THE DEVELOPMENT OF THE ORIGIN SENSE OF THE PREPOSITION in BIBLICAL HEBREW

Liza Lemmer

North-West University
The School of Ancient Language and Text Studies
E-mail: liza.lemmer@nwu.ac.za

(Received 14/06/2016; accepted 04/11/2016) DOI: https://doi.org/10.25159/1013-8471/3114

ABSTRACT

The origin sense of the preposition in Biblical Hebrew has been treated in various ways by traditional grammars and lexica. The discrepancy between the entries for in these sources indicates that a systematic and theoretically justifiable account of the nature of this sense was lacking. In this paper the Principled Polysemy Approach (Tyler and Evans 2013) was employed to analyse the origin sense (as defined) by investigating whether 1) it should be viewed as a distinct sense and 2) how is it related to the primary sense and the other senses of the preposition. The conclusion is reached that the origin sense is a distinct sense of the preposition and that it is related to the primary sense, which contains the semantic elements of locational source and separation, in a principled way.²

INTRODUCTION

Language is made up of sound, meaning, forms, structure, and vocabulary. In the lexicon of a language we find open-class words and closed-class words. New words are constantly added to the open class, such as nouns, verbs and adjectives. Of the lexical types found in the closed class, however, such as conjunctions, prepositions and pronouns, the creation of new words is uncommon (Fromkin and Rodman 1993:3, 17, 38–39).

Since new prepositions are not easily created in a language, prepositions are often used in novel ways in new contexts. This is not a random process, however; on the contrary: the meaning extension of a preposition must in some way be systematic,

^{1 &}quot;Origin" is used in this paper to refer to the native land, hometown, tribe etc. of a person. The "origin sense" of מָן therefore refers to the usage of this preposition to indicate the "origin" of a person from a native land, a hometown or a tribe etc.

This article is based on a section from my master's dissertation (Lemmer 2014).

otherwise the hearer would not have a good chance of understanding the utterance in which a preposition is being used in a new way.

Consider the following two examples from the Hebrew Bible which contain the preposition מָּלְ:

(1) Judges 9:43

הַעָם יֹצֵא מָן הַעִיר

The people were coming מָן the city.

(2) Judges 14:18

מַה מָתוֹק מִדְבַשׁ וּמֶה עַז מֵאַרִי

What is sweet מָן honey? What is strong מָן a lion?"

In (1), אָן is used to indicate the source of the peoples' movement in physical space. In (2), on the other hand, it indicates the difference between the degree of, first, the sweetness and, second, the strength of two entities. Yet, these two meanings are both encoded by the same lexical form אָן.

The above example is representative of the linguistic phenomenon called polysemy. Polysemy refers, in its simplest form, to one linguistic form having more than one distinct, yet related, meaning (Cuyckens and Zawada 2001:x).

The preposition אָן has long been recognised as having numerous meanings. This is clear from the fact that some of the trusted lexica and grammars³ for the Hebrew Bible list between seven and sixteen "senses" or "uses" of אָם. In most cases these "senses" are also divided into further subdivisions. The fact that the different senses of the preposition were all listed under one entry in the lexica and grammars testifies to the fact that the compilers of these lexica and grammars acknowledged that the senses of אָם were related to each other in some way.

Nerlich and Clarke (1997:348) point to the importance of the study of polysemy when they state that "the study of polysemy is of fundamental importance for any

³ Among others Joüon and Muraoka (2006), Brown, Driver and Briggs (1907), and Waltke and O'Connor (1990).

⁴ This follows from the fact that it is standard practice in dictionaries that "homophonous words have separate entries, whereas the various meanings of a polysemous word occur within the same entry" (Fromkin and Rodman 1993:174–175).

semantic study of language". Scanlin (1992:125) notes, however, that the focus in traditional approaches to linguistics has mainly been on phonetics, morphology and syntax and not on semantics. Regarding the traditional dictionaries of Biblical Hebrew, Barr (1992:143) writes that the "semantic analysis of the older dictionaries seems often to be defective and needs to be rethought". De Blois (2000:2) explains that although some semantic analysis was usually present, a thorough analysis of the concepts that lie behind the linguistic forms and how these concepts were perceived by the speakers of the language was lacking. Thus, although the multiplicity of the senses of has been well noted in the lexicographical and grammatical work on Biblical Hebrew, the principled study of polysemy in Biblical Hebrew has, until recently, been neglected together with the neglect of semantics.

PROBLEM STATEMENT

This neglect can be seen in the way in which the existing grammars and lexica treat the proposed⁶ origin sense of מָּל. The grammar by Gesenius and Kautzsch (1910) as well as the grammar by van der Merwe et al. (1999) do not list the origin sense of at all. This probably indicates that they did not regard it as a distinct sense of the preposition. Brown et al. (1907) list the origin sense under a more general sense rendered with a gloss "out of" and the lexicon by Gesenius and Tregelles (1857) lists

⁶ The designation "proposed" is used here, since the rest of the paper will endeavour to prove that the origin sense should indeed be regarded as a distinct sense of מָלן.

it under the more general sense of "going out from anything". