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#### German Possessor Datives: Raised And Affected

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#### Abstract

The German POSSESSOR DATIVE CONSTRUCTION (PDC) is an instance of EXTERNAL POSSESSION: a single nominal acts simultaneously as possessor, i.e. a subpart of a larger nominal phrase, and as a BENEFACTIVE or MALEFACTIVE (AFFECTEE) argument of the verb. The challenge is to understand the mechanisms that make this dual functioning possible. Following Landau (1999), this paper presents a POSSESSOR RAISING analysis, arguing that the POSSESSOR DATIVE (PD) moves from the specifier of the possessed nominal to a verbal argument position. The analysis is implemented in a dynamic structurebuilding framework, where heads with their selectional features are introduced in the course of the derivation, and it is in principle possible that an argument which gets merged into the structure to take on one thematic role raises into a newly built sentence domain to fulfill another thematic role. This movement and the resulting double  $\theta$ -role assignment are crucially driven by formal features; that is, both stem form the fact that, in its origin site, the raised argument is not case-licensed. An additional caselicensing head is needed for the derivation to converge. This head is an affectee light verb which assigns inherent dative case to the argument it its specifier. Thus, unlike Landau's account of PDCs in Hebrew, where PDs can be interpreted as affected without actually being  $\theta$ -related to the verb, the analysis here offers an explanation for the cross-linguistically more general case of the PDC, where the PD's role as both possessor and affectee needs to be syntactically encoded.

#### **Keywords:**

affectee light-verb, defective D, double  $\theta$ -role assignment, external possession, inherent dative case, internal merge, possessor dative construction, possessor raising

#### 0. Introduction

Many languages around the world make use of a construction known as EXTERNAL POSSESSION (see e.g. Payne & Barshi 1999 and Vergnaud & Zubizarreta 1992). Typical examples from German (a), French (b), and Hebrew (c) are given in (1).

- (1) a. Tim hat der Nachbarin das Auto gewaschen.
  - Tim has the neighbor (DAT, FEM) the car washed
  - 'Tim washed the neighbor's car.'
  - b. J'ai coupé les cheveux à Pierre.
    - I have cut the hair to Pierre (DAT)
    - 'I cut Pierre's hair.'
    - (Guéron 1985: p. 59 (69b))
  - c. ha-yalda kilkela le-Dan et ha-radio.
    - the-girl spoiled to-Dan (DAT) ACC the-radio
    - 'The girl broke Dan's radio.'
    - (Landau 1999: p. 3 (3a))

In such structures, a single dative-marked nominal (for instance *der Nachbarin* in (1a)) acts simultaneously as a possessor, i.e. a subpart of a larger nominal phrase, and as a complement to a verb (*waschen* in (1a)). The challenge posed by these structures is to understand the mechanisms that make this dual functioning possible.

This is just the kind of situation for which classical generative grammar introduced the device of the movement transformation. One says that the nominal *der Nachbarin* in (1a) first occupies the usual

possessor position within the larger nominal and is thus interpreted as possessors normally are. It subsequently occupies a different position in the structure, a complement position to the verb *waschen*, and is thus interpreted as such complements normally are. This is the intuition behind accounts that analyze the phenomenon of external possession as POSSESSOR ASCENSION/RAISING (see e.g. Allen et al. 1990 and Landau 1999).

The present paper argues that this intuition is fundamentally correct and presents some new evidence for its correctness. However, the analysis is difficult to implement within the terms of the standard Principles & Parameters view because that theory is committed to the existence of deep structure – a level of representation in which all core semantic role relations are fixed *before* any movement operations apply. In that conception of how syntax is organized, it is impossible to move a nominal into a derived position in which it will be assigned a new, or additional, semantic role. But in (1a), the possessor is assigned the semantic role of AFFECTEE (more specifically, the person who benefits from the car washing) in its derived position.

One of the consequences of making the transition from the Principles & Parameters framework to a MINIMALIST system (Chomsky 1995, 2000, 2001) is exactly the elimination of the level of deep structure. In this paper, I explore the ramifications of this theoretical shift in connection with such structures as (1) (henceforth the POSSESSOR DATIVE CONSTRUCTION or PDC). I argue that the elimination of deep structure opens the way to a much improved understanding of such constructions. The paper can be seen, then, as an argument in favor of this crucial theoretical shift.

To reiterate, the challenge posed by the PDC is to account for the fact that the dative-marked possessor argument (POSSESSOR DATIVE or PD) also plays the role of an affectee argument. I propose that, in a system where heads with their selectional features are introduced in the course of the derivation, it is in principle possible that an argument which gets merged into the structure to take on *one* thematic role

raises into a newly built sentence domain (or PHASE) to fulfill *another* thematic role. This movement and the resulting double θ-role assignment are crucially case (i.e. formal feature)-driven; that is they are due to the fact that in its origin site, the raised argument is not case-licensed. Only an additional case-checking head can save the derivation. I argue, in line with much recent work (Anagnostopoulou 2002, Baker to appear, Hole to appear-a, McFadden 2003, McIntyre 2003, Miyagawa & Tsujigka 2004, Pereltsvaig 2003, and Pylkkänen 2002), that this head is a MALEFACTIVE or BENEFACTIVE (affectee) light verb which assigns inherent dative case to its argument. My approach is similar to Landau's (1999) possessor raising analysis but goes beyond the seemingly special case of Hebrew, which, according to Landau, as well as Pereltsvaig 2003, can be analyzed without a syntactic correlate of PD-affectedness, i.e. without assignment of an affectee role. As confirmed for German by Hole (to appear-a), McIntyre (2003), and Wegener (1985, 1991) and for Romance by Guéron (1985) and Kempchinsky (1992), however, a PD is not only a possessor but must also be an affectee argument of the verb.

## 1. Scope of the article

Before we get into the intricacies of the proposed possessor raising analysis and how this analysis differs from Landau's (1999), this section establishes the territory covered in this paper. Crucially, PD-movement is not intended to account for the non-PD constructions addressed in subsection 1.2.

## 1.1 Possessor datives: an overview

A PD is a dative-marked nominal that is interpreted as the possessor of one of its clausemates. In (2a), for example, *Mami* is the possessor of *das Auto*. Unlike genitive-marked possessors (see (2b)), PDs do not end up as part of the same constituent as the possessed DP. While the genitive possessor in (3c), for example, focus-moves as a unit with the possessed DP, the PD in (3a) does not. When the possessed DP

gets fronted, the PD must stay in its lower position (see (3b)). (PD and possessee are in bold face; the phrase in focus is given in capital letters.)

- (2) a. Mein Bruder hat **der Mami das Auto** zu Schrott gefahren.

  my brother has the mom (DAT) the car to scrap driven
  - 'My brother totaled mom's car (totaled the car on mom).'
  - b. Mein Bruder hat **Mamis**Auto zu Schrott gefahren.

    my brother has mom's (GEN) car to scrap driven

    'My brother totaled mom's car.'
- (3) a. \*Der Mami DAS AUTO hat er zu Schrott gefahren.

  the mom (DAT) the car has he to scrap driven

  'Mom's CAR he totaled.'
  - b. **DAS AUTO** hat er **der Mami** zu Schrott gefahren.

    the car has he the mom (DAT) to scrap driven

    'Mom's CAR he totaled. (The CAR he totaled on mom.)'
  - c. Mamis AUTO hat er zu Schrott gefahren.

    mom's (GEN) car has he to scrap driven

    'Mom's CAR he totaled.'

The fact that the PD *der Mami* is not licensed without a possessed DP like *das Auto* (see (4a) and similar examples in Wunderlich 2000), unless the verb takes a dative complement independently of the possessor relation (4b), shows that there is an obligatory thematic connection between the PD and the possessed nominal.

- (4) a. \*Mein Bruder hat/ist² der Mami gefahren.

  my brother has the mom (DAT) driven
  - b. Mein Bruder wollte der Mami helfen.my brother wanted the mom (DAT) help'My brother wanted to help mom.'

The puzzle is that, despite this obligatory thematic connection between PD and possessed DP, the data in (3) seem to suggest that, syntactically speaking, a PD behaves like an independent argument of the verb. Even in the case of inalienably possessed body parts, so called PERTINENCE DATIVES (see (5) and many more examples in Isac&enko 1965 and Wegener 1985)<sup>3</sup>, PD and possessed DP do not form a syntactic constituent.

- (5) Ein guter Ehemann massiert seiner Frau jeden Abend den Rücken.
  - a good husband massages his wife (DAT) each evening the back
  - 'A good husband massages his wife's back every night.'

It is clear that the PD (here *seiner Frau*) and the possessed DP (here *den Rücken*) can be separated. Note that, in dative constructions that are not PDCs (as discussed in subsection 1.2), the definite article of the possessed DP can be replaced with a possessive pronoun referring to the referent of the dative nominal. This is only readily acceptable, however, when the possessee is a non-body-part DP (see (6a)), not when it is a body-part DP (see (6b) and Wunderlich 1996 for more examples of this type).

(6) a. Mein Bruder hat der Mami leider ihr Auto zu Schrott gefahren.<sup>4</sup>

my brother has the mom (DAT) unfortunately her car to scrap driven

'Unfortunately my brother totaled mom's car.'

- b. ?Ein guter Ehemann massiert seiner Frau jeden Abend ihren Rücken.
  - a good husband massages his wife (DAT) each evening her back
  - 'A good husband massages his wife's back every night.'

As pointed out by Shibatani (1994), this contrast probably stems from the fact that body-part nominals are special in that they are automatically understood to be inalienably possessed by the referent of the dative nominal. Intuitively, the use of a possessive pronoun (which serves the sole purpose of establishing a possessor relation) is then simply redundant. The coocurrence of a non-core dative (not selected by the verb) with a possessed nominal that is specified by a possessive pronoun ties in with the discussion provided in the following subsection – it will be established that examples like (6a-b) are *non*-PD constructions – and is fully explained in section 3 of the paper.

## 1.2 Non-possessor datives

There are several types of dative-marked nominals (henceforth 'non-PDs') which appear to be licensed by neither the presence of a possessed DP nor a verb that selects a dative argument. The dative *mir* 'me' in (7), for example, corresponds to the so called ETHICAL DATIVE that Borer & Grodzinsky (1986) discuss in their study of dative constructions in Hebrew.

(7) Schlaf mir jetzt schön ein, Kleines!

sleep me (DAT) now nicely in little one

'Kindly fall asleep for me now, little one!'

Here, the person referring to him or herself in the first person expresses an emotional attitude toward the situation of the child's falling asleep. The referent of an ethical dative thus deeply cares about the given situation. As noted by Borer & Grodzinsky, Hebrew ethical datives are obligatorily clitics, i.e. may not be expressed by a non-pronominal dative phrase, and are only compatible with verbs having an external

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argument. In German, the distribution of ethical datives is not as restricted – examples like (7) show that, just like PDs (see section 2.2), ethical datives in German are compatible with unaccusative verbs – but it is true that the construction is most commonly found in imperatives with the dative first person pronoun *mir*, which could be argued to exhibit clitic-like behavior.

Another type of non-PD, exemplified by (8), is known as the DATIVUS IUCANDIS or ESTIMATIVE DATIVE.

(8) Mein Bruder ist der Mami zu schnell gefahren.

my brother has the mom (DAT) too fast driven

'My brother drove too fast for mom.'

The interpretation here is that my brother's driving was too fast for mom's liking. This type of dative typically cooccurs with modifiers like *zu* 'too' and *genug* 'enough'.

Non-PDs that fall under the rubric of neither ethical nor estimative datives, like (9), are what McIntyre (2003) calls FICIARY (BENEFICIARY/MALEFICIARY) DATIVES.

(9) Sie hat mir Bushs Ansprache übersetzt.

she has me (DAT) Bush's speech translated

'She translated Bush's speech for me.'

(McIntyre 2003: p.7 (17b))

This type of dative is interpreted like a PD but without the possessive aspect. As is the case in PDCs, the well-formedness of all three of the non-PD constructions discussed here does not depend on the presence of the dative DP. The verbs in (7)-(9) do not in any way need a dative argument. The well-formedness of any construction with a non-core dative does, however, depend on the ability of the verb to express some kind of affectedness – a negative or positive effect, either physical or emotional – on the dative referent

(see also Wegener 1985, 1991, McIntyre 2003, and Hole to appear-a). This explains why *fahren* 'drive' alone, as in (2a), can occur in neither a PD nor a non-PD construction – both require a predicate which can assign an affectee role.

Getting back to examples like (6a) in section 1.1, while all dative constructions seem to be subject to the affectedness condition discussed here, an obligatory possessor relation between the dative DP and another nominal in the sentence only holds for the PDC. The non-PD *mir* in (9), for example, is not the "possessor" of the speech. It is clear that the genitive nominal *Bushs* establishes the possessor relation here. Similarly, in (6a) (*Mein Bruder hat der Mami (DAT) leider ihr (POSS) Auto zu Schrott gefahren.*), it is not the dative but the possessive pronoun which establishes the possessor relation with the possessee. The dative in these cases must then be a non-PD, more specifically, a bene/maleficiary. In the case of (6a), this does not make a significant difference in interpretation. Since the possessive pronoun *ihr* 'her' has the same referent as the dative *der Mami* 'the mom', the possessor relation established by the possessive pronoun is the same as that expressed by the dative nominal in the corresponding PDC (where the possessee comes with a definite article). I will occasionally refer back to non-PD constructions for purposes of comparison, but the main focus of this paper is on PDs, which involve *both* affectedness *and* a possessor relation.

