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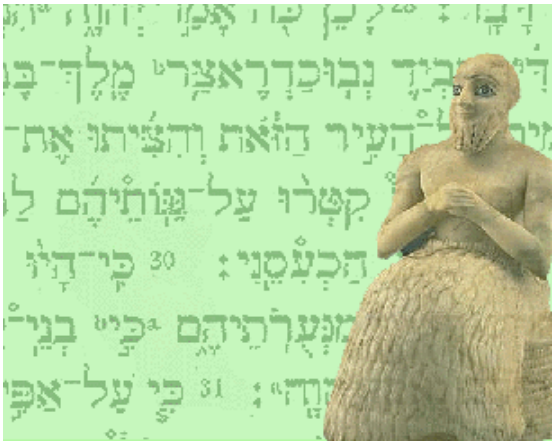

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ROBERT D. HOLMSTEDT, THE TYPOLOGICAL CLASSIFICATION OF THE HEBREW OF GENESIS: SUBJECT-VERB OR VERB-SUBJECT?

THE TYPOLOGICAL CLASSIFICATION OF THE HEBREW OF GENESIS: SUBJECT-VERB OR VERB-SUBJECT?*

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1. INTRODUCTION

The recent publication of another monograph on word order variation in ancient Hebrew (Moshavi 2010) suggests that the issue is at once important, complex, and unsettled. It is important in that understanding the word order patterns and what motivates the choice of one pattern over another better enables us to interpret the syntactic subtleties of ancient Hebrew texts. That the issue is complex is established both by the diversity of word orders exhibited in the ancient texts, especially the Bible, and by the attention that word order variation receives in general linguistics.[1] And that it is unsettled—that a universally satisfying, comprehensive, adequate description of ancient Hebrew word order variation has yet to appear—is confirmed by the appearance of Moshavi 2010, which joins the monographs of Gross 1996, 2001, Rosenbaum 1997, Goldfajn 1998, Heimerdinger 1999, Shimasaki 2002,[2] and Lunn 2006,[3] besides numerous articles and a few theses.[4]

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* I thank John A. Cook, John Screnock, Andrew R. Jones, and Krzysztof Baranowksi for providing critical feedback on my argument. This study, divided into six parts and written for on-line consumption, was also published on the blog I co-own: ancienthebrewgrammar.wordpress.com. The ideas promoted within this study, as well as any errors of presentation or fact, are my sole responsibility.

[1] For example, doing a basic keyword search for the year 2010 using "word order" in the CSA Linguistics and Language Behavior Abstracts database produced 129 peer-reviewed journal articles and with eighteen doctoral theses (database accessed 6/11/2011, http://search2.scholarsportal.info.myaccess.library.utoronto.ca/ids70/results.php?SID=5744e36d53aad4128574d3108085ed6e&id=2). In fact, the journal *Lingua* ran two issues devoted to word order issues: 120/2 was on the theme "Verb First, Verb Second" and 120/3 was on "Exploring the Left Periphery. "These articles represent the full spectrum of language interests, from formal syntax, typology, and pragmatics to psycholinguistics and language acquisition.

[2] See Holmstedt 2003 for a review article.

[3] See Holmstedt 2009c for a short review.

[4] In alphabetical order: Bailey 1998, Bailey and Levinsohn 1992, Buth 1990, 1992, 1999, DeCaen 1995, Doron 2000, Fariss 2003, Floor 2003, 2004, 2005, Gross 1993a, b, 1994, Hornkohl 2005, Jongeling 1991, Lon-

The monographs and articles listed above or in note 4 approach the analysis of word order variation in the Hebrew Bible from different linguistic frameworks (although it is notable that only DeCaen, Doron, and myself utilize some form of generative syntactic theory), take up differing pragmatic concepts that influence word order (e.g., topic, focus, theme, rheme), and often use different corpora from within the Bible (for example, Rosenbaum 1997 uses Isaiah 40–55, while Lunn 2006 addresses poetic texts including Pss 1–50, whereas most, including Moshavi 2010, use data from Genesis to 2 Kings). Yet, for all the differences, there is one clear point of agreement: that Hebrew should be classified typologically as a Verb-Subject (VS) language. Moshavi devotes more space to this issue than the others, and it is no small item that the arguments of the small minority who disagree and classify Hebrew as a Subject-Verb (SV) language have been promoted from brief footnote to full-scale consideration.[5]

As one of those in the small SV minority and whose views were given respectful consideration in this latest word order contribution, I will take advantage of the appearance of Moshavi's monograph (a revision of her 2000 thesis) to clarify a few points on which my arguments have been misunderstood and to re-issue an empirical challenge.[6] In doing so, I will present here in published

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gacre 1992, 1995, van der Merwe 1991, 1997, 1999a, b, van der Merwe and Talstra 2002/2003, Moshavi 2000, 2006, Myhill 1995, Myhill and Xing 1993, Payne 1991, de Regt 1991, 1996.

[5] See Joüon 1923, Schlesinger 1953, DeCaen 1995, 1999, Holmstedt 2002, 2003, 2005, 2009a, b; Screnock 2011.

[6] Moshavi neither understands the generative analysis underlying my word order studies nor engages the typological study of word order with any rigor. She thus misses the importance of applying the four typological criteria, which allows her to freely (but inaccurately) dismiss my application of the four criteria as "somewhat precarious." She concludes that basic word order determined as I have done (i.e., following the typologists) "bears little resemblance to the way the language is most frequently used" (2010:15).

In her short counter-argument, Moshavi builds her case against my analysis in three questionable ways (2010:7–16, esp. pp. 14–16). First, she summarizes the typological approach to basic word order on pp. 7–10, but then ignores most of it when she evaluates my arguments. Second, the structure of her discussion in chapters 5–9 acknowledges that clause-type distinctions (e.g., indicative versus modal, declarative versus interrogative, negative versus non-negative) can be salient for word order analysis. But Moshavi does not acknowledge that cross-linguistically these pairs often exhibit word order differences, as with English, in which declarative clauses are Subject-Verb (e.g., *Jim reached the house yesterday*) but interrogatives have an inverted Verb-Subject order with a fronted *wh*-word (e.g., *When did Jim reach the house?*). It is inexcusable to overlook the possibility of similar patterns in Hebrew and the role that such distinctions might play in both the basic word order discussion as well as the assignment of

(and revised) form the Genesis data I used in my thesis (2002), which will complement my published analyses of Proverbs (2005) and Ruth and Jonah (2009a) and will anticipate works in progress on Qoheleth and the Minor Prophets.

2. THE QUESTION OF 'BASIC WORD ORDER'

Although there are six primary word order types when the three core constituents are considered at the same time—SVO, SOV, VSO, VOS, OVS, and OSV—Dryer (1997) has argued that only two contrastive sets reflect fundamental properties of languages: VO vs. OV and SV vs. VS. For Hebrew, there is, to my knowledge, no debate about where Hebrew falls within the division VO/OV distinction—it clearly patterns with VO languages. That is, there is a consensus that the Object normally follows the Verb; when the Object precedes the Verb, it does so due to literary (e.g., chiasm) or discourse-pragmatic (e.g., Focus fronting) reasons. The other word order distinction, SV vs. VS distinction, is also generally agreed upon in Hebrew studies, though it is almost always simply assumed rather than supported with linguistic argument. Beyond the purely typological question of classifying Hebrew among languages of the world, determining whether Hebrew is SV or VS has great explanatory significance. That is, whether a language has SV or VS as its "basic order" (more on this concept below) is critical for explaining the various patterns that are described for a given linguistic text. My contention is that the VS classification of Hebrew has neither been empirically supported nor has it been made within a clear linguistic theory.[7] This remains the case, the most recent arguments (Moshavi 2010) notwithstanding.

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pragmatic marking to the constituents in such clauses.

Third, the relationship between language *use* and that language's *grammar* is a complex issue and cannot be invoked without at least some discussion of the complexities involved. Imagine this scenario: an author composes a text made up entirely of interrogative clauses, which reflect an order like English *wh-Vfinite-S-Vnonfinite* (e.g., *Where do I come from? Where am I going?*). That text then, for some reason, becomes the database for a linguistic analysis of word order in that language (for which the vast majority of other texts exhibit the non-interrogative Subject-Verb order as both dominant and pragmatically neutral). Since interrogative clauses (and the order exhibited within this clause type) are taken as the dominant pattern (and so would be taken as basic by those who favor the frequency criterion), the description of the language based on the interrogative-heavy text is radically different than other analyses based on different texts. This is a case where *usage* transparently skews the reconstruction of the *grammar*. And that is why one cannot simply use language use as an out-of-hand argument for or against some other grammar proposal. (For the differences between grammar and usage, see Newmeyer 2003).

[7] Perhaps the best attempt is an excerpt from an MA thesis (Hornkohl 2005). Although Hornkohl's survey of the issues is impressive, his han-

In §3 I will walk through the typological issues again, using data from the book of Genesis to illustrate word order variation in Hebrew. But first let me be clear that my argument has both an analytical and methodological component. And it is the methodological component that must be heard, even if one does not find the analytical component compelling. The methodological argument can be succinctly summarized as follows: the standard VS analysis of Hebrew has not been empirically supported using any modern linguistic framework;[8] rather, it has been and continues to be assumed, and even when the question is raised, as in the works mentioned above, it is done perfunctorily, in the manner of "we

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dling of the linguistic issues and Hebrew data lacks critical reflection. One example must suffice: Hornkohl misunderstands (and misrepresents) the arguments against including the *wayyiqtol* given in DeCaen 1995 and Holmstedt 2002, and so accepts without sufficient justification Moshavi's stance regarding the inclusion of the *wayyiqtol* in the frequency analysis (2005:43–44).

[8] For example, van der Merwe explicitly states that his assessment of Biblical Hebrew as a VSO language "is not merely based on statistics, but on arguments from various points of view" (1999a:294). In the footnote for that statement, van der Merwe briefly cites a few scholars who hold a VSO analysis, but no Biblical Hebrew data are provided for a VSO claim (1999a:294, note 34). In an earlier article on Biblical Hebrew information structure, van der Merwe (1991) proceeds from the assumption that Biblical Hebrew is VSO without any discussion or presentation of examples.

Similarly, Rosenbaum (1997) briefly reviews previous studies of word order and then takes as his starting point, without any study of the data, the position that "the basic functional pattern" for Biblical Hebrew is VSO (21). It is in his Appendix A, that Rosenbaum takes the VS "blindness" a step further. There he discusses the word order statistics from the fifteen chapters of Isaiah that he analyzed. He notes that Isaiah 40–55 contains essentially an equal number of SV (189) and VS (184) clauses (1997:222). Furthermore, he comments that, "Biblical Hebrew is commonly classified as a VSO language. It appears, however, from a comparison of the statistics for Isaiah 40–55 of all three constituents in a clause … that the pattern for Isaiah 40–55 may be SVO (42.48%; VSO is 31.37%). *But this is an example of how surface statistics of word-order can be deceptive.* Our discussion of the various sub-types of VSO languages demonstrate (*sic*) that such surface statistics may be the result of the frequent use of special positions" (1997:222–23; emphasis added). Rosenbaum's argument illustrates how one's assumptions drive the interpretation of the data, sometimes stretching the limits of logic and the scientific spirit of objective investigation.

