1 Introduction

Over the past one and a half decades or so, modality has become increasingly more prominent in discussions of the Biblical Hebrew verbal system. It is not simply that more attention has been given to those forms traditionally identified as non-indicative, although much important work has been done recently with regard to the Imperative, Jussive, and Cohortative forms. Instead, scholars have increasingly invoked modality to describe those forms traditionally viewed as indicative or non-modal. Unfortunately, these studies too often employ the terms modal or modality in vague and general ways without providing a precise understanding of the category. This situation is not entirely the fault of Biblical Hebrew scholars, but is in part reflective of uncertainties and disagreements over the category of modality within the field of linguistics. The purpose of this paper is to discuss the linguistic category of modality and then to articulate a theory of modality in Biblical Hebrew. However, first I want to survey very briefly the expanding role of modality in Biblical Hebrew verb theory.

2 Modality in Biblical Hebrew Verb Theory

Traditional treatments of modality in Biblical Hebrew identify yiqtol, qatal, wayyiqtol, and weqatal as indicative or non-modal and Imperative, Jussive, and Cohortative as non-indicative, modal, or volitive. However, scholars have long recognized that the boundary between indicative yiqtol and volitive Jussive and Cohortative is tenuous: the forms are frequently
morphologically indistinguishable, and unambiguous *yiqtol* forms often express the same modal nuances that are primarily associated with the Jussive and Cohortative. E. J. Revell claimed word order distinguishes indicative and non-indicative or modal uses of the prefix forms: Jussive and Cohortative and modal *yiqtol* appear clause initially, whereas indicative *yiqtol* appears clause medially (1989:14–17).

Revell’s students have built on his observations. Ahouva Shulman has established in her dissertation and subsequent articles that the morphologically distinct modal forms in the prose of Genesis through 2 Kings overwhelmingly occur at the beginning of the clause (1996). Vincent DeCaen extended Revell’s indicative : modal syntactic distinction by claiming a “tense-mood neutralization” for *weqatal* and *wayyiqtol* (1995:2): irrealis *weqatal* is derived from a tense-mood neutralization of past, realis *qatal*, while the realis, past narrative *wayyiqtol* form is derived from an opposite tense-mood neutralization of the irrealis short prefix form (1995:289–93).

Jan Joosten has also given a wider role to modality. He identifies *yiqtol* and *weqatal*, which he claims are only syntactically distinct, as non-volitive modals, in contrast to the volitive modal Imperative, Jussive, and Cohortative forms (1992, 1997, 1999). This analysis effectively shifts the center of gravity to the modal side of the verbal system, whereby only *wayyiqtol* and *qatal* remain as indicative forms. Joosten, recognizing the patent deficiency in this, identifies the participle as integral the indicative verbal system. The participle complements *wayyiqtol* and *qatal* by expressing past progressive aspect and general present tense (1999). The view that *yiqtol* and *weqatal* are non-indicative modal forms that differ either syntactically or sequentially is shared by several other scholars, including Galia Hatav (1997) and Andy Warren (1998).

Two problems arise with the recent direction of the discussion of modality in Biblical
Hebrew. The first is that the nature of the claims scholars are making regarding the meanings of
the verb forms are not always clear. Does DeCaen’s claim that weqatal has undergone tense-
mood neutralization mean we should classify it as a modal form or as an indicative form used
modally or something else?3

The second problem is that terminology varies among scholars and is too often not well
enough defined. This variation in terminology reflects differences of understanding of modality
among scholars. For example, the past progressive meaning of yiqtol is incompatible with
Joosten’s theory, since he identifies the form as future-modal. By redefining examples of past
progressive yiqtol as past iterative, Joosten is able to avoid the problem that such examples pose
to his theory (1999). Unfortunately, it is not entirely clear how iterative is any more a “modal”
meaning than progressive aspect. In the case of Agustinus Gianto’s article on mood and
modality, he presents a useful taxonomy of modality, but I would take issue with more than half
of his Biblical Hebrew examples illustrating these modalities (1998). In order to clarify what I
am claiming in my theory of modality in Biblical Hebrew, I want to begin with an overview of
the linguistic category of modality.

