Verbal sequences in Biblical Hebrew:
A new approach based on discourse representation theory

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The centuries-old view that the Biblical Hebrew verbal forms appear with two distinct vav conjunctions that not only signal relationships between clauses but affect the semantics of the verb forms themselves is disappearing from grammars. However, this slow demise has created a pedagogical gap where previously the notion of “verbal sequences” served in tandem with the idea of two vav conjugations to describe the various inter-clausal relationships exhibited in Biblical Hebrew (e.g., conjunctive, conjunctive–sequential, disjunctive, epexegetical; see Waltke and O’Connor 1990: 650, who in turn cite Lambdin 1971: 162). In this paper I propose a new approach to the description of inter-clausal relationships and the temporal structure of discourse based on discourse representation theory and particularly Smith’s (2003) discourse modes. According to this approach, stretches of discourse in Biblical Hebrew can be classified according to the type of temporal interpretation they receive (atemporal expressions aside): succession, deixis, or anaphor. The syntactic, semantic, and pragmatic factors that determine these types of temporal interpretation are explained and illustrated with both realis (indicative) and irrealis (non-indicative) types of discourse.

1.1. Verbal sequences and the treatment of inter-clausal relations

The coordination of verbal clauses is a standard topic treated in the grammars of Biblical Hebrew. Sometimes it appears, in more recent grammars, under the heading “verbal sequences” or similar nomenclature (e.g., AC 2003: 83; van der Merwe, Naudé, and Kroeze 1999: 163). There is a high degree of uniformity among all the discussions, despite the long gap of time between some. In particular, they agree in broad terms on the roles they assign to the vav conjunction and to word order with respect to the interpretation of verbal sequences. Setting aside the semantic alteration of verbal conjugations associated with the vav in some discussions (e.g., Joüon-Muraoka 2006: §118a, 119a; Arnold and Choi 2003: 83), the grammars minimally distinguish between a conjunctive (or copulative) vav and a consecutive (or sequential) vav, which are understood to be variants of a single conjunction (e.g., Kautzsch 1910: §49b; Joüon-Muraoka 2006: §115a; Waltke and O’Connor 1999: 650; van

A well-developed analysis of the multivalency of the vav conjunction is provided by Waltke and O’Connor (1990: 650), who adopt Lambdin’s (1971: 162; see also §§98, 107, 197) taxonomy as their starting point and add to it a fourth category so as to include conjunctive-sequential, disjunctive, epexegetical, and conjunctive varieties of vav.¹ The examples in (1) on your handout are offered by Waltke and O’Connor (1990: 650–54) as illustrative of the four meanings vav may express (given in boldface).

(1) a. Jeremiah 40:15 (conjunctive-sequential waw)

Let me go so that I can kill Ishmael.

b. Genesis 41:54b (disjunctive waw)

There was famine in all the (other) lands, but throughout Egypt there was food.

c. Exodus 24:7b (epexegetical waw)

They said, “All that YHWH has said, we will do, that is, we will obey.”

d. 1 Kings 18:41 (conjunctive waw)

Go, eat and drink.

Because the consecutive vav appears only immediately before a finite verb, word order is viewed as integrally related to the multivalency of the vav conjunction.² For example, GKC

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¹ The first three derive from Lambdin’s grammar, though Waltke and O’Connor mention only the binary distinction of conjunctive-sequential and disjunctive as their starting point.

² Joüon-Muraoka (2006: §115a) states that the vav is multivalent only when attached to
(Kautzsch 1910: §142a) states that “In the great majority of instances, however, the position of the subject at the beginning of a verbal-clause is to be explained from the fact that the clause is not intended to introduce a new fact carrying on the narrative, but rather to describe a state.” Waltke and O’Connor (1990: 650) describe word order as “the major device” for distinguishing between the conjunctive (including the conjunctive-sequential) and disjunctive vav’s: namely, the conjunctive and conjunctive-sequential vav’s stands immediately before a verb whereas the disjunctive vav stands immediately before some word other than a verb.

