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The Syntax of Cardinal Numerals in Judges, Amos, Esther, and 1QM*

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Abstract

The studies currently available on the syntax of cardinal numerals are either too narrow, too brief, or significantly dated. In this study, I establish a new methodology for considering cardinal numerals and provide a preliminary description of numeral syntax based on evidence in Judges, Amos, Esther, and 1QM. I also explore the potential for identifying diachronic change in Ancient Hebrew on the basis of numeral syntax.

Introduction

Very little is said about numeral syntax outside of reference grammars. The majority of recent secondary literature on numeral syntax *not* found in a reference grammar focuses on the issue of the order of elements in number phrases and its significance in the diachronic development of Ancient Hebrew.¹ This narrow stream of debate focuses on one particular issue, with the majority of participants coming to the same unsatisfying conclusion: the order of noun and numeral is variable in Ancient Hebrew. To find treatments of other aspects of numeral syntax, one must typically look to reference grammars. Given the genre of reference grammars, however, they cannot devote much space to numeral syntax, and as a result cannot give the

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1 Robert Polzin, *Late Biblical Hebrew: Toward an Historical Typology of Biblical Hebrew Prose* (Missoula, MT: Scholars Press, 1976), 58–60; Gary Rendsburg, “Late Biblical Hebrew and the Date of P,” *JANES* 12 (1980): 71; Avi Hurvitz, *A Linguistic Study of the Relationship between the Priestly Source and the Book of Ezekiel* (Paris: Gabalda, 1982), 167–168; Steven Weitzman, “The Shifting Syntax of Numerals in Biblical Hebrew: A Reassessment,” *JNES* 55/3 (1996), 177–185; Robert Rezetko, “Dating Biblical Hebrew: Evidence from Samuel-Kings and Chronicles,” in *Biblical Hebrew: Studies in Chronology and Typology* (ed. Ian Young; London/New York: T. & T. Clark, 2003), 228–229.

exhaustive data and arguments that form the basis of their claims. In contrast to other areas of Ancient Hebrew grammar that receive ample attention from argument-driven studies, the last and only monograph devoted to Hebrew numerals was published in 1893 by Sven Herner.² This article is offered as a first step toward addressing this desideratum, by covering the full variety of syntactic patterns³ within a focused analysis of cardinal numerals.

Previous analyses in reference grammars also suffer from a lack of textual-historical sophistication. Due to the nature of reference grammars, their descriptions of numeral syntax focus on the range of possibility found in the entire Hebrew Bible. As a result of including all texts from the Hebrew Bible, they seldom articulate with precision and nearly always include some sort of qualification. Van der Merwe, Naudé, and Kroeze, for example, note that the cardinal numbers 3–10 “can be placed before or after” the noun; or, again, that the number can be bound to the noun (“construct relationship”) or in the free state (“appositional relationship”).⁴ Such descriptions are unsatisfying at best, and give the impression that, when it comes to numerals, anything is possible. Although the grammars at times distinguish between different periods in the history of Hebrew, attention to diachronic issues is *ad hoc*. For the most part, they focus on describing all of “Biblical Hebrew” synchronically, with little attention to diachronic development and no focus on the grammar found in individual texts. As a result, the grammars often provide no reasons—grammatical or diachronic—for the syntactical possibilities given.

Given the range of dialects, time periods, and genres represented in ancient Hebrew texts, the

2 *Syntax der Zahlwörter im Alten Testament* (Berlin, 1893).

3 Given the scope of this study, I cannot cover *every* aspect of numeral syntax because not all aspects are present in my corpus.

4 Christo H. J. van der Merwe, Jackie A. Naudé, and Jan H. Kroeze, *A Biblical Hebrew Reference Grammar* (hereafter “MNK”; Sheffield: Sheffield Academic Press, 1999), §37.2.2.iii. Cf. similar descriptions of these points of numeral syntax in Emil Kautzsch, *Gesenius’ Hebrew Grammar* (hereafter “GKC”; translated by A. E. Cowley; Oxford: Clarendon, 1910), §134a–c; Bruce K. Waltke and Michael O’Connor, *An Introduction to Biblical Hebrew Syntax* (hereafter “WO”; Winona Lake, IN: Eisenbrauns, 1990), §15.2.2*b*, 15.2.4*a*; Paul Joüon and Takamitsu Muraoka, *A Grammar of Biblical Hebrew* (hereafter “JM”; Rome: Editrice Pontificio Istituto Biblico, 2006) §142d; and Avihai Shivtiel, “Numerals: Pre-Modern Hebrew,” in *Encyclopedia of Hebrew Language and Linguistics*, Volume 2: *G–O* (ed. Geoffrey Khan; Leiden: Brill, 2013), 900–901.

approach found in reference grammars is prone to miss distinctive grammatical features of particular texts.⁵ My research, in contrast, focuses on the Hebrew in each individual text, and I consider the grammar of numerals in each text individually before putting it into contact with the grammar found in other texts. Although I present the data from the texts together when appropriate, I distinguish and provide full references for my data, allowing others to access the evidence regardless of my conclusions.⁶ Finally, I proceed with caution in diachronic analysis; before claims of historical development can be made, alternative explanations must be sought *and* large data sets appealed to.⁷ As a result, this study contains no firm conclusions regarding diachronic change—except in one case, where I argue *against* an area of diachronic change that has been appealed to often in the past. Instead, I give two suggestions for areas of diachronic change and provide a basis for further study.

My corpus consists of four texts: Judges, Amos, Esther, and 1QM (the “War Scroll”). These texts were selected because they each contain a fair amount of numerals and because of the relative unanimity of opinion regarding their ages relative to each other—that is, the language in Amos and Judges is incontrovertibly older than that in Esther, which itself is older than 1QM. In all four texts, there is no variant manuscript evidence to complicate the data as presented in the Masoretic Text and 1QM. Following a brief statement of my methodology and terminology in Section One, I present the features from the Hebrew of Judges, Amos, Esther, and 1QM, *when they agree*, in Section Two. Where the data from the texts differ, the features are addressed separately in Section Three, where I consider the possibility of diachronic change.

5 This is one of several reasons Robert D. Holmstedt has advocated a new approach to Hebrew linguistics that begins with “the distinctive grammar of each text”; cf. Robert D. Holmstedt and John Sorenock, “Writing a Descriptive Grammar of the Syntax and Semantics of the War Scroll (1QM): The Noun Phrase as Proof of Concept,” in *The War Scroll, War and Peace in the Dead Sea Scrolls and Related Literature* (eds. Kipp Davis, Dorothy M. Peters, Kyung S. Baek, and Peter W. Flint; Leiden: Brill, 2015), 67–69.

6 Cf. Holmstedt and Sorenock, “Descriptive Grammar,” 73.

7 See John Sorenock and Robert D. Holmstedt, *Esther* (Waco, TX: Baylor University Press, 2015), 18–23.

1 – Methodology and Terminology

My methodology is based on the notion of constituency.⁸ A complex numeral is made up of at least two simple numerals, and often complex numerals contain within themselves *other* complex numerals made up of two (or more) simple numerals. All of these various parts are constituents, which can be abstracted and considered individually, from the simplest level (i.e., a simple cardinal) to the most complex (i.e., a number phrase, made up of a numeral and a noun quantified by that numeral), including several levels in-between. We would expect that similar constituents would have similar syntax, and as such it is logical to organize the discussion around the constituents and the basic structures they create.⁹

Because ordinal numerals behave as adjectives,¹⁰ the study of their syntax belongs in the larger context of the syntax of adjectives; I will not attempt to address them here. Cardinals, on the other hand, do not behave as adjectives. The exception is אחד, “one,”¹¹ which also will not be

8 On this important concept, which is fundamental to my approach to Hebrew syntax generally, see Srenock and Holmstedt, *Esther*, 2–3.

9 Other descriptions of numeral syntax are not oriented around the constituent parts of numerals and number phrases. In these, one finds a discussion of the syntax with the following or similar sections: one; two; 3–10; 20–90 (that is, simple round numbers over 10), 100, 100s, 1000, 1000s; Cf., e.g., GKC §97; JM §142; WO §§15.2.1–5; MNK §37.2.2; J.C.L. Gibson, *Davidson’s Introductory Hebrew Grammar: Syntax* (hereafter “*Davidson’s Syntax*”; Edinburgh: T&T Clark, 1994), §§46–47. Following these sections, or interspersed in the others, there may be sections on complex adding numbers 21–99, or 101–999, etc. Such organization obscures the basic syntax of complex numerals having to do with constituency, and moreover results in some significant oversights. For example, GKC accurately describes the phenomenon where certain nouns are plural when quantified by numbers 2–10 but singular with numbers 11 and higher. However, this point is not stated concisely, but instead spread out over five different statements in three sections; GKC §134e,f, and g; similarly MNK §37.2.2 n. 1, §27.2.2.ii.a and iii; JM §142e–j. Wolfgang Richter’s *Grundlagen einer althebräischen Grammatik: II. Die Wortfügung (Morphosyntax)* (St. Ottilien: EOS Verlag, 1979) is unique among the grammars in its presentation of the data; although it is oriented similarly to other grammars in many respects, Richter nevertheless gives clearer access to some of the constituent parts of each number phrase (cf. his summary chart on page 26).

10 MNK, §37.3.2; *Davidson’s Syntax* §48.

11 Cf. GKC §97a; JM §142b; WO 15.2.1a; MNK §37.2.2.i.a; *Davidson’s Syntax* §45; Richter, §2.1.7; Heinrich Ewald, *Syntax of the Hebrew Language of the Old Testament* (translated by James Kennedy; Edinburgh: T&T Clark, 1891), §286d; Shvitiel, 900; Martin Abegg, “Hebrew of the Dead Sea Scrolls,” in *The Dead Sea Scrolls after Fifty Years* (edited by Peter Flint and James C. Vanderkam; Leiden/Boston/Köln: Brill, 1998), 352. In some

considered here for the same reason as ordinals.¹² My investigation focuses on the three main features of syntax where cardinal numerals are involved: the order of constituents, the structure of the phrase, and the gender agreements of constituents. I describe these three types of features as they occur in four different and distinct types of phrases: number phrases, complex adding numerals, complex multiplying numerals, and complex teen numerals.

For my purposes, I define a *number phrase* as a noun phrase consisting of two constituents: a cardinal numeral and the noun that it quantifies. For example, in חמשה אנשים (“five men”; Judg 18:2), the numeral חמשה quantifies the noun אנשים. The numeral constituent can be simple, as in this example, or can be a complex numeral; for example, חמש ועשרים שנה (“twenty-five years”; 1QM VII 3). Complex numerals consist of two or more numerals (“members”) in combination; there are two basic types, depending on whether the members are added together or multiplied to give the resulting numeral.¹³ In *complex adding numerals*¹⁴ the members are added together, as in the example above, חמש ועשרים (“twenty-five”). Complex adding numerals can have more than two members, one for each digit (1s, 10s, 100s, etc.), as in שבע ועשרים ומאה (“one-hundred and twenty-seven”; Esth 1:1). Moreover, each member can be simple—as in the examples given so

cases in the Hebrew Bible, שנים, “two,” also appears to have more adjectival properties than other numerals; however, none of these cases appear in my corpus; cf. WO §15.2.1j. On the adjectival properties of some numerals compared to the nominal properties of others, see Eytan Zweig, “Nouns and Adjectives in Numeral NPs,” in *Proceedings of the thirty-fifth annual meeting of the North East Linguistic Society* (Vol. 2; Eds. Leah Bateman and Cherlon Ussery; Amherst, MA: GLSA, 2006), 663–674.

12 There are a few possible exceptions where אחד looks as though it follows the syntax of the other numerals: Judg 16:7 and 11, כְּאֶחָד הָאָדָם (“like one man”); Esth 4:11, אֶחָת דָּתוֹ, (“his one law”). However, alternative understandings are also possible, wherein typical adjectival syntax is followed—אֶחָת דָּתוֹ could be a copula clause, “his law is one,” and כְּאֶחָד הָאָדָם probably includes a null constituent that is one member of the collective plural אָדָם (“one [person] of man”; cf., e.g., 2 Sam 13:13, כְּאֶחָד הַנְּבָלִים, “like one of the fools”; Gen 22:2, אֶחָד הַהָרִים, “one of the mountains”; examples in WO 15.2.1f).

13 See Tania Ionin and Ora Matushansky, “The Composition of Complex Cardinals,” *Journal of Semantics* 23 (2006), 315–316; Zweig, “Numeral NPs,” 664.

14 I have opted to use the terms “adding numeral” and “multiplying numeral” instead of “additive numeral” and “multiplicative numeral” (as in Zweig, “Numeral NPs”) to avoid confusion with the term “multiplicative” used by GKC and others (GKC §134r; WO §15.4; JM §§100o, 142q), where a word or phrase indicates “double” or “three times,” etc. (e.g., עשרים פעמים, “twenty times”).

far—or a complex multiplying numeral—as in אֶלֶף וָאַרְבַּע מֵאוֹת (“one-thousand four-hundred”; 1QM VI 10), where אַרְבַּע מֵאוֹת (“four-hundred”) is a complex multiplying numeral.

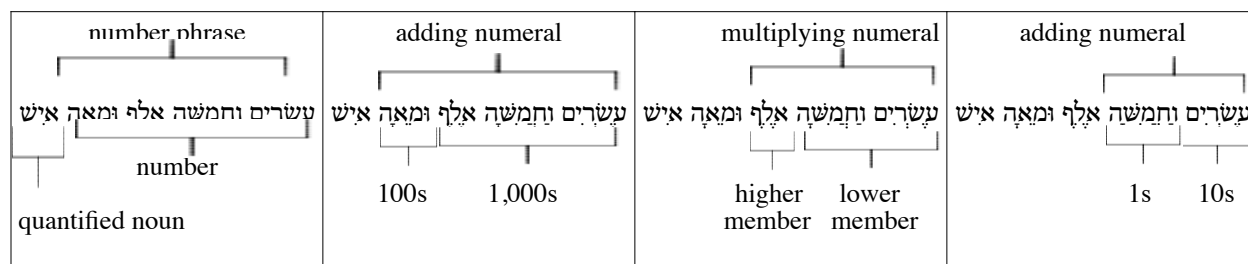
In *complex multiplying numerals* the members are multiplied to make the resulting numeral, as in עֶשְׂרֵת אֲלָפִים (“ten-thousand”; Judg 1:4). Unlike complex adding numerals, complex multiplying numerals must have exactly two members—one lower and one higher. Like complex adding numerals, complex multiplying numerals can consist of simple and/or complex numerals. The complex members can be adding or complex multiplying numerals, as in חֲמֵשֶׁה וְשִׁבְעִים אֲלָף (“seventy-five thousand”; Esth 9:16)—the lower-member חֲמֵשֶׁה וְשִׁבְעִים (“seventy-five”) is a complex adding numeral—and אַרְבַּע מֵאוֹת אֲלָף (“four-hundred thousand”; Judg 20:17)—the lower-member אַרְבַּע מֵאוֹת (“four-hundred”) is itself another complex multiplying numeral. Finally, *complex teen numerals* are a particular subset of complex adding numerals. Like normal complex adding numerals, the members of a complex teen numeral are added together to make the resulting numeral. However, complex teen numerals use a variation of the cardinal עֶשֶׂר having the same basic sense as English “teen,” and they have their own particular syntax. An example of a complex teen numeral is אַרְבַּע עֶשְׂרֵה (“fourteen”; 1QM IV 15). Like complex multiplying numerals, complex teen numerals must contain exactly two members—a 1s digit and “teen.” Unlike other complex numerals, complex teen numerals cannot contain members that are complex numerals.

Figure 1 – Four Types of Numeral Structure

<i>Number phrase</i>	<i>Complex Adding Numeral</i>	<i>Complex Multiplying Numeral</i>	<i>Complex Teen Numeral</i>
<p>חֲמֵשֶׁה אַנְשִׁים</p> <p>quantified number noun</p> <p>5 men</p>	<p>חֲמֵשׁ וָעֶשְׂרִים</p> <p>10s member 1s member</p> <p>25</p>	<p>עֶשְׂרֵת אֲלָפִים</p> <p>higher lower member member</p> <p>10,000</p>	<p>אַרְבַּע עֶשְׂרֵה</p> <p>“teen” 1s member</p> <p>14</p>

Although many of the number phrases we find involve only simple numerals, several contain complex numerals, a few of which contain multiple embedded phrases. When such a numeral occurs, each phrase is a separate piece of evidence in my analysis. Consider, for example, Judg 20:35, עֶשְׂרִים וְחֲמִשָּׁה אֲלֵף וּמֵאָה אִישׁ, “twenty-five thousand one-hundred men.” This number phrase contains a complex multiplying numeral and two different complex adding numerals.

Figure 2 – Embedded Complex Numerals



In each of these four types of phrase, we can describe the order of constituents or members—for number phrases, the quantified noun (or “quantified” for short) and the number; for complex adding numerals, the 1s, 10s, 100s, 1,000s, and 10,000s members; for complex multiplying numerals, the higher-member and the lower-member; and for complex teen numerals, the 1s member and “teen.” When analyzing structure, I will consider whether the noun and number, or the various members for complex numerals, are bound, in apposition, or coordinated (with or without ו). Finally, for agreement, I will consider if a 1s digit (1–10) has its gender determined by another constituent or member of the phrase—whether the quantified noun, the higher-member of a complex multiplying numeral, the “teen” in a complex teen numeral, or any of the other members of a complex adding numeral.

Words that indicate fractional numbers (whether particular lexical items indicating “half” or “third”, or ordinal numerals in certain contexts)¹⁵ may or may not take the syntax of cardinal

¹⁵ Cf. WO §15.5.

numerals. In my corpus, חצי, “half,” is the only fraction that appears.¹⁶ It never occurs in a complex numeral and is always bound to the word it quantifies. In my view it is safer to treat חצי not as a cardinal numeral, but as a lexical item whose semantic content is numerical. Even so, if I were to include it in my evidence as a numeral, it would not complicate the discussion since it patterns with the rest of the evidence.

2 – Shared Features in Judges, Amos, Esther, and 1QM

The majority of syntactic features in my corpus are the same in all four texts. Complex multiplying and teen numerals are the same in all ways, number phrases have consistent order and gender agreement, and complex adding numerals have consistent structure and gender agreement. This leaves two areas where the texts vary, which I will address in Section Three: the structure of number phrases, and the order of complex adding numerals.¹⁷ A chart summarizing the features discussed below can be found in Section 2.5.

2.1 – Number Phrases

Order. All the texts in my corpus agree on the order of constituents in number phrases. In

¹⁶ Judg 16:3^{twice}; Esth 5:3, 6; 7:2; 1QM V 6^{twice}, 7, 13.

¹⁷ For my earlier work on all of these aspects of numeral syntax in Esther and 1QM, see Srenock and Holmstedt, *Esther*, 14–16, 259–263; and Holmstedt and Srenock, “Descriptive Grammar,” 95–103.

249 cases, the order is *number-quantified*,¹⁸ as in the following examples.¹⁹

Amos 1:11	שְׁלֹשָׁה פְּשָׁעֵי אֶדוֹם	“three transgressions of Edom”
Judges 7:22	שְׁלֹש־מֵאוֹת הַשּׁוֹפְרוֹת	“the three-hundred trumpets”
Esther 2:12	שֵׁשֶׁה חֳדָשִׁים	“six months”
1QM VI 14	ארבעים שנה	“forty years”

The order *quantified-number*, in contrast, occurs only 13 times.²⁰ Eleven of these 13 exceptions occur in Esther, where complex cardinal numerals are used as ordinals—either because an ordinal higher than “tenth” is impossible (e.g., Esth 9:15, יוֹם אַרְבָּעָה עָשָׂר, “the fourteenth day”), or because שנה, “year,” takes cardinal numerals with an ordinal sense.²¹ In these cases, the order *quantified-number* occurs corresponding to the order used with ordinal numbers.²² Figure 3