3 Modality in Linguistics

The category of modality draws on diverse backgrounds and describes a wide variety of
phenomena, which make it difficult both to define and to delimit precisely. In particular,
modality combines ideas from three distinct fields—grammatical theory, modal logic, and speech
act theory. The contribution by each of these fields to the discussion of modality is summarized
in (1) on your handout.
(1) Backgrounds to the linguistic discussion of modality
   a. *Grammatical theory*: indicative vs. subjunctive vs. imperative
   b. *Modal logic*: actual world/situation vs. possible or alternative worlds/situations
   c. *Speech act theory*: locutionary act vs. illocutionary act vs. perlocutionary act

Briefly, *grammatical theory* distinguishes among grammatical moods, like indicative, subjunctive, and imperative. *Modal logic* has introduced the distinction between the actual world and possible worlds, which enables the description of hypothetical modal situations. Finally, *speech act theory* distinguishes among the meaningful utterance, called the locutionary act, the aims to which the utterance is employed, called the illocutionary act, and the effect achieved through the use of the utterance, referred to as the perlocutionary act.

These backgrounds share the feature of the speaker’s opinion, assessment, or employment either of an event or a proposition. This has served as the starting point for defining modality (e.g., Palmer 1986:2, quoting Lyons 1977:452; Bybee 1985:192). Since modality interacts with aspect and tense in verbal systems, linguists have found it advantageous to define these three parameters based on their shared feature of time, as given in (2) on your handout (Givón 1984:272; Chung and Timberlake 1985:256).

(2) Time and tense, aspect, and modality
   a. *Aspect*: temporal structure of events (perfective vs. imperfective; state vs. activity)
   b. *Tense*: temporal location in time with respect to time of speaking (past, present, or future)
   c. *Modality*: temporal existence of an event or proposition (exists, does not exist, potentially exists, contingently exists)

_Aspect_ defines the temporal structure of events. _Tense_ has to do with the temporal location of an event with respect to the time of speaking. And _modality_ defines the temporal existence of an event or a proposition—whether it exists, does not exist, or potentially exists.⁴

To expand on this last point, a speaker uses modalities to relativize the existence of an event or the validity of a proposition to a set of possible alternative situations: a speaker may relativize
an event as possibly or probably occurring, as desirable or directed to occur, or occurring under
certain circumstances; similarly, a speaker may relativize a proposition as possibly or probably
true or true under specific circumstances. To illustrate, in uttering the modal statement *It may
snow*, I am relativizing the existence of the situation in which it snows as possibly occurring with
respect to alternative meteorological situations.

Up until this point I have employed only the term modality; however, a three-way distinction
should be made between modality, modal systems, and mood systems, as shown in (3) on your
handout.

(3) Modality, modal system, and mood system
   a. *Modality*: category of modal notions or meanings expressed in human language.
   b. *Modal system*: expresses modalities by “a single system of commuting terms” (Palmer
      2001:6).
   c. *Mood system*: expresses modalities by a prototypically binary distinction realis : irrealis or
      indicative : subjunctive.

*Modality* refers to the virtually limitless number of modal nuances that may be expressed by
human languages, including deductive, speculative, jussive and directive, to name a few (see
Bybee and Fleischman 1995:2). These various modalities may be expressed either by modal
systems or mood systems. Modal systems and mood systems can co-occur in languages, but are
distinct in their semantics and their grammatical structure. *Modal systems* express modalities
using “a single system of commuting terms” (Palmer 2001:6), as in the case of the English modal
verbs *may, must,* and *will.* These modal verbs express complimentary degrees of epistemic
judgements about propositions and deontic modality operating on events. *Mood* has traditionally
referred to the expression of modality through grammatical moods like indicative, subjunctive,
and imperative (though it is expressed in some languages by clitics or particles; see Palmer
2001:19, 150). Palmer has argued that mood systems are prototypically binary, expressing the
distinction of realis : irrealis or the typological equivalent indicative : subjunctive (2001:1, 4).\(^5\)