## 1.3 Solving the puzzle

According to Landau (1999), the "classic puzzle" of the PDC is that an argument in the clause (the PD) can derive its semantic role from another argument (the possessee) but its syntactic behavior from the predicate. As this paper will show, the split between semantic role and syntactic behavior, while compatible with the Hebrew facts, does not accurately describe the more general case of the PDC. In German and the Romance languages at least, PDs derive not only their syntactic behavior but also one of their semantic roles from the verb. The truly puzzling question with respect to the general case of the PDC is thus how to avoid the apparent violation of the θ-Criterion.

Landau identifies two major paths to take in analyzing PDCs:

- a. PD is an argument of the verb (male/benefactive). The possessor interpretation arises through binding of an anaphoric element or through control of PRO in the possessee.
- b. PD is an argument of the possessee. Its misleading syntax is due to syntactic raising to a position typically occupied by verbal arguments (Landau 1999).

Borer & Grodzinsky (1986) analyze the Hebrew PDC following path (a), while Landau reanalyzes the Hebrew facts according to path (b). Other path (a)-type analyses have been given for German by Hole (to appear-a) and for Romance by Kempchinsky (1992), Vergnaud & Zubizarreta (1992), and Guéron (1985).<sup>5</sup> As laid out in section 2, the argument for syntactic movement (i.e. possessor raising) that Landau proposes for Hebrew generally extends to German. I will therefore follow Landau (as well as Isac&enko (1965) and Gallmann (1992) who have proposed possessor raising analyses for German)<sup>6</sup> in taking path (b). Since the class of verbs that allow the PDC in German seems to be more restricted than the corresponding verb class in Hebrew, however, I will argue that certain aspects of path (a) must be integrated into the analysis. In particular, while I do agree with Landau that a PD originates in the specifier of the corresponding possessed DP and then raises to a specifier position within the verbal domain, I claim, contra Landau, that PDs are also thematically restricted by the verb. Besides acting as the possessor of the DP which is its origin site, PDs must play the role of affectee. Although Landau agrees that "[the] PDC is always associated with an affectedness implication for [the] PD" (Landau 1999: p. 3, fn. 1), the following examples hint at the generalization that many more verbs imply affectedness, i.e. are compatible with the PDC, in Hebrew than in German. While the German PDC in (10b) is clearly unacceptable, the Hebrew equivalent in (10a) is judged grammatical by Landau. Dispensing with a syntactically encoded affectedness condition then might be an acceptable solution for Hebrew (see also Pereltsvaig 2003, an analysis of the Hebrew PDC as possessor raising to a dative light-verb head which is

defective in that it does not assign a semantic role to the argument in its specifier), but not for German. The German PDC, which gets better the more obviously the negative (10c-e) or positive (10f) effect on the dative referent is expressed, clearly involves assignment of an affectee role.

(10) a. Gil gar le-Rina ba-xacer.

Gil lives to-Rina in-the-yard

'Gil lives in Rina's yard.'

(Landau 1999: p. 4, (4c))

b. \*Tim wohnt Lena im Garten.

Tim lives Lena (DAT) in-the garden

'Tim lives in Lena's garden.'

c. ?Tim steht Lena im Garten herum.

Tim stands Lena (DAT) in-the garden around

'Tim stands around in Lena's garden.'

d. Tim steht Lena den ganzen Tag im Weg.

Tim stands Lena the whole day in-the way

'Tim stands in Lena's way all day.'

e. Tim ruiniert Lena den schönen Garten.

Tim ruins Lena (DAT) the beautiful garden

'Tim ruins Lena's beautiful garden.'

f. Tim gräbt Lena den Garten um.

Tim digs Lena (DAT) the garden around

'Tim aerates Lena's garden.'

After showing in section 2 that Landau's arguments for a raising analysis generally hold for German, I will propose in section 3 that the affectedness condition can be explained within a dynamic structure-building framework where a second  $\theta$ -role becomes available to an argument after movement. Section 4 addresses residual issues and possible extensions. Section 5 concludes the paper.

# 2. Possessor raising

The goal of this section is to show that several of the basic properties Landau (1999) identifies for the PDC in Hebrew hold for German as well. Like Landau's data, the German facts illustrate that a syntactic movement analysis is superior to a thematic approach that bases the connection between possessor and possessee on binding or control (e.g. Hole to appear-a, Kempchinsky 1992, Vergnaud & Zubizarreta 1992, Borer & Grodzinsky 1986, and Guéron 1985). After an informal description of three major characteristic properties of the PDC in 2.1-2.3, subsection 2.4 introduces Landau's movement analysis and thus provides the basic building blocks for a formal structural account of the PDC and its properties. Finally, subsection 2.5 points out the advantages this approach has over non-movement alternatives. Although Landau's proposal is very similar to the dynamic structure-building analysis I present in section 3, it will become evident that the latter is superior, at least with respect to the general (non-Hebrew) case of the PDC.

# 2.1 Obligatory possessor interpretation

The crucial distinction between a regular dative-marked benefactive or malefactive argument of the verb and a possessor dative is that the latter must cooccur with a clausemate nominal with which it stands in a possessor relation. The possessee is typically an inalienably possessed body part or something that counts as inalienably possessed by extension (*house*, *garden*, *car*, *computer*, etc. (see Vergnaud & Zubizarreta 1992)). In a PDC, the dative-marked nominal is obligatorily interpreted as possessor, unless the structure

contains a verb which independently selects a dative argument or is compatible with a non-PD, such as an ethical or estimative dative (see section 1.2)). A benefactive or malefactive interpretation is, so to speak, superimposed upon but may not replace the possessor relation between the possessed nominal and the dative-marked DP. As Landau puts it, at least 'transitory' possession must hold. Often this possessor relation is not literally one of possessing or owning something but must be interpreted in the broader sense of being responsible for something, even if just temporarily. An important restriction on this aspect of the PDC is that the range of relations that it may subsume is narrower than the range which can be expressed by an overt genitive (pre or postnominal) possessor. The remainder of this subsection presents evidence for this.

Based on the observation that postnominal *of*-possessors can be interpreted as *either* possessor/creator *or* theme (see (11a)), but PDs can only be the possessor/creator (see (11b)) in Hebrew picture noun constructions, Landau argues that PDs are obligatorily interpreted as the subject of the corresponding possessed DP, crucially not as an internal (theme) argument.

- (11) a. Gil higdil et ha-tmuna s&el Rina.
  - Gil enlarged ACC the-picture of Rina
  - 'Gil enlarged Rina's picture.' [Rina = possessor/creator/theme]
  - b. Gil higdil le-Rina et ha-tmuna.

Gil enlarged to-Rina ACC the-picture

'Gil enlarged Rina's picture.' [Rina ≠ theme]

(Landau 1999: p. 5, (5a-b))

This subject-requirement calls for further specification in that it needs to be established whether PDs are the subject (i.e. in the external argument position) of DP or NP. The examples in (12) shed light on this question. If PDs can only originate in Spec DP, not Spec NP, we expect that the PDC should be

incompatible with nouns like process nominals which require a non-possessor, namely an agent (in Spec NP), as subject. (12a-b) are the German equivalents of Kempchinsky's (1992) Spanish and Landau's Hebrew examples. As these examples are ungrammatical for independent reasons, however<sup>8,9</sup> – German *sehen* 'see' does not express affectedness (see Wegener 1985, 1991), and *die Armee* 'the armee', a noun referring to an institution, not individual people, does not have a referent that can be affected – I appeal to example (12c) to prove the point: process nominals, which require an agent as subject are indeed incompatible with the PDC.

- (12) a. \*Ich fotografierte der Armee die Zerstörung der Stadt.
  - I photographed the army (DAT) the destruction the city (GEN)
  - 'I photographed the army's destruction of the city.'
  - b. \*Die Journalisten sahen der Armee die Hinrichtung von einigen Gefangenen.

    the journalists saw the army (DAT) the execution of several prisoners

    'The journalists saw the army's execution of several prisoners.'
  - c. \*Ich habe dem Ulli gestern die Wiederaufarbeitung des Kunstwerks fotografiert.

    I have the Ulli (DAT) yesterday the re-working the piece-of-art (GEN) photographed

    'I photographed Ulli's remodeling of the artwork.'

Given a PDC interpretation, where the PD *dem Ulli* is obligatorily interpreted as possessor of the remodeling process, (12c) is unacceptable. Its ungrammaticality cannot be attributed to the verb *fotografieren*. As confirmed by examples like *Ich musste Ulli (DAT) gestern die abgebrannte Küche fotografieren* 'I had to take pictures of Ulli's burned-down kitchen' (maybe because he needed the photos for insurance purposes), *fotografieren* can, in principle, assign an affectee role. Seemingly grammatical examples of process nominals in PDCs, given in Hole to appear-a (see (13)<sup>10</sup>), do not convincingly disprove the point here.

- (13) a. Walter hat  $(?uns_x)$  den  $Bau_x$  der Mauer befürwortet.

  Walter has us (DAT) the construction the wall (GEN) supported

  'Walter supported (for us) the construction of the wall (by us).'
  - b. Ed stellte  $uns_x$  den  $Bau_{(x)}$  der Mauer in  $Aussicht_x$ . *Ed put us (DAT) the construction the wall (GEN) in prospect*'Ed dangled the prospect of constructing the wall before us.'

    (Hole to appear-a: p. 16-17, (34a), (35a))

In (13a), the addition of the dative *uns* is marked as degraded, and in (b), the dative is clearly part of the expression *jemandem (DAT) etwas in Aussicht stellen* 'to dangle the prospect of something before somebody'. This means that *uns* in (13b) is not an 'extra' or 'free' dative (as in the other PDC-examples discussed here) and thus cannot originate as possessor of the process nominal *Bau*. Hole's data in (13) then do not undermine Landau's and my claim that the possessor relation in a PDC is not equivalent to the relation established by a genitive nominal functioning as an agent.

More generally, the fact that the PDC imposes restrictions on the type of nominal that a PD can cooccur with – not with process nominals – corroborates Landau's claim that the possessor relation between the PD and the other involved nominal cannot be replaced by a thematic restriction imposed by the verb. Unlike a beneficiary non-PD, for example, a PD cannot occur as an argument of the verb independently of other DPs in the clause. It is not a grammatical addition to just any verb that has an affectee role to assign.

In her thematic binding account, Kempchinsky (1992) is forced to say that examples like (12) are ungrammatical because the dative nominal cannot bear both an agent and a benefactive role. As for non-process nominals, where an agent is not required, however, she argues that their co-occurrence with a PD is acceptable because possessor is not a "genuine"  $\theta$ -role and can thus be assigned to the PD in addition to

the benefactive role coming from the verb.<sup>12</sup> As explained in subsection 2.4, Landau's movement analysis allows for a more straightforward account of the incompatibility of process nominals with the PDC. The most natural explanation, however, can be given within the dynamic structure-building system I propose in section 3. It will become apparent that agents, subjects which originate in Spec NP of the head nominal, have no way of getting to the specifier of the nominal's DP-projection. Spec DP, however, is the position from which possessor raising is launched.

#### 2.2 C-command restriction

In the data considered thus far, the possessee is either a direct object or a PP that is subcategorized for by the verb. As pointed out by both Guéron (1985) and Borer & Grodzinsky (1986), the possessee cannot be the external argument of the verb. This is confirmed by the ungrammaticality of the Hebrew example and its German equivalent in (14a-b). The possessed noun may only surface in subject position if it has moved there from inside the VP, as in a passive (15a) or unaccusative (15b) configuration.<sup>13</sup>

- (14) a. \*ha-kelev hitrocec le-Rina

  the-dog ran-around to-Rina

  'Rina's dog ran around.'

  (Landau 1999: p. 7 (11b))
  - b. \*Der Hund ist Lena herumgelaufen.

    the dog is Lena (DAT) around-run

    'Lena's dog ran around.'
- (15) a. Der Hund ist Lena überfahren worden

  the dog is Lena (DAT) over-driven PASS

  'Lena's dog was run over (by a car).'

b. Der Arm ist mir eingeschlafen.

the arm is me (DAT) in-slept

'My arm fell asleep.'

In the well-formed examples in (15), the possessee in subject position starts out as the internal argument of the verb. In (14), however, the possessee gets introduced directly as the verb's external argument, i.e. originates above the PD, and the result is ungrammatical. There must thus be a restriction on the PDC that requires the PD to c-command (at some point in the derivation) the possessee in its base position. The exact position of PDs will be discussed in subsection 2.4.

## 2.3 Locality

Guéron (1985) observed that the possessor and the possessee must be clausemates. In her non-movement account, the clausemate condition holds at both deep and surface structure. As for the account supported here, the condition is that possessor and possessee must be "clausemates", or, more specifically, cannot be separated by a subject-containing category ( $\nu$ P, IP, CP), after PD-raising. In the following French examples, the possessee is an inalienably possessed body part.

