The Finite Verbal Forms in Biblical Hebrew Do Express Aspect¹

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Introduction

Perhaps there is no more long-standing problem in Biblical Hebrew (BH) grammar than the interpretation of its verbal system. At its core the controversy consists of alternative answers to one basic question: do the BH verbal forms primarily express tense or aspect? There are currently three basic answers offered by scholars to this question. The first is that the BH verbal forms primarily express *tense*; that is, they denote the temporal location of events with respect to the time of the statement or utterance, either using a binary distinction of past versus non-past, or using a ternary distinction of past, present, and future. This approach is a continuation of the tense model employed by the medieval grammarians and dominant in the field until the latter half of the nineteenth century.²

The second answer offered is that the BH verb forms primarily express *aspect*, namely, a central binary opposition between perfective and imperfective aspect. Although these labels derive from Slavic grammar, linguists have adopted them to describe aspectual distinctions found in a wide range of languages.³ These two aspects are defined by linguists as "different ways of *viewing* the internal temporal constituency of a situation"; perfective aspect views (or conceptualizes) an event as an undifferentiated whole, in contrast to imperfective aspect, in which the temporal progression

^{1.} I would like to thank Jan Joosten for the stimulation to my own thinking about the BH verbal system that his article and e-mail exchanges have provided. Portions of my argument in this essay were earlier presented in papers at the 2005 American Oriental Society annual meetings (joint session with the North American Conference on Afroasiatic Linguistics), and the 2005 Upper Midwest Society of Biblical Literature meetings. I am grateful for the feedback received at both venues. I also would like to thank Cynthia L. Miller and Robert D. Holmstedt, who each read earlier versions of this essay and provided helpful critiques that have improved my arguments.

^{2.} The tense theory espoused by medieval Jewish grammarians identified qatal, the participle, and yiqtol as past (${}^{c}a\underline{b}ar$), present (${}^{c}om\bar{e}d$), and future (${}^{c}a\bar{t}id$) tense, respectively. The $w\bar{a}w$ -prefixed forms (wayyiqtol and weqatal) were explained by the theory that there are two distinct $w\bar{a}w$ conjunctions: one that simply conjoined two clauses ($w\bar{a}w$ $hahibb\hat{u}r$), but another that "converted" the tense of the verb to which it was attached ($w\bar{a}w$ $hahipp\hat{u}k$); see J. A. Cook, *The Biblical Hebrew Verbal System* (Ph.D. diss., University of Wisconsin, 2002), 79–82, and references there.

^{3.} See Oxford English Dictionary, 2nd ed., s.v. "aspect." According to Binnick, the term aspect entered Western European linguistics in the early part of the nineteenth century, but only became part of the "linguistic tradition" at the end of that century; R. I. Binnick, Time and the Verb (Oxford, 1991), 135–36; the Oxford English Dictionary (2nd ed., s.v. "aspect") dates the entrance of the term into English to 1853.

of an event is in view. This aspectual contrast may be illustrated by the opposition of meaning between the French Passé Simple écrivit and Imparfait écrivais.

The third, and most recently offered answer, is that the BH verbal forms primarily express *relative tense*; that is, they indicate events as relative to some point in time indicated in the discourse.⁶ The temporal "reference point" to which the relative tense event is related may be indicated by another verbal form or some temporal expression in the discourse, or it may be coextensive with the time of the utterance, in which case the relative tense is indistinguishable from (absolute) tense.⁷ Examples of grammaticalized relative tense forms in English include the Past Perfect (*he had written*) and Future Perfect (*he will have written*), which designate events as preceding some point earlier than the time of the utterance and some time future to the utterance, respectively.

In a recent article, Jan Joosten has cast doubt on the aspectual explanation of the BH verbal system in light of cross-linguistic data. Joosten observes that two prototypical uses of imperfective aspect verbs are the expression of what he terms the "real present" (i.e., "processes that are going on at the moment of speaking") and "attendant circumstances in the past" (analogous to the English past progressive in *John was reading when I entered the room*). Joosten states that, "since neither of these functions is regularly expressed by YIQTOL in BH there is no point in classifying YIQTOL as an imperfective." In other words, Joosten argues that unless these prototypically imperfective functions or meanings can be shown to be "regularly expressed" by BH *yiqtol*, it is incorrect to identify the form as morphologically marked for imperfective aspect. Further, Joosten sees *yiqtol* as "the weak point" in aspectual theories of the BH verbal system: "If YIQTOL does not express imperfective aspect this makes the aspectual interpretation of the finite forms in BH unfeasible." 12

Although Joosten's article is primarily devoted to this negative argument, he provides an excursus in which he briefly summarizes his alternative theory of the BH verb, which he has presented in more detail in earlier articles. ¹³ Joosten's model

^{4.} Quote from B. Comrie, *Aspect* (Cambridge, 1976), 3. For more recent discussions, see C. Bache, *The Study of Tense*, *Aspect and Action* (Frankfurt am Main, 1995), 5–6; Binnick, *Time and the Verb*, 135–58.

^{5.} The English Simple and Progressive verb forms create a similar contrast (e.g., *He wrote* vs. *He was writing*).

^{6.} The earliest and most influential relative tense theory is that of H. Reichenbach, *Elements of Symbolic Logic* (London, 1947), 286–99; for discussion, see Binnick, *Time and the Verb*, 109–16.

