Generalizing Asymmetric Coordination with Anaphoric Pronoun
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<S2> I am pursuing a programme in Biblical Hebrew syntax that was outlined by Professor Naudé in his 1990 paper “A Syntactic Analysis of Certain Dislocations in Biblical Hebrew”. His programme has three steps.

<S3> First, employ generative grammar. In the nineties, the major school of research was called Government and Binding Theory or GB, and this is what I employed in my doctoral studies. Today, we have advanced to the Minimalist Programme, or Minimalism.

<S4> Second, develop a generative analysis of topicalization, sometimes referred to as the “fronting” of a major constituent, explaining in detail which constituent moves where, why, and how, and the nature of the resulting gap.

<S5> Third, based on this analysis of topicalization, further develop an analysis of the superficially similar dislocation of a major constituent, sometimes referred to as “extraposition”. Unlike clause-internal movement with resulting gap, dislocation is a matter of a constituent completely outside the clause structure, standing as an absolute entity, as Waltke and O’Connor explain. A glance through The Encyclopedia of Hebrew Language and Linguistics edited by Khan and others, 2013, under the headings of “fronting” and “extraposition”, will give a sense of both the superficial similarity of the two phenomena and the difficulty in teasing them apart.

Accordingly, I assume Minimalism, and offer a model of Biblical Hebrew topicalization. Gesenius, Kautzsch, Cowley note that conjunction vav serves to formally isolate dislocated constituents, and so I employ the conjunction vav as a diagnostic for what is in and crucially, for what is not in the clause. I propose that dislocation is simply one special case of asymmetric coordination, and outline a research project in this light. I review a first result with the time remaining.

<S6> Let’s start with Second Kings 18:4 ki ad-hayim hahema hayu vne yisrael megatterim lo. This is one of the few tokens I have found with all the bells and whistles. I have provided a syntactic tree diagram, but I have pruned the branches and left nodes unlabeled for ease of exposition. Under this analysis, Biblical Hebrew is right-recursive.

<S7> The clause architecture is made clear by three landmarks. The complementizer, in this case, the subordinating conjunction ki, heads the Complementizer Phrase or CP, equivalent
to the clause. Grammatical tense and aspect are present but separate. Like English, grammatical aspect forces the realization of the verb as a participle. The stranded past-tense feature is realized by the dummy verb *hayah* ‘to be’ as a last resort. On this view, the root *hayah* means absolutely nothing, but only serves to realize stranded grammatical features. <S8> Crucially, no grammatical tense, no finite verb. <S9> Maybe past tense but no grammatical aspect: the verbal root is realized as the finite verb in the tense position. <S10> Maybe no tense or aspect, but subjunctive mood: ‘let them burn incense’! The finite verb must then move higher to realize grammatical mood, hence “verb movement”. (Note that I assume such verb movement in the so-called consecutive constructions.) <S11> In other words, the verb is a special sort of syntactic object: a bundle of distributed features, constructed by the syntax, which is subsequently spelled out in one of three positions. The verbal system is thus intimately connected to the basic clause architecture. <S12> Notice in the absence of a verbal root and grammatical features, the simple verbless clause obtains. <S13> So do the math: a verbal root present or absent, a minimum of three features, present or absent, generate sixteen distinct constructions, uniting all Biblical Hebrew clause types with considerable empirical coverage.

<S14> The major constituents are intercalated in typical fashion. The key here is the overt subject *yne yisrael* ‘the Israelites’: another crucial landmark, in fact the pivot or hinge of the clause. <S15> We see that fronting has occurred, that a constituent has moved past the subject and higher in the tree. We also know where that fronted constituent has moved to (the original position is indicated by strikethrough). <S16> Other constituents could have moved. Perhaps the other Prepositional Phrase *lo*. <S17> The subject can also move, which is the unmarked case.

