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## Possessor raising\*

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### Abstract

Various languages allow instances of external possession – possessive encoding without a possessive structure in DP. The analysis of these cases has long been a battleground of raising versus control. I provide a new argument in support of possessor raising of a type thematically parallel to raising to subject. The possessor phrase moves from a possessum-DP-internal position to an a-thematic A-position within vP. Like raising to subject, this movement is obligatory and does not result in the assignment of a new theta-role to the moving element.

The expression of possessive relationships in natural languages is strongly associated with complex DP/NP structure. We see this in English DP possessives like *Sarah's house* and NP possessives like *friend of mine*; in French *son père* and *l'idée du fils*; and in a similar way in all or nearly all human languages that have been described. What sort of universal could be behind these facts? In the simplest case the connection between possessive semantics and nominal syntax would be quite direct. The possessor theta-role is assigned inside nominal projections, and it is not assigned anywhere else.

The challenge from this perspective is to account for a series of exceptions to the pattern connecting possessive semantics and nominal syntax. In certain cases, possessor-denoting phrases surface external to possessum DPs, and in the most challenging of these, this occurs without the presence of any type of possessive verb (e.g. *have*, *own*). Payne and

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Barshi (1999a) group these exceptions under the heading of *external possession*. A well-known type of example, the ‘possessor dative construction’ in German, and a less-well known example drawn from Nez Perce (Sahaptian; USA) appear below.<sup>1</sup>

- (1) Tim hat **der Nachbarin** das Auto gewaschen.  
 Tim has **the neighbor.DAT.FEM** the car washed  
 Tim washed *the neighbor’s* car. (German; Lee-Schoenfeld 2006, 102)
- (2) haama-pim hi-nees-wewkuny-e’ny-Ø-e **ha-haacwal-na** lawtiwaa  
 man-ERG 3SUBJ-O.PL-meet-PR-P-REM.PAST **PL-boy-OBJ** friend.NOM  
 The man met *the boys’* friend. (Nez Perce; field notes)

Of central concern here are the bolded phrases. These are interpreted as denoting possessors, yet in both cases, syntactic facts point to a structure which treats these phrases as syntactic dependents of the *verb*, rather than of the possessum. This is the classic conundrum of external possession. In German (1), the possessor phrase marks the dative case, rather than the genitive; the possessum and possessor phrases do not behave as a constituent for topicalization (Lee-Schoenfeld 2006, p 104). In Nez Perce (2), the possessor phrase marks the objective (accusative) case, rather than the genitive, and controls plural object agreement.

What accounts for the possessor interpretation of these external possessors? If the universal we are entertaining is correct, the options are limited. The possessum DP in these cases must contain some element referentially dependent on the possessor phrase surfacing external to it. Possibilities for this dependency mirror those applying over the edge of non-finite TP: raising, or (some type of) control. On a raising analysis, the possessor phrase would move out of the possessum phrase to an a-thematic A-position in the clausal spine. The dependent element in the possessum phrase is a copy left by move-

<sup>1</sup> Abbreviations in Nez Perce glosses are: 3/3 3rd person subject / 3rd person object portmanteau agreement, 3OBJ 3rd person object agreement, 3SUBJ 3rd person subject agreement, APPL:GOAL goal applicative, EMPH emphatic, ERG ergative case, GEN genitive case, HAB.PRES.PL present habitual with plural subject, IMPER imperative, IMPERF imperfective aspect, IMPERF.PL imperfective aspect, plural subject, LOC locative case, OBJ objective case, O.PL plural object agreement, P P aspect (perfect/perfective), PR object possessor raising suffix, PRES present tense, PROSP prospective aspect, REC.PAST recent past tense, REM.PAST remote past tense, S.PL plural subject agreement, Y.N yes-no question particle.

ment.

- (3) a. Subject raising:

[<sub>DP</sub> The buffalo] seemed [<sub>TP</sub> ~~the buffalo~~ to impress Martin ]

- b. Possessor raising (pseudo-Nez Perce (2)):

The man met [<sub>DP</sub> the boys]<sub>poss'r</sub> [<sub>DP</sub> ~~the boys~~ friend ]

On a control analysis, by contrast, the possessor phrase would occupy an A-position in the clausal spine which is associated with a theta role, perhaps ‘affectee’. The name ‘control’ nowadays subsumes two distinct and much debated approaches to the relationship between this position and something lower.<sup>2</sup> On theories which permit movement between thematic positions, such as Hornstein 1999, the affectee position could be obtained by movement; the possessum phrase contains a copy just as it would on a raising analysis. On theories which eschew such movement, such as Chomsky 1981, the overt possessor phrase would have to be generated in the affectee position; a relationship of binding links this phrase to a PRO possessor inside the possessum DP.

- (4) a. Control into TP:

[<sub>DP</sub> Sarah]<sub>exper</sub> hopes [<sub>TP</sub> PRO/~~Sarah~~<sub>agent</sub> to buy the house ]

- b. Control into DP (pseudo-German (1)):

Tim washed [<sub>DP</sub> the neighbor]<sub>affectee</sub> [<sub>DP</sub> PRO/~~the neighbor~~<sub>poss'r</sub> the car ]

Both the raising analysis and the various versions of the control analysis respect the universal connection between nominal structures and possessive interpretations. But which of the particular means for obscuring this connection are actually instantiated in natural languages?

Several decades of research in this area have resulted in a scorecard which is heavily tilted toward the control-type analysis. The case for this analysis is well-argued and

<sup>2</sup> See Hornstein (1999, 2001), Culicover and Jackendoff (2001), Polinsky and Potsdam (2002), Landau (2003), Bowers (2008).

well-known. It applies in a straightforward way to a language like German. As in a striking majority of European languages,<sup>3</sup> external possession in German is associated with a requirement of possessor affectedness. Possessor dative sentence (1) is infelicitous, even morbid, if the neighbor is dead; the possessor phrase *der Nachbarin* ‘the neighbor’ is assigned an additional affectee theta-role in the possessor dative construction. Analyses of German possessor dative constructions respond to this semantic fact in ways that closely mirror approaches to cross-clausal control. This means either binding of a PRO possessor from a thematic position in the clausal spine, as in Hole 2005 (in the spirit of Chomsky 1981), or movement from possessor position into a clausal thematic position, as in Lee-Schoenfeld 2006 (in the spirit of Hornstein 1999). In response to similar facts, similar proposals have been widely explored in the analysis of French (Guéron 1985, 2006, Tellier 1991, Vergnaud and Zubizarreta 1992), Spanish (Kempchinsky 1992), Mandarin (Huang 1999) and other languages.

The case for the raising analysis has invited more skepticism. Reported instances of external possession where the possessor occupies an A-position but obtains no new theta-role (and in particular no affectee interpretation) hail for the most part from languages that remain understudied.<sup>4</sup> Explicit raising analyses along these lines have been very few. The clearest purported cases of a-thematic external possession from A-positions come from Tzotzil (Mayan; Mexico), analyzed in Arc-Pair Grammar by Aissen (1987, ch 8), and from Choctaw (Muskogean; USA), analyzed in Relational Grammar by Davies (1986, ch 3). Within transformational grammar, work on Hebrew by Landau (1999) and on Nuuchah-nulth by Ravinsky (2007) is notable in explicitly advocating possessor raising analyses without thematic effects, but the empirical situation regarding affectedness judgments

<sup>3</sup> On this areal trend, see Koenig and Haspelmath (1998, §2) and Haspelmath (1999). In languages where external possession is found predominantly with body-part possessa (e.g. French), it is sometimes also reported that external possession requires that the *possessum* be affected (Cheng and Ritter 1987). These notions are clearly related: when the possessum is part of the possessor’s body, an effect on the possessum is an effect on the possessor.

<sup>4</sup> The case is of course different where possessor phrases occupy clausal A’-positions, as in the languages discussed by Szabolcsi (1984), Chung (1994) and Gavruseva (2000). Since this kind of external possession raises slightly different issues, I set it aside here.

for Hebrew at least remains controversial.<sup>5</sup> For languages like Korean for which possessor movement analyses have been widely discussed (Ura 1996, Ko 2007), those analyses have come under fire for failing to account for affectedness constraints (e.g. Tomioka and Sim 2007); and similar remarks apply to various instances of external possession explored as cases of Possessor Ascension in the framework of Relational Grammar (Blake 1990, 82).

This curious weakness in the case for true possessor raising, compared with the very strong evidence for control-like external possession, has led some to doubt that universal grammar should permit possessor raising in the way that it permits raising to subject.<sup>6</sup> If this is so, there is an end to the parallels between dependencies into non-finite TP and those into possessive DP when it comes to raising to A-positions. This in turn would suggest that analyses which posit movement into *thematic* A-positions for languages like German (e.g. Lee-Schoenfeld 2006, 2008) would have to be reconsidered. In the broadest terms, this conclusion deals a blow to the idea that referential dependency can in general be reduced to movement (Hornstein 2001).

What, then, are the prospects for the possessor raising analysis? Do natural languages ever show true possessor raising in the way that they show raising to subject? This paper is devoted to the contention that they do. I'll make a new case for this conclusion on the basis of the construction in (2), which presents a particularly clear example of simple possessor raising. The possessor phrase moves from a position internal to the possessum DP to a position in the clausal spine. Like in classic cases of raising to subject, the A-position targeted by movement is not a position in which a theta-role is assigned. There is no affectedness condition on possessor movement in Nez Perce.

To make the case for the simple raising analysis of (2), I'll first provide some back-

<sup>5</sup> See Guéron 2006, Pylkkänen 2008. Notably, Lee-Schoenfeld (2006, p 123) reports that her Hebrew consultants do not share the crucial affectedness judgments Landau reports. I won't resolve this controversy here.

Also notable is the possessor raising analysis of Swahili by Keach and Rochemont (1994). These authors do not directly tackle affectedness effects, but there is some indication that affectedness may nevertheless be relevant in Swahili (Schrock 2007).