(16) a. Jean semble [IP] avoir lavé les cheveux].

Jean seems him (DAT) have washed the hair

'Jean seems to have washed his hair.'

b. \*Jean **lui** semble [IP avoir lavé **les cheveux**].

(Guéron 1985: p. 48 (18))

The German data in (17) (as well as several examples in Hole to appear-a) confirm that there cannot be a clause boundary intervening between PD and possessed DP. If the matrix verb is a COHERENT or RESTRUCTURING predicate, on the other hand, taking a 'reduced' infinitival complement, which,

according to Wurmbrand 2001, is a (non-clausal) VP (see (17c)), the PD *can* be separated from the possessee.

- (17) a. Jan hat beschlossen [ $_{\nu P/IP}$  Luise die Haare zu waschen].

  Jan has decided Luise (DAT) the hair to wash

  'Jan decided to wash Luise's hair.'
  - b. \*Jan hat **Luise** beschlossen [ $_{\nu P/IP}$  **die Haare** zu waschen].
  - c. Jan hat **Luise** versucht [ $_{VP}$  **die Haare** zu waschen].

    Jan has Luise (DAT) tried the hair to wash

    'Jan has tried to wash Luise's hair.'

(17c) also confirms that PD and possessee, while locally restricted, do not need to be directly adjacent. As for the connection between external possession and the study of reduced infinitive constructions, the data in (17) establish the PDC as a handy new coherence diagnostic (see Lee-Schoenfeld in prep).

Expanding on Guéron's clausemate condition, Landau shows that the locality of the PDC even goes beyond clause-boundedness. In a case where the direct object is a complex DP, for example, the PD must be associated with the larger (containing) DP, rather than with the genitive, which is properly contained in (i.e. a subpart of) the larger DP. Put another way, the relation between the PD and its associated possessor position may not extend *into* the DP (into the domain of its head), but rather may access only its highest (outermost) specifier position. As shown in (18), Landau's observation extends to German.

(18) a. Tim pflegte **Lena** [das Fohlen [der Stute]] gesund.

Tim treated Lena (DAT) the foal the mare (GEN) healthy

'Tim cured the mare's foal which belongs to Lena.'

b. Tim pflegte **Lena** [die Mutter [des Fohlens]] gesund.

Tim treated Lena (DAT) the mother the foal (GEN) healthy

'Tim cured the foal's mother which belongs to Lena.'

In (18a), it is the foal that must be interpreted as belonging to Lena, whereas in (18b), it is the mother of the foal. Thus, in both cases, the larger DP corresponds to the possessed DP. It may be pragmatically inferred that the embedded DP also belongs to Lena, but the syntax does not encode this reading.

In (19a-b),<sup>14</sup> it seems that the dative *mir* should be the possessor of the embedded genitive DP, but I will show that these constructions are only apparent counterexamples to the generalization above.

- (19) a. Dann stecke ich mir einen Ring auf [einen Finger [der linken Hand]].

  the stick I me (DAT) a ring on a finger the left hand (GEN)

  'Then I put a ring on a finger of my left hand.'
  - b. Mir fiel der Hammer auf [die Spitze [des linken Zeigefingers]].
    me (DAT) fell the hammer on the tip the left index-finger (GEN)
    'The hammer fell on the tip of my left index finger.'

The data in (20) provide reason to believe that the datives in (19) can, in fact, not be possessors of the respective embedded DPs. I argue that they are either possessors of the respective larger DPs or maleficiary non-PDs. The key observation regarding (20a-b) is that the PD cooccurs with a possessive pronoun as part of the embedded DP.

- (20) a. ?Ein guter Ehemann massiert seiner Frau jeden Abend **ihren** Rücken.
  - a good husband massages his wife (DAT) each evening her back

<sup>&#</sup>x27;A good husband massages his wife's back every night.'

- b. Dann stecke ich mir einen Ring auf [einen Finger [meiner linken Hand]].

  then stick I me (DAT) a ring on a finger my left hand (GEN)

  'Then I put a ring on a finger of my left hand.'
- c. Mir fiel der Hammer auf [die Spitze [meines linken Zeigefingers]].

  me (DAT) fell the hammer on the tip my left index-finger (GEN)

  'The hammer fell on the tip of my left index finger.'

All three examples involve a body-part nominal specified by a possessive pronoun, but, while (20a) is clearly degraded (see also sections 1.1-2), (b) and (c) are not. Since the possessive pronoun in (b) and (c) can cooccur with the PD *mir* without degrading the utterances at all, I conclude that the PD in these examples does not originate in the position occupied by the possessive pronoun, i.e. the specifier of the embedded DP. Rather, it either originates in the possessor position of the larger DP or is really a maleficiary non-PD (not standing in a possessor relation at all).

This means that, if there is a syntactic possessor relation at all, *mir* in (19a) is probably the possessor of the body-part DP *einen Finger*, not *der linken Hand*. Just as in expressions like *Er hob die Hand* 'He raised his hand' and *Sie schloss die Augen* 'She closed her eyes', where the logical possessors of *die Hand* and *die Augen* are (non-derived) subjects and thus cannot originate in the possessor position of the respective body-part nominals (see section 4) but are merely pragmatically related to them, it is plausible in (19a) that there is no syntactic possessor relation between *mir* and *der linken Hand*. As for (19b), I suggest that we may be dealing with a maleficiary non-PD. The reason that the sentence is degraded when *mir* is left out is not that the dative is necessary to indicate the possessor of the body part but rather that some human referent is needed in the linguistic environment of a body part. Unlike in (19a), there is no 1st person subject pronoun here to satisfy this need.

Other apparent counterexamples to the generalization that PDs cannot be possessors of the genitive nominal of complex DPs are presented in Hole to appear-a and shown here in (21a-c).<sup>15</sup>

- (21) a. Man zerriss dem Jungen<sub>x</sub> die Papiere der Mutter<sub>x</sub>.

  one tore-apart the boy (DAT) the documents the mother (GEN)

  'They tore apart his mother's documents on the boy.'
  - b. Man verweigerte  $ihm_x$  die Auszahlung des Lohns<sub>x</sub>.

    one denied him (DAT) the payment the wages (GEN)

    'They denied him the payment of his wages.'
  - c. Man verweigerte ihm<sub>x</sub> die Auszahlung des Lohns der Mutter<sub>x</sub>.

    one denied him (DAT) the payment the wages (GEN) the mother (GEN)

    'They denied him the payment of his mother's wages.'

    (Hole to appear-a: p. 18, (37a-c))

(21a) can be explained on a par with (19a-b). The utterance is not degraded when the definite article preceding *Mutter* is replaced with the possessive pronoun *seiner* 'his'. I take this to mean that the dative *dem Jungen* is not in competition, so to speak, with the possessive pronoun; it either originates as possessor (here: person who is temporarily in charge) of the larger DP *die Papiere*, or it is a maleficiary non-PD. Kinship terms like *Mutter* are (inherently) relational nouns which, in the absence of a syntactic possessor, are automatically interpreted as related to the speaker or the referent of a nominal in the near linguistic context. As for (21b) and (c), *verweigern* is a verb that regularly occurs with a dative argument, <sup>16</sup> suggesting that, again, the dative in these examples is not an extra or free argument but rather a subcategorized one. No possessor relation between *ihm* and either of the two DPs then needs to be accounted for. Hole himself states that the definite articles in examples like (13) and (21) (his (34a), (35a), and (37)) can be properly interpreted without the extra dative argument: The possessor variable

(which Hole assumes to be included in one of two lexical entries of every nominal) "may be mapped to some arbitrary referent, or be absent altogether, in the absence of the extra dative" (Hole to appear-a: 17).

Hence, I follow Landau in concluding that PD and possessee may not be separated by a clausal node nor by more than one DP node. A way to understand this requirement is that the PD must be associated with the topmost specifier of the possessor-possessee DP. A higher origin site would put the PD outside the thematic domain of D, and – crucial to the dynamic structure-building account I present in section 3 – a lower origin site would violate restrictions on movement. Since my proposal takes Landau's possessor raising analysis as a starting point, I will end this section by giving an overview of Landau's main points, with the goal of highlighting incompatibilities of his approach with the German PDC to be accounted for here.

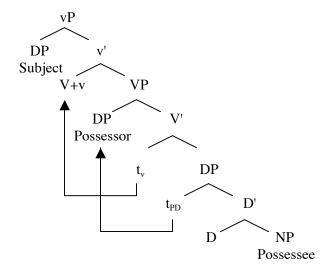
## 2.4 Possessor raising

Based on the characteristic properties of the PDC discussed above and drawing on possessor raising analyses that have been proposed for a variety of other constructions (Szabolcsi 1983, Kubo 1990, Ura 1996, Keach & Rochemont 1992), Landau (1999) proposes the case-driven movement analysis summarized in (22) and illustrated in (23).

- (22) a. The possessor is generated in a caseless Spec position<sup>17</sup> within the possessee.
  - b. It is generated with dative case features.
  - c. It then raises to check its case features with V.

(Landau 1999: p. 9 (17))

### (23) Possessor raising:



This version of possessor raising works for both Hebrew and German in as far as the basic PDC properties of the two languages overlap. Since German and Hebrew seem to differ, however, as far as affectedness is concerned, Landau's analysis cannot be directly extended to German. The goal of this subsection is to show how the basic properties of the PDC discussed in 2.1-2.3 fall out from Landau's analysis but also how this analysis is at odds with the German affectedness condition. I give a preview here of how the dynamic structure-building system I appeal to in section 3 resolves these difficulties.

In Landau's framework, the first basic property discussed above, namely the obligatory possessor interpretation of PDs, falls out from the definition of chains. Since PDs form a chain with their possessee-internal trace, and since a chain may only bear a single semantic role, PDs must bear the  $\theta$ -role they receive in their base position. As the base position is Spec DP, i.e. the topmost 'subject' position of the possessed DP, PDs must be assigned the role of possessor (or creator, in the case of Hebrew picture nouns), not the internal theme role, and not an agent role, which is assigned in Spec NP. Furthermore, the possessor role may not be overridden by an affectee role from the verb. Although the obligatory possessor interpretation also holds for the German PDC, Landau's chain-based explanation precludes an account of the fact that the German PDC must allow for the assignment of an affectee role in addition to

the possessor role. The analysis I propose in section 3 allows for double  $\theta$ -role assignment while still ruling out PD-raising from a DP-internal (agent or theme) position. In a dynamic structure-building system, where movement proceeds via phase edges (in this case: Spec DP),<sup>18</sup> and is driven by formal (including case, but not  $\theta$ -)features, the origin site of a PD is necessarily Spec DP. Any lower origin site would violate restrictions on movement operations.

As for the second and third basic PDC properties, the c-command and the locality condition, the former straightforwardly falls out from Landau's version of possessor raising because PDs originate in the specifier of, that is higher than, the lexical shell of the possessee. Consistent with the facts discussed in 2.2, the structure in (23) therefore forces the PD to c-command the possessee in its base position. The locality condition results from the fact that possessor raising is an instance of A-movement. Subject-containing categories like  $\nu$ P and DP prevent an argument from moving across their left edge to another A-position. In the case of  $\nu$ P, the PD argument is prevented from moving out of the clause, and in the case of complex DPs, it is unable to raise out of the possessee if it starts any lower than the specifier of the larger (containing) DP.

The locality restriction correctly predicts the incompatibility of the PDC with process nominals, as described in subsection 2.1. If PDs must start out in Spec DP, and process nominals need an agent-subject which is thematically related to N and therefore occupies Spec NP, then a PD cannot be an appropriate 'subject' for a process nominal. Note, however, that this is where Landau's determination of Spec DP as the base position of PDs involves some degree of stipulation. Although it is clear that PDs cannot move out of DP across an occupied 'subject' position, nothing in Landau's version of possessor raising predicts that PDs could not start in Spec NP or as the complement of N and then move out via Spec DP if this specifier is unoccupied. Landau argues that the complement of N is the domain of dative case checking in Hebrew, and that a PD generated in Spec NP would have no need to move. However, if certain Ds can be caseless and thus force the argument in their specifier to check case elsewhere, why

should there not be instances of caseless N, forcing agent arguments to raise for case-checking purposes? Again, a dynamic structure-building approach, which incorporates the requirement that movement be strictly formal-feature-driven and proceed via the closest phase edge, has the benefit of naturally ruling out PD-raising from Spec NP or the complement of N to the caseless Spec DP position. While N may well happen to be caseless in this framework, there is a non-stipulated reason for why a DP in Spec NP is unable to move out of DP, and that is the idea of 'derivation by phase' (Chomsky 2001). In order to move or be accessible to positions higher in the syntactic object, an element needs to be at the edge of the minimal phase containing it. Even if this edge, here Spec DP, is unoccupied, the complement of N or an agent nominal in Spec NP cannot reach this position because in a PDC-context, D is defective and thus cannot attract a case-seeking nominal. Only a nominal that originates in Spec DP (i.e. the topmost specifier of the possessee) then has the chance of moving out of the DP-phase.

