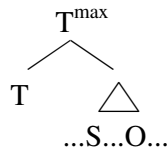


## VSO and Left-Conjunct Agreement *Biblical Hebrew vs. Modern Hebrew*

Edit Doron

VSO word order may on principle be the reflection of very different clause structures. This chapter argues that for many languages where VSO order is attested (Semitic, Celtic, Romance, Greek), it reflects a particular clause structure, which I will call a “VSO clause,” where the subject does not raise out of the c-command domain of the tense head of the clause:



A VSO clause is derived only if T has the following property:

- (i) T does not have the EPP feature.

VSO clauses exhibit the pattern of “left-conjunct agreement” observed in Irish by McCloskey (1986), and in Arabic by Aoun, Benmamoun, and Sportiche (1994), where the verb agrees with the leftmost conjunct of a postverbal conjoined subject, rather than with the full conjoined subject. Example (1) shows left-conjunct agreement in Biblical Hebrew<sup>1</sup>:

- (1) way-yiqqafi šem wa:-yεpεt ?εt-haššimla:  
 and-took.3MS Shem and-Japheth ACC-the.garment  
 ‘And Shem and Japheth took a garment.’ (Genesis 9:23)<sup>2</sup>

This chapter shows that left-conjunct agreement follows from (i) above, and more precisely from the weaker (ii):

- (ii) T does not attract DP.

I assume (following Borer 1986 and Chomsky 1998) that what triggers the attraction of DP to T is the Agree relation between T and DP. Therefore, if T attracts DP, then they must be related by Agree. But if T has property (ii)—i.e., it does not attract DP—then T need not be related by Agree to DP. Rather, I propose that the Agree relation be defined to hold between T and the minimal D constituent closest to T which allows the derivation to converge. In a derivation which requires D to move, the minimal D that does not lead to a violation of the constraints on movement (such as the Coordinate Structure Condition) is the full subject DP. But in a derivation where D is not required to move, the minimal D constituent is a D head. In section 3, I show that in clauses with a conjoined subject, it is the head of the left conjunct that is the D head closest to T.

VSO clauses share property (ii) with another very different type of clause, those with an expletive subject. In this type of clause, T has the EPP feature—i.e., it does not have property (i). The EPP feature of T is satisfied by merging an expletive rather than by attracting the subject; that is, clauses with expletive

subjects have property (ii). Yet both VSO clauses (which also have property (i)) and clauses with expletive subjects (which do not have property (i)) exhibit left-conjunct agreement, which shows that this kind of agreement follows from a property weaker than (i). It will be shown in section 3 that left conjunct agreement follows from property (ii)—i.e., from the lack of DP-raising to T—either because T does not have the EPP feature (property (i)), or because the EPP feature is satisfied by merging an expletive.

Left-conjunct agreement is illustrated below for English, in a clause with an expletive subject, and for Modern Hebrew, in a clause with a null expletive:

- (2) a. In the school there **was** a library and a terminal room.  
 b. ??In the school there **were** a library and a terminal room.

(3) **Modern Hebrew**

- a. hayta li sipriya ve-fiadar mafišebim  
 was.*3FS* DAT.me library.*F* and-room.*M* (of)computers  
 ‘I had a library and a terminal room.’
- b. ??hayu li sipriya ve-fiadar mafišebim  
 were.*3P* DAT.me library.*F* and-room.*M* (of)computers  
 ‘I had a library and a terminal room.’

In general, VSO clauses are not expletive constructions, since they do not show the definiteness effect found in (2) and (3). (1) above, for example, is a VSO clause which is clearly not an expletive construction, since its subject is definite. In addition, not every VSO sequence is a VSO clause. VSO word order is found in Modern Hebrew, but not VSO clauses. First, VSO word order occurs in Modern Hebrew in a null expletive structure such as (3) above. In addition, Modern Hebrew has VSO sequences following any preverbal constituent.<sup>3</sup> But there is no VSO sequence in Modern Hebrew which by itself constitutes a clause. Example (4) below shows that clause initial VSO is ungrammatical in non-expletive constructions, irrespective of the agreement features of the verb. (5) shows that VSO is possible only when some other constituent precedes the verb. The contrast between (5a) and (5b) indicates that left-conjunct agreement is disallowed. These constructions are therefore different in some crucial way from the expletive construction in (3), which allows left-conjunct agreement:

(4) **Modern Hebrew**

- a. \*yiqafi šem ve-yepet ?et-hasimla  
 will-take.*3MS* Shem and-Japheth ACC-the.garment  
 ‘Shem and Japheth will take the garment.’
- b. \*yiqfu šem ve-yepet ?et-hasimla  
 will-take.*3P* Shem and-Japheth ACC-the.garment  
 ‘Shem and Japheth will take the garment.’

- (5) a. \*mafiar yiqafi šem ve-yepet ?et-hasimla  
 tomorrow will-take.*3MS* Shem and-Japheth ACC-the.garment  
 ‘Shem and Japheth will take the garment tomorrow.’

- b. mafar yiqfu šem ve-yepeṭ ʔet-hasimla  
 tomorrow will-take.3P Shem and-Japheth ACC-the.garment  
 ‘Shem and Japheth will take the garment tomorrow.’

Left-conjunct agreement in non-expletive constructions seems to be attested in languages which, like Biblical Hebrew, have VSO clauses:

(6) a. **Standard Arabic**

laʕibat maryam wa- zayd fi l-bayt  
 played.3FS Mariam.F and-Zayd.M in the.house  
 ‘Mariam and Zayd played in the house.’ (Rana Fahoum, p.c.)

b. **Modern Irish**

dá mbeinn -se agus tusa ann  
 if be.COND.IS EMPH and you there  
 ‘if you and I were there’ (McCloskey and Hale 1984: 31a)

c. **Spanish**

Estaba abierta la tienda y el mercado  
 was.3S open.FS the shop.F and the market.M  
 ‘The shop and the market were open.’ (Rodrigo Gutierrez, p.c.)

d. **Greek**

Irthe o Pavlos kai o Giannis sto parti  
 came.3S the Paul and the John to-the party  
 ‘Paul and John came to the party.’ (Anastasia Giannakidou, p.c.)