<sup>6</sup> See e.g. Guéron 2006 on Landau's raising analysis of Hebrew, and Blake 1990 on possessor ascension analyses in Relational Grammar.

ground on object case, object agreement and the structure of the Nez Perce vP (§1). In sections 2 and 3 I outline four basic properties of the Nez Perce external possession construction and show how the movement analysis derives these and additional facts. Section 4 then extends the analysis to certain cases of covert possessor movement. Section 5 addresses the semantics of possessor raising and makes the empirical case against an affectedness condition. Section 6 relates the Nez Perce possessor raising phenomenon to its more control-like German counterpart, and concludes the paper.

## 1 The structure of the Nez Perce vP

Nez Perce is a morphologically rich language in which ordinary objects of monotransitive verbs show two distinctive behaviors relevant to possessor raising.<sup>7</sup> They are marked with a case traditionally called the *objective*, distinct from that of transitive subjects (ergative) and intransitive subjects (nominative); and they control dedicated object agreement for person and number.

### (5) Only objects mark objective case

- a. hi-pnim-se- $\emptyset$                       picpic  
    3SUBJ-sleep-IMPERF-PRES cat.NOM  
    The cat is sleeping.
- b. ciq'aamqal-nim pee-twe'key'k-se- $\emptyset$       **picpic-ne**  
    dog-ERG              3/3-chase-IMPERF-PRES cat-OBJ  
    The dog is chasing the cat.

### (6) Dedicated object agreement

- a. *pro* pe-kuu- $\emptyset$ -ye  
    *pro* S.PL-go-P-REM.PAST  
    We went.

<sup>7</sup> Nez Perce is a highly endangered language spoken by about 30 elderly individuals in Idaho, Washington and Oregon. Unattributed examples are from fieldwork with a total of four speakers conducted in Lapwai, ID, from 2007 to 2011. Grammatical sketches may be found in Aoki (1970), Rude (1985), Crook (1999, ch 2) and Deal (2010b, ch 1). Prior work on possessor raising may be found in Rude 1985, 1986, 1999.

- b. *pro* 'e-pe-kii-yuu-0-ye ('ip-ne)  
*pro* 3OBJ-S.PL-go-APPL:GOAL-P-REM.PAST 3SG-OBJ  
 We went to him/her.
- c. *pro* 'e-pe-nees-kii-yuu-0-ye ('ime-né)  
*pro* 3OBJ-S.PL-O.PL-go-APPL:GOAL-P-REM.PAST 3PL-OBJ  
 We went to them.

Objects are not distinguished by word order, however, and may appear in any linear order with respect to subject and verb (Rude 1992; Crook 1999, pp. 231-232; Deal 2010b, pp. 21-22).

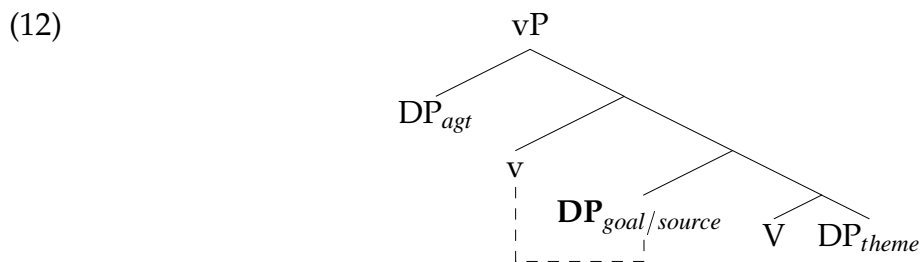
Objective case and object agreement are extremely well correlated (Deal 2010a). Ditransitive constructions reveal a common structural basis for the two. First, some basic facts: in a ditransitive, it is always the goal or source argument, never the theme, that controls object agreement and marks the objective case. The theme argument appears in the nominative, and does not agree. These facts hold irrespective of the relative order of goal and theme. (Note that goal/source arguments are marked exactly as are objects of monotransitives; there is no distinct dative case.)

- (7) a. 'aayato-nm<sub>(agent)</sub> pe-'eny-0-e tamaamin<sub>(theme)</sub> haacwal-a<sub>(goal)</sub>  
 woman-ERG 3/3-give-P-REM.PAST cake.NOM boy-OBJ  
 The lady gave the boy cake
- b. 'aayato-nm<sub>(agent)</sub> pe-'eny-0-e haacwal-a<sub>(goal)</sub> tamaamin<sub>(theme)</sub>  
 woman-ERG 3/3-give-P-REM.PAST boy-OBJ cake.NOM  
 The lady gave the boy cake
- (8) ciq'aamqal-nim<sub>(agent)</sub> hi-nees-peχwi-0-ye ke'niks<sub>(theme)</sub>  
 dog-ERG 3SUBJ-O.PL-steal-P-REM.PAST leftover.NOM  
 ha-haacwal-na<sub>(source)</sub>  
 PL-boy-OBJ  
 The dog stole the leftovers from the boys. (lit. The dog stole the boys the leftovers.)
- (9) Weet *pro*<sub>(agent)</sub> 'e-tkuytuu'-0-ye Angel-ne<sub>(goal)</sub> poxpok'ala<sub>(theme)</sub>  
 Y.N *pro* 3OBJ-throw-P-REM.PAST Angel-OBJ ball.NOM  
 Did you throw Angel the ball?

Against this background, we can use Condition C effects to probe the relative structural relation between the goal/source DP and the theme DP. This test reveals that the argument which marks objective case and controls object agreement in these structures – the goal or source – is the higher of the two objects.<sup>8</sup> The goal/source c-commands into the theme. This produces disjoint reference effects in (10b) and (11b).

- (10) a. Weet *pro* 'e-tkuytuu'-Ø-ye 'ip-nim-nix<sub>i</sub> poxpok'ala Angel-ne<sub>i</sub>  
 Y.N *pro* 3OBJ-throw-P-REM.PAST 3OBJ-GEN-EMPH ball.NOM Angel-OBJ  
 Did you throw Angel<sub>i</sub> her<sub>i</sub> ball?
- b. Weet *pro* 'e-tkuytuu'-Ø-ye *pro*<sub>i/\*j</sub> Angel-nim<sub>j</sub> poxpok'ala  
 Y.N *pro* 3OBJ-throw-P-REM.PAST Angel-GEN ball.NOM  
 Did you throw him/her<sub>i/\*j</sub> Angel's<sub>j</sub> ball?
- (11) a. Pinooc-nim<sub>i</sub> pee-kiwyek-Ø-e Elwit'et-ne<sub>j</sub> 'ip-nim<sub>i/j</sub> hipt  
 Pinooc-ERG 3/3-feed-P-REM.PAST Elwit'et-OBJ 3SG-GEN food.NOM  
 Pinooc<sub>i</sub> fed Elwit'et<sub>j</sub> her<sub>i</sub>/his<sub>j</sub> food
- b. Pinooc-nim<sub>i</sub> pee-kiwyek-Ø-e 'ip-ne<sub>\*i/\*j</sub> Elwit'et-nim<sub>j</sub> hipt  
 Pinooc-ERG 3/3-feed-P-REM.PAST 3SG-OBJ Elwit'et-GEN food.NOM  
 Pinooc<sub>i</sub> fed him/her/it<sub>\*i/\*j</sub> Elwit'et<sub>j</sub>'s food

These facts point to a familiar asymmetric structure for double object constructions.<sup>9</sup>



The higher object of the ditransitive participates in object agreement, indicated by a dotted line, and marks the objective case. These two morphological behaviors are the head- and dependent-marking realizations of an Agree relation between a DP and v. Locality

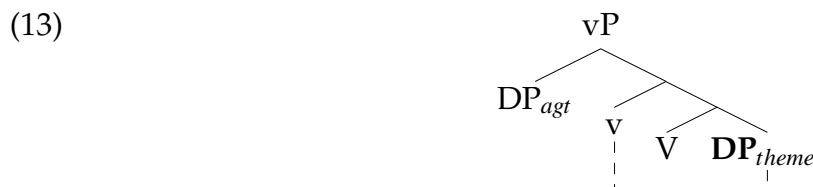
<sup>8</sup> This is one of several tests that reveal structural asymmetry in English ditransitives (Barss and Lasnik 1986). Other tests applicable in English (e.g. condition A, superiority, NPI licensing) are not straightforwardly applicable to Nez Perce.

<sup>9</sup> I provide here only a minimal structure for the ditransitive vP, representing structural asymmetry between objects but glossing over many other interesting questions; see Larson (1988), Pylkkänen (2008) and others.



constraints on Agree require that the DP that enters into this relation must be the closest to *v* in its c-command domain; and so the goal or source argument, and not the theme argument, will always be chosen.

In a monotransitive, the single object is the closest DP to *v* in its c-command domain:



We can generalize that object agreement and objective case are behaviors of the highest object, or the second highest argument, in the Nez Perce vP.

## 2 The object possessor raising construction: basic profile

We now turn to four crucial properties of the construction in (2), henceforth the *object possessor raising construction*. Central to this sentence type is a DP which has the semantics of a possessor but the syntax of a clausal dependent. The English correlate of this possessor DP is italicized in all examples in this paper.

The possessor DP in the object possessor raising construction shows three properties typical of clausal dependents. First, it controls clausal object agreement.<sup>10</sup> The possessum DP does not agree. This agreement asymmetry is reflected in both person and number agreement. In sentence (14), the possessor DP is plural, and the possessum DP singular; object agreement must be plural.

- (14) *pro* hi-\*(**nees**)-hex-ne'ny-θ-e      **ma-may'as-na** pist  
*pro* 3SUBJ-O.PL-see-PR-P-REM.PAST PL-child-OBJ father.NOM  
 He saw *the children's* father. (Rude 1986, 119)

In sentence (15), the possessor DP is first person, and the possessum DP third person. Nez Perce verbs show overt person agreement only for third person.<sup>11</sup> Here, object agreement

<sup>10</sup> This and the property following have been observed by Rude (1986).

<sup>11</sup> This holds for both subject and object agreement. On the morphosyntax of agreement in Nez Perce, see Deal 2010b.

must take the form consistent with a first person object, rather than that encoding a third person object.

- (15) *pro* **hi/\*pee**-tq'ilikeec-e'ny-u' 'iin-e 'iniit  
*pro* 3SUBJ/\*3/3-fall-PR-PROSP 1SG-OBJ house.NOM  
 It will fall on *my* house.