Jongeling (1991, 2000) represents the exception that proves the (unfortunate) rule: he uses both frequency arguments and typological comparison with Welsh to argue that Biblical Hebrew is VSO. The fundamental problem with Jongeling's analysis is that he does not deal with the *wayyiqtol* form and whether it should or should not be included in the statistical analysis. On the use of the *wayyiqtol*, see §3.2 below. For my criticism of Moshavi 2010, see note 6 above.

take this truth, that Biblical Hebrew has VS basic word order, to be self-evident and so it hardly needs mentioning." Clearly, any argument even approaching my snide characterization is unacceptable scholarship, and yet it persists. I recognize, though, the momentum created by a long-standing tradition and therefore I am willing to re-issue my challenge for those who support a VS classification to provide the supporting argument. I will also extend my argument that Biblical Hebrew can be accurately classified as an SV language by analyzing the data from Genesis while also considering the typological features of SV and VS languages.

3. THE TYPOLOGICAL CLASSIFICATION OF WORD ORDER

The study of word order variation is a fascinatingly complex task. While languages vary on a cline of flexibility, from strict to 'free', even those that are strict exhibit more than one word order and those that are 'free' arguably exhibit limited patterns, although the patterns may be influenced by features other than syntactic roles. Mithun (1992), for instance, has questioned whether some languages can be assigned to a typological word order category such as SVO, VSO, or SOV. In particular, for languages with an apparently 'free word order', Mithun argues that we should not be looking for a basic word order in terms of the position of subject, verb, and modifiers. Rather, she suggests that in these languages the syntactic role of an item (subject, object, etc.) is less important than its discourse role (e.g. topic-hood, identifiability, 'newsworthiness'). Thus, the order of the constituents, subject noun phrase, verb, complements, etc., will change in a 'basic clause', depending on the information status of the constituents.

Clearly, while describing the full range of word order variation is a challenge in and of itself, setting out to determine a 'basic word order' poses significant additional challenges—challenges that have led some to give up on the notion altogether, as many have for ancient Greek.[9] And yet, even if we were to admit that some languages, like ancient Greek, might not have a basic word order that is *syntactic* in nature (i.e., subject, verb, object) but *pragmatic*, even this must be argued carefully and empirically.

The typological study of word order has most often been traced back to Joseph Greenberg's 1963 article, "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements." This essay set in motion a rich comparative linguistic method with the goal of discerning morphological and syntactic 'universals' (or better, 'tendencies'[10]) among human languages.

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[9] For studies that explicitly address Greek word order, see, for example, Dunn 1988, Davison 1989, Matić 2003.

[10] Greenberg himself lists exceptions in his footnotes and so subsequent typological research has generally recognized the non-universal nature of the typological 'universals' but focused on the strength, breadth,

In the first section in Greenberg's essay he focused on 'certain basic factors of word order' and proposed using three criteria to identify the basic word order of any given language (Greenberg 1963:76):[11]

- the use of prepositions versus postpositions;
- the relative order of subject, verb, and object in declarative sentences with nominal subject and object;
- the position of qualifying adjectives, either preceding or following the modified noun.

Although these three criteria have been modified as the typological program has matured, they still reflect the fundamental question involved in determining how a language patterns: does a head (i.e., the constituent being modified) precede or follow its modifier? To answer this question, four criteria are typically used, in varying degrees: 1) frequency, 2) distribution, 3) clause type, and 4) pragmatics (Siewierska 1988:8–14; Payne 1997: 76–77; Bickford 1998:214–16; Dryer 2007:73–78).

3.1 THE CRITERION OF FREQUENCY

The 'frequency' criterion focuses on that word order that is numerically dominant. This is perhaps the most common criterion and was adopted early in the typological approach by Greenberg himself: "The so-called normal order, it would seem, is necessarily the most frequent" (1966:67). Certainly this criterion has dominated in Biblical Hebrew studies; it is succinctly summarized by Muraoka in his study of emphatic structures in Biblical Hebrew: "[W]e are not interested in discussing the theory that [VS] order is normal because action is the most important piece of information to be conveyed by this sentence type called verbal clause. In other words, by saying that V-S is the normal word-order we do not mean that it is logically or intrinsically so, but simply statistically" (1985:30).

Hawkins, in his monograph on word order, suggests three criteria for determining word order based upon frequency:

> For the majority of the word orders in this study in the majority of our languages the basicness issue is not problematic, for the simple reason that only one order occurs. English has *this man*, never **man this* . . . But for at least some word orders in the majority of languages, variants do exist, and the question then arises as to which order, if any, is the "basic" one. For example, English has both preposed and postposed genitives (*the king's castle*/*the castle of the king*) . . . [I]n general I shall follow

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and nature (absolute versus implicational) of the *tendencies* observed.

[11] For a concise summary of the basic issues involved in the typological quest for determining 'basic word order' in any given language, see Newmeyer 1998:330–37.

> these three (overlapping) criteria when making a basicness decision:
>
> 1. Where one doublet (e.g., NAdj) occurs with greater frequency than the other (AdjN) in attested samples of the relevant language, then, all things being equal, the more frequent doublet is the basic one.
>
> 2. Where one doublet (e.g., NAdj) is more frequent within the grammatical system of the language than the other (e.g., the quantity of adjective lexemes that occur postnominally exceeds the number that occur prenominally), then, all things being equal, the grammatically more frequent doublet is the basic one.
>
> 3. Where one doublet is grammatically unmarked and the other marked (i.e., a special type of grammatical meaning may be associated with one order of Adj and N, but not the other, over and above their lexical meanings; one word order may not undergo certain general rules that the other does, or may be generated by rules of a more restricted nature; one word order may be the one chosen by exceptional modifiers, whose exceptional status is marked in the lexicon, etc.), then, in all these cases, the unmarked order is the basic one. (1983:12–13)

By Hawkins' first and second criteria, Biblical Hebrew appears to be a strong VS language, with a more than 5-to-1 ratio of VS to SV clauses in Genesis. And this is where most discussions of basic word order in Biblical Hebrew have stopped (excepting only Jongeling 1991 and Moshavi 2010). However—and this is a critical point—though the frequency criterion may appear to be a straightforward tool for determining the basic order of a variety of grammatical constructions, deep problems with the unqualified application of this criterion have long been noted. First, some languages do not appear to exhibit a clear preference for one order over another (Tomlin 1986:34; Dryer 2007:73–74). In such cases, if other criteria are not invoked, one cannot make a basic word order determination; if this is so, the result is that one must eschew any comment on overall basic word order and limit the syntactic description to word order patterns in various contexts. It may be that such an approach is best for Biblical Hebrew and we should remain open to the possibility.

A second problem with the naïve application of the frequency criterion is embedded within Hawkins' third criterion: the issue of markedness.[12] That is, many languages allow more than one order

[12] Markedness theory developed out of the Prague School of linguistic analysis. The basic concept is, given two similar constructions, the one occurring more often and in a greater number of environment is unmarked while the one the occurs less often and in restricted environments

for some grammatical constructions and so determining which order is basic must recognize the context of use. In fact, this markedness issue leads directly to the other three criteria, distribution, clause type, and pragmatics.

3.2 THE CRITERION OF DISTRIBUTION

The first criterion that recognizes the salience of context in the basic word order discussion is the test of *distribution*. Given two or more alternatives for a syntactic construction, the one that occurs in the greater number of environments is unmarked and, hence, the basic order. Note that this is not the same as statistical dominance, because the issue at hand is not simply 'occurrence' but 'environment'. For instance, in English, manner adverbs like *slowly* may both precede and follow the verb (*He walked slowly* and *He slowly walked*), but as the more highly restricted option, the Adverb-Verb order is the marked choice, thus leaving the Verb-Adverb option the basic order (Dryer 2007:69, 74).

For the Hebrew of Genesis, the test of distribution can be illustrated well by considering the *wayyiqtol* form. First, if we take the *wayyiqtol* to include an indicative finite verb and compare it to other indicative finite verbs, an asymmetry is easily observable:

(1) DISTRIBUTION OF WAYYIQTOL

a. VS (866x):[13] Gen 22:13
   וַיִּשָּׂא אַבְרָהָם אֶת־עֵינָיו
b. Adjunct-VS (34x):[14],[15] Gen 22:4
   בַּיּוֹם הַשְּׁלִישִׁי **וַיִּשָּׂא** אַבְרָהָם אֶת־עֵינָיו
c. SV: Ø
d. Complement-VS: Ø
e. Subordinator-V:[16] Ø

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is marked. See Battistella 1996 for an introduction to markedness theory in both Jakobsonian and Chomskyan schools of linguistics.

[13] Genesis has 866 *wayyiqtol* clauses (in 742 verses) with an overt Subject.

[14] With John A. Cook (personal communication), I take the cases of initial ויהי and והיה in these verses as discourse markers. Thus, the following prepositional phrases, like ביום השלישי (some of which include an infinitive clause, and some of which are continued by a *wayyiqtol* before the main clause), are temporal (non-argument) adjuncts that have moved higher than *wayyyiqtol* in the clause.

[15] ***34x***—Gen 4:3, 8; 8:6; 11:2; 19:17, 29, 34; 21:22; 22:4, 20; 24:22; 25:11; 26:32; 27:34; 28:6; 29:13, 23; 31:10; 35:17, 18, 22; 37:18; 38:1, 24, 28; 39:7, 11, 13, 15, 18; 40:20; 41:8; 48:1.

[16] At this point, the presence and position of an overt Subject is irrelevant; the salient detail is whether or not this form may co-occur with a subordinator, such as אָז, אִם, אֲשֶׁר, הֵ, כִּי, and פֶּן.

(2) DISTRIBUTION OF QATAL

a. VS(46x):[17] Gen 22:20
הִנֵּה **יָלְדָה** מִלְכָּה גַם־הִוא בָּנִים לְנָחוֹר אָחִיךָ

b. Adjunct-VS (57x):[18] Gen 10:25 וּלְעֵבֶר **יֻלַּד** שְׁנֵי בָנִים

c. SV (168x):[19] Gen 4:18 וְעִירָד **יָלַד** אֶת־מְחוּיָאֵל

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[17] ***46x***—Gen 9:16; 12:3, 13; 16:2; 17:5, 13, 14; 18:18; 19:19, 28; 21:7, 25; 22:18, 20; 26:4; 27:35; 28:14 (2x), 21; 29:3; 30:6, 18, 20, 23, 33, 42; 31:1; 34:5, 30; 37:7; 38:24, 29; 40:10 (2x), 19; 41:30, 36; 42:28, 30, 38; 44:29, 31; 45:9, 16; 48:11, 21. These are non-subordinate clauses. It is important to recognize that the majority of these V (*qatal*)-Subject clauses are likely not indicative, but the so-called *waw*-consecutive perfect, or more linguistically accurate, the modal use of the perfect (*qatal*) verb for the apodosis of conditional clauses, result clauses, habitual actions, or instructions. When these modal uses are removed, only ***twenty-two*** remain as candidates for non-subordinate VS indicative clauses with the *qatal* verb: 16:2; 19:19, 28; 21:7, 25; 22:20; 27:35; 30:6, 18, 20, 23; 31:1; 37:7; 38:24, 29; 40:10 (2x); 42:28, 30; 45:9, 16; 48:11. Also note that the exclamative/deictic הִנֵּה 'look!' and the conjunction וְעַתָּה 'and now' (or even כִּי used asseveratively) do not affect word order and are thus included in this list.

[18] ***57x***—Gen 4:6, 26; 7:11, 20; 8:5, 9, 13, 14; 9:14, 19; 10:18, 25, 32; 11:9 (2x); 13:6; 15:1, 18; 17:26; 18:7, 12; 19:15, 22; 20:5, 18; 22:1; 23:19; 24:30; 25:10, 26; 26:10; 27:30; 29:35; 31:7, 32; 32:5; 33:7, 17; 34:19; 36:7; 37:33; 38:21, 22; 39:19; 40:1, 23; 42:4, 11, 21; 43:3, 7; 45:1 (2x), 3, 9, 15; 48:7. This list includes the 15x with a negative particle as a verbal adjunct (Gen 2:5; 8:9; 13:6; 31:7, 32; 34:19; 36:7; 38:21, 22; 40:23; 42:4, 11; 45:1 (2x), 3).