**1. Word Order in Biblical Hebrew and Modern Hebrew**

The prevalent word order in Biblical Hebrew is verb initial, as shown again in (7) below. In Modern Hebrew, on the other hand, the prevalent word order is SVO, as shown in (8a), whereas verb initial sentences are in general ungrammatical, as shown again in (8b):

(7) **Biblical Hebrew**

V S O  
 hirʔa-ni: yhwh ʔo:tka: mēlek ʕal ʔʳa:m  
 showed-me God ACC.you king over Syria  
 ‘The Lord hath showed me that thou shalt be king over Syria.’  
 (2 Kings 8:13)

(8) **Modern Hebrew**

- S V O  
 a. haseret herʔa-li ʔet-dani menaceafi ba-tafiarut  
 the.movie showed-me ACC-Dani winning in-the.race  
 ‘The movie showed me Dani winning the race.’
- V S O  
 b. \*herʔa-li haseret ʔet-dani menaceafi ba-tafiarut  
 showed-me the.movie ACC-Dani winning in-the.race  
 ‘The movie showed me Dani winning the race.’

SVO is also often attested in Biblical Hebrew. Example (9), exactly as is, is a perfect grammatical sentence of both Modern and Biblical Hebrew:

(9) **Biblical Hebrew**

S	V	O			
u-mo:šɛ:	ha:ya:	roʃɛ:	ʔɛʔ-ʃo:n	yiʔro:	fiotno:
and-Moses	was.	3MS	keeping.MS	ACC-sheep	(of)Jethro father-in-law.his

‘Now Moses kept the flock of Jethro his father-in-law.’ (Exodus 3:1)

In Biblical Hebrew, the only sentences not introduced by an overt complementizer are direct quotations, such as (7) above. Other main clauses are always introduced by the complementizer *w-* ‘and’, also realized phonologically as *u-*, as in (9) above, or as *way-* in (10):<sup>4</sup>

(10)	V	S	O			
	way-yiqqafi	mo:šɛ	ʔɛʔ-maʔte	ha:ʔ <sup>6</sup> lo:hi:m	b <sup>9</sup> -	ya:do:
	and-took.3MS	Moses	ACC-rod	(of)the.God	in-hand.his	

‘And Moses took the rod of God in his hand.’ (Exodus 4:20)

In verb initial sentences such as (10), the complementizer ‘and’ cliticizes to the verb, yet it does not follow that the verb raises to C in Biblical Hebrew. Rather, the complementizer in both (9) and (10) lowers to cliticize to the left edge of the clause, similar to what is argued by Shlonsky (1988) for the Modern Hebrew complementizer *še* ‘that’ and by McCloskey (1996b) for Irish. Indeed, when sentences like (9) and (10) are preceded by adverbial clauses (themselves introduced by complementizers), then the main-clause complementizer *follows* the adverbial clause, as shown in (11a-b). Notice that it should not be inferred from the syntax of the corresponding King James translations that the clause following the adverbial clause is an embedded clause. In Biblical Hebrew, unlike English, a clause with an overt complementizer is possible as a main clause. In fact, the complementizer ‘and’ never introduces an embedded clause (cf. footnote 4):

- (11)a. wa-yhi: l- šibʕaʔ hayya:mi:m **u-** me hammabu:l  
 and-was to-seven the.days **and**-waters (of)the.flood  
 ha:yu: ʃa1 ha:ʔa:reʃ  
 were upon the.earth  
 ‘And it came to pass after seven days, that the waters of the flood were upon the earth.’ (Genesis 7:10)
- b. wa-yhi: miq-qeʃ ya:mi:m **way-**ya:be qayin mip-pri:  
 and-was in-end (of-)days **and**-brought Cain from-fruit  
 ha:ʔ<sup>a</sup>da:ma:  
 (of)the.ground  
 ‘And in process of time it came to pass, that Cain brought of the fruit of the ground.’ (Genesis 4:3)

## 2. Conjoined Subjects in Biblical Hebrew

As noted in the standard grammars of Biblical Hebrew (e.g., Gesenius 1910, Joüon 1923), the verb agrees fully with a conjoined subject in SV clauses, as in (12), but it agrees with the left conjunct in VS clauses, e.g., (13). I list here more examples of left-conjunct agreement simply because it is more exotic:

- (12) u-mo:še: ʔah<sup>a</sup>ro:n w-fiu:r ʕa:lu: ro:š haggiḅʕa:  
and-Moses Aaron and-Hur climbed.**3MP** head (of)the.hill  
'And Moses, Aaron and Hur went up to the top of the hill.'  
(Exodus 17:10)
- (13) a. wat-tašar d<sup>o</sup>bo:ra u:-ba:ra:q bən ʔ<sup>a</sup>bi:no:ʕam  
and-sang.**3FS** Deborah and-Barak son (of)Abinoam  
'Then sang Deborah and Barak the son of Abinoam.' (Judges 5:1)
- b. way-ya:moṭ na:da:b wa-ʔ<sup>a</sup>bi:hu: lipne ʔ<sup>a</sup>bi:həm  
and-died.**3MS** Nadab and-Abihu before father.their  
'But Nadab and Abihu died before their father.' (1 Chronicles 24:2)
- c. u-ba:ta: ʔatta: w-ziqne yišra:ʔel ʔel mēlek  
and-will.come.**2MS** you and-elders (of)Israel to king  
mišrayim wa-ʔ<sup>a</sup>martem ʔela:w  
(of)Egypt and-will.say.**2MP** to.him  
'And thou shall come, thou and the elders of Israel, unto the king of  
Egypt, and ye shall say unto him...' (Exodus 3:18)
- d. way-yiqafi ʔabra:m w<sup>o</sup>-na:ʕio:r la:həm na:ši:m  
and-took.**3MS** Abram and-Nahor DAT.themselves wives  
'And Abram and Nahor took them wives.' (Genesis 11:29)
- e. wat-ta:qa:m ribqa: w<sup>o</sup>-naʕ<sup>a</sup>ro:teyha wat-tirkabna: ʕal  
and-rose.**3FS** Rebecca and-maids.her and-rode.**3FP** on  
hagg<sup>o</sup>malli:m  
the.camels  
'And Rebeka arose, and her damsels, and they rode upon the camels.'  
(Genesis 24:6 1)
- f. wat-taʕan ra:ʕiel w<sup>o</sup>-leʔa: wat-to:marna: lo:  
and-answered.**3FS** Rachel and-Leah and-said.**3FP** to.him  
ha-ʕo:d la:nu: ʕeləq w<sup>o</sup>-naʕla: b-ḅet ʔa:bi:nu:  
Q-yet to.us portion and-inheritance in-house (of)father.our  
'And Rachel and Leah answered and said unto him, Is there yet any  
portion or inheritance for us in our father's house?' (Genesis 31:14)
- g. way-yišša: da:wid w<sup>o</sup>-ha:ʕa:m ʔ<sup>a</sup>šer ʔitto:  
and-lifted.**3MS** David and-the.people that with.him  
ʔet-qo:la:m way-yibku:  
ACC-voice.their and-wept.**3MP**  
'Then David and the people that were with him lifted up their voice and  
wept.' (1 Samuel 30:4)