Although the realis : irrealis and indicative : subjunctive mood distinctions are typologically or semantically equivalent, they may be distinguished partially based on other factors. First, subjunctive is primarily associated with subordinate clauses, in contrast to irrealis. Second, irrealis may co-occur with other grammatical markers of modality that occur in complementary distribution with the subjunctive mood. Finally, realis : irrealis mood systems, in contrast to indicative : subjunctive, rarely co-occur with tensed systems; instead, realis mood often expresses past tense and irrealis mood non-past tense (Palmer 2001:5).

Listed in (4) on your handout are the modalities most often operative in modal systems, which include the propositional modalities \textit{epistemic} and \textit{evidential}, on the one hand, and the event modalities \textit{deontic} and \textit{dynamic} on the other.

(4) Propositional and event modalities

a. \textit{Propositional}
   - Epistemic: e.g., \textit{She may/must/will have arrived by now}. (speculative/deductive/assumptive)
   - Evidentiary: e.g., reported, sensory (visual or auditory)

b. \textit{Event}
   - Deontic: e.g., \textit{She may/must/will report to work at 9 o’clock tomorrow}. (permissive, directive or obligative, commissive)
   - Dynamic: e.g., \textit{She can/will be there in 10 minutes}. (abititive, volitive)

These modalities may also be expressed by \textit{irrealis} or \textit{subjunctive} mood, with which other meanings or functions are regularly associated, including future, negative, imperative-jussive, conditional, purposive, resultative, and past habitual (Palmer 2001:22).

4 \textbf{A Taxonomy of Modality in Biblical Hebrew}

My theory of modality in Biblical Hebrew may be summarized in three points. First, Biblical
Hebrew has an opposition between realis and irrealis mood which is indicated syntactically. Second, embedded within the irrealis side of the mood system is a deontic/volitive modal system consisting of the Imperative, Jussive, and Cohortative forms (so Waltke and O’Connor 1990:564–65; Hatav 1997:151). Third, Biblical Hebrew also, less frequently, employs periphrastic modal constructions, including auxiliary modal verbs with a following infinitive, the infinitive absolute adverbially modifying a finite verb, and modal adverbs and conjunctions.

I want to elaborate on each of these points in reverse order. First, although Biblical Hebrew lacks a highly productive system of modal verbs such as we find in English or German, it nevertheless, infrequently employs certain lexemes as modal auxiliaries with a following infinitive construct. This construction is predominately used to express negative dynamic modality, as in examples (5a) and (5b).

(5) Examples of modal verb + infinitive construct
a. Deut 1:9
   נָאָםָה אָלְכֵּם שִׁעֵתִהְוָה לְאָזֶרֶם לָא מֵאָבָאְלֶךְ שָׁאָתָה שְׁאָתַךְ
   And I said to you at that time, “I am unable to bear you alone.”

b. Exod 10:27
   נְיִמְנֵךְ יְהוָה אַתָּלְכֵּם פָּרֵעה לָא אָבָאְלָה לְשִׁלְחֵהּ
   The Lord hardened the heart of Pharaoh, and he was unwilling to dismiss them.

Permissive deontic modality is expressed withְִּן, as illustrated in (5c) (see Stabnow 2000:102–103).

(5) Examples of modal verb + infinitive construct

c. 1 Sam 18:2
   בְּיוֹדֵעַ לְשָׁאֲלִי בְּיוֹדֵעַ לְשָׁאֲלִי אָבָתְךָ לְשָׁאֲלִי בְּיוֹדֵעַ
   And Saul took him on that day and he did not permit him to return (to) his father’s house.

A more frequent construction for the expression of modality is the adverbial use of the infinitive absolute with a finite verb, as in example (6).