[19] ***168x***—Gen 1:2; 3:1, 11, 12, 13, 20, 22; 4:1, 2, 4, 18 (3x), 20, 21, 22; 6:1, 4, 8; 7:6, 10, 11, 19; 8:5; 10:8 (2x), 9, 13, 15, 24 (2x), 26; 11:3, 12, 14, 27 (2x); 13:12 (2x), 14; 14:3, 18, 23; 15:12, 17 (2x); 16:1, 5; 17:27; 18:12, 13, 17, 33; 19:4, 9, 15, 23 (2x), 24, 31, 38; 20:4, 5 (2x), 6; 21:1, 7, 26 (3x); 22:1, 23; 24:1 (2x), 16, 35, 56, 62; 25:3 (2x), 19, 34; 26:26, 27; 27:6, 30; 28:16; 29:9, 17; 30:26, 29; 31:5, 6, 7, 19, 25 (2x), 29, 32, 34, 38, 47; 32:2, 13, 22; 33:3, 17; 34:5 (2x), 7, 27; 35:18; 36:2, 4, 5, 12, 13, 14; 37:2, 3, 11, 20, 33, 36; 38:14, 22, 23, 25, 28; 39:1, 8, 22; 41:10, 15, 56, 57; 42:8, 10, 23; 43:5, 22, 23 (2x); 44:3 (2x), 4 (2x), 8, 16, 19, 20 (2x), 27; 45:14, 16, 19; 46:31; 47:5, 26; 48:2, 3, 10, 22; 49:22, 26; 50:5, 16, 20 (2x), 23. Thirty-four of these examples include pronominal Subjects (3:12, 20; 4:20, 21; 10:8, 9; 14:23; 16:5; 18:13; 20:5 (2x), 6; 21:26 (2x); 26:27; 28:16; 30:26, 29; 31:6; 32:13, 22; 33:3; 38:14, 23, 25; 39:22; 41:15; 42:8, 23; 44:4, 27; 45:19; 48:22; 50:20) and seven more are negated (16:1; 20:4; 24:16; 31:32, 38; 39:8; 47:26), leaving 127 cases not negated and with lexical NP subjects (Gen 1:2; 3:1, 11, 13, 22; 4:1, 2, 4, 18 (3x), 22; 6:1, 4, 8; 7:6, 10, 11, 19; 8:5; 10:8, 13, 15, 24 (2x), 26; 11:3, 12, 14, 27 (2x); 13:12 (2x), 14; 14:3, 18; 15:12, 17 (2x); 17:27; 18:12, 17, 33; 19:4, 9, 15, 23 (2x), 24, 31, 38; 21:1, 7, 26; 22:1, 23; 24:1 (2x), 35, 56, 62; 25:3 (2x), 19, 34; 26:26; 27:6, 30; 29:9, 17; 31:5, 7, 19, 25 (2x), 29, 34, 47; 32:2; 33:17; 34:5 (2x), 7, 27; 35:18; 36:2, 4, 5, 12, 13, 14; 37:2, 3, 11, 20, 33, 36; 38:22, 28; 39:1; 41:10, 56, 57; 42:10; 43:23 (2x); 44:3 (2x), 4, 8, 16, 19, 20 (2x); 45:14, 16; 46:31; 47:5; 48:2, 3, 10; 49:22, 26;

d. Complement-VS(15x):[20] Gen 22:23
שְׁמֹנָה אֵלֶּה **יָלְדָה** מִלְכָּה לְנָחוֹר
e. Subordinator-V:[21] Gen 25:12
יִשְׁמָעֵאל בֶּן־אַבְרָהָם אֲשֶׁר **יָלְדָה** הָגָר

(3) DISTRIBUTION OF YIQTOL

a. VS (43x):[22] Gen 27:41 **יִקְרְבוּ** יְמֵי אֵבֶל אָבִי
b. Adjunct-VS (44x):[23] Gen 2:24

50:5, 16, 20, 23).

[20] ***15x***—Gen 6:9; 7:20; 10:11; 14:5; 21:6; 22:23; 24:27, 50; 30:40; 31:42; 41:54; 42:4, 36; 46:34; 47:9. These Complements include both accusative (i.e., 'direct object' noun phrases) and oblique (i.e., prepositional phrases required by a verb).

[21] ***Relative/Complementizer*** **אֲשֶׁר** (182x)—Gen 1:21, 31; 2:2, 3, 8, 22; 3:1, 11, 12, 17, 23; 4:11; 5:5, 29; 6:2, 7, 22; 7:4, 5, 9, 16; 8:6, 21; 9:17, 24; 10:14; 11:5; 12:4, 5, 11; 13:3, 4; 14:24; 15:17; 16:15; 17:23; 18:5, 8, 19, 33; 19:5, 19, 21, 27, 29; 20:3, 13; 21:1, 2, 3, 4, 9, 23, 25, 29; 22:2, 3, 9, 18; 23:16; 24:5, 7, 15, 22, 24, 27, 40, 44, 47, 48, 51, 52, 66; 25:10, 12; 26:1, 3, 15, 18, 29, 32; 27:4, 9, 14, 17, 19, 27, 41, 45; 28:4, 15, 18, 22; 29:10; 30:2, 18, 25, 26, 29, 30, 38; 31:13, 16, 18, 43, 49, 51; 32:3, 11, 32; 33:5, 8, 11, 19; 34:1, 13, 27; 35:3, 12, 13, 14, 15, 26, 27; 36:5, 6, 24, 31; 37:6, 10, 23; 38:10; 39:1, 17, 19; 40:13, 22; 41:13, 28, 48, 50, 53, 54; 42:9, 14, 21; 43:2, 14, 17, 27, 29; 44:2, 5, 8, 15, 16, 17; 45:4, 13, 27; 46:5, 6, 15, 18, 20, 22, 25, 27; 47:11, 22; 48:6, 9, 15, 22; 49:28, 30; 50:5, 6, 12, 13, 15, 24; ***Causal/Temporal/Complementizer*** **כִּי** (116x)—Gen 2:3, 5; 3:1, 14, 19, 20; 4:25; 5:24; 6:6, 7, 12, 13; 7:1; 8:11; 9:6; 10:25; 11:9; 13:6; 14:14; 16:4, 5, 11, 13; 17:5; 18:15, 19, 20; 19:8, 13, 30; 20:6, 9, 10; 21:7, 16, 17, 30, 31; 22:12; 24:14; 26:7, 8, 13, 16, 20, 28; 27:1, 20, 23; 28:6, 11; 29:21, 32, 33, 34; 30:1, 9, 13, 16, 20, 26; 31:6, 15, 22, 30, 31, 32, 36, 37; 32:21, 26, 27, 29, 33; 33:10, 11; 34:5, 7, 19; 35:7, 18; 36:7; 37:4, 17; 38:11, 14, 15, 16, 26; 40:14, 15, 16; 41:21, 49, 57; 42:4, 5, 12; 43:5, 10, 18, 21, 25, 30; 44:24, 27, 32; 45:3, 5, 26; 46:32; 47:15, 20; 49:4; 50:15, 17; ***Interrogative*** **הֲ** (11x)—Gen 8:8; 16:13; 20:5; 27:36; 29:5, 15, 25; 31:15; 41:38; 42:22; 44:15.

[22] ***43x***—Gen 1:3, 6, 9 (2x), 11, 14, 20, 24; 9:26, 27 (2x); 16:5; 18:4; 19:20; 22:17; 24:55, 60; 26:28; 27:28, 29 (3x), 31, 41; 30:3, 24; 31:44, 49; 33:14; 37:7; 41:33, 34; 42:16, 20; 44:18, 21, 33; 47:4, 19; 48:16; 49:8 (2x), 17. As with the *qatal* examples (see above, note 17), many of the *yiqtol* Verb-Subject examples are clearly not indicative, since the form and/or context point to modal (e.g., jussive) semantics. Eliminating from the list above morphologically modal (jussive, cohortative) examples and morphologically ambiguous but contextually modal examples leaves just ***five*** indicative cases: Gen 27:41; 37:7; 42.20; 49:8 (2x). Also note that the exclamative/deictic **הִנֵּה** 'look!' and the conjunction **וְעַתָּה** 'and now' (or even **כִּי** used asseveratively) do not affect word order and are thus included in this list. For my notion of particles "affecting" word order (that is, the concept of "triggered inversion"), see Holmstedt 2002, 2005, 2009a.

[23] ***44x***—Gen 2:24; 6:3; 9:11, 15; 13:8; 15:1, 4; 17:5, 13; 18:28, 29, 30, 31, 32; 21:10; 24:5, 8, 39; 27:12; 29:32, 34; 30:20, 30; 32:29, 33; 34:22;

עַל־כֵּן **יַעֲזָב**־אִישׁ אֶת־אָבִיו וְאֶת־אִמּוֹ

c. SV (71x):[24] Gen 24:40
יְהוָה אֲשֶׁר־הִתְהַלַּכְתִּי לְפָנָיו **יִשְׁלַח** מַלְאָכוֹ אִתָּךְ

d. Complement-VS (10x):[25] Gen 2:23 לְזֹאת **יִקָּרֵא** אִשָּׁה

e. Subordinator-V:[26] Gen 17:21 יִצְחָק אֲשֶׁר **תֵּלֶד** לְךָ שָׂרָה

The *qatal* and *yiqtol* Verbs are found in a wide variety of word order patterns, both preceding (2a, 3a) and following (2c, 3c) the syntactic Subject, allowing Adjuncts (2b, 3b) and Complements (2d, 3d) to be fronted, and existing in main (2a-d, 3a-d) and subordinate (2e, 3e) clauses. In contrast, *wayyiqtol* clauses exhibit a highly restricted pattern: the Subject always follows the Verb, it cannot be negated, it does not allow the fronting of its Complement, and it does not follow overt subordinators like אֲשֶׁר or כִּי. In fact, the only constituent that can stand in front of the *wayyiqtol* is a fronted temporal Prepositional Phrase Adjunct, as in (1b), although that even this is allowed may be considered a controversial claim.

35:10; 37:10; 40:13, 19; 41:31, 36, 44; 42:38; 43:8, 32; 44:7, 18, 22, 23; 47:19; 48:20; 49:10; 50:25. This list includes the 23x with a negative particle as a verbal adjunct (Gen 6.3. 9:11, 15; 13:8; 15:1, 4; 17:5; 21:10; 24:5, 8, 39; 32:29, 33; 35:10; 41:31, 36, 44; 42:38; 43:8, 32; 44:22, 23; 49:10), which leaves 21x with only a fronted adjunct (Gen 2.24; 17:13; 18:28, 29, 30, 31, 32; 27:12; 29:32, 34; 30:20, 30; 34:22; 37:10; 40:13, 19; 44:7, 18; 47:19; 48:20; 50:25).

