

Agreement and its failures

PART FOUR

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Outline:

- §1: present data regarding φ -agreement with post-verbal subjects in Hebrew
- while φ -agreement with **pre-verbal** subjects is clearly obligatory, it appears as though φ -agreement with **post-verbal** subjects is *optional*
- §2: show that apparent *optionality* is sensitive to the appearance of a post-verbal DAT DP
- and moreover, it depends in rather subtle ways on the **kind** of DAT DP involved
 - ▷ in a way that is incompatible with φ -agreement being *optional*
- §3: consider possible alternative accounts (that do not resort to φ -agreement being *optional*) for the data in §1
- proposal: the appearance of *optionality* in §1 is a result of two different (but string-identical) underlying structures
- §4: discuss the implications of these findings for the theory of φ -agreement in general, and the relation between φ -agreement and (un)grammaticality in particular
- §5: highlight a conflict between these results and agreement-based theories of Case (e.g., Chomsky 2000, *et seq.*)
- and show independent evidence (from empirical domains unrelated to post-verbal subjects in Hebrew) that agreement-based theories of Case are untenable

A terminological note: throughout this talk, 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 and 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 talk therefore involve only verbal passives and unaccusatives.

1. The Basic Pattern

(1) *SV ORDER — LACK OF φ -AGREEMENT NOT TOLERATED*¹

- 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

¹The glosses of (1–4) are imprecise, in the sense that the DAT element is understood as both the possessor of the NOM 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 GEN 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 DAT element as a raised possessive-dative element (see Landau 1999).

(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.’

- (1–2) involve *gender*-features; the same can be demonstrated using *number*-features:

(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.’

- Note: this is not an instance of *agreement-attraction*:²

(5) a. *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.’

b. *PLURAL DATIVE DOES NOT BLOCK DEFAULT/MASC. 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.’

- Whatever mitigates the lack of φ -agreement in (2b, 4b) cannot do so in (1b, 3b)
 - the appearance of *optionality* only arises when post-verbal subjects are involved
- We might hypothesize that there is still *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 untenable

2. The Status of the Dative

- The possibility of default agreement-morphology in examples like (2b, 4b) disappears when the DAT element is absent:

²Thanks to Patrick Grosz for helpful discussion of this point.

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

a. nafl-a ha-cincenet
 fell-3sg_{FEM} the-jar_{FEM}
 'The jar fell.'

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

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

a. nafl-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: the data in (6–7) already casts significant doubt on an account whereby φ -agreement, even just with post-verbal subjects, is somehow *optional*

- the verb *nafal* ('fell') does not select a thematic DAT argument
 - the DAT *le-Dani* ('DAT-Dani') is a *possessive-dative* (Borer and Grodzinsky 1986)

⇒ Let us therefore attempt to contrast (2a–b, 4a–b) with instances of unambiguously thematic DAT arguments

(8) OBLIGATORILY DITRANSITIVE VERBS — ENGLISH

- a. * John handed.
 b. * John handed the paper.
 c. * John handed to Bill.
 d. John handed the paper to Bill.

(9) 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 exam to the supervisor.'

(10) PASV. OF OBLIG. 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 exam was handed to the supervisor.'

- (11) *PASV. OF OBLIG. DITRANSITIVE WITH POST-VERBAL SUBJECT (GENDER)*
 nimser-a la-mefakeax ha-ma'atafa
 PASV.handed-3sg_{FEM} DAT.the-supervisor the-envelope_{FEM}
 'The exam was handed to the supervisor.'
- (12) *PASV. OF OBLIG. DITRANSITIVE WITH POST-VERBAL SUBJECT, NO φ -AGREEMENT*
 * nimsar la-mefakeax ha-ma'atafa
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-envelope_{FEM}
- (13) *PASV. OF OBLIG. DITRANSITIVE WITH POST-VERBAL SUBJECT (NUMBER)*
 nimser-u la-mefakeax ha-maftex-ot
 PASV.handed-3pl DAT.the-supervisor the-key_{MASC}-PL
 'The keys were handed to the supervisor.'
- (14) *PASV. OF OBLIG. DITRANSITIVE WITH POST-VERBAL SUBJECT, NO φ -AGREEMENT*
 * nimsar la-mefakeax ha-maftex-ot
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-key_{MASC}-PL
- This effect is systematic:
- passives of ditransitives that take an obligatory DAT argument cannot appear with default agreement-morphology (unless the THEME is *singular* and *masculine*, of course)
 - Again, if φ -agreement with post-verbal subjects were somehow *optional*, this would be completely unexpected
 - as would the facts in (6–7), above, concerning derivations that do not include a DAT DP
- [Landau \(1994\)](#), [Preminger \(2005\)](#): in Hebrew, the internal arguments of a ditransitive verb can manifest either of two hierarchical relations:
- (15) *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" TEST³
 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.'
- (16) *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.'

³This is the "each ... the other" test proposed by Barss and Lasnik (1986).

- In the absence of c-command, Hebrew manifests familiar *Weak Crossover* effects with respect to variable-binding:

(17) 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:

(18) *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.’

Note: Accounting for (15–16, 18) 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 (15–16, 18), it is neither a *sufficient* nor a *necessary* condition for binding in Hebrew
 - as demonstrated in (19a) and (19b), respectively
- even if the putative antecedent and pronoun are not separated by a clause boundary (cf. Williams 1997, Janke and Neeleman 2009)

(19) 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](#)):

(20) GREEK: THEME \gg 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.’

(21) GREEK: GOAL \gg THEME

a. VARIABLE-BINDING

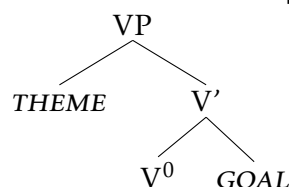
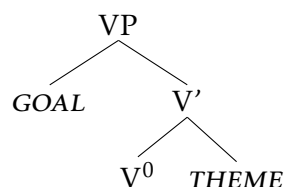
Estila [se kathe mitera] [to pedhi tis_i]
 sent.1sg to every mother the.ACC child her
 ‘For every mother_i, I sent that mother_i’s child to her_i.’

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.’

- [Anagnostopoulou \(2005\)](#): one of the analyses compatible with such facts is —

- both THEME and GOAL are base-generated within VP proper, in either of two hierarchical orders:

(22) a. THEME-OVER-GOAL [$\equiv(15, 20)$]b. GOAL-OVER-THEME [$\equiv(16, 21)$]

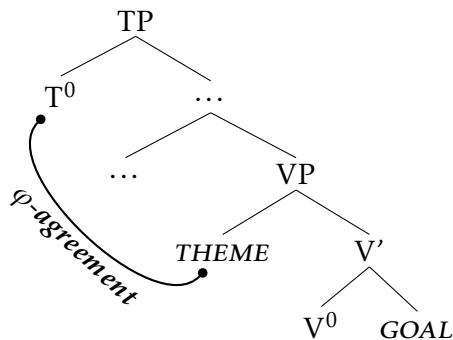
- [Anagnostopoulou \(2003\)](#), [Chomsky \(1995, 2000\)](#), and [Collins \(1997\)](#): a specifier of a given head does not intervene in probe-goal relations targeting the *complement* of the same head

(23) EQUIDISTANCE CONDITION ([Chomsky 1995, 2000](#); [Collins 1997](#))

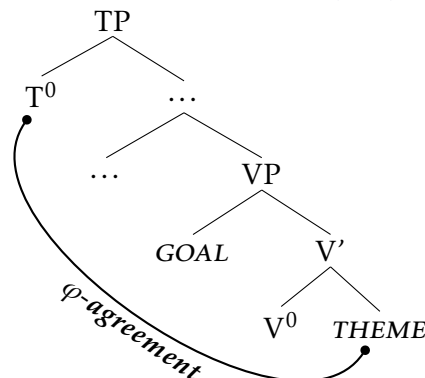
If α and β are in the *minimal search domain* of the same head, then α and β never intervene in relations targeting one another

- In (22), both THEME and GOAL are within the *minimal search domain* of V^0
 - regardless of whether the particular structure under consideration is (22a) or (22b)
- ⇒ if (22) is the correct analysis of Hebrew ditransitives, then when a ditransitive undergoes passivization, the GOAL will not intervene in the relation between T^0 and the THEME
- again, regardless of whether the underlying structure is (22a) or (22b):

(24) a. *THEME-OVER-GOAL* [\equiv (22a)]



b. *GOAL-OVER-THEME* [\equiv (22b)]



- We can therefore account for the pattern in (11–14)—repeated here—if we assume that φ -agreement is not *optional*, but rather *obligatory*:

(11) nimser-a la-mefakeax ha-ma'atafa
 PASV.handed-3sg_{FEM} DAT.the-supervisor the-envelope_{FEM}
 ‘The envelope was handed to the supervisor.’

(12) * nimsar la-mefakeax ha-ma'atafa
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-envelope_{FEM}

(13) nimser-u la-mefakeax ha-maftex-ot
 PASV.handed-3pl DAT.the-supervisor the-key_{MASC}-PL
 ‘The keys were handed to the supervisor.’

(14) * nimsar la-mefakeax ha-maftex-ot
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-key_{MASC}-PL

- if φ -agreement were *optional*, we would wrongly predict (12, 14) to be possible
- if φ -agreement is *obligatory*, the ungrammaticality of (12, 14) follows⁴

3. Two Structures for Raised Possessive-Datives

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

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

a. naf1-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.’

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

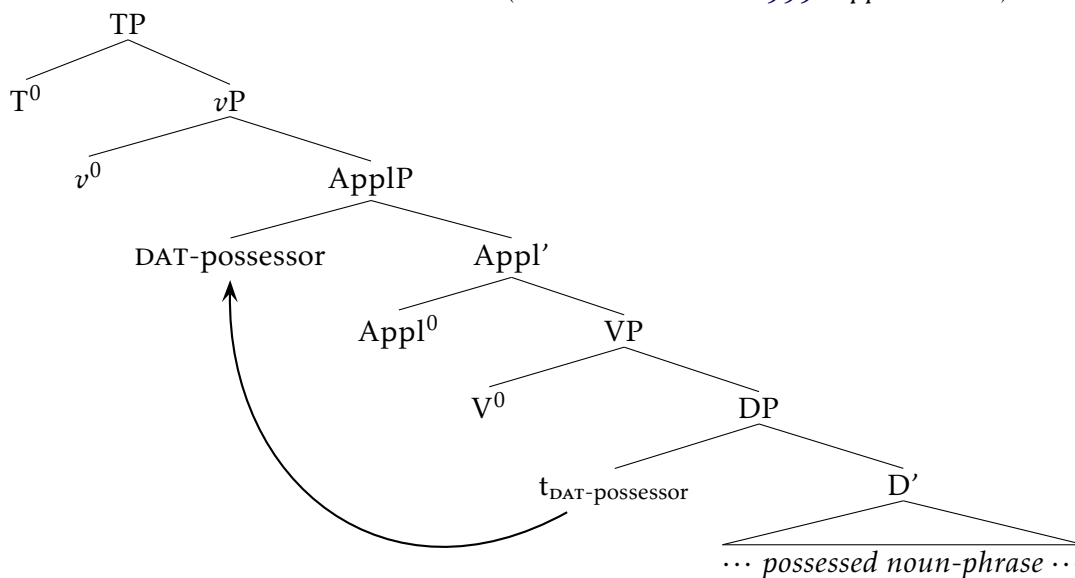
a. naf1-u le-Dani ha-maftex-ot
 fell-3pl DAT-Dani the-key_{MASC}-PL
 ‘Dani’s keys fell.’

⁴One 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 talk.

b. ? nafal le-Dani ha-maftex-ot
 fell(3sg_{MASC}) DAT-Dani the-key_{MASC}-PL
 ‘Dani’s keys fell.’

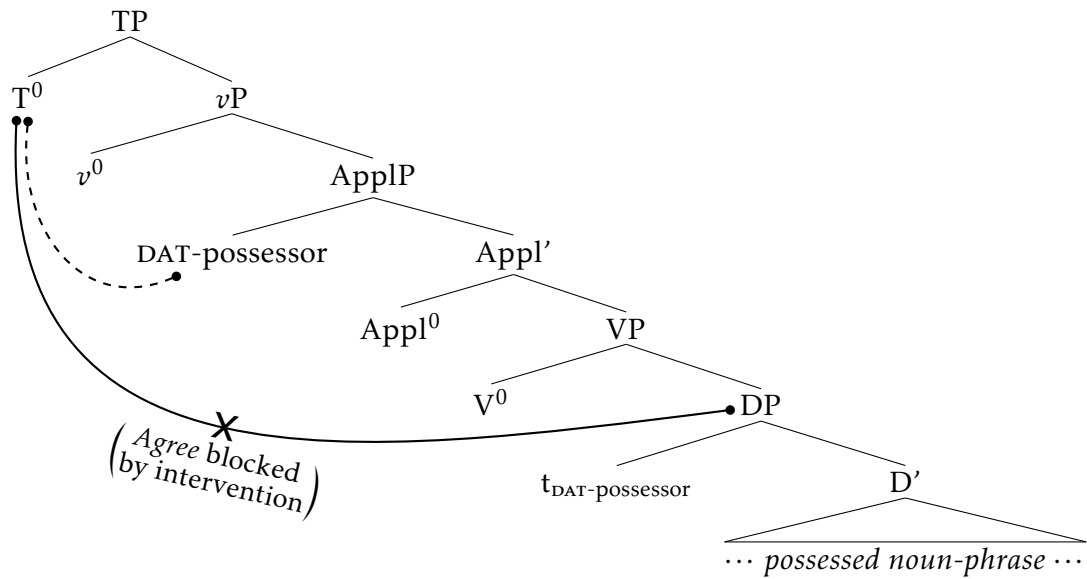
- One can be certain that the possessor is outside the DP in (2a–b, 4a–b)
 - DP-internal possessors in Hebrew bear GEN Case (marked by *shel* ‘of’), rather than DAT Case (marked by /l(e)-/) (Ritter 1991, 1992)
- The verb-phrase headed by *nafal* (‘fell’), in (1–4), does not normally assign DAT Case (possessive/reflexive/ethical-datives notwithstanding)
- **Proposal:** in order to support the assignment of DAT Case in a verb-phrase that normally does not assign it, an additional *applicative*-like layer must be projected
 - following Collins (1997), Marantz (1993), Pylkkänen (2002), and others

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



- In (25), the possessive-dative and the VP-internal DP are in separate maximal projections, and therefore not subject to the *equidistance* condition in (23), above
 - ⇒ in probe-goal relations between a higher probe—such as T⁰—and the possessed DP, the DAT possessor will indeed intervene

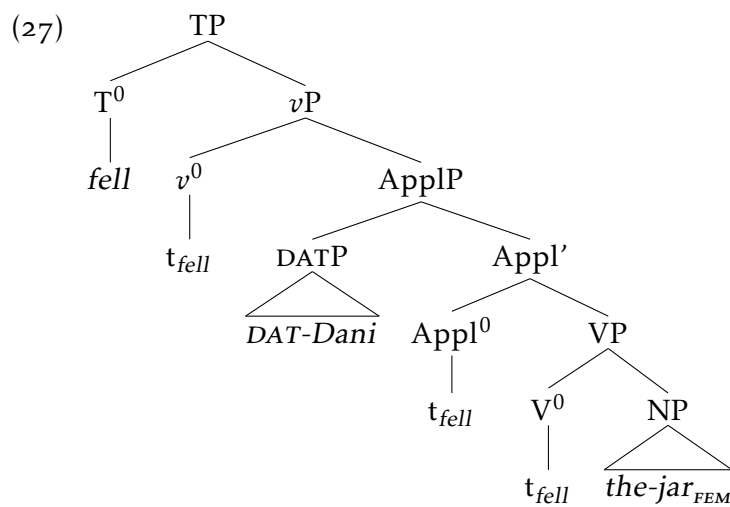
(26) INTERVENTION IN POSSESSIVE-DATIVE CONSTRUCTION



- 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 unexpected:

- (2) a. nafI-a le-Dani ha-cincenet
 fell-3sg_{FEM} DAT-Dani the-jar_{FEM}
 ‘Dani’s jar fell.’
- (4) a. nafI-u le-Dani ha-maftex-ot
 fell-3pl DAT-Dani the-key_{MASC-PL}
 ‘Dani’s keys fell.’

- How can intervention by the DAT possessor ever be circumvented in (2a, 4a)? (schematized in (27), below)