^{7.} Thus Comrie proposes a model that employs a reference point only when it is temporally distinct from the time of the utterance; B. Comrie, *Tense* (Cambridge, 1985), 122–30.

^{8.} J. Joosten, "Do the Finite Verbal Forms in Biblical Hebrew Express Aspect?" *JANES* 29 (2002), 49–70. The label *finite* is used by many scholars to separate out for discussion the fully conjugated *qatal*, *yiqtol*, *wayyiqtol*, and *weqatal* forms.

^{9.} Joosten, "Finite Verbal Forms," 53.

^{10.} Ibid., 57

^{11.} Morphologically marked, meaning that, according to Joosten, the morphology of the yiqtol conjugation does not indicate imperfective aspect.

^{12.} Joosten, "Finite Verbal Forms," 51, 67.

^{13.} J. Joosten, "The Predicative Participle in Biblical Hebrew," ZAH 2 (1989), 128–59; idem, "Biblical wegatal and Syriac waqtal Expressing Repetition in the Past," ZAH 5 (1992), 1–14; idem, "The Indicative

of the BH verb is essentially a tense-based one, though it has several peculiarities. Joosten identifies wayvigtol and gatal as past tense and perfect aspect (equivalent to English Present Perfect), respectively, but has admitted "partial promiscuity" between the meanings of these forms. ¹⁴ Yigtol and wegatal, the former's "faithful companion," are both "future/modal," a designation that I discuss below. 15 Finally, although he does not directly treat the participle within this article devoted to the finite verbal forms, elsewhere Joosten identifies it as a present tense verb form. 16

Contra Joosten

Joosten's argument is open to three general areas of criticism: the first has to do with his apparent underlying assumption about the categories of tense and aspect; the second is his use of typological data in support of his argument; and the third is his treatment of the statistical data. I address each of these in turn below.

An underlying assumption?

A formative influence upon Joosten's approach to the BH verb appears to be Jerzy Kuryłowicz's 1970s publications on the Semitic verb. 17 Kuryłowicz argued that aspect and tense are subsidiary, context-induced functions or meanings of the prefix and suffix conjugations in Semitic (e.g., Arabic yagtulu and gatala; BH yigtol and gatal). These prefix and suffix conjugations form a privative opposition of "simultaneity (or non-anteriority) versus anteriority," respectively. 18 Although Kuryłowicz refers to this opposition as "one of general time-reference," his vocabulary and discussion make it clear that the opposition is one of *relative tense*.

Joosten's discussion of the BH verb often echos Kuryłowicz's. Like Kuryłowicz, Joosten seeks to define the basic meaning of the verbal forms as distinct from "additional layers of meaning created by the context." ¹⁹ In addition, Joosten uses terminology similar to Kuryłowicz's to distinguish the BH verbal forms. For instance, Joosten explains that *gatal* expresses "anteriority to . . . the moment of speaking," whereas wayyiqtol "expresses contemporaneity with a moment in the past." He further contrasts *qatal* as anterior to the moment of speaking with the participle, which "expresses contemporaneity with the moment of speaking."²¹

System of the Biblical Hebrew Verb and its Literary Exploitation," in E. van Wolde, ed., Narrative Syntax and the Hebrew Bible (Leiden, 1997), 51-71; idem, "The Long Form of the Prefixed Conjugation Referring to the Past in Biblical Hebrew Prose," HS 40 (1999), 15-26.

- 14. Joosten, "Finite Verbal Forms," 67-69; quote is from idem, "The Indicative System," 61.
- 15. Joosten, "Finite Verbal Forms," 67-68.
- 16. Joosten, "The Indicative System," 60.
- 17. J. K. Kuryłowicz, Studies in Semitic Grammar and Metrics (Warsaw, 1972); idem, "Verbal Aspect in Semitic," Or. 42 (1973), 114-20. For an analysis and critique of Kuryłowicz's theory see Cook, The Biblical Hebrew Verbal System, 111–15.
- 18. Kuryłowicz, "Verbal Aspect in Semitic," 115. A Privative opposition is an asymmetrical relationship between two members, one of which is marked for a feature that the other lacks.
 - 19. Joosten, "Finite Verbal Forms," 52.
 - 20. Joosten, "The Indicative System," 60.
 - 21. Loc. cit.

This approach to defining the BH verbal forms ultimately derives from Hans Reichenbach's landmark relative tense theory. Reichenbach argued that the various verb tenses cannot adequately be described in terms of a temporal relationship between the time of the event (E) and the time of the speech about the event (S); rather, a third point was required in the temporal ordering—a "reference time" (R). With this reference time in the temporal ordering, Reichenbach was able to distinguish between certain "tenses" that logicians and semanticists had previously struggled to differentiate. For example, Reichenbach defined past tense as an event time and a reference time contemporaneously located prior to the speech time (i.e., E,R < S; the comma denotes contemporaneity), while the perfect, by contrast, he defined as an event time located prior to a contemporaneous reference time and speech time (i.e., E < R,S). This is the exact distinction Joosten draws between *wayyiqtol* from *qatal*, thus making his model a relative tense one like Kuryłowicz's.