In the examples in (13), the form of the verb is singular, yet the subject is clearly plural. It is implausible to analyze these examples as containing a singular subject combined with a comitative phrase, though this is the interpretation often offered by traditional interpreters of the Bible, such as Rashi (Rabbi Shlomo Yitzhaki, 1040—1105), and traditional translations such as the King James Bible (see in particular the translation of 13c and 13e).<sup>5</sup> (13d), for example, contains a plural reflexive dative bound by the subject. (13g) contains the idiom ‘X lifted up X’s voice’ which is obligatorily reflexive: There is no lifting up anybody’s voice but one’s own. But this entails, since X is marked as plural in the second part of the idiom, that the subject is plural as well. The examples in (13) are, therefore, examples with plural subjects.

The contrast between full agreement of the preverbal subject and partial agreement of the postverbal subject is also found in the other languages with left-conjunct agreement. Postverbal left-conjunct agreement, as in the (a) sentences below, alternates with full preverbal agreement, in the (b) sentences:

(14) **Standard Arabic**

- a. laʕibat maryam wa-zayd fi l-bayt  
 played.*3FS* Mariam.*F* and-Zayd.*M* in the.house  
 ‘Mariam and Zayd played in the house.’
- b. maryam wa-zayd laʕiba:/\* laʕiba/\*laʕibat fi l-bayt  
 Mariam and Zayd played.*3MDUAL/\**.*3MS* /\*.*3FS* in the.house  
 ‘Mariam and Zayd played in the house.’

(15) **Spanish**

- a. Estaba abierta la tienda y el mercado  
 was.*3S* open.*FS* the shop.*F* and the market.*M*  
 ‘The shop and the market were open.’
- b. La tienda y el mercado estaban abiertos/\*estaba abierto/abierta  
 the shop and the market were.*3P* open.*MP*/\*was.*3S* open\**FM* /\**FS*  
 ‘The shop and the market were open.’

(16) **Greek**

- a. Irthe o Pavlos kai o Giannis sto parti  
 came.*3S* the Paul and the John to-the party  
 ‘Paul and John came to the party.’
- b. O Pavlos kai o Giannis irthan/\*irthe sto parti  
 the Paul and the John came.*3MP*/\*came.*3S* to-the party  
 ‘Paul and John came to the party.’

### 3. V-Raising and Left-Conjunct Agreement in VSO Clauses

First, we must establish that VSO word order in Hebrew is indeed a case of V-raising, similar to Irish (Chung and McCloskey 1987, McCloskey 1991, 1996a,

1996b, Koopman and Sportiche 1991, Duffield 1991, 1995, Guilfoyle 1993, Bobaljik and Carnie 1996) and Arabic (Mohammed 1990, Benmamoun 1992, and Fassi Fehri 1993), and unlike other types of VSO languages such as Chamorro (Chung 1990), where the subject lowers to VP rather than V raising.

It has already been argued extensively that the verb in Modern Hebrew raises out of the VP.<sup>6</sup> First, there is evidence (Shlonsky 1987) that the verb can precede sentential adverbs, like *bevaday* ‘certainly’:

(17) **Modern Hebrew**

a. hamore bevaday yasbir ?et-hašifur  
 the.teacher certainly will.explain ACC-the.lesson  
 ‘The teacher will certainly explain the lesson.’

b. hamore yasbir bevaday ?et-hašifur  
 the.teacher will.explain certainly ACC-the.lesson  
 ‘The teacher will certainly explain the lesson.’

Second, there is evidence (Shlonsky 1991) that quantifiers are floated from a postverbal position:

(18) hayeladim hebinu kulam ?et-hašifur  
 the.children understood all.3MP ACC-the.lesson  
 ‘The children have all understood the lesson.’

Third, VP-ellipsis strands the verb (Doron 1990, 1999), which shows that the verb has raised out of the VP. The second reading available for (19) shows that VP-ellipsis has applied, stranding the verb in T:

(19) ?im mišehu yedaber šal abodato, gam dani yedaber  
 if someone will.speak about work.his, also Dani will.speak  
 a. ‘If someone will speak about his work, Dani will speak too.’  
 b. ‘If someone will speak about his work, Dani will too.’

In Biblical Hebrew, it is possible to show that the verb may be found to the left of sentential adverbs, which indicates that it raises out of VP:

(20) **Biblical Hebrew**

we-lo: yiqqa:re: **ʔo:d** ?et-šimka: ?abra:m  
 and-NEG will.be.called **any more** ACC-name.yours Abram  
 ‘Neither shall thy name any more be called Abram.’ (Genesis 17:5)

In addition, at least for the absolute form (ABS), the verb can be shown to raise out of VP, since ABS precedes not only T (i.e., the tensed form of the verb), but negation (NEG) as well, as mentioned by Levin (1971)<sup>7</sup>:

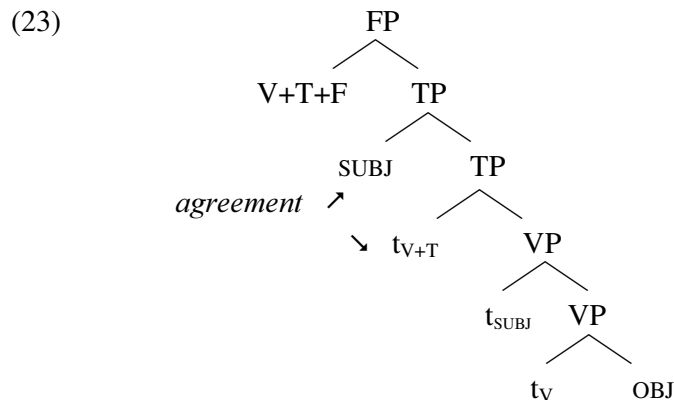
(21)a. ra:ʔo: ra:ʔi:ti ?et - ʔoni: šammi: ʔašer b<sup>o</sup>-mišra:yim  
 see.ABS saw.*IS* ACC-affliction (of)people.my that in-Egypt  
 ‘I have surely seen the affliction of my people which are in Egypt.’  
 (Exodus 3:7)

b. ba:ko: lo tibke:  
 cry.ABS NEG will.cry.2MS  
 ‘Thou shalt weep no more.’ (Isaiah 30:19)