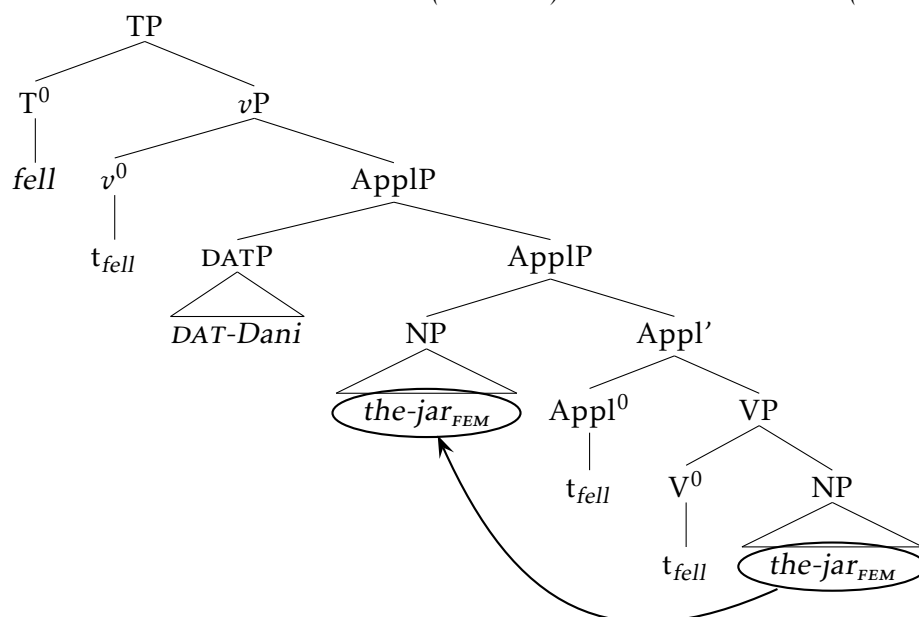


- we could, of course, discard the ApplP-based analysis of possessive-datives, and revert to an account that takes φ -agreement to be *optional*; but recall:
 - I. φ -agreement with pre-verbal subjects is decidedly not optional (see (1, 3), above)
 - II. even if we were to restrict the optionality of φ -agreement to derivations involving post-verbal subjects, we would lose our account for the lack of *optionality* when:
 - i. thematic (rather than possessive) DATs are involved (as in (11–14), above)
 - ii. a DAT element is completely absent (as in (6–7), above)

⇒ we need a different account of how intervention is circumvented in (2a, 4a)

- Suppose that the THEME DP could move to a (second) specifier of ApplP:

(28) MOVEMENT OF THE THEME TO (SECOND) SPECIFIER OF APPLP (“CROWDING”)⁵



- Ura (1996): multiple specifiers of the same projection are equidistant with respect to a structurally higher probe⁶
 - this can be derived from the same *equidistance* condition given in (23), repeated here:

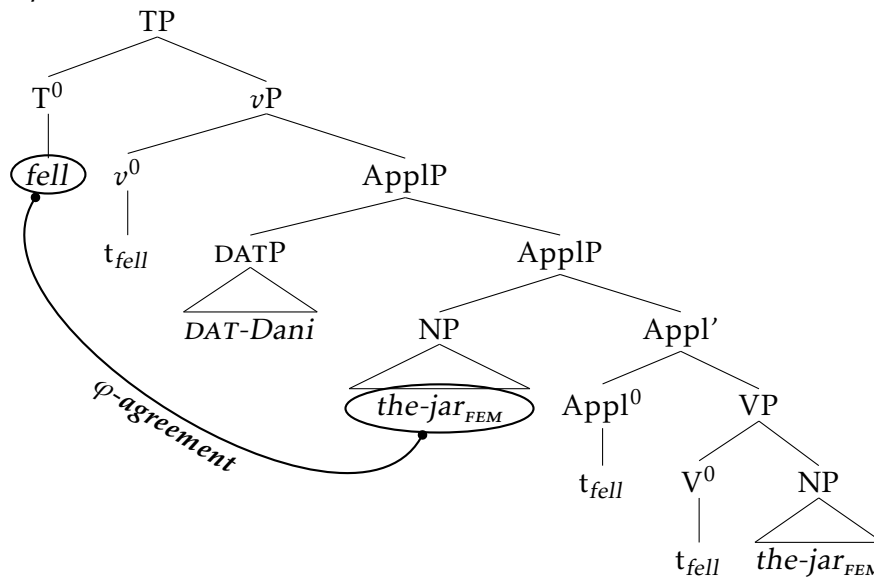
(23) *EQUIDISTANCE CONDITION* (Chomsky 1995, 2000; Collins 1997)

If α and β are in the *minimal search domain* of the same head, then α and β never intervene in relations targeting one another

- In (28), the DAT *le-Dani* (‘DAT-Dani’) and the THEME *ha-cincenet* (‘the-jar_{FEM}’) occupy two specifiers of the same projection (namely, ApplP)
 - given (23), the two are equidistant with respect to higher probes, such as T⁰
 - ⇒ allowing T⁰ to enter into a φ -agreement relation with the THEME

⁵Thanks to David Pesetsky for suggesting the term “crowding”.

⁶The 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).

(29) φ -AGREEMENT

- The source of variation between the agreeing and non-agreeing variants of (2, 4):
 - movement of the THEME to a (second) specifier of ApplP, vs. lack of such movement
- dialects of Hebrew in which the non-agreeing version is ruled out would obligatorily impose this movement operation
- This analysis captures the fact that a non-agreeing verb is allowed in the presence of non-thematic DATs (e.g., possessive-datives)
 - but not in the absence of a DAT element, or with an obligatory thematic DAT argument
- ApplP, with the DAT DP in its specifier (as shown in (26)), is only projected in the case of a non-thematic DAT DP (e.g., a possessive-dative)
 - thematic DATs, 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

DISCLAIMER:

This “crowding” analysis is intended as a demonstration that the co-existence of the agreeing and non-agreeing variants (e.g., (2a, 4a) vs. (2b, 4b)) can be handled—and is in fact **better handled**—without resorting to φ -agreement being *optional*.

I do not, however, presume to have shown that the “crowding” analysis is the best exemplar of this family of analyses; it is simply intended as an existence-proof that they are possible.

