Against PersonP

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Abstract

Emphatic verb doubling diagnoses V-to-C movement in Classical Hebrew and shows that split agreement is not a consequence of movement to between hypothetical Person and Number phrases.

Keywords T-to-C, person, split agreement, verb movement, left periphery; Classical Hebrew

1 Introduction

The PersonP Hypothesis proposes that person projects *per se* and not as a dependent of other projections. It has featured in analyses of Modern Hebrew morphosyntax (Shlonsky 1989, Nevins 2002) and *pro*-drop (Holmberg 2003, Platzack 2004). In this paper, I return to Semitic, the family that inspired the hypothesis, and argue that one of its members, Classical Hebrew, offers strong evidence against it.

The specific proposal I argue against is made most clearly by Nevins, building on Shlonsky's work, in relation to verbs like those below, where, surprisingly, what is one affix in the perfective, *tem* = person+number, becomes two in the imperfective, *ti* = person, *uu* = number.

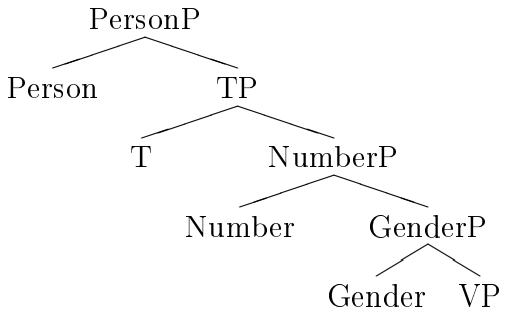
(1) a. zraaq- **tem**
throw.PF-2MP
'You all threw'

b. **ti**-zrq- **uu**
2- throw.IMPF-MP

'You all will throw' (Classical Hebrew; Halle 1997, p. 432)

Such variation is unexpected if the number of syntactic terminal nodes is constant across aspects and if each terminal receives at most a single exponent. Adopting Shlonsky's phrase structure (2), according to which person and number are autonomous projections of the main clause—

(2)



—Nevins proposes that perfective and imperfective verbs raise to different heights: imperfectives stop at T^0, so that $Person^0$ is realized to its left, prefixally, and number to its right, suffixally; perfectives, by contrast, stop at $Person^0$, so that Person and Number are located in a single complex head and can be realized as a single fused suffix. Ideas similar in nature have been suggested or pursued by Banksira (2000), Benmamoun (2000), Julien (2002), Tourabi (2002), Fassi Fehri (2003).

It follows from this account (and *mutatis mutandis* from its conceptual kin), that Person is prefixal only for verbs below PersonP. Verbs moved to the C domain cannot have person prefixes. The current paper shows that this consequence is false and that, therefore, the PersonP Hypothesis is incompatible with Classical Hebrew's verbal syntax and morphology. The empirical focus is the language's verb emphasis construction, sometimes called 'the predicate cleft'. This, I argue, can be used to diagnose V-to-C movement. To show that the PersonP Hypothesis is false, it suffices simply to show that verbs in the emphatic construction may have person prefixes.

Verb emphasis is introduced in Section 2.1 and, in Sections 2.2.1–2.2.3, is developed as a diagnostic for V-to-C movement in three configurations, narrative forms, *wh*-questions, and imperatives and injunctives. Section 3 develops the case against the PersonP Hypothesis, showing, in Section 3.1, that all the conditions hold in the classical language to replicate Shlonsky's phrase

structure for and Nevins' account of the modern language, and concluding, in Section 3.2, with the falsification of the prediction that verb emphasis and person prefixes are incompatible. An appendix sketches the mechanics of split agreement argued for in Harbour (2005).

2 Verb Emphasis in Classical Hebrew

This section introduces the verb emphasis construction of Classical Hebrew and develops it into a diagnostic of V-to-C movement. In brief, the construction consists of a normal sentence with fully inflected verb, plus the same verb partially copied. These nearly always occur in the order *copy* **verb**, analyzed, in Section 2.1, as having the verb in T and the copy in Fin.[1] However, this order is inverted in narrative forms, interrogatives, imperatives and injunctives, all cases where there are good crosslinguistic reasons to suppose that the verb has moved into the C domain. The core facts of these configurations and accounts of the order reversal are presented in Sections 2.2.1–2.2.3. This lays the groundwork for the showing, in Section 3, that the PersonP Hypothesis is incompatible with Classical Hebrew morphology and syntax. Throughout this section, I rely on Rizzi's (1997) decomposition of the C domain into semantically and syntactically distinct projections:

(3) $\underbrace{\text{Force} > \text{Topic} > \text{Focus} > \text{Topic} > \text{Finiteness}}_{\text{C domain}} > \underbrace{\ldots}_{\text{T domain}}$

2.1 Core Properties

This subsection presents the core properties of the verb emphasis construction and argues for the structure:

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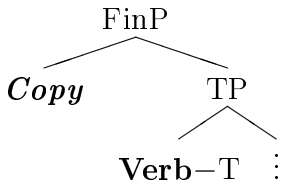

[1]The *copy is italicized*, the **full verb boldfaced**, throughout.