These facts are highly reminiscent of basic ditransitive constructions, in which the goal/source DP agrees, and the theme DP does not.

Second, in the object possessor raising construction, the possessor DP can mark objective case. The possessum DP cannot.

- (16) himiis-nim pee-p-e'ny-0-e **hoqhoq-ne** siis / \*siis-ne  
 wolf-ERG 3/3-eat-PR-P-REM.PAST pig-OBJ soup.NOM / \*soup-OBJ  
 The wolf ate *the pig's* soup.

These facts are again reminiscent of basic ditransitives: the goal/source DP marks the objective case, and the theme DP remains in the nominative.

Third, in the object possessor raising construction, the possessor and possessum are freely separable from one another. Just as the relative order of verb, goal/source and theme is free in an ordinary ditransitive, so the order of the possessor DP is free with respect to the verb and other verbal dependents, including the possessum DP, in a possessor raising sentence.

- (17) a. Angel-nim paa-'yaâ-na'n-0-ya Tatlo-na taqmał  
 Angel-ERG 3/3-find-PR-P-REM.PAST Tatlo-OBJ hat.NOM  
 Angel found *Tatlo's* hat  
 b. Angel-nim Tatlo-na paa-'yaâ-na'n-0-ya taqmał  
 Angel-ERG Tatlo-OBJ 3/3-find-PR-P-REM.PAST hat.NOM  
 c. Angel-nim taqmał paa-'yaâ-na'n-0-ya Tatlo-na  
 Angel-ERG hat.NOM 3/3-find-PR-P-REM.PAST Tatlo-OBJ

Nez Perce constituent questions involve *wh*-fronting (Deal 2010b). In interrogative possessor raising sentences, the possessor may undergo *wh*-fronting without pied-piping the possessum.

(18) 'isii-ne *pro* 'e-sewlekey'k-ey'-se- $\emptyset$  'aatoc?  
 who-OBJ *pro* 3OBJ-drive-PR-IMPERF-PRES car.NOM  
 Whose car are you driving?

(19) 'isii-ne *pro* 'aw'-ya $\hat{x}$ -na'n- $\emptyset$ -ya 'iniit?  
 who-OBJ *pro* 3OBJ-find-PR-P-REM.PAST house.NOM  
 Whose house did you find?

Importantly, this behavior is restricted to the object possessor raising construction. In non-possessor-raising sentences, possessum and possessor do not behave as independent constituents. Linear contiguity is required. The following examples show this constraint in declaratives: possessor phrase *Angelnim* 'Angel's' must be adjacent to possessum phrase *taqmaṭ* 'hat'.<sup>12</sup>

- (20) a. *pro* 'ew-'nii-se- $\emptyset$  Tatlo-na **Angel-nim taqmaṭ**  
*pro* 3OBJ-give-IMPERF-PRES Tatlo-OBJ Angel-GEN hat.NOM  
 I'm giving Tatlo Angel's hat
- b. \* *pro* **Angel-nim** 'ew-'nii-se- $\emptyset$  Tatlo-na **taqmaṭ**  
*pro* Angel-GEN 3OBJ-give-IMPERF-PRES Tatlo-OBJ hat.NOM
- c. \* *pro* 'ew-'nii-se- $\emptyset$  **Angel-nim** Tatlo-na **taqmaṭ**  
*pro* 3OBJ-give-IMPERF-PRES Angel-GEN Tatlo-OBJ hat.NOM

In interrogative sentences, outside of the possessor raising construction, *wh*-movement of a possessor phrase pied-pipes the possessum phrase:

- (21) a. 'isii-nm 'iniit-pe 'ee wees?  
 who-GEN house-LOC you be  
 Whose house are you at?
- b. \* 'isii-nm 'ee wees 'iniit-pe?  
 who-GEN you be house-LOC
- (22) a. 'isii-nm cickan *pro* 'ew-'nii- $\emptyset$ -ye 'aayato-na?  
 who-GEN blanket.NOM *pro* 3OBJ-give-P-REM.PAST woman-OBJ  
 Whose blanket did you give to the lady?
- b. \* 'isii-nm *pro* 'ew-'nii- $\emptyset$ -ye cickan 'aayato-na?  
 who-GEN *pro* 3OBJ-give-P-REM.PAST blanket.NOM woman-OBJ

<sup>12</sup> Note that examples (20)-(22) cannot be parsed as involving possessor raising due to the absence of distinctive possessor raising verbal morphology, discussed just below.

Only in the possessor raising construction is it possible to disrupt the surface constituency of possessor and possessum.

A final central property of the object possessor raising construction concerns the verb. This is required to take a special suffix, *e'ni*.<sup>13</sup>

- (23) a. Weet *pro* 'a-capakayk- $\emptyset$ -a hipinwees-ne?  
 Y.N *pro* 3OBJ-clean-P-REM.PAST eating.table-OBJ  
 Did you clean the table?
- b. Weet *pro* 'a-capakayk-\*(a'ny)- $\emptyset$ -a Besi-ne hipinwees?  
 Y.N *pro* 3OBJ-clean-\*(PR)-P-REM.PAST Bessie-OBJ eating.table.NOM  
 Did you clean *Bessie's* table?
- (24) a. *pro* 'ew-'nii-se- $\emptyset$  pike-ne miyepkaawit  
*pro* 3OBJ-give-IMPERF-PRES mother-OBJ baby.NOM  
 I am giving the mother the baby.
- b. *pro* 'ew-'nii-\*(ey')-se- $\emptyset$  Angel-ne pike miyepkaawit  
*pro* 3OBJ-give-PR-IMPERF-PRES Angel-OBJ mother.NOM baby.NOM  
 I am giving *Angel's* mother the baby.

This suffix is not found in ordinary ditransitive constructions; compare (7)-(9), and (24a) to (24b).

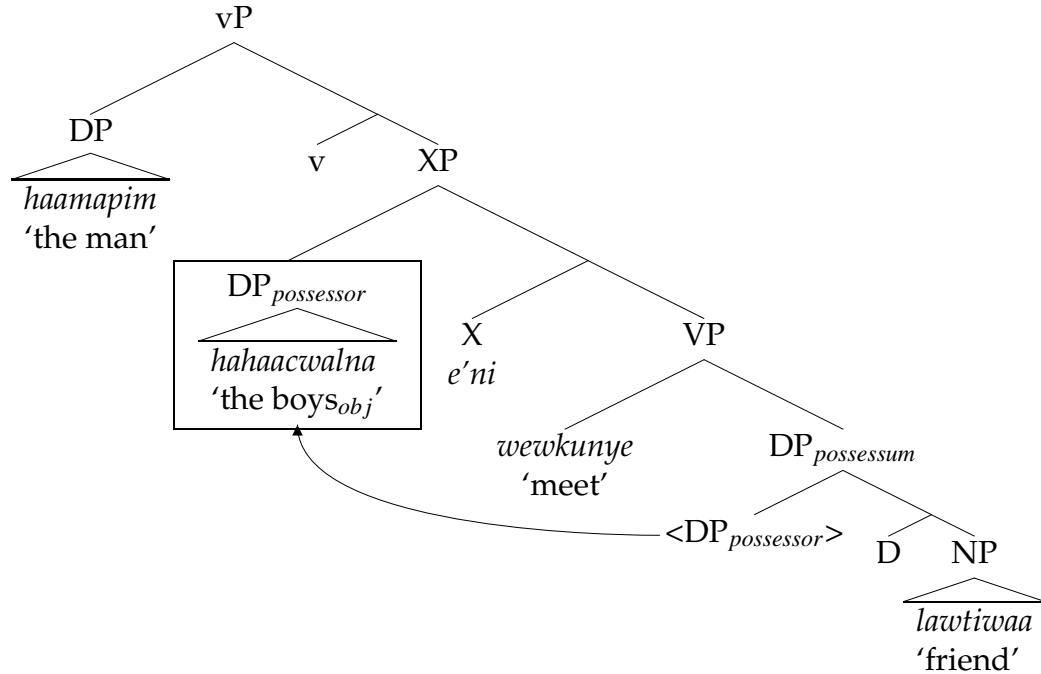
### 3 The movement analysis

The possessor movement analysis accounts straightforwardly for the four properties listed above. Example (25) is parsed as (26):

- (25) haama-pim hi-nees-wewkuny-e'ny- $\emptyset$ -e **ha-haacwal-na** lawtiwaa  
 man-ERG 3SUBJ-O.PL-meet-PR-P-REM.PAST **PL-boy-OBJ** friend.NOM  
 The man met *the boys'* friend.

<sup>13</sup> This suffix is subject to morphologically and phonologically conditioned allomorphy. As in many languages with verbal marking of possessor raising (e.g. Tzotzil (Aissen 1979), Chichewa (Baker 1988), Ika (Frank 1990)), the Nez Perce PR suffix is morphologically syncretic with an applicative suffix. However, as discussed in section 5, in the context of possessor raising, there is a distinct absence of applicative semantics. On issues raised by this type of syncretism, see Deal (2011).

(26)



The possessor DP originates internal to the possessum DP, where it receives the possessor theta-role. Subsequently it moves to the specifier of a *vP*-internal functional head, which for the time being we might call 'X'. The head of this projection is realized as verbal suffix *e'ni*. In its derived position, the possessor DP is the second-highest argument in *vP*, and thus is correctly predicted to mark objective case and control verbal agreement. For its part, the possessum DP is *not* second-highest in *vP*, and is correctly expected not to mark objective or to agree with *v*. Like the theme of a ditransitive, it appears in the nominative. The possessor DP and the possessum DP do not form a surface constituent; those processes responsible for word order freedom among verbal arguments in Nez Perce are expected to apply in this case.

Of course, the facts thus far are entirely consistent with a binding-based alternative to the movement analysis. Two further sorts of facts strengthen the case for the movement approach. These concern locality effects and the obligatoriness of possessor raising.