18 *Number-quantified* order occurs in Judg 1:4, 7, 20; 2:8; 3:3, 8, 11, 14, 16, 29, 30, 31; 4:3^{twice}, 6, 10, 13, 14; 5:31; 6:1, 25, 27; 7:6, 7, 8, 16^{twice}, 19, 20, 22, 25; 8:4, 10, 12, 14, 26, 28, 30; 9:2, 4, 5, 18, 22, 24, 34, 43, 44, 49, 56; 10:2, 3, 4^{thrice}, 8; 11:26, 33, 37, 38, 39, 40; 12:7, 9^{four times}, 11, 14^{four times}; 13:1; 14:11, 12^{thrice}, 13^{twice}, 14, 17, 19; 15:4^{twice}, 11, 13, 15, 16, 20; 16:3, 5, 7, 8, 13, 15, 19, 27, 28, 29, 31; 17:2, 3, 4, 10; 18:2, 7, 11, 14, 16, 17^{twice}; 19:2, 4, 6, 8, 29; 20:2, 10, 15^{twice}, 16, 17, 21, 25, 31, 34, 35, 39, 44, 45^{twice}, 46, 47^{twice}; 21:10, 12; Amos 1:3, 6, 9, 11, 13; 2:1, 4, 6, 10; 3:12; 4:4, 7, 8; 5:25; 6:9; Esth 1:1, 4, 5, 10, 14; 2:9, 12^{thrice}, 21, 23; 3:9, 12; 4:11^{twice}, 16; 5:14; 6:2; 7:9; 8:9; 9:1^{twice}, 6, 10, 12^{twice}, 13, 14, 15, 27, 30; 1QM I 13; II 4, 6, 9^{twice}, 13, 14; III 14^{twice}; IV 5, 15^{twice}, 16^{twice}, 17; V 1, 2, 3^{twice}, 7^{twice}, 12, 13^{thrice}, 14, 16; VI 1^{twice}, 2, 4^{thrice}, 8, 8–9, 9^{twice}, 10, 14^{twice}; VII 1^{twice}, 2, 3, 9–10, 14^{thrice}, 15^{twice}, 16, 18; VIII 1–2, 4, 6, 8–9, 13, 14; IX 4^{twice}, 4–5, 11, 12^{twice}, 13^{twice}; XI 8–9; XVI 7. In three cases where the quantified entity is a bound pronoun (שְׁנֵיהֶם, “the two of them”; Judg 19:6, 8; Esth 2:23), *quantified-number* order is perhaps impossible, if we consider the pronoun’s being bound to the numeral the only grammatical possibility for a pronoun with a numeral. Of course, the pronoun may need to be bound to the numeral *because* the grammar expects a bound structure with *number-quantified* order.

19 In many types of syntax I examine, there are some numerals that I do not include because they cannot contribute to the data—whether because the text is not fully extant in 1QM, or because a word is formally ambiguous with respect to structure (e.g., אַרְבַּע could be bound or free). When the consonantal text is ambiguous but the Masoretic Text’s vocalization indicates the structure, I do include the data but indicate that it is exceptional in this way.

20 *Quantified-number* order occurs in Esth 1:3; 2:16; 3:7^{twice}, 13; 8:12; 9:15, 17, 19, 21^{twice}; 1QM II 1, 2. A few cases in 1QM that could be understood as having *quantified-number* order (cf. Abegg, “Hebrew of the Dead Sea Scrolls,” 353) are more likely cases where the number stands alone or modifies a null constituent (Holmstedt and Screnock, “Descriptive Grammar,” 96 n. 64).

21 JM §142o; WO §15.3.1; Davidson’s *Syntax* §48b; GKC §134o, p; Ewald §287k.

22 Screnock and Holmstedt, *Esther*, 15–16.

shows the high correspondence in Esther between the order used in number phrases and whether the numerals have a cardinal or ordinal sense.

Figure 3 - Order of Constituent in Number Phrases in Esther and Ordinal Use of Cardinals

	Number-quantified Order	Quantified-number Order
Cardinal Use	28 times 1:1, 4, 5, 10, 14; 2:9, 12 ^{thrice} , 21, 23; 3:9; 4:11 ^{twice} , 16; 5:14; 6:2; 7:9; 8:9; 9:6, 10, 12 ^{twice} , 13, 14, 15, 27, 30	0 times
Ordinal Use	3 times 3:12; 9:1 ^{twice}	11 times 1:3; 2:16; 3:7 ^{twice} , 13; 8:12; 9:15, 17, 19, 21 ^{twice}

This leaves only two cases of normal cardinal number phrases having *quantified-number* order, both in the latest texts of the corpus, 1QM: ראשים שנים עשר (“twelve chiefs”) in II 1, and ראשי המשמרות ששה ועשרים (“the twenty-six chiefs of the courses”) in II 2. In my corpus, then, the four grammars of Hebrew found in four texts from a variety of time periods agree with respect to the order of number phrases. The only cases of *quantified-number* order occur in the latest text, 1QM; however, the vast majority of 1QM’s number phrases are *number-quantified*.²³ This data challenges the frequently made claim that *quantified-number* order increased in later Hebrew, first stated by Herner,²⁴ resurrected by Polzin,²⁵ and repeated by many reference grammars.²⁶

Elisha Qimron provides an example of the kind of argument that can be avoided by proceeding carefully before making diachronic conclusions. When examining the evidence from the Dead Sea Scrolls, Qimron takes as his starting point the idea that *quantified-number* order increased in later Hebrew. As a result, he considers CD (the “Damascus Document”), which

23 Note that, according to Abegg (“Hebrew of the Dead Sea Scrolls,” 354), the order of number phrases in the Dead Sea Scrolls is *number-quantified*.

24 Herner, *Syntax der Zahlwörter*, 68.

25 Polzin, *Late Biblical Hebrew*, 58–60.

26 E.g., GKC §134c; JM §142d n. 1; WO 15.2.2b n. 12; Davidson’s *Syntax* §46c.

contains a few cases of *quantified-number* order, to “reflect a real Qumranic feature.”²⁷ This is in spite of the fact evidence elsewhere in the Scrolls suggests that *number-quantified* order “dominates.”²⁸ Though it is possible that *number-quantified* order in the rest of the Scrolls reflects a practice of classicizing,²⁹ we cannot come to this conclusion until we have carefully supported and plotted a diachronic change in the language in terms of number phrase order. In fact, there is not sufficient evidence in the Hebrew Bible to support the idea of diachronic change in this area, as suggested by the data cited above.³⁰ Moreover, in the Hebrew *after* the period evidence in the Scrolls, the order of number phrases is *number-quantified*.³¹ If the language had truly developed in the later texts of the Hebrew Bible and the Dead Sea Scrolls, the principle of change and diffusion demands that Mishnaic Hebrew would also contain the new feature, but it does not.³² Finally, the four cases of *quantified-number* order in CD cited by Qimron³³ do not appear to be characteristic of CD, where my quick survey of number phrases reveals at least 12 cases of *number-quantified* order.³⁴ The long-standing and incorrect acceptance of this notion—that number phrase order changed over time—illustrates the importance of careful, extensive, and book-by-book analysis of the evidence before concluding that diachronic change has

27 Elisha Qimron, *The Hebrew of the Dead Sea scrolls* (Atlanta, GA: Scholars Press, 1986), §400.20.

28 Qimron, §400.20.

29 We might add that the same is possible in later Hebrew Bible texts, for example, Esther; cf. Sáenz-Badillos, *Hebrew Language*, 126.

30 For data from the whole of the Hebrew Bible that agrees with the data presented here, see Eduard König, “Zur Syntax der Zahlwörter im Alten Testament,” *The American Journal of Semitic Languages and Literatures* 18/3 (1902), 130–134. For a successful argument against the incorrect use of some data in the Hebrew Bible, see Weitzman, “Shifting Syntax,” 179–181.

31 M. H. Segal, *A Grammar of Mishnaic Hebrew* (Oxford: Clarendon Press, 1927), §394; a quick search of the Mishnah in Accordance shows hundreds of examples supporting Segal’s assertion.

32 Screnock and Holmstedt, *Esther*, 21; cf. the methodological point made in the case of the use of infinitives in Steven E. Fassberg, “The Infinitive Absolute as Finite Verb and Standard Literary Hebrew of the Second Temple Period,” in *Conservatism and Innovation in the Hebrew Language of the Hellenistic Period* (eds. J. Joosten and J.S. Rey; Leiden: Brill, 2008), 56.

33 CD I 5, 10; XIV 21; XX 15.

34 CD IV 15, 16, 21; VII 6, 12; IX 22–23; X 6–7; XII 5; XIV 13; XIX 1, 2; XX 22.

occurred.³⁵

Agreement. The agreement features within number phrases are well documented.³⁶ With numerals higher than 10, the gender of the numeral is constant and cannot show agreement features with the quantified noun (e.g., uninflected ארבעים, feminine מאה, masculine אלף).³⁷ With the cardinals 1–2, the cardinal agrees in gender with the quantified noun 63 times in my corpus.³⁸ When cardinals 3–10 are used, the gender of the cardinal is *opposite* the gender of the quantified noun (“chiastic concord”) 102 times in my corpus,³⁹ as in the following examples.

Amos 4:4	שְׁלֹשֶׁת יָמִים	“three days”
Judg 16:7	שִׁבְעַת מַחְלָפוֹת רֹאשִׁי	“seven braids of my head”
Esth 9:12	עֲשָׂרֶת בְּנֵי־הָמָן	“ten sons of Haman”
1QM IX 4	אַרְבַּע אַצְבָּעוֹת	“four fingers”

There is one possible exception to these rules in my corpus: in 1QM V 13 we find אַרְבַּע גּוֹדְלִים,

35 Qimron’s argument involves one further point, that *in measurements* (e.g., with אֹרֶךְ, “length”) the order of quantified noun and number changes over time; Qimron, §400.20. These measurement words are not the quantified noun, however; rather, they are complements of the null copula (predicate nominatives). For example, in אֹרֶךְ חֲמֵשׁ וְעֶשְׂרִים אַמָּה (“the length was twenty-five cubits”; Ezek 40:30), “cubits” is the quantified noun and it follows the number, as everywhere in Ancient Hebrew. The evidence, then, pertains to the order of constituents in null-copula clauses.

36 JM §100d; WO §15.2.2a; GKC §97a; MNK §37.2.2.i.a, ii.b, iii.a; Eduard König, *Historisch-Kritisches Lehrgebäude der Hebräischen Sprache: Zweite Hälfte 1. Theil* (Leipzig: J.C. Hinrichs’sche Buchhandlung, 1895), 210–211; Shvitiel, “Numerals,” 900–901.

37 Cf. GKC §97f; MNK §37.2.2.v.a and vi.a; Davidson’s *Syntax* §47b; WO 15.2.4a. For the agreement features of “teen” (עֶשְׂרִים, עֶשְׂרִים), see Section 2.4.

38 Judg 3:16; 6:16; 7:25; 8:12; 9:2, 5, 18, 37, 44, 53; 11:37, 38, 39; 13:2; 15:4^{twice}, 13; 16:3, 28^{twice}, 29^{thrice}; 17:5, 11; 18:19; 19:6, 8, 13; 20:1, 8, 11, 31^{twice}; 21:3, 6, 8; Amos 3:12; 4:7^{thrice}, 8^{thrice}; 6:9; Esth 2:21, 23; 3:8, 13; 4:11; 6:2; 7:9; 8:12; 9:27; 1QM V 12; VI 4^{twice}; VII 15, 18; IX 11, 14^{thrice}. Although אחד, “one,” differs in most respects from the other cardinals, because in the case of gender agreement with quantified nouns it agrees with the other cardinals I include it in my figures here.