[24] ***71x***—Gen 1:20, 22; 2:5 (2x), 6; 3:15 (2x), 16; 4:7; 5:29; 8:22; 9:2, 6; 14:24; 15:4, 15; 16:12; 17:6, 9; 18:18; 19:19; 21:24; 22:5, 8; 23:6; 24:7, 40, 45; 25:23; 28:3, 22; 31:39, 53; 33:14; 34:10; 35:10, 11 (2x); 37:27; 38:17; 41:16, 27, 40; 42:19, 37; 43:9, 14, 29; 44:9, 10, 17, 33; 45:20; 46:4 (2x); 47:19, 24, 30; 48:5, 6, 19 (4x); 49:9, 16, 19 (2x), 20; 50:21, 24. Eight of these include modal *yiqtol* Verbs (Gen 1:20, 22; 22:5; 33:14; 37:27; 43:29; 44:33; 45:20), for thirty the Subject is an independent pronoun (Gen 3:15 (2x), 16; 4:7; 14:24; 15:4, 15; 16:12; 17:9; 19:19; 21:24; 22:5; 24:7, 45; 31:39; 33:14; 38:17; 41:40; 42:37; 43:9; 44:9, 10, 17; 46:4; 47:30; 48:19 (2x); 49:19, 20; 50:21), and three are negated (8:22; 23:6; 47:19). All three issues complicate the word order; omitting them leaves ***thirty-two*** clauses that are indicative and have lexical NP Subjects: Gen 2:5 (2x), 6; 5:29; 9:2, 6; 17:6; 18:18; 22:8; 24:40; 25:23; 28:3, 22; 31:53; 34:10; 35:10, 11 (2x); 41:16, 27; 42:19; 43:14; 46:4; 47:24; 48:5, 6, 19 (2x); 49:9, 16, 19; 50:24.

[25] ***10x***—Gen 2:23; 15:5; 27:39; 31:8 (2x); 32:29; 41:40; 49:6 (2x). The verbs in 32:29 and 49:6 (2x) are modal and negated.

[26] ***Relative/Complementizer*** אֲשֶׁר (39x)—Gen 2:19; 6:21; 9:2; 11:6; 13:16; 15:4, 14; 17:10, 14, 21; 20:9, 13; 21:12; 22:2, 14; 24:3; 26:2; 27:10, 40, 44; 28:15, 22; 29:27; 30:38; 31:32; 32:13; 33:14; 34:11, 12; 38:18; 40:14; 41:36, 55; 42:38; 44:1, 9, 10, 34; 49:1; ***Causal/Temporal/Complementizer*** כִּי (35x)—Gen 4:12; 12:12; 13:15, 17; 15:13; 19:2, 22; 20:7; 21:10, 12, 18, 30; 22:17; 24:4, 41; 26:3; 28:15; 29:2, 32; 30:33; 31:35, 49; 35:10; 37:35; 38:16; 43:7, 16, 25, 32; 44:15, 26; 46:3; 48:17; 49:10; 50:3; ***Interrogative*** הֲ (14x)—Gen 17:17; 18:13, 14, 23, 24, 25, 28; 20:4; 24:5, 58; 34:31; 37:8, 10; 43:7.

Thus, the distributional criterion provides an important filter for the frequency criterion. In this case, distributional asymmetries show the *wayyiqtol* to be the more restricted form since its use is limited to specific syntactic environments. That the *wayyiqtol* has a more constrained distribution than the other verbal forms strongly suggests that its fixed VS order should not simply be taken as the basic order for Biblical Hebrew even though the VS *wayyiqtol* clause is by far the most common clause type in Hebrew prose. This is not to say that the criterion of distribution has provided an argument for SV or VS order; rather, it provides a strong argument against the inclusion of the *wayyiqtol* data in determining basic word order.

3.3 THE CRITERION OF CLAUSE TYPE

The second criterion used to filter raw frequency results concerns 'clause type'. This criterion is predicated on the observation that languages often exhibit different word order patterns in different clause types; in such cases, not all clause types present the language's basic word order. Consider English interrogative clauses, such as *When did Noah leave?* This clause type in English has the inflected Verb, *did*, before the Subject, in contrast to the declarative counterpart, *Noah left yesterday*. On this basis, we would exclude interrogative clauses as a source for basic word order in English. Moreover, although interrogatives are typically a minority clause type in English texts and so their exclusion would not normally affect the frequency results, we can imagine a text that consists predominantly of questions, resulting in a highly skewed frequency-based analysis for English word order.

Such observations—that one must consider whether the language in question exhibits word order variation according to clause type—have influenced the typological analysis of basic word order from its beginnings (see Greenberg 1963:80). The result is that basic word order is most often identified as the the word order present in "stylistically neutral, independent, indicative clauses with full nouns phrase (NP) participants, where the subject is definite, agentive and human, the object is a definite semantic patient, and the verb represents an action, not a state or an event" (Siewierska 1988:8; see also Mallinson and Blake 1981:125). Notably, Siewierska also indicates that the basic word order of a language need not be identical to the "dominant linearization pattern" (i.e., statistically prevalent word order) in that language (1988:8). She suggests that this may be the result of the vagaries of human communication, in which diverse structures are utilized, or it may be due to a genre convention (1988:11–12). Genre convention is certainly operative in Hebrew with regard to the restricted distribution of *wayyiqtol* clauses, which I discussed above. The *wayyiqtol* form is used as the narrative Verb and, unlike the *qatal* and *yiqtol* Verbs, is confined to indicative semantics and a past temporal context (Cook 2004, 2006).

Another implication for Biblical Hebrew that follows from Siewierska's basic clause definition concerns the presence of overt Subjects. Hebrew, like many languages (Spanish and Italian, for example) allows the syntactic Subject to be omitted. Such languages are often referred to as null Subject or 'pro-drop' languages (see Holmstedt forthcoming a for an overview). Null Subject languages often exhibit word order differences between clauses with an overt Noun Phrase as the Subject and clauses without an overt Subject (Siewierska 1988:11); similarly, clauses with overt *pronominal* Subjects often exhibit word order differences from clauses with lexical Noun Phrase Subjects (Dryer 2007:80). Since Biblical Hebrew allows an overt Subject to be omitted (4a) and arguably uses overt Subject pronouns for Topic or Focus marking (4b), any discussion of basic word order must draw primarily on clauses that have overt lexical Noun Phrase Subjects (4c).

(4) TYPES OF SUBJECTS IN BIBLICAL HEBREW

a. Null: Gen 9:6 בְּצֶלֶם אֱלֹהִים עָשָׂה אֶת־הָאָדָם
b. Pronominal: Gen 27:31 וַיַּעַשׂ גַּם־**הוּא** מַטְעַמִּים
c. Lexical Noun Phrase: Gen 3:1
מִכֹּל חַיַּת הַשָּׂדֶה אֲשֶׁר עָשָׂה **יְהוָה אֱלֹהִים**

That clauses with lexical Noun Phrase Subjects are less common in null Subject languages like Hebrew, Spanish, and Italian makes it more difficult but not impossible to identify basic word order clauses in a text. It simply highlights the necessity of using all the criteria together in the investigation of basic word order.

The clause criterion holds a number of additional implications for the careful study of basic word order in Biblical Hebrew. First, it has long been noted that the dominant VS pattern of narrative becomes less than dominant in direct speech (MacDonald 1975). Consider the following numerical data from Genesis:

(5) NARRATIVE VERSUS SPEECH IN GENESIS

a. the *wayyiqtol* is used 1971x in narrative but only 123x[27] in speech.
b. of 2507[28] main (non-subordinate) narrative clauses, only

[27] Gen 3:10 (2x), 12, 13; 12:19; 16:5 (2x); 19:9, 13, 19; 20:6, 12, 13 (2x); 24:35 (2x), 36 (2x), 37, 39, 40, 42 (2x), 45 (3x), 46 (4x), 47 (4x), 48 (3x); 26:27, 28; 27:33 (3x), 35, 36; 29:33, 35; 30:6, 27; 31:9 (2x), 10 (3x), 11 (2x), 12, 15, 26 (2x), 27, 40, 41, 42; 32:5, 6 (2x), 29, 31; 33:10; 37:7; 39:14, 15 (2x), 18 (3x); 40:11 (3x); 41:10, 11, 12 (2x), 13, 18, 20, 21 (2x), 22, 24 (2x); 42:30, 31, 33; 43:7, 21 (2x); 44:20 (2x), 21, 22, 23, 24 (2x), 25, 26, 27, 28 (2x); 45:7, 8; 48:3, 7; 49:15 (2x), 23 (2x), 24 (2x). Only twenty-one of these include an overt Subject: Gen 19:13; 20:6; 24:36, 37; 30:27; 31:9, 11, 40; 32:6; 41:11, 20, 24; 42:33; 44:20, 25, 27, 28; 45:7; 49:23, 24 (2x).

[28] The totals in (5b) and (5c) include verbless and participial clauses, though the SV and VS numbers include only finite verbs (including im-

107[29] are SV (4.3%) while 896[30] (including *wayyiqtol*) are VS (over 35.8%)

c. of 1748 main (non-subordinate) speech clauses, 134[31] are SV (7.7%) and 200[32] are VS (11.4%)

The remarkable non-use of the wayyiqtol in direct speech confirms its primary role as the narrative or story-telling verb. Add the radical shift towards near balance of SV and VS in speech texts and it is clear that one's position on the discourse type will significantly impact the methodology and conclusions for basic word order.

How do we decide which discourse type is a better candidate for representing basic word order? Narrative is typically taken as the determinative discourse type: "If storyline clauses in narrative discourse in a given language are VSO, then that language should be classified as a VSO language" (Longacre 1995:333); this view holds that dialogue introduces complexities that likely depart from basic word order. However, Payne (1995) suggests that "[m]ost

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peratives).

[29] ***107x***—Gen 2:5 (2x), 6; 3:1; 4:1, 2, 4, 18 (3x), 22; 6:4, 8; 7:6, 10, 11, 19; 8:5; 10:8 (2x), 9, 13, 15, 24 (2x), 26; 11:3, 12, 14, 27 (2x); 13:12 (2x), 14; 14:3, 18; 15:12, 17 (2x); 16:1; 17:27; 18:17, 33; 19:4, 15, 23 (2x), 24, 38; 20:4; 21:1; 22:1, 23; 24:1 (2x), 16, 62; 25:3 (2x), 19, 34; 26:26; 27:6, 30; 29:9, 17; 31:19, 25 (2x), 34, 47; 32:2, 22; 33:3, 17; 34:5 (2x), 7, 27; 35:18; 36:2, 4, 5, 13, 14; 37:2, 3, 11, 36; 38:14, 25, 28; 39:1, 22; 41:56, 57; 42:8, 23; 44:3 (2x), 4 (2x); 45:14, 16; 47:26; 48:10; 50:23.

[30] **896x: *842x wayyiqtol*. *52x qatal***—Gen 4:26; 6:9; 7:11, 20; 8:5, 9, 13, 14; 9:19; 10:5, 11, 18, 25, 32; 11:9; 12:3; 13:5, 6; 14:5; 15:1, 18; 17:26; 18:7, 11; 19:22, 28; 20:18; 21:25; 22:23; 23:19; 25:6, 10, 26; 26:15; 29:3; 30:40, 41, 42; 31:32; 33:7, 17; 34:5, 19; 36:7; 38:29; 40:1, 23; 41:54; 42:4; 45:1, 3, 15. Only ***2x yiqtol*—**Gen 2:24; 32:33.

