

Failure to Agree is Not a Failure: φ -Agreement with Post-Verbal Subjects in Hebrew

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Abstract

Based on the patterns of φ -agreement with post-verbal subjects in Hebrew, I argue against the idea that failure to establish a φ -agreement relation between a φ -probe and its putative target (e.g., due to intervention) results in ungrammaticality, or a “crash”; at the same time, I demonstrate that φ -agreement also cannot be *optional*.

At first glance, these two claims—that φ -agreement is neither optional, nor does its failure result in ungrammaticality—might seem contradictory. However, I argue that there is a third possibility, which is in fact the only one that can account for the data under consideration: φ -agreement must be attempted by every φ -probe; but if it fails (e.g., due to the presence of an intervener), its failure is systematically tolerated.

KEYWORDS: *agreement, intervention, Hebrew, datives, possessor-raising, smuggling, crowding*

1. Introduction

In this paper, I examine the patterns of φ -agreement with post-verbal subjects in Hebrew, arguing against the idea that failure to establish a φ -agreement relation between a φ -probe and its putative target (e.g., due to intervention) results in ungrammaticality, or a “crash”; at the same time, I argue that φ -agreement also cannot be *optional*.

At first glance, these claims—that φ -agreement is neither optional, nor does its failure result in ungrammaticality—might seem contradictory. However, I argue that there is a third possibility, which is in fact the only one that can account for the data under consideration: φ -agreement must be **attempted** by every φ -probe; but if it fails (e.g., due to the presence of an intervener), its failure is systematically tolerated.

Interestingly, this mirrors the behavior of the rule-based systems of early generative grammar, where rules were composed of a *Structural Description* (SD) and a *Structural Change* (SC). In these terms, the effects of φ -agreement, as far as valuing the features on the φ -probe, could be thought of as the SC; the locality conditions associated with φ -agreement (incl. intervention) could be thought of as the SD.

Section 2 presents the basic pattern. In section 3, I investigate the dependence of φ -agreement patterns on the thematic properties of the predicates in question, and present data that casts serious doubt on the viability of an account that takes φ -agreement to be optional. Section 4 reexamines the portion of the data that seemed to suggest an account based on optional φ -agreement, and argues that the appearance of optionality there is a result of two different (but string-identical) underlying structures, one of which gives rise to φ -agreement, and one of which does not. Two particular implementations of this are considered: one based

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on Collins' (2005) "smuggling" analysis of the English raising construction, and one based on proposals by Anagnostopoulou (2003) and McGinnis (1998)—and evidence is presented in favor of the latter kind of analysis for the Hebrew data under consideration.

Section 5 discusses the implications of these findings for the theory of φ -agreement in general, and the relation between φ -agreement and (un)grammaticality, in particular. Section 6 is the conclusion.

A terminological note: throughout this paper, I use the term *post-verbal subject* to refer to subjects in the so-called "untriggered inversion" construction. The default word order in Hebrew is *SV(O)*. As shown by Shlonsky (1987) and Reinhart & Siloni (2005), the verb can precede the subject in one of two ways: "triggered inversion", in which some clause-initial XP licenses the inverse order (i.e., [*XP verb subject ...*]); and "untriggered inversion", in which nothing precedes the verb (i.e., [*verb subject ...*]). Untriggered inversion is possible only when the subject is underlyingly an internal argument: verbal passives and unaccusatives allow it, while unergatives do not. The examples of post-verbal subjects in this paper therefore involve only verbal passives and unaccusatives.

2. The Basic Pattern

There is a well-documented correlation, in languages that exhibit alternating *SVO* and *VSO* word-orders, between pre-verbal subjects and φ -agreement (see Fassi Fehri 1993, among others). Consider the following representative examples:¹

- (1) *SV ORDER — LACK OF φ -AGREEMENT NOT TOLERATED*
- a. ha-cincenet nafl-a le-Dani (Hebrew)
 the-jar_{FEM} fell-3sg_{FEM} DAT-Dani
 'Dani's jar fell.'
- b. * ha-cincenet nafal le-Dani
 the-jar_{FEM} fell(3sg_{MASC}) DAT-Dani
- (2) *VS ORDER — LACK OF φ -AGREEMENT TOLERATED*
- a. nafl-a le-Dani ha-cincenet
 fell-3sg_{FEM} DAT-Dani the-jar_{FEM}
 'Dani's jar fell.'
- b. ? nafal le-Dani ha-cincenet
 fell(3sg_{MASC}) DAT-Dani the-jar_{FEM}
 'Dani's jar fell.'

¹The glosses of (1–4) are imprecise, in the sense that the dative element is understood as both the possessor of the nominative argument, as indicated in the glosses, and as affected by the event denoted by the sentence; in the case of the verb *nafal* ('fell'), the relevant affectedness reading is one of adversity.

Moreover, the possession relation implicated by this construction is weaker than the one generated by genitive possessors: Dani need not be, strictly speaking, the possessor of the jar; rather, the relation is implicated is one of *association*: the jar is associated with Dani, in some contextually-relevant way. All of these properties are consistent with the analysis of the dative element as a raised possessive-dative element (see Landau 1999).

The noun *cincenet* ('jar_{FEM}') happens to be of the grammatical gender *feminine*. In prescriptive Hebrew, use of this noun as a subject necessitates feminine agreement-morphology on the verb, as in (1a, 2a). In colloquial Hebrew, however, there is another possibility: if the noun-phrase *ha-cincenet* ('the-jar_{FEM}') is not moved to pre-verbal subject position, the verb can instead surface with default agreement-morphology, as in (2b).

The same phenomenon demonstrated in (1a–b, 2a–b) using *gender* features can be replicated using *number* features:²

(3) *SV ORDER — LACK OF φ-AGREEMENT NOT TOLERATED*

- a. ha-maftex-ot nafl-u le-Dani
 the-key_{MASC}-PL fell-3pl DAT-Dani
 'Dani's keys fell.'
- b. * ha-maftex-ot nafal le-Dani
 the-key_{MASC}-PL fell(3sg_{MASC}) DAT-Dani

(4) *VS ORDER — LACK OF φ-AGREEMENT TOLERATED*

- a. nafl-u le-Dani ha-maftex-ot
 fell-3pl DAT-Dani the-key_{MASC}-PL
 'Dani's keys fell.'
- b. ? nafal le-Dani ha-maftex-ot
 fell(3sg_{MASC}) DAT-Dani the-key_{MASC}-PL
 'Dani's keys fell.'

The pattern in (2b, 4b) might appear to be an instance of *agreement attraction*—namely, use of default (i.e., *masculine singular*) agreement-morphology on the verb *nafal* ('fell') being triggered by the adjacent *masculine singular* noun-phrase *le-Dani* ('DAT-Dani'). This is not borne out, however: the same pattern is possible even if the dative element is itself *feminine* or *plural*, as in (5–6).³

²The noun *mafteax* ('key_{MASC}'), though it idiosyncratically selects the plural suffix typically used with *feminine* nouns (*-ot*), is formally *masculine*. This can be seen by looking at adjectival modification:

- (i) a. mafteax xadaš/*xadaš-a
 key_{MASC} new_{(MASC)/*new_{FEM}}
 'a new key'
- b. maftex-ot xadaš-im/*xadaš-ot
 key_{MASC}-PL_(FEM) new-PL_{MASC/*new-PL_{FEM}}
 'new keys'

³Thanks to Patrick Grosz for helpful discussion of this point.

(5) FEMININE DATIVE DOES NOT BLOCK DEFAULT/MASC. φ -AGREEMENT

? nafal le-Dina ha-cincenet
fell(3sg_{MASC}) DAT-Dina_{FEM} the-jar_{FEM}
'Dina's jar fell.'

(6) PLURAL DATIVE DOES NOT BLOCK DEFAULT/SG. φ -AGREEMENT

? nafal l-a-yelad-im ha-maftex-ot
fell(3sg_{MASC}) DAT-the-child_{MASC-PL} the-key_{MASC-PL}
'The children's keys fell.'

It is certainly not the case, however, that φ -agreement is generally *optional* in Hebrew. Whatever mitigates the lack of φ -agreement in (2b, 4b, 5–6) is unable to do so in (1b, 3b)—which are not acceptable even in colloquial Hebrew. The appearance of optionality with respect to φ -agreement only arises when post-verbal subjects are involved, as in (2a–b, 4a–b). We might hypothesize that there is nonetheless optionality associated with φ -agreement in Hebrew, but it only arises in derivations containing a post-verbal subject; but as will be shown below, even this more articulated alternative proves to be untenable.

3. The Status of the Dative

The possibility of default agreement-morphology in examples like (2b, 4b) disappears when the dative element is absent, as in (7b, 8b)—though omitting this dative is a perfectly acceptable alternative when appropriate agreement-morphology is present, even with a post-verbal subject, as in (7a, 8a):

(7) DATIVE ELEMENT ABSENT — LACK OF φ -AGREEMENT NOT TOLERATED (GENDER)

- a. nafal-a ha-cincenet
fell-3sg_{FEM} the-jar_{FEM}
'The jar fell.'
- b. * nafal ha-cincenet
fell(3sg_{MASC}) the-jar_{FEM}

(8) DATIVE ELEMENT ABSENT — LACK OF φ -AGREEMENT NOT TOLERATED (NUMBER)

- a. nafal-u ha-maftex-ot
fell-3pl the-key_{MASC-PL}
'Dani's keys fell.'
- b. * nafal ha-maftex-ot
fell(3sg_{MASC}) the-key_{MASC-PL}

Note that the data in (7–8) already casts significant doubt on an account whereby φ -agreement in Hebrew, even when we restrict ourselves to post-verbal subjects, is somehow *optional*.

In this respect, it is interesting to consider the status of the dative element *le-Dani* ('DAT-Dani') in examples such as (1–4): it is quite clear that the verb *nafal* ('fell') does not select a thematic dative argument. Thematic datives aside, Borer & Grodzinsky (1986) identify three types of so-called "semi-argumental" dative clitics in Hebrew: *reflexive*, *ethical*, and *possessive*. As Borer & Grodzinsky demonstrate, *reflexive* and *ethical* dative clitics are

restricted to pronominal forms; only possessive-datives can be realized as full (or “lexical”) noun-phrases. Thus, the use in (1–4) of *le-Dani* (‘DAT-Dani’)—a full dative noun-phrase—disambiguates in favor of the possessive-dative.⁴

Let us therefore contrast (2a–b, 4a–b) with similar constructions in which the dative element is not a possessive-dative, but rather an unambiguously thematic argument of the verb. Both in English and in Hebrew, there are some verbs that are obligatorily ditransitive—in other words, neither internal argument of these verbs can be omitted:

- (9) *OBLIGATORILY DITRANSITIVE VERBS — ENGLISH*
- a. * John handed.
 - b. * John handed the paper.
 - c. * John handed to Bill.
 - d. John handed the paper to Bill.
- (10) *OBLIGATORILY DITRANSITIVE VERBS — HEBREW*
- a. * Dan masar
Dan handed
 - b. * Dan masar et ha-ma’atafa
Dan handed ACC the-envelope
 - c. * Dan masar la-mefakeax
Dan handed DAT.the-supervisor
 - d. Dan masar et ha-ma’atafa la-mefakeax
Dan handed ACC the-envelope DAT.the-supervisor
‘Dan handed the envelope to the supervisor.’

Given that the verb *masar* (‘handed’) in (10) is obligatorily ditransitive, we would expect its passive counterpart to exhibit similar behavior, requiring both internal arguments to be present—an expectation that is indeed borne out:

- (11) *PASSIVE OF OBLIGATORILY DITRANSITIVE VERB*
- a. * ha-ma’atafa nimser-a
the-envelope_{FEM} PASV.handed-3sg_{FEM}
 - b. * nimsar/nimser-a la-mefakeax
PASV.handed(3sg_{MASC})/3sg_{FEM} DAT.the-supervisor
 - c. ha-ma’atafa nimser-a la-mefakeax
the-envelope_{FEM} PASV.handed-3sg_{FEM} DAT.the-supervisor
‘The envelope was handed to the supervisor.’

Just like the examples in (1–4), the passive verb in (11) allows the subject to appear post-verbally:

⁴As noted in fn. 1, the reading generated by the dative element in (1–4) is also perfectly consistent with the interpretive properties associated with the possessive-dative constructions, as identified by Landau (1999).

- (12) *PASSIVE OF OBLIGATORILY DITRANSITIVE WITH POST-VERBAL SUBJECT*
 nimser-a la-mefakeax ha-ma'atafa
 PASV.handed-3sg_{FEM} DAT.the-supervisor the-envelope_{FEM}
 'The envelope was handed to the supervisor.'

Crucially, however, the verb cannot appear with default agreement-morphology, even when the subject is post-verbal:

- (13) *PASSIVE OF OBLIGATORILY DITRANSITIVE WITH POST-VERBAL SUBJECT, NO φ -AGREEMENT (RULED OUT)*
 * nimsar la-mefakeax ha-ma'atafa
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-envelope_{FEM}

The same effect is attested not only with φ -agreement in *gender* features, but also with φ -agreement in *number* features:

- (14) *PASSIVE OF OBLIGATORILY DITRANSITIVE WITH POST-VERBAL SUBJECT*
 nimser-u la-mefakeax ha-maftex-ot
 PASV.handed-3pl DAT.the-supervisor the-key_{MASC}-PL
 'The keys were handed to the supervisor.'

- (15) *PASSIVE OF OBLIGATORILY DITRANSITIVE WITH POST-VERBAL SUBJECT, NO φ -AGREEMENT (RULED OUT)*
 * nimsar la-mefakeax ha-maftex-ot
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-key_{MASC}-PL

This effect is systematic: passives of ditransitive verbs that take an obligatory dative argument cannot appear with default agreement-morphology (unless the THEME is *singular* and *masculine*, of course)—even when the subject is post-verbal, as in (12–15).