39 Judg 1:20; 3:3, 8; 6:1, 25, 27; 7:16, 20; 9:22, 34, 43; 12:7, 9, 11, 14; 14:12, 14, 17; 16:7, 8, 13, 15, 19; 17:10; 18:2, 7, 14, 17; 19:2, 4; 20:47; Amos 1:3^{twice}, 6^{twice}, 9^{twice}, 11^{twice}, 13^{twice}; 2:1^{twice}, 4^{twice}, 6^{twice}; 4:4, 7; 6:9; Esth 1:3, 5, 10, 14; 2:9, 12^{twice}, 16; 4:16; 9:10, 12, 13, 14; 1QM I 13^{twice}; II 9, 13, 14; III 14; IV 5, 16, 17^{twice}; V 3, 7^{twice}, 13^{twice}, 14, 16; VI 1^{twice}, 2, 4, 8; VII 9–10, 12, 14^{thrice}; VIII 1–2, 4, 6, 8–9, 13, 14; IX 4^{twice}, 12^{twice}, 13; XI 8–9.

“four thumbs.” If גודל is a masculine noun,⁴⁰ this would be a case where a numeral 3–10 would agree with the quantified noun, not following chiasmic concord. However, given the fact that גודל, “thumb,” is a part of the human body, and moreover given the lack of examples before Rabbinic Hebrew, it is possible that גודל is quantified by a masculine cardinal because it is actually a feminine noun in this case in 1QM. When a cardinal 3–10 is used within a complex numeral, the agreement features differ depending on the type of complex numeral, but sometimes involve the gender of the quantified noun in the larger number phrase (see Sections 2.2, 2.3, and 2.4).

Another aspect of agreement features in number phrases is the grammatical number of the quantified noun. In most cases, the number of the quantified noun is plural with any numeral two or higher. However, with certain nouns that are used with a collective sense,⁴¹ the singular form is used with numerals above 10.⁴² These nouns can be identified as חֶדֶשׁ, אִישׁ, שָׁנָה, יוֹם and אִמָּה.⁴³ In 41 cases where these nouns are used with numerals 2–10, their grammatical number is plural, in like manner to other nouns in the same context.⁴⁴

Amos 4:4	שְׁלֹשֶׁת יָמִים	“three days”
Judg 12:14	שְׁמֹנֶה שָׁנִים	“eight years”
Judg 20:10	עֶשְׂרֵה אַנְשִׁים	“ten men”

40 David J. A. Clines, *The Dictionary of Classical Hebrew* (Sheffield: Sheffield Academic Press, 1993–2012), גודל.

41 The term collective “designate[s] a plurality of individuals as forming a group” (JM §135*b*). The words I refer to here are not always collective, since with numerals 2–10 they take a plural form; for this reason, I refer only to their “collective sense” with numerals over 10. Note that some nouns take no plural marking (that is, they have no plural form; e.g., English “sheep”), but are nevertheless plural, and thus not collectives (plural “sheep” refers to multiple animals, compared to “flock” which refers to the group of sheep collectively).

42 A. B. Davidson, *Introductory Hebrew Grammar: Hebrew Syntax* (Edinburgh: T&T Clark, 1901), §37; cf. §47 Rem. 1; *Davidson’s Syntax* §47 (and remark 1); Ewald §287*i*; König, “Syntax der Zahlwörter,” 138; Zweig, “Numeral NPs,” 670; Abegg, “Hebrew of the Dead Sea Scrolls,” 354. One could arrive at this point by reading the following grammars and piecing together the evidence given in various sections: MNK §37.2.2 n. 1, §37.2.2.ii.a and iii; JM §142*e–j*; GKC §134*e, f*, and *g*.

43 There are other words used with a collective sense with numbers 11 and higher outside my corpus, most notably לילה.

44 Judg 3:8; 6:1, 25, 27; 9:22; 11:37, 38, 39, 40; 12:7, 9, 11, 14; 14:12, 14, 17; 16:15; 18:2, 7, 14, 17; 19:2, 4; 20:10, 47; Amos 4:4, 7; 6:9; Esth 1:5; 2:12^{twice}; 4:16; 9:27; 1QM II 9, 13, 14; IV 16, 17; V 7; IX 12^{twice}.

Esth 2:12	שֵׁשֶׁה חֳדָשִׁים	“six months”
1QM V 7	שבע אמות	“seven cubits”

With אחד and numerals over ten, however, their grammatical number is singular, in 84 cases.⁴⁵

Amos 2:10	אַרְבָּעִים שָׁנָה	“forty years”
Judg 3:29	עֶשְׂרֵת אֲלָפִים אִישׁ	“ten-thousand men”
Esth 1:4	שְׁמוֹנִים וּמֵאָה יוֹם	“a hundred and eighty days”
Esth 2:12	שְׁנַיִם עָשָׂר חֳדָשׁ	“twelve months”
1QM IV 16	שְׁתַּיִם עֶשְׂרֵה אַמָּה	“twelve cubits”

Compared to the 125 total cases where this rule is followed, there are just three exceptions.⁴⁶

The numeral אֶלֶף (“thousand”) follows the same rule.⁴⁷ In complex multiplying numerals (see Section 2.3), אֶלֶף is plural with lower-members 2–10 (14 times),⁴⁸ but with lower-members over ten אֶלֶף is singular (16 times).⁴⁹

Judg 5:8	אַרְבָּעִים אֲלָף	“forty-thousand”
Judg 15:11	שְׁלֹשָׁת אֲלָפִים	“three-thousand”

45 Judg 1:4; 3:11, 14, 29, 30, 31; 4:3, 6, 10, 14; 5:31; 7:6, 7, 8, 16, 19; 8:4, 10, 14, 28; 9:2, 5, 18, 53; 10:2, 3, 8; 11:26; 13:1, 2; 14:19; 15:11, 15, 16, 20; 16:27, 31; 18:11, 16, 17; 20:1, 2, 8, 11, 15^{twice}, 16, 17, 21, 25, 31, 34, 35, 39, 44, 45^{twice}, 46, 47; 21:10; Amos 2:10; 5:25; Esth 1:4; 2:12; 3:12; 4:11; 5:14; 7:9; 9:6, 12, 15; 1QM II 4; IV 15^{twice}, 16; V 3, 17; VI 14^{twice}; VII 1^{twice}, 2, 3, 7.

46 Judg 2:8; 1QM II 6, 9. Outside my corpus, when עֶשֶׂר, “ten,” occurs at the end of a complex adding numeral modifying a noun with a collective sense, as in Judg 2:8, the noun is sometimes plural (Jan Joosten, personal correspondence; cf. Gen 50:22, 26; Josh 24:29); this is odd given that other 1s digits, when occurring at the end of a complex adding numeral, do *not* cause the collective noun to be plural (e.g., Judg 7:3; 8:14; 10:2, 3). The use of plural שָׁנָה in 1QM II 6 and 9 may be explained by the fact that in both cases שָׁנָה is bound to a further noun phrase (e.g., 1QM II 6 שְׁנֵי הַמִּלְחָמָה, “years of the war”), and as a result it is too “concrete” to have a collective sense (Robert D. Holmstedt, personal correspondence).

47 As far as I am aware, מֵאָה and רַבְבָּה do not occur in any extant Ancient Hebrew evidence in an analogous situation—that is, coupled with a number above ten in a complex multiplying numeral (e.g., English “twenty-four hundred”).

48 Judg 1:4; 3:29; 4:6, 10, 14; 7:3; 15:11; 16:27; 20:34, 45; Esth 3:9; 1QM VI 10, 11; IX 5.

49 Judg 5:8; 7:3; 8:10^{twice}; 12:6; 20:2, 15, 17, 21, 25, 35, 44, 46; 21:10; Esth 9:16; 1QM IX 4.

Esth 3:9	עֶשְׂרֵת אֲלָפִים	“ten-thousand”
Esth 9:16	חֲמֵשֶׁה וְשִׁבְעִים אֲלֶף	“seventy-five thousand”
1QM IX 4	שְׁמוֹנֶה וְעֶשְׂרִים אֶלֶף	“twenty-eight thousand”
1QM IX 5	שֵׁשֶׁת אֲלָפִים	“six-thousand”

This rule clarifies how to interpret complex numerals that have embedded interior complex numerals. For example, עֶשְׂרִים וְשִׁשָּׁה אֲלֶף (Judg 20:15) is not 6,020 (an adding numeral with an embedded multiplying numeral) but 26,000 (a multiplying numeral with an embedded adding numeral), since אֶלֶף is singular. Moreover, שֵׁשֶׁה is not bound (see Section 2.3); together, these rules make the boundaries of each member clear.

Structure. The structure of number phrases, which differs somewhat in the various texts of my corpus, is discussed in Section Three.

2.2 – Complex Adding Numerals

Order. Because the order of complex adding numerals varies in the texts of my corpus, it is discussed in Section Three.

Agreement. The agreement features of complex adding numerals is the same in Judges, Esther, and 1QM; Amos contains no complex adding numerals. The simple numerals within complex adding numerals show agreement with the quantified noun of the number phrase (23 times), in contrast to what we find in complex multiplying numerals, where agreement is confined to the complex numeral (see Section 2.3). Numerals above 10—that is, the 10s, 100s, and 1,000s members of complex adding numerals—show no agreement features. The 1s members, on the other hand, do show agreement features: numerals 1–2 agree with the quantified noun of the number phrase (two times)⁵⁰ or, when the complex adding numeral is one member

⁵⁰ Judg 10:3; 1QM II 1.

within a complex multiplying numeral, they agree with the higher-member of the multiplying numeral (three times).⁵¹ Numerals 3–10 take the opposite gender of the quantified noun (13 times)⁵² or the higher-member of the multiplying numeral (five times).⁵³ Examples of each of these four types, in the order given above, are as follows:

Judg 10:3	עֶשְׂרִים וּשְׁתַּיִם שָׁנָה	“twenty-two years”
Judg 7:3	עֶשְׂרִים וּשְׁנָיִם אֶלֶף	“twenty-two thousand”
1QM II 6	שְׁלוֹשׁ וּשְׁלוּשִׁים שָׁנֵי הַמִּלְחָמָה	“thirty-three years of the war”
Esth 9:16	חֲמֵשֶׁה וְשִׁבְעִים אֶלֶף	“seventy-five thousand”

There are no exceptions to these rules in my corpus.