The original position of ABS is within VP, as can be seen in untensed clauses. The order ABS -T observed in (21) is not found in imperative clauses, which are untensed. Rather, the order found in imperative clauses is T- ABS, as in (22):

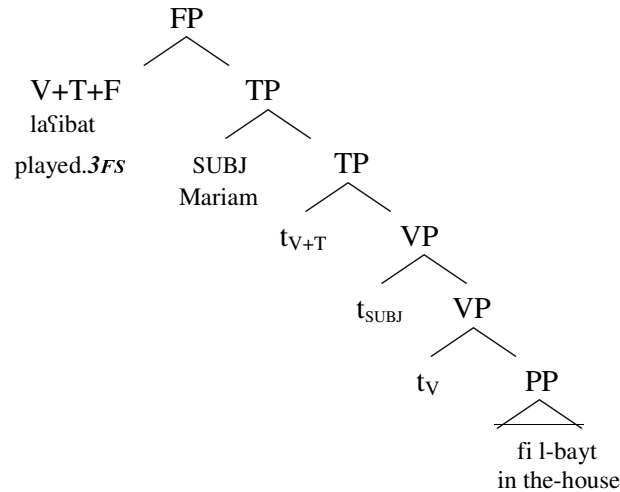
(22) simfu: šamo:ša w-ʔal ta:bi:nu:  
 hear.IMP.MP hear.ABS and-NEG will.understand.2MP  
 u-rʔu: ra:ʔo: w-ʔal teḏa:ʔu:  
 and see.IMP.MP see.ABS and-NEG will.know.2MP  
 ‘Hear ye indeed, but understand not; and see ye indeed, but perceive not.’  
 (Isaiah 6:9)

I will therefore assume that V raises in tensed clauses in Biblical Hebrew, and I will attempt to answer the question posed as a consequence: How far does V raise in a VSO clause? The answer that Aoun, Benmamoun and Sportiche (1994) have given for Arabic is that V raises to functional head F *beyond* T. F is lower than C, since VSO order is possible in embedded clauses introduced by an overt C. The motivation for Aoun, Benmamoun, and Sportiche’s answer is theory internal: Subject-verb agreement, according to them, is a relation which holds between T, the head of the clause, and its specifier, as shown in (23) and, exemplified in (24). Therefore, the subject must be in the specifier of TP even when the verb precedes it. Accordingly, the verb must have raised to a functional head F higher than T in a VSO clause:



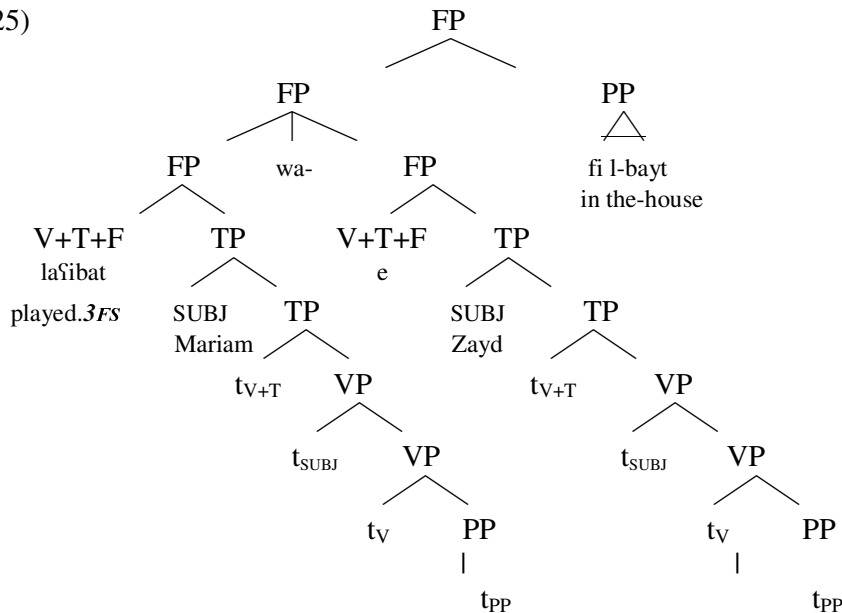


(24)



Yet if agreement is a relation which invariably holds between T and its specifier, then there is no structural difference between examples with left-conjunct agreement, such as (14a), and examples with full agreement, such as (14b). Indeed, Aoun, Benmamoun, and Sportiche deny the existence of left-conjunct agreement, and argue that such examples involve sentence conjunction where ellipsis of the verb and Right Node Raising have also taken place:

(25)



In (25), the second occurrence of the verb 'play' is ellided, whereas the PP 'in the house' is Right Node Raised (RNR). Yet this account is problematic even for Arabic. It predicts that the RNR constituent should show singular agreement, since this constituent supposedly originates from two singular clauses. This prediction cannot be tested with an RNR constituent such as 'in the house' in (25), which does not exhibit agreement. Yet in examples where the RNR constituent is a predicate with overt agreement, this prediction is systematically falsified. In (26), for example, the RNR constituent *yalʃaba:ni fi l-bayt* 'play.3MD in the

house’ is obligatorily marked as dual (*D*), but if it were raised from two singular clauses, it should be marked as singular:

(26) **Standard Arabic**

ka:nat maryam wa-zayd yalʕaba:ni fi l-bayt  
 was.*3FS* Mariam and-Zayd play.*3MD* in the.house  
 ‘Mariam and Zayd used to play in the house.’ (Rana Fahoum, p.c.)

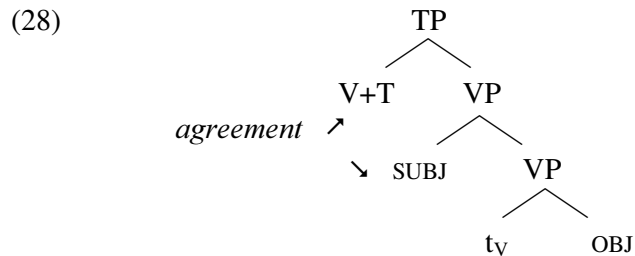
Aoun and Benmamoun (1999) deny the existence of this problem by showing that it is not attested in either Lebanese or Moroccan Arabic. Yet this problem arises for Standard Arabic, as (26) shows, and moreover, it is also found in Irish and Biblical Hebrew. The relevant example from Irish is shown in (27), where the constituent which is Right Node Raised from two singular clauses (according to Aoun, Benmamoun, and Sportiche), *‘nár suí*, is nevertheless plural:

(27) **Irish**

Bhínn féin agus an seandúine ‘nár suí.  
 was.*IS* EMPH and the old-fellow *IP* sitVN  
 ‘The old fellow and I used to be sitting.’ (McCloskey 1986:ex. 37)

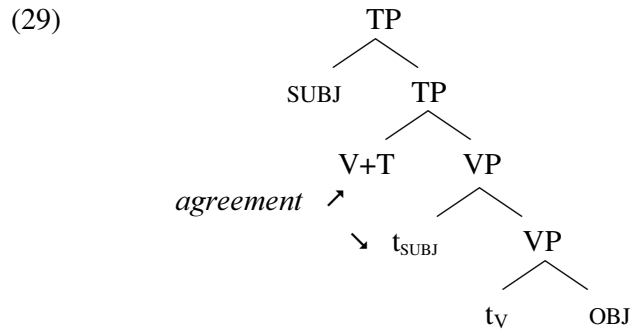
In Biblical Hebrew as well, the putatively RNR constituents contain plural anaphors—e.g., *lahem* ‘for themselves’ in (13d), and *qolam* ‘their voices’ in (13g), which is an anaphoric part of the expression ‘raise their voices’. The plurality of these anaphors would be completely unexpected if they originated from singular clauses.

Since the only argument in Aoun, Benmamoun, and Sportiche for raising V beyond T is to afford a unified account of agreement, and since this attempt is not successful, we are left with no reason to assume that V raises beyond T in VSO structures. Indeed, in McCloskey (1986, 1996a, 1996b), it is argued with respect to Irish that the verb does *not* raise beyond T. Rather, the verb is in T, while the subject is in a specifier of a head lower than T. For simplicity’s sake, I assume that this lower head is V, though it is argued in Bobaljik and Carnie (1996) and McCloskey (1996b) that this head is actually a functional head below T and above temporal adverbs which follow the verb. Agreement in Irish holds between T and the lower subject, as shown in (28):



Something needs to be said about how the structure in (28) satisfies the EPP.<sup>8</sup> According to Chomsky (1995), the EPP is satisfied by covert raising of the features of the subject to T. Chomsky (1998) argues against covert feature movement, and moreover proposes to view the EPP as a feature not just of T but of functional heads in general. This feature is not necessarily a lexical property of functional heads, but can be added independently into the derivation. I propose

that in a strictly VSO language such as Irish, T is not compatible with the EPP feature, neither as part of its lexical specification nor as an addition by the derivation. In Biblical Hebrew, Arabic, Romance, and Greek, on the other hand, an EPP feature may be added to T in some derivations, though it is not part of the lexical specification of T. Accordingly, in these languages, a VSO structure such as (28) is derived with a numeration which does not include the EPP feature. An SVO structure such as (29) is the outcome of a different derivation, one which includes an EPP feature but no expletive:

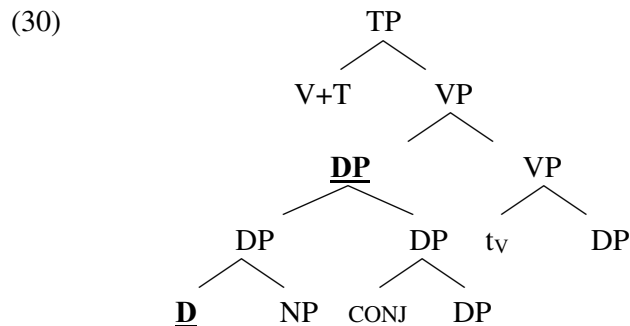


The two derivations in (28) and (29) have different agreement patterns, based on the same operation Agree:

*The operation AGREE (adapted from Chomsky 1998)<sup>9</sup>*

- (a) The relation AGREE holds between the  $\phi$ -features of T and the  $\phi$ -features of D which is closest to T (in terms of c-command) in T's domain (all the nodes dominated by its sister).
- (b) The values of  $\phi$ -features are copied to T from the D related to it by AGREE.
- (c) If T has an EPP feature, D is raised to T.

In (30), if T has an EPP feature not satisfied by the pure merging of an expletive, it enters into the AGREE relation with the highlighted DP, since this is the DP closest to T, and since this is the minimal constituent within the closest DP that may move without violating the constraints on movement:



Yet, if T in (30) does not have an EPP feature (or if the EPP feature can be satisfied by a pure merging of an expletive), no movement is forced, and the AGREE relation holds with the closest D head, which is the boldfaced D in (30). Crucially, I assume the asymmetric structure of coordinate structures argued for by Larson (1990). where conjunctions head coordinate structures. I also assume



- b. ?et-haseper samu d<sup>o</sup>vora ve baraq a1 hamadap  
 ACC-the.book put.3P Deborah and Barak on the.shelf  
 ‘Deborah and Barak put the book on the shelf.’

The lack of left-conjunct agreement in Modern Hebrew is puzzling in view of the fact that it exists in Biblical Hebrew. This leads us to suspect that the structure in (31b) cannot be the right structure for OVS sentences in Modern Hebrew. I claim that neither is it the right structure for Biblical Hebrew.

Despite the grammar-book generalization concerning Biblical Hebrew left conjunct agreement, there *are* conjoined postverbal subjects in Biblical Hebrew where full agreement is attested:

(33) **Biblical Hebrew**

w<sup>o</sup>-hanno:t<sub>er</sub>et mimmenna: yo:klu:  
 and-the remainder from.it will.eat.3MP  
 ?ah<sup>a</sup>ro:n u-ba:na:w  
 Aaron and- sons.his  
 ‘And the remainder thereof shall Aaron and his sons eat.’

(Leviticus 6:9/16)

- (34) way-yhi: ?afar hadd<sup>o</sup>bari:m ha:ʔelle: fia:tʔu:  
 and-was after things these offended.3MP  
 mašqe melek mišra:yim w<sup>o</sup>-ha:ʔo:p<sub>e</sub>: la-ʔ<sup>a</sup>do:nehem  
 butler (of)king (of)Egypt and-the.baker to-lord.their  
 l-melek mišra:yim  
 to-king (of)Egypt

‘And it came to pass after these things, that the butler of the king of Egypt and his baker had offended their lord the king of Egypt.’ (Genesis 40:1)

- (35) w<sup>o</sup>-ta:p<sub>su</sub>: bo: ?a:bi:w w<sup>o</sup>-ʔimmo:  
 and-will.hold.3MP at.him father.his and-mother.his  
 ‘Then shall his father and his mother lay hold on him.’