4. Implications for the Theory of φ -Agreement

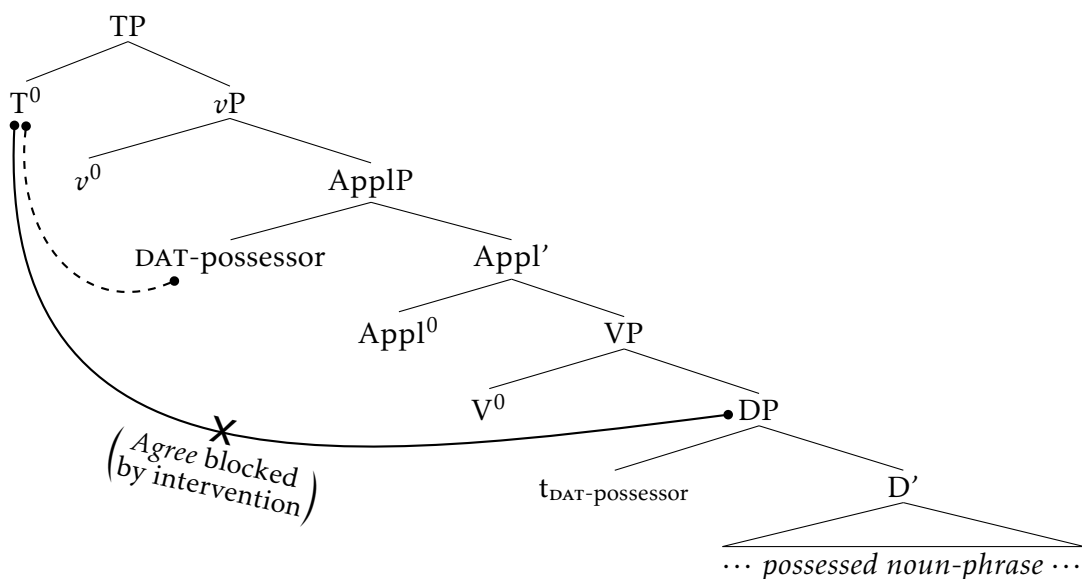
A short recap:

- Sections 1–2: evidence that φ -agreement in Hebrew is decidedly not *optional*
 - φ -agreement with pre-verbal subjects is obligatory (§1)
 - even in the domain of post-verbal subjects, the appearance of *optionality* only arises in the presence of a non-obligatory DAT element, disappearing in other scenarios (§2):
 - I. when a DAT DP is absent
 - II. when a DAT DP is present, but is an obligatory thematic argument
- Section 3: the agreeing/non-agreeing pairs that create the impression of *optionality* have two distinct underlying structures
 - related by a particular movement operation, termed *crowding*
- A property that is implicit in this account—and that I would like to now make explicit:
 - While φ -agreement is clearly not *optional*, its failure does not result in ungrammaticality:
 - failure of φ -agreement to **apply** is ruled out (i.e., it results in ungrammaticality)
 - this is just another way of saying that φ -agreement is not *optional*
 - but φ -agreement that has **applied but failed**—e.g., due to intervention by a DAT DP—does not give rise to ungrammaticality
 - recall the non-*crowding* (2b), schematized in (26)—both repeated here:

(2) VS ORDER — LACK OF φ -AGREEMENT TOLERATED

- b. ? nafal le-Dani ha-cincenet
 fell(3sg_{MASC}) DAT-Dani the-jar_{FEM}
 ‘Dani’s jar fell.’

(26) INTERVENTION IN POSSESSIVE-DATIVE CONSTRUCTION



- For (26) to give rise to (2b), the failure of φ -agreement (due to intervention by the DAT DP) 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 DAT DP in (26) is not *failure* per se of φ -agreement
 - but rather agreement with the DAT DP 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 φ -features of the DAT intervener to the probe
 - recall (5a–b), repeated here:

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

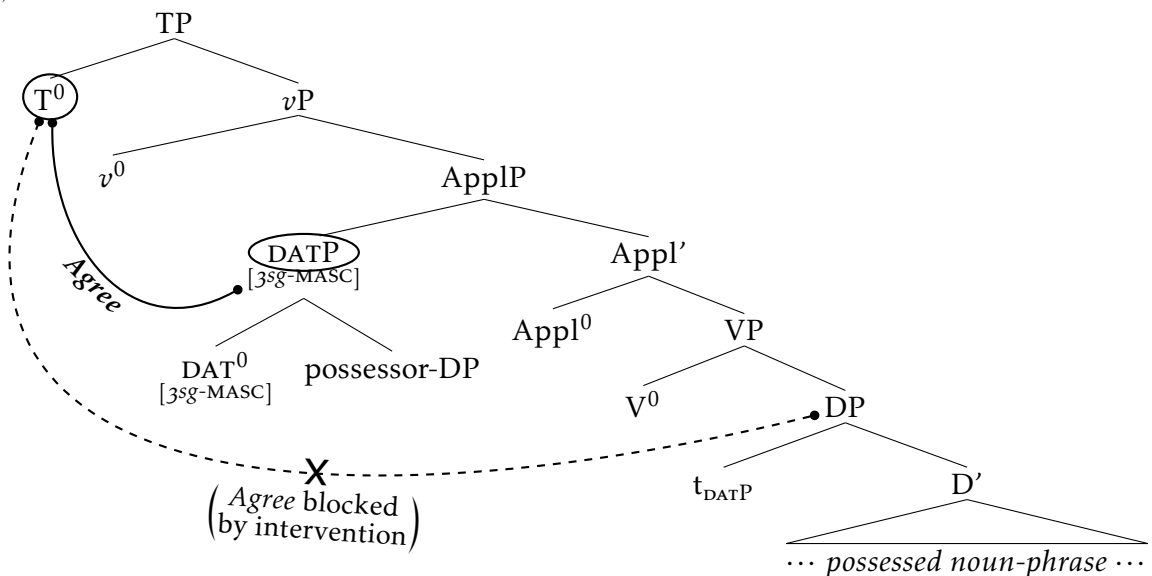
? nafal le-Dina ha-cincenet
 fell(3sg_{MASC}) DAT-Dina_{FEM} the-jar_{FEM}
 ‘Dina’s jar fell.’

b. PLURAL DATIVE DOES NOT BLOCK DEFAULT/MASC. 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.’