### 3.1 Locality

The signature property of a movement dependency is sensitivity to principles of locality. Nez Perce possessor raising shows evidence of locality effects of both the relative and absolute varieties.<sup>14</sup>

Relative locality constraints are those that constrain a probe to attract only the *closest* potential goal, where calculations of closeness are made in terms of c-command. This can be formalized in a standard way:

(27) *Relative Locality*

DP<sub>X</sub> can move to Spec,A only if there is no DP<sub>Y</sub> which A asymmetrically c-commands and which asymmetrically c-commands DP<sub>X</sub>

A relative locality effect is seen in possessor raising in ditransitives. Here, the possessor of the higher object (goal/source) but not the lower one (theme) is subject to raising.<sup>15</sup> Consider sentences (28) and (29):

- (28) *pro* 'ew-'nii-yey'-se-0                      Angel-ne   pike                      taqmał  
*pro* 3OBJ-give-PR-IMPERF-PRES   Angel-OBJ   mother.NOM   hat.NOM

- a.    I'm giving *Angel's* mother a hat.  
b.    \* I'm giving a/the mother *Angel's* hat.

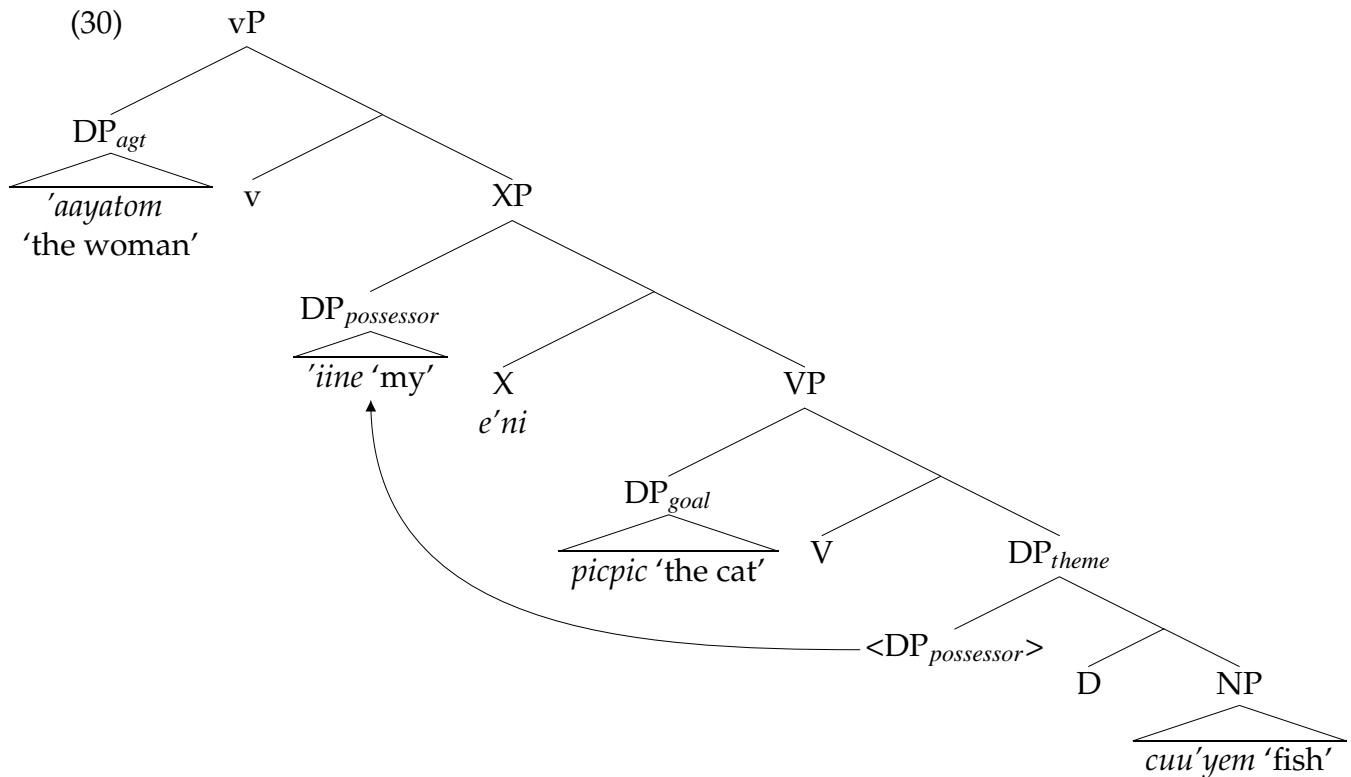
- (29) 'aayat-om   hi-kiwyek-ey'-se-0                      'iin-e   picpic   cuu'yem.  
woman-ERG 3SUBJ-feed-PR-IMPERF-PRES 1SG-OBJ cat.NOM fish.NOM

- a.    The woman fed *my* cat the fish.  
b.    \* The woman fed a/the cat *my* fish.

<sup>14</sup> Principles of relative locality go by several names: Relativized Minimality (Rizzi 1990), Minimal Link Condition (Chomsky 1995), Attract Closest (Chomsky 1995), Shortest Move (Chomsky 2000). Principles of absolute locality are discussed in terms of bounding nodes (Chomsky 1981), barriers (Chomsky 1986), and phases (Chomsky 2001).

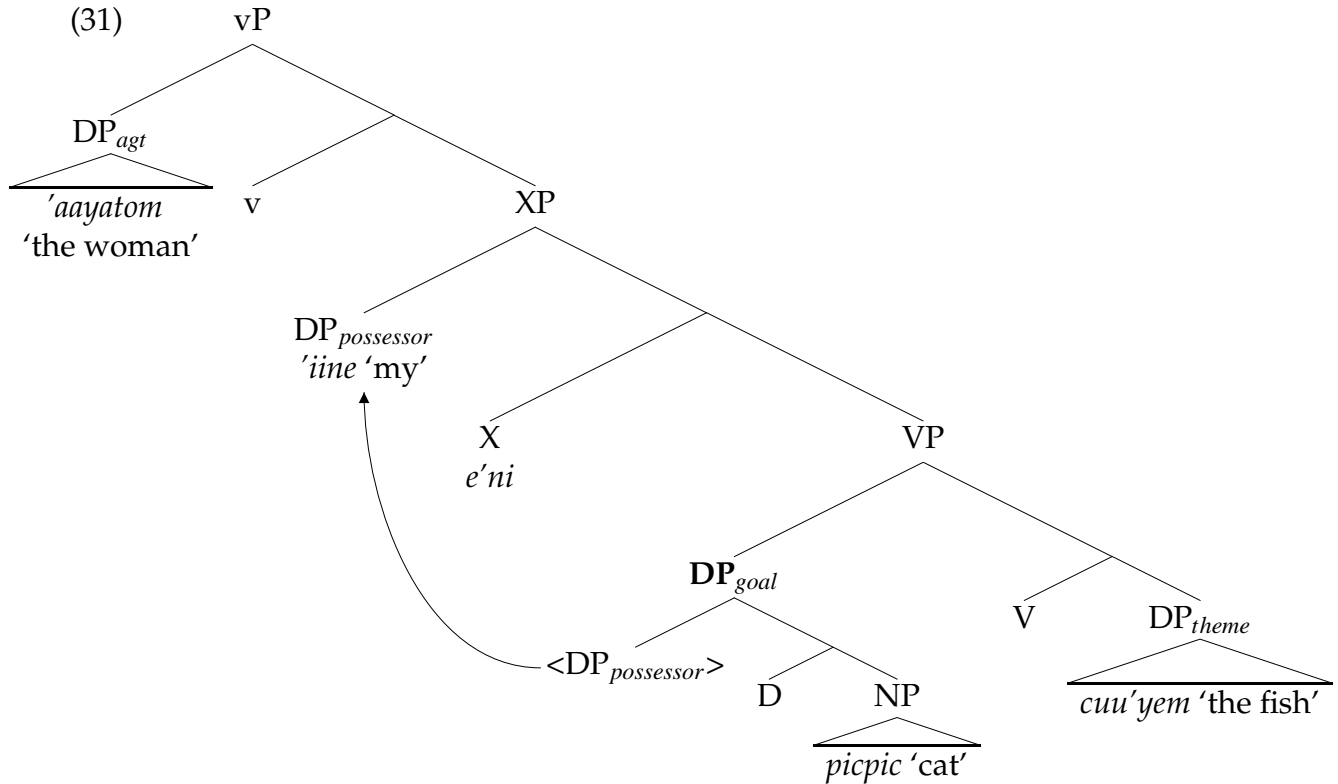
<sup>15</sup> Suppose we dub whatever object marks objective case and controls agreement the 'direct object' (Rude 1985). (This will mean, perhaps counterintuitively, that the goal or source argument is direct object in a ditransitive, rather than the theme.) Then we can state this finding in a way which very much recalls Relational Grammar's Law of Relational Succession (Perlmutter and Postal 1983): possessor raising to direct object is only possible from a possessum which would otherwise be direct object.

In order to derive the unacceptable (b) readings of these sentences, we would require a derivation wherein the possessor of the theme moves to Spec,XP across the goal DP:



This derivation violates relative locality: the possessor DP that moves to Spec,XP is not the closest DP to X. DP<sub>goal</sub> structurally intervenes between X and the base position of DP<sub>possessor</sub>: X asymmetrically c-commands DP<sub>goal</sub>, and DP<sub>goal</sub> asymmetrically c-commands the base position of DP<sub>possessor</sub>. Possessor movement is therefore barred.

By contrast, the acceptable (a) readings of these examples do *not* incur a relative locality violation:



There is no DP which X asymmetrically c-commands and which asymmetrically c-commands the base position of  $DP_{possessor}$ .<sup>16</sup>

The possessor raising construction also shows locality effects of the absolute variety. Absolute locality concerns particular phrase types which limit extraction of their subconstituents. In the theory of Chomsky (2001), such phrases are *phasal*; only those elements which occupy the specifier position of a phasal constituent may be extracted from the phase. Chomsky (2001, fn 29) suggests that DP is a phase. If this is so, we expect possessor raising only in those structures where the possessor phrase occupies Spec,DP.