Unfortunately, for all the merits of Reichenbach's relative tense theory, many linguists have come to recognize that one of its primary weaknesses is its assumption that past and perfect can be distinguished in terms of tense or time. As Comrie has observed,

In terms of location in time, however, the perfect is not distinct from the past. The past tense locates an event in time prior to the present moment. If one were to provide an analysis of the perfect analogous to that of the pluperfect and the future perfect, then one would say that the reference point for the perfect is simultaneous with the present moment, rather than being before the present moment (as for the pluperfect) or after the present moment (as for the future perfect). The situation in question would then be located in time prior to this reference point. In terms of location in time, however, this would give precisely the same result as the past, which also locates a situation as prior to the present moment. Thus, however perfect differs from past, it is not in terms of time location.²³

Even more important than this weakness in Joosten's relative-tense explanation of the BH verb is his implicit endorsement of Kuryłowicz's underlying assumption that "language needs to express tense before it can express aspect." Kuryłowicz argued that tense is more basic than aspect to verbal systems; therefore, in a language such as BH, which contains relatively few verbal forms, it is most likely that verbal forms will be marked for tense, while "they may be used with aspectual implications in certain contexts." Joosten summarizes Kuryłowicz's assumptions to this effect, but then drops this line of argumentation, simply stating that "the question remains whether Kuryłowicz' premises are correct." ²⁶

The question of whether tense or aspect is more basic to verbal systems crosslinguistically is an important one, but it is not as unsettled as Joosten's claim might lead one to believe. In fact, linguistic research on verbal systems since Kuryłowicz's

^{22.} Reichenbach, Elements, 297.

^{23.} Comrie, *Tense*, 78. For a defense of Reichenbach's relative tense analysis of perfect, see R. Declerck, "From Reichenbach (1947) to Comrie (1985) and Beyond," *Lingua* 70 (1986), 305–64. For a treatment of the perfect as an aspect, see Binnick, *Time and the Verb*, 264–81.

^{24.} Joosten, "Finite Verbal Forms," 51; see Kuryłowicz, "Verbal Aspect in Semitic," 114.

^{25.} Joosten, "Finite Verbal Forms," 51.

^{26.} Ibid., 52.

theory of the Semitic verb have overwhelmingly disproved his premise. Bybee and Dahl, based on their independent surveys of verbal systems in the world's languages, have discovered that the most frequent type of verbal system consists of a primary aspectual opposition between a perfective verb (which usually has a "secondary meaning" of simple past tense) and an imperfective verb, often containing a secondary tense opposition between imperfective past and imperfective non-past, as illustrated by figure 1.²⁷

Figure 1. Model of a proto-typical aspect-prominent verbal system.

perfective: imperfective past: non-past

This model is diametrically opposed to the one presumed by Kuryłowicz, in which tense would be the primary opposition and past tense would have a secondary aspectual opposition, as illustrated in figure 2.

Figure 2. Kuryłowicz's model of a tense-prominent verbal system.

past: non-past perfective: imperfective

In addition, Dahl and Bybee have presented separate, complementary arguments from morphology that aspect is more "basic" to verbal systems than tense. Dahl observes that cross-linguistically languages tend to show greater morphological distinction between aspectual forms (e.g., perfective vs. imperfective) than between tensed forms (e.g., past imperfective vs. non-past imperfective). This tendency is illustrated by the Arabic examples in figure 3, in which the past imperfective is constructed periphrastically of the general imperfective yaktubu plus the perfective form of the verb 'to be' (kāna), which denotes the construction as past imperfective.²⁸

Figure 3. Arabic aspect-tense verbal oppositions.

Perfective: kataba 'he wrote' Imperfective: yaktubu 'he is writing' Past Imperfective: (kāna) yaktubu 'he was writing'

If verbal systems, by contrast, were predominently structured according to Kuryłowicz's model in figure 2 above, Dahl notes that verbal systems would exhibit more morphological similarity between aspectual forms, such as between the Arabic

^{27.} J. L. Bybee and Ö. Dahl, "The Creation of Tense and Aspect Systems in the Languages of the World," Studies in Language 13 (1989), 83.

^{28.} See W. Wright, A Grammar of the Arabic Language, 3rd ed. (Cambridge, 1962), 2.21.

Perfective and Imperfective, rather than between opposing tensed forms, as between Arabic Imperfective and Past Imperfective (see figure 3).²⁹

In her study of the relationship between morphology and verbal semantics, Bybee hypothesizes that the "the degree of morpho-phonological fusion of an affix to a stem correlates with the degree of semantic *relevance* of the affix to the stem," defining relevancy as "the extent that the meaning of the category directly affects the lexical content of the verb stem." Bybee concludes that the category of aspect "is most directly and exclusively relevant to the verb," and that its relevancy is reflected in the high degree of fusion between aspectual morphemes and verb stems crosslingusitically. Aspect is directly relevant to the character of an event, and alters the meaning of a predication at a more basic level than tense, which relates more broadly to the whole proposition in terms of location in time. The relative degree of relevancy of aspect versus tense is illustrated by the morphology of the Arabic verb forms in figure 3, in which aspectual distinctions are expressed by bound verbal morphology while tense is expressed through a periphrastic construction.

The typological argument

Joosten appeals to typological data on verbal systems as evidence both against an imperfective interpretation of *yiqtol* and in support of his future/modal identification of the form.³² It is therefore appropriate to ask whether his use of typological data is sound. To revisit Joosten's argument against imperfective *yiqtol*, he states that, "the most prominent functions attached to the imperfective in recognized aspect languages are the expression of real present [i.e., an event going on at the moment of speaking] and of attendant circumstances in the past [i.e., an event reported as going on at the same moment as another past event]. Since neither of these functions is regularly expressed by YIQTOL in BH, there is no point in classifying YIQTOL as an imperfective."³³

Several objections may be raised with respect to this typological argument. First, while it is true that the expression of real present and of attendant circumstances in the past are prominent functions of imperfective verbs, the absence of these functions from BH *yiqtol* would not, in and of itself, disprove an aspectual interpretation of the form. Although Joosten admits that imperfective verb forms will not "conform in all details" with a description of the cross-linguistic category of imperfective, this argument demands just such conformity with respect to the two particularly prominent imperfective functions of "real present" and "attendant circumstances in the past."³⁴

^{29.} Ö. Dahl, Tense and Aspect Systems (Oxford, 1985), 83.

^{30.} J. L. Bybee, Morphology, (Amsterdam, 1985), 4, 15.

^{31.} Ibid., 21, 24.

^{32.} Linguistic typology refers to the classification of linguistic structures across languages. Each language is classified as a particular type with respect to a specific linguistic category under investigation (W. Croft, *Typology and Universals*, 2nd ed. [Cambridge, 2003], 1). Arguments based on linguistic typology against a particular linguistic analysis, such as Joosten's, generally aim to show that the analysis, if correct, would make the linguistic structure or language under investigation anomalous with respect to the linguistic types recognized among the world's languages.

^{33.} Joosten, "Finite Verbal Forms," 53.

^{34.} Loc. cit.

Admittedly, if Joosten could show that *yiqtol* never expresses these values, the burden of proof would rest on those who argue that despite never expressing real present and attendant circumstances in the past, yiqtol is nevertheless an imperfective verb. However, Joosten only argues that yiqtol does not "regularly" express these notions. Again, this does not conclusively disprove an imperfective aspectual identification of yiqtol. Joosten, apparently recognizing this fact, attempts to tighten up his argument in the course of his article. Thus, he initially claims that yiqtol is not the "regular means" for expressing the real present in BH, discusses several "rare" uses of the form for real present, and then proceeds to infer from the data that perhaps yiqtol is "incapable of expressing the real present." That BH yiqtol is incapable of expressing the real present and/or attendant circumstances in the past is a serious charge, and one that I do not think can be maintained, as I demonstrate below. However, again, if BH yiqtol does not "regularly" express these values, that fact would merely call for explanation, it would not constitute conclusive evidence against an aspectual interpretation of the form.

Further, even if the imperfective identification of yiqtol were disproved, it would not automatically follow, contra Joosten, that "the aspectual interpretation of the finite forms in BH [is] unfeasible."³⁶ This argument requires demonstrating that aspectual languages cannot exist apart from an imperfective verb form. Joosten argues that a verbal system centered around an opposition between an aspectual verb and a future/ modal verb would be anomalous.³⁷ However, the same doubts may be raised concerning his alternative model. His argument could be strengthened by finding comparable verbal systems to his model for BH, which consists of a past (wayviatol): perfect (qatal) opposition, a perfect (qatal): present (participle) opposition (a present tense form that is likewise used for past and future expressions), and two future/ modal forms (yiqtol and weqatal). Joosten points to no such comparable example for his model of BH, nor do Bybee and Dahl cite an analogous verbal system in their cross-linguistic survey.³⁸

Joosten also utilizes typological data to support his contention that BH yiqtol is a future/modal verb. Joosten understands modality in terms of a modal (including future): non-modal (indicative) or irrealis: realis opposition.³⁹ This broad understanding of modality allows him to construct ad hoc arguments to remove obstacles to his future/modal interpretation of yiqtol. For example, he dismisses examples of yiqtol that express real present in questions because "there is something inherently modal about questions."⁴⁰ Aside from being an ad hoc and vague appeal to modality, his argument with respect to viqtol in questions would imply that all questions in BH should have a modal verb form, which is patently not the case (e.g., Judg. 18:3 in which both a *gatal* and a participle occur in questions).

^{35.} Joosten, "Finite Verbal Forms," 54-56.

^{36.} Ibid., 67.

^{37.} Loc. cit.

^{38.} Bybee and Dahl, "The Creation of Tense and Aspect Systems."

^{39.} See Joosten, "The Prefix Conjugation," 16. On the modal: non-modal or realis: irrealis distinction, see F. R. Palmer, Mood and Modality, 2nd ed. (Cambridge, 2003), 1-4.

^{40.} Joosten, "Finite Verbal Forms," 54.

Similarly, Joosten dismisses various imperfective-like uses of *yiqtol* in the past as being "iterative," which he proceeds to associate with modality based on crosslinguistic data. Those data that do not fit this argument, such as the close relationship between iterativity and imperfectivity in classical Greek and modern French, he dismisses as being "rather accidental." ⁴¹

The statistical argument

Despite Joosten's admission that "statistics are of limited value in linguistic research,"42 his argument is largely a statistical one. He argues that, "it would be perverse to disregard the massive predominance of YIQTOL as an expression of future/ modal,"43 thus implying that these statistics are disregarded by an aspectual theory and that they demand instead, a future/modal identification of yiqtol. However, as I argued in the previous section, that the expression of real present and of attendant circumstances in the past by yiqtol is statistically rare does not in itself debunk an imperfective identification of the form. Likewise, that future/modal is the statistically dominant use of viatol does not alone demand a future/modal identification of the form. The statistics do, however, require explanation. They raise the question of whether Joosten's theory—that *yiqtol* is future/modal and that the statistically marginal functions "could be regarded as context-conditioned subsidiary functions".⁴⁴—is the most coherent explanation of the statistics. Below I show how Joosten's future/modal identification of yiqtol does not adequately explain the examples of yiqtol expressing real present and attendant circumstances. In the following section I demonstrate how typological data support an aspectual understanding of the BH verbal system as a more coherent and comprehensive explanation of the BH data—including the statistical predominance of yiqtol as an expression of future/modal—than Joosten's tense model.

Joosten deals with examples of yiqtol expressing real present and attendant circumstances in the past by treating some expressions as somehow modal and by dismissing others that do not fit with his modal identification of yiqtol as statistically irrelevant. For example, Joosten disregards examples like $v_{ij} = v_{ij}$ in Gen. 37:15 because such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:15 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:16 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:16 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:17 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:18 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 37:19 decause such examples of $v_{ij} = v_{ij}$ in Gen. 3

Gen. 37:15

נִיְמְצָאָהוּ אִישׁ וְהְנֵּה תֹעֶה בַּשֶּׁדֶה וַיִּשְׁאָלֵהוּ הָאִישׁ לֵאמֹר מַה־חְּבַקּשׁ And a man found him wandering in the field; and the man asked him, "What **are you looking for?**"

^{41.} Ibid., 62. See also Joosten, "The Prefix Conjugation."

^{42.} Joosten, "Finite Verbal Forms," 65.

^{43.} Loc. cit.

^{44.} Loc. cit.

^{45.} Joosten, "Finite Verbal Forms," 54.

Joosten in an earlier article claimed of this example that "the action is not entirely 'real': it is questioned." While such an analysis is valid for an interrogative like "Are you looking for something?", in this example the man recognizes that Joseph really is looking, he only questions what he is looking for (i.e., the open variable created by the question does not relate to Joseph's activity, but to the object of his activity). This question in no way suspends the "real-ness" of Joseph's search.

Other attempts to make the evidence fit with his modal identification of *yiqtol* are likewise unconvincing. For instance, Joosten suggests that תַּבְקַשׁוּן in 2 Kings 6:19 "may be modal," and should be translated as "the man you want." 47

2 Kgs. 6:19

וַיאֹמֶר אַלְיטָע לא זָה הַדֵּרֶךְ וְלֹא זֹה הַעִיר לְכוּ אַחַרֵי וְאוֹלִיכָה אַתְכֵם אַל־האָיש אַשר **תבקשון**

And Elisha said to them, "This is not the way, and this is not the city. Follow me and I will lead you to the man whom you are seeking."

Again, it is unclear to me what is modal about this predication, given Joosten's definition of modality as irreal. Rather, this is a consummate example of the real present: the Arameans are actively seeking "the man" (i.e., Elisha) at the time Elisha speaks to them.

Joosten proposes that ינהג in 2 Kings 9:20 might be explained as a "habitual present" rather than a real present.

2 Kgs. 9:20

וַיַגָּד הַצֹּפָה לֵאמֹר בַּא עַד־אַלֵיהָם וָלֹא־שַׁב וְהַמְּנָהָג כָּמְנָהָג יָהוּא בַן־נִמְשִׁי בְשְׁגַּעוֹן יְנָהָג And the watchman reported, "He came to them but has not returned. And the driving is like the driving of Jehu, son of Nimshi, for he is driving furiously.

Despite some translational support for a habitual reading—"for he is accustomed to drive furiously"⁴⁸—I think the more natural reading in the context is as a real present: the watchman is observing a charioteer as yet unidentified to him, who at that moment is driving like a maniac. 49 In light of these examples, I think Joosten moves too quickly from stating that "YIOTOL is almost never found as an expression of the real present"⁵⁰ to concluding that *yiqtol* is "incapable of expressing the real present."⁵¹

Joosten assesses the examples of yiqtol expressing attendant circumstances in the past as "infrequent and generally doubtful." 52 However, his explanations of these

^{46.} Joosten, "The Indicative System," 58. However, Joosten hedges his claim by also offering the alternative explanation that "these cases are the vanishing traces of an historically earlier use of the prefix conjugation" (ibid.). In an earlier article Joosten identifies the "historically earlier use" of viqtol as present tense ("The Predicative Participle," 156).

^{47.} Joosten, "Finite Verbal Forms," 55, n. 38.

^{48.} So J. M. Powis Smith, ed., The Old Testament: An American Translation (Chicago, 1939).

^{49.} So the New Living Translation correctly renders the clause: "for he is driving so recklessly" (Holy Bible. New Living Translation [Wheaton, Ill., 1996]).

^{50.} Joosten, "Finite Verbal Forms," 55 (italics added).

^{51.} Ibid., 56 (italics added).

^{52.} Ibid., 57.

examples may be challenged. For instance, he reinterprets several examples as "prospective," by which he means a relative future expression (future-in-the-past), translatable by English *would* or *was about to.*⁵³ However, a prospective analysis of the examples Joosten cites makes some nonsensical (e.g., 1 Sam. 1:10) or implies an incorrect habitual reading (e.g., 1 Sam. 13:17–18). Rather, *yiqtol* in these passages is best understood as expressing attendant circumstances in the past, well rendered into English by the Past Progressive (suggested "prospective" renderings are marked with ?).