[31] ***134x***—Gen 1:20, 22; 3:11, 12, 13, 15 (2x), 16, 22; 4:7; 5:29; 6:21; 8:22; 9:2, 6, 7; 14:23, 24; 15:4, 15; 16:5, 12; 17:6, 9, 17, 18; 18:12, 13, 18, 25; 19:9, 19, 31; 20:5 (2x), 6; 21:7, 24, 26 (2x); 22:5, 8; 23:6; 24:35, 40, 44, 45, 56, 60; 25:23 (2x); 26:27; 28:3, 16, 22; 30:29; 31:5, 6, 7, 29, 38, 39, 53; 32:13; 33:14; 34:10; 35:11 (2x); 37:20, 27, 33; 38:17, 22, 23; 39:8; 41:10, 15, 16, 27, 40; 42:10, 16, 19 (2x), 37; 43:9, 14, 23 (2x), 29; 44:8, 9, 10, 16, 17 (2x), 19, 20 (2x), 27, 33; 45:19, 20; 46:4 (3x), 31; 47:5, 19, 24, 30; 48:2, 3, 5, 6, 19 (4x), 22; 49:8, 9, 16, 19 (2x), 20, 22, 26; 50:5, 16, 20 (2x), 21, 24.

[32] ***200x***—Gen 1:3, 6, 9 (2x), 11, 14, 20, 24; 2:23; 3:3; 4:6, 25; 6:3 (2x), 18; 7:1; 8:16; 9:11 (2x), 14, 15, 16, 26, 27 (2x); 12:13; 13:8; 15:1, 4, 5; 16:2, 5; 17:5 (2x), 13 (2x), 14; 18:4, 12, 13, 14, 18, 28, 29, 30, 31, 32; 19:13, 19, 20; 20:6; 21:6, 7; 22:17, 18, 20; 23:6; 24:5, 18, 27, 30, 31, 36, 37, 39, 50, 55, 60; 26:4, 10, 22, 28; 27:12, 20, 28 (2x), 29 (3x), 31, 34, 35, 38, 39, 41; 28:14 (2x), 21; 29:32 (2x), 34, 35; 30:3, 6, 18, 20 (2x), 23, 24, 27, 30, 33; 31:1, 7, 8 (2x), 9, 11, 40, 42, 44, 49; 32:5, 6, 29; 33:14; 34:8, 22, 30; 35:10; 37:7 (2x), 10, 33; 38:21, 22, 24; 39:19; 40:10 (2x), 13, 19 (2x); 41:11, 20, 24, 30 (3x), 31, 33, 34, 36 (2x), 40, 44, 51, 52; 42:4, 11, 16, 21, 28, 30, 33, 36, 38 (2x); 43:3, 7, 8; 44:7, 18 (2x), 20, 21, 22, 25, 27, 28, 29, 31, 33; 45:1, 7, 9 (2x), 10, 16; 46:34; 47:4, 9, 19 (2x); 48:7, 11, 16, 20 (2x), 21; 49:6 (2x), 8 (2x), 10, 17, 23, 24 (2x); 50:25.

claims about word order have undoubtedly been based on narrative data and, without conscious awareness, the typological cubby-holes to which languages have been assigned are likely biased by formal features correlating with temporal sequentiality" (1995:454). In other words, precisely because clauses in narrative are strung together in some sort of temporal order, narrative (rather than direct speech/dialogue/conversation) may exhibit departures from standard word order (see also Downing 1995:20). This does not mean that speech clauses do not always contain word order complexities, but that we should not naïvely take the dominant order in narrative as basic simply by virtue of its text-type.

Another distinction that may affect the word order discussion involves main and subordinate clauses. Subordinate clauses often appear to be more conservative, that is, they show less syntactic diversity than main clauses (this is what Ross 1973 named the 'Penthouse-principle', i.e., that the rules are different if you live in the penthouse = upstairs/main clause). This observation has interesting implications for both word order typology and diachronic syntax. For identifying basic word order, some, like Bickford (1998:214–16), argue that subordinate clauses take priority in the identification of basic word order. For diachronic syntax, it has been noted that word order changes in, for example, English, German, and Kru, first took place in main clauses and only later (often much later) applied to subordinate clauses (see Matsuda 1998 and Bybee 2002 for discussion and bibliography). Importantly, if it is established that a diachronic word order change has affected main clauses but not subordinate clauses in Hebrew, the priority of the clauses for word order typology is reversed: the new order exhibited in main clauses should be taken as basic.[33]

Biblical Hebrew, I suggest, should be added to the list of languages that exhibit Ross' Penthouse principle. As the data in (6) illustrate, there is no doubt that subordinate clauses (6b) are overwhelmingly VS in Biblical Hebrew, even when all the criteria are applied, while the number of SV and VS main clauses (6a) are nearly identical.

(6) MAIN VERSUS SUBORDINATE CLAUSE WORD ORDER IN GENESIS

a. Main
SV (224x):[34] Gen 2:6 וְאֵד יַעֲלֶה מִן־הָאָרֶץ

[33] The older basic word order pattern in subordinate clauses thus becomes a remnant feature. Moreover, since it does not match the new basic order, it is likely that, for example, the older VS order in Hebrew subordinate clauses receives a new syntactic processing so that the native speaker's grammar associates (by reanalysis) the VS order with a syntactic constraint (in the case of Hebrew, it is associated with 'triggered inversion'; see Holmstedt 2002, 2005, 2009a).

[34] **224x: *157x qatal***—Gen 3:1, 11, 12, 13, 22; 4:1, 2, 4, 18 (3x), 22; 6:4,

VS (216x):[35] Gen 27:41 יִקְרְבוּ יְמֵי אֵבֶל אָבִי

b. Subordinate

SV (16x):[36] Gen 31:32 כִּי רָחֵל גְּנָבָתַם

VS (127x):[37] Gen 4:25 כִּי הֶרָגוֹ קָיִן

8; 7:6, 10, 11, 19; 8:5; 10:8 (2x), 9, 13, 15, 24 (2x), 26; 11:3, 12, 14, 27 (2x); 13:12 (2x), 14; 14:3, 18, 23; 15:12, 17 (2x); 16:1, 5; 17:27; 18:12, 13, 17, 33; 19:4, 9, 15, 23 (2x), 24, 31, 38; 20:4, 5 (2x), 6; 21:1, 7, 26 (2x); 22:1, 23; 24:1 (2x), 16, 35, 56, 62; 25:3 (2x), 19, 34; 26:26, 27; 27:6, 30; 28:16; 29:9, 17; 30:29; 31:5, 6, 7, 19, 25 (2x), 29, 34, 38, 47; 32:2, 13, 22; 33:3, 17; 34:5 (2x), 7, 27; 35:18; 36:2, 4, 5, 13, 14; 37:2, 3, 11, 20, 33, 36; 38:14, 22, 23, 25, 28; 39:1, 8, 22; 41:10, 15, 56, 57; 42:8, 10, 23; 43:23; 44:3 (2x), 4 (2x), 8, 16, 19, 20 (2x), 27; 45:14, 16, 19; 46:31; 47:5, 26; 48:2, 3, 10, 22; 49:22, 26; 50:5, 16, 20 (2x), 23. ***67x yiqtol***—Gen 1:20, 22; 2:5 (2x), 6; 3:15 (2x), 16; 4:7; 5:29; 8:22; 9:2, 6; 14:24; 15:4, 15; 16:12; 17:6, 9, 18; 18:18; 19:19; 21:24; 22:5, 8; 23:6; 24:7, 40, 45; 25:23 (2x); 28:3, 22; 31:39, 53; 33:14; 34:10; 35:11 (2x); 37:27; 38:17; 41:16, 27, 40; 42:19, 37; 43:9, 14, 29; 44:9, 10, 17, 33; 45:20; 46:4 (3x); 47:19, 24, 30; 48:5, 6, 19 (4x); 49:8, 9, 16, 19 (2x), 20; 50:21, 24. Note that this list of SV clauses does not account for any of the other criteria (distribution, clause type, or pragmatics).

[35] **216x:** ***127x qatal***—Gen 3:3; 4:6, 25, 26; 6:3, 9, 18; 7:11, 13, 14, 20; 8:5, 9, 13, 14; 9:14, 16, 19; 10:5, 11, 18, 25, 32; 11:9 (2x); 12:3, 13; 13:5, 6; 14:5; 15:1, 18; 16:2; 17:5, 13, 14, 26; 18:7, 11, 12, 13, 18; 19:19, 22, 28; 20:18; 21:6, 7, 25; 22:18, 20, 23; 23:19; 24:27, 30, 50; 25:6, 10, 26; 26:4, 10, 15, 22, 26; 27:20, 35; 28:14 (2x), 21; 29:3, 32, 35; 30:6, 18, 20, 23, 33, 40, 41, 42; 31:1, 7, 8, 32, 42; 32:5; 33:7, 17; 34:5, 8, 19, 30; 36:7; 37:7, 33; 38:21, 22, 24, 29; 39:19; 40:1, 10 (2x), 19, 23; 41:30 (3x), 36, 51, 52, 54; 42:4, 11, 21, 28, 30, 36, 38; 43:3, 7; 44:29, 31; 45:1, 3, 9 (2x), 10, 15, 16; 46:34; 47:9; 48:7, 11, 21; 49:9; ***91x yiqtol***—Gen 1:3, 6, 9 (2x), 11, 14, 20, 24; 2:23, 24; 6:3; 9:11 (2x), 15, 26, 27 (2x); 13:8; 15:1, 4, 5; 16:5; 17:5, 13; 18:4, 14, 28, 29, 30, 31, 32; 19:20; 22:17; 24:5, 39, 55, 60; 26:28; 27:12, 28, 29 (3x), 31, 39, 41; 29:32, 34; 30:3, 20, 24, 30; 31:8 (2x), 44, 49; 32:29, 33; 33:14; 34:22; 35:10; 37:7, 10; 40:13, 19; 41:31, 33, 34, 36, 40, 44; 42:4, 16, 20, 38; 43:8; 44:7, 18 (2x), 21, 22, 33; 47:4, 19 (2x); 48:16, 20 (2x); 49:6 (2x), 8 (2x), 10, 17; 50:25. Note that this list of VS clauses does not account for any of the other criteria (distribution, clause type, or pragmatics), although I have omitted the 866 *wayyiqtol* clauses, which I have argued in §3.2 skew the analysis.

[36] **16x:** ***10x qatal***—Gen 3:20; 6:1; 21:26; 30:26; 31:32, 42; 42:38; 43:5, 22; 44:32; ***6x yiqtol***—Gen 13:16; 17:17; 18:25; 22:14; 35:10; 44:5. As with the data in note 34, this list of SV clauses does not account for any of the other criteria (distribution, clause type, or pragmatics).

[37] **127x:** ***90x qatal***—Gen 1:1, 21; 2:3, 5; 3:1, 5; 4:25; 5:24; 6:1, 12–13; 7:9, 16; 8:8, 11; 10:25; 11:5, 9; 13:6; 14:14, 24; 16:11, 15; 19:13; 21:3, 4, 17, 25, 31; 22:3; 24:21, 22, 44, 51, 52; 25:10, 12; 26:5, 8, 15, 28; 27:1, 14, 23, 30 (2x); 28:4, 6, 11; 29:10, 33; 30:13, 25, 29; 31:16, 22; 32:27; 33:5, 11, 13; 35:7; 36:7; 37:4; 38:14; 40:22; 41:54, 57; 42:5, 28; 43:17, 30; 44:16, 17, 27; 45:5, 27; 46:5, 18, 20, 25; 47:11, 15, 16, 18, 20; 48:9, 15; 49:30; 50:13, 15; ***37x yiqtol***—Gen 4:24; 6:4; 12:12; 13:16; 15:13; 17:21; 19:19; 20:7; 21:10, 12; 24:8; 26:7; 27:4, 19, 25, 31; 28:20; 29:2, 8; 30:38; 31:49; 32:9, 18; 37:20; 38:11 (2x); 41:50; 42.20; 43:16, 32; 44:5, 23; 45:11; 46:33; 48:17; 50:3, 15.

