Towards an RRG treebank of Biblical Hebrew

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This paper will introduce and discuss the ongoing construction of a treebank of Biblical Hebrew based on Role and Reference Grammar. The work is anchored in the TreeGraSP research project which aims to combine linguistic descriptions and data-driven approaches (Bladier et al. 2018; 2019; 2020). Biblical Hebrew is an ancient Semitic language preserved over millennia in the Hebrew Bible. As such, Biblical Hebrew offers stable and ideal data to test how well an RRG description applies to an ancient language. The corpus is stored in the so-called BHSA database (Biblia Hebraica Stuttgartensia Amstelodamensis), created and maintained by the Eep Talstra Centre of Bible and Computer at Vrije Universiteit, Amsterdam (https://etcbc.github.io/bhsa/). The database is richly annotated with morphological, lexical, and syntactic features, but no semantic description. The purpose of the present project is to enrich the database with an RRG-description of Biblical Hebrew sentences that allows Old Testament researchers to apply the insights of RRG in linguistic and exegetical interpretation. The project is a continuation of previous work on building a computational parser for Biblical Hebrew (Winther-Nielsen 2008; 2009). An RRG description of Hebrew sentences and verbal aspect is also the topic of recent research (Højgaard 2021). For the present paper, the agenda is twofold: Firstly, we will present the automatic parsing of Hebrew sentences into an RRG-like format (cf. Figure 1 for an example).



Figure 1: Transformation of BHSA syntax to RRG-trees (Genesis 1:6)

Secondly, we will discuss the concrete challenges for creating trees of a heavily inflected language such as Biblical Hebrew.

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