In loose semantic terms, verb emphasis serves "to *strengthen* the verbal idea, i.e. to emphasize in this way either the certainty (especially in the case of threats) or the forcibleness and completeness of an occurrence" (Kautzsch 1910, §113*n*). Typical examples are:

(5) a. *ʻaalooh* na-**ʻleh** w- yaaraš- nuu ʾoo<u>t</u>- aaḥ kii–
go up 1P-go up.IMPF and.ASP-possess.PF-1P ACC-3FS for–
yaa<u>k</u>ool n- **uu<u>k</u>al** ll- aaḥ
able 1P-able.IMPF to-3FS
'Let us go up at once, and possess it; for we are well able to overcome it' (Numbers 13:30)

b. *yaa<u>d</u>oʻ* t- **ee<u>d</u>aʻ** kii– *moo<u>t</u>* taa-**muu<u>t</u>**
know 2-know.IMPF for–die 2- die.IMPF
'Thou shalt know for certain that thou shalt surely die' (Kings I 2:37)

c. uu- <u>b</u>aḥuur- iim *kaašool* yi-**kkaašeel**-uu
and-young man-P fall 3- fall.IMPF- P
'And the young men shall utterly fall' (Isaiah 40:30)

Note the variety of means by which the Kings James translators capture the notion of a "strengthen[ed] verbal idea": 'go up *at once*', 'are *well* able', 'know *for certain*', '*surely* die', '*utterly* fail'.

The construction comprises a typical sentence together with a partial copy of the verb. The partial copy, traditionally termed 'the infinitive absolute', is, essentially, the verb deprived of clitics, agreement, and tense, and in some cases, conjugation class, or *binyan*. The copy may be preceded by complementizers, such as *kii* 'for', or topicalized XPs, such as *baḥuuriim* 'young men'. (See Harbour 1999 for more details; see Kautzsch 1910, §113*a*–*k*, on independent uses of the partial copy.)

Interestingly, verb emphasis only occurs in finite clauses. Of the construction's (by my reckoning) 500 Old Testament occurrences, the fully inflected verb is frequently imperfective (4) or perfective (6), and, on occasion, participial (7), but never infinitive.

(6) a. *ʾaamoor* **ʾaamar**-tii kii– *śaanooʾ* **śnee**ʾ- <u>t</u>aa- ḥ
say say.PF- 1S for– hate hate.PF-2MS-3FS
'I verily thought that thou hadst utterly hated her'(Judges 15:2)

b. w- 'attaah *haalok* **haalak**-taa kii–*nikˌsof* **nikˌsaf**- taah l-
and-now go go.PF- 2MS for–long long.PF-2MS to-
beeyt 'abiikaa ...
house father.2MS
'And now, [though] thou wouldest needs be gone, because thou sore longest after thy father's house...' (Genesis 31:30)

(7) a. 'al– t-'ookˌl- uu mimm-ennuu naa' uu- *bˌaašeel* **mbuššaal**
PROH–2-eat.IMPF-P from- 3MS raw and-cook cook.PART
bammaayim
in water
'Eat not of it raw, nor sodden at all with water' (Exodus 12:9)

b. **'omr-** im *'aamoor* li- mna'ṣay
say.BNNI-3P say to-despisers.1S
'They say still unto them that despise me' (Jeremiah 23:17)

Given its restriction to finite clauses, this use of the copy demands to be associated with a finiteness-related projection, one at least as high as the landing site of the finite verb. Rizzi (1997) argues positions as high as Force can mark finiteness. However, we can rule out such positions here by noting that topics and focused elements precede the copy, as in (5c) and (6b); see also the discussion of *wh*-questions in Section 2.2.2. This confines the copy positions below Focus. If the lower Topic is for background information (Julien 2002), then it too is eliminated, as verb emphasis foregrounds. This confines the copy to Fin or T.

Concerning the position of the verb, note that Classical Hebrew is VSO (*V–created S–God O–heaven-and-earth*):

(8) bree'šiit baaraa' 'loohiim 'eet haš-šaamayim w- 'eet
in the beginning create.PF God ACC the-heaven and-ACC
haa-'aareṣ
the- earth
'In the beginning God created the heaven and the earth'(Genesis 1:1)

To precede the subject, the verb must have evacuated vP, moving past the lowest possible subject position. Yet, elements in topic and focus precede it, as exemplified (5c) and by the sentences below:

(9) a. kii–pšaa‘- ay ’nii ’- eeḏaa‘
for-trangression-P.1S I 1S-know.IMPF
‘For I acknowledge my transgressions’ (Psalms 51:5)

b. w- ‘al m’uuraṯ ṣif‘oonii gaamuul yaaḏ-oo haaḏaah
and-on den cockatrice weaned child hand-3S put.PF
‘and the weaned child shall put his hand on the cockatrice’ den’
(Isaiah 11:8)

Indeed, it is possible to regard *pšaa‘ay* ‘my transgressions’ in (9a) and *gaamuul* ‘weaned child’ in (9b) as foci (given that, in their contexts, the sentences concern transgressions as against sins and iniquities, and weaned children as against unweaned), in which case, the subsequent DPs occupy the lower Topic phrase and so the verb is likely lower still, in Fin or T. Preempting the interpretation of verb position in *wh*-questions as evidence of T-to-C movement, T is to be regarded as the target of verb movement (Sections 2.2.2 and 3.1).