This prediction is interesting in view of a special class of Nez Perce nouns which permit two distinct structures for the possessive. These nouns are all kinship terms. In addition to the productive analytic possessive structure (32), which all common nouns permit, these kinship terms show a synthetic possessive form made up of a special stem and a bound possessor prefix. Independent, genitive-marked possessor nominals do not co-occur with the bound prefixes. There are, therefore, two entirely distinct ways to say

<sup>16</sup> Note that the  $DP_{goal}$  does not c-command the possessor DP it dominates, and so does not intervene.



‘my mother’ or ‘your father’ in Nez Perce:

(32) Productive possessive marking:

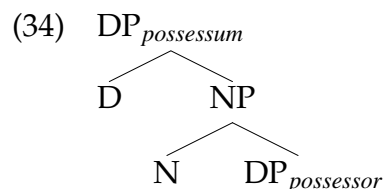
- a. 'iin-im    pike  
1SG-GEN mother.NOM  
my mother
- b. 'im-im    pist  
2SG-GEN father.NOM  
your father

(33) Special synthetic possessive marking:

- a. ne-'iic  
1SG-mother  
my mother
- b. im-'toot  
2SG-father  
your father

This special possessive form appearing only with kinship terms – a major class of semantically relational nouns – is reminiscent of facts in English: all nouns permit the prenominal *'s*-genitive (*John's birthday* (relational), *John's day* (nonrelational)), but only relational nouns reliably permit the postnominal *of*-genitive (*the birthday of John* (relational), *??the day of John* (nonrelational)).<sup>17</sup>

Why should only relational nouns permit the synthetic possessive form in Nez Perce, or the *of*-genitive in English? Barker (1995) proposes that *of* is simply a marker for the direct arguments of N, projected within NP. Suppose the same holds for the special possessive structure in Nez Perce (33). With relational nouns, the following structure is available:



---

<sup>17</sup> These examples are from Barker (1995, ch 2).

In Nez Perce, where there is no case-marker parallel to English *of*, this structure surfaces as such only when the entire possessive NP may be realized with a synthetic possessive form.

Now we have a prediction for synthetic possessives. They should not support possessor raising. The possessor DP is buried too deeply inside the phase delineated by  $DP_{possessum}$  to move to Spec,XP. This prediction is correct. The fact is observed by Rude (1986), who provides the following minimal pair:

- (35) a. kaa waaqo' ne-'iice-p                      pee-tqecimk-cix-0                      titooqan-m  
           and now    1SG-mother-OBJ 3/3-dislike-IMPERF.PL-PRES Indians-ERG  
           And now the Indians dislike my mother (Aoki 1979)
- b. kaa waaqo' 'iin-e    pike                      hi-tqecimk-ey'-cix-0  
           and now    1SG-OBJ mother.NOM 3SUBJ-dislike-PR-IMPERF.PL-PRES  
           titooqan-m  
           Indians-ERG  
           And now the Indians dislike *my* mother. (Rude 1986, 122)

Crucial is sentence (35a), with synthetic possessive *ne'iic* 'my mother'. Possessor raising has not taken place here: there is no PR verbal morphology, and object agreement shows the third person features of the possessum, rather than first person features of the possessor. By contrast, in the possessor raising form, (35b), the possessum head noun must appear in the analytic form. This is as predicted if the possessor raising structure is derivable only from the analytic possessive. This constraint is enforced by the sensitivity of possessor raising to absolute locality.<sup>18</sup>

Overall, the sensitivity of possessor raising to constraints of absolute and relative locality argues strongly in favor of a movement derivation of the possessor raising structure.

<sup>18</sup> Note that these facts contravene the generalization proposed by Tomioka and Sim (2007) in discussion of external possession in Korean: "if a language has both options such as internal and external possession structures, the external possession structure is reserved for special possession relations, such as [inalienable possession] and kinship relations." In Nez Perce, in striking contrast to Korean, it is only kinship possessives which permit the internal possession structure, the structure *without* possessor raising, when occurring in object position. On the impossibility of internal possession with other possessives in highest object position, see section 3.2 below.

### 3.2 Obligatoriness

Contemporary theories of the origins of movement dependencies require movement to occur in response to a trigger. In standard minimalist approaches, this trigger takes the form of an unchecked, unvalued or uninterpretable feature.<sup>19</sup> When such a feature is present in a structure and can be checked, valued, or deleted by a movement operation, then, provided the movement operation does not create (new) grammatical ill-formedness, movement is obligatory.

This aspect of the syntax of movement is in evidence in possessor raising. Rude (1986) reports that object possessor raising is obligatory in monotransitives. Examples like (36b), with an analytic possessive object of a monotransitive but no possessor raising, are not grammatical.

- (36) a. Weet *pro* 'e-cukwe-ney'-se- $\emptyset$  Luk-ne tiim'es?  
 Y.N *pro* 3OBJ-know-PR-IMPERF-PRES Luke-OBJ book.NOM  
 Do you know the book of *Luke*?
- b. \*Weet *pro* 'e-cukwe-ce- $\emptyset$  Luk-nim tiim'es?  
 Y.N *pro* 3OBJ-know-IMPERF-PRES Luke-GEN book.NOM

*Pro*-drop of the possessor phrase is available in the possessor raising construction, as in (37a). The possessor raising construction requires the possessive parse of this example (indicated by *pro<sub>poss</sub>*), and crucially, the possessive parse is not possible without the possessor raising construction, as in (37b).

- (37) a. *pro<sub>subj</sub>* 'a-x-nay'-sa-qa \*(*pro<sub>poss</sub>*) huukux 'istuuptu-peme  
*pro* 3OBJ-see-PR-IMPER-REC.PAST *pro* hair.NOM cut-from  
 i. I saw *her* hair (on the ground) from being sheared.  
 ii. \*I saw the hair (on the ground) from being sheared.
- b. *pro<sub>subj</sub>* 'a-x-sa-qa (\**pro<sub>poss</sub>*) huukux 'istuuptu-peme  
*pro* 3OBJ-see-IMPER-REC.PAST *pro* hair.NOM cut-from  
 i. \*I saw *her* hair (on the ground) from being sheared.

<sup>19</sup> Though see alternative approaches in Moro (2000), Richards (2010).

- ii. I saw the hair (on the ground) from being sheared.

The impossibility of a possessive parse of (37b) is of a piece with the ungrammaticality of (36b): where the verbal morphology of possessor raising is absent, an (analytic) possessor phrase within the highest object is ruled out. These facts suggest that movement to Spec,XP is required by some feature of the possessor phrase.<sup>20</sup> In (36b) and on the possessive parse of (37b), X is not present, as revealed by verbal morphology. The relevant features of the possessor phrase remain unchecked/unvalued/uninterpretable, and the derivation crashes.

Now, this obligatoriness is subject to an interesting constraint. In certain syntactic environments, it is not possible to merge X and perform possessor raising without creating new sources of ill-formedness. From the theme position of a ditransitive, for instance, it is not possible to perform possessor raising without creating a violation of relative locality. In this position, the analytic possessive surfaces simply as a constituent.

- (38) *pro*<sub>agt</sub> 'ew-'nii-se-∅                      pike-ne<sub>goal</sub> [ Angel-nim taqmaṭ ]<sub>theme</sub>  
*pro* 3OBJ-give-IMPERF-PRES mother-OBJ [ Angel-GEN hat.NOM ]  
 I'm giving the mother Angel's hat (cf. (28))

- (39) 'e-tquyteyuu-y      Meli-ne [ 'im-im kapoo ]<sub>theme</sub>  
 3OBJ-throw-IMPER Mary-OBJ [ 2SG-GEN coat.NOM ]  
 Throw Mary your coat!

The impossibility of possessor raising from the theme of a ditransitive accounts for the judgments in (20), repeated below.

- (40) a. *pro* 'ew-'nii-se-∅                      Tatlo-na Angel-nim taqmaṭ  
*pro* 3OBJ-give-IMPERF-PRES Tatlo-OBJ Angel-GEN hat.NOM  
 I'm giving Tatlo Angel's hat
- b. \* *pro* Angel-nim 'ew-'nii-se-∅                      Tatlo-na taqmaṭ  
*pro* Angel-GEN 3OBJ-give-IMPERF-PRES Tatlo-OBJ hat.NOM

<sup>20</sup> In a grammar with abstract Case features, a [uCase] feature may be the culprit here, in the spirit of what Landau (1999) proposes for Hebrew. Alternatively, possessor phrase movement may be motivated by the need to establish  $\phi$ -agreement with the possessor phrase in a Spec-head configuration, as Ravinsky (2007) proposes for Nuuchahnulth. Note that there is no DP-internal  $\phi$ -agreement with possessors in Nez Perce.

- c. \* *pro* 'ew-'nii-se-Ø                      Angel-nim Tatlo-na taqmał  
       *pro* 3OBJ-give-IMPERF-PRES Angel-GEN Tatlo-OBJ hat.NOM

Because the possessor cannot raise out of the theme possessum DP to Spec,XP, it must surface in situ, contiguous with the possessum.

This instances are interesting for what they tell us about the nature of obligatoriness in grammar. This kind of obligatoriness is reminiscent of what Preminger (2010) finds in  $\phi$ -agreement in Hebrew: “ $\phi$ -agreement must be attempted by every  $\phi$ -probe; but if it fails (e.g., due to the presence of an intervener), its failure is systematically tolerated.” In a parallel way, Nez Perce possessor phrases raise in all and only cases where their raising creates no ill-formedness. In cases where raising would produce ungrammaticality, its failure is systematically tolerable.

A further example of this effect is seen in the interaction of possessor raising with constraints on binding. It is not possible to raise the possessor phrase if it is bound by the subject (Rude 1986). When the subject binds the possessor, the analytic possessive object surfaces as a constituent and the verbal morphology of possessor raising does not appear.<sup>21</sup> Compare:

- (41) a. pit'iin'-im paa-'yaâ-na'ny-Ø-a                      'ip-ne picpic  
       girl-ERG 3SUBJ-find-PR-P-REM.PAST 3SG-OBJ cat.NOM  
       The girl<sub>i</sub> found his<sub>j</sub>/her<sub>j/\*i</sub> cat
- b. pit'iin' hi-'yaaâ-n-a                      [ 'ip-nim picpic ]  
       girl.NOM 3SUBJ-find-P-REM.PAST [ 3SG-GEN cat.NOM ]  
       The girl<sub>i</sub> found her<sub>i/\*j</sub> cat

Possessor raising is forbidden when the possessor is bound, and required when it is free.<sup>22</sup>

This contrast can be traced to Principle B. Let us suppose, as seems quite plausible, that free and bound pronominal possessors are distinguished by some syntactic feature, such that we can speak of ‘bound pronouns’ and ‘free pronouns’ as distinct lexical items

<sup>21</sup> This binding configuration is also incompatible with ergative and objective case marking, and with object agreement; see Deal (2010a).