This standard treatment I have just outlined is problematic and unsatisfactory. It is problematic insofar as it places too much semantic weight on the vav conjunction and word order. In his 2000 JBL article, Richard Steiner asked whether the vav conjunction has many meanings, one meaning, or no meaning at all. I incline toward the latter view with respect to verbal coordination: the vav conjoins verbal clauses at the same syntactic level but contributes no real semantic content to the coordinative construction. The difficulties inherent with placing too much semantic weight on word order is illustrated by Peckham’s 1997 article on the Hebrew verbal system in which he made word order a central component for distinguishing not only verbal sequence but tense, aspect, and mood in general. As Tropper (1999) observed in his response to the article, it is difficult to imagine that such a system as Peckham envisioned ever existed in Hebrew or any language.³

³ This is not to say that word order cannot or does not serve to signal semantic distinctions. In fact, I espouse the view that BH has a SV : VS opposition corresponding with realis : irrealis mood (see Cook forthcoming).
The traditional treatments are likewise unsatisfactory, because their accompanying taxonomies of examples illustrate but fail to explain the inter-clausal relationships in Biblical Hebrew. I submit that the reason they cannot explain the inner logic of Biblical Hebrew inter-clausal relationships is precisely because they have focused too exclusively on the vav conjunction and word order. In order to rectify this situation, I propose to approach the issue from the other direction, beginning with a taxonomy of temporal relationships that may be expressed among successive clauses. This approach seems both legitimate and advantageous for several reasons. First, I have argued in my 2004 JSS article that the traditional association of temporal succession with a “consecutive” vav is erroneous, thus making the underlying assumption of a multivalent vav untenable. Second, while logical relationships are sometimes in view in the discussions (notably WOC’s epexegetical vav), in all cases temporality is an interpretive feature of the clauses—either in terms of the temporal anchoring of a clause or the temporal relationship between successive clauses. Third, as I will show, approaching the issue in the way I propose allows us appropriately to factor in semantics and pragmatics alongside syntax as determinative of these variety of temporal relationships.

2. A new approach based on discourse representation theory

Discourse representation theory, or DRT as it is known (see Kamp and Reyle 1993; Kamp, Genabith, and Reyle 2011), is particularly well suited to the task at hand because it was developed specifically to explain the semantic relationships among successive clauses, which traditional semantic theory is unable to treat adequately. In particular, DRT is concerned with the inter-clausal relationships of anaphor and temporality. Sentences like the one in (2)
are conventionally used to illustrate the pronominal anaphor that DRT seeks to explain.4

(2) If a farmer, owns a donkey, he, feeds it.

More germane to the present topic is the contrast between the sentences in (3), which illustrate two types of temporal relationships that may hold between successive clauses (see Kamp and Rohrer 1983).

(3) a. He spoke and Kathy walked into the room.
   b. He was speaking and Kathy walked into the room.

In (3a) Kathy walked into the room is interpreted as temporally succeeding the event he spoke, whereas in (3b) the event of speaking temporally encompasses Kathy’s walking into the room. Although we can readily see that the contrast between these two sentences lies in the choice of the Simple Past verb versus the Past Progressive, this observation does not actually explain the semantic difference and as such fails to capture fully the semantic and pragmatic factors that are determinative of the temporal relationships that may hold between clauses.5 Arguably the various verbal sequences identified in Biblical Hebrew all revolve around the issue of the temporal relationships between adjoining clauses.6

4 Such sentences have come to be referred to as “donkey sentences.”

5 The search for the precise semantic feature that accounts for the distinction between the sentences in (3) is outlined in Cook (in progress): while viewpoint and situation aspects each were entertained early on as the locus of this distinction, there is wide-spread agreement now that boundedness—a concept that is contributed to by a variety of semantic factors—is the source of the different interpretations for such compound sentences.