- Nevertheless, one might imagine that the DAT DP is enclosed in some projection that prevents the features of the nominal from being accessed
 - and instead, this enclosing projection transmits its own φ -features—which are *3sg-masculine*—to the probe:

(30) DATIVE INTERVENERS ENCLOSED IN ADDITIONAL PROJECTION



- Unfortunately, the behavior of DATs in Hebrew is decidedly opposed to what an approach like (30) would lead one to expect
- As shown in (16a–b, 18b)—repeated here—the behavior of DATs in Hebrew with respect to binding relations suggests that their φ -features **are** visible from the outside:

(16) HEBREW: GOAL \gg 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.’

(18) b. CONDITION A

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.’

- This is so not just for thematic DATs, as in (16a–b, 18b), but for possessive-datives as well:

(31) BINDING BY A POSSESSIVE DATIVE (CONDITION C)

ne'elam/ne'elm-u [l-o_{i/*j}] [ha-tlun-ot neged ima šel Dani_j]
 disappear(3sg_{MASC})/3pl DAT-3sg_{MASC} the-complaint-PL against mother of Dani
 ‘The complaints against Dani_j’s mother disappeared (from his_{i/*j} custody).’

- if DAT nominals are indeed enclosed in a dedicated projection, such as DATP in (30):
 - it must be that the features of the enclosed nominal are copied into the DATP layer
 - contra what is diagrammed in (30)
 - otherwise the binding facts exemplified by (16a–b, 18b) and (31) could not be captured

⇒ the *singular masculine* morphology on the verb in examples such as (5a–b) cannot be the result of (successful) φ -agreement with some *singular masculine* DATP-like projection

- A similar argument can be made using the passives of thematically ditransitive verbs
- where the THEME and the GOAL can be generated in either hierarchical order, and are equidistant with respect to T⁰ (see section 2)
- if DATs were enclosed in an extra projection, which could be agreed with by φ -probes, we would expect *singular masculine* agreement to be possible in these passives
 - by virtue of the φ -probe finding and agreeing with the projection enclosing the DAT DP

- but this is not borne out; recall (11–14), repeated here:

- (11) nimser-a la-mefakeax ha-ma'atafa
 PASV.handed-3sg_{FEM} DAT.the-supervisor the-envelope_{FEM}
 'The envelope was handed to the supervisor.'
- (12) * nimsar la-mefakeax ha-ma'atafa
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-envelope_{FEM}
- (13) nimser-u la-mefakeax ha-maftex-ot
 PASV.handed-3pl DAT.the-supervisor the-key_{MASC}-PL
 'The keys were handed to the supervisor.'
- (14) * nimsar la-mefakeax ha-maftex-ot
 PASV.handed(3sg_{MASC}) DAT.the-supervisor the-key_{MASC}-PL

⇒ Again, the conclusion is that DATs in Hebrew absolutely cannot be targeted for φ -agreement:

- they cannot transfer their own φ -features to the probe
- nor is it the case that they transfer *singular masculine* features, found on some enclosing projection, to the φ -probe
- In terms of the categorical status of DATs, these results could indicate that:
 - I. DATs in Hebrew are actually DPs, rather than PPs
 - and that so-called DAT Case-marking is D⁰-related morphology
 or alternatively, that:
 - II. DATs are PPs, but the φ -feature values of the DP are copied onto P⁰ (Rezac 2008a)
- Regardless of the particular technical implementation, however, we can safely conclude that when a DAT intervenes in Hebrew, it is truly an instance of φ -agreement *failing*
 - rather than some kind of defective agreement with the DAT itself

⇒ this brings us back to the original point of this section:

- the derivations in which intervention has occurred—and consequently, φ -agreement has failed—do not result in *ungrammaticality*

Let us consider the consequences of these results for the theory of φ -agreement:

- Clearly, the account whereby φ -agreement is intrinsically *optional* is ruled out (see, in particular, section 2)

- But equally problematic is the *uninterpretability*-based approach
 - namely, that φ -features on probes are *uninterpretable*, unless and until they enter into an *Agree* relation with their counterparts on a suitable goal
 - if so, intervention in (26) should result in the uninterpretable φ -features on T^0 reaching the interfaces unchecked, and crashing the derivation⁷ \Rightarrow contrary to fact
 - the *uninterpretability*-based approach to φ -agreement is patently incompatible with the data under consideration here
- Instead, it seems that the correct characterization of the relation between φ -agreement and (un)grammaticality is the following:

(32) *You can fail, but you must try:*

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

The characterization in (32) 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 σ conformed to the SD, it had to undergo the associated SC
 - but if σ did not meet the SD, the SC was irrelevant to σ (even if the rule in question was *obligatory*)
- The generalization in (32) can therefore be restated in SD/SC 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 (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 φ -agreement
 - but rather, that the logic of φ -agreement and its relation to (un)grammaticality mirrors what an SD/SC system would generate

⁷One 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 φ -agreement to be *optional*—predictions that have already been shown to be incorrect (see section 2).