<S18> In other words, the basic word order of Biblical Hebrew is *verbzwei*, ‘verb-second’ or V2, analogous to the Germanic and the medieval Romance verb-second systems. One constituent, only one constituent, necessarily one constituent, moves immediately in front of the finite verb, moves into the *Vorfeld*, ‘to the forefront’. The finite verb appears in second position. The preverbal constituent is called the “topic”, hence topicalization. Notice here that Biblical Hebrew can extend verb-second word order to subordinate clauses, as in Old French, Icelandic or Yiddish.

Lest there be confusion, let me emphasize that Topic is a syntactic position, and topicalization is a syntactic operation. There is no necessary relation to phonological stress, and
there is no necessary relation to information structure. To the extent that there are such correlations, we would reasonably expect behaviour analogous to that of Dutch or Yiddish.

In addition to a theory of basic word order, of verb movement, and topicalization, there is the curious phenomenon of pro-drop or pronoun-dropping. Dropping is an unfortunate metaphor, since nothing is dropped. It is simply the case that some pronouns are present but not pronounced: they are phonologically null, they are seen but not heard, as it were. A verb-second, pro-dropping system may seem odd at first, but the system is instantiated in Old French, for example. In Old French, it is typically the phonologically null subject pronoun that moves into topic position.

Consider now the Biblical Hebrew grammatical subject. The subject vne yisrael ‘the Israelites’ appears immediately following the finite verb. The subject may also be an overt pronoun: hémma or hem. Crucially, the subject pronoun may be a phonologically null pronoun: seen but not heard. This is indicated by the “little pro” for ‘pronoun’.

Finally, consider the verb-second twist on pro-drop. The subject as any other constituent may be topicalized. Accordingly, an overt pronoun may be topicalized. Notice crucially that there is no reason at all why the phonologically null subject pronoun cannot be topicalized. But then, notice the counterintuitive consequences. In terms of the syntax, such a construction is still formally verb-second as it must be; but in terms of the surface output, the string is verb-first or V1. Elizabeth Cowper calls these constructions “pseudo-verb-first”. One way of understanding how this might work, short of reading Arthurian romance in Old French, is to strike out all subject pronouns in a passage of German or Dutch.

To summarize, I analyze Biblical Hebrew basic word order as verb-second, on the model of the Germanic languages (minus English). Mandatory topicalization results in a clause-internal gap. As in Yiddish or Icelandic, verb-second order obtains in subordinate clauses. The added twist is Biblical Hebrew pro-drop, both subject and, as Holmstedt notes, objects. A parade example of a verb-second, pro-drop language is Old French.

What then of dislocation and the anaphor/antecedent relation? The dislocated constituent is not moved within the clause like the topic, the constituent must be completely outside the clause. We say that the constituent is “base-generated” outside the clause. There is therefore no gap resulting from movement. Or to put it another way, all gaps within the clause must be
plugged, as it were: hence, the function of the resumptive constituents, typically pronouns and other proforms.

For a formal syntactic theory, what we really need is a formal diagnostic, a landmark at the clause boundary. This diagnostic will unambiguously indicate what is in and crucially what is outside the clause. I propose to use the conjunction vav as that formal diagnostic to explore the nature of dislocation and the nature of the concómitant resumption, especially with respect to topicalization.

<S26> Let us examine clausal coordination from a Minimalist perspective. Recall that a clause is analyzed as a syntactic phrase headed by a complementizer, hence Complementizer Phrase or CP. The first CP is merged with the conjunction ‘and’, represented by the ampersand, creating an intermediate phrase. <S27> Then the second CP is merged, creating the well-formed Coordinating Conjunction Phrase. We say that the first CP is the “complement” and the second CP is the “specifier”. Crucially, the resulting construction is asymmetrical. I argue that such asymmetry largely explains the Biblical Hebrew consecutive phenomenon, or as I prefer, modal or subjunctive coordination.

But in addition, there is no syntactic constraint here on the type of phrases that are conjoined. <S28> Thus, we can find Prepositional Phrases, PP, of every size, complexity and function merged with a clause. <S29> We can find a simple Nominal Clause, NP, and this may even be a pronoun. <S30> That position may even be empty—or at least, the specifier is phonologically null.