Exod. 8:20 (24)

וַיַצָשׁ יְהוָה בַּן וַיָּבֹא עָרֹב כָּבֵד בֵּיתָה פַּרְעֹה וּבֵית עֲבָדִיו וּבְכָל־אֶּרֶץ מִצְרַיִם הִּשְּׁחֵת הַאָּרֵץ מִפְּנֵי הַעַּרֹב

And Yhwh did so; a swarm entered into the house of Pharaoh and the house of his servants, and throughout the land of Egypt the land was about to become ruined(?)/was becoming ruined before the swarm.

1 Sam. 1:10

וָהִיא מַרַת נַפֶשׁ וַתִּתְפַּלֵל עַל־יהוַה ובַכה תִבְכֵה

And she was deeply embittered and prayed to Yhwh and was about to weep(?)/was weeping greatly.

1 Sam. 13:17-18

נֵיצֵא הַפַּשְׁחִית מָפַחֲנֵה פָּלְשָׁתִּים שְׁלֹשֶׁה רָאשִׁים הָרֹאשׁ אֶחָד יִ**פְּנֶה** אֶל־דֶּרֶךְּ עָפְרָה הוְלָאשׁ אָחַד יִ**פְּנֶה** בְּרַךְּ בִּית חרוֹן וְהַרֹאשׁ אֲחַד יִ**פְנֵה** בַּרַךְּ הַגְּבוּל ...

And raiders came out from the camp of the Philistines in three companies—one company was about to(?)/would turn(?)/was turning toward the way of Ophrah... another company was about to(?)/would turn(?)/was turning the way of Beth Horon, and one company was about to(?)/would turn(?)/was turning the way of the border.

2 Sam. 15:37

וַיַבא חושי רֵעה דַוָד הַעִיר וָאַבְשַׁלוֹם יַבא יִרושַׁלַם

Hushai, David's companion, entered the city just as Absolom was about to enter(?)/was entering Jerusalem.

Joosten suggests that *yiqtol* in the following passages "could be read as iterative," which he understands as essentially the same as habitual.⁵⁴ However, such a rendering (marked with ? in the examples) is less convincing than a past imperfective one.⁵⁵

Exod. 19:19

וַיָהִי קוֹל הַשׁוֹפַר הוֹלֶךְ וְחָזֵק מָאֹד מֹשֶׁה יִ**דְבֶּר** וְהָאֱלֹהִים יַ**עֲנֵנוּ** בִקוֹל

As the sound of the trumpet was growing louder and louder, Moses would speak(?)/was speaking and God would answer(?)/was answering him aloud.

^{53.} Ibid., 58. Although Joosten does not give a formal definition of prospective, elsewhere in this article he identifies "קְרָא" in Gen. 2:19 ("he would call" NRSV) as prospective (ibid., 64), and in an earlier article he translates 2 Sam. 15:37 (cited below) as "... Absalom was about to enter Jerusalem" (Joosten, "The Prefix Conjugation," 23).

^{54.} See Joosten, "The Prefix Conjugation," 21.

^{55.} Joosten, "Finite Verbal Forms," 58.

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2 Sam. 23:10
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הוא קַם וַיַּךְ בַּפָּלְשָׁתִּים . . . וַיַּעֲשׂ יְהוָה תִּשׁוּעָה גִּדוֹלֶה בַּיוֹם הַהוּא
                                     וָהַעַם יַשְבוּ אַחֲרֵיו אַךְ־לְפַשִּט
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He rose and struck the Philistines . . . and Yhwh performed a great victory on that day, and the people would turn back(?)/were turning back after him only to strip (the slain).

Instead, these and other examples that Joosten claims are doubtful are best understood as imperfectives expressing attendant circumstances in the past, as illustrated by a comparison of one of Joosten's doubtful yiqtol examples with one of his attendant participial examples, which he finds acceptable.

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1 Kgs. 20:33
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רהבד בן־הַדַר נִימָהַרוּ נִימָהַרוּ נִימָהַרוּ נִימָהַרוּ נִימָהַרוּ נַיִּמְלְטוּ הַמְמֵנוּ נִיאמְרוּ אַחִיךּ בֶּן־הַדַּד
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The men were seeking an omen and they quickly accepted it from him and said, "Yes, Ben-Hadad is your brother."

2 Sam. 18:24

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וַדַוִד יּוֹשֶׁב בֵּין־שָׁנֵי הַשְּׁעַרִים וַיֵּלֹדְ הַצֹּפֵה אֵל־גַג הַשַּׁעַר
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Now David was sitting between the two gates, and the watchman went up to the roof of the gate.

In these two examples, *yiqtol* and the participle, respectively, equally express attendant circumstances to the subsequent main wayvigtol clause.

A final set of examples Joosten correctly identifies as habitual, ⁵⁶ and thus susceptible to a modal analysis.⁵⁷ However, it is also possible to account for these examples within an aspectual model.

The above discussion demonstrates that Joosten's counter-examples are at best equivocal, and hence do not rule out an aspectual approach to the BH verbal system. The legitimate question to ask of the aspectual explanation is whether it can adequately or better account for the distributional pattern of meanings or functions of yiqtol that Joosten has observed. I address this question in the following section.