(Deuteronomy 21:19)

Full agreement is specially puzzling in examples such as (36a), since in the same chapter, three verses earlier, the same postverbal subject *does* trigger left-conjunct agreement, as shown in (36b):

- (36)a. way-yerdu: ?ela:w melek yišra:ʔel w-i:ho:ša:pa:t  
 and-descended.3MP to.him king (of)Israel and-Jehoshaphat  
 u- melek ʔ<sup>e</sup>do:m  
 and-king (of)Edom  
 ‘So the king of Israel and Jehoshaphat and the king of Edom went down to him.’ (2 Kings 3:12)

- b. way-yelek melek yišra:ʔel u-melek y<sup>a</sup>hu:da: u- melek ʔ<sup>e</sup>do:m  
 and-went.3MS king (of)Israel and-king (of)Judah and-king (of)Edom  
 way-ya:so:bbu: derek šibʕat ya:mi:m  
 and-circled.3MP road seven days  
 ‘So the king of Israel went, and the king of Judah, and the king of Edom;

and they fetched a compass of seven days' journey.' (2 Kings 3:9)

We must ask whether there is a structural difference between sentences with full agreement and sentences with left-conjunct agreement. The answer is provided by Moreshet (1967). In a comprehensive study of the complete prose of the Bible (excluding poetry), Moreshet found 235 sentences with a conjoined postverbal subject. In 210 of these sentences, agreement is with the left conjunct, whereas in 25 examples the verb fully agrees with the conjoined postverbal subject. Moreshet was able to discover a descriptive generalization which captures the distribution of full versus left-conjunct agreement. His generalization constitutes a necessary condition for full agreement:

THE MORESHET GENERALIZATION (adapted from Moreshet 1967)

The verb in Biblical Hebrew agrees with the leftmost conjunct of a postverbal conjoined subject, unless either (I) or (II) hold:

(I) The verb is preceded in the clause by some constituent.

(II) A clitic is attached to the verb.

Examples (33) and (34) above fall under clause (I) of this generalization, whereas (35) and (36a) fall under clause (II).<sup>10</sup> The problem is that the two clauses of the Moreshet Generalization do not seem to constitute a natural class of syntactic environments.

Fortunately, the analysis proposed for clitics in Semitic by Doron (1996) and Doron and Heycock (1999) makes it possible to subsume condition (II) of the Moreshet Generalization under condition (I). According to this analysis, clitics may be viewed as anaphors bound by preverbal constituents, as in (37):

(37) kol habben hayyilo:d hayʔo:r-a: tašli:ku:-**hu:**  
every son born the.river-ALLAT you.will.throw-**him**  
'Every son that is born ye shall cast into the river.' (Exodus 1:22)

(37) is not an example of left-dislocation, as the constituent binding the clitic is the quantifier *kol habben hayyilo:d* 'every son that is born'. Quantifiers with 'every' do not undergo left-dislocation.

Crucially, the constituent binding the clitic is possibly empty, if previously mentioned in the discourse. This is clearly the case in (36a), for example, where the object clitic refers to the prophet Elisha, mentioned earlier in the text. The same is true for (35), where there is previous mention of a rebellious son, to which the clitic is anaphoric. These clitics may therefore be analyzed as bound by a preverbal constituent, just as in (37). The only difference is that the preverbal constituent is overt in (37), but it is null in (35) and (36a). Condition (II) therefore does not characterize any examples that do not already fall under (I). The two necessary conditions can be collapsed to a single one, which coincides with condition (I):

THE MORESHET GENERALIZATION (revised)

The verb in Biblical Hebrew agrees with the leftmost conjunct of a postverbal conjoined subject, unless the verb is preceded in the clause by some constituent.

The reformulation of the Moreshet Generalization is an improvement over the original formulation for yet another reason. It now accounts as well for cases where the anaphoric element which licenses full agreement is not a clitic attached to the verb, but some other anaphor. An example is shown in (38), where the anaphor is part of the conjoined subject itself (additional examples are Exodus 29:15, Leviticus 8:19,22, Numbers 20:10):

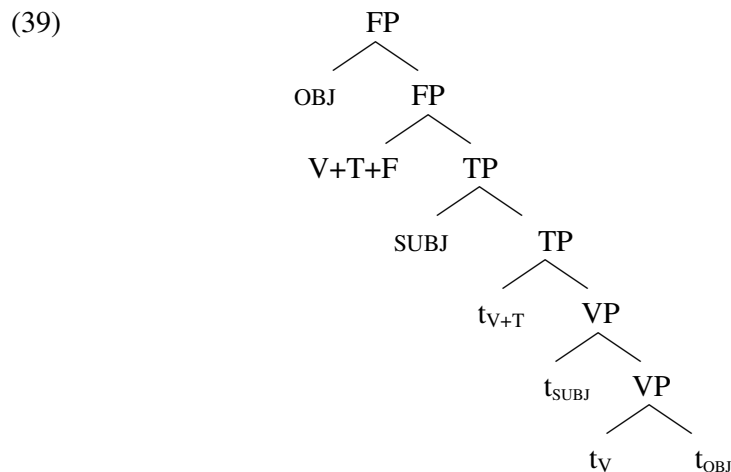
- (38) way-yo:klu: way-yištu: hu: w-ha:ʔ<sup>a</sup>na: ši:m ʔ<sup>av</sup>šer ʔimmo:  
 and-ate.3MP and-drunk.3MP he and-the.men that with.him  
 ‘And they did eat and drink, he and the men that were with him.’  
 (Genesis 24:54)

The Moreshet Generalization in conjunction with our previous discussion provides a necessary condition for the raising of the verb beyond T. According to the conclusions of section 4, full agreement is the result of the subject raising to specifier of TP. Accordingly, if in a full-agreement structure the subject is found following the verb, then it must be that the verb has raised beyond T. The Moreshet Generalization states a condition on such a movement very similar to the condition on V-raising beyond T known from the discussion of Germanic languages (den Besten 1983, Platzak 1986a, and many others). This condition can be formulated as a V2 condition on V-raising beyond T:

THE V2 CONDITION

The verb in Biblical Hebrew does not raise beyond T unless preceded by some constituent.

In other words, the raising of V to a functional projection F beyond T is possible only if some constituent—e.g., the object—occupies the specifier position of TP:<sup>11</sup>



Descriptively, as we have seen, Modern Hebrew differs from Biblical Hebrew in two relevant respects:

- (i) The verb is always preceded by some constituent, not necessarily the subject.