Again, if φ -agreement with post-verbal subjects were somehow *optional*, this would be completely unexpected—as would the facts in (7–8), above, concerning derivations that do not include a dative noun-phrase.

It has been independently established that in Hebrew, the internal arguments of a ditransitive verb can manifest either of two hierarchical relations (Landau 1994, Preminger 2005):

- (16) *HEBREW: THEME* » *GOAL*
 a. *VARIABLE-BINDING*
 hexzarti [kol aveda_i] [le-be'al-eha_i]
 returned.1sg every loss_{FEM} DAT-owner-3sg_{FEM}.POSS
 'I returned every lost item_i to its_i owner.'
 b. *"EACH ... THE OTHER" TEST*⁵
 hexzarti (be-ta'ut) [kol tik] [le-be'al-av šel ha-axer]
 returned.1sg in-mistake every bag_{MASC} DAT-owner-3sg_{MASC}.POSS of the-other
 'I (accidentally) returned every bag to the owner of the other.'

⁵This is the "each ... the other" test proposed by Barss & Lasnik (1986).

(17) HEBREW: GOAL » THEME

a. VARIABLE-BINDING

hexzarti [le-kol exad_i] [et xafac-av_i]
returned.1sg DAT-every one_{MASC} ACC items-3sg_{MASC}.POSS
'For every person_i, I returned that person_i's items to him_i.'

b. "EACH ... THE OTHER" TEST

hexzarti (be-ta'ut) [le-kol exad] [et tik-o šel ha-axer]
returned.1sg in-mistake DAT-every one_{MASC} ACC bag-3sg_{MASC}.POSS of the-other
'For every person_i, I (accidentally) returned the other person's bag to him_i.'

The data in (16–17) can be taken as indicative of two different hierarchical orders, since in the absence of c-command, Hebrew manifests familiar *Weak Crossover* effects with respect to variable-binding:

(18) a. BASELINE FOR WCO (SUBJECT-OBJECT) IN HEBREW — CLITIC VERSION

?? [im-o_i] ohevet [kol yeled_i]
mother-3sg_{MASC}.POSS loves every child
'His_i mother loves every child.'

b. BASELINE FOR WCO (SUBJECT-OBJECT) IN HEBREW — GENITIVE VERSION

?? [ima šel-o_i] ohevet [kol yeled_i]
mother of-3sg_{MASC}.POSS loves every child
'His_i mother loves every child.'

Moreover, in Hebrew, the same point can be made using Condition A:

(19) CONDITION A IN HEBREW DITRANSITIVES

a. THEME » GOAL

Dan_i her'a [et ha-tinok_j] [le-acmo_j]
Dan showed ACC the-baby DAT-himself
'Dan_i showed the baby_j to itself_j.'

b. GOAL » THEME

Dan_i her'a [l.a-tinok_j] [et acmo_j]
Dan showed DAT.the-baby ACC himself
'Dan_i showed the baby_j to itself_j.'

Finally, it is important to note that accounting for (16–17, 19) in terms of *linear precedence*—in other words, imposing a requirement that the antecedent precede the bound pronoun at PF—is highly unlikely. While linear precedence is respected in (16–17, 19), it is neither a sufficient nor a necessary condition for binding in Hebrew (as demonstrated in (20a) and (20b), respectively), even if the putative antecedent and pronoun are not separated by a clause boundary (cf. Janke & Neeleman 2009, Williams 1997):

- (20) a. * im-o šel ha-tinok ra'ata et acmo
 mother-3sg_{MASC}.POSS of the-baby saw ACC himself
- b. et acmo ha-tinok kvar ra'a
 ACC himself the-baby already saw
 'The baby already saw himself.'

The same state of affairs is attested in Greek (Anagnostopoulou 2003:166–167):

- (21) GREEK: THEME » GOAL
- a. VARIABLE-BINDING
 Estila [kathe pedhi_i] [stin mitera tu_i]
 sent.1sg every child to.the mother his
 'I sent every child_i to his_i mother.'
- b. "EACH ... THE OTHER" TEST
 Estila [to ena pedhi] [stin mitera tu alu]
 sent.1sg the.ACC one child to.the mother the other.GEN
 'I sent each child to the other's mother.'
- (22) GREEK: GOAL » THEME
- a. VARIABLE-BINDING
 Estila [se kathe mitera_i] [to pedhi tis_i]
 sent.1sg to every mother the.ACC child her
 'For every mother_i, I sent that mother_i's child to her_i.'
- b. "EACH ... THE OTHER" TEST
 Estila [stin mia mitera] [to pedhi tis alis]
 sent.1sg to one mother the.ACC child the other.GEN
 'For every mother_i, I sent the other mother's child to her_i.'

As Anagnostopoulou (2005) points out, one of the analyses compatible with such facts is that both the THEME and the GOAL are base-generated within VP proper, in either of two hierarchical orders:

- (23) a. THEME-OVER-GOAL [≡(16, 21)] b. GOAL-OVER-THEME [≡(17, 22)]
- ```

graph TD
 VP --> THEME
 VP --> V_prime[V']
 V_prime --> V0
 V_prime --> GOAL

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graph TD
 VP --> GOAL
 VP --> V_prime[V']
 V_prime --> V0
 V_prime --> THEME

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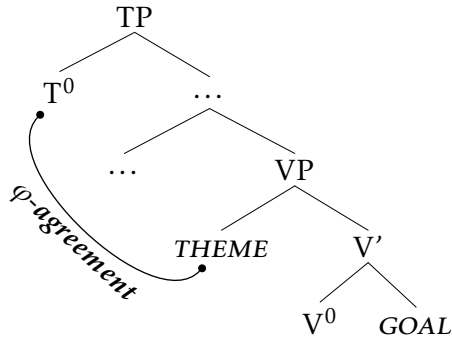
Anagnostopoulou (2003), Chomsky (1995, 2000), and Collins (1997) argue that a *specifier* of a given head does not intervene in probe-goal relations targeting the *complement* of the same head. This is derivable on the basis of the following generalization:

- (24) EQUIDISTANCE CONDITION (Chomsky 1995, 2000; Collins 1997)  
     If  $\alpha$  and  $\beta$  are in the *minimal search domain* of the same head, then  $\alpha$  and  $\beta$  never intervene in relations targeting one another

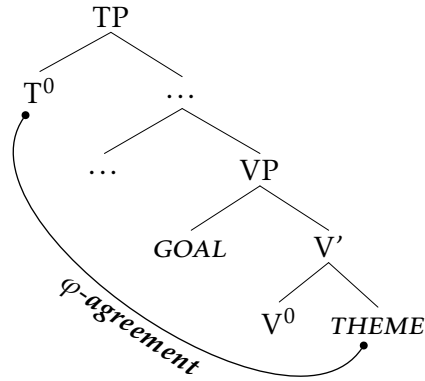


In (23), both the THEME and the GOAL are within the minimal search domain of  $V^0$ , regardless of whether the particular structure under consideration is (23a) or (23b). Thus, if (23a–b) is the correct analysis of Hebrew ditransitives, then when a ditransitive undergoes passivization, the dative GOAL will not intervene in the relation between  $T^0$  and the THEME argument—again, regardless of whether the underlying structure is (23a) or (23b):

(25) a. *THEME-OVER-GOAL* [ $\equiv$ (23a)]



b. *GOAL-OVER-THEME* [ $\equiv$ (23b)]



We can therefore account for the pattern in (12–15)—repeated here—if we assume that  $\varphi$ -agreement is not *optional*, but rather *obligatory*:

- (12) nimser-a                    la-mefakeax            ha-ma'atafa  
 PASV.handed-3sg<sub>FEM</sub> DAT.the-supervisor the-envelope<sub>FEM</sub>  
 'The envelope was handed to the supervisor.'
- (13) \* nimsar                    la-mefakeax            ha-ma'atafa  
 PASV.handed(3sg<sub>MASC</sub>) DAT.the-supervisor the-envelope<sub>FEM</sub>
- (14) nimser-u                    la-mefakeax            ha-maftex-ot  
 PASV.handed-3pl DAT.the-supervisor the-key<sub>MASC-PL</sub>  
 'The keys were handed to the supervisor.'
- (15) \* nimsar                    la-mefakeax            ha-maftex-ot  
 PASV.handed(3sg<sub>MASC</sub>) DAT.the-supervisor the-key<sub>MASC-PL</sub>

Regardless of whether the underlying structure of (12–15) is *THEME-over-GOAL* or *GOAL-over-THEME*,  $\varphi$ -agreement can apply (as shown in (25a–b)). If  $\varphi$ -agreement were optional, we would wrongly predict that (13, 15) be possible, alongside (12, 14). On the other hand, if  $\varphi$ -agreement is obligatory, the ungrammaticality of (13, 15) follows.<sup>6</sup>

<sup>6</sup>One might wonder regarding the status of agreement with post-verbal subjects in passives of ditransitive verbs that unlike *masar* ('handed'), are not obligatorily ditransitive. The judgments regarding such constructions are not as clear-cut, and I have therefore set them aside for the purposes of this paper.

## 4. Possessive-Datives Once More

Recall (2a–b, 4a–b)—repeated here—in which default agreement-morphology is possible:

(2) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (GENDER)

a. nafl-a le-Dani ha-cincenet  
fell-3sg<sub>FEM</sub> DAT-Dani the-jar<sub>FEM</sub>  
'Dani's jar fell.'

b. ? nafal le-Dani ha-cincenet  
fell(3sg<sub>MASC</sub>) DAT-Dani the-jar<sub>FEM</sub>  
'Dani's jar fell.'

(4) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (NUMBER)

a. nafl-u le-Dani ha-maftex-ot  
fell-3pl DAT-Dani the-key<sub>MASC-PL</sub>  
'Dani's keys fell.'

b. ? nafal le-Dani ha-maftex-ot  
fell(3sg<sub>MASC</sub>) DAT-Dani the-key<sub>MASC-PL</sub>  
'Dani's keys fell.'

Note that DP-internal possessors in Hebrew bear genitive Case (marked by *shel* 'of'), rather than dative Case (marked by /l(e)-/) (see Ritter 1991, 1992). Thus, one can be certain that the possessor is outside the DP in both (2a–b) and (4a–b).

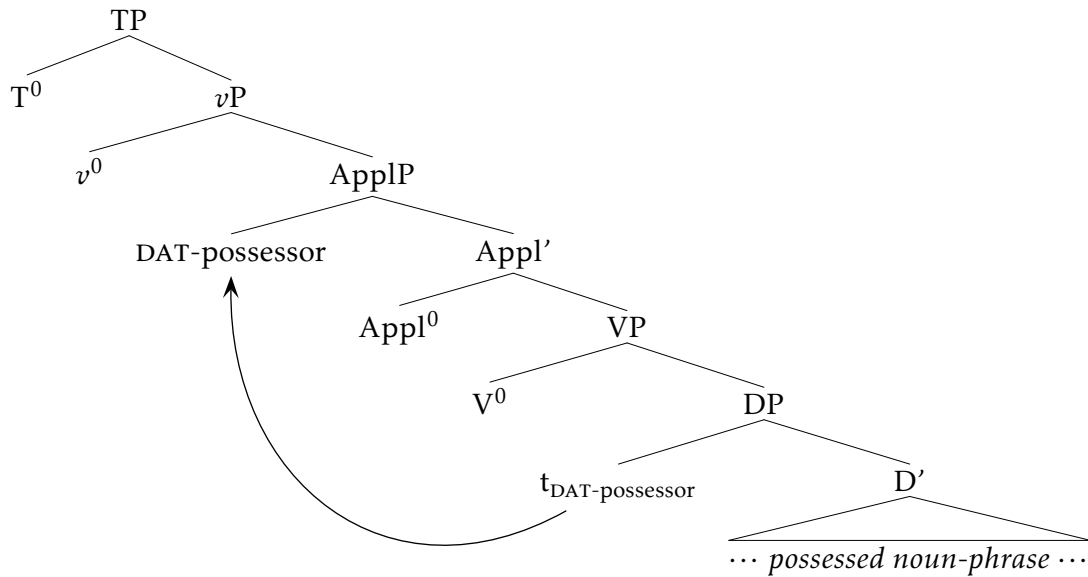
Suppose that in order to support the assignment of dative Case in a verb-phrase that normally does not assign it—such as the verb-phrase headed by *nafal* ('fell'), in (1–4)—an additional, applicative-like layer must be projected (following Collins 1997, Marantz 1993, Pylkkänen 2002, and others):<sup>7</sup>

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<sup>7</sup>This possibility is perfectly compatible with Landau's (1999) analysis of possessive-dative raising in Hebrew—though Landau places the possessive-dative directly in [Spec,VP], rather than in [Spec,ApplP] as in (26). In section 3, I discussed the consequences of placing a dative in [Spec,VP], and argued that while this is incorrect for possessive-datives, there is another class of datives in Hebrew for which [Spec,VP] is precisely the correct position—namely, obligatorily thematic datives.

Note that the ApplP projection in (26) is applicative-like, in the sense that it endows an otherwise dative-less verb-phrase with the ability to assign dative Case; it is not, however, a true *applicative*, since true applicatives add another argument-slot to the verb—and as Landau argues in detail, the possessive-dative in Hebrew is decidedly not a thematic argument of the verb.

(26) *POSSESSIVE-DATIVE CONSTRUCTION* (based on Landau 1999; *ApplP* added)



In (26), the possessive-dative and the VP-internal DP are in separate maximal projections, and therefore not subject to the *equidistance* condition in (24), repeated here:

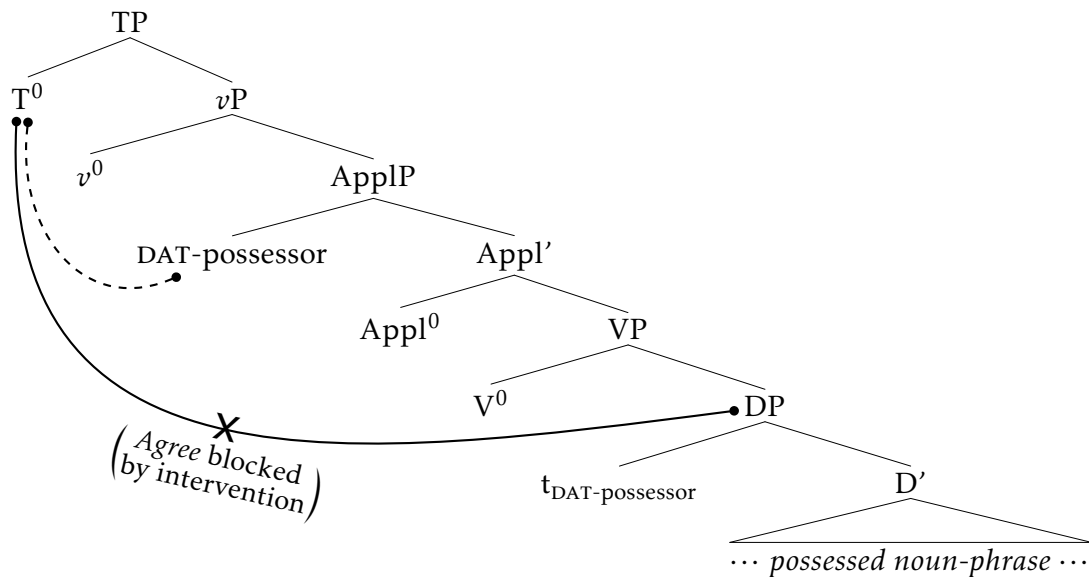
(24) *EQUIDISTANCE CONDITION* (Chomsky 1995, 2000; Collins 1997)

If  $\alpha$  and  $\beta$  are in the *minimal search domain* of the same head, then  $\alpha$  and  $\beta$  never intervene in relations targeting one another

Therefore, in probe-goal relations between a higher probe—such as T<sup>0</sup>—and the possessed DP, the dative possessor will indeed intervene.

This predicts the acceptability of the non-agreeing (or default-agreement) variants in (2b, 4b), above; but from this perspective, the acceptability of the agreeing variants in (2a, 4a) is now surprising:

(27) INTERVENTION IN POSSESSIVE-DATIVE CONSTRUCTION



How does the  $\varphi$ -agreement relation manage to circumvent intervention by the dative possessor? We could, of course, discard the ApplP-based analysis of possessive-datives, and revert to an account that takes  $\varphi$ -agreement to be *optional*—but recall that (i)  $\varphi$ -agreement with pre-verbal subjects is decidedly not optional (see (1, 3), above); and (ii) even if we were to somehow restrict the optionality of  $\varphi$ -agreement to derivations involving post-verbal subjects, we would lose our account for the lack of optionality when thematic (rather than possessive) datives are involved (as in (12–15), above), as well as when a dative is completely absent (as in (7–8), above).

We therefore need a different account of how intervention is circumvented in (2a, 4a). To address this, let us first consider how intervention effects are circumvented in another language and construction—namely,  $\varphi$ -agreement across a dative experiencer in English.

#### 4.1. Background: Intervention Suppression in English

Consider the following, well-studied construction:

(28) There  $\underbrace{\text{seems [to the children]}_{\text{DAT}} \text{ [to be [a man]}_{\text{NOM}} \text{ in the garden}]}$ .

Note that—not unlike the Hebrew examples given above—there is apparent variation with respect to the appearance of non-default agreement-morphology in examples like (28) (see Boeckx 2000). Nevertheless, given the cross-linguistic behavior of dative noun-phrases and defective intervention, one would expect the dative experiencer in (28) to intervene, as well; but as the overt agreement-marker /-z/ on the verb *seem* in (28) indicates, this is not necessarily the case.

Conceivably, one could seek to explain the lack of intervention by the dative experiencer by appealing to its syntactic category—namely, asserting that the dative experiencer is syntactically a PP, while intervention is a property of DPs proper. Such an explanation, however, faces serious problems: recent work suggests that the categorial status of datives—