That copy and verb are in Fin or T seems sure. Yet, this alone does not guarantee (4), as copy and verb could be specifier and head of one and the same projection. This position would, however, rule out in principle a PersonP analysis: PersonP could never intervene between specifier and head of a single projection and so there would be no person prefixes at all. To adopt (4), therefore, is to be generous to the claim I wish to argue against.

With this analysis of the basic construction in place, let us turn to cases where the order is inverted.

2.2 Order Inversion

Although the order *copy* **verb** overwhelmingly predominates, there are several constructions in which the inverted order, **verb** *copy*, is systematic: narrative forms, *wh*-questions, and imperatives and injunctives. These are discussed in turn in the following subsections, which comprise, in each case, an initial description of the sentence type, an illustration of its cooccurrence with the order **verb** *copy*, and an explanation of the order inversion. The analyses are essentially identical in all cases: inversion derives from the basic structure, $[_{\text{FinP}}$ *copy* $[_{\text{TP}}$ **verb** $]]$, by movement of the verb into the C domain, $[_{\text{CP}}$ **verb** $[_{\text{FinP}}$ *copy* $[_{\text{TP}}$ ⟨verb⟩ $]]]$.[2]

[2]The inverted order is common in a fourth construction, where a normal sentence is followed by a copy (***šaaloḫ*** ‘send’) of the finite verb (**šaalaḫtii** ‘I sent’) coordinated with

2.2.1 Narrative Forms

A frequent narrative device in the Bible is to begin a sentence with 'and' followed immediately by the verb. Such 'and-verb' combinations have the striking property that 'and' plus an imperfective verb has perfective meaning, whereas 'and' plus a perfective verb has imperfective meaning. This 'and', glossed 'and.ASP', itself encodes aspect: *waa-*∼*waC-* takes imperfect verbs / perfective meaning, *w-*∼*uu-* takes perfective verbs / imperfective meaning. Sentence (ii) of each example pair illustrates the verb without 'and.ASP'. (See Kautzsch 1910, §49, on phonological differences between prefixed and

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a similarly tenseless form (*haškeem* 'rise up early') of a different root.

(i) 'šer **šaalaḥ-** tii 'leeyhem 'eth–'baad̲ay han-nbi'iim *haškeem* w-
which send.PF-1S to them ACC–servants.1S the- prophets rise up early and-
šaalooḥ
send
'which I sent unto them by my servants the prophets, rising up early and sending [them]' (Jeremiah 29:19)

The construction has an aspectual flavor (iterated, ongoing, simultaneous) and is particularly frequent with *haalok̲* 'go', as in (iv), where the aspectual nature is most evident (the translation not even mentioning going *per se*, but rather, continuation). The usual order, *copy* **verb**, arises only rarely, when the coordinated tenseless forms are topicalized—in (ii), there is stylistic parallelism, with preverbal topicalization in both clauses:

(ii) ***haalok̲*** w- *ṭaapoop̄* t- **eelak̲-** naah uubrāgleeyhem t- 'akkas- naah
go and-mince 3F-go.IMPF-FP and with their feet 3F-tinkle.IMPF-FP
'walking and mincing [as] they go, and making a tinkling with their feet' (Isaiah 3:16)

However, the capacity of such coordinated forms to occur both (iii) with verb emphasis, where, in consequence, there are two tenseless copies, and (iv) without any clausemate, rootmate finite form, suggests that the construction is not derived from verb emphasis.

(iii) kii ***haa'eed̲*** **haa'id̲o-** t̲ii ba-'boot̲eeyk̲em ... *haškeem* w- ***haa'eed̲***
for protest protest.PF-1S in- your fathers rise up early and-protest
'I earnestly protested unto your fathers ... rising early and protesting' (Jeremiah 11:7)

(iv) w- ham-mayim haay- uu *haalok̲* w- *ḥaasoor*
and-the- waters be.PF-3P go and-decrease
'And the waters decreased continually' (Genesis 8:12)

unprefixed forms, and Hatav 2004 for a recent morphosemantic analysis.)

(10) a. (i) uu- beerak- tii 'oot- aah
and.ASP-bless.PF-1S ACC-3FS
'And I will bless her' (Genesis 17:16)

(ii) hinneeh beerak- tii 'oot- oo
behold bless.PF-1S ACC-3MS
'Behold, I have blessed him' (Genesis 17:20)

b. (i) way- y-baarek 'oot- oo
and.ASP-3-bless.IMPF ACC-3MS
'And [he] blessed him' (Genesis 28:1)

(ii) w- 'eel šadday y-baareek 'oot- kaa
and-Almighty God 3-bless.IMPF ACC-2MS
'And [may] God Almighty bless thee' (Genesis 28:3)

What is important for current purposes is that nothing may intervene between aspectual 'and.ASP' and the verb. Sentences of the form (*And*) *XP verb*—(5c), (10bii)—simply use perfective verbs as perfective and imperfective as imperfective; that is, they use conjunctive 'and', not aspectual 'and.ASP'.