- (ii) There is no left-conjunct agreement when the subject follows the verb, other than in expletive constructions.

The difference may be reduced to a single factor if we simply assume that in Modern Hebrew, T has the EPP feature as a lexical property. This is why in Modern Hebrew, unlike Biblical Hebrew, there is always some constituent preceding the verb, and there is no left-conjunct agreement. Even where the object precedes the verb, the subject is in the specifier of TP and therefore triggers full agreement. Indeed, (39) is the structure proposed by Shlonsky and Doron (1992) for Modern Hebrew OVS sentences. In that chapter, independent evidence was presented in favor of (39) over (31b) as the structure for OVS sentences in Modern Hebrew. The distribution of left-conjunct agreement in Biblical Hebrew coupled with the lack of left-conjunct agreement in Modern Hebrew, is an additional argument to the same effect. The structure of Modern Hebrew SVO sentences, on the other hand, is argued by Shlonsky and Doron (1992) to be as in (29), the structure proposed here for Biblical Hebrew SVO sentences as well. A similar asymmetry between the position of a preverbal subject and a preverbal object is argued for in Germanic by Zwart (1993a).

Adopting the framework of Chomsky (1998) has made it possible to account for the different distribution of the EPP feature in the different languages. T in Modern Hebrew is assigned the EPP feature lexically (as in English). In Biblical Hebrew, it is not, but T may be enriched with an EPP feature as part of some derivations but not of others (the same is true of Arabic, Greek, and Romance). In Irish, in contrast, T is incompatible with the EPP feature, which cannot be added to it either lexically or by the derivation.

### Notes

1. All the Biblical Hebrew translations are from the King James Bible (1611), which is generally more literal than the other translations.
2. I am very grateful to Shraga Assif for the phonetic transcription of the Biblical Hebrew data.
3. The preverbal constituent may be null even when it is not expletive, as is generally assumed for “narrative inversion” and for “all-focus sentences,” e.g.:
 

(i) **Modern Hebrew**  
 hitqašer ʔaba šelka  
 called father yours  
 ‘Your father called.’
4. The main clause complementizer ‘and’ has an important role for text cohesion (for recent discussion see de Caen 1995 and Hatav 1997). It is in complementary distribution with other complementizers—e.g., *ki*:





Japanese by Doron and Heycock (1999). For a very different view of the EPP in VSO languages, see Massam (2000).

9. Chomsky's definition also includes an additional clause regarding the erasure of the non-interpretable  $\phi$ -features of an agreeing T.
10. There exist a couple of apparent counterexamples to this generalization, yet it seems that even those can be explained away:

(i) wa-ykah<sup>a</sup>nu:   ʔɛlʕa:za:r   w<sup>o</sup>-ʔi:ta:ma:r  
 and-served.3MP   Eleazar   and-Ithamar  
 'Eleazar and Ithamar executed the priest's office.'  
 (1 Chronicles 24:2)

The verb in (i) shows full agreement to the postverbal subject, yet neither does it contain an object clitic, nor is it preceded by any constituent. But notice that (i) appears in the context of a detailed list of all the temple officials in King David's administration, at the point where the divisions of high priests, the descendents of Aaron, are listed:

(ii) w<sup>o</sup>-li-bne   ʔah<sup>a</sup>ro:n   mafilqo:ta:m   bne ʔah<sup>a</sup>ro:n   na:da:b  
 and-to-sons (of)Aaron divisions.their   sons (of)Aaron Nadab

wa-ʔ<sup>a</sup>bi:hu:   ʔɛlʕa:za:r   w<sup>o</sup>-ʔi:ta:ma:r  
 and-Abihu   Eleazar   and-Ithamar

way-ya:mot   na:da:b   wa-ʔ<sup>a</sup>bi:hu:   lipne ʔ<sup>a</sup>bi:həm   u-ba:ni:m  
 and-died.3MS Nadab   and-Abihu   before father.their   and-sons

lo: ha:yu: la:həm   wa-ykah<sup>a</sup>nu:   ʔɛlʕa:za:r   w<sup>o</sup>-ʔi:ta:ma:r  
 NEG were   to.them and-served.3MP   Eleazar   and-Ithamar

'Now these are the divisions of the sons of Aaron. The sons of Aaron; Nadab and Abihu, Eleazar and Ithamar. But Nadab and Abihu died before their father, and had no children: therefore Eleazar and Ithamar executed the priest's office.'

(1 Chronicles 24: 1-2)

The passage in (ii) is an explanation for why there are only two divisions of high priests listed, not four, in spite of the fact that Aaron, the forefather of all high priests, had had four sons (about two centuries prior to David's time). The clause in (i), which is the last clause in (ii), is therefore probably not conjoined to the preceding clause, but rather contains it as an adverbial clause: 'Because Nadab and Abihu had died leaving no children while Aaron was still in office, only Eleazar and Ithamar succeeded him as high priests.' If this is so, then (i) does after all fall under the Moreshet Generalization.

11. In Arabic, Spanish, and Greek, left-conjunct agreement is optional, which may indicate that in those languages, T-raising to F is independent of the fronting of a constituent to the specifier of FP.

### References

- Abraham, Werner (ed.)  
1983 *On the Formal Syntax of Westgermania*. Amsterdam: John Benjamins.
- Adger, David, S. Pintzuk, B. Plunkett and G. Tsoulas (eds.)  
1999 *Specifiers: Minimalist Approaches*. Oxford: Oxford University Press.
- Alexiadou, Artemis and Elena Anagnostopoulou  
1998 "Parametrizing AGR: word order, V-movement and EPP-checking", *Natural Language and Linguistic Theory* 16.3: 491-539.
- Aoun, Joshep and Elabbas Benmamoun  
1999 "Gapping, PF merger and patterns of partial agreement", in: Elabbas Benmamoun and Shalom Lappin (eds.), 175-192.
- Aoun, Joshep, Elabbas Benmamoun and Dominique Sportiche  
1994 "Agreement, word order and conjunction in some varieties of Arabic", *Linguistic Inquiry* 25: 195-220.
- Benmamoun, Elabbas  
1992 "Structural conditions on agreement", *Proceedings of NELS 22*: 17-32.
- Benmamoun, Elabbas and Shalom Lappin (eds.)  
1999 *Fragments: Studies in Ellipsis and Gapping*. Oxford: Oxford University Press.
- den Besten, Hans  
1983 "On the interaction of root transformations and lexical deletive rules", in: Werner Abraham (ed.), 47-131.
- Bobaljik, Jonathan D. and Andrew Carnie  
1996 "A minimalist approach to some problems in Irish word order" in: Robert Borsley and Ian Roberts (eds.).
- Borer, Hagit  
1986 "I-subjects", *Linguistic Inquiry* 17: 375-416.
- Borer, Hagit  
1995 "The ups and downs of Hebrew verb movement", *Natural Language and Linguistic Theory* 13.3: 527-606.
- Borsley, Robert and Ian Roberts (eds.)  
1996 *The Syntax of the Celtic Languages*. Cambridge: Cambridge University Press
- Carnie, Andrew and Eithne Guiloye (eds.)  
2000 *The Syntax of Verb Initial Languages*. Oxford: Oxford University Press.
- Chomsky, Noam  
1995 *The Minimalist Program*. Cambridge, Mass: MIT Press.
- Chomsky, Noam