(6) Modal adverbial use of the infinitive absolute

Jer 37:9
   עָלֵיאָם הַשָּׁאֲלִי לְאָזֶרֶם לָא מֵאָבָאְלָה מְלַאָלָה קָרָאָם לָא ילָה
   Do not deceive yourselves by saying, “The Chaldeans will certainly leave off against us.” for
they will not go.

The passages in (7a) and (7b) illustrate the use of modal adverbs, which predominantly express epistemic modality, such as speculative in example (7a), and deductive in example (7b).

(7) Examples of modal adverbs
a. Jer 26:3
Perhaps they will listen and each turn from his evil way, and I might repent of the evil which I am planning to do to them because of the wickedness of their deeds.

b. Gen 28:16
Jacob awoke from his sleep and he said, “Certainly the Lord is in this place and I did not know.”

Waltke and O’Connor state that the Imperative, Jussive, and Cohortative “comprise one unified system for the expression of the speaker’s will” (1990:565). That is, they participate in a deontic/volitive modal system, evident from the largely complementary distribution of these forms, illustrated in (8) on your handout.

(8) Deontic/volitive modal system

<table>
<thead>
<tr>
<th>First person</th>
<th>Cohortative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Imperative</td>
</tr>
<tr>
<td>Negative</td>
<td>ל + Jussive</td>
</tr>
</tbody>
</table>

The most distinctive claim I am making here is that Biblical Hebrew has a syntactically marked realis : irrealis mood distinction operative with the *yiqtol* and *qatal* conjugations as well
as the modal system of Imperative, Jussive, and Cohortative.\(^9\) The basis for making this claim is first, Revell’s contention that indicative and modal yiqtol are syntactically distinguished, and second, the modal meanings associated with weqatal, which suggest a parallel explanation to Revell’s with regard to weqatal versus qatal. Thus, I am suggesting that the traditional category of weqatal be reinterpreted as irrealis qatal; a weqatal conjugation, historically or functionally distinct from qatal, does not exist.

My claim that Biblical Hebrew has a syntactically marked mood distinction entails the view that it is an SVO language. To briefly reiterate this view as most recently presented by Robert Holmstedt in Sunday’s session, basic word order in Biblical Hebrew is SV. However, this order is regularly inverted following function words, negatives, the gemination in the wayyiqtol form, and—to state it in terms of my theory of modality—irrealis mood. These seemingly disparate reasons for triggered VS ordering may be unified in part if we make the reasonable assumption that irrealis mood in Biblical Hebrew is the mood of negative and subordinate clauses (excepting relative clauses). Thus, the VS word order found in subordinate and negative clauses is triggered by irrealis mood. Two forms stand outside of this realis : irrealis mood system. The first is the past narrative wayyiqtol, which is the only tensed verb in Biblical Hebrew; its position outside of the mood system can be explained by the observation mentioned earlier, that tense is incompatible with the realis : irrealis mood distinction. The VS ordering of wayyiqtol clauses derives, therefore, from a different phenomenon than the irrealis VS ordering. Second, the participle stands outside the mood system because it stands outside the verbal system: it is properly a verbal adjective, which requires an overt or, much more often, covert copula when it functions as the main predicate.
Elsewhere I have argued for the traditional view that *yiqtol* and *qatal* express an aspectual opposition between imperfective and perfective. These aspectual and concomitant tense meanings are associated with realis *yiqtol* and *qatal*. By contrast, determining the notional meanings expressed by irrealis *yiqtol* and *qatal* is complicated by several factors. First, the category of realis:irrealis displays less cross-linguistic uniformity than other typological categories. For example, notional meanings such as imperative, future, interrogative, and negative are marked by realis mood in some languages and by irrealis mood in others. For this reason some linguists have only reluctantly recognized the realis:irrealis mood opposition as a valid typological category (cf. Bybee, Perkins, and Pagliuca 1994; Bybee and Fleischman 1995). Following the lead of other linguists, we should view realis:irrealis as a relative mood distinction (Mithun 1995). That is, it expresses a general semantic opposition between realis mood, which evaluates events with respect to an actual situation, and irrealis mood, which relativizes the truth of an event or proposition with respect to alternative situations. The categorization of particular notional meanings with these moods will vary among different languages.