5. φ -Agreement and Case

- Section 4: failure to establish φ -agreement between a φ -probe and its putative nominal target is tolerated by the grammar
- This is in conflict with the idea that Case on a nominal arises when a “complete” set of φ -features on a probe is valued by the φ -features on the nominal (Chomsky 2000, *et seq.*):
 - if φ -agreement fails, the target nominal should fail to receive Case
 - ⇒ falsely predicting that failed φ -agreement should never be tolerated
 - since, presumably, it would give rise to a violation of the *Case Filter* (or whatever takes its place)
- This section: further support for the conclusions in section 4, by providing independent evidence that an agreement-based theory of Case-assignment is untenable (by “independent”, I mean “not from φ -agreement in Hebrew”)

Consider φ -agreement and NOM Case in Icelandic:

- φ -agreement in Icelandic tracks NOM (m-)Case, as opposed to *subjecthood* (Bobaljik 2008, Boeckx 2000, Holmberg and Hróarsdóttir 2003, Schutze 1997)
- but there are more NOM DPs in Icelandic than just those that φ -agreement targets
 - in other words, the noun-phrases targeted by φ -agreement constitute a proper subset of those noun-phrase that bear NOM Case

(33) $\begin{array}{ccccccc} & & \swarrow & \text{X} & \searrow & & \\ \text{það} & \boxed{\text{virðist}/*\text{virðast}} & & \text{einhverjum manni} & & [\boxed{\text{hestarnir}} & \text{vera seinir}] \\ \text{EXPL} & \boxed{\text{seem.sg}/*\text{seem.pl}} & \text{some} & \text{man.sg.DAT} & & \boxed{\text{the.horses.pl.NOM}} & \text{be slow} \\ \text{'A man finds the horses slow.'} & & & & & & \text{[Holmberg and Hróarsdóttir 2003:(12)]} \end{array}$

- One could posit that the plural NOM noun-phrase in (33) undergoes phonologically covert agreement with the embedded T^0
 - and that this is the real source of its NOM Case
- but covert agreement between the embedded T^0 and the downstairs NOM conflicts with what happens when the DAT intervener is A-moved out of the way:⁸

(34) $\begin{array}{ccccccc} & & \swarrow & & \searrow & & \\ \text{Manninum} & \boxed{\text{virðast}} & & [\boxed{\text{hestarnir}} & \text{vera seinir}] \\ \text{the.man.sg.DAT} & \boxed{\text{seem.pl}} & & \boxed{\text{the.horses.pl.NOM}} & \text{be slow} \\ \text{'The man finds the horses slow.'} & & & & \text{[Holmberg and Hróarsdóttir 2003:(11)]} \end{array}$

- If embedded NOMs enter into (covert) φ -agreement with the embedded infinitival T^0 , their availability as targets for φ -agreement by the upstairs finite T^0 would be surprising
 - One could entertain the possibility that in (34), φ -agreement with the downstairs infinitival T^0 is suppressed in favor of φ -agreement with the upstairs T^0

⁸The reader may have noticed that between (33) and (34), the DAT noun-phrase has changed not only its position, but also its quantificational force. That is because in Icelandic expletive-associate constructions, it is the closest noun-phrase (even if it is non-NOM) that exhibits the *definiteness-effect*—familiar from the behavior of NOMs in the English expletive-associate construction—in addition to being the noun-phrase that is eligible for A-movement, if an expletive is not selected (McGinnis 1998).

- Alternatively, it could be that both the downstairs infinitival T⁰ and the upstairs T⁰ enter into φ -agreement relations with *hestarnir* ('the.horses.pl.NOM') in (34)
 - though see Baker and Vinokurova (to appear), who argue that such “double agreement” is generally an impossibility
- While these two alternatives strike me as rather stipulative, it is not clear to me that either can be falsified on the basis of Icelandic alone⁹

It is here that Basque proves to be an instructive test-case:

- Arregi and Nevins (2008), Preminger (to appear), Rezac (2008b): *Agree* in Basque targets only ABS noun-phrases
 - the DAT and ERG agreement-morphemes on the Basque auxiliary are the result of *clitic-doubling* of their respective full-DP counterparts¹⁰
- Just like NOMs in Icelandic, though, there are more ABS noun-phrases in Basque than just those that have been targeted for φ -agreement
 - in (35), below, the ABS argument of the embedded predicate *irakur* ('read') is the plural noun-phrase *liburu horiek* ('those books')
 - but this noun-phrase has not entered into any (overt) φ -agreement relations:

(35) [Lankide-e-i liburu horiek irakur-tze-n] probatu
 colleague(s)-ART_{pl}-DAT book(s) those_{pl}(ABS) read-NMZ-LOC attempt
 d- ϕ /*it- u- (z)te.
 3.ABS- sg.ABS/*pl.ABS- have- 3pl.ERG
 'They have attempted to read those books to the colleagues.'
 (subject is [pro-3pl.ERG]) [Preminger to appear:(29)]

- The ABS agreement-morphemes in (35) are *3rd-person singular* (rather than *plural*)
 - which, as argued in Preminger (to appear), is the hallmark of failed *Agree* in Basque
 - regardless, there is certainly no evidence of overt φ -agreement with this DP
- As in the Icelandic example, one could posit that ABS Case on *liburu horiek* ('those books') is the result of covert φ -agreement with some functional projection in the downstairs clause
 - in this case, inside the nominalized clause selected by the adposition /-n/
- This is schematized in (36), below—where FP refers to the functional projection that enters into a covert φ -agreement relation with the downstairs ABS noun-phrase:

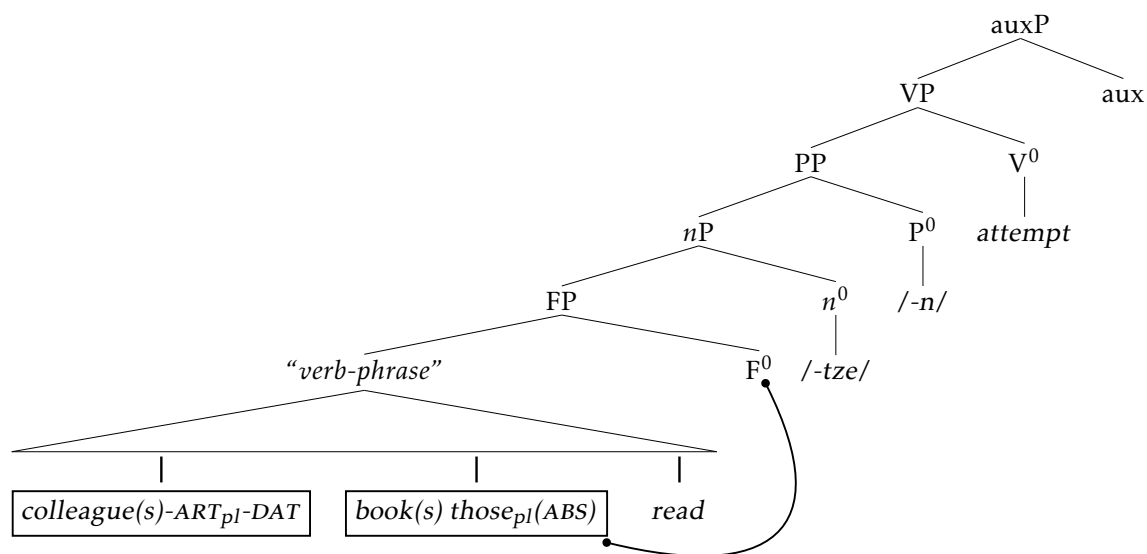
⁹There are counterparts to the data in (33–34) in which the downstairs domain is a small-clause, rather than an infinitival—in which case, there might not be a downstairs T⁰ at all:

(i) það finnst/*finnast einhverjum stúdent [tölvurnar ljótar]. (Icelandic)
 EXPL find.sg/*find.pl some student.sg.DAT the.computers.pl.NOM ugly
 'Some student finds the computers ugly.'
[Holmberg and Hróarsdóttir 2003:(14)]

However, even small-clauses might not be entirely bereft of functional structure, in which case whatever functional projections are present in the small-clause could take the place of the embedded T⁰ in the two accounts formulated in the text (but see Johnson and Tomioka 1997, who argue that small-clauses in fact contain no functional structure).

¹⁰This is not the case in all dialects of Basque; there are dialects in which the probe can, under certain conditions, value its features using the feature-values on a DAT noun-phrase; see Rezac (2006, 2008a).

(36)



- However, the approach schematized in (36)—which is the Basque counterpart of the approach sketched above for Icelandic NOMs—runs into problems:
 - [Elordieta 2001](#), among others: in Basque, the DAT argument of a ditransitive verb occupies a structurally higher position in the verb-phrase than the ABS one
 - In fact, when the DAT argument is removed from this construction, overt φ -agreement with the embedded ABS argument, which is blocked in (35), is able to obtain:

(37) [Harri horiek altxa-tze-n] probatu d- it- u- zte.
stone(s) thosepl(ABS) lift-NMZ-LOC attempt 3.ABS- pl.ABS- have- 3pl.ERG
 ‘They have attempted to lift those stones.’
 (subject is [pro-3pl.ERG]) [Etxepare 2006:(85a)]

- In (35), the DAT (*lankide-e-i* ‘colleague(s)-ARTpl-DAT’) is situated in the downstairs verb-phrase, but is higher than the ABS *liburu horiek* (‘those books’)
 - therefore, it intervenes, blocking φ -agreement between the upstairs auxiliary and the ABS DP ([Preminger to appear](#)), in contrast with the state of affairs in (37)

⇒ it stands to reason that the DAT would also intervene in the relation in (36)

- between F^0 (the putative φ -probe for phonologically covert φ -agreement with the downstairs ABS) and the ABS *liburu horiek* (‘those books’)
- Crucially, since F^0 cannot *Agree* with the embedded non-DAT argument, the ABS Case borne by this noun-phrase cannot be the result of φ -agreement¹¹

¹¹The alternative approach—which assumes that in instances where overt φ -agreement has failed to obtain, Case-markings such as NOM/ABS arise as the result of phonologically-null agreement—can be pushed one step further; we could assume that in Basque, the relevant probe for phonologically-null agreement (F^0) is so low as to be situated between the DAT argument and the putative target of φ -agreement (the ABS noun-phrase). This would indeed mean that the DAT argument would not intervene in the supposed relation between F^0 and the putative target. At this point, however, this alternative becomes a notational variant of the approach sketched in section 4, whereby failed attempts to establish φ -agreement are tolerated by the grammar: this notational variant involves recourse to a phonologically invisible projection (F^0 /FP), which enters into phonologically undetectable φ -agreement with the noun-phrase

The crucial difference between this Basque data and the Icelandic data discussed earlier is this:

- In the Basque examples, the DAT intervener that disrupts the agreement relation is introduced immediately above the putative target of φ -agreement
 - as opposed to the Icelandic examples, where the DAT intervener is introduced as an experiencer argument of the upstairs predicate
- ⇒ it is extremely unlikely that there is some functional projection, which could serve as an agreement probe, in between the DAT intervener and the putative target of φ -agreement
- Therefore, it cannot be that ABS Case on this DP arises as a result of φ -agreement

6. Conclusion

- The patterns of φ -agreement with post-verbal subjects in Hebrew resist analysis in terms of:
 - I. *optional* φ -agreement
but also resist analysis in terms of:
 - II. *uninterpretable* features on φ -probes
- Instead, they necessitate an account of the following kind:
 - **attempting** to apply φ -agreement to a given structure is mandatory
 - but **failure** of this φ -agreement relation to go through—e.g., due to intervention—does not give rise to ungrammaticality
- Crucially, it is empirically untenable to subsume such “failure to agree” under successful agreement with some *3sg-masculine*-bearing functional shell, which encloses the dative DP
- Finally, I noted that these results conflict with the idea that Case arises via φ -agreement
 - e.g., as a result of valuing a full φ -set on a probe (Chomsky 2000, *et seq.*)
- I showed independent evidence—from empirical domains other than φ -agreement in Hebrew—that a theory claiming that Case is dependent on φ -agreement is untenable
 - indicating that we should be undeterred by the aforementioned conflict

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in question, and is also so close to that noun-phrase as to preclude detection by syntactic means (e.g., intervention); and finally, in those instances where overt φ -agreement has successfully targeted the noun-phrase in question, this lower functional projection is somehow not an obstacle in the face of a higher φ -probe targeting this noun-phrase.

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