6 Disjunction is arguably something slightly different and clearly word order is often used to indicate such relationships between clauses conjoined with vav, but in such cases temporality still plays a role, as is evident in the Genesis 41:54 example in Waltke and O’Connor (1990: 651, given in 1b above): not only is there a contrast of famine and food in the two clauses, but temporally the events are overlapping with each other versus successive.
3. Smith’s theory of discourse modes

Carlota Smith’s (2003) theory of discourse modes is rooted in DRT and especially focused on the temporal relationships among successive clauses. As such her treatment is a useful starting point for my analysis of inter-clausal temporal relationships in Biblical Hebrew. Her theory of discourse modes should not be confused with discourse linguistics, which generally focuses on broad discourse types not always readily distinguishable from genre distinctions. Rather, Smith has in mind smaller stretches of text defined semantically by the temporal relationships among the clauses. In her work she proposes a non-exhaustive list of five discourse modes, given for you in in table 1. These five types are distinguished by situation type, temporal deixis, and temporal progression.

Table 1. Major discourse modes (based on Smith 2003: 19–20).

<table>
<thead>
<tr>
<th>Situations</th>
<th>Temporality</th>
<th>Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative Report</td>
<td>eventualities, specific states</td>
<td>temporally located, dynamic</td>
</tr>
<tr>
<td></td>
<td>eventualities, general states</td>
<td>dynamic</td>
</tr>
<tr>
<td>Description</td>
<td>states, ongoing events</td>
<td>temporally located, static</td>
</tr>
<tr>
<td>Information</td>
<td>general states</td>
<td>atemporal</td>
</tr>
<tr>
<td>Argument</td>
<td>abstract entities, general states</td>
<td></td>
</tr>
</tbody>
</table>

All three of these parameters—situation type, temporal deixis or anchoring, and temporal progression—contribute to Smith’s (2003: 93–97) identification of three temporal relationships that may be expressed among successive clauses. These are continuity, deixis, and anaphor, which are illustrated for you with her examples in (4–6) on your handout. The example in (4) illustrates continuity, in which the events are interpreted as temporally
successive with one another. Each of the events reported in this brief narrative excerpt (each indicated by a parenthetical numbered e) are interpreted as happening in succession, one after another. Note, however, that the one stative situation (in contrast to the dynamic events) in the passage, which is indicated by the parenthetical s1, temporally overlaps with the surrounding events in the narrative.

(4) Continuity (narrative)

She put on her apron (e1), took a lump of clay from the bin (e2) and weighed off enough for a small vase (e3). The clay was wet (s1). Frowning, she cut the lump in half with a cheese-wire to check for air bubbles (e4), then slammed the pieces together much harder than usual (e5). A fleck of clay spun off (e6) and hit her forehead, just above her right eye (e7).

In passages with deictic temporality, illustrated by the example in (5), events are interpreted as temporally located with respect to some fixed point such as the narrator’s or, more often, the speaker’s deictic center. In the example from Smith in (5) the temporal interpretation of each event is separately related to the speaker’s deictic center rather than in any way being temporally located relative to one another.

(5) Deixis (report; also applies to information and argument)

Downtown Austin will have to live for at least several more months with the half-finished shell of the Intel Corp design center. Intel has postponed a decision on what to do about the project until sometime next year, when the semiconductor company has a better reading on the strength of the economy. Intel decided in March to halt construction on the 10-story center at Fourth and San Antonio streets, as well as other projects around the country, to save money during a chip industry downturn. Intel took heat from critics who called the half-finished concrete skeleton, encircled by a chain-link fence, an eyesore.
Somewhat more complicated is anaphoric temporality, illustrated by the excerpt in (6). Smith (2003: 96) explains that such descriptive passages are anaphorically anchored by an initial locative reference (in this case, the initial locative phrase *In the passenger car*) and contain a “tacit durative time adverbially.” The result is that the events receive a durative, overlapping interpretation despite the fact that the events are mostly dynamic and reported with Simple Past verbs. The anaphoric temporal relation illustrates that the interpretation of discourse modes involves not simply semantics but also discourse pragmatics.

(6) Anaphor (description)

In the passenger car every window was propped open with a stick of kindling wood. A breeze blew through, hot and then cool, fragrant of the woods and yellow flowers and of the train. The yellow butterflies flew in at any window, out at any other . . . Overhead a black lamp in which a circle of flowers had been cut out swung round and round on a chain as the car rocked from side to side, sending down dainty drifts of kerosene smell.