Structure. In 32 cases of complex adding numerals in my corpus, the members are coordinated with *-ו*,⁵⁴ as in the following examples:

Judg 10:2	עֶשְׂרִים וּשְׁלֹשׁ	“twenty three”
Esth 1:4	שְׁמוֹנִים וּמֵאָה	“one-hundred eighty”
1QM VI 10	שֵׁשׁ מֵאוֹת וָאַרְבַּעַת אֲלָפִים	“four-thousand six-hundred”

In 1QM VI 11, שֵׁשׁ אֲלָפִים חֲמֵשׁ מֵאוֹת could be taken as a single complex numeral (“six-thousand five-hundred”), in which case the members would be coordinated *without* *-ו*. The near context of the phrase in VI 11, however, together with the fact that it would have anomalous order as an adding numeral (see Section Three), indicates that it is better understood as two distinct number phrases, rather than a complex adding numeral.

⁵¹ Judg 7:3; 12:6; 20:21.

⁵² Judg 2:8; 8:14; 10:2; Esth 1:1; 8:9^{twice}; 9:30; 1QM II 2, 6, 9, 10; VI 14; VII 3.

⁵³ Judg 20:15, 35, 46; Esth 9:16; 1QM IX 4–5.

⁵⁴ Judg 2:8; 7:3; 8:10, 14, 26; 10:2, 3; 12:6; 16:5; 17:2, 3; 20:15, 21, 35^{twice}; 46; Esth 1:1, 4; 8:9^{twice}; 9:16, 30; 1QM II 1, 2, 6, 9, 10; VI 10^{twice}; 14; VII 3; IX 4–5. Cf. JM §100j. Outside my corpus there are some cases where the structure of adding numerals is more complex: in Kings, for example, there are three instances where some members of the adding numeral are coordinated without *waw* (1 Ki 10:14; 20:15; 2 Ki 19:35).

ויהיו הפרשים על רכב אנשי הסרד ששת אלפים חמש מאות לשבט

“The horsemen, in addition to the chariots of the men of the *serek*, will be six-thousand, five-hundred to a tribe.”

The phrase חמש מאות לשבט, “five-hundred to a tribe,” clearly stands apart as a distinct phrase.⁵⁵

All complex adding numerals in my corpus, then, have the structure of coordination with -ו.

2.3 – Complex Multiplying Numerals

Complex numerals closely resemble number phrases, with מאה, “hundred,” and אלף, “thousand,” occupying the role of the quantified noun in the number phrase. In order and agreement features, complex multiplying numerals take the same syntax as number phrases; in structure, complex multiplying numerals use only one of the two structural options available in number phrases: bound structure.

Order. In the three texts in my corpus that contain complex multiplying numerals (Amos contains none), the order is lower-member followed by higher-member in every case (60 times),⁵⁶ as in the following examples:

Judg 4:3 תשע מאות “nine hundred”

Esth 9:6 חמש מאות “five hundred”

1QM VI 10 ארבעת אלפים “four thousand”

There are no exceptions to this order in my corpus.

Agreement. Whereas simple numerals within complex adding numerals show agreement *outside* of the complex numeral phrase (with the quantified noun of the number phrase), in

⁵⁵ Note that 12 tribes with 500 horsemen each makes 6,000 total.

⁵⁶ Judg 1:4; 3:29, 31; 4:3, 6, 10, 13, 14; 5:8; 7:3^{twice}, 6, 7, 8, 16, 22; 8:4, 10^{twice}, 26; 11:26; 12:6; 15:4, 11; 16:27; 18:11, 16, 17; 20:2^{twice}, 15^{twice}, 16, 17^{twice}, 21, 25, 34, 35, 44, 45, 46, 47; 21:10, 12; Esth 3:9; 9:6, 12, 15, 16; 1QM VI 8–9, 9, 10^{thrice}, 11^{twice}; IX 4–5, 5, 14.

complex multiplying numerals the agreement is *internal* (54 total times). For example, in Judg 20:2, אִישׁ רֶגֶל, אַרְבַּע מֵאוֹת אֶלֶף (“four-hundred thousand footmen”), אַרְבַּע is in chiastic concord with מֵאוֹת, not the quantified noun אִישׁ in the number phrase.⁵⁷ As noted above, numerals above 10 show no agreement features—whether the higher-members מאה and אֶלֶף or lower-members that are 10s digits (e.g., Judg 8:10, מֵאָה וְעֶשְׂרִים אֶלֶף, “one hundred twenty thousand”). Numerals 1–2 agree in gender with the higher-member of the multiplying numeral (three times),⁵⁸ and numerals 3–10 take the gender opposite the higher-member’s gender (51 times),⁵⁹ as in the following examples:

Judg 20:21	שְׁנַיִם וְעֶשְׂרִים אֶלֶף	“twenty-two thousand”
Esth 3:9	עֶשְׂרֵת אֲלָפִים	“ten thousand”
1QM IX 14	שלוש מאות	“three hundred”

In the 60 total complex multiplying numerals, there are no cases in my corpus where the lower-member of the multiplying numeral shows gender agreement with the quantified noun of the number phrase. The higher-member אֶלֶף behaves like a collective, taking a plural form with lower-members 2–10 but a singular form with 11 and above (see Section 2.1). מאה never appears with a lower-member above 10; with numerals 2–10 it is plural. When a complex teen numeral is the lower-member of a multiplying numeral,⁶⁰ the 1s member of the complex teen numeral shows gender agreement with either the word “teen” or with the higher-member of the multiplying numeral (see Section 2.4).

When a complex adding numeral is the lower-member of a complex multiplying numeral, the agreement features are notable: the 1s member of the adding numeral takes its gender based on the gender of the higher-member of the multiplying numeral, as in שְׁנַיִם וְעֶשְׂרִים אֶלֶף (“twenty-two

⁵⁷ JM §100f; WO §15.2.5c; MNK §37.2.1.v.

⁵⁸ Judg 7:3; 12:6; 20:21.

⁵⁹ Judg 1:4; 3:29, 31; 4:3, 6, 10, 13, 14; 7:3, 6, 7, 8, 16, 22; 8:4, 26; 11:26; 15:4, 11; 16:27; 18:11, 16, 17; 20:2^{twice}, 15^{twice}, 16, 17^{twice}, 34, 35, 45, 46, 47; 21:12; Esth 3:9; 9:6, 12, 15, 16; 1QM VI 8–9, 9, 10^{thrice}, 11^{twice}, IX 4–5, 5, 14.

⁶⁰ As in Judg 8:10; 20:25, 44; 21:10.

thousand”; Judg 20:21). The internality of agreement features of members in complex multiplying numerals is parallel to what we find in number phrases, with the higher-member of a multiplying numeral taking the same syntactic role as the quantified noun in number phrases.

Structure. The structure of complex multiplying numerals is the same in Judges, Esther, and 1QM, though the Hebrew of Judges shows one particular feature that cannot be confirmed or contradicted in the other texts. Although the evidence is somewhat sparse, we find that most clear cases of complex multiplying numerals have the lower-member bound to the higher-member of the multiplying numeral (30 times);⁶¹ this includes evidence where the vocalization of the Masoretic Text, not the consonantal text itself, provides the indication that the numeral is bound.⁶²

Judg 3:29 עֶשְׂרֵת אֲלָפִים “ten thousand”

Esth 9:15 שְׁלֹשׁ מֵאוֹת “three hundred”

1QM VI 11 שֵׁשׁת אֲלָפִים “six thousand”

Note that the form of many complex multiplying numerals does not indicate whether bound structure or apposition is used; this is the case, for example, when שֵׁשׁ, “six,” is the lower-member.

When a complex adding numeral is embedded in a multiplying numeral as the lower-member in Judges, apposition is used rather than bound structure (five times).⁶³ This is always the case in Judges, as in Judg 20:35, עֶשְׂרִים וְחֲמִשָּׁה אֲלָף (“twenty-five thousand”). Two similar cases in Esther and 1QM are inconclusive, since there the increasing order of adding numerals (see

61 Judg 1:4; 3:29; 4:3, 6, 10, 13, 14; 7:3, 6, 7, 8, 16, 22; 8:4, 26; 11:26; 15:4, 11; 16:27; 20:15, 16, 34, 45; Esth 3:9; 9:6, 12, 15; 1QM VI 10, 11; IX 5; cf. JM §§100*l*, 142*d*; Davidson’s *Syntax* §46*a*; Abegg, “Hebrew of the Dead Sea Scrolls,” 356.

62 Judg 4:3, 13; 7:6, 7, 8, 16, 22; 8:4, 26; 11:26; 15:4; 20:15, 16; Esth 9:6, 12, 15. Note the large number of cases in 1QM where the numeral could be read as bound or independent: VI 8–9, 9, 10^{twice}, 11; IX 14.

63 Judg 7:3; 12:6; 20:15, 35, 46; cf. the discussion of complex adding numerals within number phrases in Section 3.2.

Section Three) entails that the final numeral of an adding numeral (i.e., a numeral higher than 10) cannot be bound.⁶⁴ This feature may occur to emphasize the correct grouping of the members of the complex numeral, though other features like the order of members and grammatical number of the higher-member also safeguard a correct interpretation.

2.4 – Complex Teen Numerals

Order. The order of complex teen numerals is straightforward in all of Ancient Hebrew, and the texts in my corpus do not deviate: in Judges, Esther, and 1QM, the order of members in complex teen numerals is 1s member followed by עשר, “teen” (35 times).⁶⁵ Amos contains no complex teen numerals. Examples of this order include the following:

Judg 10:8 שְׁמֹנֶה עָשָׂר “eighteen”

Esth 8:12 שְׁלוֹשָׁה עָשָׂר “thirteen”

1QM III 14 שְׁנַיִם עָשָׂר “twelve”

Agreement. The agreement features of complex teen numerals are the same throughout my corpus. The “teen” member (עשרה/עשר) agrees in gender with the quantified noun, or, if the complex teen numeral is the lower-member of a complex multiplying numeral, it agrees with the higher-member of the multiplying numeral (34 times).⁶⁶

Judg 20:44 שְׁמֹנֶה-עָשָׂר אֶלֶף “eighteen thousand”

⁶⁴ Esth 9:16; 1QM IX 4–5. Compare also ambiguous cases in Judges where there is no 1s member in the adding numeral (Judg 8:10), where a complex teen numeral is the lower-member of the multiplying numeral and is thus ambiguous (Judg 8:10; 20:25, 44; 21:10), and where the order of adding numerals is decreasing (Judg 20:21; this is the only case out of 16 total where increasing, rather than decreasing, order is used in Judges; see Section Three).