i.e., whether they are DPs or PPs—is largely orthogonal to their syntactic behavior, even with respect to intervention (see Anagnostopoulou 2005, Rezac 2008). As Rezac (2008) argues, this could be the result of the P<sup>0</sup> head (in instances where the dative is a PP) probing for some or all of the features on the DP, and thereby copying those feature values into the PP layer and rendering them visible from outside the PP.

We are therefore still in need of an explanation for the lack of intervention by the dative experiencer in cases like (28). Below, I review two possible explanations for this phenomenon.

#### 4.1.1. Smuggling

The account sketched in this sub-section, as well as the term *smuggling*, follows Collins (2005)—with some modifications.

As a starting point, Collins cites Abels' (2001) argument for the existence of infinitival extraposition in English. Consider the following example:

(29) John seems likely to me to be nice. [Collins 2005:(4a)]

Note that *likely* itself does not select a dative experiencer:

(30) ?? John is likely to me to be nice.

As a result, it does not appear that [*to me*] in (29) is a complement of *likely*. On the other hand, *seem* can take not only infinitival complements, but also AP complements—as shown below—and these tend to precede the dative experiencer, if one is present:

(31) John seems [<sub>AP</sub> tall] (to me).

It is therefore reasonable to assume that the structure of (29) is just like (31), except that instead of a simplex AP (consisting only of [*tall*]), the AP complement of *seem* in (29) is [<sub>AP</sub> *likely* [*to be nice*]], from which [*to be nice*] has extraposed:

(32) John<sub>1</sub> seems [<sub>AP</sub> likely t<sub>2</sub>] [<sub>DAT</sub> to me] [t<sub>1</sub> to be nice]<sub>2</sub>.

At this point, I would like to address a possible move not taken by Collins. One could envision that the extraposition site (i.e., the landing site of the constituent marked with the index 2, in (32)) is structurally higher than the dative experiencer [*to me*]. This might create a problem with respect to the diagnostics mentioned earlier, which indicate that the dative experiencer c-commands into the infinitival complement; but it is conceivable that infinitival extraposition is, for some reason, subject to obligatory reconstruction. If so, the subject of the infinitival (*John*) could simply raise out of the infinitival, thereby circumventing intervention by the dative experiencer.

There are at least two reasons to reject such a move. First, as observed by Wexler & Culicover (1977, 1980), extraposed constituents are—by and large—*islands* for extraction; consider the following example:

- (33) a. I told Mary [a story about John].  
 b. I told [a story about John] to Mary.  
 c. I told t<sub>1</sub> to Mary [a story about John]<sub>1</sub>. (*Heavy NP-Shift*)

- (34) a. Who<sub>1</sub> did you tell Mary [a story about t<sub>1</sub>]?  
 b. ?? Who<sub>2</sub> did you tell t<sub>1</sub> [to Mary] [a story about t<sub>2</sub>]<sub>1</sub>? (*Heavy NP-Shift*)

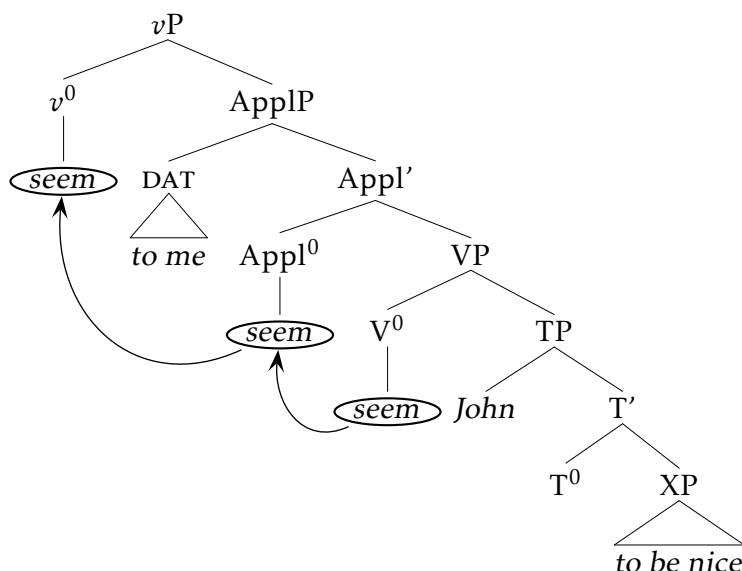
In (34b)—created on the basis of the *Heavy NP-Shift* sentence in (33c)—extraction from the extraposed noun-phrase is degraded, compared to the non-extraposed noun-phrase in (34a).

Second, if A-movement out of the extraposed infinitival were possible, we would make the prediction that every language that allows infinitival extraposition (à la (29)) will not show defective intervention in these constructions—a prediction that strikes me as too strong.

There are two ways to avoid making this prediction: we could assume that the extraposition site is structurally lower than the position of the dative experiencer; or, we could assume that the constituent that extraposes is small enough as to not include the downstairs subject. Moreover, these two options are not mutually exclusive; in what follows, I will consider both possibilities. Regardless, it seems that raising of [*John*] from within an infinitival that has extraposed to a position higher than the dative intervener cannot be the answer to how intervention effect are circumvented in this construction. We are therefore still in need of an account for the lack of intervention effects, which is where Collins' (2005) proposal comes in.

Let us first sketch the essential base-generated structure involved in the *smuggling* derivation, along with V<sup>0</sup>-to-AppI<sup>0</sup>-to-v<sup>0</sup> head-movement of the verb *seem*:

- (35) “BASE-GENERATION”<sup>8</sup>

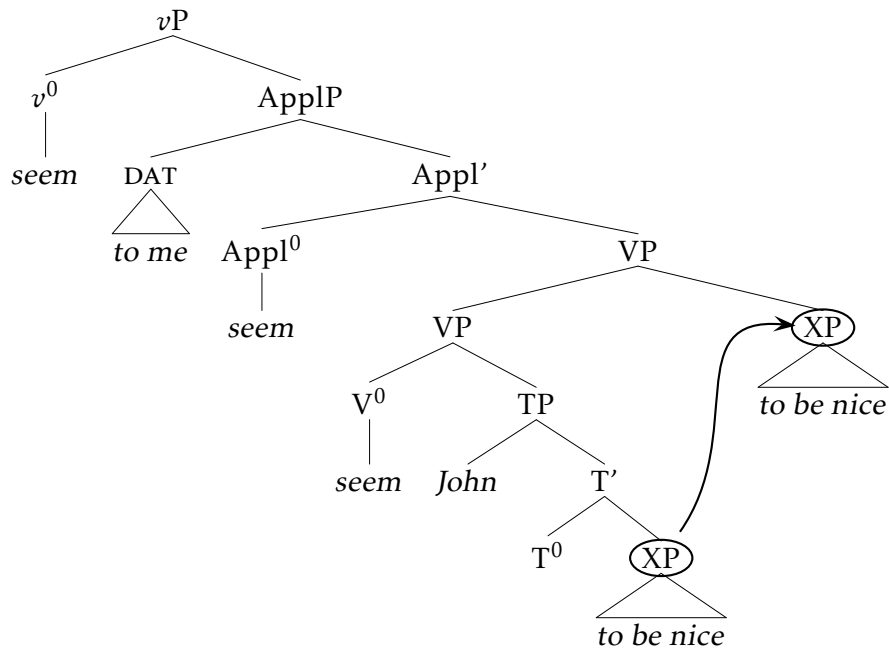


For now, let us assume that the extraposition site (to which [*to be nice*] is extraposed) is lower than the dative experiencer:<sup>9</sup>

<sup>8</sup>The phrase-marker diagram in (35) is not meant to imply that all of the depicted structure is merged prior to any other operations applying; rather, it is meant to (perhaps artificially) separate the base-generated aspects of the structure from those that are derived via movement. As a result, operations that appear later in this description are not necessarily subsequent to all of these base-generation operations, in derivational terms.

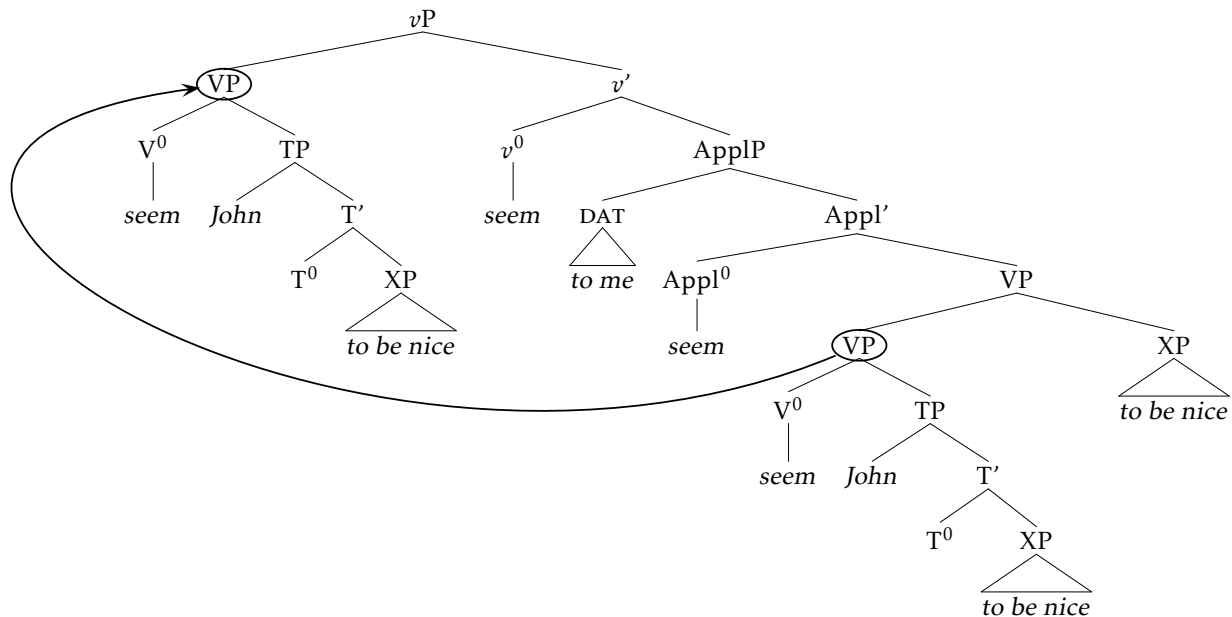
<sup>9</sup>Despite its appearance in (36), this extraposition operation is not necessarily counter-cyclic; see fn. 8.

(36) INFINITIVAL EXTRAPOSITION



The next derivational step is the “smuggling” itself: the remnant VP, created by infinitival extraposition, moves across the dative experiencer, to [Spec,*v*P]:

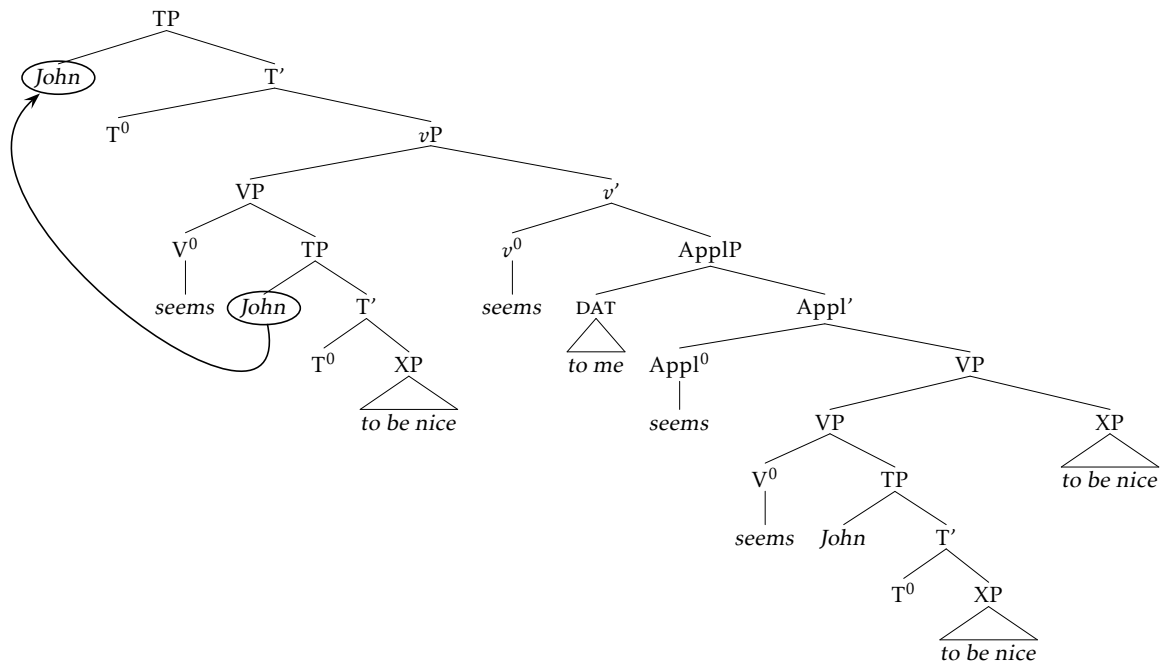
(37) REMNANT VP MOVEMENT



Presumably, no intervention arises in (37) because the movement operation instantiated here is not the kind of movement that could potentially target a dative.

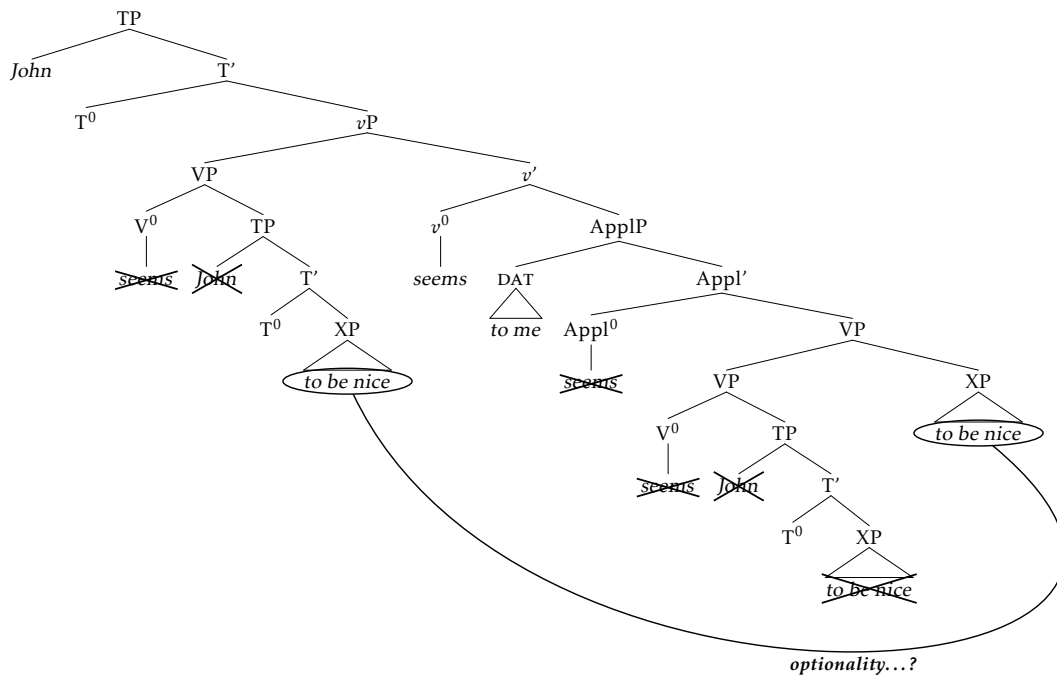
At this point, raising of [John] can apply, targeting the copy contained within the fronted VP. Since this copy is not c-commanded by the dative experiencer, no intervention effects arise:

(38) RAISING



Let us now consider how a structure such as (38), above, would be linearized. Assuming an LCA-like pronunciation algorithm (Kayne 1994), whereby every element that is asymmetrically c-commanded by another copy of itself goes unpronounced, we are left with the following:

(39) PRONUNCIATION (GIVEN LCA-LIKE ASSUMPTIONS)



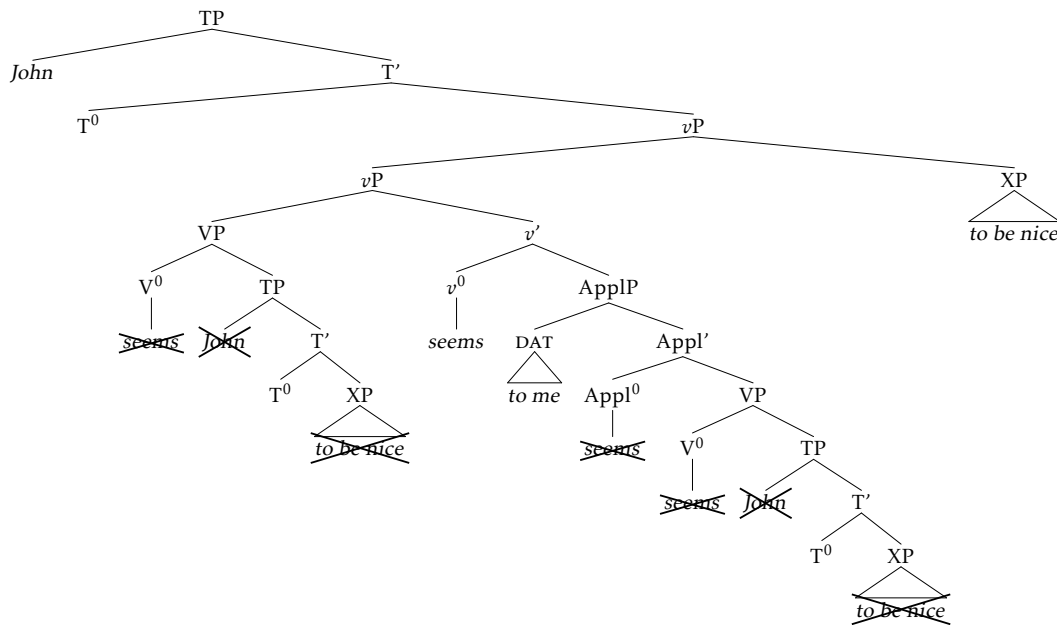


As shown in (39), neither copy of the XP [*to be nice*] c-commands the other; this would appear to falsely predict that either of the two possibilities in (40b–c) would be available, in addition to (40a):

- (40) a. John seems to me to be nice.  
 b. \* John to be nice seems to me.  
 c. \* John to be nice seems to me to be nice.

As far as I can see, Collins’ (2005) proposal offers no solution to this problem. Conceivably, one could assume that the landing site of infinitival extraposition is indeed higher, as discussed earlier—high enough to asymmetrically c-command the copy contained within [Spec, *v*P]. If the extraposed XP is indeed small enough as to not include the subject [*John*], then raising of [*John*] out of the extraposed constituent (which as discussed earlier, we would want to block) would not be possible. We would, however, need to stipulate that the extraposed XP is subject to obligatory reconstruction, to account for the evidence that the dative experiencer of *seem* obligatorily c-commands into the infinitival complement.

(41) PRONUNCIATION (GIVEN LCA-LIKE ASSUMPTIONS, AND A HIGH EXTRAPOSITION SITE)



In short, remnant VP movement has “smuggled” [*John*] across the dative [*to me*], bleeding defective intervention—hence the name that Collins (2005) gives to this approach.

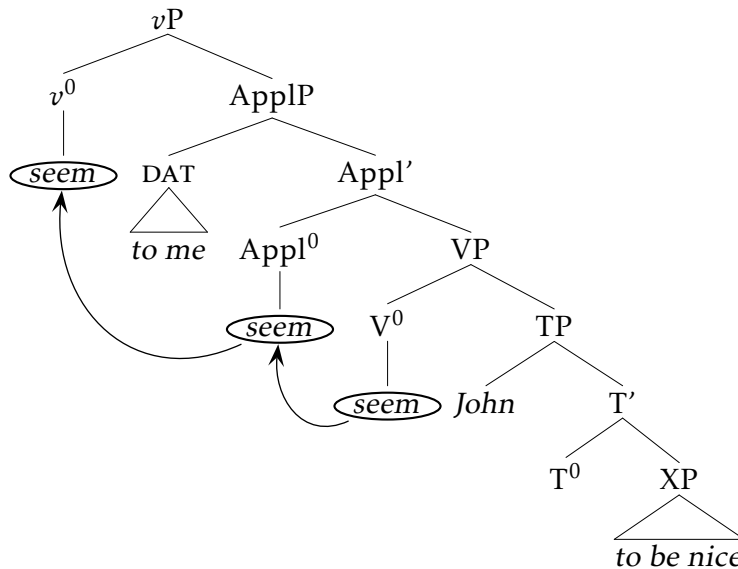