When narrative forms cooccur with predicate clefts, the typical *copy* **verb** order is inverted—**verb** *copy*:

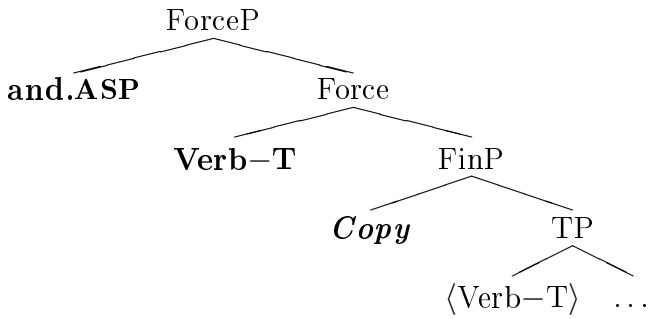
(11) a. way- y-**baarek** *baarook* 'et- kem
and.ASP-3-bless.IMPF bless ACC-2MP
'Therefore he blessed you still' (Joshua 24:10)

b. laammaah–zzeh šillah- t- oo way- y-**eeleek**
why– this send away.PF-2S-3MS and.ASP-3-go.IMPF
haalook
go
'Why is it that thou hast sent him away, and he is quite gone?'
(Samuel II 3:24)

c. way- ye-**'šm-** uu *'aašoom*
and.ASP-3- offend.IMPF-P offend
'And [they] have greatly offended' (Ezekiel 25:12)

The inverted order, **verb** *copy*, is easily explained. If the finite verb raises into the C domain, then the ordering facts follow: the verb has simply undergone head-movement past the copy.

(12)



ForceP is the natural landing site for the verb, as the construction, a narrative device, has illocutionary force. Furthermore, this semantically motivated placement makes the syntactically accurate prediction that nothing can precede 'and.ASP': it and the verb are robustly clause initial. The prediction follows from Force being the highest projection of the C domain.[3]

The copy in (12) has been left in FinP, despite head movement of the verb through Fin^0. If the copy were in Fin^0 and head adjoined to the verb, the word order would still be **verb** *copy*. Alternatively, following Harbour (2002), the copy can be argued to be in SpecFinP: although morphologically identical to a head, it is maximal in the sense of Chomsky (1993) because it does not project, and, so, occupies a specifier position; consequently, it is unaffected by movement through Fin^0. As, in a small number of cases, material intervenes between the two (20a), the second account is to be preferred.

2.2.2 *Wh*-Questions

Consider now *wh*-questions. These also force the finite verb to occur in a specific position, namely, directly after the *wh*-word. The following are typical

[3]Register aside, *'n so* or *'n then* strike me as good English equivalents. Like the Hebrew, they are robustly clause initial:

(i) a. 'n so/then John walks into the room
b. *John, 'n so/then (he) walks into the room

examples for *mah* 'what, how' and *madduu'/laammaah* 'why'. Observe that, unlike the narrative construction just discussed (Section 2.2.1), topics may precede the *wh*+**verb** complex: (13b), (13c), (14b). However, these topics do not intervene between the *wh*-element and the verb.[4]

(13) a. 'o mahy–y-a'an- k̲aa 'aab̲iik̲aa qaašaah
or what– 3-answer.IMPF-2s father.2MS hard
'Or what if thy father answer thee roughly?' (Samuel I 20:10)

b. w- ham-melek̲ mahy–y-a'śeh– llaanuu
and-the- king what– 3-do.IMPF–to us
'What then should a king do to us?' (Hosea 10:3)

c. w- 'aad̲aam mahy–y-aab̲iin darko
and-man what– 3-understand.IMPF his way
'How can a man understand his own way?' (Proverbs 20:24)

(14) a. laammaah y-d̲abbeer 'd̲oonii 'et̲– had-db̲aariim
why 3-speak.IMPF my master ACC–the- words
haa'eelleh
these
'Wherefore saith my lord these words?' (Genesis 44:7)

b. gil'aad̲ b- 'eeb̲er hay-yardeen šaak̲een w- d̲aan laammaah
Gilead in-beyond the- Jordan abide.PF and-Dan why

[4]Two types of interventions do occur. In (i), 'your face' intervenes between 'why' and the verb. To my knowledge, the exception is unique for 'why', 'what, how'. However, such intervention arises as a matter of course with preposition+*wh* complexes, like *'al-maah* 'whereupon', *'ad̲-maah* 'how long'; the *wh*-word here is perhaps reanalysed as preposition+*wh*, 'to what', for archaic, poetic effect.