⁶⁵ Judg 3:14; 8:10; 10:8; 19:29; 20:25, 44; 21:10; Esth 2:12; 3:7^{twice}, 12, 13^{twice}; 8:12^{twice}; 9:1^{twice}, 15, 17^{twice}, 18^{thrice}, 19, 21^{twice}; 1QM II 1, 2; III 14; IV 15^{twice}, 16^{twice}; V 1, 2.

⁶⁶ One occurrence in 1QM IV 16 is fragmentary, and as such the order can be determined but not the agreement features. Judg 3:14; 8:10; 10:8; 19:29; 20:25, 44; 21:10; Esth 2:12; 3:7^{twice}, 12, 13^{twice}; 8:12^{twice}; 9:1^{twice}, 15, 17^{twice}, 18^{thrice}, 19, 21^{twice}; 1QM II 1, 2; III 14; IV 15^{twice}, 16; V 1, 2. Cf. MNK, §37.2.2.iv.

Esth 3:12 שלֹשֶׁה עָשָׂר יוֹם “thirteenth day” (ordinal use of cardinal)

1QM IV 16 שְׁתֵּים עָשָׂרָה אַמָּה “twelve cubits”

1s members 1–2 take the same gender (13 times),⁶⁷ and 1s members 3–9⁶⁸ take the opposite gender (16 times),⁶⁹ of *both* עֶשֶׂר/עָשָׂרָה *and* the quantified noun of the noun phrase.⁷⁰ When the complex teen numeral is embedded within a multiplying numeral, the same rules apply for 1s members 1–2 (one time)⁷¹ and 3–9 (three times),⁷² though it is the higher-member of the complex multiplying numeral, not the quantified noun, that shares the gender features with עֶשֶׂר/עָשָׂרָה from which the 1s members take their gender. This system of agreement features is followed 33 total times.

Esth 2:12 שְׁנָיִם עָשָׂר חֳדָשׁ “twelve months”

1QM IV 15 אַרְבַּע עָשָׂרָה אַמָּה “fourteen cubits”

Judg 8:10 חֲמִשָּׁת עָשָׂר אֶלֶף “fifteen thousand”

Judg 21:10 שְׁנָיִם-עָשָׂר אֶלֶף “twelve thousand”

It is unclear whether the agreement of the 1s digit follows *internally* from the gender of the teen member or *externally* from the other constituent in the noun phrase or multiplying numeral, since the gender of עֶשֶׂר, “teen,” will always be the same as the external constituent. If the agreement is internal, complex teen numerals would resemble multiplying numerals in their agreement features; if the agreement is external, they would resemble complex adding numerals.

Structure. The structure of complex teen numerals is fairly uniform in Judges, Esther, and 1QM. The 1s member and “teen” member are coordinated without 1 in 29 discernible cases;⁷³ in

67 Judg 19:29; Esth 2:12; 3:7^{twice}, 13; 8:12; 9:1; 1QM II 1, 2; III 14; IV 16; V 1, 2.

68 Note that the 1s digit “10” is not used in complex teen numerals.

69 Judg 3:14; 10:8; Esth 3:12, 13; 8:12; 9:1, 15, 17^{twice}, 18^{thrice}, 19, 21^{twice}; 1QM IV 15.

70 Cf. MNK, §37.2.2.iv; Davidson’s *Syntax* §47a.

71 Judg 21:10.

72 Judg 8:10; 20:25, 44.

73 Judg 19:29; 20:44; 21:10; Esth 2:12; 3:7^{twice}; 3:12, 13^{twice}; 8:12^{twice}; 9:1^{twice}; 9:15, 17^{twice}, 18^{thrice}; 19, 21^{twice}; 1QM II

all of these, the consonantal text provides the indication that the numeral is not bound.⁷⁴

Judg 20:44	שְׁמֹנֶה-עָשָׂר	“eighteen”
Esth 3:7	שְׁתֵּים עָשָׂרָה	“twelve”
1QM V 2	שְׁנַיִם עָשָׂר	“twelve”

In the case of the word עֶשְׂתִּי, occurring in 1QM IV 16 (עֶשְׂתִּי עַשְׂרָה), the form of the word is unclear: it may be bound or free. עֶשְׂתִּי always occurs in teen constructions with עָשָׂר, with the meaning “eleven” (cf. Akkadian *išten*, “one,” and Ugaritic *ʾšty*, “one”).⁷⁵ It seems unlikely that a word having a value of one would appear in a dual or plural form, with ים- ending. As such, עֶשְׂתִּי in 1QM IV 16 is not the bound form of a hypothetical עֶשְׂתִּים;⁷⁶ rather, it is the free form of the word, coordinated with עָשָׂר, “teen.”

Richter rightly notes, however, that the masculine forms of 3–9 are bound within complex teen numerals, at least according to the Masoretic Text’s vocalization.⁷⁷ There are just over 30 cases in the Hebrew Bible where the vocalization can indicate whether the masculine numeral 3–9 is bound or free, and in all cases it is bound.⁷⁸ Although none of these cases fall within my corpus, we must nevertheless recognize this point of numeral syntax. In consonantal texts such as the “non-biblical” Dead Sea Scrolls, we have no indication whether such masculine numerals 3–9 are bound or free. In contrast to masculine cardinals, the feminine forms—the bound or free

1, 2; III 14; IV 16^{twice}; V 1, 2. Cf. JM §100e.

74 Although the shortened forms שְׁנַיִם and שְׁתֵּים are used with teens (never שְׁנַיִם and שְׁתֵּים), these are not intended to be read as bound forms (i.e., they are not *Qere* שְׁנַיִם and שְׁתֵּים; cf. GKC §97d; WO §15.2.3a; JM §100c; *contra* Richter, 26, and König, *Lehrgebäude*, 212–213); WO suggests the shortened form is because they are plural rather than dual (§15.2.3b). As a result, there is no effect on our understanding of the syntax involved.

75 Cf. JM §100f.; König, *Lehrgebäude*, 212.

76 JM, seeing עֶשְׂתִּי as stemming from Akkadian, suggests it is “an abbreviation of עֶשְׂתִּים” (JM §100f).

77 Richter, 26.

78 Gen 5:10; 7:20; 11:25; 14:4; 17:25; 37:2; 47:28; Exod 27:14, 15; 38:14, 15; Josh 19:6, 38; 21:4, 6, 19, 33; 1 Ki 7:1; 14:21; 22:52; 2 Ki 13:1; 14:17, 23; 16:1; 20:6; 25:8; Isa 38:5; Jer 1:2; 25:3; 52:12; Ezek 40:11; 1 Chr 6:45, 47; 2 Chr 12:13; 15:10; 25:25.

state of which is indicated by the consonantal text—are always free.⁷⁹

There are two divergent cases in Judges where the 1s member is bound to עשר, “teen,”⁸⁰ for example, Judg 20:25, שְׁמֹנֶת עָשָׂר, “eighteen.” The evidence is, unfortunately, too sparse to discern with certainty why this occurs. It may result from a diachronic development, with Judges containing traces of both an earlier structure and the later structure we see in Esther and 1QM. Alternatively, there may be a grammatical explanation: the complex teen numeral may use bound structure when it is the lower-member embedded within a multiplying numeral. In Judges, there are five teen numerals whose structure is not formally ambiguous; of those five, four are within multiplying numerals. Two of these four are bound,⁸¹ while two are coordinated.⁸² This structure could be used to indicate that the teen numeral is one unit within the larger multiplying numeral,⁸³ similar to the phenomenon I explored in Section 2.3 where the last member of an embedded adding numeral is not bound to the higher-member of the multiplying numeral to help define the adding numeral. There are no examples in Esther or 1QM of complex teen numerals embedded within complex multiplying numerals.

2.5 – Overview of Shared Numeral Syntax in Judges, Amos, Esther, and 1QM

The following chart summarizes the features described above. The texts of my corpus agree in all but two of these areas, where diachronic language development may explain the differences (see Section Three).

Figure 4 – Summary of Cardinal Numeral Syntax

79 The feminine form שְׁמֹנֶת is vocalized the same whether bound or free. Masculine אָשָׁר occurs in a complex teen numeral three times (Gen 32:23; 37:9; Deut 1:2); in all three instances it is bound according to the reading tradition.

80 Judg 8:10; 20:25; cf. JM §100e.

81 Judg 8:10; 20:25.

82 Judg 20:44; 21:10.

83 Though the multiplying numeral would be understandable without this structure (since something like “teen hundred” is not possible), the structure could be used to reinforce that the teen numeral is a unit.

	<i>Order</i>	<i>Structure</i>	<i>Gender Agreement</i>
Number Phrase	<p>Normal: <i>number-quantified</i> (שלושת השבטים)</p> <p>Complex cardinals as ordinals: quantified-number (חדש שנים-עשר)</p>	<p>Possible diachronic development (see Section 3.2)</p> <p>Normal: apposition with indefinite NP, bound with definite NP</p> <p>With יום: bound (שלושת ימים)</p> <p>With complex numeral: apposition (עשרים ושנים איש)</p>	<p>1–2 agree with quantified, 3–10 chiasitic with quantified</p> <p>20+ not inflected for gender</p>
Complex Adding Numeral	Possible diachronic development (see Section 3.2)	Coordination with 1 (שמונים ומאת)	1–2 1s member agrees with quantified, 3–10 1s member chiasitic with quantified
Complex Teen Numeral	1s-עשר (שמונה עשרה)	<p>Normal: coordination without 1 (שמונה עשרה)</p> <p>According to the Masoretic Text, bound with masculine numerals 3–9</p> <p>Sometimes, when teen is lower member of multiplying numeral: bound (חמשת עשר)</p>	<p>עשר, “teen,” agrees with quantified</p> <p>1–2 agree, 3–9 chiasitic, with עשר and with quantified</p>
Complex Multiplying Numeral	Lower member – higher member (חמש מאות)	<p>Normal: bound (ששת אלפים)</p> <p>With complex adding lower member: apposition (עשרים ושנים אלף)</p>	lower member 1–2 agree, 3–10 chiasitic, with higher member (ששת אלפים)
	<i>Number</i>		
Nouns with Collective Sense	Plural with 2–10, singular with 1 and 11+		

3 – Divergent Features and Possible Diachronic Development

Two areas of cardinal numeral syntax possibly involve diachronic change. These are the order of members in complex adding numerals and the structure of number phrases. More data

from other corpora are needed to confirm whether diachronic development or another possible explanation dealing with style or dialect⁸⁴ is responsible for the differences we see among the texts. In what follows, I will describe the variation among the texts and briefly explore how it might stem from diachronic change.