A second complicating factor is that the syntactic distinction between realis and irrealis mood is often obscured through the lack of an overt subject or due to pragmatically motivated word order movement. In addition, the morphological overlap between irrealis mood *yiqtol* and modal Jussive and Cohortative blurs the semantic distinction between these forms.

In light of these complicating factors, the taxonomy I am presenting is largely semantically based. An important starting point is the fact that grammars already recognize that *weqatal*—which I am reinterpreting as irrealis *qatal*—expresses many irrealis types of modality, even if
they are not labeled as such. These include subordinate modalities like condition, purpose, and result, and deontic modalities. Likewise, the grammars recognize that *yiqtol* functions in these same categories of modality and also expresses epistemic modalities. Having earlier in my paper established the notional meanings typically associated with the typological category of modality, we may reasonably interpret *qatal* (including *weqatal*) and *yiqtol* when they express such notional meanings as examples of irrealis *qatal* and *yiqtol*. Thus, I am not proposing new meanings for these forms, but presenting a reclassification of the notional meanings associated with these forms in terms of a realis : irrealis mood distinction.

The deontic use of irrealis *yiqtol* is the easiest to establish based on examples like the one in (9a), which features VS word order, a morphologically distinct *yiqtol* form, and a clear modal meaning.

(9) Irrealis *yiqtol* expressing deontic volitive and directive modalities
a. Gen 1:9

> נאמר אלוהים יִקְּטוּל וַתַּשְׁמַע אֶלֶּהָ יִהְיֶלֶת אֲלָמָה וּרְכוֹתָה רְמֵי יִהְיוּ

And God said, “Let the water under the sky be gathered to one place and let dry land appear.”

In (9b), despite no overt subject, the distinct *yiqtol* form occurs in an unmistakable context of deontic prohibitive commands.

b. Exod 20:13–16

> לָא תִּפְרָצֵא לָא תִּשְׁלָךְ לָא תִּזְבֹּחֵ לָא תַּטְהֵר בָּשָׂר פָּרָק

You shall not murder, you shall not commit adultery, you shall not testify against your neighbor falsely.

Irrealis *qatal* also expresses deontic modalities, but with some important differences from irrealis *yiqtol*. First, while irrealis *yiqtol* predominantly expresses negative commands, irrealis *qatal* is limited to positive commands, as illustrated by example (10a).

(10) Irrealis *qatal* expressing deontic directive and commissive modalities
a. Deut 6:5

> נָאֱהַלֶּהוּ אֶלֶּהָ יָהְלֶהוּ בְּכֶלֶל-יִבְּשָׂהָ בְּכֶלֶל-מַיֵּתָהָ

You shall love the Lord your God with all your heart and with all your soul and with all
your strength.

This negative-positive distribution parallels that of the Imperative and Jussive in the modal
tool system. The other frequent deontic meaning expressed by irrealis qatal (but rarely if ever by
irrealis yiqtol) is commissive, which is generally not distinguished from performative qatal in the
grammars. The commissive function for irrealis qatal may be illustrated by the example in
(10b), which cannot be performative in that the promise is made with respect to a generation yet
unborn.

b. Gen 15:18

בְּעִמֶּנֶּה אָקָה יִתָּה אֶחְרַאָסָא בֵּיהַת צוֹזָרָא

On that day the Lord made a covenant with Abram: “To your descendants I shall give
this land.”

The deontic meanings for irrealis qatal illustrated in (10a) and (10b) typically feature second and
first person forms, and so generally preclude an overt subject, making the word order
inconclusive with respect to the realis : irrealis syntactic distinction.