(i) laammaah p̄aaneyk̲aa t̲-astiir
why face.2MS 2-hide.IMPF
'Wherefore hidest thou thy face?' (Psalms 44:25)

Vocatives, which may intervene between *wh*-element and verb, are the other exception.

(ii) laammaah yhoowaah t-a'mood̲ b- raaḥooq
why Lord 2-stand.IMPF in-distant
'Why standest thou afar off, O Lord?' (Psalms 10:1)

Neither affects the general point.

y- aaḡuur 'ŏniyyoo̲t
3S-live.IMPF ships
'Gilead abode beyond Jordan: and why did Dan remain in ships?' (Judges 5:17)

c. madduu‘ baa'– ham-mšuggaa‘ hazzeh 'eeley̲kaa
why come.PF–the- madman this to.2MS
'Wherefore came this madman to thee?' (Kings II 9:11)

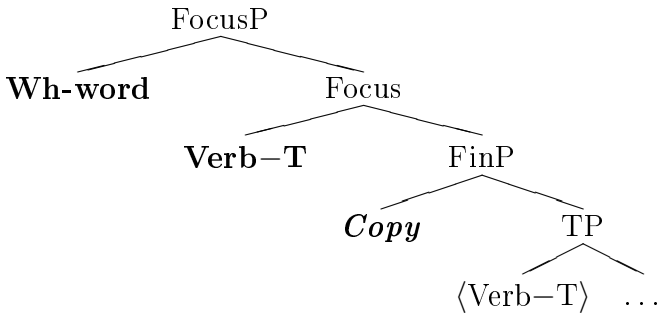
Here again, when a *wh*-word occurs with verb emphasis, the usual *copy* **verb** order is inverted—**verb** *copy*:

(15) a. uu- mahy–y-**oo̲k̲iiḥ** *hoo̲k̲eeḥ* mikkem
and-what– 3-reprove.IMPF reprove from.2MP
'But what doth your arguing reprove?' (Job 6:25)

b. laammaah **hee‘b̲ar-** taa *ha‘b̲iir* 'e̲t– haa‘aam hazzeh
why bring over-2MS bring over ACC–the people this
'Wherefore has thou at all brought this people over Jordan?' (Joshua 7:7)

Both narrative forms and these *wh*-questions can be interpreted as attracting the verb to a C position. I suggest that the *wh*-words are in FocusP, following the well observed similarities, both syntactic and semantic, between focused and questioned elements (see, e.g., Rizzi 1997). Again, this semantically motivated placement makes a syntactically accurate prediction: that topics can precede the *wh*+**verb** complex—(13b), (13c), (14b)—in contrast to the *and*.ASP+**verb** complexes of Section 2.2.1.

(16)



In light of Pesetsky and Torrego's recent work (2001), I regard the verb movement here as the concomitant of question-associated T-to-C movement (Chomsky 1986), a fact to which we return in Section 3.1.

2.2.3 Imperatives and Injunctives

Finally, consider imperatives and injunctives. The latter differ from the former in placing the particle *naa'* or the suffix *-aa*, glossed alike, after the verb. Again, these sentence types (illustrated below by imperatives) are generally verb initial (17), though they may be headed by a topic, such as an adverb or noun phrase (18).

(17) a. qaḥ maṭṭ̲kaa uu- nṭeeh– yaad̲k̲aa
take.IMP rod.2MS and-stretch.IMP–hand.2MS
'Take thy rod, and stretch out thy hand' (Exodus 7:19)

b. kabbeed̲ 'et̲– 'aab̲iik̲aa w- 'et̲– 'immek̲aa
honor.IMP ACC–father.2MS and-ACC–mother.2MS
'Honor thy father and thy mother' (Deuteronomy 5:16)

(18) a. w- 'et̲– ra'b̲on baatteeyk̲em qḥ- uu
and-ACC–famine houses.2MP take.IMP-P
'And take [food for] the hunger of your households' (Genesis 42:33)

b. w- 'attaah qḥ- uu–'oot̲aah lii l'iššaah
and-now take.IMP-P– her to.1S to wife
'Now therefore get her to me for wife' (Judges 14:2)

Again, when imperatives (19) and injunctives (20) cooccur with predicate clefts, the typical order is inverted—**verb** *copy*:

(19) a. **šim'-** uu *šaamoo'* w- 'al– t-aab̲iin- uu uu-
listen.IMP-P listen and-PROH–2-understand.IMPF-P and-
r'- uu *raa'oo* w- 'al– t-eed̲'- uu
see.IMP-P see and-PROH–2-perceive.IMPF-P
'Hear ye indeed, but understand not; and see ye indeed, but perceive not' (Isaiah 6:9)

b. **bk̲uu** *b̲aak̲oo* la- hooleek̲
weep.IMP.P weep to the-go.PRES.PART

'Weep sore for him that goeth away' (Jeremiah 22:10)

(20) a. **haarḡ-** eenii naa' *haaroḡ*
kill.IMP-1S INJ kill
'Kill me, I pray thee, out of hand' (Numbers 11:15)

b. n- **eelk̲-** aah *haalook̲* lḥallot̲
1P-go.IMPF-INJ go to pray
'Let us go speedily to pray' (Zacharia 8:21)

If we suppose imperatives and injunctives to involve verb movement to FocusP (cf, *wh*-questions), we again explain the order inversion.