An aspectual model based on typology

One may justifiably wonder whether the debates over the semantics of the BH verbal system have long since reached an impasse, each party continuing to parade the same old data that support its long-held views. However, the recent typological attention to verbal systems provide promising new methods and data for answering this vexing question. Corresponding to each of my above criticisms of Joosten's theory—his underlying assumption about tense versus aspect, his use of typological data, and his treatment of the statistical data—below I present arguments based in typology that the BH verbal system is aspect-prominent.

^{56.} He confusingly uses "iterative" and "habitual" interchangeably. On the difference between the two categories see Comrie, Aspect, 27, and S. Rothstein, Structuring Events: A Study in the Semantics of Lexical Aspect. Explorations in Semantics 2 (Oxford, 2004), 28-29.

^{57.} On the connection between habituality and modality see Palmer, Mood and Modality, 179. See Joosten's earlier article, "The Prefix Conjugation."

Aspect versus tense

One of the most significant arguments that the BH verbal system is aspectual has already been presented above, namely, that aspect is a more basic distinction in the world's verbal systems, being more frequently expressed by bound verbal morphology than tense. This means that *a priori*, the binary opposition between BH *qatal* and *yiqtol*, which stands at the center of the BH verbal system, is more likely to be an aspectual one than a tensed one.

Joosten has rejected this long-held view of the BH verbal system as organized around an aspectual binary opposition between *qatal* and *yiqtol*. Instead, he argues that the primary division in the system is between indicative and modal verb forms: *qatal*, *wayyiqtol*, and the participle are indicative, and *yiqtol* and *weqatal* are (nonvolitive) modal forms (the jussive, imperative, and cohortative are volitive modal forms). However, as I pointed out earlier, Joosten's model of the BH verbal system, consisting of two separate relative tense oppositions (*wayyiqtol*: *qatal* and *qatal*: participle) within this modal opposition appears to be typologically anomalous.

Perfective qatal and imperfective yiqtol

The preceding argument only establishes the typologically statistical likelihood that *qatal* and *yiqtol* form a core aspectual opposition between perfective and imperfective aspect within the BH verbal system. However, another line of typological argumentation directly supports this aspectual definition of the forms. The argument that *qatal* is perfective aspect and not past tense is supported by the form's interaction with stative predicates. Typological studies have discovered that perfective and past tense verb forms behave in semantically distinct ways with stative predicates. ⁵⁹ In particular, when stative predicates combine with perfective verb forms, very often they express present states. By contrast, when stative predicates combine with past tense conjugations, they are limited to expressing past states. An analysis of BH shows that it conforms to this typological pattern: as illustrated by the following contrastive examples, stative predicates in the perfective *qatal* conjugation express present states in many contexts, whereas stative predicates in the past narrative *wayyiqtol* form always express past states. ⁶⁰

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Isa. 55:9a (qatal + stative predicate = present state)
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פִּי־**גַבָהוּ** שָׁמַיִם מֵאָרֵץ כֵּן **גָבָהוּ** דְרָכַי מִדַּרְכֵיכֵם

For (as) the heavens are higher than the earth, so my ways are higher than your ways.

1 Sam. 10:23 (wayyiqtol + stative predicate = past state)

ויתיצב בתוך העם ויגבה מכל-העם משכמו ומעלה

And he stood in the midst of the people, **and he was taller** than all the people by a head (lit., from his shoulder up).

^{58.} Joosten, The Prefix Conjugation, 16.

^{59.} J. Bybee, R. Perkins, and W. Pagliuca, *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World* (Chicago, 1994), 92.

^{60.} For a list of these data, see Cook, The Biblical Hebrew Verbal System, 213-14, 234, n. 51.

Having determined that *qatal* is a perfective form based on its interaction with stative predicates, this conclusion may in turn be utilized in an implicational typological argument that *yiqtol* is imperfective. Bybee, Perkins, and Pagliuca hypothesize, based on their grammaticalization study of verbal systems, that perfective verbs develop only in languages that already feature an imperfective verb. 61 Thus, if the identification of qatal as a perfective verb in Biblical Hebrew is correct, by implication yiqtol must be an imperfective verb form.

Diachronic typology and the BH verbal system

As I conceded above in my critique of Joosten, his statistical findings regarding the distribution of yiqtol and the participle require explanation, as also does the analogous semantic overlap between qatal and wayyiqtol. Again, typology offers both evidence and methods for dealing with these data. In this case, diachronic typology maximizes the comparative and historical data by comparing languages in terms of their stages of development rather than as static language states. Scholars in grammaticalization studies, a subfield of diachronic typology, have hypothesized several universal paths of development for verbal systems. Two of these paths of development are especially relevant for explaining the BH verbal system: the perfective-past path of development and the progressive-imperfective path, as illustrated in figure 4.

Figure 4. Paths of development of verbal forms⁶²

- a. Perfective-past path: resultative > perfect > perfective > past
- b. Progressive-imperfective path: progressive > imperfective

Development along these pathways is gradual and can therefore create formmeaning asymmetries of two sorts. The first sort is when verb forms retain expression of their older meaning(s) alongside their development of newer meanings. This is exemplified by English wolde/would, which functioned as a main verb expressing desire ('want') in Old English but is now an auxiliary verb in Present Day English. Between these poles of development, Middle English texts show the verb used with both meanings or grammatical functions within a single context.⁶³ The second type of form-meaning asymmetry consists of multiple forms expressing the same meaning, which results from the fact that "within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but may remain to coexist with and interact with newer layers."64 A good example of this phenomenon is coexisting inflected and periphrastic verbal constructions with partially overlapping meaning, such as the English Simple Past and Present Perfect (e.g., waited and have waited) or the Latin Future forms cantabit and cantare habet ('he will sing').65

^{61.} Bybee, Perkins, and Pagliuca, Evolution of Grammar, 91.