As compared to non-movement alternatives, the main theoretical advantage of a possessor raising approach is that it only makes one PDC-particular claim: PDs are generated in a caseless position. Everything else, the nature of PD-raising and the interpretive consequences, follows from general tenets of the respective theoretical framework (Landau's Principles & Parameters framework and the Minimalist system proposed here). The next subsection presents some specific evidence against control and binding accounts.

## 2.5 Arguments against control and binding

Guéron's (1985) control/PRO-analysis is inherently incompatible with (and thus relies on a PDC-particular stipulation in order to account for) the local nature of the PDC because the relation between PRO and its controler is not, in general, subject to the strict locality requirements that characterize A-movement. As shown by the French data in (24) and similar examples from German in (25), it is perfectly grammatical for a *v*P/IP boundary and more than one DP boundary to intervene between PRO and its controller.

- (24) a. Jean<sub>1</sub> a promis au directeur de [ $_{IP}$  PRO<sub>1</sub> venir à la soirée].

  Jean has promised to-the director to come to the party

  'John promised the director to come to the party.'
  - b. Jean<sub>1</sub> a [DP une liste de [DP livres à PRO<sub>1</sub> lire]].
    Jean has a list of books to read
    'John has a list of books to read.'
    (Landau 1999: p. 12 (21))
- (25) a.  $Jan_1$  hat dem Direktor versprochen [ $_{\nu P/IP}$  PRO $_1$  zur Party zu kommen]. Jan has the director promised to-the party to come 'Jan promised the director to come to the party.'
  - b.  $Jan_1$  machte [DP eine ganze Reihe von [DP Versuchen PRO<sub>1</sub> den Artikel zu lesen]]. Jan made a whole series of attempts the article to read 
    'Jan made a whole series of attempts to read the article.'

The possessor raising analysis and the traditional non-movement alternatives all have in common that there is an empty category inside the possessed DP. As for the type of empty category, however, Landau presents convincing evidence that it is a trace, rather than PRO or a null anaphor. This evidence stems from argument-adjunct-sensitivity. While it is possible in Hebrew to extract a PD from locative and source PPs, typical adjunct PPs expressing, for example, cause and opposition block possessor raising out of the prepositional object. As shown by the examples in (26)-(29), German is similar to Hebrew in this respect: the PDC works as expected when the possessed DP is associated with direction, locative, or source PPs that are selected (at least as optional arguments) by the verb, but a possessor relation is impossible to establish in the case of non-selected PPs headed by prepositions like wegen 'because of',

*trotz* 'despite', and *ohne* 'without'. In all of the following examples, the verb does not license a dative-marked argument independently of the possessor relation.

- (26) a. Eine Katze kommt **meinen Eltern** nicht [ins **Haus**].
  - a cat comes my parents (DAT) not in-the house
  - 'A cat is not allowed in my parents house.' (idiomatic)
  - b. Das Kind legte sich **dem Papa** [auf **den Bauch**].

the child lay self the dad (DAT) on the belly

'The child lay down on the dad's belly.'

(27) a. Er stand **der Braut** [auf **der Schleppe**].

he stood the bride (DAT) on the train

'He stood on the bride's train.'

- b. Das Buch lag **Tim** [direkt vor **der Nase**].
  - the book lay Tim (DAT) directly in-front-of the nose

'The book was lying directly in front of Tim (literally: in front of Tim's nose).'

(28) Er hat **der Frau** etwas [aus **der Handtasche**] genommen.

he has the woman (DAT) something out the purse taken

'He took something from the woman's purse.'

(29) a. \*Tim musste seiner Schwester [wegen der Katze] aufräumen.

Tim had-to his sister (DAT) because-of the cat up-tidy

'Tim had to clean up because of his sister's cat.'

- b. \*Tim aß der Mami [trotz der Bitte] nicht auf.
  - Tim ate the mom (DAT) despite the plea not up
  - 'Tim didn't eat up despite mom's plea.'
- c. \*Tim hat **der Mami** [ohne **Geschirrspülmittel**] abgewaschen.<sup>20</sup>

Tim has the mom (DAT) without dish-soap off-washed

'Tim did the dishes without mom's dish soap.'

In the unacceptable examples (29a-c), the ungrammaticality is two-fold. First, it is impossible to interpret Lena as the possessor (of the cat, the plea, and the dish soap), and second, the verbs *aufräumen* 'clean up', *aufessen* 'eat up', and *abwaschen* 'do the dishes' (in their unergative use, which lacks an overt direct object but implies it) cannot license the dative case on *Lena*, at least not in the given context.<sup>21</sup> Crucially, when used transitively, i.e. with a direct object instead of an adjunct PP, these same verbs do license the dative on *Lena* and thus encode Lena's affectedness. This is shown by the grammatical examples in (30).

(30) a. Tim musste **der Mami die Küche** aufräumen.

Tim had-to the mom (DAT) the kitchen up-tidy

'Tim had to clean up mom's kitchen.'

b. Tim aß seiner Schwester netterweise den Spinat auf.

Tim ate his sister (DAT) nicely the spinach up

'Tim was nice enough to eat up his sister's spinach.'

c. Tim hat **der Mami den Teller** abgewaschen.

Tim has the mom (DAT) the plate off-washed

'Tim rinsed off mom's plate.'

The generalization is then that only argument PPs are compatible with PDCs. <sup>22,23</sup> Assuming that arguments are transparent and adjuncts are opaque to extraction (Chomsky 1986, Huang 1982, Longobardi 1985), Landau's movement analysis makes perfect sense of this generalization. The empty category inside the possessee must be a trace, not PRO. It cannot be a null anaphor either because, while a binding analysis can account for the *locality* of the PDC, it has no explanation for the fact that the construction is not licensed across a PP-adjunct boundary. As shown in (31) and (32), neither control nor anaphoric binding is sensitive to the argument-adjunct distinction.

- (31) Britta<sub>i</sub> hat sich [beim PRO<sub>i</sub> Warmlaufen] vor dem Spiel verletzt.

  \*Britta has self at-the warm-running before the game injured\*

  \*Britta injured herself while warming up before the game.'
- (32) a. Tim<sub>i</sub> lässt die Lena nicht [neben sich<sub>i</sub>] essen.

  Tim lets the Lena not next-to self eat

  'Tim doesn't let Lena eat next to him.'
  - b. Der Direktor<sub>i</sub> lässt die Versammlung [ohne sich<sub>i</sub>] anfangen.

    the director lets the gathering without self start

    'The director lets the gathering start without him.'

Both PRO and the anaphor *sich* can be coindexed with the respective matrix subject despite the intervening PP adjunct boundary.<sup>24</sup> In contrast, the (b)-examples of the "minimal" (structurally similar) pairs in (33)-(34) confirm that the PD may not be separated from its associated possessee by boundaries of PP adjuncts like the *neben* or *ohne*-PP here.

(33) a. Tim; lässt die Lena nicht [neben sich;] essen.

Tim lets the Lena not next-to self eat 'Tim doesn't let Lena eat next to him.'

b. \*Tim musste der Mami [neben dem Sessel] aufräumen.

Tim had-to the mom next-to the armchair up-tidy
'Tim had to clean up next to mom's armchair.'

(34) a. Der Direktor, lässt die Versammlung [ohne sich,] anfangen.

the director lets the gathering without self start

'The director lets the gathering start without him.'

b. \*Tim hat der Mami [ohne Geschirrspülmittel] abgewaschen.

Tim has the mom (DAT) without dish-soap off-washed

'Tim did the dishes without mom's dish soap.'

In short, non-movement accounts of the PDC simply do not have a natural explanation for restrictions on the construction. Not assuming movement of the PD from inside the possessee means that the PD should be licensed independently of the presence of a possessed DP. Restrictions on the cooccurrence of PDs with other nominals in the clause would thus be unexpected.<sup>25</sup> Whether the possessee is embedded in an argument or adjunct, and, in fact, whether there is a possessee at all should not interfere with the PDC. It is clear, however, that the PDC *is* sensitive to these factors. As discussed in subsection 1.2, dative-marked DPs that are not possessors are only allowed to occur if the verb selects a dative-marked complement or if the DP is what I call a 'non-possessor dative'. Disregarding non-PDs for now (section 3.2 offers a more thorough discussion), (35) is ungrammatical if the dative-marked DP does not cooccur with a possessee.

### (35) Tim aß seiner Schwester \*(den Spinat).

Tim ate his sister (DAT) (the spinach)

'Tim ate his sister's \*(spinach).'

Summing up but also looking ahead to the following section, there are two basic choices for the analysis of PDCs: the binding/control approach and the movement approach. I follow Landau in arguing for the latter. The PD raises from Spec DP into a verbal argument slot. What Landau does not discuss at all is the connection between POSSESSOR and DATIVE embodied by the PD. Why should the possessor come with a dative case feature? This is where my proposal crucially differs from Landau's. The true puzzle of the German PDC is that the possessor receives a new  $\theta$ -role after raising. The PD is not only an argument of the possessee but also a malefactive or benefactive argument of the verb (i.e. is subject to the affectedness condition discussed in section 1). I will propose that the dative form of the PD and its interpretation as an affectee participant are linked in the way that such facts usually are. Dative (in this use at least) is an inherent (or thematically-linked) case which is associated lexically with the assignment of a particular semantic role (affectee in the present case). Landau avoids the problem of double  $\theta$ -role assignment, an apparent violation of the  $\theta$ -Criterion, by focusing on the Hebrew PDC, which is tolerated by a wider range of verbs than its German counterpart. In Landau's Hebrew examples, affectedness seems to be an implication of the given verbs in a particular context, which does not need to be encoded syntactically. Evidence from Spanish and French (see e.g. Kempchinsky 1992 and Guéron 1985), where the PDC is as restricted as in German, suggests that Hebrew is untypical in this respect. In order to explain the more general case of the PDC, the task is then to find a theoretical framework that, under certain circumstances such as inherent case-checking, allows double  $\theta$ -role assignment. The goal of section 3 is to integrate the basic ideas of Landau's possessor raising analysis into such a framework.

## 3. The PDC in a framework of dynamic structure-building

In this section, I continue to motivate (3.1) and then present in detail (3.2) a dynamic structure-building approach to account for the German PDC. I claim that this framework allows for double  $\theta$ -role assignment (3.3) and thus enables PDs to play the role of both possessor and affectee. This makes the current approach more attractive than traditional possessor raising analyses which have been criticized for not taking the obligatory affectedness of the dative referent into account (see especially the criticism in Hole to appear-b). I will also make reference to non-PDC examples of double  $\theta$ -role assignment provided by López (2001) and show that the system I propose has a better solution to the problem of overgeneration than López' account does.

#### 3.1 The facts: Hebrew vs. German

If Landau's (1999) possessor raising account were applied to the German PDC without modification, the contrast between Hebrew and German apparent in (37)-(40) would be unexpected. Like examples (10a-f) in subsection 1.3, these sentence pairs suggest that, unlike in German, the PDC in Hebrew requires no appeal to a syntactically encoded affectedness condition. A more concise (but still informal and descriptive) statement of what I mean by "affectedness condition" is given in (36).<sup>26</sup> The proposal to be developed in this section aims to account for this condition on the German PDC.

#### (36) PDC affectedness condition:

A PD is licensed only if the verb which takes the possessor-possessee complex as its complement can accommodate two internal arguments. One of these arguments must be assigned an affectee role.

(37) a. Gil lakax le-Rina et ha-tik.

Gil took to-Rina ACC the-bag

'Gil took Rina's bag.'

(Landau 1999: p. 8 (12b))

b. \*Tim nahm Lena die Tasche.

Tim took Lena (DAT) the bag

'Tim took Lena's bag.'

(38) a. Gil histakel le-Rina al ha-bayit.

Gil looked-at to-Rina on the-house

'Gil looked at Rina's house.'

(Landau 1999: p. 26 (49b))

b. \*Tim schaute Lena das Haus an.

Tim looked Lena (DAT) the house at

'Tim looked at Lena's house.'

(39) a. Gil maca le-Rina et ha-taba 'at.

Gil found to-Rina ACC the-ring

'Gil found Rina's ring.'

(Landau 1999: p. 27 (54b))

b. ?Tim fand Lena den Ring.

Tim found Lena (DAT) the ring

'Tim found Lena's ring.'

(40) a. Gil caxak le-Rina ba-mitbax.

Gil laughed to-Rina in-the-kitchen

'Gil laughed in Rina's kitchen.'

(Landau 1999: p. 28 (54g))

b. \*Tim lachte Lena in der Küche.Tim laughed Lena (DAT) in the kitchen'Tim laughed in Lena's kitchen.'

The judgments here are based on PDC-interpretations of the examples. If the dative nominal is not interpreted as a possessor, one could imagine an imperative-type context (e.g. *Du wirst mir (DAT) doch wohl nicht in der Küche lachen!* 'You won't offend me and laugh in the kitchen, will you?'), which facilitates affectedness, and construe it as an ethical dative, but then the construction involves a non-PD (see sections 1.1-2). The only difference between well-formed German PDCs and the (b)-examples in (37)-(40) appears to be that the verbs in the latter do not imply an obvious effect on the referent of the PD (here *Lena*).<sup>27</sup> I thus conclude that the ungrammaticality of the German sentences is due to precisely this lack of PD affectedness, a violation of the affectedness condition. In order to improve the German PDCs, *nehmen* 'take' could be changed to *tragen* 'carry'; *anschauen* 'look at' to *anstreichen* 'paint'; *finden* 'find' to *verbaseln* 'lose (colloq.)' and *lachen* 'laugh' to *herumstehen* 'stand around'. All these changes implicate that the action the verb expresses must have immediately obvious physical or emotional consequences for the referent of the possessor which can be viewed either negatively or positively. This confirms that, besides being a possessor, PDs must play a malefactive or benefactive (affectee) role. (Again, see also Wegener 1985, 1991, McIntyre 2003, and Hole to appear-a.)