In sum, all classes of exceptional ordering (**verb** *copy*) fall under a single rubric of explanation. The basic assertoric verb focus is established: $[_{\text{FinP}}$ *copy* $[_{\text{TP}}$ verb $]]$. Then, further factors cause the verb, in T, to raise higher: $[_{\text{XP}}$ **verb** $[_{\text{FinP}}$ *copy* $[_{\text{TP}}$ ⟨verb⟩ $]]]$, where, on semantic grounds, X is Force for narrative forms, and Focus otherwise. In all cases, this semantically motivated placement correctly predicts the (im)possibility of occurrence after a sentence-initial topic (possible if and only if X ≠ Force). The copy is maximal and, so, in SpecFinP (Harbour 2002), it is unaffected by head movement through Fin^0. This permits intervention between verb and copy, as in (20a). We have, therefore, arrived at the following:

(21) The order **verb** *copy* diagnoses V-to-C movement in Classical Hebrew

3 Against PersonP

Let us now return to the main theoretical point: is split agreement the consequence of verb movement to a position below a hypothetical PersonP? Given the facts and analysis presented above, the answer is: it is not. Section 3.1 shows that exactly the right conditions hold in the classical language for Shlonsky's phrase structure and Nevins' use of it to apply there. Section 3.2 draws out, and falsifies, the prediction that person prefixes cannot occur on verbs in C, using verb emphasis to diagnose V-to-C movement (21).

3.1 The argument for

For Shlonsky's and Nevins' accounts to apply in Classical Hebrew, we must motivate the functional hierarchy PersonP > TP > NumberP and the idea that different Hebrew verbs move to different positions. With these in place, we claim that the difference between the imperfective, for which person is a prefix, and the perfective, for which it is suffix, fused with number, is that the imperfective stops in TP, whereas the perfective passes through to PersonP.

Shlonsky argues for the two premises by noting two differences between the Modern Hebrew *benoni* (approximately, present participle) and the past and future, reflexes of the classical language's perfective and imperfective. First, the *benoni* agrees less than do the past and future: the latter distinguish person, number and gender; the former, number and gender only. Second, adverb placement shows that the *benoni* does not raise as high as the past and future. Shlonsky ties reduced agreement and reduced movement together by proposing that movement goes only as high as feature specification demands. So, the *benoni*, being specified for number but not person, raises to NumberP but not to PersonP. The past and future, however, are specified for person and so raise higher. Finally, Shlonsky notes a crosslinguistic generalization—that there is number agreement without person agreement, but never person without number—and captures this by placing PersonP higher than NumberP.

We can replicate this argument for the *benoni* and (im)perfective in the classical language. First, only the *benoni* is invariant under changes of person:

(22) **Table 1**
Classical Hebrew Agreement Distinctions

	Perfective	**Imperfective**	***Benoni***
3MS	qaaṭal	yiqṭool	qooṭeel
2MS	qaaṭaltaa	tiqṭool	qooṭeel
1MS	qaaṭaltii	'eqṭool	qooṭeel
3FS	qaaṭlaah	tiqṭool	qooṭeleṯ
2FS	qaaṭalt	tiqṭlii	qooṭeleṯ
1FS	qaaṭaltii	'eqṭool	qooṭeleṯ
3MP	qaaṭluu	yiqṭluu	qooṭliim
2MP	qṭaltem	yiqṭluu	qooṭliim
1MP	qaaṭalnuu	niqṭool	qooṭliim
3FP	qaaṭluu	tiqṭoolnaah	qooṭloṯ
2FP	qṭalten	tiqṭoolnaah	qooṭloṯ
1FP	qaaṭalnuu	niqṭool	qooṭloṯ

Second, the difference in height of landing site can be demonstrated by questions with *benoni* main verbs. These robustly show intervention of the subject (**boldfaced**) between *wh*-word and *benoni* verb (*italics*).

(23) a. w- *laamaah* **yhoowaah** *meeḇii'* 'ooṯaanuu
and-why Lord bring.BNNI us
'el–haa'aareṣ hazzoo'ṯ
to this land
'And wherefore hath the Lord brought us unto this land?'
(Numbers 14:3)

b. *madduu'* **'ḏoonii** *ḇookeh*
why master.1S cry.BNNI
'Why weepeth my lord?' (Kings II 8:12)

c. *maah* **'attem** *noo'aaṣ-* iim
what you.MP advise.BNNI-MP
'What advice give ye?' (Chronicles II 10:9)

Recall, from Section 2.2.2 and following Pesetsky and Torrego (2001), that the *wh*-words in (23) trigger T-to-C movement. If the *benoni* were in T, then T-to-C movement would make it and the *wh*-word adjacent. If, however, the *benoni* is below T, then T-to-C movement does not affect the basic assertoric order (**subject** *benoni*) exemplified below.