<sup>22</sup> Highly parallel facts obtain in Tzotzil; see Aissen (1987, 1997).

that could be merged into a syntactic structure.<sup>23</sup> Now suppose it is a free pronoun that originates in possessor position. Just as with non-pronominal items, the movement of this pronoun into the binding domain of the subject creates no grammatical ill-formedness. Movement is therefore required. This case corresponds to (41a). If, on the other hand, it is bound pronoun that originates in possessor position, the case is rather different. Raising a bound pronoun into the binding domain of the subject creates a violation of Principle B. Here, again, it becomes exceptionally possible to leave the possessor phrase in situ inside the possessive object, as in (41b).<sup>24</sup>

#### 4 Overt and covert movement

The movement analysis may be extended straightforwardly to cover an alternation in the case-marking of possessor phrases in environments of possessor raising. This alternation appears to be a recent innovation in contemporary Nez Perce, absent from texts recording the speech of earlier generations. Speakers who permit this alternation allow an alternative version of possessor raising sentences in which the possessor phrase is marked with the genitive case, rather than the objective. The following are minimal pairs.

- (42) a. *pro* 'a-ax-nay'-sa-qa 'ip-ne huukux  
           *pro* 3OBJ-see-PR-IMPERF-REC.PAST 3sg-OBJ hair.NOM  
           I saw *her* hair.

<sup>23</sup> This could be a [+anaphoric] or [+pronominal] feature, as in Chomsky (1982), or a bundle of  $\phi$ -features, as in Kratzer (2009).

<sup>24</sup> The assumptions here concerning binding are motivated by other considerations in Nez Perce which suggest that free and bound pronouns are treated differently for purposes of agreement. This suggests they do not have the same featural profile (Deal 2010b, ch 8).

For the question at hand, this view could be contrasted with an alternative according to which the distinction between bound and free pronouns is construed not in terms of distinct lexical items, but in terms of distinct syntactic contexts in which a single lexical item finds itself. On this view it remains easy to account for the impossibility of a bound reading in (41a); any other choice leads to a Principle B violation. It is harder to account for the impossibility of a free reading in (41b), since this, after all, violates no binding principle. Kirill Shklovsky (p.c.) points out that in Tseltal Mayan, free readings are required in sentences like (41a), but still grammatically possible in sentences like (41b). A different theory of binding for the two languages? Unlikely. It seems to me that this difference between Nez Perce and Tseltal is plausibly linked to the fact that possessor raising is not strictly obligatory in Tseltal, unlike in Nez Perce.

- (43) a. tewliki-nm pe-wiw-likeec-e'n-yu' 'aayat-ona 'iniit  
 tree-ERG 3/3-fall[of trees]-on.top-PR-PROSP woman-OBJ house.NOM  
 The tree is going to fall on *the woman's* house
- b. tewliki-nm pe-wiw-likeec-e'n-yu' 'aayat-onm 'iniit  
 tree-ERG 3/3-fall[of trees]-on.top-PR-PROSP woman-GEN house.NOM  
 The tree is going to fall on *the woman's* house

The genitive examples retain crucial properties of the possessor raising structure. Morphologically, the alternation concerns *only* the case of the overt possessor DP. The distinctive verbal morphology of possessor raising is present in both structures, as (42) and (43) show; XP remains projected. Genitive-marked possessors furthermore retain control of verbal agreement:

- (44) *pro* 'e-nees-cukwe-ney'-se- $\emptyset$                       lepe'eeyu-nm pike  
*pro* 3OBJ-O.PL-know-PR-IMPERF-PRES twins-GEN       mother.NOM  
She knows *the twins'* mother.
- (45) tewliki-nm hi-wiw-likeec-e'n-yu'                      'iin-im 'iniit  
tree-ERG    3SUBJ-fall[of trees]-on.top-PR-PROSP 1SG-GEN house.NOM  
The tree is going to fall on *my* house

In (44), the verb agrees with the plural possessor, not the singular possessum. In (45), verbal agreement takes a form consistent with first person agreement, given the first person possessor, not the form indexing a third person object.

Nez Perce is a language in which the genitive case is generally found only internal to nominal projections. There is no quirky genitive, genitive of negation, or prepositional genitive. This suggests that the genitive-marked phrases in (42)-(45) remain in situ in the possessum DP. Word order facts corroborate this hypothesis. Examples (46a,b) show that both genitive and objective possessors are grammatical when the possessor noun immediately precedes the possessum noun. When the two are separated by another constituent,

however, as in (46c,d), only the objective version remains licit.<sup>25</sup>

- (46) a. Angel-nim paa-'yaâ-na'n-0-ya      **Tatlo-na/Tatlo-nm**    **taqmaɫ**.  
 Angel-ERG 3/3-find-PR-P-REM.PAST Tatlo-OBJ/Tatlo-GEN hat.NOM  
 Angel found Tatlo's hat
- b. Angel-nim **Tatlo-na/Tatlo-nm**    **taqmaɫ**    paa-'yaâ-na'n-0-ya.  
 Angel-ERG Tatlo-OBJ/Tatlo-GEN hat.NOM 3/3-find-PR-P-REM.PAST
- c. Angel-nim **Tatlo-na/\*Tatlo-nm**    paa-'yaâ-na'n-0-ya      **taqmaɫ**.  
 Angel-ERG Tatlo-OBJ/Tatlo-GEN 3/3-find-PR-P-REM.PAST hat.NOM
- d. Angel-nim **taqmaɫ**    paa-'yaâ-na'n-0-ya      **Tatlo-na/\*Tatlo-nm**.  
 Angel-ERG hat.NOM 3/3-find-PR-P-REM.PAST Tatlo-OBJ/Tatlo-GEN

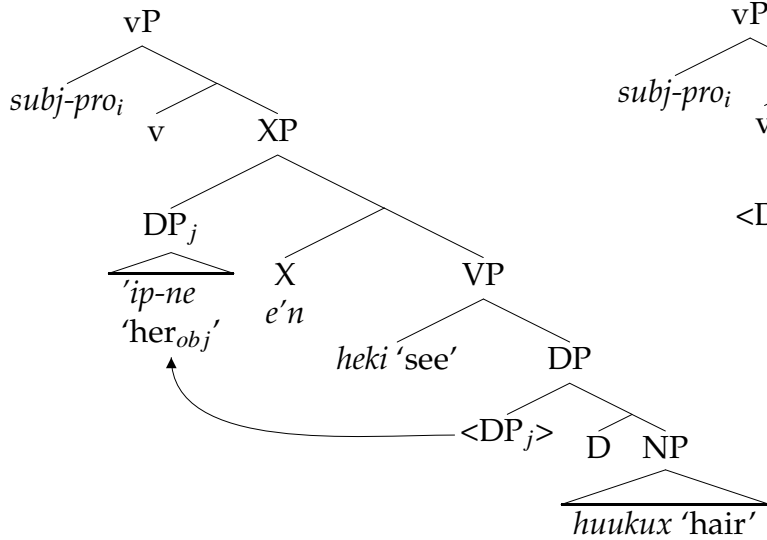
What then of the presence of possessor raising morphology, and control of agreement by the possessor? These facts suggest possessor phrase movement – a movement that would have to be covert. A simple analysis of this covert movement is afforded by the copy theory of movement. In both objective and genitive versions of the possessor raising structure, the possessor phrase moves from a possessum-phrase-internal position to the specifier of XP. Movement produces two copies, of which the grammar may choose to pronounce either one. Pronunciation of the higher copy results in overt movement, and pronunciation of the lower copy results in covert movement (Bobaljik 2002, Polinsky and Potsdam 2002).

- (47) 'a-ax-nay'-sa-qa                      'ip-ne / 'ip-nim    huukux.  
 3OBJ-see-PR-IMPERF-REC.PAST 3SG-OBJ / 3SG-GEN hair.NOM  
 I saw *her* hair.

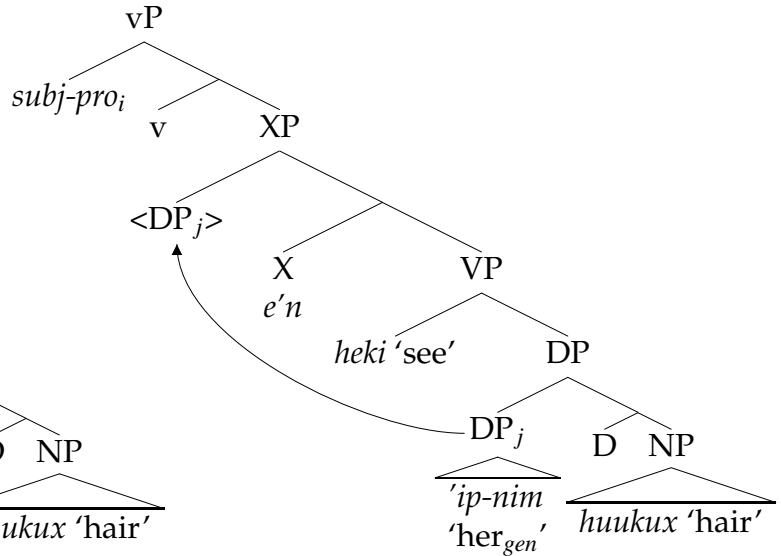
<sup>25</sup> Due to syncretism between ergative and genitive and the considerable flexibility of Nez Perce word order, the starred variant of example (46d) is grammatical on the parse 'Tatlo found Angel's hat'. Here *Angelnim taqmaɫ* 'Angel's hat' is a constituent with a genitive-marked possessor, and *Tatlonm* is the ergative-marked subject – a parse in conformance with the generalization above.