At this point, two related challenges arise. The first is to understand the PDC affectedness condition (36) in a deeper way – to derive it from independent principles rather than stipulate it. The second is to

understand "double"  $\theta$ -role assignment, that is how to allow for a doubly  $\theta$ -marked DP without relying on dubious distinctions like "primary" vs. "secondary" (Guéron 1985) or "genuine" vs. "non-genuine" (Kempchinsky 1992)  $\theta$ -roles.

In a dynamic structure-building framework like Chomsky's (1995, 2000, 2001) Minimalist Program, the Projection Principle and to an extent also the  $\theta$ -Criterion lose their relevance because the levels of deep and surface structure are eliminated. The crucial property of this framework is that heads with their selectional requirements are introduced in the course of the derivation. This opens the possibility that selectional features can in principle be satisfied either by drawing material from the lexicon (or numeration (see next subsection))<sup>28</sup> or else by way of movement. I will show that a slight revision of Chomsky's system makes it possible for an argument to first receive a semantic role in situ and then, under certain conditions, raise to a higher head, check its formal features and take on another semantic role. As will be explained in section 3.3, the two  $\theta$ -roles of the chain linking the initial position of the raised constituent to its landing site do not violate any principles that hold for the revised system. I therefore propose that a dynamic structure-building framework provides the answer to what Landau calls the "classic puzzle" of the PDC (mentioned in section 1.3 and restated here in (41)).

(41) An argument in the clause (the possessor) derives its semantic role from another argument (the possessee) but its syntactic behavior from the predicate. What is the possessor dative an argument of? (Landau 1999: p. 2 (1))

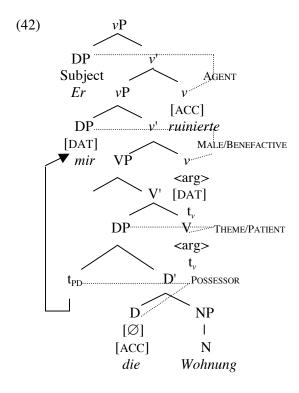
My claim is that, at least in German, a PD is both an argument of the possessee and of a verbal head that gets merged as the sister of the possessor-possessee complex. Since this means that PDs derive not only their syntactic behavior but also one of their semantic roles from the predicate, the German PDC (which is probably the general case) ceases to be anomalous. The actual task here is to find a theoretical framework that allows for a consistent account of the German facts without allowing for unwanted derivations. The

following subsection explains how case checking and crucially the double  $\theta$ -role assignment work in the framework I propose.

## 3.2 PDs as possessor and affectee

Assume that in the numeration<sup>29</sup> that is the source of a particular instance of a PDC there is a nominal that gets introduced as the possessee. Assume further that the D-head of the possessee comes without genitive or dative case licensing ability. This is plausible because the content of a numeration is not controlled by well-formedness conditions. In fact, it is no surprise that the lexicon of languages like German and Hebrew, which have possessor datives (unlike the lexicon of English which does not), contains non-caselicensing (or defective) Ds. If the elements of a numeration are not combined "correctly", i.e. if (some of) their features cannot be matched to form AGREE relations, the derivation crashes. If, on the other hand, an element like the defective D-head at issue here is matched with another element that makes up for the defect, the derivation can still converge and yield a grammatical sentence. Continuing with the derivation at hand, if a DP with a dative case feature is introduced as the specifier of the defective D, it can receive a θ-role from the possessee, <sup>30</sup> but its dative case feature must get checked by an element introduced later in the derivation. I propose that this element is a functional (or light) v-head (henceforth affectee v) which gets merged with the VP containing the possessor-possessee complex. While the lexical V has a theme role to assign, the affectee v comes with the need for an argument to which it can assign an affectee (male/benefactive) role. The DP sister of V, i.e. the possessor-possessee complex, fulfills the theme role. Then, if the numeration does not provide for another nominal suitable for assignment of the male/benefactive role, a previously introduced phrase can be raised from a position within the same syntactic object as contains the verbal head which assigns the male/benefactive role. In particular, this movement (or INTERNAL MERGE) operation targets the possessor DP (the PD) and raises it from the specifier position of the possessor-possessee complex to the specifier of the affectee vP. In its postraising position, the PD both checks its dative case feature and receives the male/benefactive role. In

other words, the affectee v assigns inherent dative case to the argument it attracts into its specifier. In contrast, the DP out of which the PD has moved (the possessee) enters into a non-movement AGREE relation with and checks structural accusative case with the topmost functional (light verb) head. This topmost verbal projection, headed by a PROTO-AGENT (or just AGENTIVE) v, assigns an agent role to the external argument in its specifier. It can be considered the instantiation of Burzio's Generalization (Burzio 1986) in that it links the presence of an external argument to the assignment of accusative case. To illustrate all of this, the approximate configuration of a sample PDC, including PD-movement and  $\theta$ -role assignment, is diagrammed in (42). After completion of subject and verb movement,  $\theta$  this will yield  $\theta$  truinierte mir die Wohnung. 'He ruined my place.'



The affectedness condition and thus the ungrammaticality of the German examples in (37)-(40) fall out from this analysis in the following way. If the lexical verb does not project an affectee v, which needs an argument in its specifier to which it can assign its  $\theta$ -role, the PD will not find a head to check dative case with. This follows from the standard assumption that checking of inherent case goes hand in hand with

the assignment of a designated  $\theta$ -role. Without an affectee v, the PD then ends up in situ with an unchecked [DAT]-feature (or, taking a slightly different view, an unvalued case feature), and the derivation crashes. In (37b)-(40b), then, the source of ungrammaticality is the absence of that crucial light verb projection. Without assignment of an affectee role, i.e. satisfaction of the affectedness condition, dative case cannot be licensed.

If the verb shell does include an affectee v and thus provides a dative case licensor, and if, in addition, the numeration happens to provide the elements needed for another DP, the raising operation is blocked because introducing an element from outside the syntactic object that is being built (EXTERNAL MERGE) is preferred over the more complex operation involving movement of an element from inside this object (INTERNAL MERGE). The additional DP then gets introduced directly into the specifier of the affectee vP, and no possessor raising occurs. In this case, the derivation is successful if the possessor DP comes with a genitive case feature that can be licensed by D. The result is a non-PD (ethical, estimative, or bene/maleficiary dative), as shown, for example, in (43a). Based on the data presented in section 1.2, it has already been established that a non-PD construction does not depend on the presence of a possessee (another example confirming this is given in (43b)). Now we see why this is so. In a case like (43a), the specifier of the possessor-possessee complex is filled with a genitive possessor. The dative-marked nominal never started out in this position and was thus never assigned the possessor role. Instead it got externally merged into the affectee argument position.<sup>33</sup> There is no raising involved here.

- (43) a. Du hast der Mama doch hoffentlich nicht Omas Geschirr kaputt gemacht. 34

  you have the mom (DAT) but hopefully not Grandma's (GEN) dishes broken made

  'I sure hope you did not ruin Grandma's dishes on mom.'
  - b. Die Kinder schlafen mir nicht schnell genug ein.
     the children sleep me (DAT) not fast enough in
     'The children don't fall asleep fast enough for me.'

The mechanisms of dative case checking, inherently connected with the assignment of an affectee role, in the context of both PDCs and non-possessor-related dative constructions thus fall out from the analysis I sketched in (42).<sup>35</sup> As for the nature of the affectee light verb projection, my proposal is compatible with the assignment of a male/benefactive role in applicative contexts (see e.g. Baker to appear and Pylkkänen 2002). In many languages, the male/benefactive aspect comes in the form of a functional marker, a morpheme. The lexical verb is argued to incorporate the applicative morpheme by raising to the light verb head.

To summarize, the general case of a PDC arises, on this view, from the presence in a given lexicon of two elements: (i) an instance of D which defines the semantics of possession but happens to lack the ability to case-license the possessor, and (ii) a light verb head which assigns an affectee role and has the means to case-license the argument that receives this role.<sup>36</sup> The problem posed by (i) is how to case-license the possessor. In effect, there is one more DP to be licensed than there are heads to license DPs. The solution to this problem is partially provided by (ii). The affectee v has an extra case feature to check. In order to take advantage of this, however, the other part of the solution is the relatively costly one of using a movement operation. The ultimate outcome is a doubly  $\theta$ -marked DP. The following subsection deals with the legitimacy of double  $\theta$ -role assignment and addresses the question of how to prevent overgeneration of Internal Merge structures.

## 3.3 Double $\theta$ -assignment

According to Landau's (1999) possessor raising analysis, PDs get their  $\theta$ -role from the possessee and check dative case with V after raising to Spec VP.  $\theta$ -assignment and feature-checking thus happen in different positions. This is in fact consistent with Chomsky's (1995) claim that the modules of feature-checking (Morphology or Checking Theory) and  $\theta$ -role assignment ( $\theta$ -Theory) are complementary.

There should be no interaction between  $\theta$ -theory and the theory of movement.  $\theta$ -roles are not formal features in the relevant sense; typically they are assigned in the internal domain, not the checking domain, and they differ from the features that enter into the theory of movement in numerous other respects. ...  $\theta$ -relatedness is a "base property", complementary to feature-checking, which is a property of movement (Chomsky 1995: 312-313).

While I agree that movement should be driven exclusively by formal features (case and agreement), not  $\theta$ -roles, the analysis I am developing is incompatible with the assumption that the domains of feature checking and  $\theta$ -assignment cannot overlap. One obvious counterexample to this assumption is inherent case-checking. When case-marking is inherent, i.e.  $\theta$ -related, there must be overlap of the two domains. In addition to inherent case-checking, the counterexample I am concerned with here involves the assignment of a  $\theta$ -role to an argument due to movement, and this is an even more serious offence (see also Rizzi to appear). Although the movement is still case-driven and therefore in accordance with Chomsky's assumptions, my proposal is clearly incompatible with the claim "that a raised element cannot receive a  $\theta$ -role" (Chomsky 1995:113). The motivation for ruling out  $\theta$ -assignment after movement is to prevent illicit double  $\theta$ -marking as in (44) (Chomsky's (113)), where the possibility of receiving a  $\theta$ -role after movement seems to allow for these derivations to converge, although the verbs HIT and BELIEVE, which share the  $\theta$ -structure of the actual *hit* and *believe* but lack case features, should not exist.

(44) a. John [<sub>VP</sub> t' [HIT t]]
b. John [<sub>VP</sub> t' [BELIEVE [ t to be intelligent]]]
(Chomsky 1995: 313)

The actual verbs *hit* and *believe* would cause these derivations to crash because they (or, to be more exact, their agentive *v*-projections) have accusative case-licensing ability and must therefore eliminate their case-features by checking them with *John*, causing *John* to be inactive and thus frozen in place. The

derivations with the impossible verbs HIT and BELIEVE seem to converge, however, because *John* is able to pick up both the theme and the agent role and then move on to Spec IP to check case and agreement features. Immediately after bringing up the configurations in (44), Chomsky actually solves the problem of unwanted convergence without having to appeal to checking and  $\theta$ -complementarity.

Surely no strong feature of the target is checked by raising to the [Spec, HIT] position, so overt raising is barred; in fact, no checking relation is established. The only possibility is direct raising to [Spec, I]. The resulting sentences *John HIT* and *John BELIEVES to be intelligent* are therefore deviant, lacking the external argument required by the verb (Chomsky 1995: 313).

The fact that the first move of *John* to Spec HIT or, to make this compatible with little v projections, to the specifier of the agentive v, is illicit because it is not driven by formal features – this specifier is not a case-position – is enough to rule out these unwanted configurations. In (44), double  $\theta$ -assignment is thus illicit, but if the only well-formedness requirement is that movement be driven strictly by formal features, assignment of a second  $\theta$ -role is not banned when it coincides with feature-checking. This latter scenario is precisely of the type I am dealing with in this paper. In PDCs, the PD raises to the specifier of the affectee v not for  $\theta$ -purposes but because the v-head is an active probe (attractor) and the head of PD is an active goal, both in need of checking their uninterpretable case feature. PD receives the affectee role as a by-product of the feature-driven movement.<sup>37</sup> The restriction given in (45) should therefore be sufficient to prevent overgeneration of double  $\theta$ -assignment constellations.

## (45) Restriction on Internal Merge:

Movement is driven by formal features, i.e. a legal operation only if, as a direct result, formal features of the goal and probe are satisfied.<sup>38,39</sup>

But this, in turn, is just the requirement of LAST RESORT, which has been a feature of the Minimalist Program, in one form or another, from the very start. It means that a DP can be an active goal for movement only if it has an uninterpretable formal feature, e.g. case, and if there is no other way to satisfy the matching formal features of the probe. Besides preventing configurations like (44) from converging, this movement restriction also rules out illicit possessor raising constructions like the German example in (46a) with the meaning given in (b).