(24) a. **daawiḏ** *yooṣee'* liqra'ṯ hap-plištii
David go forth.BNNI against the- Philistine
'[Saul saw] David go forth against the Philistine'
(Samuel I 18:55)

b. w- **a'nii** *kooṯeeḇ* 'al–hasseēper baddyoo
and-I write.BNNI in the book with ink
'I wrote [them] with ink in the book' (Jeremiah 36:18)

These word order facts thus constitute an argument that, as in the modern language, the *benoni* does not raise as high as the perfective and imperfective, that is, to T.[5] They demonstrate, furthermore, that the finite verb is in indeed T, and not lower, as argued in Section 2.1.

So, all the conditions hold in the classical language for the split agreement of the imperfective to be analyzed as the consequence of a trajectory of movement that is shorter than the perfective's: movement to TP, not PersonP (Nevins 2002). To illustrate, consider the second person plural verbs in (1). In the imperfective, we have ('MP' abbreviates masculine plural):

$$[_{\text{PersonP}}\ \mathbf{2}\ [_{\text{TP}}\ \mathbf{verb\text{-}MP}\ [_{\text{NumberP}}\ \langle \text{MP} \rangle\ ]]]$$

When vocabulary insertion takes place, Person and Number are realized as individual pieces of inflection—

$$[_{\text{PersonP}}\ \mathbf{ti}\ [_{\text{TP}}\ \mathbf{zrq\text{-}uu}\ [_{\text{NumberP}}\ \langle \text{MP} \rangle\ ]]]$$

—resulting, straightforwardly, in the linear order *ti-zrq-uu*. By contrast, for the perfective, we posit verb movement to PersonP:

$$[_{\text{PersonP}}\ \mathbf{verb\text{-}MP\text{-}2}\ [_{\text{TP}}\ \langle \text{verb-MP} \rangle\ [_{\text{NumberP}}\ \langle \text{MP} \rangle\ ]]]$$

When vocabulary insertion takes place, Person and Number are realized as a single piece of inflection—

$$[_{\text{PersonP}}\ \mathbf{zraaq\text{-}tem}\ [_{\text{TP}}\ \langle \text{verb-MP} \rangle\ [_{\text{NumberP}}\ \langle \text{MP} \rangle\ ]]]$$

—resulting, straightforwardly, in the linear order *zraaq-tem*.

There are, of course, residual issues: why the *benoni* cannot have a person prefix, whether there are reasons/consequences to the perfective moving higher than the imperfective, and so on. As I shall now argue against the analysis, however, I leave them unanswered.

[5] Given the substantial differences between them, it is extremely interesting that the correlation, reminiscent of Romance, between lack of person agreement and shorter distance of verb movement should hold in both the ancient and the modern languages.

3.2 The argument against

The argument against this analysis, and against PersonP, is now very simple.

First, we can tell from normal cases of verb emphasis, such as (5), that functional hierarchy must be FinP > PersonP: when the verb is imperfective, the order is always *copy* person-**verb**. Second, if the verb moves beyond PersonP, Person^0 will head adjoin to the verb and will no longer be prefixal. These facts, combined, make a simple, and false, prediction: person is never a prefix when the verb has moved to C.

To see that the prediction is false, recall (21) that the order **verb** *copy* diagnoses V-to-C movement. It suffices to observe that **verb** *copy* occurs with prefixal person in (11), (15), (19) and (20), in order to see that the prediction, and so the account, is wrong: positing PersonP does not explain the morphological, or the syntactic, properties of Classical Hebrew verbs.[6]

4 Conclusion

By anchoring person agreement to a particular clausal position, the PersonP Hypothesis permits prefixal person only on verbs below PersonP. Classical Hebrew, exhibiting prefixed verbs demonstrably in C, falsifies the hypothesis. As stated at the outset, PersonP features in analyses of more phenomena than just Hebrew morphosyntax. The foregoing calls researchers who use it to reformulate the hypothesis in ways that avoid the difficulties discussed here, or else to abandon it.

[6] A remnant movement account can avoid this conclusion: suppose PersonP and NumberP are directly above vP and that everything but the verb evacuates vP, moving above PersonP; then vP can move to Number for the order Person−Verb−Number, or to Person for the order Verb−Person+Number; if all further processes attract only PersonP, then these orders will be preserved. Two considerations count against such an account. First, conceptually, the appeal of the PersonP Hypothesis is the tight relation it permits at the syntax-morphology interface. It is easily checked that the variety of verb emphasis sentences above can be derived by remnant movement only if given many unnamed projections and unmotivated movements. Such an account so weakens the view of the syntactic interfaces implicit in the PersonP Hypothesis that it cannot be called on in its defense. Second, empirically, one would, in fact, want subsequent movements to affect the order of Person and Verb, to cope with *and*.ASP (Section 2.2.1). If [$_{\text{TP}}$ Person−Verb−Number] moves to ForceP, then, internally to TP, vP must move to PersonP, to produce the order Verb−Person+Number; and if [$_{\text{TP}}$ Verb−Person+Number] moves to ForceP, the very same movement, which took place earlier in the derivation, must be undone. Such movements would be highly irregular, even by remnant movement standards.