The expression of epistemic modality is associated particularly, if not exclusively, with
irrealis yiqtol rather than irrealis qatal; it may appear with a modal adverb, as illustrated earlier in
(7), or alone, as in the first line of the proverb in (11a).

(11) Irrealis yiqtol expressing epistemic and dynamic modality

a. Prov 14:13

Even in laughter a heart may be hurt.

and the end of rejoicing is grief.

Although this example exhibits the typical VS irrealis word order, the pragmatic focus fronting
of יָבוּם שִׁבְטָו יִבְאַלְלֶה could also account for the word order. However, the context demands an
interpretation that amidst laughter a heart is only sometimes hurt. Similarly, word order is
inconclusive in example (11b), which lacks an overt subject.
b. Deut 1:12

אֶקְהֶה נָבַי בַּדַּרְכּוֹ יָשִׁיטֵן אֲשֶׁר עָמַדְתָּ בְּעַדּוֹ אֲשֶׁר בָּקָעַטְתָּ (רְפָעִים)

How can I alone bear your trouble and your burden and your bickering?

Nevertheless, the context, particularly verse 9 presented already in (5a), makes a dynamic modal interpretation unavoidable.

Both irrealis יִקוֹיִל and irrealis qatal regularly express subordinate modalities such as condition, purpose, and result. As with deontic modality, distributional variation exists between the two forms: irrealis יִקוֹיִל expresses these types of modality predominately in clauses headed by subordinate conjunctions, such as בְּ, בּ, מִן, and others;¹⁰ by contrast, the bare irrealis qatal may alone express subordinate types of modality. To illustrate, in the passage in (12a) on your handout, irrealis יִקוֹיִל appears in a subordinate בְּ clause, and is followed by a conjoined irrealis qatal.

(12) Irrealis יִקוֹיִל and qatal in purpose clauses

a. Gen 18:19

כִּי יְרָאָה לָמוֹשׁ אַשְּרָה יְצַוָּה אַשְּרִי נוֹרֵחַ וְאָשַׁר בוֹאָה אַשְׁרֵי

לְשָׁמַר לִשְׁמָה יָשִׁירֵן לְשָׁמַר לְשָׁמַר מִשְׁמָה

For I have known him [Abraham] in order that he might command his sons and his household after him that they might keep the way of the Lord by practicing righteousness and justice.

By contrast, in example (12b), irrealis qatal appears at the head of a series of purpose clauses.

b. Gen 8:17¹¹

כָּל הָאֲדָמָה אֲשֶׁר אָשֶׁר אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה אָשֶׁר בָּאָלָה

שָׁלֹת מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָה אָשֶׁר מִי וְעָלָ

רְפָעִים

Every living creature that is with you from all flesh, including the birds, the animals, and every crawling thing that crawls upon the ground, you shall bring out with you in order that they might swarm on the earth and might be fruitful and might become numerous upon the earth.

Both irrealis יִקוֹיִל and irrealis qatal occur in conditional protases, as in example (13a) and (13b); however, irrealis qatal is more frequent than irrealis יִקוֹיִל in conditional apodoses.


(13) Irrealis *yiqtol* and *qatal* in conditional clauses

a. Gen 18:26

And the Lord said, “If I find at Sodom fifty-righteous people in the city, then I will forgive the whole place on their account.”

b. Gen 43:9

If I do not bring him back to you and set him before you, then I will be culpable before you forever.


4 Conclusion

In conclusion, this necessarily brief and semantically based taxonomy is enough to illustrate the basic outlines of modality in Biblical Hebrew and provide a basis for further refinements of a semantic or pragmatic nature. To repeat my central claims, the primary types of modality are expressed in Biblical Hebrew infrequently through periphrastic or lexical means, and through the opposition of realis: irrealis mood in the *yiqtol* and *qatal* and conjugations. The deontic modal system of Imperative, Jussive, and Cohortative, is associated with irrealis mood. Two important implications arise from this study. The first is my rejection of a distinct *weqatal* conjugation; notional meanings or function listed for *weqatal* in the standard grammars are properly regarded as associated with irrealis *qatal*. The second is my acceptance of the view that Biblical Hebrew is an SVO language and the integral role that mood plays in understanding that word order.