4. Temporal interpretation in Biblical Hebrew

Smith’s three-way distinction of continuity, deixis, and anaphor are a promising semantics-based alternative to the traditional, verbal-sequencing explanations for the inter-clausal relationships in Biblical Hebrew. However, I would like to expand her scheme in two directions to make it more comprehensively applicable to the Biblical Hebrew data. First, while Smith limits herself to indicative modes of discourse, the three-way distinction she proposes seems equally applicable to realis and to irrealis expressions. However, these interpretations apply to each mood in somewhat different ways, due to the different

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7 That is, Smith’s “tacit” semantic operators is discourse-pragmatically inferred from the locative adverbial expression that anchors the succeeding events as temporally overlapping descriptions of a single situation.
temporal character of realis and irrealis moods. In realis expressions, inter-clausal temporal relations involve the notions of temporal precedence and overlap. By contrast, irrealis expressions additionally include the notion of accessibility of events. That is, irrealis events, on analogy with temporal anchoring of realis events, are modally anchored to a given situation by an accessibility relation. That accessibility may be expressed in terms of a situation that is wished for, commanded, assessed as possible or probable, etc.

Secondly, I want to propose a fourth category alongside Smith’s three temporal interpretations—namely, that of generic. The category of generic builds off of Smith’s distinction between specific states and general states, mentioned in table 1, and essentially adds a negative value to the list: in contrast to the various temporal and modal anchorings, generic expressions are unanchored insofar as they describe situations that are universally valid or accessible. The resultant system that I am proposing based on these expansions of Smith’s three-way distinction is given in table 2 and includes references to the following examples that illustrate each category.

Table 2. Temporal interpretation between clauses in Biblical Hebrew (parenthetical numbers refer to illustrative examples below).

<table>
<thead>
<tr>
<th>Continuity</th>
<th>Realis sphere: temporal relations (precedence)</th>
<th>Irrealis sphere: modal relations (accessibility)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous</td>
<td>One event temporally follows another. (7)</td>
<td>One alternative situation is accessible after another. (8–10)</td>
</tr>
<tr>
<td>Deixis</td>
<td>An event is temporally anchored in a personal deictic center (speaker or narrator). (11)</td>
<td>An event is modally anchored in a personal deictic center (obligation, wish, volition, etc.). (12)</td>
</tr>
<tr>
<td>Anaphor</td>
<td>An event is temporally anchored by a preceding event in the discourse context. (13)</td>
<td>An event is modally anchored by a preceding event in the discourse context. (14)</td>
</tr>
<tr>
<td>Generic</td>
<td>An event is temporally valid at all times; it is “unanchored.” (15)</td>
<td>An event is modally valid across all situations; it is “unanchored.” (16)</td>
</tr>
</tbody>
</table>
In the remainder of my time I want to illustrate very briefly each of these eight discourse modes, drawing attention to how factors of tense, mood, situation and viewpoint aspects, word order, and discourse pragmatics all contribute to explaining the temporal interpretation of inter-clausal relationships in Biblical Hebrew.

4.1. Continuity

Temporal continuity is the default temporal interpretation of narrative (see Cook 2004), whereby each event is interpreted as temporally located in a continuous series with the preceding and succeeding events. In such instances, illustrated in (7), the first event in the narrative (indicated here by \( e_0 \)) is deictically anchored as prior to (\(<\)) to the narrator’s time. Each succeeding event, however, is located as temporally subsequent to the preceding event (e.g., \( e_0 < e_1 \), \( e_1 < e_2 \), etc.), as indicated in the example by the less-than signs between events.

(7) Gen 21:19 (temporal continuity in prose narrative)\(^8\)

God opened ([\( e_0 < C_N \)], \( e_0 < e_1 \)) her eyes, and she saw \( (e_1 < e_2) \) a well of water, and she went \( (e_2 < e_3) \) and filled \( (e_3 < e_4) \) the skin of water, and she gave the lad a drink \( (e_4 < e_5) \).