A Appendix: Deriving split agreement

This appendix sketches the analysis of split agreement developed in Harbour (2005) (relying on references therein). It is logically independent of the foregoing argument. Readers may accept one, neither, or both.

In the syntax, φ-features, such as person (π) and number (ω), are unitary and have the hierarchical structure:

$$\begin{array}{c}\varphi\\|\\\pi\\|\\\omega\end{array}$$

My claim is that syntax determines the position of φ-sets and that any splitting arises arises postsyntactically, to iron out imperfect linearization.

The task of the postsyntactic modules is to transform the hierarchical objects that syntax constructs into the linear strings that our articulators pronounce. The most basic steps, the introduction of phonological content (vocabulary items) and the establishing of linear adjacency between exponents of syntactic structure, occur in tandem, beginning at the root and cycling outwards. When a syntactic terminal, X, is targeted for vocabulary insertion in a structure [X [**y**]], it is first made linearly adjacent to **y**, the previously vocabularized/linearized material. This is represented by the removal of the brackets separating X and **y** and the insertion of an arrow:

$$[\mathrm{X}\ [\mathbf{y}]] \ \Rightarrow\ [\mathrm{X}{\rightarrow}\mathbf{y}]$$

Inserting a single vocabulary item, **x**, yields a perfect linear string, **x**→**y**.

Splitting arises when X is syntactically simplex, as are φ-features, but is realized by multiple vocabulary items.

$$\begin{array}{c}[\varphi{\rightarrow}\mathbf{y}]\\|\\\pi\\|\\\omega\end{array} \ \Rightarrow\ \begin{array}{c}[\mathbf{x}{\rightarrow}\mathbf{y}]\\|\\\mathbf{z}\end{array}$$

Read left to right, the string is frayed, not linear. However, it can be satisfactorily linearized as **x**→**y**→**z**, reasoning as follows. The adjacency previously established between the head of the φ-set and **y** must be preserved—the purpose of vocabulary insertion is to establish, not disestablish, linear adjacency between phonological exponents of structurally adjacent syntactic nodes. If **x**→**y** is preserved, only two orders are possible: initial **z** or final **z**. Given, however, that hierarchical dominance (**x**–**z**) translates to linear precedence, only the latter is acceptable, yielding **x**→**y**→**z**.

As a concrete example, consider again (1b). Given vocabulary items [2] ⇔ /ti/ and [P] ⇔ /uu/, we have:

[φ [**zrq**]]	⇒	[φ→**zrq**]	⇒	[**ti**→**zrq**]	⇒	[**ti**→**zrq**→**uu**]
|		|	|		
2		2		**uu**		
|		|			
P		P				

This instance of split agreement contrasts with the simpler singular, where [2] ⇔ /ti/ is the only exponent:

[φ [**zroq**]]	⇒	[φ→**zroq**]	⇒	[**ti**→**zroq**]
|		|	
2		2		
|		|	
S		S		

Note that suffixal φ-sets may split, but do so without straddling the verb. Given vocabulary items [2] ⇔ /te/ and [MP] ⇔ /m/ in (1a), we have:

[[**zraaq**] φ]	⇒	[**zraaq**→φ]	⇒	[**zraaq**→**te**]	⇒	[**zraaq**→**te**→**m**]
|		|	|		
2		2		**m**		
|		|			
P		P				

This shows that, if one analyzes these suffixes as two vocabulary items, then the account yields the correct linear string. (I reject decomposition on comparative/historical grounds, not pertinent here. Clearly, linearization also works without decomposition:

$$[[\textbf{zraaq}]\ \varphi] \Rightarrow [\textbf{zraaq}{\rightarrow}\varphi] \Rightarrow [\textbf{zraaq}{\rightarrow}\textbf{tem}] \qquad)$$

$$\begin{array}{ccc} & & \\ | & & | \\ 2 & & 2 \\ | & & | \\ \text{P} & & \text{P} \end{array}$$

Splits involving gender, such as second person feminine singular *t-...-ii* ([FS] $\Leftrightarrow$ /ii/ in the context of [2]) and second/third person feminine plural *t-...-naa* ([FP] $\Leftrightarrow$ /naa/), are easily accommodable simply by locating gender below person in the φ-structure. One option is to collocate it with number, in which case all details are identical to the preceding cases.

$$\begin{array}{c} \varphi \\ | \\ \pi \\ | \\ \omega\gamma \end{array}$$

So, if syntax orders the whole φ-set with respect to the root, then a preverbal, multiply realized φ-set will yield agreement split across the verb. At the current stage, I must leave unaddressed what the syntax does that places the φ-set before the verb in the imperfective / *and.*ASP-perfective and after it in the perfective / *and.*ASP-imperfective. However, as φ-placement varies substantially crosslinguistically (Julien 2002), this loose end points, not to a deficiency of the proposal just sketched, but to an incomplete understanding of the broader issues.

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