For this theory to work, languages (unlike English) that do exhibit defective intervention in this construction—yet still allow infinitival extraposition—would have to somehow ban remnant VP movement to [Spec, *v*P].

### 4.1.2. Crowding

The account sketched in this sub-section follows work by McGinnis (1998) and Anagnostopoulou (2003)—with some modifications.<sup>10</sup>

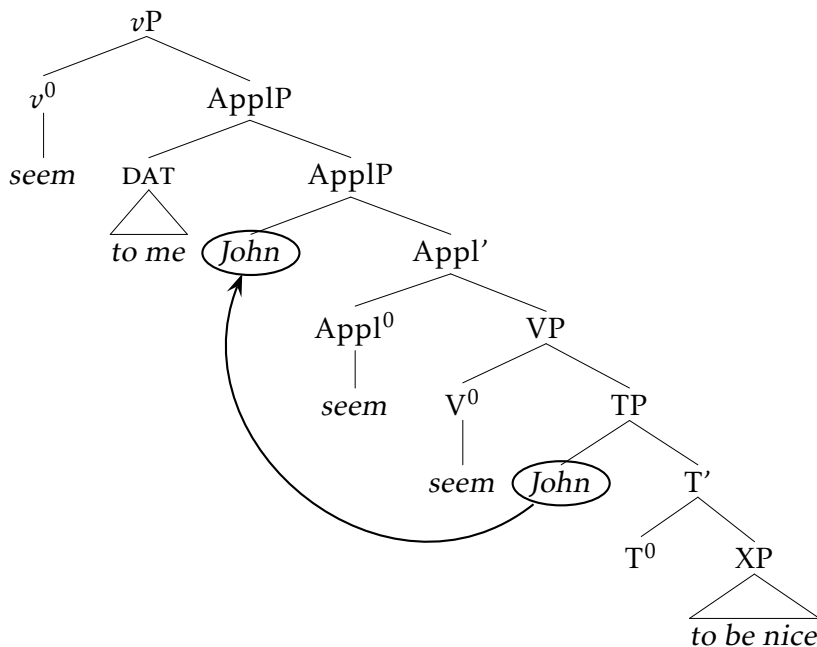
Let us once again start with the basic structure assumed in §4.1.1—in (35), repeated here:

(35) “BASE-GENERATION”



Suppose that [*John*] could move to a (second) specifier of  $ApplP$ :

(42) MOVEMENT TO [Spec,  $ApplP$ ]



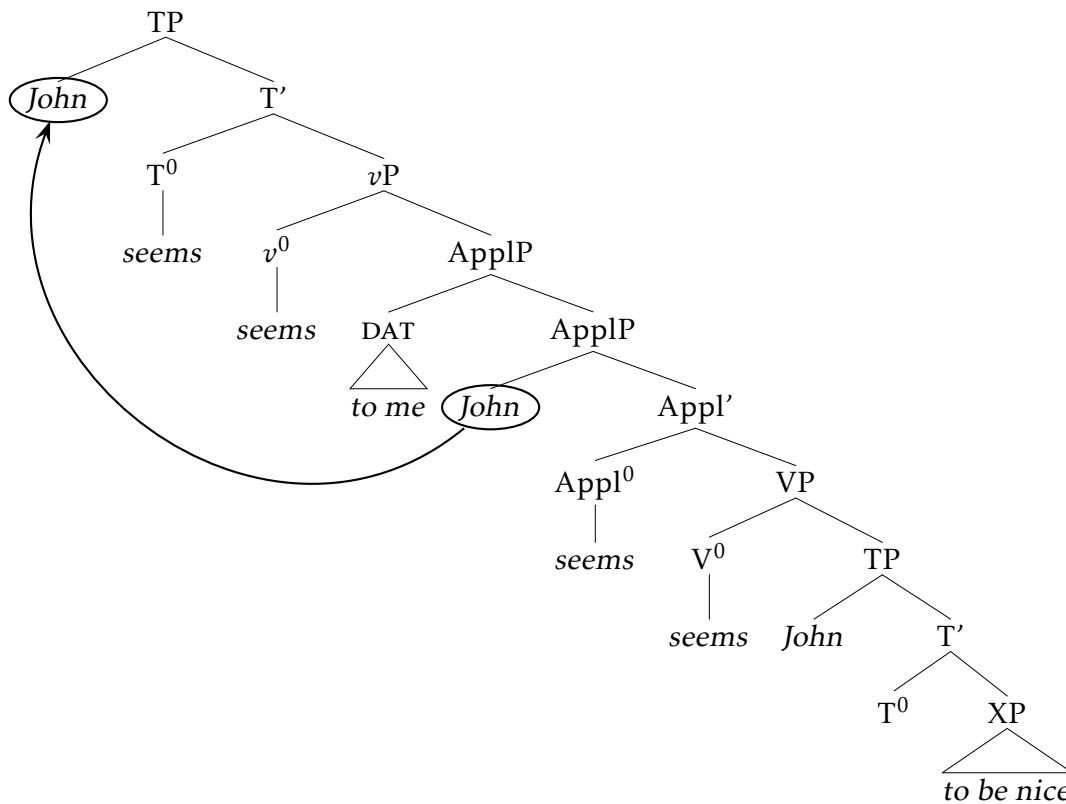
<sup>10</sup>Thanks to David Pesetsky for suggesting the term “crowding”.

It is relatively well-established that multiple specifiers of the same projection are equidistant with respect to a structurally higher probe (Ura 1996).<sup>11</sup> This has been explained in terms of the same *equidistance* condition given earlier in (24), and repeated here:

- (24) *EQUIDISTANCE CONDITION* (Chomsky 1995, 2000; Collins 1997)  
 If  $\alpha$  and  $\beta$  are in the *minimal search domain* of the same head, then  $\alpha$  and  $\beta$  never intervene in relations targeting one another

In (42), the dative [*to me*] and the subject [*John*] occupy two specifiers of the same projection—namely, ApplP. Given the observation in (24), [*to me*] should not intervene in the relation between  $T^0$  and [*John*] (since [*to me*] and [*John*] are both within the minimal search domain of  $\text{Appl}^0$ ):

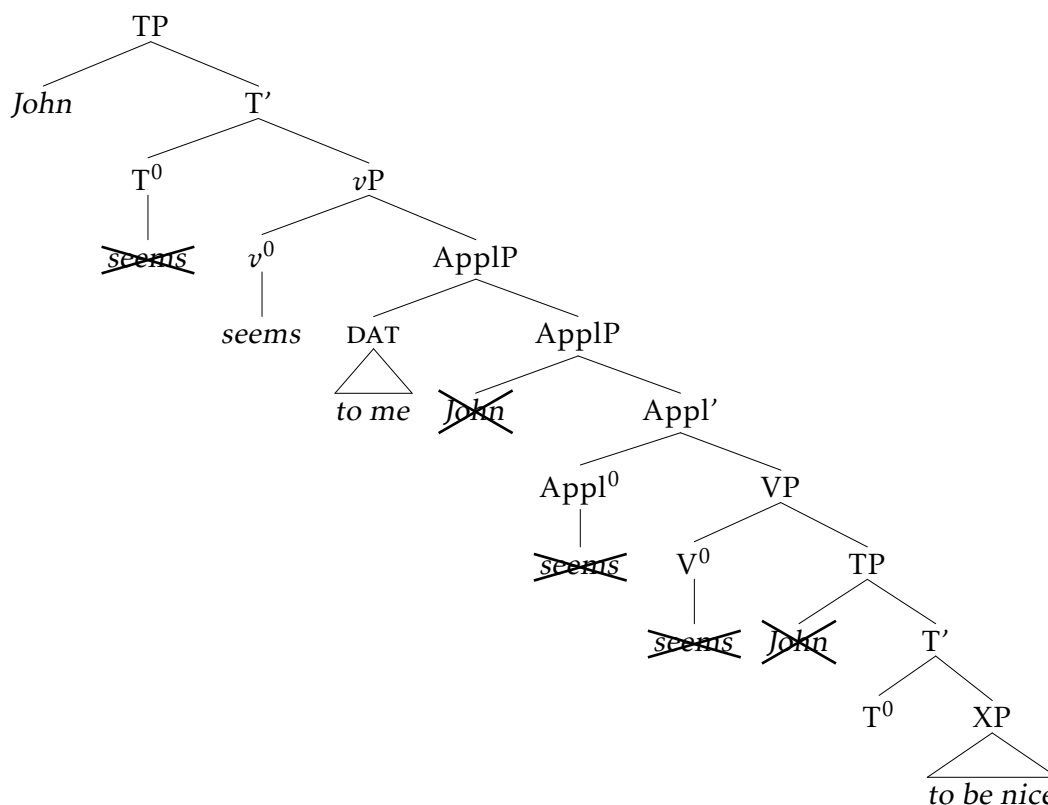
- (43) *RAISING*



Let us now consider how a structure such as (43), above, would be linearized. Assuming once again an LCA-like pronunciation algorithm (Kayne 1994), whereby every element that is asymmetrically c-commanded by another copy of itself goes unpronounced, we are left with the following:

<sup>11</sup>The most notable exception to such equidistance has to do with multiple CP-specifiers in intermediate wh-movement—which is not involved in the data under discussion here. See Richards (2001).

(44) PRONUNCIATION (GIVEN LCA-LIKE ASSUMPTIONS)



In short, “crowding” refers to the scenario in which the downstairs subject (*John*) has moved into a position—[Spec,ApplP]—where it is equidistant to the dative (*to me*) with respect to higher probes (namely,  $T^0$ ).

Within a *crowding* approach, the cross-linguistic variation (i.e., whether or not these dative noun-phrases intervene) can be reduced to whether or not ApplP allows more than one specifier—a kind of cross-linguistic variation that is independently attested at the CP level (where some languages that allow multiple *wh*-movements to target a single clausal periphery do so by allowing multiple CP-specifiers, whereas other languages limit CP to a single specifier; see Richards 2001).

The point of this discussion, however, is not to rule in favor of one of these two approaches—*smuggling* or *crowding*—over the other, as an account for raising across dative experiencers in English. Rather, this discussion is meant to set the stage for an investigation of how these two approaches can be applied to the Hebrew data involving post-verbal subjects.

#### 4.2. *Smuggling* vs. *Crowding* of Hebrew Post-Verbal Subjects

The Hebrew data in (2a–b, 4a–b), repeated below, is similar to the English data discussed in §4.1, above—with two important differences: (i) the complement of  $V^0$  in (2a–b, 4a–b) is not an infinitival TP, as in the data in §4.1, but rather a noun-phrase (e.g., *ha-cincenet* ‘the-jar<sub>FEM</sub>’); and (ii) the relation between  $T^0$  and the nominative noun-phrase (if it is established) results in  $\varphi$ -agreement, but not in movement.

(2) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (GENDER)

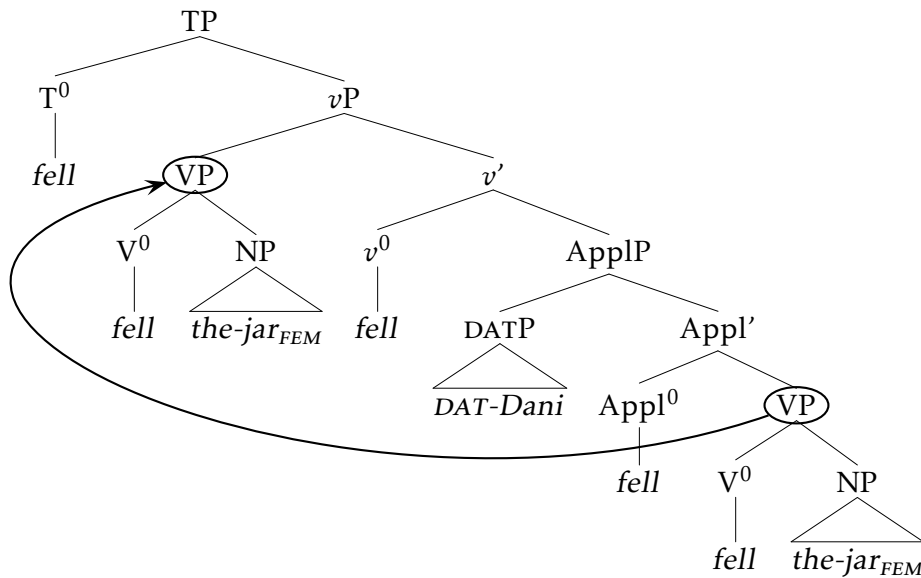
- a. nafl-a le-Dani ha-cincenet  
 fell-3sg<sub>FEM</sub> DAT-Dani the-jar<sub>FEM</sub>  
 ‘Dani’s jar fell.’
- b. ? nafal le-Dani ha-cincenet  
 fell(3sg<sub>MASC</sub>) DAT-Dani the-jar<sub>FEM</sub>  
 ‘Dani’s jar fell.’

(4) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (NUMBER)

- a. nafl-u le-Dani ha-maftex-ot  
 fell-3pl DAT-Dani the-key<sub>MASC-PL</sub>  
 ‘Dani’s keys fell.’
- b. ? nafal le-Dani ha-maftex-ot  
 fell(3sg<sub>MASC</sub>) DAT-Dani the-key<sub>MASC-PL</sub>  
 ‘Dani’s keys fell.’

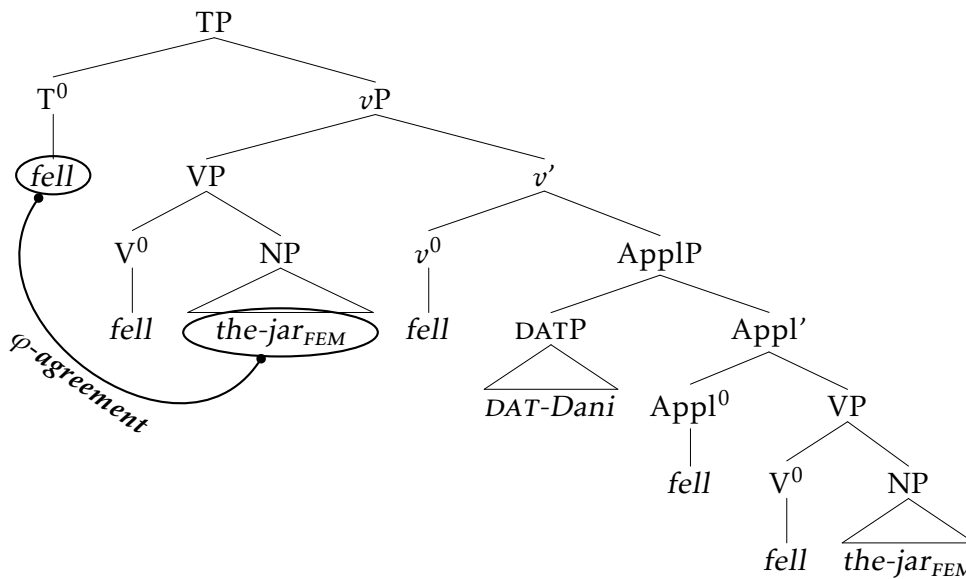
Let us consider what an adaptation of the *smuggling* approach to the Hebrew data might look like. Clearly, there is no counterpart to the infinitival ([*to be nice*], in §4.1) that would extrapose; but the *smuggling* step—namely, remnant-movement of the VP to [Spec,vP]—can apply in similar fashion:

(45) SMUGGLING OF HEBREW POST-VERBAL SUBJECT ACROSS DATIVE INTERVENER



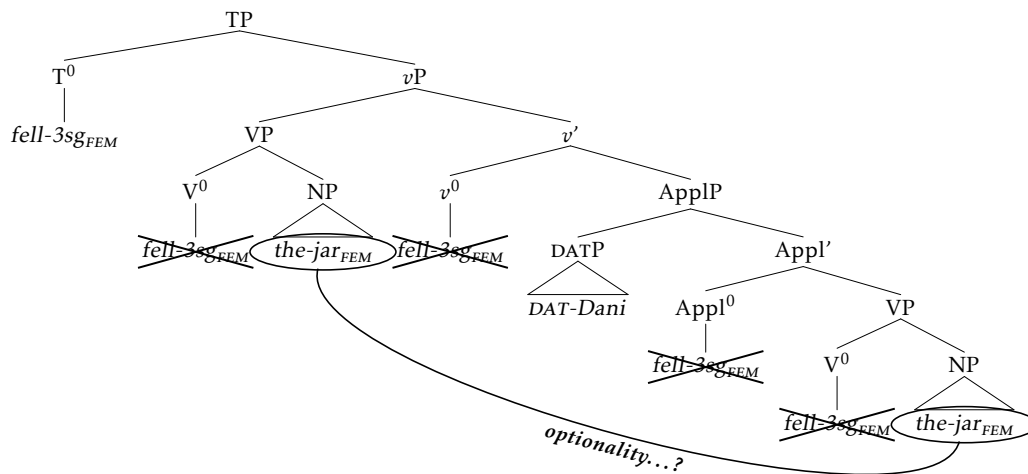
This allows T<sup>0</sup> to establish a  $\varphi$ -agreement relation with *ha-cincenet* (‘the-jar<sub>FEM</sub>’), without intervention by the dative *le-Dani* (‘DAT-Dani’):

(46)  $\varphi$ -AGREEMENT



The pronunciation algorithm sketched in §4.1, when applied to (46), would yield the following:

(47) PRONUNCIATION (GIVEN LCA-LIKE ASSUMPTIONS)



As in §4.1.1, an LCA-like pronunciation algorithm would not yield a prediction regarding which of the two copies of *ha-cincenet* ('the-jar<sub>FEM</sub>') would be pronounced (since neither of the two copies of this noun-phrase c-commands the other). This is once again problematic, since the only attested word order is [V DATP THEME].

There is, however, a much more severe problem with (47): there is reason to believe that there is simply no copy of the THEME in a position not c-commanded by the dative possessor. Consider (48), below:

- (48) ne'elam/ne'elm-u [1-o<sub>i/+j</sub>] [ha-tlun-ot neged ima šel Dani<sub>j</sub>]  
 disappear(3sg<sub>MASC</sub>)/3pl DAT-3sg<sub>MASC</sub> the-complaint-PL against mother of Dani  
 'The complaints against Dani<sub>j</sub>'s mother disappeared (from his<sub>i/+j</sub> custody).'

One might hypothesize that the movement of VP to [Spec,*v*P] (in (45), above) is a kind of movement that must reconstruct for purposes of Condition C evaluation (e.g., A-bar movement). Consider, however, the SV counterpart of (48):<sup>12</sup>

- (49) [ ha-tlun-ot            neged ima      šel Dani<sub>i</sub> ] ne'elm-u      [ l-o<sub>i/j</sub> ]  
           the-complaint-PL against mother of Dani    disappear-3pl    DAT-3sg<sub>MASC</sub>  
           'The complaints against Dani<sub>i</sub>'s mother disappeared (from his<sub>i/j</sub> custody).'

Under the plausible assumption that the derivation of (49) is also fed by the structure in (45–47), the disappearance of the disjoint-reference effect in (49) casts doubt on the idea that the fronting of VP to [Spec,*v*P] is an instance of obligatorily-reconstructing movement. First, it is not clear that sub-extracting the subject out of the fronted VP—which is presumably what turns (48) into (49)—should change the status of the VP node itself vis-à-vis reconstruction. Second, as argued by Abels (2008), sub-extraction is subject to the same generalized *Improper Movement Condition* as consecutive movements of a single node. This prevents, for example, A-movement from applying to a sub-constituent of a node that has previously undergone A-bar movement.<sup>13</sup> Since A-movement is ordered, with respect to the generalized *Improper Movement Condition*, before types of movement that obligatorily reconstruct (e.g., A-bar movement)—and movement of the subject to pre-verbal position (as in (49)) is indeed an instance of A-movement—the movement of VP to [Spec,*v*P] cannot be the kind of movement that obligatorily reconstructs.

Given this, the disjoint-reference effect in (48) indicates that not only is there no pronounced copy of *ha-cincenet* ('the-jar<sub>FEM</sub>') within [Spec,*v*P], but there is no interpreted copy of *ha-cincenet* ('the-jar<sub>FEM</sub>') in that position, either.<sup>14</sup>