(46) a. \*Chris<sub>i</sub> bewunderte [ $_{DP}$  t<sub>i</sub> den Bruder]

Chris admired the brother

'Chris admired his brother.'

b. Chris bewunderte seinen Bruder

Chris admired his brother

Here the possessor has been moved into external argument (subject) position. Without the restriction in (45), we have the following scenario: If the DP *Chris* happens to come with a nominative case feature which it cannot check in Spec DP and there is no other nominal to fill the subject position of the sentence, *Chris* will receive the possessor role in situ, raise to Spec vP, take on the proto-agent role, and end up in Spec IP to check its nominative case and agreement features. Convergence of this derivation is an undesired result because (46a) does not force the possessor reading given in (b). It is not clear whose brother is being admired. With the movement restriction in place, however, this type of nominative-marked possessor constellation has no chance to converge. As already discussed in connection with Chomsky's examples in (44), in order to get the proto-agent role, the PD *Chris* has to move to the specifier of the agentive v, a non-case position. It is commonly assumed that the first specifier of an agentive v is never a position in which formal features are checked<sup>40,41</sup> Thus, with the case feature of the PD not being satisfied as a result of this move, the operation is illegal. Direct movement of the PD to Spec IP would allow for nominative case checking but would prevent the agentive v from assigning its  $\theta$ -

role. In fact, before I° can even be introduced, the selectional requirements of v must be met. Besides entering into an accusative case-checking AGREE relation with a DP in the structure that has already been built, the agentive v must be supplied with an argument in its specifier to which it can assign its  $\theta$ -role. In a system, where Internal Merge is strictly formal-feature-driven, only a DP newly (i.e. externally) assembled from elements in the numeration can be merged into this specifier. Once this happens, direct movement of the PD to Spec IP is impossible because I° will find the newly introduced DP in Spec vP to check nominative case with. Io cannot look further down to find the PD. The derivation fails as desired.<sup>42</sup> To reiterate, the restriction in (45) does *not* rule out PD-raising. Since PDs move for inherent dative casechecking with the affectee v-head, the operation is legal. Having given up on strict checking and  $\theta$ complementarity, nothing prevents the affectee v from assigning its male/benefactive role to the argument that has been merged into its specifier. Furthermore, as hinted at in section 2, allowing movement only for formal-feature-checking provides a natural explanation for why the PD must originate in Spec DP, as opposed to Spec NP or the complement of N. Movement to Spec DP (which is a necessary step for an element to move out of the DP – DP is a phase, and movement proceeds via phase-edges) from either Spec NP or the complement of N is illegal because, being headed by an defective D, Spec DP is not a case position. It is thus possible to account for the cooccurrence restrictions on the PDC with process nominals (see subsection 2.1) without having to stipulate that the PD is based in Spec DP.

Other counterexamples to Chomsky's strict separation of Checking (i.e. Movement) and  $\theta$ -Theory are provided by López (2001). He reports on cases of double  $\theta$ -assignment in Spanish and English. In the Spanish causative construction in (47) (López' (21)), for instance, the agent argument of the verb in the embedded clause is argued to additionally receive a  $\theta$ -role from the matrix verb.

(47) Yo le hice reparar mi coche a mi mecánico favorito

I cl. (DAT) made repair my car to my mechanic (DAT) favorite

'I made my favorite mechanic repair my car.'

(López 2001: p. 705 (21))

According to López, the causee mi mecánico favorito is both the agent of reparar and the affectee of hice 'make'. The causee thus receives a second  $\theta$ -role after being copied and raised into the position where it surfaces as the dative clitic le. López' English examples are ECM constructions like (48a). Since, in López' system, accusative case is checked by the lexical V-head, the matrix Spec VP in an ECM construction is a position that allows both checking of accusative case and assignment of a  $\theta$ -role.

- (48) a. Sue estimated Bill's weight to be 150 lbs. (cf. Sue estimated Bill's weight.)
  - b. \*Sue estimated Bill to weigh 150 lbs. (cf. \*Sue estimated Bill.)

(López 2001: p. 703 (16)-(17))

The ungrammaticality of (48b) is supposed to show that the verb *estimate* imposes thematic restrictions on the raised ECM-subject. *Bill's weight* then not only gets a  $\theta$ -role from the head of the embedded VP *be 150 lbs* but also from the matrix verb *estimate*. Since the judgments given in (48) are extremely subtle, it is not clear that the ECM-subject really does receive a second  $\theta$ -role. According to Chomsky's (1995) account of ECM-constructions, the ECM-subject does not raise overtly. Still, López has a point in noting that at least for the Spanish causative example in (47), there must be a way to allow for case-checking and  $\theta$ -assignment overlap.

In order to prevent instances of illicit double  $\theta$ -role assignment, as in \*Chris saw me hit, meaning Chris saw me hit myself (see (49)), where the embedded direct object me both receives the internal and the external  $\theta$ -role of the embedded verb hit, López has to appeal to his somewhat controversial move of

taking accusative case-checking ability away from the external-argument-introducing v. He claims the structure in (49a) cannot result because the object is never in the checking domain of the embedded external  $\theta$ -role assigner v.

- (49) a. \*Chris saw [ $_{vP}$  me [ $_{v}$  v + hit] [ $_{vP}$  t $_{obi}$ ]]
  - b. Chris saw me hit myself.

(López 2001: p. 698 (4))

With V being both  $\theta$ -assigner and accusative case checker, the ECM-subject me does not enter into a potentially pied-piping (or movement-triggering) AGREE relation with v, i.e. it is not in a position to raise to Spec vP. The ECM-subject stays within VP and is thus not in danger of receiving the external  $\theta$ -role from v. The controversial side effect of this solution to the problem of illicit double  $\theta$ -role assignment is that the function of v is reduced to the introduction of the external argument. This means that little v is no longer the physical instantiation of Burzio's Generalization (1986): if v is absent (or somehow inert), the possibility of having both structural accusative case and an external argument will be absent too (see López' section 4 for a discussion of this consequence). Within the system I develop here, López' problem case in (49) is taken care of without having to give up Burzio's Generalization. The movement restriction in (45) makes raising of the ECM-subject me to Spec vP an illegal operation because, again, the first specifier of this vP is not a case position. No formal features are checked as a result of this move. Note also that López does not address how his revision of Chomsky's system would handle the type of overgeneration scenario I show in (46). Any dynamic structure-building framework that does not stipulate strict complementarity of Checking and  $\theta$ -Theory, i.e. a framework that allows  $\theta$ -assignment after movement, must find a different way of preventing the operation Internal Merge from raising an argument via Spec vP (picking up the external  $\theta$ -role) to Spec IP (checking nominative case).

In sum, I have shown that there is reason to believe that the modules of Checking and  $\theta$ -Theory cannot be strictly complementary. PD constructions in German (and arguably in many other languages as well) are a prime example of doubly  $\theta$ -marked DPs. López' Spanish causative and (less convincingly) his English ECM examples also suggest that a revision of Chomsky's (1995, 2000, 2001) system is called for. Overgeneration of double  $\theta$ -role assignment can be avoided by requiring that movement be driven exclusively by formal features, never by thematic needs.

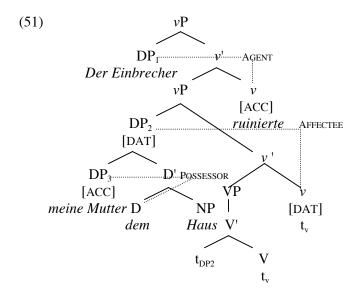
#### 4. Residual issues

Since random numerations, which can contain elements made up of any combination of features allowed in the language, are a core characteristic of a Minimalist system, the only way to prevent ungrammatical derivations from converging is through restrictions on the structure-building process. Operations like External and Internal Merge must be designed to disallow illicit combinations of feature bundles from being spelled out. As explained in the previous section, the movement restriction given in (45) successfully rules out overgeneration cases like Chomsky's (44), my (46), and López' (49). A PD cannot accidentally raise to the highest Spec  $\nu$ P projection and receive a proto-agent role. There may, however, be other overgeneration scenarios that the system developed thus far does not prevent. One such scenario is the following. Say the possessee DP comes with a dative and the possessor DP with an accusative case feature. Nothing prevents the entire possessor-possessee complex from raising into the specifier of the affectee  $\nu$  to check its dative case feature and the possessor DP from entering into a static (or non-movement) AGREE relation with the higher, accusative-case-checking  $\nu$ . A possible result of this scenario is the ungrammatical sentence in (50).

(50) \*Der Einbrecher ruinierte meine Mutter dem Haus.

the burglar ruined my mother (ACC) the house (DAT)

The tree structure in (51) shows this problem-case before v-to-I-to-C movement and raising of the subject from Spec vP via Spec IP to Spec CP (i.e. the movements resulting in VERB-SECOND word order) have taken place.



Unless we can straightforwardly rule out this constellation because of a semantic feature clash between the malefactive aspect and the inanimate house, there is a puzzle to be solved here. If it is at all possible to imagine a house with feelings which is negatively affected by the burglar's ruining the mother, there must be a structural reason that renders this sentence unacceptable: word order. If the accusative argument is not a pronominal (pronominals occur high in the structure and thus precede full DPs), the dative argument (the PD) must precede the accusative one (the possessee). This is confirmed by the examples in (52).

(52) a. ?\*Mein Bruder hat das Auto der Mami zu Schrott gefahren

my brother has the car (ACC) the mom (DAT) to scrap driven

'My brother totaled mom's car.'

b. ?Mein Bruder hat das Auto dem PAPI, nicht der MAMI, zu Schrott gefahren
 my brother has the car (ACC) the dad (DAT) not the mom (DAT) to scrap driven
 'My brother totaled DAD's, not MOM's car.'

Without special emphasis, (52a) is clearly degraded, and even when *dem Papi* is contrasted with *der Mami*, as in (52b), which seems at least better than (a), it is not clear that there is a possessor relation between *das Auto* and the respective parent. If this sentence is acceptable at all, it is probably a scrambled non-PD (here maleficiary dative) construction, not a PDC. The possessor raising configuration in (51) must then clearly be kept from converging, and since raising of the entire possessor-possessee complex happens for case reasons, the movement restriction in (45) is not sufficient here. Economy considerations might provide at least a temporary solution. One could argue that raising of the bigger DP, the possessee DP, which has the smaller possessor DP in its specifier, is an illegal operation because it would be more economical to just move the smaller DP. In order for this to work, the probe (the affectee *v*) has to look for any DP that is active, i.e. whose case-feature needs to be valued.<sup>43</sup> If given a choice between two equidistant<sup>44</sup> DPs, *v* must attract the smaller one. Since, in (45), it is the bigger DP that gets raised to the specifier of the affectee *v*, the derivation is deviant. The economy principle of moving a smaller rather than a bigger phrase would then ensure that the PD, not the possessee, ends up with dative case. I leave a more thorough investigation of this issue for future research.<sup>45</sup>

Another interesting possessor construction to be explored in the system this paper develops is shown in (53). Here the possessor is allowed to be in subject position (cf. (46a)).

(53) Er hebt die Hand. 46

he (NOM) raises the hand

'He is raising his hand.'

According to Guéron (1985), who gives a control-based account of the French PDC, these constructions are limited to expressions of "natural gesture" (i.e. functional movement of a body part). She analyzes predicates like *lever la main* 'raise the hand' as "pronominal verbs" or "reanalyzed V+NP" constructions which are transitive in syntax but intransitive at LF. In effect, the verb and the body part form an idiomatic unit expressing a particular kind of bodily movement.<sup>47</sup> As for the analysis presented in this paper, the question is how the example in (53) is different from the one in (46a), *Er bewunderte den Bruder* 'He admired the brother', where no obligatory possessor relation gets established between *er* and *den Bruder*. Since the movement restriction given in (45) prevents possessor raising to the specifier of an agentive *v*, the subject *er* in (53) cannot have originated in Spec DP of the possessee *die Hand*. The possessor relation must then be established differently here. This is confirmed by the fact that \**sich die Hand heben* 'to raise one's hand' is impossible. While the reflexive PD in (54a), a "non-natural gesture" sentence, is fine, it is unacceptable in (54b).

- (54) a. Er massiert sich die Füße.
  - he massages self (DAT) the feet
  - 'He is massaging his feet.'
  - b. \*Er hebt sich die Hand.

he raises self (DAT) the hand

'He is raising his hand.'

This contrast corroborates Guéron's reanalysis of V+NP, taking the theme-status away from the NP. If *die Hand* were the theme argument of *heben* 'raise', we would expect it to be able to host a PD in its specifier; and since it is possible to say *Er hebt ihr die Hand*. 'He raises her hand.', perhaps in a context where she is unable to raise her own hand, we know that generally, *heben* can project an affectee v. One way to make sense of the ungrammaticality in (54b) is then to follow Guéron and maintain that the DP *die Hand*, when used as a body part belonging to the subject *er*, is not a theme argument of *heben* and also

cannot assign a possessee role to the DP in its specifier. Another possible explanation is that, since there cannot be external causation with natural gesture sentences,<sup>48</sup> the subject is automatically the possessor of the body part. While it is possible to ask about the manner of causation given the case of (55) (*How did he break his leg?*), this makes no sense in the case of (56) (*#How did he raise his hand?*) Thus, in contexts where there is no distinction between the causing and the resulting event, as in (56), the possessor relation does not need to be expressed through a special construction (namely the PDC). In fact, the difference in grammaticality between the examples in (55) and (56) suggests that this possessor relation really is different in that it is not syntactically encoded. It seems plausible that there is no structural connection (neither via binding nor movement) between the subject and the possessor position.