<S31> My proposal for the syntax of Biblical Hebrew dislocation and resumption is as follows. Any syntactic phrase, abbreviated XP, may merge in coordination; crucially, the XP is outside the clause or CP. This constituent XP is the dislocated phrase. Furthermore, this dislocated item takes scope over the subordinate CP, and introduces the antecedent for anaphoric elements within that subordinate CP. On this view, the so-called “nominative absolute” or casus pendens, ‘the hanging topic’, is merely one special case of such asymmetric coordination. <S32> I also claim that even in the absence of an overt conjunction, the asymmetrical structure still obtains.

<S33> My research project into the antecedent/anaphor relation in Biblical Hebrew dislocation will proceed as follows. First, the scope of the research is limited to all and only the tokens set out and interpreted by Gross 1987. Certainly, some interpretations are questionable,
and some tokens will ultimately be rejected *ex hypothesi*, and many more added, but that is a determination to be made *after* the analysis. Second, all and only the tokens with an *overt* coordinating conjunction are extracted as the initial database. Third, sort by the size and nature of the constituent before the conjunction, while varying the type and complexity of the main clause. Fourth, progress through the sorted data, systematically building up a theory of dislocation and resumption in relation to topicalization. Fifth, when the tokens with overt coordination are exhausted, work through that half of the database *without* an overt conjunction. Sixth, compare data from true subordination: see Holmstedt (2016), *The Relative Clause in Biblical Hebrew*.

With reference to the initial database with the overt conjunction *vav*, one way to shoot down the theory is to find two major constituents before the finite verb—a verb-third construction, as it were—without an intervening conjunction *vav*. As predicted, no such tokens are found.

*S34* Consider for example the token in Isaiah 43:7. The two preverbal phrases are separated by the conjunction *vav*, as expected. *Kol hannigra višmi* ‘everyone who is called by name’ is isolated and excluded from the clause. This is the dislocated item. The immediately preverbal *lixvodi* ‘my glory’ must be in topic position. We see here that there is no necessary relation between dislocation and topicalization. *S35* To be clear, I claim that there is no substantial difference from the construction without an overt conjunction: the syntactic structure remains.

*S36* Consider further the token in Leviticus 7:16. Here again, the two preverbal phrases are separated by the conjunction. *Umim-móhorát* ‘on the next day’ is isolated and excluded from the clause by *vav*, hence dislocation. Again, the verb-second word order obtains within the CP, with *hannotar mimménu* ‘anything left over’ as the topic. *S37* And again, I claim that the same structure obtains, even without an overt conjunction.

In short, the theory of asymmetric coordination survives disconfirmation. (If you can think of other such disconfirming tests, please let me know.)

I begin with the bare noun phrase or “nominative absolute” as the dislocated constituent. At the same time, I control for a finite verb in the main clause, and it is the grammatical subject that is in the anaphor/antecedent relation.
A common scenario has the finite verb appearing by itself, as in First Samuel 11:11: *Hanniš’arim va-yafūsu* ‘Those who survived were scattered’. (Notice here and elsewhere that the NIV translation does not reflect the syntax: ‘as for those who survived, …… they were scattered.)

At any rate, the Noun Phrase here, *hanniš'arim*, is isolated and excluded from the CP by the conjunction *vav*: this must be a dislocated phrase. This phrase has not moved, it has not left a gap, it is base-generated. Therefore, a null subject pronoun has moved into topic position. After all, the finite verb must have its grammatical subject, and the clause must have its mandatory topic. (The anaphor/antecedent relation is indicated by the subscript index.)

