

## A Role and Reference Grammar of Biblical Hebrew clause linkage

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One of the vexing questions in Biblical Hebrew is the function of *consecutio temporum* ‘sequence of tenses’. Traditional primers like Page H. Kelly (1992) will interpret the ubiquitous Hebrew clause linkage marker (CLM) as either a *waw conjunctive* or a *waw consecutive*. The primer will explain that a first verb governs time and mode for subsequent forms, but it will leave to learners to guess at writer intentions - “(t)his literary device gave writers greater flexibility in expressing their thoughts, even though they work with a limited number of verb forms.” (p. 210).

A linguistic turn is taking place in the study of Biblical Hebrew. The state of the art linguistic reference grammar of van der Merwe et al (2017) includes an introduction to information structure and offers semantic and pragmatic accounts of some clause relations. But, because Biblical Hebrew does not mark temporal distinctions between past, present, future and modality, translation into tense is still “exclusively determined by the context and the lexical signification of the verb” (p. 154).

While Hebrew information structure is addressed in Winther-Nielsen (MS), this paper will focus on interclausal linkage in order to show how Role and Reference Grammar can provide new insights for Hebrew linguistics. It revisits the earliest work on Hebrew clause linkage (Winther-Nielsen 1995), and it uses the mapping of interclausal relations in RRG (Van Valin and LaPolla 1997; Van Valin 2005). It explores how coordination, subordination and cosubordination nexus at different clause junctures function in a learner corpus used for teaching intermediate level Hebrew grammar and text analysis.

The data for this study consists of a corpus of 2060 clauses or clause fragments selected from a Dutch database that has been developed since 1977 (see the link <https://etcbc.github.io/bhsa/> and the RRG-based descriptions of the database in Winther-Nielsen 2008; 2009). Since the Spring of 2015 the database has provided a complete analysis of interclausal connections for the entire Hebrew Bible. In this database clause linkage is coded by numbers consisting of mostly three digits. The first digit X (X\*\*) specifies the connectivity type for a clause and the second digit Y (\*Y\*) specifies the predicate of this clause, while the Z (\*\*Z) specifies the predicate of the preceding clause, to which it is linked.

Even if this hierarchical structuring of the texts is only a first possible interpretation of the texts, the codes and their occurrence can help linguists select the most frequent types of connections and limit the sample of linkage types to the size of 15 tokens or more for a code (Table 1). It is possible to explore clause linkage for the three major finite conjugations of Biblical Hebrew, the narrative *wayyiqtol*-form (code 7), the perfective *qatal*-form (code 2) and the non-perfective *yiqtol*-form (code 1), and results can be related to linkage with imperatives (code 3), infinitives (code 4) and participles (code 6). This helps an RRG grammarian explore nexus and juncture types in Biblical Hebrew based on frequency and likely function in a given contextual environment.

**Table 1. All Codes in Learner Corpus more Frequent than 15**

Code	Tense	After	No	Code	Tense	After	No
477	<i>wayyiqtol</i>	<i>wayyiqtol</i>	181	110	∅ CLM – <i>yiqtol</i>	Verbless Cl	21
472	<i>wayyiqtol</i>	<i>qatal</i>	35	113	∅ CLM – <i>yiqtol</i>	imperative	17
427	CLM – <i>qatal</i>	<i>wayyiqtol</i>	27	130	∅ CLM – imperative	Verbless Cl	18
422	CLM – <i>qatal</i>	<i>qatal</i>	57	400	CLM – Verbless Cl	Verbless Cl	21
421	CLM – <i>qatal</i>	<i>yiqtol</i>	40	407	CLM – Verbless Cl	<i>wayyiqtol</i>	17
122	∅ CLM – <i>qatal</i>	<i>qatal</i>	21	103	∅ CLM – Verbless Cl	imperative	23
120	∅ CLM – <i>qatal</i>	Verbless Cl	15	107	∅ CLM – Verbless Cl	<i>wayyiqqtol</i>	20

527	Reason – <i>qatal</i>	<i>wayyiqtol</i>	21	101	Ø CLM – Verbless Cl	<i>yiqtol</i>	20
522	Reason – <i>qatal</i>	<i>qatal</i>	17	502	Reason – Verbless Cl	<i>qatal</i>	17
411	CLM – <i>yiqtol</i>	<i>yiqtol</i>	44	64	l <sup>o</sup> ‘to’ + infinitive	prep l <sup>o</sup>	101
413	CLM – <i>yiqtol</i>	imperative	21	12	Relative Cl - <i>qatal</i>		51
412	CLM – <i>yiqtol</i>	<i>qatal</i>	19	11	Relative Cl – <i>yiqtol</i>		15
111	Ø CLM – <i>yiqtol</i>	<i>yiqtol</i>	37	16	Relative Cl – Participle		25
112	Ø CLM – <i>yiqtol</i>	<i>qatal</i>	18				

The case study will use the web-application Bible Online Learner <https://bibleol.3bmoodle.dk/> which has been developed since 2008 for corpus driven task-based and persuasive language learning. This application is currently being developed for flexible landing pages, localization and individualization of the interface. A learning designer can then create RRG-defined grammatical terms for the interface, and this can assist researchers who want to explore the use of codes for the study of interclausal connections.

The goal of this project is to explore how we can design a learning environment to train advanced students in Biblical Hebrew RRG. We want to be able to teach nuclear, core and clausal junctures for coordination, cosubordination and subordination through the corpus and explore how interclausal linkage relates to Actionsart and perspectival aspect.

## References

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- (MS), Why Eve Shouldn't Eat the Snake: An Informed Answer from Focus Structure and Reference Tracking in Biblical Hebrew (Revised version of paper presented at RRG Conference on August 2, 2015, at the HH University in Düsseldorf)