(48) Higher copy surfaces:



Lower copy surfaces:



Pronunciation of the lower copy means pronunciation of a possessor phrase in situ. This in situ pronunciation is very plausibly related to the choice of the genitive case – a case appearing on all and only nominals which are pronounced internal to other nominals' projections.

What sort of evidence should we expect for this covert movement? Regardless of the pronunciation of one or the other copy, movement effects a rearrangement of c-command relationships among the possessor phrase and any arguments lower than the possessum phrase from which it is extracted. Evidence of this rearrangement can be seen with the help of Condition C. The following examples show possessor phrases covertly moving from goal arguments in ditransitives. Crucially, the possessor phrase, surfacing in the genitive, may not be co-referent with an R-expression which is (in) a lower argument.<sup>26</sup>

<sup>26</sup> It appears that similar judgments obtain for the English translation of (50), perhaps suggesting covert possessor movement in this case as well. Nez Perce shows us that the Condition C effect is crucially missing in environments in which possessor phrases do not raise (and note that the English translation here is much improved over (50)):

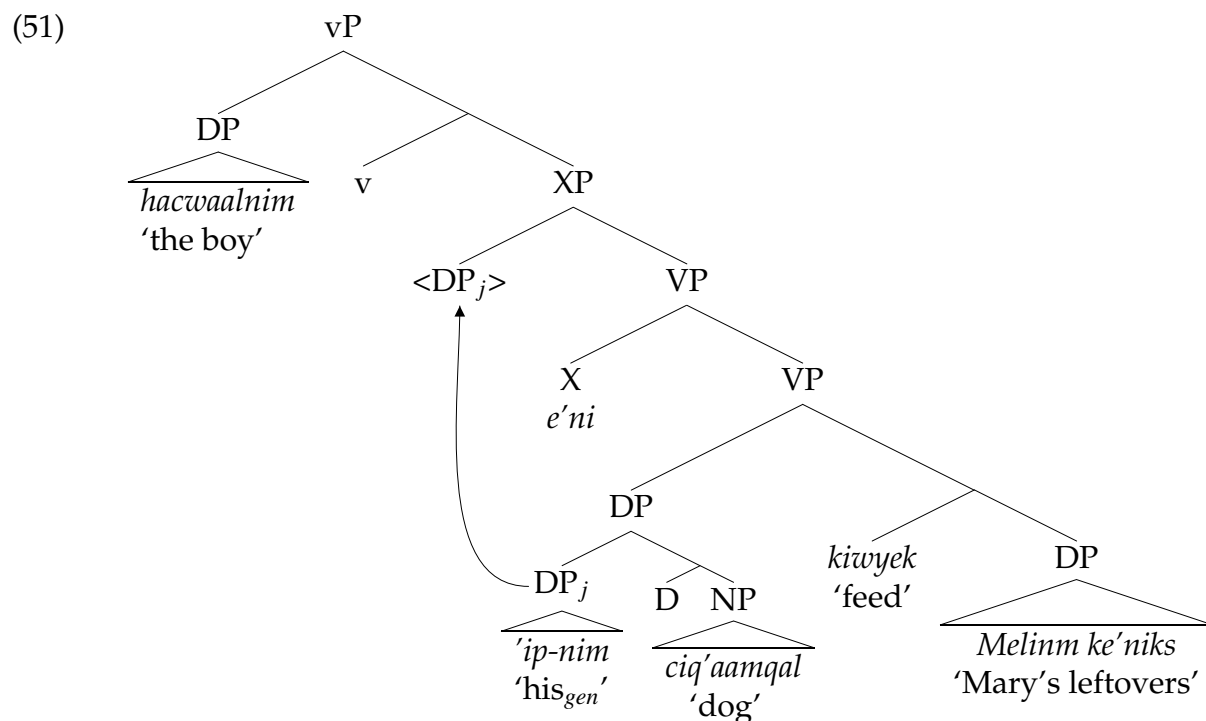
- (i) 'ip-ním ma-máyac páa-'yaâ-taa'nix Angel-ne kine  
 3SG-GEN PL-child.NOM 3/3-find-HAB.PRES.PL Angel-OBJ here  
 Her<sub>i</sub> kids usually find Angel<sub>i</sub> here.

The only way for a possessor phrase to c-command out of a possessum phrase is for it to move outside of the possessum's projection, *pace* Kayne (1994).

- (49) haacwal-nim pee-kiwyek-ey'-se-0 [ 'ip-nim ciq'aamqal ]<sub>goal</sub> [ Meli-nm  
 boy-ERG 3/3-feed-PR-IMPERF-PRES [ 3SG-GEN dog.NOM ] [ Mary-GEN  
 ke'niks ]<sub>theme</sub>  
 leftovers.NOM ]  
 The boy is feeding *his/her*<sub>j/\*i</sub> dog Mary<sub>i</sub>'s leftovers.

- (50) *pro* 'ew-'nii-yey'-se-0 [ 'ip-nim pike ]<sub>goal</sub> miyapkaawit<sub>theme</sub>  
*pro* 3OBJ-give-PR-IMPERF-PRES [ 3SG-GEN mother.NOM ] baby.NOM  
 I am giving *his/her*<sub>j/\*i</sub> mother the baby<sub>i</sub>.

This effect follows straightforwardly on the covert movement parse, shown below for example (49).



Covert movement puts the possessor phrase in a position of c-command over *Meli* 'Mary', from which it is accordingly forced to be disjoint.<sup>27</sup>

<sup>27</sup> Why does the grammar not respond to the Condition C violation that can come about upon raising by simply not doing raising? Recall that there are two choices for the lexical item surfacing as a pronoun. It may be a bound pronoun in virtue of its lexical representation, in which case its raising creates a Principle B violation; raising is avoided, and the pronoun surfaces in situ.

- (i) haacwal hi-kiwyek-se-0 [ 'ip-nim ciq'aamqal ]<sub>goal</sub> [ Meli-nm hipt ]<sub>theme</sub>  
 boy 3SUBJ-feed-IMPERF-PRES [ 3SG-GEN dog.NOM ] [ Mary-GEN food.NOM ]  
 The boy<sub>j</sub> is feeding *his/her*<sub>j/\*i</sub> dog Mary's food.

## 5 In support of raising

Where is it that possessor phrases move in the possessor raising construction? What is the nature of the head X to whose specifier they go? The case for possessor *raising* in particular is the case that Spec,XP is not a theta-position. All available evidence points to this conclusion. Possessor raising in Nez Perce is obligatory when grammatically possible regardless of the semantics of the possessor. It is not influenced by the alienability of the relation between possessor and possessum. It is not influenced by the ability of the possessor to be affected by the verbal action or the ability of the verbal action to have an effect on its participants.

The types of affectedness conditions which are familiar from external possession in other languages do not apply in Nez Perce. There is no entailment of the verbal action applying to the possessor as object (cf. English *She hit her on the arm* → *She hit her*):

- (52) *pro* pee-c'îx-ney'-se-0 miyooxato-na c'iiqin  
*pro* 3/3-speak-PR-IMPERF-PRES chief-OBJ word.NOM  
 He speaks *the chief's* words. (↯ He speaks the chief.)

- (53) ki-nm paa-'yaâ-na'n-0-ya 'imees-nim 'iskit  
 this-ERG 3/3-find-PR-P-REM.PAST deer-GEN trail.NOM

met'u weet'u mawa paa-'yaâ-n-a 'imees-ne  
 but not when 3/3-find-P-REM.PAST deer-OBJ

This (person) found *the deer's* trail, but never found the deer.

Relatedly, the relationship between the possessor and possessum may be inherent/inalienable (e.g. (44)), or accidental/alienable (e.g. (16), (23b)). Where the possessum is a body-part noun, possessor raising takes place regardless of whether the body part is physically attached to the possessor's body.<sup>28</sup>

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Alternatively, the lexical item surfacing as a pronoun may be a free pronoun in virtue of its lexical representation. If this is so, it must raise. The raising structure is not ungrammatical. It is only when the sentence is interpreted with respect to a variable assignment that maps the pronoun to Mary that a Condition C effect is produced. It seems plausible to me that the syntax is not allowed to 'look ahead' to this kind of information in determining whether or not there should be possessor raising.

<sup>28</sup> This is in contrast to Czech and Mohawk facts discussed by Baker (1999), Fried (1999) and O'Connor (2007).

- (54) *pro*<sub>subj</sub> 'a-ax-nay'-sa-qa *pro*<sub>poss</sub> huukux  
*pro* 3OBJ-see-PR-IMPERF-REC.PAST *pro* hair.NOM  
 I saw *her* hair.

Context A. Her hair is attached to her head in the normal way.

Context B. She has just gotten a haircut. I go to the salon and see the hair on the ground.

There is no evidence of any affectedness constraint on the possessor in the style of what is found in German.<sup>29</sup> The possessor may be long dead:

- (55) Weet *pro* 'e-cukwe-ney'-se-∅ Luk-ne tiim'es?  
 Y.N *pro* 3OBJ-know-PR-IMPERF-PRES Luke-OBJ book.NOM  
 Do you know the book of *Luke*?
- (56) *pro* pee-x-te-ne'n-yu' Coosef-ne temikees naaqc hiisemtuks-pe  
*pro* 3/3-see-go-PR-PROSP Joseph-OBJ tomb.NOM one moon-LOC  
 They will go see *Joseph's* tomb next month.

The possessor may be inanimate:

- (57) Weet *pro* 'e-heteeme-ney'-tee'nix Bible-ne tiitwatit?  
 Y.N *pro* 3OBJ-read-PR-HAB.PRES.PL Bible-OBJ story.NOM  
 Do you read *Bible* stories?
- (58) *pro* 'e-ex-ney'-se-∅ tewliki-ne saq'is  
*pro* 3OBJ-see-PR-IMPERF-PRES tree-OBJ shadow.NOM  
 I see *the tree's* shadow.