There is also comparative evidence in Northwest Semitic that ancient Hebrew was initially a VS language in both main and subordinate clauses.[38] However, by the post-biblical period, Hebrew exhibits a shift in word order character, such that soon after the turn of the era, Rabbinic Hebrew appears to be an SV language.[39] Indeed, it has even been argued that Biblical Hebrew itself exhibits an (early BH) VS-to-SV (late BH) shift (Givón 1977). These lines of evidence converge in such a way as to suggest that Biblical Hebrew experienced a shift to SV order in main clauses while the older VS order was preserved in subordinate clauses. If so, two questions proceed from this. First, if the basic word order of main and subordinate clauses differ, which is to be taken as the typological classification for the language? Second, is it possible to identify when this shift occurred? For instance, if Genesis does exhibit SV basic word order, then the shift must have occurred earlier than Givón argues.[40]

Finally, it should not go unnoticed that Siewierska's definition of the basic clause type includes a semantic notion:[41] indicative

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As with the data in note 35, this list of VS clauses does not account for any of the other criteria (distribution, clause type, or pragmatics), although I have omitted the 866 *wayyiqtol* clauses, which I have argued in §3.2 skew the analysis.

[38] For Ugaritic (late 2nd millennium), whether SVO or VSO is the basic word order remains undetermined, although descriptions often lean towards a qualified VSO analysis (Tropper 2000:869−80; Bordreuil and Pardee 2009:66; contra Sivan 1997:210–14). Old Aramaic appears to be consistently VSO with fronting of the Subject for discourse-pragmatic reasons (Degen 1969:121; Hug 1993 lists only one SVO example; see also Buth 1987), as does Phoenician (Segert 1976:249; Friedrich and Röllig 1999:316) as well as the rest of the Canaanite dialects in the first half of the first millennium, including the Hebrew epigraphic texts (Garr 1985:189–91). Significantly, Kaufman notes that, in contrast to VSO Old Aramaic and SOV Imperial Aramaic, later Aramaic reflects "the normal Semitic drift from VSO to SVO type" (1997:127).

[39] Moshe Bar-Asher, personal communication (05/11/2011), confirms my own view that SV is the dominant pattern (using all four criteria) in the Mishna. Published statements regarding the basic word order of Rabbinic Hebrew are surprisingly rare.

[40] For an introduction to the current state of the debate about Biblical Hebrew diachrony, see Zevit 2005, 2006. For my own views, see Holmstedt forthcoming b. When I imply that Genesis is earlier than the texts that Givón has taken as "late" biblical Hebrew, it reflects full awareness that I am taking a position counter to the anti-dating (relative or absolute) hypothesis presented in Young, Rezetko, and Ehrensvärd 2008. It is also important to note that, while Givón's study contains interesting insight, it is also flawed (see Buth 1987:21–25) and must be completely redone.

[41] It is worth noting that word order distinctions based on the semantic type of verb are attested in a number of languages. For example, Siewierska (1988) claims that some African languages vary the word order

clauses rather than non-indicative (i.e., modal, subjunctive) are better candidates for basic word order. In biblical Hebrew, modal clauses—whether with the morphologically modal *jussive*, the modal use of the imperfective *yiqtol*, or the modal use of the perfective *qatal*—are consistently VS (7b). In contrast, indicative clauses (excluding the *wayyiqtol*) are not so clearly VS (7a); rather, SV is dominant by more than two-to-one.

(7) INDICATIVE VERSUS MODAL CLAUSE WORD ORDER IN GENESIS

a. Indicative
   SV (164x):[42] Gen 2:6 אֵד יַעֲלֶה מִן־הָאָרֶץ
   VS (77x):[43] Gen 27:41 יִקְרְבוּ יְמֵי אֵבֶל אָבִי
b. Modal[44]

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depending on the *tense* and *aspect* of the verb used. For example, the Sudanic languages Lendu, Moru, Mangbetu, and the Gur languages Natioro and Bagassi exhibit SVO order in the perfective tenses and SOV in the imperfective. Similarly, the Sudanic language Anyuak appears to be a language that switches from SVO in the present tense to SOV in the past and future (1988:95; regarding Anyuak/Anywa, see also Reh 1996).

[42] **164x: *131x* indicative SV *qatal*—**Gen 1:2; 3:1, 11, 13, 22; 4:1, 2, 4, 18 (3x), 22; 6:1, 4, 8; 7:6, 10, 11, 19; 8:5; 10:8, 13, 15, 24 (2x), 26; 11:3, 12, 14, 27 (2x); 13:12 (2x), 14; 14:3, 18; 15:12, 17 (2x); 17:27; 18:12, 17, 33; 19:4, 9, 15, 23 (2x), 24, 31, 38; 21:1, 7, 26; 22:1, 23; 24:1 (2x), 35, 56, 62; 25:3 (2x), 19, 34; 26:26; 27:6, 30; 29:9, 17; 31:5, 7, 19, 25 (2x), 29, 32, 34, 42, 47; 32:2; 33:17; 34:5 (2x), 7, 27; 35:18; 36:2, 4, 5, 12, 13, 14; 37:2, 3, 11, 20, 33, 36; 38:22, 28; 39:1; 41:10, 56, 57; 42:10, 38; 43:5, 22, 23 (2x); 44:3, 8, 16, 19, 20 (2x), 32; 45:14, 16; 46:31; 47:5; 48:2, 3, 10; 49:22, 26; 50:5, 16, 20, 23. This list excludes the thirty-four examples with pronominal Subjects as well as the six examples that are negated; see above, note 19. ***33x* indicative SV *yiqtol*—**Gen 2:5 (2x), 6; 5:29; 9:2, 6; 17:6; 18:18; 22:8; 24:40; 25:23; 28:3, 22; 31:53; 34:10; 35:11 (2x); 41:16, 27; 42:19; 43:14, 29; 47:24; 48:5, 6, 19 (4x); 49:8, 9, 16; 50:24. This list excludes the thirty examples with pronominal Subjects as well as the three examples that are negated; see above, note 24.

[43] **77x: *22x* indicative VS *qatal*—**Gen 16:2; 19:19, 28; 21:7, 25; 22:20; 27:35; 30:6, 18, 20, 23; 31:1; 37:7; 38:24, 29; 40:10 (2x); 42:28, 30; 45:9, 16; 48:11. ***65x* indicative VS *yiqtol*—**Gen 2:23, 24; 4:24; 6:4; 12:12; 13:16; 15:5, 13; 17:13, 21; 18:14, 28, 29, 30, 31, 32; 19:19; 20:7; 21:12; 26:7; 27:4, 12, 19, 25, 31, 39, 41; 28:20; 29:2, 8, 32, 34; 30.20, 30, 38; 31.8 (2x), 49; 32.9, 18; 34.22; 37.7, 10, 20; 38.11 (2x); 40.13, 19; 41.40, 50; 42.4, 20; 43.16; 44.5, 7; 45.11; 46.33; 47.19; 48.17, 20; 49.8 (2x); 50.3, 15, 25. Note that nineteen of these have a fronted adjunct (Gen 2:24; 17:13; 18:28, 29, 30, 31, 32; 27:12; 29:32, 34; 30:20; 34:22; 37:10; 38:11; 40:13, 19; 41:50; 48:20; 50.25), six have a fronted complement (Gen 2:23; 15:15; 27:39; 31:8 (2x); 41:40), and thirty-five are formally subordinate (introduced by **אִם, אֲשֶׁר, בַּעֲבוּר, כִּי, לוּ, פֶּן,** or an interrogative, Gen 4:24; 6:4; 12:12; 13:16; 15:13; 17:21; 18:14; 19:19; 20:7; 21:12; 26:7; 27:4, 29, 25, 31; 28:20; 29:2, 8; 30:30, 38; 31:49; 32:9, 18; 37:20; 38:11; 42:4; 43:16; 44:5, 7; 45:11; 46:33; 47:19; 48:17; 50:3, 15). This leaves **only *five* simple** indicative VS *yiqtol* clauses: Gen 27:41; 37:7; 42:20; 49:8 (2x).

SV (14x):[45] Gen 16:1 שָׂרַי אֵשֶׁת אַבְרָם לֹא יָלְדָה לוֹ
VS (102x):[46] Gen 1:3 יְהִי אוֹר

As this section has illustrated, the clause type criterion covers a lot of linguistic ground. For Biblical Hebrew, applying this criterion leads one to set aside clauses without lexical Noun Phrase Subjects, work with an awareness that narrative and direct speech exhibit different patterns (primarily due to the conventionalized use of the *wayyiqtol* in the narrative genre), distinguish between the word order of main and subordinate clauses (and choose which has priority for determining basic order), and look to the order exhibited by indicative clauses rather than non-indicative clauses. Although filtering the data through this criterion requires significant effort and results in a smaller database of clauses that may arguably exhibit basic word order, since it is clear that Hebrew does pattern differently along each of these divides (Subject type, genre, clause level, and semantic type), it is a filtering process that is absolutely required.

3.4 THE CRITERION OF PRAGMATICS

The third, and final, criterion by which the raw frequency data are filtered concerns 'pragmatic markedness'. Attention to the pragmatic features of a clause is particularly significant for so-called 'free-order' languages like Hebrew, that is, languages exhibiting a great deal of word order variation. At the core of this approach is the recognition that the majority of language data contains pragmatically 'marked', or 'non-neutral', clauses. Even for languages

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[44] I have included in the modal category (and, in previous notes, isolated) clauses with verbal negation. Negation is often closely linked to modality (see Lyons 1977:768–77; Palmer 1979; Hoye 1997; Palmer 2001:173–76). Not surprisingly, Givón has observed that negative function words in some languages clearly affect the word order of the Subject, Verb, and Object (1979:124–25).

[45] All examples listed are modal by virtue of being negated—Gen 16:1; 20:4, 5; 21:26 (2x); 24:16; 28:16; 31:38; 38:14, 23; 39:8; 42:8, 23; 47:26. If one does not classify negation as a form of modality, then there are no examples of modal SV *qatal* clauses in Genesis; either way, the SV order in these clauses is likely due to the Topic-fronting of the Subject.

[46] **102x: *39x* modal VS *qatal***—Gen 9:16; 12:3, 13; 17:5, 13, 14; 18:18; 22:18; 26:4; 28:14 (2x), 21; 29:3; 30:33, 42; 34:5, 30; 40:19; 41:30, 36; 42:38; 44:29, 31; 48:21. Of these fifteen are negated (2:5; 8:9; 13:6; 31:7, 32; 34:19; 36:7; 38:21, 22; 40:23; 42:4, 11; 45:1 (2x), 3). ***42x* modal VS *yiqtol***—Gen 1:9 (2x), 20; 6:3; 9:11, 15; 15:1, 4; 16:5; 17:5; 18:4; 21:10; 22:17; 24:5, 8, 39, 55, 60; 27:28, 29 (3x), 31; 30:3; 32:3; 33:14; 35:10; 41:31, 34, 36, 44; 42:16, 38; 43:8, 32; 44:22, 23; 47:4, 19; 48:16; 49:6, 10. Of these, twenty-two are negated (6:3; 9:11, 15; 15:1, 4; 17:5; 21:10; 24:5, 8, 39; 32:33; 35:10; 41:31, 36, 44; 42:38; 43:8, 32; 44:22, 23; 49:6, 10). ***21x* VS Jussive—**Gen 1:3, 6, 11, 14, 24; 9:26, 27 (2x); 13:8; 19:20; 26:28; 30:24; 31:44, 49; 41:33; 44:18 (2x), 21, 33; 49:6, 17. Of these, three are additionally negated (13:8; 44:18; 49:6).

that have a more rigid word order, such as English, pragmatics can produce extreme but grammatically acceptable examples, as with *Into the room walked the Prime Minister*, a VS clause with a fronted locative PP—certainly not basic order in English.