Modal continuity is the dominant interpretation between clauses in procedural material in which an agent is obliged to carry out actions in a particular sequence, as illustrated by the excerpt from the tabernacle instructions in (8). The “future” sense in this passage derives from the irrealis status of the events: the agents must bring about situations that are yet to be realized, they are therefore akin to future temporal expressions. Throughout the passage each event succeeds the previous one, often logically dependent on the previous event’s

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8 **Explanation of symbols:** some unspecified \( e_0 \) (somewhere earlier in the discourse) is deictically anchored as prior to the narrator’s deictic center \( (C_n) \), and \( e_1 \) temporally follows (\(<\)) \( e_0 \) (i.e., is continuous/successive with it).
completion. The only exception to this pattern is the overlap between $e_2$ and $e_3$ (that is, צִפִּית and תְּצַפֶּנּוּ in v. 11): no specific order is given for the overlaying of the inside and outside of the ark; this temporal overlap is conveyed by the combination of inverted word order, the concomitant switch to Irrealis Imperfect for $e_3$, and the repetition of the verbal lexeme צפה.

In other words, the departure from the pattern of continuity is effected by a combination of semantic, syntactic, and discourse-pragmatic factors.

(8) Exodus 25:10–14 (modal continuity in procedural instructions)

They shall make an ark of acacia wood—two and a half cubits its length, a cubit and a half its breadth, and a cubit and a half its height. And you shall overlay it with pure gold on its inside, and on its outside you shall overlay it. Then you shall make upon it a gold molding round about. And you shall cast for it four gold rings and place (them) upon its four feet—two rings (shall be) on one of its sides and two (shall be) on the other of its sides. Then you shall make poles of acacia wood and overlay them with gold and insert the poles into the rings on the sides of the ark, to lift the ark by them.

9 Explanation of symbols: $R_o$ denotes a modal relation of obligation between a given situation and an alternative one (which the agent is obligated to bring about). The lead event $e_1$ is modally related to the narrator’s deictic center ($C_n$), while the following events are interpreted as successively following this initial event (i.e., $R_o e_1 < e_2$ indicates that a modal obligation of continuity holds between $e_1$ and $e_2$), except for $e_3$, which is by verbal repetition and syntactic inversion is indicated as simultaneously obligated with $e_2$ (or at least there is no requirement of successive completion of the two tasks).
Procedural legal code is frequently apodictic; that is, it is introduced with a conditional structure, as illustrated by the excerpt from Leviticus 1 in (9). In this case, the first three predicates are not successive: the protasis \( e_1 \) is null copular, and so stative, and overlapping with the following; the two Imperfect verbs that begin the apodosis provide further guidelines for the offering—what and where—and a continuous interpretation is avoided by the topicalizing word order and repetition of the lexeme and object (\( יִבֶנּוּ \) and \( יָבוּ \) ‘he must offer it’). The contrastive switch from Irrealis Imperfect to Irrealis Perfect in verse 4 begins the procedural portion proper of the lengthy apodosis, in which the actions must be carried out in the prescribed order. Similar to the case just discussed in example (8), here in Leviticus 1:9 the shift to an inverted word order with Irrealis Imperfect \( הַחַץ \) yields a non-successive contrastive statement with the previous clause: while the priests must arrange some pieces on the altar, other specific parts of the animal they must wash before burning the entire animal as a burnt offering.

(9) Leviticus 1:3–9 (modal continuity in conditional instruction)\(^{10}\)