- (55) a. \*Er brach das Bein.
  - he broke the leg
  - 'He broke his leg.'
  - b. ?Er brach sein Bein.

he broke his leg

'He broke his leg.'

c. Er brach **sich das Bein**.

he broke self (DAT) the leg

'He broke his leg.'

(56) a. Er hob die Hand.

he raised the hand

'He raised his hand.'

German Possessor Datives

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b. ?Er hob seine Hand.

> he raised his hand

'He raised his hand.'

c. \*Er hob sich die Hand.

he raised self (DAT) the hand

'He raised his hand.'

The (b)-examples show that the body part in both non-natural-gesture (55) and natural-gesture (56) constructions can marginally be modified with a possessive pronoun. The unmarked versions of these sentences, however, have a PD in the former case (see (55c)) and neither PD nor possessive pronoun in

the latter case (see (56a)). In short, I suggest that natural-gesture constructions like (53)/(56) cannot and

need not be analyzed as PDCs. Other examples of natural-gesture (according to Guéron, complex

reanalyzed) verbs are die Augen schlieβen 'close one's eyes', mit den Ohren wackeln 'to wiggle one's

ears', and mit der Wimper zucken 'blink (idiomatic)'.

A type of construction found in English but not in German, which is similar to (53)/(56) in that it

potentially has a possessor in subject position is given in (57).<sup>49</sup>

a. The ship tore a sail. (57)

b. The car burst a tire.

c. The athlete tore a muscle.

(Hole to appear-b: p. 372 (14)

Unlike in natural gesture constructions, the direct object here is not necessarily a body part and thus not automatically inalienably possessed by the subject. As there is no PD or possessive pronoun, the question

is how the possessor relation gets established here. In this case, there is no reason to argue against Spec

DP of the possessee being the origin site of the subject because the subjects in (57) are not proto-agents. This means that movement of the possessee from Spec DP to the nominative case position (Spec IP) does not have to proceed via the specifer of the agentive vP and thus does not cause the derivation to crash. In other words, possessor raising into subject position *is* compatible with the PDC account presented here, as long as the possessor moves directly to Spec IP without an intermediate, purely  $\theta$ -related stop-off point.

## 5. Conclusion

This paper presents a PDC analysis which is able to account for the fact that German PDs are not only raised, as proposed by Landau (1999), but also obligatorily affected, as proposed for German by e.g. Wegener (1985, 1991), McIntyre (2003), and Hole (to appear-a, to appear-b) and for French and Spanish by e.g. Guéron (1985) and Kempchinsky (1992). The PD plays the role of both possessor and affectee. The framework I propose to allow for double  $\theta$ -role assignment is a dynamic structure-building system generally based on, but in certain points crucially distinct from, Chomsky's Minimalist Program (1995, 2000, 2001). As also argued by López (2001), Chomsky's strict separation of the modules of Checking and  $\theta$ -Theory, which prevents a moved argument from receiving a  $\theta$ -role, must be modified. Obvious cases of illicit double  $\theta$ -role assignment can be ruled out by the restriction that the movement operation Internal Merge may only be applied if the moving element can check its formal features as a direct result of the movement. Other, less obvious cases may exist and will have to be carefully investigated. Overall, I have shown that the proposed dynamic structure-building approach is a plausible (if not the only) way of making Landau's (1999) convincing possessor raising account compatible with the German facts and thus the more general case of the PDC. The most attractive aspect of the analysis is that it provides a unified way to account for both "ordinary" affectee datives (non-PDs) and possessor datives. In the case of the former, the affectee v introduces as its specifier an argument that is externally merged. In the case of the

latter, the affectee *v* merges with an argument from inside the syntactic object being built (Internal Merge); the result is possessor raising.

The basic idea on which the account is built is that selectional features of heads can in principle be satisfied either by drawing material from the numeration or by way of movement. In a PDC constellation with a complex DP containing two heads that require feature-checking but only one feature-licensing head, the costly solution of moving the non-case-licensed DP to the specifier of an additional case-checking v-head (the affectee v) is the only way to allow for the derivation to converge. It seems worth exploring to which extent this basic idea of "external" or "internal" satisfaction of featural requirements (unconstrained by Chomsky's strict checking and  $\theta$ -complementarity) is applicable beyond the PDC and causative contexts.

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#### **Notes**

<sup>&</sup>lt;sup>1</sup> McIntyre (2003), for example, calls this head 'V<sup>DAT</sup>' and argues that it assigns to its specifier an interpretation parallel to that found with subjects of English *have*. For Hole (to appear-a), it is a voice-head (Aff), and for Pylkkänen (2002) it is one of the (v) applicative heads she proposes for the introduction of non-core arguments.

<sup>&</sup>lt;sup>2</sup> When used intransitively, *fahren* 'drive' takes the perfect auxiliary *sein* 'be'.

<sup>&</sup>lt;sup>3</sup> Similar examples from French can be found in Guéron 1985 and Vergnaud & Zubizarreta 1992.

<sup>4</sup> In many dialects of German, particularly in casual speech, the combination of dative possessor plus possessed DP with a possessive pronoun in Spec DP is not only acceptable but actually replaces the standard genitive construction. Instead of *Mamas Auto* 'mom's car', speakers of these dialects can say *der Mama ihr Auto* '(to) the mother her car' (see e.g. Wegener 1985). Unlike in a PDC, the dative possessor and the possessee in this construction cannot be separated.

<sup>&</sup>lt;sup>5</sup> See Landau (1999) for a more comprehensive overview of path (a)-type analyses.

<sup>&</sup>lt;sup>6</sup> Isac&enko (1965) proposes a dative transformation rule which turns genitive constructions like *Der Rücken des Mannes* schmerzt ('The man's back aches') into the corresponding PDC *Dem Mann schmerzt der Rücken* (literally 'to the man hurts the back'), where the post-nominal genitive *des Mannes* raises to become the dative *dem Mann*. Gallmann (1992) argues that, after incorporation of the possessee N° into V°, the caseless complement of N°, namely the possessor-NP, raises and adjoins to V' to get structural dative case from V°, which assigns both accusative and dative case in this framework.

<sup>&</sup>lt;sup>7</sup> Note that several authors have specifically argued against a possessor raising analysis for German (see e.g Hole to appear-a, to appear-b, Pylkkänen 2002, and Wunderlich 1996, 2000). As discussed in section 3, the account proposed here avoids the main problem these authors have with traditional possessor raising analyses like Landau 1999 and Gallmann 1992.

<sup>&</sup>lt;sup>8</sup> Thanks to one of my reviewers for pointing this out to me.

<sup>&</sup>lt;sup>9</sup> Note that it is not the genitive DP *der Stadt* 'of the city' following the head noun *Zerstörung* 'destruction' that makes (11a) ungrammatical. As shown by examples like *Ottos Beschreibung Marias* 'Otto's description of Maria', German allows for multiple possessors in DP (see Longobardi 1996).

<sup>&</sup>lt;sup>10</sup> Subscript 'x' marks a binding relation between the dative and one of the other nominals in the sentence. According to Hole (to appear-a), both *den Bau* and *Aussicht* are possible bindees in (13b).

<sup>&</sup>lt;sup>11</sup> The *Redewendungen* edition of the *Duden* (Drosdowsky 1992) lists the dative as part of the expression. To clarify, this expression *is* a PDC, with the dative being the "possessor" of *Aussicht*, but since it is a frozen combination, the dative behaves like it is subcategorized for. It cannot function as possessor of a different nominal, and it cannot be left out like a PD in a regular PDC.

<sup>&</sup>lt;sup>12</sup> Kempchinsky's "non-genuine" possessor is similar to what Guéron (1985) calls a "secondary" θ-role, assignment of which is supposed to be exempt from the θ-Criterion.

<sup>&</sup>lt;sup>13</sup> In (15a-b), the VERB-SECOND (Spec CP) position is occupied by the nominative-marked DP. Note that, in the unmarked (neutral) word order, the dative precedes the accusative nonminal, as shown in the embedded clauses in (i) and (ii):

- (i) ... weil Lena der Hund überfahren worden ist.
  - because Lena (DAT) the dog over-driven PASS is
  - "...because Lena's dog was run over."
- (ii) ... weil mir der Arm eingeschlafen ist.
  - because me (DAT) the arm in-slept
  - "...because my arm has fallen asleep."

- <sup>16</sup> Under "Phrases and Collocations (3-4 words)" for the entry of the verb *verweigern*, the *dict. cc* online dictionary lists *jemandem* (DAT) *die Erlaubnis verweigern* 'refuse somebody permission' and *jemandem* (DAT) *etwas verweigern* 'refuse somebody something', and a Google search confirms the frequent occurrence of datives in the context of this verb.
- <sup>17</sup> Landau (1999) does not discuss why this position should be caseless. As I explain in section 3, a Minimalist framework allows for caseless Spec DP positions because the operation which creates the lexicon for a given language is not subject to well-formedness conditions. In other words, a lexicon containing Ds that lack case-licensing ability is not in any way "ruled out". In fact, this is precisely where the distinction lies between languages that have the PDC and languages that do not. While the lexicon for German and Hebrew, for example, includes non-case-licensing Ds, the lexicon for English does not.
- <sup>18</sup> See McCloskey 2000 and Svenonius 2004 for analyses which suggest that DPs are phases in the sense of Chomsky 2000, 2001.
- <sup>19</sup> In a passive or unaccusative constellation (see (15)), the entire possessor-possessee complex raises to Spec IP, the subject position of the sentence. As noted by Landau (1999), this leads to an unbound trace, "a case of remnant movement (Müller 1996) where a constituent containing a trace moves outside the c-command domain of the antecedent of that trace" (p. 12). A Hebrew example is shown in (i).
  - (i)  $[_{IP}[_{DP}t_1]$  ha-kovec ha-xadas $]_2$  nimxak  $[_{VP}$  le-Gil $_1[_v,t_v,t_2]]]$  the-file the-new was-erased to Gil 'Gil's new file was erased.' (Landau 1999: p. 12 (22)-(23))

This is not a problem for the c-command condition since the now standard assumption is that c-command condition on movement is satisfied derivationally, not on post-movement structures.

<sup>&</sup>lt;sup>14</sup> These examples were provided by one of my reviewers.

<sup>&</sup>lt;sup>15</sup> I thank one of my reviewers for noticing this apparent contrast between Hole's (to appear-a) and my data.

<sup>&</sup>lt;sup>20</sup> Unlike in Hebrew, where, according to Landau (1999), instrumental PPs are compatible with PDC, example (29c) would also be bad if the preposition were *mit* 'with' (cf. Landau's (35a)).

<sup>21</sup> The examples in (29) could pass as ethical dative constructions but for that interpretation, the preferred context is an imperative with a first-person pronoun as the PD, as in *Iss mir jetzt erstmal brav auf!* 'Be good and eat up for me!' Notice that this fact demonstrates the potential of these verbs to express affectedness, even when used unergatively.

- (i) Sie trampelten ihr [auf dem Blumenbeet] rum.
   they trampled her (DAT) on the flower-bed around
   'They trampled around on her flowerbed.'
   (Wunderlich 2000: 260)
- (ii) Er ist ihr [auf dem frisch gestrichenen Fußboden] rumgelaufen.

  he is her (DAT) on the freshly pained floor around-run

  'He ran around on her freshly painted floor.'

I do not see a problem with these PPs being arguments. Like *stehen* 'stand' and *liegen* 'lie', *rumtrampeln* and *rumlaufen* select an optional locative argument. Non-locative PPs (e.g. a time adverbial) would have to be analyzed as adjoined, but not locative PPs.

A reviewer notes that the examples in (29) could be ungrammatical simply because the non-argument PPs are adjoined too high to be c-commanded by the PD. I rule out this possibility because German VPs are right-headed, and the non-finite verb in (a) and (c) needs to linearly follow the PP. If German non-finite Vs do not undergo V-to-v raising (which I assume; see Hankamer & Lee-Schoenfeld 2004), the PP can only be left-adjoined to VP, i.e. be in a position lower than the PD.

<sup>24</sup> In (32), the anaphor is even bound across a *v*P-boundary (see Lee-Schoenfeld 2004 for an analysis of binding in ACCUSATIVUS CUM INFINITIVO (AcI)-constructions).

<sup>25</sup> Hole (to appear-a), for example, who proposes a Kratzer-style voice account of dative binding in German, where PDs are introduced by an Aff voice-head and bind a variable in the possessee, can only speculate on a generalization that explains why DPs should block possessor-related binding. (On Hole's view not all DPs are opaque to the possessor relation between the extra dative and the possessee.)