3.1 – Order of Complex Adding Numerals

In my corpus, there is a notable difference between the texts in the order of members in complex adding numerals. In Judges, the order of members is decreasing in 15 of 16 complex adding numerals.⁸⁵

Judg 2:8 מאָה וְעֶשְׂרִי “one-hundred and ten” (100s-10s)

The sole exception is Judg 20:21, where we find שְׁנַיִם וְעֶשְׂרִים, “twenty-two.”⁸⁶ In Esther and 1QM, the order of members in adding numerals is increasing, in 15 of 16 total cases.⁸⁷

Esth 1:1 שֶׁבַע וְעֶשְׂרִים וּמֵאָה “one-hundred and twenty-seven” (1s-10s-100s)

1QM VI 10 שש מאות וארבעת אלפים “four-thousand six-hundred” (100s-1,000s)

The exception is found in the second occurring complex adding numeral of 1QM VI 10, אַלֶּף וארבע מאות, “one-thousand four-hundred” (1,000s-100s). There are no complex adding numerals in Amos.

⁸⁴ See Screnock and Holmstedt, *Esther*, 22.

⁸⁵ Judg 2:8; 7:3; 8:10, 14, 26; 10:2, 3; 12:6; 16:5; 17:2, 3; 20:15, 35^{twice}, 46. Note that in Judges, where both adding numerals and multiplying numerals use increasing order, the two can be told apart by the syntactical structure: adding numerals use coordination with ו, whereas multiplying numerals use bound structure.

⁸⁶ Compare the adding numerals in 7:3, עֶשְׂרִים וּשְׁנַיִם; in 10:3, עֶשְׂרִים וּשְׁתַּיִם; and in 12:6, אַרְבָּעִים וּשְׁנַיִם. Note that the adding numeral being embedded in a larger multiplying numeral does not have any effect on the order of members in the adding numeral.

⁸⁷ Esth 1:1, 4; 8:9^{twice}, 9:16, 30; 1QM II 1, 2, 6, 9, 10; VI 10, 14; VII 3; IX 4–5. I am not including one case that could be misread as an adding numeral, in 1QM VI 11; the near context of the phrase in VI 11, together with the fact that it would have anomalous structure as an adding numeral (see Section 2.2), indicates that it is better understood as two distinct number phrases, rather than a complex adding numeral.

The earlier text, Judges, seems to clearly prefer decreasing number in adding numerals, whereas the later texts, Esther and 1QM, prefer increasing order. The number of linguistic tokens, however, is quite limited, with just 16 in Judges, six in Esther, and 10 in 1QM; moreover, this is but one segment of the larger corpus of Ancient Hebrew. The data are suggestive, but a wider survey of evidence is necessary to confirm that diachronic development is involved here. Nevertheless, the data put us in a better position to evaluate past claims about Hebrew numeral syntax. The order of complex adding numerals is often said to be decreasing;⁸⁸ for example, Waltke and O'Connor call increasing order "rare," at least for adding numerals that have more than two members.⁸⁹ In at least two texts (Esther and 1QM), however, increasing order is the norm.⁹⁰ Eduard König's early (1895) presentation of data for complex adding numerals suggests that both decreasing and increasing order are used throughout the Hebrew Bible, though the former is more prevalent.⁹¹

Given the possibility of diachronic development from decreasing to increasing order, it is inaccurate to present one order as the normal order for all of "Biblical Hebrew" (or "Dead Sea Scrolls Hebrew," for that matter). Moreover, our ultimate goal should be to say more than merely that both orders are possible, without identifying particular circumstances or periods in the language in which a given order occurs.⁹² JM do well to clarify, after citing decreasing order as the more frequent order, that "there is some historical evolution,"⁹³ citing Herner's study. We

88 WO §15.2.5d; GKC 97f; cf. Hetzron, "Innovations," 169, who sees decreasing order as the "original order," i.e., in very early stages of Hebrew.

89 WO §15.2.5d; cf. §15.2.4a where adding numerals made up of only 1s and 10s are able to have either increasing or decreasing order (not considering the possibility that one order may be the norm at one stage in the development of the language, and the other order at another stage).

90 Cf. Srenock and Holmstedt, *Esther*, 14.

91 König, *Lehrgebäude*, 215–224. Scholars in the 19th century interpreted the data in various ways; see Herner, *Syntax der Zahlwörter*, 73; S. R. Driver follows Herner, *Notes on the Hebrew Text and the Topography of the Books of Samuel* (Oxford: Clarendon, 1913), x; cf. also Davidson's *Syntax*, §47c.

92 Abegg ("Hebrew of the Dead Sea Scrolls," 356), for example, notes that both orders can occur in the Dead Sea Scrolls.

93 JM §100m; cf. GKC §134i, which presents a similar point, though less clearly.

would do better to present both orders as possible, and moreover to undertake further study on a book-by-book basis to arrive at a more nuanced understanding of this point of numeral syntax.⁹⁴

3.2 – Structure of Number Phrases

Past accounts of the structure of number phrases have noted that both appositional and bound structure can be used.⁹⁵ In all four texts of my corpus, the same variety exists, with appositional structure used in 59 number phrases⁹⁶ and bound structure in 50 number phrases.⁹⁷ Various scholars point to different conditions which might explain some of this variety. First, according to WO, “The construct also precedes numbered things taken as a block”⁹⁸; in other words, bound structure is used with nouns having a collective sense.⁹⁹ According to Davidson, however, only יום—not the other nouns used with a collective sense with numerals over ten—requires the numeral quantifying it to be bound.¹⁰⁰ We can isolate with some certainty a number of nouns in Ancient Hebrew used with a collective sense with numerals over ten, including איש, שנה, יום, אמה, חדש, and לילה.¹⁰¹ If number phrases having these nouns use bound structure, regardless of their definiteness, the data should be adjusted accordingly. In my corpus, the word יום follows this principle; in all of the number phrases in which it is found, bound structure is used.¹⁰² The other nouns of this type, including איש, שנה, and חדש, do not follow this principle in any of the

94 See Holmstedt and Screnock, “Descriptive Grammar,” 67–69.

95 JM §142d; MNK §§37.2.2.iib, c, iiib, c; GKC §§134a, b.

96 Judg 1:20; 6:1, 25, 27; 7:16, 19; 8:14; 9:22, 34, 43; 10:2, 3; 11:37, 39; 12:9; 15:13; 16:5, 7, 8, 13, 15, 19; 17:2, 3; 18:2; 19:2; 20:10, 47; Amos 1:3, 6, 9, 11, 13; 2:1, 4, 6; 4:7, 8; 6:9; Esth 1:1; 2:9, 12^{twice}; 8:9; 9:30; 1QM I 13; V 3, 7, 14; VI 1, 2, 8; VII 9–10, 14^{twice}; VIII 4, 6; IX 4, 13.

97 Judg 3:3, 16; 4:10; 7:20, 25; 8:12; 9:44; 11:38, 40; 14:12, 14, 17; 15:4; 16:3, 28, 29; 17:10; 18:7, 14, 17; 19:4, 6, 8; Amos 3:12; 4:4; Esth 1:4, 5, 10, 14; 2:21, 23; 4:16; 6:2; 9:10, 12, 13, 14, 27; 1QM III 14; IV 5; V 12; VI 4^{twice}; VII 14, 15, 18; VIII 14; IX 11, 13; XI 8–9.

98 WO §15.2.2b; see also JM §142d.

99 On nouns used with a collective sense with numerals over ten, see Section 2.1.

100 Davidson’s *Syntax* §46a.

101 Cf. Davidson 1901, §37 rem. 1.

102 Judg 11:40; 14:12, 14; 19:4; Amos 4:4; Esth 1:4, 5; 4:16.

texts, which use appositional structure as often or more than bound structure with these nouns.¹⁰³

Second, when the numeral of the number phrase is a complex adding numeral—whether or not it has a multiplying numeral embedded within it—appositional syntax is always used.¹⁰⁴ Although they never occur in my corpus, number phrases whose main numeral is a complex multiplying numeral or a complex teen numeral may also take appositional syntax.¹⁰⁵ Third, JM state that the number two is usually bound,¹⁰⁶ while Davidson states that two is bound when used with indefinite nouns.¹⁰⁷ In my corpus, however, neither of these rules are followed.¹⁰⁸ Thus, the use of “two” does not affect the structure of number phrases in my corpus.

After eliminating the cases explained by the rules stated above, number phrases remain split between bound and appositional structure. One final feature involving the definiteness of the number phrase clarifies the situation: apposition is used with indefinite nouns and bound structure with definite nouns.¹⁰⁹ Following Christopher Lyons, my working definition of

¹⁰³See, for example, Judg 8:14; 19:2; Amos 6:9; Esth 2:12; and 1QM IV 15. Note, however, that outside of my corpus, we see a trend where some *particular* numerals are bound when used with some of these words, for example, מאה with שנה (Gen 5:3, 6, 18, 25, 28; 11:10, 25; 21:5; 25:7, 17; 35:28; 47:9, 28; Exod 6:16, 18, 20; Num 33:39; compare Gen 17:17; 23:1; Isa 65:20).

¹⁰⁴Judg 8:14; 10:2, 3; 16:5; 17:2, 3; Esth 1:1; 8:9; 9:30. Cf. *Davidson's Syntax* §47c; and cf. the same structure in multiplying numerals whose lower-member is a complex adding numeral (Section 2.3). When this second rule and the previous rule—that יום requires a bound numeral—come into conflict, there are various results; for example, when a complex adding numeral is used with יום, it is sometimes bound (Gen 7:24; 8:3; Esth 1:4; 4QCommGen^a I 7) and sometimes appositional (Neh 6:15).

¹⁰⁵Cf. *Davidson's Syntax* §47c, d; JM §142e; and Abegg, “Hebrew of the Dead Sea Scrolls,” 354. Simple מאה and אלף can occur in apposition or be bound to the quantified noun (cf. Judg 4:10 and Esth 1:4; cf. MNK §37.2.2.vi.b; JM §142g).

¹⁰⁶JM §142c.

¹⁰⁷*Davidson's Syntax* §46a.

¹⁰⁸See Judg 11:37, 39; 15:13. On the shortened forms of שנים and שתים, see footnote 74.