Explanation of symbols: \( R_c \) \((R_c C_i e_i)\) denotes a modal “condition” (i.e., a posited or protasis event); the arrow \((R_o e_i \rightarrow e_j)\) designates an if-then relationship; the equal sign \((R_o e_2 = e_3)\) indicates the events are identical; the intersection sign \((R_o e_{13} \cap e_{14})\) indicates that the two events are obligated at the same time rather than in continuity.
If his offering (is) \( R_C N e_1 \) a burnt offering from the herd, he **must offer** \( R_o e_1 \rightarrow e_2 \) a male without blemish; at the entrance of the tent of meeting he **must offer** \( R_o e_2 = e_1 \) it, for his acceptance before Yhwh. He **should lay** \( R_o e_3 < e_4 \) his hand upon the head of the burnt offering, and it **will be accepted** \( R_o e_4 < e_5 \) on his behalf as atonement for him. Then he **shall slaughter** \( R_o e_5 < e_6 \) the bull before Yhwh, and Aaron’s sons the priests **shall offer** \( R_o e_6 < e_7 \) the blood and **shall dash** \( R_o e_7 < e_8 \) the blood round about upon the altar that is at the entrance of the tent of meeting. Then he **shall flay** \( R_o e_8 < e_9 \) the burnt offering and **cut it up** \( R_o e_9 < e_{10} \) into its pieces. Then the sons of Aaron the priest **shall place** \( R_o e_{10} < e_{11} \) fire upon the altar and **arrange** \( R_o e_{11} < e_{12} \) wood on the fire. Then Aaron’s sons the priests **shall arrange** \( R_o e_{12} < e_{13} \) the pieces with the head and the suet upon the wood that is on the fire on the altar; but its entrails and its legs he **shall wash** \( R_o e_{13} \cap e_{14} \) with water. Then the priest **shall turn** the whole **into smoke** \( R_o e_{14} < e_{15} \) on the altar as a burnt offering, an offering by fire of pleasing odor to Yhwh.

A final, brief example of modal continuity is the habitual expression in Genesis 29:3.

Linguists have long seen habituality as closely related with irrealis mood, and recently irrealis analyses of habituality have been proposed (Boneh and Doron 2008, 2010). The irrealis character of habitual expressions can be seen in their reference not to actual events but to events that are known to occur with some regularity. In the example in (10), the habitual account is the irrealis counterpart to realis narrative: it recounts in order of occurrence the habitual activity of watering the flocks. Thus, after the habitual modal relationship is established by the first Irrealis Perfect, subsequent irrealis forms express the habitual actions in succession, each being related to the preceding event.

(10) **Genesis 29:3 (modality continuity in habitual narrative)**

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tוֹאַסְפוּ אֶתְּיוֹם ־־וֹרָאָבֶשֶׁם ־־וֹחָלַק אֶת הָצָאָן ־־וֹבְאָשֶׁם יַפִּי מֵעַל אֶת הָאֶבֶן ־־וֹשִׁקוּ אֶת אֶת הָצֹאן ־־וֹהֵשִׁבוּ אֶת
\]

11 **Explanation of symbols:** \( R_o \) designates a habitual modal relationship.
All the flocks would gather \((R_{itC_n}e_1)\) there, then they would roll \((R_{it}e_1 < e_2)\) the stone from upon the mouth of the well, then they would water \((R_{it}e_2 < e_3)\) the flock, then they would replace \((R_{it}e_3 < e_4)\) the stone upon the mouth of the well.

4.2. Deixis

Temporal deixis interpretations relate or anchor events to a temporal “deictic center”: either that of the narrator \((C_n)\), as at the beginning of a narrative discourse, or that of the speaker \((C_s)\), which is typical of almost all realis reported speech. In the example in (11) notice that the narrative verbs are temporally continuous with one another and frame the reported speeches, each of which receives a temporal deixis interpretation: that is, each of the events in the reported speeches are temporally and individually related to the speaker’s deictic center.

(11) Gen 24:23–24 (temporal deixis in reported speech)\(^{12}\)

He said \(([e_0 < C_n], e_0 < e_1)\), “Whose daughter \((C_s < e_2)\) you? Please tell \((R_o e_2 C_s)\) me. Is \((C_s < e_4)\) there at your father’s house a place for us to spend the night?” She said \((e_1 < e_3)\) to him, “I am \((C_s < e_5)\) the daughter of Bethuel, son of Milcah, whom she bore \((e_6 < C_s)\) to Nahor.”