The operative pragmatic notions for Hebrew are Topic and Focus, both of which motivate the fronting of constituents, which in turn appears to motivate VS order.[47] In brief, *Topic* draws a constituent to the front of the clause to either 1) orient the reader/listener to which entity among previously established entities will now act or experience an event, or 2) set the scene with time or place adjuncts (e.g., a temporal PP). Focus similarly draws a constituent to the front of a clause, but for a different reason: it is to contrast the fronted entity with other known or assumed (based on shared knowledge) entities with which it forms a contextually or logically established set. Importantly, whether or not a particular entity has been previously established (and thus can be a Topic or makes sense as a Focus) is sensitive to the embedded discourse worlds (i.e., conversations) within the larger text. So, for instance, the fact that some person has been mentioned in the narrative does not necessarily establish that entity as available for Topic-status within a conversation embedded within the narrative.

(8) DISTINGUISHING DISCOURSE 'WORLDS' WITHIN A LAYERED TEXT

Gen 38:22 וְגַם אַנְשֵׁי הַמָּקוֹם אָמְרוּ לֹא־הָיְתָה בָזֶה קְדֵשָׁה

In (8), the SV clause does not present any Topic or Focus on the Subject. Although the entity אַנְשֵׁי הַמָּקוֹם has been invoked previously in the larger discourse (v. 21), there it was invoked by the narrator, whereas here in v. 22 (8) the entity is used within a conversation between Judah and his servant and cannot necessarily be taken as an established entity (and thus, available to carry Topic marking).[48] Put another way, the phrase אַנְשֵׁי הַמָּקוֹם is new to Judah and so cannot be a Topic. In light of such complexity, the linguist filtering the word order data by the pragmatic criterion must be sensitive to numerous strategies by which the information structure of a text unfolds.

I have previously separated out clauses with fronted constituents, as I did above in (2), where I separated out *qatal* and *yiqtol* clauses that have fronted Adjuncts (2b, 3b) or fronted Complements (2d, 3d). Similarly I pointed out that pronominal Subjects (as in (4b)) are not appropriate for basic word order clauses since such

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[47] See Holmstedt 2009a for an exposition of my model for Biblical Hebrew Information Structure, in which Topic and Focus are central concepts.

[48] Some entities are assumed as a part of general knowledge (at least, between the narrator/speaker and reader/listener) and so carry Topic marking from the first use. This is not the case with אַנְשֵׁי הַמָּקוֹם in Gen 38:22.

Subjects in Hebrew signal Topic or Focus marking. Using those examples will illustrate how Topic and Focus work as well as how these pragmatic features affect clausal word order, thereby rendering their clauses poor candidates for basic word order. Consider the examples in (9).

(9) CONSTITUENT FRONTING

a. Adjunct-fronting: Gen 29:34 **עַתָּה הַפַּעַם** יִלֶּוֶה אִישִׁי אֵלָי
b. Complement-fronting: Gen 31:42
אֶת־עָנְיִי וְאֶת־יְגִיעַ כַּפַּי רָאָה אֱלֹהִים
c. Subject-fronting: Gen 23:6
אִישׁ מִמֶּנּוּ אֶת־קִבְרוֹ לֹא־יִכְלֶה מִמְּךָ

In (9a), there are two fronted adjuncts, the temporal adverb עַתָּה 'now' and the adverbial NP הַפַּעַם 'this time'. The first is fronted as a scene-setting (temporal) Topic, the second as a contrastive Focus: Leah thinks that this, third son, will finally endear Jacob to her, whereas apparently the first two sons did not gain her the favor she desired. The Topic-Focus order in (9a) illustrates that even the pragmatic functions have an order in Hebrew: Hebrew exhibits multiple Topics, multiple Foci, but when both a Topic and Focus are present, the order is always Topic-Focus.

Like הַפַּעַם in (9a), the fronted Complement in (9b) carries Focus marking. In Gen 31:42, Jacob finishes his blistering charge against Laban, which culminates in our example and the short clause that follows it, וַיּוֹכַח אָמֶשׁ 'and he rebuked (you) last night!'. It is not clear if the NPs עָנְיִ and יְגִיעַ כַּפַּיִם constitute the contrastive constituents or if it is the 1cs pronouns attached to the NPs that are contrastive. Is Jacob asserting that his experience has been one of pain and suffering (presumably in contrast to how Laban would characterize it) or is he simply contrasting who God has favored: him (not Laban)? Both options are contextually felicitous and both may be intended, which is possible since the scope of the Focus is over the entire compound constituent. In any case, this fronting of the Complement communicates something like the following: *Though you (Laban) have continually treated me unfairly, my oppression and my toil caught God's attention.*

Finally, two features in (9c) indicate that it is an unambiguous example of Subject-fronting. First, the Verb is negated, which I have suggested above is a feature associated with VS order. Thus, any constituent in front of the Verb can only be there due to a pragmatically-motivated fronting. Also, the presence of the Complement אֶת־קִבְרוֹ before the Verb is unarguably a case of Topic or Focus fronting. This necessarily points to the Subject that precedes the fronted Complement as a case of fronting as well. So, what pragmatic roles do the fronted Subject and Complement fill? In the context, taking the Subject אִישׁ מִמֶּנּוּ 'a man from us' as the Topic makes good sense, since the Hittite speaker(s) is orienting Abraham to which of the previously mentioned entities (whom Abraham had referenced as 'you' in the preceding verse) would act. Another way

to think of this is as a choice that the Hittite speaker made in the response: among the obvious choices, rather than starting with 'you, Abraham …', he started with 'a man among us'. The key to understanding the force of the Focus-fronted Complement is understanding that while the scope of the Focus lies over the entire NP, it can also be associated with one constituent within the phrase; in the case of אֶת־קִבְרוֹ the Focus is on the 3ms suffix, indicating that the force is 'his (own) grave'. Thus, a paraphrastic translation of (9c) that highlights the pragmatics is 'no man among us would withhold his own grave from you'.

There is, to my knowledge, broad agreement that examples like (9a) and (9b) illustrate the Topic- or Focus-fronting of a constituent that is normally positioned after the Verb.[49] The numbers in (10) demonstrate that a fronted constituent is much more often followed by VS order than SV order. But given the complicating factor of the fronting itself, neither 'X-VS' or 'X-SV' (where 'X' means a fronted constituent) can be used to isolate the basic order.

(10) CONSTITUENT FRONTING

a. Adjunct-fronting: VS (101x)[50] vs. SV (6x)[51]
b. Complement-fronting: VS (25x)[52] vs. SV (0x)
c. Subject-fronting: 192x[53]

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[49] There is less agreement regarding the precise nature of the concepts of Topic and Focus. My point above, though, concerns the classification of examples like (9a) and (9b), not their full explanation.

[50] See notes 18 and 23.

[51] Gen 4:15; 8:22; 9:6; 19:15; 20:5; 45:8 This does not include Adjunct clauses, such as a conditional clause protasis, which is technically clausal adjuncts to the verb in the apodosis; these Adjuncts do not appear to affect word order within the main clause.

[52] See notes 20 and 25.

[53] **192x: *64x*** SV examples with a pronominal Subject reflect Topic or Focus-marking on the Subject—Gen 3:12, 15 (2x), 16, 20; 4:7, 20, 21; 10:8, 9; 14:23, 24; 15:4, 15; 16:5, 12; 17:9; 18:13; 19:19; 20:5 (2x), 6; 21:24, 26 (2x); 22:5; 24:7, 45; 26:27; 28:16; 30:26, 29; 31:6, 39; 32:13, 22; 33:3, 14; 38:14, 17, 23, 25; 39:22; 41:15, 40; 42:8, 23, 37; 43:9; 44:4, 9, 10, 17, 27; 45:19; 46:4; 47:30; 48:19 (2x), 22; 49:19, 20; 50:20, 21. Also, if negation is typically associated with (or put differently, results in) VS order, then ***9x*** SV examples with a negated Verb also likely reflect a fronted Subject—Gen 8:22; 16:1; 20:4; 23:6; 24:16; 31:38; 39:8; 47:19, 26. Similarly, with explicitly modal verbs, ***7x*** SV examples almost certainly reflect Subject-fronting—Gen 1:20, 22; 22:5; 33:14; 37:27; 44:33; 45:20. Finally, ***112x*** are indicative and have the Subject and Verb adjacent (i.e., no other fronted constituent to signal Subject fronting), and yet the context suggests that the Subject has been fronted for Topic—Gen 2:6; 3:11, 13, 22; 4:1, 2, 4, 18 (3x), 22; 5:29; 6:8; 7:19; 8:5; 9:2, 6; 10:8, 13, 15, 24 (2x), 26; 11:12, 14, 27 (2x); 13:12 (2x), 14; 14:3; 17:16, 27; 18:12, 17, 18, 33; 19:9, 15, 23, 24, 38; 21:1, 7, 26; 22:1, 23; 24:1 (2x), 35, 40, 56, 62 ; 25:3 (2x), 19, 23, 34;

The Subject-fronting illustrated in (9c) and quantified in (10c), though, lies at the heart of the basic word order discussion. It is clear that many SV clauses are best understood in the context as non-basic, whether the Subject is a pronoun (which, in a null Subject language like Hebrew, always signals Topic or Focus; see Holmstedt, forthcoming a) or is positioned before another fronted constituent, as in (9c). The SV order in such clauses reflects either a Topic or Focus-marked Subject. The same cannot be said, though, for a number of examples like (8) above or (11).

(11) SV WITHOUT TOPIC OR FOCUS-MARKED SUBJECT (47X)[54]

Gen 37:20 חַיָּה רָעָה אֲכָלָתְהוּ

As with the SV clause in (8), there is nothing in the discourse context of the example in (11) that even weakly suggests a Topic or Focus reading of the Subject. The plan by Joseph's brothers to pass off Joseph's disappearance as a wild animal attack does not build on any previously established or generally presumable discourse entity. As a newly introduced entity, חַיָּה רָעָה cannot be a Topic; moreover, a contrast created by Focus-marking on חַיָּה רָעָה makes no contextual sense—with what would the imaginary wild animal be contrasted?

Although the majority of main, indicative SV clauses reflect Topic or Focus marking on the Subject (9c, 10c), the existence of some SV clauses (11) that are in main, indicative clauses with no Topic or Focus marking—and so arguably basic—challenges the traditional VS classification of Biblical Hebrew. To add to this, if Biblical Hebrew were a strong VS language (Longacre 1995), then even with the omission of *wayyiqtol* clauses, we would expect to see numerous main, indicative VS clauses. But we do not: qualifying SV clauses (11) number almost twice as many as qualifying VS clauses (12).

26:26; 27:6, 30; 28:3, 22; 29:9, 17; 31:5, 7, 19, 25 (2x), 29, 34, 47; 32:2; 33:17; 34:5 (2x), 7; 35:10, 11, 18; 36:4, 5; 37:3, 11, 33, 36; 39:1; 41:10, 16, 27, 56, 57; 44:8, 19; 45:14; 46:4, 31; 47:5, 24; 48:5, 6, 19 (2x); 49:9, 16, 19; 50:5, 16, 20, 23, 24.

[54] ***47x***—1:2; 2:5 (2x), 6; 3:1, 22; 5:29; 6:1, 4; 7:6, 10, 11; 9:2; 11:3; 14:18; 15:12, 17; 19:4, 23, 31; 22:8; 31:53; 34:10, 27; 35:11; 36:2, 12, 13, 14; 37:2, 20; 38:22, 28; 42:10, 19; 43:14, 23; 44:16, 20; 45:16; 46:31; 48:2, 3, 10; 49:22, 26; 50:23.