- 1998 "Minimalist inquiries: the framework" *MIT Occasional Papers in Linguistics* 15.
- Chung, Sandra  
1990 "VPs and verb movement in Chamorro", *Natural Language and Linguistic Theory* 8: 559-620.
- Chung, Sandra and James McCloskey  
1987 "Government, barriers and small-clauses in Modern Irish", *Linguistic Inquiry* 18: 173-237.
- Cinque, Guglielmo and G. Giusti (eds.)  
1995 *Advances in Roumanian Linguistics*. Amsterdam: John Benjamins.
- DeCaen, Vincent  
1995 On the Placement and Interpretation of the Verb in Standard Biblical Hebrew Prose. [Ph.D. dissertation, University of Toronto.]
- Doron, Edit  
1990 VP-ellipsis in Hebrew. [MS., The Hebrew University of Jerusalem.]
- Doron, Edit  
1996 "The Predicate in Arabic", in: Jacqueline Lecarme, Jean Lowenstamm and Ur Shlonsky (eds.), 77-87.
- Doron, Edit  
1999 "V-movement and VP-ellipsis", in: Elabbas Benmamoun and Shalom Lappin (eds.), 124-140.
- Doron, Edit  
2000 "Word order in Hebrew", in: Jacqueline Lecarme, Jean Lowenstamm and Ur Shlonsky (eds.), 41-56.
- Doron, Edit and Caroline Heycock  
1999 "Filling and licensing multiple specifiers", in: David Adger, S. Pintzuk, B. Plunkett and G. Tsoulas (eds.), 69-89.
- Duffield, Nigel  
1991 Particles and Projections. [Ph.D. Dissertation, USC.]
- Duffield, Nigel  
1995 *Particles and Projections*. Dordrecht: Kluwer.
- Eid, Mushira (ed.)  
1990 *Perspectives on Arabic Linguistics I*. Amsterdam: John Benjamins.
- Fassi Fehri, Abdelkader  
1993 *Issues in the Structure of Arabic Clauses and Words*. Dordrecht: Kluwer.
- Farkaş, Donca and Draga Zec  
1995 "Agreement and pronominal reference", in: Guglielmo Cinque and G. Giusti (eds.).
- Gesenius, Friedrich H. W.  
1910 *Hebrew Grammar*. Edited and enlarged by E. Kautzsch, second English edition revised by A.E. Cowley. Oxford: Clarendon Press.
- Guilfoyle, Eithne

- 1993 "Nonfinite clauses in Modern Irish and Old English",  
*Proceedings of the 29<sup>th</sup> Regional Meeting of the Chicago Linguistic Society*, 199-214.
- Hatav, Galia  
1997 *The Semantics of Aspect and Modality; Evidence from English and Biblical Hebrew*. Amsterdam: John Benjamins.
- Joiion, Paul  
1923 *Grammaire de l'Hébreu Biblique*. Rome : Institut Biblique Pontifical.
- Koopman, Hilda and Dominique Sportiche  
1991 "On the position of subjects", *Lingua* 85: 211-258.
- Larson, Richard  
1990 "Double objects revisited: reply to Jackendoff", *Linguistic Inquiry* 21: 589-593.
- Lecarme, Jacqueline, Jean Lowenstamm and Ur Shlonsky (eds.)  
1996 *Studies in Afroasiatic Grammar*. The Hague: Holland Academic Graphics.
- Lecarme, Jacqueline, Jean Lowenstamm and Ur Shlonsky (eds.)  
2000 *Research in Afroasiatic Grammar*. Amsterdam: John Benjamins.
- Levin, Saul  
1971 *The Indo-European Languages*. Albany, NY: SUNY University Press.
- Massam, Diane  
2000 "VSO and VOS: Aspects of Niuean word order", in: Andrew Carnie and Eithne Guiloye (eds.) , 97-116.
- McCloskey, James  
1986 "Inflection and conjunction in Modern Irish", *Natural Language and Linguistic Theory* 4: 245-281.
- McCloskey, James  
1991 "Clause structure, ellipsis and proper government in Irish",  
*Lingua* 85: 259-302.
- McCloskey, James  
1996a "Subjects and subject positions", in: Robert Borsley and Ian Roberts (eds.).
- McCloskey, James  
1996b "On the scope of verb movement in Irish", *Natural Language and Linguistic Theory* 14: 47-104.
- McCloskey, James and Kenneth Hale  
1984 "On the syntax of person-number inflection in Modern Irish",  
*Natural Language and Linguistic Theory* 4: 487-533.
- Mohammad, Mohammad  
1990 "The problem of subject-verb agreement in Arabic: towards a solution", in: Mushira Eid (ed.).
- Moreshet, Menachem  
1967 "hanasu hakodem lishney nos'im bilshon hamikra", *Leshonenu* 31: 1-10.
- Platzak, Christer  
1983 "Germanic word order and the Comp/ Infl parameter", *Working Papers in Scandinavian Syntax* 2. Trondheim.
- Shlonsky, Ur

- 1987 Null and Displaced Subjects. [Ph.D. Dissertation, MIT.]
- Shlonsky, Ur  
1988 “Complementizer cliticization in Hebrew and the Empty Category Principle”, *Natural Language and Linguistic Theory* 6: 191-205.
- Shlonsky, Ur  
1991 “Quantifiers as functional heads: a study of quantifier float in Hebrew”, *Lingua* 84: 159-180.
- Shlonsky, Ur and Edit Doron  
1992 “Verb-second in Hebrew”, *Proceedings of WCCFL* 10: 431-446.
- Zwart, Jan Wouter  
1993 *Dutch Syntax: A Minimalist Approach*. Groningen Dissertations in Linguistics 10.