¹⁰⁹The clearest presentation of this rule, though brief, is found in *Davidson's Syntax* §46a–b. WO appears to agree with this rule for numerals 3–10 (§15.2.2b), while JM states only half the rule, “the cst. state [=bound structure] is generally used when the noun has the article” (§142d). König’s data on the use of bound numerals with determined and indetermined nouns gives limited access to one half of the issue; “Syntax der Zahlwörter,” 130–134. See also Holmstedt and Srenock, “Descriptive Grammar,” 97–98. According to MNK (§37.2.2 note 2), quantified nouns are usually indefinite; in the data of my corpus, however, there is a high number of definite quantified nouns.

definiteness is as follows: “If the reference of a noun phrase is characterized by [identifiability or uniqueness], then that noun phrase [is] definite.”¹¹⁰ In other words, a definite noun phrase is one whose referent is either identifiable—whether in the discourse world or in the audience’s general knowledge¹¹¹—or unique, or potentially both. Taking the data of all of the texts together, there is a preference to use bound structure with definite number phrases and appositional structure with indefinite number phrases. This preference is amplified, however, in the later texts Esther and 1QM.

In Amos and Judges, appositional structure is used with definite number phrases 3 times¹¹² and with indefinite number phrases 22 times.¹¹³

Judg 1:20	אֶת־שְׁלֹשָׁה בְנֵי הָעֲנָק	“the three sons of Anaq”	(definite NumP)
Judg 16:8	שִׁבְעָה יִתְרִים לֶחִים	“seven fresh cords”	(indefinite NumP)
Amos 4:7	שְׁלֹשָׁה חֳדָשִׁים	“three months”	(indefinite NumP)

Bound structure is used with definite number phrases 15 times¹¹⁴ and with indefinite number phrases five times.¹¹⁵

Judg 14:12	שִׁבְעַת יְמֵי הַמִּשְׁתָּה	“the seven days of the feast”	(definite NumP)
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110Christopher Lyons, *Definiteness* (Cambridge: Cambridge University Press, 1999), 15; cf. Holmstedt and Srenock, “Descriptive Grammar,” 75–76.

111Cf. Peter J. Bekins, “Non-Prototypical Uses of the Definite Article in Biblical Hebrew,” *JSS* 58/2 (2013): 225–40.

112Judg 1:20; 16:13, 19. Eight occurrences in Amos (1:3, 6, 9, 11, 13; 2:1, 4, 6) might be considered definite, but they are difficult to interpret. The phrase occurring in all of these cases is usually translated “for three sins of...” (e.g., “three sins of Damascus”). In my opinion, the text does not have three particular types of transgression or three particular transgressions in mind (whether actual or imagined). As a result, though the phrases would typically be considered definite (by virtue of the definite noun, e.g., “Damascus”), by the standards of my definition of definiteness above they are not definite. Given the role of interpretation in the understanding of this evidence, I will not include it; if it were included, there would still not be enough data in Amos to clearly understand its use of structure in number phrases.

113Judg 6:1, 25, 27; 7:16, 19; 9:22, 34, 43; 11:37, 39; 12:9; 15:13; 16:7, 8, 15; 18:2; 19:2; 20:10, 47; Amos 4:7, 8; 6:9.

114Judg 3:3; 7:20, 25; 8:12; 9:44; 14:17; 15:4; 16:3, 28, 29; 18:7, 14, 17; 19:6, 8.

115Judg 3:16; 4:10; 11:38; 17:10; Amos 3:12.

Judg 11:38	שְׁנֵי חֳדָשִׁים	“two months”	(indefinite NumP)
Amos 3:12	שְׁתֵּי כַרְעִים	“two legs”	(indefinite NumP)

In eight of the 45 total cases cited above, the structure is ambiguous in the consonantal text but indicated by the Masoretic Text’s vocalization;¹¹⁶ if we were to eliminate these, it would not change the overall character of the evidence.

The number phrases of Esther and 1QM show the same preferences to a greater extent. Bound structure is used almost exclusively with definite number phrases (21 times¹¹⁷), and appositional structure with indefinite number phrases (16 times¹¹⁸).

Esth 9:13	אֶת עֲשָׂרַת בְּנֵי־הָמָן	“the ten sons of Haman”	(bound-def.)
1QM VII 15	שְׁתֵּי חֲצוֹצְרוֹת הַמִּקְרָא	“the two trumpets of assembly”	(bound-def.)
Esth 2:12	שֵׁשׁ חֳדָשִׁים	“six months”	(appos.-indef.)
1QM V 14	חֲמֵשֶׁה טַפְחִים	“five spans”	(appos.-indef.)

Two number phrases do not follow this pattern: once bound structure is used with an indefinite number phrase,¹¹⁹ and once appositional structure is used with a definite number phrase.¹²⁰ If we appealed to a diachronic explanation for the differences in my four texts, these two cases in Esther and 1QM would not be abnormal, as older features of language take a long time to disappear and often never completely disappear.¹²¹

The use of appositional structure for indefinite number phrases and bound structure for

¹¹⁶Judg 6:1, 25; 9:22; 12:9; 16:13, 15, 19; Amos 4:8.

¹¹⁷Esth 1:10, 14; 2:21, 23; 6:2; 9:10, 12, 13, 14, 27; 1QM III 14; IV 5; V 12; VI 4; VII 14, 15, 18; VIII 14; IX 11, 13; XI 8–9.

¹¹⁸Esth 2:12^{twice}; 1QM I 13; V 3, 7, 14; VI 1, 2, 8; VII 9–10, 14^{twice}; VIII 4, 6; IX 4, 13.

¹¹⁹1QM VI 4.

¹²⁰Esth 2:9. This is the only case in Esther where the consonantal text is ambiguous on the structure of the number phrase; Esth 2:9 has וְאֵת שִׁבְעַת הַנְּעוּרוֹת הַרְאִיּוֹת, but שִׁבְעַת could be revocalized שִׁבְעָה. Alternatively, we could understand the quantified noun to be definite but the number phrase to be indefinite: “seven of the chosen ladies.”

¹²¹See Robert D. Holmstedt, “Investigating the Possible Verb-Subject to Subject-Verb Shift in Ancient Hebrew: Methodological First Steps,” *KUSATU* 15 (2013), 12; Srenock and Holmstedt, *Esther*, 21–22.

definite number phrases is illustrated in the following tables. The percentage of cases that follow the rule is given for each book in parenthesis.

Figure 5 – Definiteness and the Structure of Number Phrases

Amos	Apposition	Bound
Indefinite	3 times 4:7, 8; 6:9	1 time 3:12
Definite	0 times	0 times

Judges (83%)	Apposition	Bound
Indefinite	19 times 6:1, 25, 27; 7:16, 19; 9:22, 34, 43; 11:37, 39; 12:9; 15:13; 16:7, 8, 15; 18:2; 19:2; 20:10, 47	4 times 3:16; 4:10; 11:38; 17:10
Definite	3 times 1:20; 16:13, 19	15 times 3:3; 7:20, 25; 8:12; 9:44; 14:17; 15:4; 16:3, 28, 29; 18:7, 14, 17; 19:6, 8

Esther (92%)	Apposition	Bound
Indefinite	2 times 2:12 ^{twice}	0 times
Definite	1 time 2:9	10 times 1:10, 14; 2:21, 23; 6:2; 9:10, 12, 13, 14, 27

1QM (96%)	Apposition	Bound
Indefinite	14 times I 13; V 3, 7, 14; VI 1, 2, 8; VII 9–10, 14 ^{twice} ; VIII 4, 6; IX 4, 13	1 time VI 4
Definite	0 times	11 times III 14; IV 5; V 12; VI 4; VII 14, 15, 18; VIII 14; IX 11, 13; XI 8–9

The evidence with respect to this use of structure can be summarized as follows: Judges uses the rule—that apposition is used with indefinite nouns and bound structure with definite nouns—to a large extent (83% of cases), Esther (whose evidence is somewhat sparse) and 1QM follow the rule almost completely (92% and 96%, respectively), and Amos does not contain enough data to contribute to our understanding. In general, our knowledge of this phenomenon would be improved by more data.

One possible explanation for the difference between Judges, Esther and 1QM is that the structure of number phrases in Hebrew developed over time. What we see in Esther and 1QM would fall at the end of the developmental process, where the new feature dominates but the old feature continues to be used to a small extent, and Judges would fall earlier, though closer to the end than the beginning, with old features present together with the new features.¹²² In Judges we find contrasting number phrases like שְׁלֹשָׁה רָאשִׁים (“three companies”) and שְׁלֹשֶׁת הָרָאשִׁים (“the three companies”) side by side, which nicely correspond to the grammatical rule we find at work in Esther and 1QM. The language of Judges, then, is perhaps well on its way to adopting the new feature, suggesting that the grammatical shift undergone by cardinal numerals in the number phrase happened quite early, before the possible shift in order in complex adding numerals (see

¹²²On the process of language change over time in its various stages, see Holmstedt, “Verb-Subject to Subject-Verb Shift,” and Srenock and Holmstedt, *Esther*, 18–23. Although the evidence at this point is too small to support the claim, I suspect that simple cardinal numerals have undergone grammaticalization and shifted from being nouns (cf. *Davidson’s Syntax* §46; MNK §§37.2.2.ii, iii) to determiners (cf. WO §15.2.6; JM §1421; *Davidson’s Syntax* §46 Rem. 2).

Section 3.1). However, it must be kept in mind that we are not working with much data. In order to clarify the issue, more evidence from more texts is needed.

4 – Conclusion

My consideration of cardinal numeral syntax has focused on exhaustive data from a small corpus consisting of Judges, Amos, Esther, and 1QM. Organized around four structures—number phrases, complex multiplying numerals, complex adding numerals, and complex teen numerals—it consolidates and restates claims made in past literature that are supported by the data. I have followed a method that begins with the distinctive grammar of each text, that gives clear access to the syntactical data of the texts, and that proceeds with caution before making assertions about the historical development of the language. I found many aspects of syntax that are shared among the texts (see the summary in Section 2.5). In addition, I have identified two areas of possible diachronic development (the order of adding numerals and structure of number phrases) even as I eliminated another area (the order of number phrases) that has been appealed to often in the past.

In this study I have attempted to provide a basis, both in method and in the evidence presented, for future study of numeral syntax. Given the abundance of numerals in a good number of Hebrew texts, the study of numeral syntax offers a promising new angle that will surely contribute to our knowledge of Hebrew diachrony. Further work on numeral syntax in other texts needs to be done to add the kind of evidence necessary to trace the diachronic development of Ancient Hebrew.