It bears mentioning that this does not constitute an argument against the *smuggling* approach in general—but rather, only against its adaptation to account for  $\varphi$ -agreement with post-verbal subject in Hebrew. This is particularly relevant since Collins' (2005) proposal is meant to account for raising in English, not for the Hebrew data discussed here.

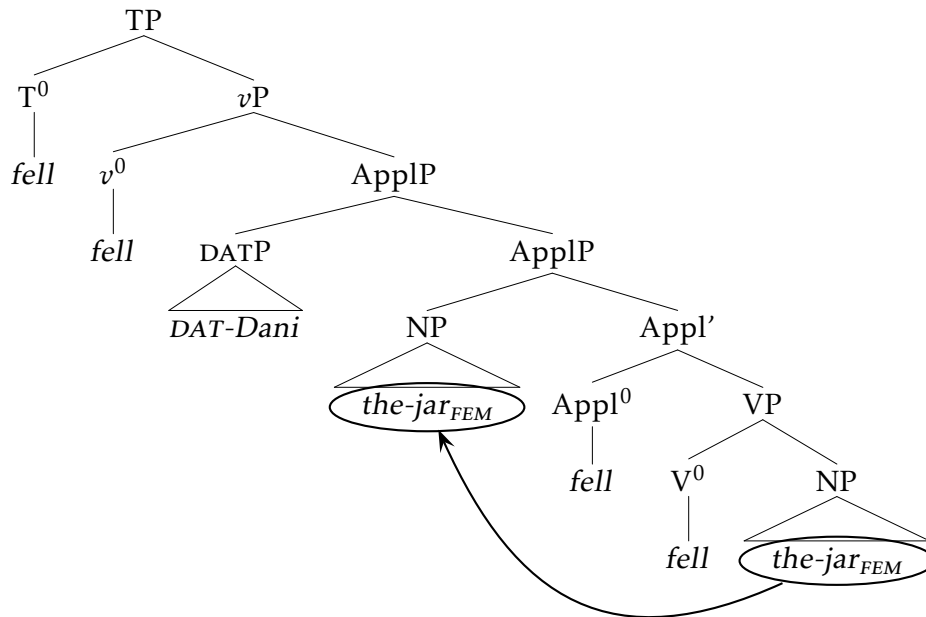
Given the inapplicability of *smuggling* as an account for this Hebrew data, let us consider a *crowding* approach:

<sup>12</sup>Note that (49) cannot be an instance of left-dislocation with a silent subject pronoun, since pro-drop in Hebrew does not apply to *3rd-person* subjects.

<sup>13</sup>While there are examples of sub-extraction out of A-bar moved constituents in the literature (e.g., the examples discussed by Torrego 1985), these examples crucially involve A-bar movement of the sub-extracted element, rather than A-movement.

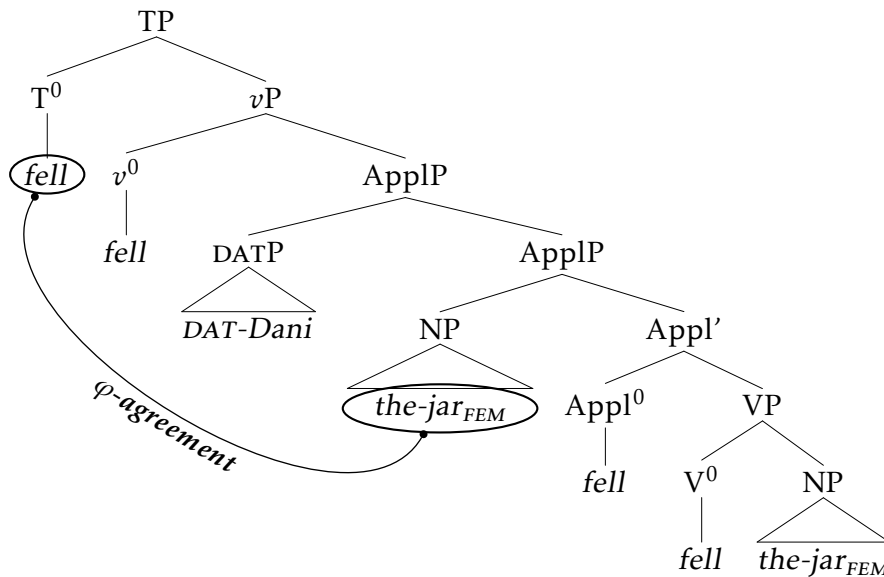
<sup>14</sup>One could entertain the possibility that Bobaljik's (2002) analysis of English expletive-associate constructions applies here—in other words, that the chain created by the movement of VP to [Spec,*v*P] is an instance of movement where both PF and LF privilege the lower copy for pronunciation/interpretation. However, in Bobaljik's system, this type of movement subsumes long-distance *Agree*; concomitantly, in order to account for the known facts regarding long-distance *Agree*, it must be subject to defective intervention effects. Thus, adopting Bobaljik's system to characterize for the movement of VP to [Spec,*v*P] leaves us with no account for the bleeding of intervention effects in this construction, which is the point of this section in the first place.

(50) CROWDING OF HEBREW POST-VERBAL SUBJECT INTO EQUIDISTANT POSITION



In (50), the THEME (*ha-cincenet* ‘the-jar<sub>FEM</sub>’) has moved into a position—a second specifier of Appl<sup>0</sup>—in which it “crowds” the dative *le-Dani* (‘DAT-Dani’), and is equidistant to it with respect to higher probes. This allows T<sup>0</sup> to enter into a  $\varphi$ -agreement relation with the THEME:

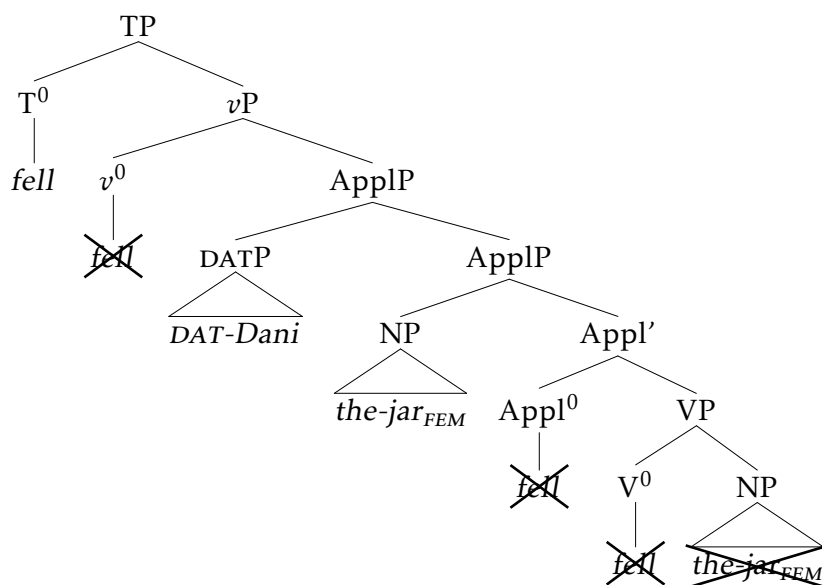
(51)  $\varphi$ -AGREEMENT



An LCA-like pronunciation algorithm, when applied to (51), would yield the following:



(52) PRONUNCIATION (GIVEN LCA-LIKE ASSUMPTIONS)



Crucially, in contrast to the *smuggling* approach to these data, (52) is compatible with the binding facts exemplified by (48), repeated here:

- (48) ne'elam/ne'elm-u [1-0<sub>i/\*j</sub>] [ha-tlun-ot neged ima šel Dani;  
 disappear(3sg<sub>MASC</sub>)/3pl DAT-3sg<sub>MASC</sub> the-complaint-PL against mother of Dani  
 'The complaints against Dani;<sub>j</sub>'s mother disappeared (from his<sub>i/\*j</sub> custody).'

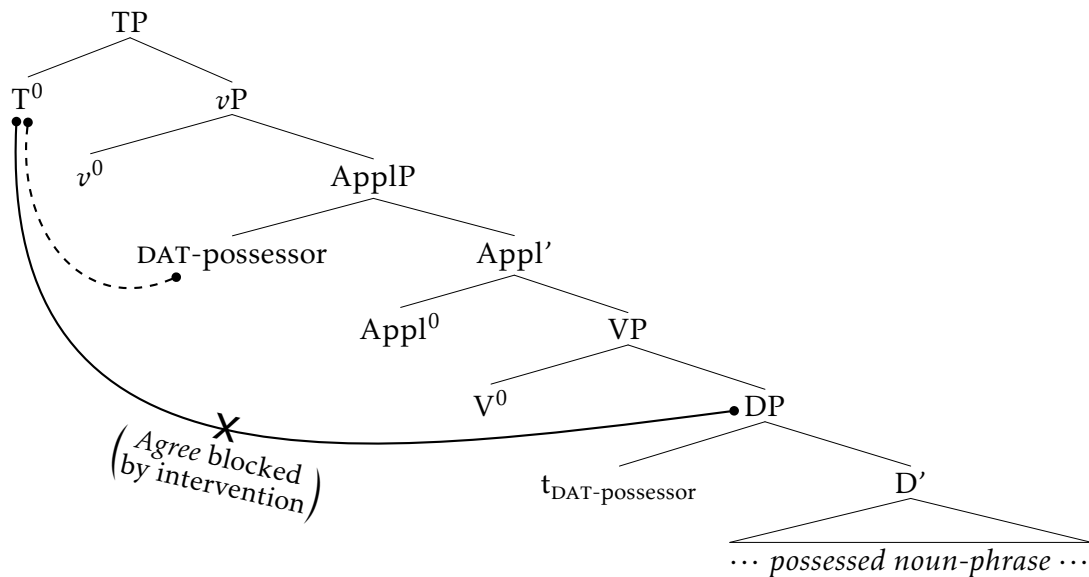
In (52), the dative possessor c-commands every position of the R-expression *Dani*. Therefore, there is no position in which *Dani* could be interpreted that would circumvent the disjoint-reference effect.<sup>15</sup>

Within this *crowding* approach, the source of variation between the agreeing variants in (2a, 4a) and the non-agreeing variants in (2b, 4b) is movement of the THEME to a (second) specifier of ApplP—as shown in (50), above—as opposed to the lack of such movement. Dialects of Hebrew in which the non-agreeing version is ruled out would obligatorily impose this movement operation.

Notice that this analysis captures the fact that this effect is found in the presence of non-thematic datives (e.g., possessive-datives)—but not in the absence of a dative, or with an obligatory thematic dative. The structure where *crowding* has not taken place—and therefore, the dative possessor intervenes in the relation between T<sup>0</sup> and the THEME—is only available in the presence of a dative that is not obligatorily thematic (e.g., a possessive-dative), since that is when an ApplP with the dative in its specifier is projected (as shown in (27), repeated here).

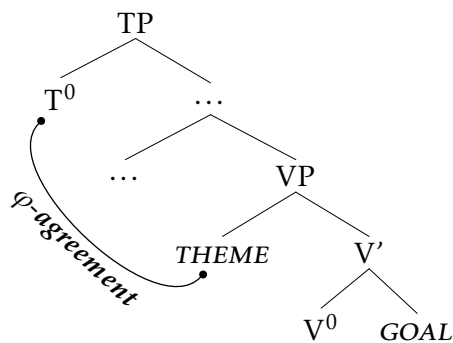
<sup>15</sup>Note that the binding relations examined in (48) are not between the dative possessor and the THEME itself, but rather between the dative possessor and a sub-constituent of the THEME; therefore, an example like (48) does not fall within the empirical domain of *Lethal Ambiguity* (McGinnis 1998). Examples that involve binding relations between the dative possessor and the THEME itself are ruled out for other reasons: the dative possessor in this construction originates within the THEME DP (Landau 1999); therefore, the base-generated structure of a possessive-dative derivation in which the possessor and THEME stand in a binding relation would furnish an *I-within-I* configuration (Chomsky 1981).

(27) INTERVENTION IN POSSESSIVE-DATIVE CONSTRUCTION

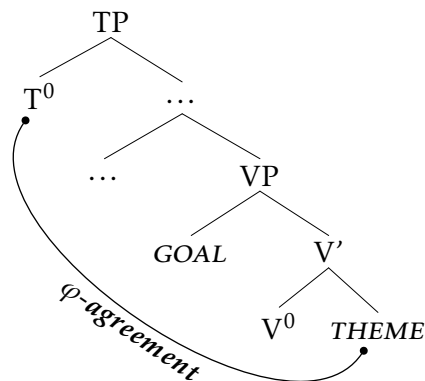


Thematic datives, in contrast, are introduced in the same minimal domain as the THEME (at least in languages like Hebrew or Greek), and therefore never block the relation between  $T^0$  and the THEME—as shown in (25), repeated here:

(25) a. THEME-OVER-GOAL



b. GOAL-OVER-THEME



Finally, it is interesting to consider how this approach might be situated within the context of other treatments of intervention in the literature.<sup>16</sup> Consider a generic intervention configuration, as illustrated in (53):

- (53) *probe*  $\gg$  *intervener*  $\gg$  *target* (where ' $\gg$ ' denotes asymmetric c-command)

<sup>16</sup>I thank an anonymous *LIVY* reviewer for drawing this parallel with the literature on Icelandic, cited in the main text.

Suppose that the *probe* is inert.<sup>17</sup> One way to alleviate intervention would then be to move the *intervener* out of the way, as illustrated in (54):

$$(54) \quad \text{intervener}_1 \gg \text{probe} \gg \text{t}_1 \gg \text{target}$$

The treatments by Holmberg & Hróarsdóttir (2003) and Kučerová (2007), and Sigurðsson & Holmberg (2008), of Icelandic dative intervention and its alleviation, fall under the purview of (54): movement of the (dative) *intervener* to a position where it no longer intervenes between the *probe* and its (nominative) goal.

However, the general schema in (53) suggests another possible strategy for alleviating intervention—namely, moving the *target* into a position that is high enough so that the *intervener* no longer intervenes (while still lower than the *probe*). This is illustrated in (55):

$$(55) \quad \text{probe} \gg \text{target}_1, \text{intervener} \gg \text{t}_1$$

Given this, we might expect to find some language that resorts to (55)—instead of or in addition to (54)—to alleviate intervention effects. The proposed treatment of agreement across a non-thematic dative in Hebrew would constitute exactly this: an instance of intervention being alleviated via the strategy in (55).

## 5. Implications for the Theory of $\varphi$ -Agreement

In sections 2 and 3, we saw evidence that an account that takes  $\varphi$ -agreement in Hebrew to be *optional* is untenable—both because  $\varphi$ -agreement with pre-verbal subjects is decidedly non-optional, and because even in the domain of post-verbal subjects, the appearance of optionality only arises in the presence of a non-obligatory dative, and disappears when a dative noun-phrase is absent or when the dative is an obligatory thematic argument.

Instead, I argued (in section 4) that the agreeing/non-agreeing pairs that create the impression of optionality have two distinct underlying structures, which are related by a particular movement operation that I have termed *crowding*.

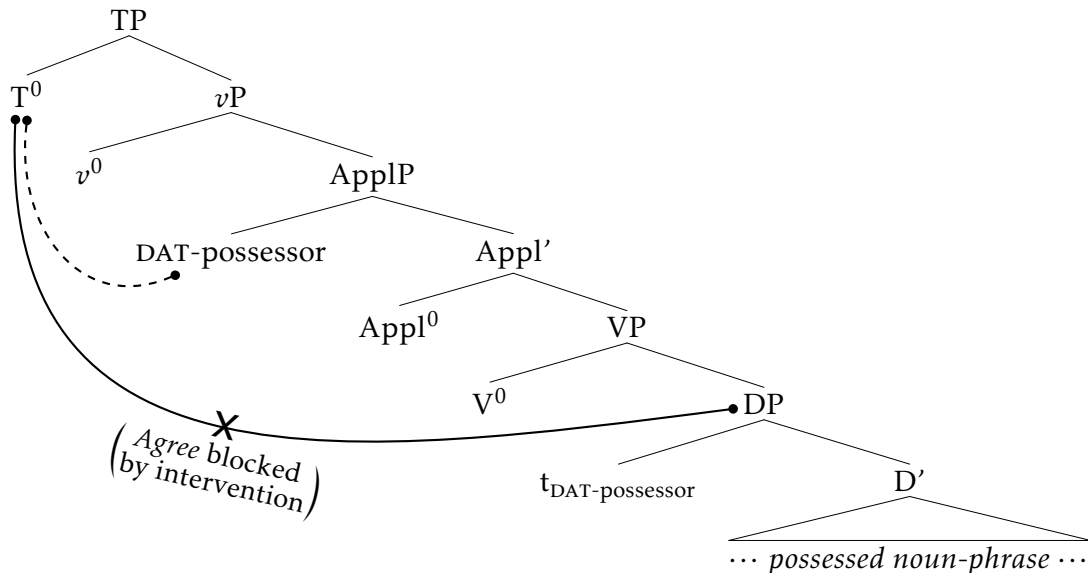
A property that is implicit in this account—and that I would like to now make explicit—is that while  $\varphi$ -agreement is certainly not *optional*, its failure does not render the utterance ungrammatical. This is a subtle but important distinction: failure of  $\varphi$ -agreement to **apply** is ruled out (i.e., it results in ungrammaticality); this is just another way of saying that  $\varphi$ -agreement is not optional. However,  $\varphi$ -agreement that has **applied but failed**—e.g., due to intervention by a dative—does not give rise to ungrammaticality. Recall the pre-*crowding* structure of (2), schematized in (27), which gives rise to (2b)—all of which are repeated here:

<sup>17</sup>For this hypothesis to be problematic, it would need to be possible for the *probe*—after undergoing movement—to search for a *goal* that was not accessible when the *probe* was in its original position. Probes are normally assumed to be heads, syntactically speaking; since head-movement results in a head-adjunction structure at the landing-site, the c-command domain of the probe in its new position is limited to the head-adjunction structure itself, which will not include any new goals. Similarly, if the probe is part of a larger (phrasal) constituent that undergoes movement, its c-command domain in its new position will include exactly the same material that it already c-commanded in its original position.

(2) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED

- a. nafI-a le-Dani ha-cincenet  
 fell-3sg<sub>FEM</sub> DAT-Dani the-jar<sub>FEM</sub>  
 ‘Dani’s jar fell.’
- b. ? nafal le-Dani ha-cincenet  
 fell(3sg<sub>MASC</sub>) DAT-Dani the-jar<sub>FEM</sub>  
 ‘Dani’s jar fell.’

(27) INTERVENTION IN POSSESSIVE-DATIVE CONSTRUCTION



For (27) to give rise to (2b), the failure of  $\varphi$ -agreement due to intervention by the dative must result in the absence of (non-default) agreement-morphology on the verb, but not in ungrammaticality (since (2b) is an acceptable utterance).

At this juncture, one might hypothesize that intervention by the dative in (27) is not *failure* per se of  $\varphi$ -agreement, but rather agreement with the dative itself, in lieu of agreement with the THEME. We have already seen that failure to agree with the THEME does not equate to transmitting the  $\varphi$ -features of the dative intervener to the probe—recall (5–6), repeated here:

(5) FEMININE DATIVE DOES NOT BLOCK DEFAULT/MASC.  $\varphi$ -AGREEMENT

- ? nafal le-Dina ha-cincenet  
 fell(3sg<sub>MASC</sub>) DAT-Dina<sub>FEM</sub> the-jar<sub>FEM</sub>  
 ‘Dina’s jar fell.’

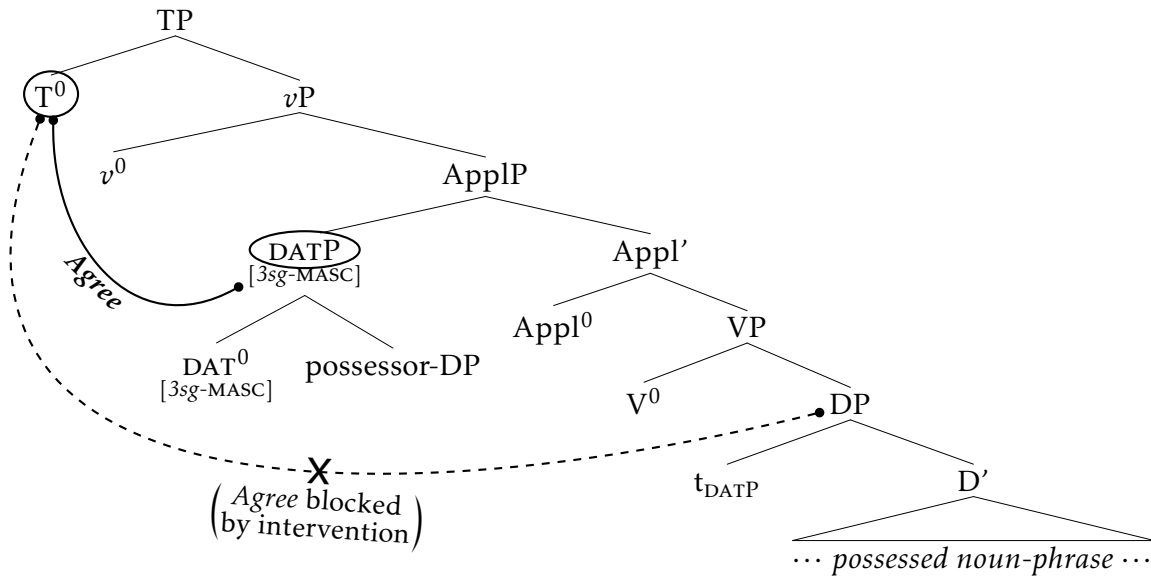
(6) PLURAL DATIVE DOES NOT BLOCK DEFAULT/MASC.  $\varphi$ -AGREEMENT

- ? nafal I-a-yelad-im ha-maftex-ot  
 fell(3sg<sub>MASC</sub>) DAT-the-child<sub>MASC-PL</sub> the-key<sub>MASC-PL</sub>  
 ‘The children’s keys fell.’

Nevertheless, one might imagine that the dative DP is enclosed in some projection that prevents the features of the nominal from being accessed; and instead, this enclosing

projection transmits its own  $\varphi$ -feature values—which are *3rd-person singular masculine*—to the probe:

(56) *DATIVE INTERVENERS ENCLOSED IN ADDITIONAL PROJECTION*



Unfortunately, the behavior of datives in Hebrew is decidedly opposed to what an approach like (56) would lead one to expect. Consider passives of thematically ditransitive verbs. As discussed in section 3, the THEME and GOAL of ditransitives in Hebrew can be generated in either hierarchical order, and are equidistant with respect to  $T^0$ . If datives were enclosed in an additional projection that could be agreed with by  $\varphi$ -probes, we would expect that *3sg-masc* agreement would be possible in passives of thematic ditransitives (by virtue of the  $\varphi$ -probe finding and agreeing with the projection enclosing the dative DP); but this is in fact not what we find—as shown in (12–15), repeated here:

- (12) nimser-a                    la-mefakeax                    ha-ma'atafa  
 PASV.handed-3sg<sub>FEM</sub> DAT.the-supervisor the-envelope<sub>FEM</sub>  
 'The envelope was handed to the supervisor.'
- (13) \* nimsar                    la-mefakeax                    ha-ma'atafa  
 PASV.handed(3sg<sub>MASC</sub>) DAT.the-supervisor the-envelope<sub>FEM</sub>
- (14) nimser-u                    la-mefakeax                    ha-maftex-ot  
 PASV.handed-3pl DAT.the-supervisor the-key<sub>MASC-PL</sub>  
 'The keys were handed to the supervisor.'
- (15) \* nimsar                    la-mefakeax                    ha-maftex-ot  
 PASV.handed(3sg<sub>MASC</sub>) DAT.the-supervisor the-key<sub>MASC-PL</sub>

The conclusion must therefore be that datives in Hebrew cannot be targeted for  $\varphi$ -agreement in any way: they cannot transfer their own  $\varphi$ -features to the probe, nor is it the case that

they transfer *3rd-person singular masculine* features, found on some enclosing projection, to the  $\varphi$ -probe.<sup>18</sup>

Another possibility, suggested by a reviewer, is that the default agreement-morphology in examples like (2b, 4b) (repeated below) is the result of a successful agreement relation—but one that targets the ApplP node (which could conceivably serve as a *3sg-masc* target, unto itself), rather than the dative DP or the THEME contained within that ApplP. This follows Den Dikken’s (2001) analysis of the English *expletive-associate* construction.

(2) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (GENDER)

- a. nafl-a le-Dani ha-cincenet  
fell-3sg<sub>FEM</sub> DAT-Dani the-jar<sub>FEM</sub>  
‘Dani’s jar fell.’
- b. ? nafal le-Dani ha-cincenet  
fell(3sg<sub>MASC</sub>) DAT-Dani the-jar<sub>FEM</sub>  
‘Dani’s jar fell.’

(4) VS ORDER — LACK OF  $\varphi$ -AGREEMENT TOLERATED (NUMBER)

- a. nafl-u le-Dani ha-maftex-ot  
fell-3pl DAT-Dani the-key<sub>MASC-PL</sub>  
‘Dani’s keys fell.’
- b. ? nafal le-Dani ha-maftex-ot  
fell(3sg<sub>MASC</sub>) DAT-Dani the-key<sub>MASC-PL</sub>  
‘Dani’s keys fell.’

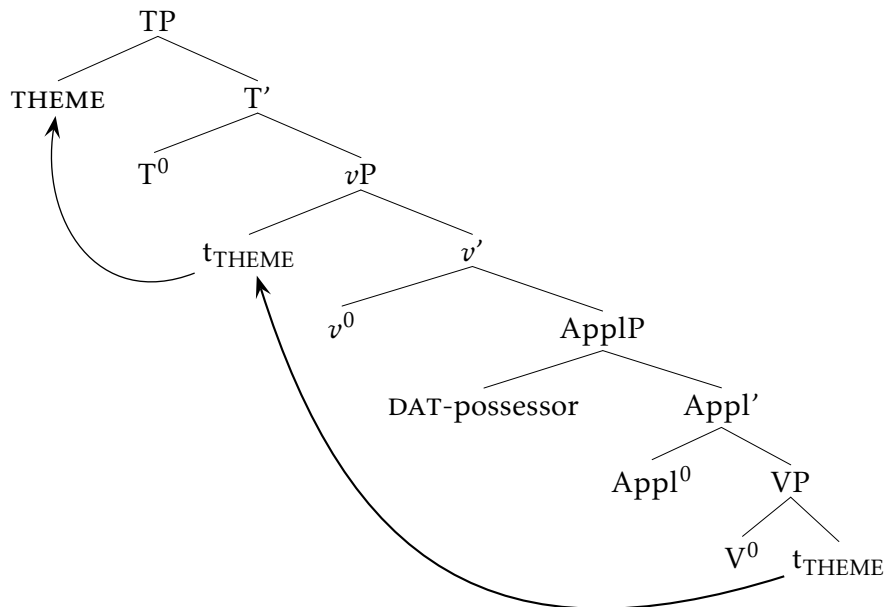
Thus, the “agreeing” versions (in (2a, 4a)) would be a result of the  $\varphi$ -probe targeting the THEME, while the “non-agreeing” versions (in (2b, 4b)) would be a result of the  $\varphi$ -probe targeting ApplP.

There is at least one major piece of evidence against such an analysis for the alternation in (2a–b, 4a–b). If ApplP in Hebrew were generally available as a (*3sg-masc*) agreement target, we would predict that “non-agreeing” forms would be felicitous whenever an ApplP target is available. So, for example, if the THEME has moved out of an ApplP structure, the ApplP node should still be able to serve as an agreement target:

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<sup>18</sup>In terms of the categorial status of datives, these results might indicate that datives in Hebrew are actually DPs, rather than PPs (and that so-called dative Case-marking is D<sup>0</sup>-related morphology)—or alternatively, it could be that datives are indeed PPs, but the  $\varphi$ -feature values of the DP are copied onto P<sup>0</sup> (à la Rezac 2008).

(57) *THEME ARGUMENT MOVED OUT OF APPLP*



If there is no intermediate position for the THEME above ApplP and below  $T^0$  (contra (57)), then the only option should be for  $T^0$  to establish an agreement-relation with ApplP (since ApplP is in the domain of  $T^0$ , while the THEME is not). Even if there is such an intermediate position, however, it should at least be *possible* to move the THEME to [Spec,TP] before  $\varphi$ -probing by  $T^0$ ; and such movement—presumably, A-movement—should obviate intervention by the THEME in the intermediate position (see, for example, Holmberg & Hróarsdóttir 2003).

Thus, an approach that takes ApplP to be a possible *3sg-masc* agreement-target predicts that when the THEME is A-moved to [Spec,TP], a “non-agreeing” form of the verb should be—at the very least—a possibility. Such examples, however, are quite sharply infelicitous; this is precisely the point of the SV examples given in (1b, 3b) in section 2, and repeated here:

(1) *SV ORDER — LACK OF  $\varphi$ -AGREEMENT NOT TOLERATED*

- a. ha-cincenet naf1-a le-Dani  
the-jar<sub>FEM</sub> fell-3sg<sub>FEM</sub> DAT-Dani  
'Dani's jar fell.'
- b. \* ha-cincenet nafal le-Dani  
the-jar<sub>FEM</sub> fell(3sg<sub>MASC</sub>) DAT-Dani

(3) *SV ORDER — LACK OF  $\varphi$ -AGREEMENT NOT TOLERATED*

- a. ha-maftex-ot naf1-u le-Dani  
the-key<sub>MASC-PL</sub> fell-3pl DAT-Dani  