The verb is not required to be eventive or telic ((55), (58)), or to carry entailments of patienthood for its object ((52), (58)).<sup>30</sup>

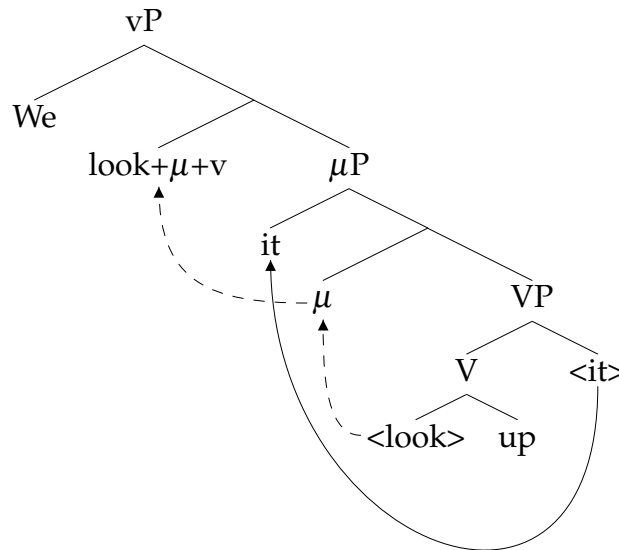
These facts speak against an analysis of X as an applicative or light verb head responsible for assigning a theta-role. They suggest instead an assimilation of X to a (low) object shift head – a head merged below v which forces A-movement of certain objects to its

<sup>29</sup> See Hole (2005), Lee-Schoenfeld (2006).

<sup>30</sup> See Keach and Rochemont (1994), Payne and Barshi (1999b, §3.3), Huang (1999), Guéron (2006, §3), Tomioka and Sim (2007) for discussion of this type of contrast.

specifier.<sup>31</sup> Johnson (1991) finds evidence of such a head in English particle verb constructions, which he analyzes roughly as in (59b). The object shift head is what Johnson calls  $\mu$ .<sup>32</sup>

- (59) a. We looked it up.  
b.



Let us suppose that the morpheme hitherto 'X' is in fact Johnson's  $\mu$ . The distinctive morphology of the  $\mu$  head shows us that the grammar is conservative in introducing this element. The head is merged only when required by the unchecked features of a possessor DP. This merger makes available the specifier of  $\mu$ P as a landing site for A-movement, and possessor raising ensues.

## 6 Conclusion

Argument dependencies spanning the boundary of non-finite TP can be divided into two groups according to whether the higher position is a thematic one, as in control, or not, as in raising. The overall conclusion from this work is that this same distinction is relevant to dependencies spanning the boundary of possessive DP – external possession. External

<sup>31</sup> On object shift to a position below the base position of the subject, see Johnson (1991) on English, Baker and Collins (2006) on Kinande, Ju|'hoansi and ꞤHoan, Broekhuis (2008, ch 2) on "all Germanic languages", Travis (2010) on Chinese, Swedish and Kalangan.

<sup>32</sup> I am taking certain liberties. For Johnson, object shift need be only to Spec,VP;  $\mu$  assigns Case to the shifted object under government.

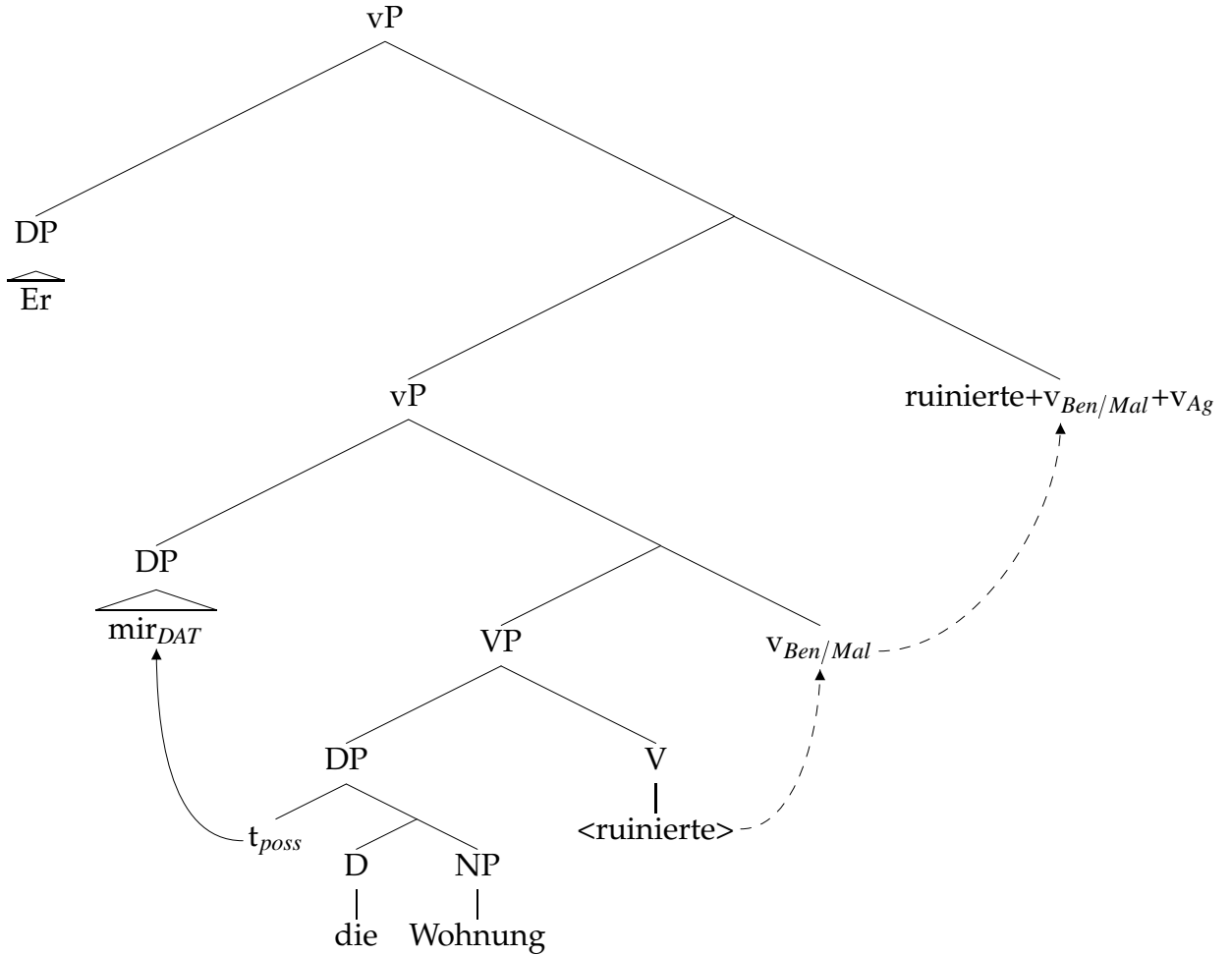
possession in the style of control (however this is analyzed) is well-known. The direct goal of this paper has been to provide new empirical evidence of external possession of the simple raising type. Object possessor raising in Nez Perce involves movement of possessor phrases into a-thematic A-positions external to the possessum DP. It is possessor raising in a way thematically parallel to raising to subject.

The distinction between control and raising at the DP level seems to me quite promising for ongoing debates over the analysis of control in particular. Universal grammar does not prohibit A-movement from possessor position, and this makes it possible to entertain an analysis of affectedness-linked external possession which features movement to thematic positions. It makes it possible, in other words, to open up external possession as a new front in the debate over raising analyses of control. For a language like German or Korean in which affectedness constraints on external possession are very well-known, the debate over possessor movement, sometimes called ‘possessor raising’, can be recontextualized as a debate over movement into thematic positions.

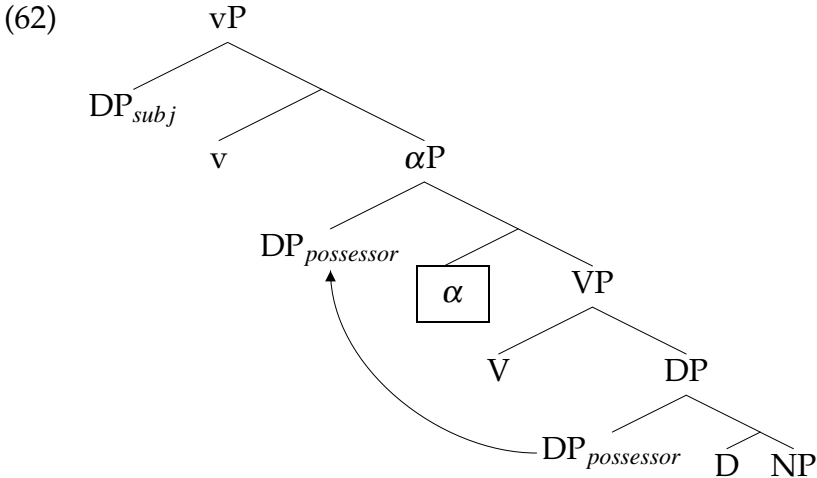
Let me close with a look at a typology of external possession which seems to me increasingly plausible in view of movement-based analyses on the control end of the spectrum. If we adopt from authors such as Lee-Schoenfeld (2006) an analysis of affectedness-based external possession which does involve movement, a simple parameter for external possession constructions comes into view. Lee-Schoenfeld proposes to parse German (60) as (61):

- (60) Er ruinierte **mir** die Wohnung.  
he ruined **me.DAT** the place  
He ruined *my* place.

(61)



On this parse, the projection hosting the moved possessor phrase is a light verb or applicative projection headed by  $v_{Ben/Mal}$ , responsible for assigning an affectee theta-role to the phrase in its specifier position. This structure contrasts neatly with the Nez Perce structure for possessor raising. In both cases, possessor phrases undergo A-movement to a position just below the base position of the external argument. In both cases, the head hosting possessor movement is a familiar one. The German-style possessor dative construction is built on a light verb/applicative head which obtains its argument via movement. Nez Perce-style possessor raising is built on the machinery of object shift. So far as external possession is concerned, the structures differ only in the content of the head to whose specifier the possessor moves:



Where  $\alpha$  is an applicative or light verb head assigning an affectee theta-role, external possession will come with a semantic signature. The movement chain is associated with two distinct theta-roles – a configuration of control. Where  $\alpha$  is an object shift head, movement has no thematic consequence. Possessor movement is true possessor raising.

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