<sup>26</sup> Interestingly, the native speaker of Hebrew I asked to confirm Landau's judgments rejected all the examples that do not satisfy the affectedness condition. This discrepancy may be due to speaker variation or (as suggested by a reviewer) contextualization effects. Landau's judgments could be based on possible but pragmatically unusual situations. More native speakers need to be consulted to clarify this. If it turns out that the Hebrew PDC is subject to the same syntactically encoded affectedness condition as the German PDC, Landau's data truly represent a special case of the PDC and his "classic puzzle" (see (41)) solves itself with

<sup>&</sup>lt;sup>22</sup> As one reviewer points out, if non-argumenthood of PPs blocks possessor raising, the PPs in (i) have to be arguments of the respective verbs.

respect to the more general case. The remaining question would be why the Hebrew dialect described by Landau (and also Pereltsvaig (2003)) should be so different.

- <sup>27</sup> Example (40b) is degraded also because *in der Küche* 'in the kitchen' is not an argument PP, and, as established in subsection 2.5, possessor raising is blocked out of adjuncts.
- <sup>28</sup> Note that complex phrases do not come directly from the lexicon or numeration. The terminology is misleading here.
- "Drawing material from the numeration" should be interpreted as parallel construction of a phrase in a so-called work-space followed by its merger with the topmost head in the larger syntactic object (sentence) that is being derived.
- <sup>29</sup> A numeration is a random array of feature-bundles selected from the lexicon, which is in turn made up of all legal lexical and functional feature combinations existing in the language.
- By saying that the possessor role gets assigned by the possessee, I do not mean that it is the lexical head of the possessed DP, namely N, that assigns the role. I follow Landau (1999) in assuming that, unlike process nominals (see subsections 2.1 and 2.4) and fear-type nouns whose 'subjects' must be based in Spec NP because there is a clearly identifiable thematic relation between agent and process or experiencer and sensation, possessed nouns have their 'subjects' in Spec DP. The possessor role (which Kempchinsky (1992) appropriately calls a "non-genuine"  $\theta$ -role) must then be assigned by D. The nature of the actual thematic relation involved is context dependent. It seems plausible to assume that there is a semantic rule applying in the syntactic context in (i) which has the effect that the referent of DP<sub>1</sub> stands in some relation R (specified by context) to the referent of DP<sub>0</sub>.

$$\begin{array}{ccc} \text{(i)} & DP_0 \\ & / \setminus \\ DP_1 & D' \\ & / \setminus \\ & D & NP \\ [poss] \end{array}$$

- Following Hale & Keyser (1993), Chomsky (1995), and Kratzer (1996), I assume that transitive/unergative verbs project a double-layer verbal structure with the outer shell being an agentive  $\nu$ P, while unaccusative verbs just consist of a bare VP. Other  $\nu$ -projections may be added to these basic structures because, following Pylkkänen (2002), I assume that a number of thematic role-types (especially those involved in applicative alternations, including affectees) are also introduced by light verbs.
- $^{32}$  VERB-SECOND word order will be spelled out correctly after the verb (which has already raised via head movement from V to the highest v) moves from v to I to C, and the subject moves via Spec IP to Spec CP (see Vikner 1995, but Haider 1993 for a different view).
- <sup>33</sup> Note that case-checking with an externally merged argument goes against Chomsky's (1995) early assumptions concerning the non-interaction of Checking and θ-Theory. It is clear that inherent case checking represents a necessary area of checking and θ-overlap. This will be discussed in subsection 3.3.

<sup>34</sup> In contrast to (43a), where the possessor is not forced to and therefore does not move, possessor raising *is* compatible with a genitive construction if the genitive is expressed as a PP-complement to the possessee. A Hebrew example is given in (i).

(i) Gil **s&**avar le-Rina et ha-mi**s&**kafayim **s&**el Sigal.

Gil broke to-Rina ACC the-glasses of Sigal

'Gil broke Sigal's glasses on Rina.'

(Landau 1999: p. 7 (9))

Here Spec DP is available for the PD, and the possessee must be interpreted as possessed by two different individuals. As Landau puts it, Rina has 'transitory' possession of the glasses. The German equivalent of Landau's Hebrew example is given in (ii). The Hebrew genitive construction is translated as a *von* ('of')-PP.

(ii) Tim hat Lena die Brille von Silke zerbrochen.

Tim has Lena (DAT) the glasses of Silke broken

'Tim broke Silke's glasses on Lena.'

<sup>35</sup> As for datives that are neither PDs nor non-PDs, i.e. dative arguments that are subcategorized by the verb (e.g. by verbs like *helfen* 'help', *gratulieren* 'congratulate', *gefallen* 'please', *fehlen* 'lack'), Maldonado (2002) argues that the dative-marked participant is always affected, either positively or negatively. If all instances of dative case-checking are indeed tied to a particular type of θ-role and thus inherent, there is a natural explanation for the incompatibility of the PDC with "dative" verbs (see examples above) shown in (i) and (ii).

- (i) \*Ich habe unseren Nachbarn der Tocher geholfen.
   I have our neighbors (DAT) the daughter (DAT) helped
   'I helped our neighbors' daughter.'
- (ii) \*Er hat seiner Freundin dem Vater gratuliert.

  he has his girlfriend (DAT) the father (DAT) congratulated

  'He congratulated his girlfriend's father.'

Assuming there can only be one affectee *v*-head per clause, the affectee role can only be assigned to either the PD or the subcategorized dative argument, and consequently, only one of the two can check its dative case feature. In German, two datives can only cooccur (marginally) if one is the first person pronoun *mir* in an ethical dative construction. This makes sense with respect to the Hebrew facts. As noted by a reviewer, PD-raising out of a possessee that is itself a dative is possible if the PD is a clitic that does not absorb the case of the predicate. It could be that German *mir* in examples like *Mach mir der Lena bitte nicht die Brille kaput*. 'Please do me a favor and don't break Lena's glasses.' behaves like a clitic. A more thorough investigation of

the connection between PDs and subcategorized datives is certainly worthwhile but is not my focus here. (See Wegener 1985, 1991 for a discussion of the cooccurrence of different datives.)

Since the cooccurrence of these two elements in a numeration is random, we expect affectee light verbs to show up independently of defective Ds. This expectation is borne out in the case of non-PD constructions which *can* but do not need to coincide with a possessed nominal. One of the examples I give in section 2.5, however, seems to contradict the independence of affectee light verbs and the PDC. In (35) *Tim a\beta Lena den Spinat*. 'Tim ate Lena's spinach.', the possessee *den Spinat* cannot be left out, i.e. Tim cannot simply eat for the benefit of Lena. This goes back to the aspectual restriction that the predicate in non-core dative constructions must express a result or imply a consequence which obviously affects the person referred to by the dative nominal.

Note that, since it is driven by formal features (case), PD-raising is an instance of A-movement. In order for this move to be legal, the origin site of the PD, the Spec of the possessed nominal, must itself be an A, not an A-bar position. As pointed out to me by Marcel den Dikken (p.c.), the analysis is then incompatible with Kayne's (1993) account, which, following Szabolcsi (1981, 1983), draws a parallel between DP and CP and therefore takes Spec DP to be an A-bar position. To make DP-movement out of a possessed nominal via the Spec of this nominal to an A-position legal, Kayne proposes that Spec DP of a possessed nominal becomes an A-position via incorporation of D into the verbal head *be*. The derived Spec of D+BE counts as an A-position. Since nothing in my account hinges on *have* being derived from D+BE (see Kayne's analysis), I will not follow Kayne and Szabolcsi in assuming that Spec DP is an A-bar position. No incorporation is needed then.

<sup>&</sup>lt;sup>38</sup> Satisfaction or checking of formal features does not necessarily mean feature deletion. Interpretable features, like  $[\phi]$  (agreement) or [WH] on a DP, are involved in the matching relation (AGREE), get checked, but do not get deleted as a result of the movement. Thus, in cases of "unbounded" or successive-cyclic movement like Wh-movement or Subj-to-Subj raising, movement to intermediate specifier positions results in checking of interpretable features on the goal but does not inactivate it because its uninterpretable case or [Q] feature feature has yet to be deleted. The goal establishes as many  $[\phi]$  or [WH] AGREE relations with intermediate probes as it needs to reach a position where its uninterpretable feature can be deleted.

One reviewer notes that  $\theta$ -features which can be "picked up" derivationally come close to behaving like "regular" formal features (i.e. case, agreement, etc.) (see Hornstein 1999 and subsequent work), and that, treating  $\theta$  and case/agreement features on a par makes (45) a stipulation. I disagree with the view that  $\theta$ -features are just like formal features and should thus be able to trigger movement as well. The major difference between  $\theta$  and formal features is the following: formal features do not need to be checked until completion of the phase which contains the feature-bearing element, and even then formal feature checking can be delayed if the element is at the phase-edge.  $\theta$  (or selectional) features, on the other hand, must be satisfied right away, before any new structure can be built.

<sup>40</sup> This holds for all formal features, not just case. There should not be a language, then, which happens to have some formal feature on the possessor needing checking and possibly resulting in the illicit constellation in (46a). I do, however, agree with one of my reviewers who warns that "in practice, any movement can be justified by assuming some formal feature on each of the probe and goal". It is true, of course, that the restriction in (45) is only meaningful if limitations are discovered on where there can be formal features.

<sup>41</sup> As pointed out by a reviewer, it is a simplification to say that Spec vP is not a case position. Ura (1996), for example, has argued that v can assign ergative case. Furthermore, there are subjects that are generated in Spec vP and stay there because they are not forced to move by an EPP feature but enter instead into a static AGREE relation with  $I^{\circ}/T^{\circ}$  (see Wurmbrand 2004). Spec vP then is a case position, but only when higher structure, including the nominative case-checking  $I^{\circ}/T^{\circ}$ -head, has been merged. Since there is no higher structure at the point when the agentive v looks to assign its  $\theta$ -role, v cannot attract an argument to move into its specifier. Movement of a DP to Spec vP after  $I^{\circ}/T^{\circ}$  has been merged, would be counter-cyclic.

 $^{42}$  A reviewer notes that the restriction in (45) rules out movement of the possessor not only into subject position but also into the position of the direct object. Since the agentive, accusative-case-checking v has not yet been merged in at the point when the verb looks to assign its internal argument role, the direct object position is not a case position. Despite the occurrence of examples like (i) (see also Hole to appear-b) as apparent PDC-alternatives, I maintain that (45) makes the right prediction here.

- (i) Er trat mich in den Magen.

  he kicked me (ACC) in the gut
- (ii) Er trat mir in den Magen.

he kicked me (DAT) in the gut

In (i), the accusative *mich* can be argued to not have originated in the specifier of the *Magen*-DP. The accusative is then an ordinary direct object, and the PP *in den Magen* is an adjunct. This is in line with Hole to appear-b: use of the accusative, i.e. the construction in (i), expresses a different kind of affectedness. Unlike in (ii), the body part in (i) represents the whole person. It is the referent of the accusative pronoun which plays the internal argument (patient) role, not the particular body part added by the PP. Hence, constructions like (i) do not involve possessor raising. (Note, however, that, on this view, the verb *schießen* 'shoot', as in *Er hat ihn in den Rücken geschossen*. 'He shot him in the back.' has to be treated as an exception because it is not grammatical with just a direct object. It also selects a PP.) My response to the question why the PDC in (ii) should be derived by possessor raising if some alternative mechanism must be available to capture the interpretation of the accusative in (i) is that no special mechanism is needed for cases like (i). The accusative can fulfill the direct object role, and its possessor relation with the inalienably possessed body part is automatic, i.e. does not have to be encoded in the syntax. In (ii), on the other hand, the dative cannot be analyzed as a core argument. Here, possessor raising is motivated.

<sup>&</sup>lt;sup>43</sup> On this view of case-checking, DPs come with unvalued case-features that need to be filled in by case-licensing heads.

<sup>&</sup>lt;sup>44</sup> According to asymmetric c-command (Chomsky 1995), neither of the two DP is closer to the affectee v.

<sup>&</sup>lt;sup>45</sup> One reviewer notes that the solution I propose here is at odds with Müller's (1996) work on remnant movement, where it is the bigger DP that is considered closer to the probe than the smaller DP in its specifier because closeness is taken to correlate with the number of intervening nodes, not c-command. The smaller DP can only be attracted from the derived position, if at all. This is an interesting observation worth exploring but goes beyond what I can cover here.

<sup>&</sup>lt;sup>46</sup> See Wunderlich 2000 for an analysis of this example in the framework of Lexical Decomposition Grammar. See also Vergnaud & Zubizarreta 1992 for a discussion of examples like these in English and French.

<sup>&</sup>lt;sup>47</sup> Note that this does not hold for similar constructions where the nominal in possessee-position is not a body part. The sentence *Er griff in die Tasche*. 'He reached in the bag.', for example, does not establish a necessary possessor relation between the subject *Er* and *die Tasche* 'the bag'. I thank Jorge Hankamer for bringing up this sentence.

<sup>&</sup>lt;sup>48</sup> Thanks to one of my reviewers for commenting on this point.

<sup>&</sup>lt;sup>49</sup> Again, credit goes to one of my reviewers.

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