'Dani's keys fell.'
- b. \* ha-maftex-ot nafal le-Dani  
the-key<sub>MASC-PL</sub> fell(3sg<sub>MASC</sub>) DAT-Dani

We can therefore quite safely conclude that when a dative intervenes in Hebrew, it is truly an instance of  $\varphi$ -agreement *failing*, rather than some kind of defective agreement with the dative itself or with the ApplP node containing it. This brings us back to the original point of this section: that the derivations in which intervention has occurred—and consequently,  $\varphi$ -agreement has failed—do not result in ungrammaticality.

Let us consider the consequences of these results for the theoretical frameworks mentioned in the INTRODUCTION: clearly, the account whereby  $\varphi$ -agreement is intrinsically *optional* is ruled out (see, in particular, section 3); but equally problematic is the approach that takes  $\varphi$ -features on probes to be *uninterpretable*, unless and until they enter into an *Agree* relation with their counterparts on a suitable goal. Under the latter approach, the result of intervention in (27) should be that the uninterpretable features on T<sup>0</sup> go unchecked, reaching the interfaces and crashing the derivation—contrary to fact.<sup>19</sup> It seems, then, that the *uninterpretability*-based approach to  $\varphi$ -agreement is patently incompatible with the data under consideration here.

Instead, it seems that the correct characterization of the relation between  $\varphi$ -agreement and (un)grammaticality is the following:

(58) “You can fail, but you must try”

Applying  $\varphi$ -agreement to a given structure is obligatory; but if the structure happens to be such that  $\varphi$ -agreement cannot culminate successfully, this is an acceptable outcome.

The characterization in (58) is reminiscent of an old tradition: at the outset of generative grammar, both syntactic and phonological rules were formulated in terms of *Structural Description* (SD) and *Structural Change* (SC). If a given structure  $\sigma$  conformed to the SD, it had to undergo the associated SC; but if  $\sigma$  did not meet the SD, the SC was irrelevant to  $\sigma$ . This was the case even if the rule in question was *obligatory*: that just meant that evaluating  $\sigma$  with respect to the SD was obligatory, not that the SC itself was obligatory.

The generalization in (58) can therefore be restated in SD/SC terms: the effects of  $\varphi$ -agreement, as far as valuing the features on the  $\varphi$ -probe, could be thought of as the SC; the locality conditions associated with  $\varphi$ -agreement (e.g., phases, intervention) could be thought of as the SD. This is not to say, of course, that rule-based syntax is the correct analysis for  $\varphi$ -agreement—but rather, that the logic of  $\varphi$ -agreement and its relation to (un)grammaticality mirrors what an SD/SC system would generate.

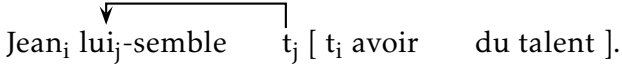
There are examples in the literature which give the impression that failed  $\varphi$ -agreement does give rise to outright ungrammaticality. One such example comes from dative-experiencer constructions in French:

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<sup>19</sup>One might entertain the existence of some rule that values uninterpretable features if they have reached the interface unchecked; but if such a rule were generally available, the resulting predictions would essentially mirror the predictions made by an account that takes  $\varphi$ -agreement to be *optional*—predictions that have already been shown to be incorrect (see section 3).



- (59) *Agree (AND SUBSEQUENT Move) BLOCKED BY INTERVENTION* → *UNGRAMMATICALITY*  
 ?\* Jean<sub>i</sub> semble à Marie [ t<sub>i</sub> avoir du talent ]. (French)  
 Jean seems to Marie have.INF of talent  
 ‘Jean seems to Marie to have talent.’ [Anagnostopoulou 2003:(66b)]

- (60) *INTERVENTION ALLEVIATED BY MOVING THE INTERVENER*  
  
 Jean her.DAT-seems have.INF of talent  
 ‘Jean seems to her to have talent.’ [Anagnostopoulou 2003:(72a)]

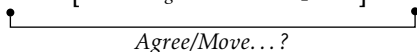
In (59), the dative à Marie (‘to Marie’) intervenes, blocking *Agree* between *semble* (‘seem’)—or more precisely, the T<sup>0</sup> head to which *semble* attaches—and the target noun-phrase *Jean*. However, if the dative intervener is moved out of the way (as in (60)), the aforementioned *Agree* relation can obtain (which in French, also results in movement of the target noun-phrase to [Spec,TP]). Crucially, the configuration in which *Agree* is blocked (in (59)) results in ungrammaticality.

Interestingly, the agreement relation that is blocked in (59) and goes through in (60) is related in some way to a movement operation—namely, movement of the noun-phrase that has been agreed with (*Jean*) to subject position. If the analysis of the Hebrew data presented here is to be extended cross-linguistically, then the ungrammaticality of (59) might be attributed to some form of interaction between the failed  $\varphi$ -agreement and the movement of *Jean*—the putative target of  $\varphi$ -agreement—to subject position, rather than to the failure of  $\varphi$ -agreement directly.<sup>20</sup>

## 6. Conclusion

In this paper, I have argued that  $\varphi$ -agreement with post-verbal subjects in Hebrew—which appears to exhibit a pattern of *optionality*—cannot receive an analysis that takes  $\varphi$ -agreement to be *optional*. In its place, I have suggested an account in which the agreeing and non-agreeing variants of the construction in question arise from two separate (but string-identical) underlying structures.

<sup>20</sup>A reviewer suggests a further investigation of this question, in terms of the *Move-vs.-Agree* diagnostics discussed by Anagnostopoulou (2003:278–280)—essentially, whether or not binding tracks the spreading of agreement-morphology (indicating *Move*) or just the surface position of the full noun-phrase (indicating *Agree*)—making use of the structural profile in (i):

(i) *probe* [ *intervening-DP* ⋯ *R-exp<sub>i</sub>* ⋯ ] DP<sub>*i*</sub>  


If morphological expression of the  $\varphi$ -features of DP<sub>*i*</sub> were to correlate with a disjoint-reference effect with respect to the R-expression marked *R-exp*, this would indicate that the relation between the probe and DP<sub>*i*</sub> is movement.

Unfortunately, this is extraordinarily difficult to test for the Hebrew possessive-dative construction; in particular, since the dative and the non-dative nominals stand in a possession relation, it requires the possessor to contain an R-expression bound by the possessum. Speakers that I consulted with rejected such constructions, irrespective of their agreement-morphology.

These attested patterns of  $\varphi$ -agreement also cast doubt on the uninterpretability-based approach to  $\varphi$ -agreement. Instead, they suggest that the relation between  $\varphi$ -agreement and (un)grammaticality adheres to the same logic that an analysis in terms of *Structural Description (SD)* and *Structural Change (SC)* would generate—namely, that even though **applying**  $\varphi$ -agreement is not optional, scenarios in which  $\varphi$ -agreement **applies and fails** do not result in ungrammaticality. Crucially, I have presented data that casts doubt on the possibility that such failure to agree can be subsumed under successful agreement with some 3sg-masc-bearing functional shell enclosing the dative DP, or enclosing both the dative DP and the THEME.

Finally, I have briefly considered the prospects of extending this account cross-linguistically, suggesting that apparent violations of this pattern (i.e., examples where failed  $\varphi$ -agreement appears to give rise to outright ungrammaticality) might be related to the interaction of failed  $\varphi$ -agreement with movement of the putative target of  $\varphi$ -agreement—rather than the failure of  $\varphi$ -agreement itself.

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