^{62.} Ibid., 105, 172.

^{63.} See P. J. Hopper and E. C. Traugott, Grammaticalization, 2nd ed. (Cambridge, 2003), 48-49.

^{64.} Ibid., 124-26.

^{65.} Ibid., 7-9.

The distribution in BH of *qatal* and *wayyiqtol*, on the one hand, and *yiqtol* and the participle, on the other, is explicable in light of this diachronic typological understanding of verbal systems. First, both the past narrative wayyiqtol and perfective qatal developed along the perfective-past path. The past narrative wayviatol is the older of the two forms, and developed into a past tense verb by the BH stage of the language. The antiquity of the form relative to *qatal* is evident from its more limited distribution as a narrative past verb (versus general past tense) in BH. By contrast, perfective qatal developed later than wayyiqtol, and thus regularly expresses its earlier perfect meaning alongside its perfective sense in BH. This argument is supported not only by the BH data but (1) by comparative-historical evidence that uniformly points to a resultative construction as the origin of the West Semitic suffixed conjugation, from which BH qatal derives;⁶⁶ and (2) by evidence from Rabbinic Hebrew suggesting that in the post-biblical period *qatal* reached its developmental endpoint as a past tense form, concomitant with the obsolescence of wayyiqtol.⁶⁷ While the close association between perfective aspect and past tense demonstrated by typological studies accounts for theories of the BH verbal system that treat qatal as past tense, those latter tense theories cannot explain the perfect meaning of the form alongside its past tense meaning.

Second, both the imperfective *yiqtol* and the progressive participle developed along the progressive-imperfective path. Yigtol is the older, imperfective form in BH, while the participle is the newer progressive form. The older *yiqtol* form, with its more general imperfective meaning, regularly appears in future contexts with a future indicative sense as well as in subordinate modal contexts, such as conditional clauses.⁶⁸ By contrast, the younger participle was never fully integrated into the BH verbal system. Nevertheless, it had already become the preferred form for the expression both of the "real present" and of "attendant circumstances in the past," as Joosten claims from his statistical analysis.⁶⁹ At the same time, the older *yiqtol* form continued to be preferred within specific syntagm, as Joosten hypothesizes with respect to yiqtol expressing "real present" in questions. 70 This analysis is buttressed by the post-biblical Hebrew data that show the participle as having further displaced imperfective yiqtol in the Rabbinic Hebrew period, in which the deontic modal functions of yiqtol (now completely merged with the Jussive) predominate in independent clauses, and future indicative *yiqtol* is largely restricted to subordinate clauses.⁷¹ Thus, BH yiqtol is typologically best understood as an imperfective verb even though it does not predominantly express certain of the proto-typical imperfective meanings.

^{66.} J. Huehnergard, "Languages," in ABD, 4.156.

^{67.} M. Pérez Fernández, An Introductory Grammar of Rabbinic Hebrew, trans. John Elwolde (Leiden, 1997), 107-8.

^{68.} Bybee, Perkins, and Pagliuca point out that impefective verb forms often express future "as a contextually determined use" (*Evolution of Grammar*, 275). They also observe that subordinate verb forms may develop from indicative ones through being marginalized by more newly developing forms within the same semantic domain (ibid., 234).

^{69.} Joosten, "Finite Verbal Forms," 56, 58-59.

^{70.} Joosten, "The Indicative System," 58.

^{71.} See Pérez Fernández, *Grammar of Rabbinic Hebrew*, 108, 123–26, who notes that expressions in which BH would use *yiqtol* are regularly expressed in Rabbinic Hebrew with the participle.

Conclusion

I find Joosten's argument against an aspectual analysis of the BH verbal system unconvincing on several grounds explained in my above critique. First, his relative tense model exhibits the inherent weakness of all relative tense theories in its failure to recognize an aspectual distinction between past and perfect verb forms. Second, he assumes a certain degree of validity in Kuryłowicz's argument that tense is more basic to verbal systems than aspect, an argument now largely disproved by more recent typological studies of verbal systems. Third, Joosten's claims that the meaning of *yiqtol* is best defined based on a simple statistical analysis and that the entire aspectual model must fall apart if yiqtol is not aspectual are problematic, and the evidence he presents for his analysis of yiqtol is equivocal. Finally, Joosten's model of the BH verb is typologically inexplicable.

By contrast, I have argued that recent findings from typological studies of verbal systems provide a framework and data for a more comprehensive and coherent explanation of the BH verbal system than has hitherto been possible. The long-held view that the BH verbal system adheres in a core binary aspectual opposition between *qatal* and yiqtol is typologically "believable." In addition, the understanding of grammar (and specifically verbal systems) presented by diachronic typology and grammaticalization studies accounts for the peculiar distribution of qatal and wayyiqtol, on the one hand, and yiqtol and the participle, on the other; and it explains why, despite the statistical preponderance of future/modal expression by yiqtol, it is still best identified as marked for imperfective aspect.