(12) VS 'BASIC WORD ORDER' (26X)[55]

Gen 42:30 דִּבֶּר הָאִישׁ אֲדֹנֵי הָאָרֶץ אִתָּנוּ קָשׁוֹת

Is Biblical Hebrew a 'weak' VS language, which allows for a SV minority alternative? Or is it a 'weak' SV language, in that VS order dominates in numerous non-basic environments (and is even obligatory in some, such as with the *wayyiqtol*)?

The careful application of the four criteria I have introduced and illustrated with data from Genesis makes one conclusion inescapable: determining the basic word order in Biblical Hebrew is no simple task. Although the criteria (aside from frequency) are grounded in grammatical features, at some level they all reflect a common sense approach to the wide variety of word order data in a language like Hebrew. Moreover, none of the four criteria exists in isolation; they overlap with each other. My application of the criteria to Hebrew in this study has raised additional questions: Is the consensus that Hebrew is a clear VS language accurate?, Did ancient Hebrew experience a VS-to-SV shift?, and, Is it possible that there is a free (minority) alternative to the basic order? In the remainder of this essay, I will begin to address these questions as they may apply to the language data from Genesis that I have presented above, although any final conclusion about Biblical Hebrew as a whole must be delayed until a full study of *all* the texts has been completed.

4. ON THE VSO LANGUAGE TYPE AND BIBLICAL HEBREW

According to Carnie and Guilfoyle, in their preface to a volume dedicated to Verb-initial (VSO and VOS) languages, these languages "make up about 10% of the world's languages" (2000:3). Yet, the Verb-initial group has generated a good deal of linguistic literature (mostly non-generative until the collected articles in Carnie and Guilfoyle 2000 and the follow-up studies in Carnie, Harley, and Dooley 2005). Even in Greenberg's 1963 study he isolates the VSO type as a primary class by centering many of his universals around features of VSO languages: for example, Greenberg's Universal 3 states that "Languages with dominant VSO order are always prepositional" (78) and Universal 6 states that "All languages with dominant VSO order have SVO as an alternative or as the only alternative basic order" (79). In fact, throughout Greenberg's forty-five Universals, the only one that occurs in VSO but not in SVO is Universal 9, which concerns the position of question particles:

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[55] See notes 17 and 22: ***26x***—16:2; 19:19, 28; 21:7, 25; 22:20; 27:35, 41; 30:6, 18, 20, 23; 31:1; 37:7 (2x); 38:24, 29; 40:10 (2x); 42:28, 30; 45:9, 16; 48:11; 49:8 (2x). It may be significant that of these twenty-six 'simple' VS clauses, only ***four*** are in narrative (19:28; 21:25; 27:41; 38:29), while ***twenty-two*** are in direct speech (16:2; 19:19; 21:7; 22:20; 27:35; 29:32; 30:6, 18, 20, 23; 31:1; 37:7 (2x); 38:24; 40:10 (2x); 42:28, 30; 45:9, 16; 48:11; 49:8).

initial particles occur in prepositional languages and final particles occur in postpositional languages. Greenberg's corpus of thirty languages included no SVO type that used initial particles. This, though, simply points to the inadequacy of Greenberg's small corpus, which typological studies have since tried to rectify. Carnie and Guilfoyle list nine features—listed in (13)—as previously noted correlates of VSO order, which as a group distinguish VSO from SVO and SOV languages.

(13) VSO CORRELATES

a. head initiality

b. prepositional

c. post-nominal adjectives

d. preverbal tense, mood/aspect, question, and negation particles

e. inflected prepositions

f. left-conjunct agreement

g. lack of a verb "have"

h. copular constructions without verbs

i. "verbal noun" infinitives

Biblical Hebrew certainly contains most of these features: it is primarily head-initial (a) and prepositional (b), adjectives follow the nouns they modify (c), question and negation function words precede the Verb (d), it lacks a "have" verb (g), and the "verb-less" clause (h) is common. Hebrew does often use "verbal nouns" (i), but not always (finite verbs are allowed in the same contexts) and not quite in the way that this feature is discussed Myhill 1985 (the source of this correlation). And while there are some apparent examples of left-conjunct agreement in Biblical Hebrew (Doron 2000), I have argued that these examples are not properly left-conjunct agreement and thus do not reflect this VSO correlate (Holmstedt 2009b).

Although the list in (13) appears impressive, one of the goals of the articles collected in Carnie and Guilfoyle 2000, which served as a motivating challenge for those who later contributed to Carnie, Harley, and Dooley 2005, was to determine whether these features (or any others) accurately reflect common properties of all VSO languages. The conclusion that the editors drew, after the arguments and data in all sixteen articles on a wide variety of languages were presented, was that no distinctive, universal properties of Verb-initial languages have yet been identified (2005:2).

One property of some Verb-initial languages that has been discussed, even for Biblical Hebrew, is a diachronic shift to SVO. Aldridge (2010) traces just such a shift in Seediq, a VOS Atayalic language spoken in Taiwan. She argues that the basic mechanism for the VOS-to-SVO shift in Seediq is the reanalysis of a fronted Topic Subject to a non-fronted (argument-position) Subject. Simi-

larly, Givón (1977) argues that Biblical Hebrew experienced a VS-to-SV shift from what he calls "early" (Genesis, Joshua, Judges) to "late" (Esther, Lamentations, Qoheleth, and Song of Songs) Hebrew.[56]

Syntactic shifts like that in Seediq and, as argued by Givón, in Biblical Hebrew must be analyzed within a *change-and-diffusion* framework of language change (see Hale 2007 for an introduction; see Holmstedt forthcoming b for an application of this approach to Biblical Hebrew). Briefly, this means that changes occur due to the imperfect transmission of linguistic structures during the first-language acquisition process. The changes that survive by diffusions spread to others through acquisition or adult feature adoption and thus become part of the language's record that is used to describe its grammar. Languages that witness a VS-to-SV shift via the reanalysis of a fronted Subject to a non-fronted Subject may also be influenced by another feature of the acquisition process: Verb-initial (VSO, VOS) languages may be more difficult to acquire than the Subject-initial (SVO, SOV) languages (Grüning 2002). If so, then it may be that first-language learners in VSO contexts are hardwired for a predisposition to analyze a fronted Subject as the normal Subject position.

Whatever continued research on the nature of Verb-initial languages determines—whether or not they share a set of features pointing to a common derivation—any VS language that experiences a diachronic shift to SV will almost certainly continue to exhibit Verb-initial features (other than the basic position of the Subject). If Biblical Hebrew, then, experienced a VS-to-SV shift, as Givón (1977) argues, both the VS and SV stages of the language will exhibit Verb-initial features.

5. CONCLUSION—AND A HINT OF WHAT IS TO COME

Why is the typological classification of Biblical Hebrew word order important? Aside from simple accuracy in a description of the language's syntax, the implications for assessing the pragmatic structure of 'simple' SV and VS clauses—and thus being able to interpret such clauses in a contextually sensitive way—is at stake. If Biblical Hebrew is a VS language (and SV is not a free alternative order), then all SV clauses must reflect the fronting of the Subject for an identifiable reason, such as Topic or Focus-marking. On the flip side, if SV is the basic order, then 1) not all SV clauses need reflect

[56] Besides the component of a Topic reanalysis, Givón also connected the word order shift to a shift in the verbal system. Givón's lengthy argument contains a number of important insights even for the rather unnuanced view of the biblical texts. In a future study I will offer corrections to Givón's "early" and "late" categories as well as his word order – verbal system connection, which is correct on the basic issue but incorrect in a number of the specifics.

a pragmatically marked role for the Subject, and 2) unless VS is a free alternative, then the few simple VS clauses that exist must either reflect Focus-marking on the Verb or some other reason motivating the Verb-fronting.

In this study, I discussed the four typological criteria that are used to determine a language's basic word order and illustrated how they apply to the Hebrew data from the book of Genesis. A clear pattern emerges from the data when they are carefully filtered through the four criteria: VS order is strongly preferred when a third element (including 'modality'[57]) is in a position higher than the Subject and Verb. But, when there is no subordinator or fronted constituent and no modal semantics, *SV order outnumbers VS order by roughly two-to-one*. This is certainly not what we would expect from a 'strong VSO' language!

My analysis here of the data from Genesis supports my previous studies of Proverbs, Ruth, and Jonah. In each of these works, I have concluded that the most accurate description of Hebrew word order is SV / X-VS—that is, SV is basic but the inversion to VS order is triggered by a third constituent 'X' (subordinator, fronted constituent, or modality).[58] In addition to the descriptive and explanatory power of my proposal, I will add two more objections to the VS analysis with which future proponents of this view must reckon.

> 1) The VS position cannot explain (at least, it has not yet explained) why there are *so few simple VS clauses* in the Hebrew Bible (where the Verb is an indicative, non-*wayyiqtol* verb in a non-subordinate clause, with no fronted phrases preceding the verb).
>
> 2) The VS position creates an asymmetry that must be explained: why do Hebrew verbal clauses pattern differently than null copula (i.e., 'verbless') and participial clauses, which

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[57] I include the *wayyiqtol* clause among those with a third element; see Holmstedt 2002:150–55; 2009a:135, n. 32.

[58] My SV / X-VS analysis addresses and refutes Buth's (1995) assessment: "Of course, one can postulate a basic SVO pattern for Hebrew, list XVSO sentences, VSO, and SVO sentences, and then describe various occurrences of each. But such a methodology has no explanatory power. It does not explain why XSVO is so rare as to be almost non-existent outside of participial clauses. Furthermore, an SVO theory is worse than a clumsy theory because it hides the fact that SVO sentences have a specially pragmatically marked element" (81, note 2).

First, 'XSVO' is rare precisely because the fronted X element triggers inversion to VS order. Thus, to get XSVO requires that the Subject is also fronted, as a second Topic (extremely rare) or Focus (rare), after the initial X constituent. Such complexity is not often utilized, for whatever reason. Second, there are in fact SVO clauses that do not have a pragmatically marked Subject.

by consensus are considered to have a basic Subject-Predicate order?[59]

In closing, I invite Hebraists to defend the VS analysis of Hebrew against my SV challenge by means of an overt linguistic framework (e.g., linguistic typology) and the clear documentation of data (e.g., footnotes with all the examples listed, preferably with some explanation of sub-categories, as I have done in this study). I cannot make the challenge any clearer: someone, preferably many scholars, must take up the VS analysis and defend it scientifically. For Choi (in his defense of the traditional view without recourse to any linguistic theory)[60] is quite right in his concern: "If Holmstedt's [SV] view is correct…the traditional [VS] view…must be rejected" (2006:143). What I have shown in this study is that the *traditional* VS position that assumes VS for Biblical Hebrew cannot be adopted by anyone who understands language study to be a scientific endeavor. If the VS position can survive in any form, it must be argued linguistically. Simply repeating the opinions of tradition (exemplified in Choi 2006) cannot be allowed to pass as informed scholarship.

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[59] See Buth 1999 for what is, in my opinion the most lucid and insightful analysis of word order in null copula clauses (his VS stance on verbal clauses notwithstanding).

[60] This evaluation of Choi's thesis is not entirely external to the work itself; Choi obliquely admits that he cannot access "modern linguistic works on Hebrew" without great difficulty (2006:143, n. 11). This simply proves the point that, like any scientific discipline, a modicum of formal training in linguistics is required in order to participate intelligently in the discussion.

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