Modal deixis identifies the modal source in a speaker’s deictic center \((C_s)\)—whether that be the source of obligation, wish, volition, or epistemic judgment. This mode aligns with the analysis of epistemic and subjective deontic modal categories (see Verstraete 2007), in

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\(^{12}\) Explanation of symbols: The strict inclusion sign \(\subseteq (C_s < e_1)\) indicates that the first-listed reference time is included within the other (i.e., the reference time of \(C_s\) is included within the reference time of \(e_1\)).
contrast to objective deontic and dynamic modality. It is almost entirely the domain of the directive system in Biblical Hebrew (i.e., Imperative and Jussive, including the so-called Cohortative). One example of modal deixis appears in example (11), the imperative הַגִּי. The passage in (12) provides a more substantial excerpt of modal deixis, also in the context reported speech. Notice that in this passage the deictic center shifts based on the level of embedded speech or discourse pragmatic considerations. For instance, the direct commands to Moses in e$^2$ and e$^3$ are anchored to God’s modal deictic center (followed by the modally continuous Irrealis Perfect in e$^4$), as also is the quotation of God’s command in e$^6$. By contrast, the event in e$^7$ is an expression of permission anchored to Pharaoh’s deictic center.

(12) Exodus 9:13 (modal deixis in directive speech)

Yhwh said ([e$^0 < C_N$, e$^0 < e_1$]) to Moses, “Get up early (R$^0e_1C_S$) in the morning and station yourself (R$^0e_3C_S$) before Pharaoh, and then say (R$^0e_3 < e_4$) to him, ‘Thus says (e$^5 = C_S$) Yhwh the God of the Hebrews, “Dismiss (R$^0e_6C_S$) my people so that they may serve me (R$^0e_7C_S$).’”’

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13 While e$^2-3$ implies the same continuity of modal events as e$^3-4$, that interpretation derives from the pragmatics of the iconic ordering of the events rather than the semantic interpretation signaled by the verbal form.

14 That is, dismissing the people gives them leave or permission to serve Yhwh. Alternatively, this could be analyzed as a general modal interpretation (see 4.4. below) dynamic event: so that they can (might be able) to serve me.

15 The material equivalence sign = (e$^5 = C_S$) indicates that the two reference times completely coincide, which is how I am analyzing performative statements. There is room for debate, however, whether speech frames of prophetic speech are best analyzed as temporally past or performative.
4.3. Anaphor

In *temporal anaphor* the event is temporally associated with (i.e., included within) a previously established event time, as in the case of static descriptions. The passage in (13) contains two such examples. In this excerpt the initial יְהִי must be interpreted as the discourse marker of past time and not a copula verb. If it were treated as a copular, as a stative it would require interpreting the event of the sons’ names as included within one of the events in the previous verse (see Smith 2003: 94)—either the appointing of his sons or Samuel’s growing old (vs. 1), neither option which makes sense. By contrast, the three null-copula events are anaphorically related to the time set by this discourse יְהִי e₁ (i.e., as unbounded events they include the reference time of e₁). Thus, the discourse יְהִי functions in a similar way as the adverbial locative expression noted by Smith (2003: 95) in her example of anaphoric discourse above in (6). The last four events (e₅₋₈) in the passage in (13) are anaphorically related to the null-copula e₁ ‘(were) judges’ insofar as their reference time is included in the reference time of this unbound null-copula expression rather than receiving a continuous interpretation as would be more typical at least for the Past Narrative forms. The null-copula expression of e₁ thus acts similarly to Smith’s (2003: 96) “tacit durative time adverbial” in anaphoric discourse.

(13) 1 Samuel 8:2–3 (temporal anaphor in prose narrative)

[Past] (e₁ ⊆ C₀) the name of the first-born (was) (e₁ ⊆ e₀) Yoel and the name of his second (was) (e₁ ⊆ e₀) Abiyah; they (were) (e₁ ⊆ e₀) judges in Beer-Sheba. They did not walk (e₅ ⊆ e₄) in his ways, but turned (e₆ ⊆ e₄) after unjust gain and took (e₇ ⊆ e₄) bribes and perverted (e₈ ⊆ e₄) justice.
Modal anaphor, on analogy with temporal anaphor, is the interpretation of events as modally anchored or related to a preceding event in the discourse. The prime example is protasis-apodosis constructions, in which a protasis event is posited as a condition upon which the “accessibility” of the apodosis is dependent. The excerpt in (14) illustrating this mode is taken from the beginning of the longer passage of modally continuous procedural instructions already discussed in (9).