Works Cited


1. This syntactic distinction was observed by H. B. Rosén (1969:215), and hinted at even earlier in S. R. Driver’s treatment of yiqtol with a volitive sense in his chapter entitled “The Voluntative with Waw” ([1892] 1998:64).

2. Shulman distinguishes modal yiqtol vs. jussive terms of an epistemic vs. deontic modality (2000).

3. This ambiguity may be resolved by recognizing the distinction among, as Palmer states: “the typological categories that are seen as common to various different languages, the grammatical markers associated with them in individual languages and the notional features that justify the typological identification” (Palmer 2001:19, emphasis added). To illustrate, when I make the claim that the morphological form qatal indicates perfective aspect, I am drawing a specific connection between the grammatical marker qatal, and the cross-linguistic typological category, perfective aspect. My basis for making this connection is the similarities between those notional features or meanings...
expressed, on the one hand, by *qatal*, and those associated, on the other hand, with the typological category perfective aspect. The association of notional features with the typological category is, in turn, based on numerous analyses of perfective aspect verbs expressing these notions or meanings in various different languages. If, however, as frequently happens, a form exhibits additional notional meanings extraneous to those by which it is connected with a particular typological category, it does not necessarily invalidate that connection and identification of the form. However, it does demand a semantic accounting for the disparate meanings associated with the single grammatical form in the language. For example, although the counterfactual meaning of *qatal* is at odds with the central distinguishing features of perfective aspect, one may explain this function of perfective *qatal* in Biblical Hebrew in terms of the secondary association of a past tense meaning with perfective *qatal*, and the "time-to-actuality" metaphor, whereby temporal distance is metaphorically used to express the degree of actuality (Heine, Claudi, and Hünnefelder 1991:75).

4. The temporal difference between tense and modality may be illustrated by the branching timeline, associated with modality, in contrast to the unilinear timeline associated with tense (based on Hatav 1997:119).

5. The binary distinction of mood has also been labeled declarative: non-declarative, real: unreal, factual: unfactual, assertive: non-assertive.


7. See also Jer 36:3.

8. With Muraoka, I eschew the traditional distinction between direct and indirect volitive in my analysis. The purposive and resultative meanings that arise in such contexts are not notional features of the volitive verbs or verbal syntagm, but an interpretive issue (so Muraoka 1997:240).

9. There are several reasons why this syntactic mood opposition in Biblical Hebrew is better defined as a realis: irrealis than as indicative: subjunctive. One reason is that subjunctive, the Indo-European mood of subordinate clauses, is an ill-suited characterization of mood in the highly paratactic language of Biblical Hebrew. A second reason is that this syntactic mood marking in Biblical Hebrew co-occurs with the morphological modal marking of the Imperative, Jussive, and Cohortative, a feature associated with irrealis versus subjunctive mood. Finally, a realis: irrealis understanding of mood in Biblical Hebrew explains the interaction—or lack thereof—between tense and mood on the basis that realis: irrealis mood systems are generally incompatible with tense systems. In other words, Biblical Hebrew has an aspectual opposition and a mood opposition, but it lacks any tense opposition. This explains the lack of a past tense meaning with irrealis mood *qatal*: the irrealis mood is incompatible with, and perhaps may be said to neutralize, the past tense meaning associated with perfective aspect *qatal*.

10. Statistics: מָשׁ + יִקְטּול occurs 315 times vs. 125 with *qatal*; יִשְׁמַר + יִקְטּול occurs 128 times vs. 15 times with *qatal*; יִשְׁמַר בֹּל + יִקְטּול occurs 121 times vs. 2 times with *qatal*.

11. See also Deut 2:6.