That the null subject pronoun typically serves as both topic and anaphor can be shown in several ways. <S39> For example, by definition, the pseudo-verb-first constructions have the null subject pronoun in topic position, serving as resumptive. In Ezekiel 47:11, the phrase *bîṣṣ’otav uvgva’av* ‘the swamps and marshes’ is isolated and excluded from the CP. The finite verb *yērāfə́rb* ‘will become fresh’ is clearly indicative, not subjunctive; it follows that the verb has not moved, that the verb is in second position. It must be the case that a null subject pronoun has moved into the topic position to satisfy the constraints.

The marginal case of Second Samuel 5:8 highlights potential ambiguity in the face of all the moving parts. The unwary might assume, since the phrase *baṣṣinor* ‘through the water shaft’ precedes the object, that *baṣṣinor* has moved higher as the topic. If so, the finite verb *yigga*‘will reach’ must have also moved in a verb-first construction. The subject pronoun is left in situ.

But this can not be the case. The finite verb *yigga*‘will reach’ is indicative, not subjunctive: therefore, the verb has not moved, it must be in second position. Therefore, it must be that the null subject pronoun has moved, supplying the preverbal topic. The observed inversion of the constituents in the backfield is the result of shifting the so-called “heavy” object to the right periphery, hence a parade example of Heavy Noun Phrase Shift, a universal tendency.

Another way to show that there is a null subject pronoun in topic position is through minimal pairs. It is perhaps not a surprise in Leviticus 7:20 that the demonstrative subject *hannefėš hahi* ‘that person’ has moved into topic position. <S43> Now contrast the token in Leviticus 23:29. Identical constituents in the set idiom, in the same order: it’s just that there is no overt subject. By analogy, there must be a null subject pronoun in topic position. But then
notice further that by analogy the null subject pronoun bears whatever syntactic emphasis, stress or focus that *hannèfeš hahi* does.

In the initial slice of data, there is just one token with an overt pronoun: *hi* in Genesis 22:24: ‘and his concubine by the name of Re’uma—she too gave birth to Tévah, Gáḥam, Táhaš, and Ma’axâ.’ There can be no doubt here that an overt pronoun augmented by *gam,* the grammatical subject of a finite verb, is emphatic or contrastive. Of course, it does not follow that always and everywhere an overt pronoun is emphatic or contrastive with a finite verb.

From just this first sliver of data, we arrive at two unexpected generalizations. **First,** as we saw earlier, we know that there is no necessary connection between dislocation and topicalization, but here we have found, at least in the case of the grammatical subject anaphor/antecedent pairing, there does appear to be a necessary connection: the topic is the resumptive element. The nature of the explanation, and the number of exceptions become pressing questions. **<S45>** We certainly can imagine exceptions. Going back to the example of Leviticus 7:20, there is no reason why we shouldn’t find *me`ammèha* ‘from his people’ in topic position, moving past the subject *hannèfeš hahi.*

And **second,** we find virtually without exception that the marked syntactic structure is not reflected in the English translations (like the NIV used here).

To summarize, I have outlined a long-term research programme in Generative Grammar. I have introduced a syntactic model of the Biblical Hebrew clause that is both verb-second and *pro-*drop; such a grammar is instantiated in Old French, for example. In every clause there is a topic position that must be filled, and this position is typically filled by a phonologically null subject pronoun. I then moved on to an analysis of dislocation, also known as extraposition, employing the coordinating conjunction ‘and’ as a formal diagnostic for what is in the clause, and what is isolated and excluded from the clause. I propose that the dislocated constituent is always found occupying the specifier position of an asymmetrical Coordinating Conjunction Phrase, taking scope over the lower clause.

We can control for the size and syntactic category of the dislocated phrase, from bare Noun Phrase all the way up to a full Complementizer Phrase or clause; control for the grammatical role of the resumptive within the clause; control for topicalization; for overt versus
null constituents; for clause type: that is, verbal, participial, verbless. In so doing, we can systematically construct a syntactic theory of Biblical Hebrew topicalization and dislocation with its anaphor/antecedent relation.

I can make notes and slides available upon request. Please note that the Cowper/DeCaen paper is freely available as a pdf online.

Thank you for your attention.