(14) Leviticus 1:3a (modal anaphor in conditional instructional)\textsuperscript{16}

אָסְרֵךְ וַתָּמִים זָכָר מִן הַבָּר בָּנוֹ אָם עֹלָה יְבֵנּו

If his offering (is) (R\textsubscript{C}C\textsubscript{NE}) a burnt offering from the herd, then he must offer (R\textsubscript{O}e\textsubscript{1} \rightarrow e\textsubscript{2}) a male without blemish.

4.4. Generic

“Generic” expressions are notoriously difficult to define: Are they universally true statements? Or are they statements about what is “prototypically” true? How are generic statements about “non-events” like “The bishop moves diagonally” (i.e., in chess) to be analyzed (see Cook 2005)? For the purposes of this model of clause anchoring and inter-clausal relations, the view that generic expressions make claims about the “structure” of the world is particularly helpful, because as such the expression does not state something about an actual state of affairs but about alternative situations allowed or demanded by the “way things are.”

Temporal generic expressions are interpreted as unanchored; they make statements about what is universally true rather than about a situation that holds for some particular reference time. There is no consistent connection between verb form and generic

\textsuperscript{16} Explanation of symbols: R\textsubscript{C} indicates a conditional modal relation (i.e., the protasis), and \rightarrow indicates the if-then anaphoric relation between events.
expressions, although copular expressions (including with participial complement) and Imperfect are the most frequent type of predication. [The Imperfect in generic expressions often makes a statement about eventualities, for which a future sense is appropriate (see Cook 2005 for discussion).]

(15) Proverbs 10:1–2 (temporal generic in proverbial sentence literature)

A wise son will gladden (∀: t ⊆ e) a father but a foolish son (is) (∀: t ⊆ e) the grief of his mother. The treasures of the wicked will not avail (∀: t ⊆ e), but righteousness will deliver (∀: t ⊆ e) from death.

Modal generics, on analogy with temporal generics, express unrestricted access to all alternative situations; hence the situation is universally modally related to every other situation. This category, in contrast to the modal deixis interpretation, includes objective deontic and dynamic (ability) modal categories, which denote modal relations whose source lies in the “structure” of the world or at least a source other than the speaker, who simply describes that modal relationship. This distinction (i.e., modal deixis versus modal generic) may also account for the intuitively recognizable distinction between “categorical” commands, such as are found in decalogue and the immediacy of directive commands.

Categorical commands, illustrated by the excerpt in (16), are less personally anchored and instead describe the way things should be universally.

17 Explanation of symbols: The universal quantifier ∀ in temporal expressions (∀: t ⊆ e) is translated as ‘for every t(ime), t is included in the reference time of e.

18 Explanation of symbols: The universal quantifier ∀ in modal expressions (∀w: Rw) is translated as ‘for every w(orld) (i.e., situation), w is modally related (i.e., accessible) from the world/situation of e.

19 See the similar argument Shulman 2000 presents regarding this distinction, but in terms
(16) Exodus 20:13–16 (modal generic in categorical/apodictic commands)

לֹא תִּנְעָף׃ אֲנָהִי: לֹא תִגְנֹב׃ לֹא תִּנְעָף׃ אֲנָהִי: לֹא תִּנְעָף׃ אֲנָהִי

You shall not kill (w: Rwe.), you shall not commit adultery (w: Rwe.), you shall not steal (w: Rwe.), you shall not testify (w: Rwe.) falsely against your companion.

5. Summary and conclusions

In conclusion, I have sketched the broad outlines of an approach to inter-clausal relationships in Biblical Hebrew that may replace the inadequate verbal-sequences analysis. The theory outlined here begins with the semantics of temporal relationships among clauses, rooted in the insights of Discourse Representation Theory, and accounts for semantic, syntactic, and discourse pragmatic factors in explaining the temporality among successive clauses in Biblical Hebrew. No doubt much work remains to be done in this vein, but that will require detailed analyses of individual passages.
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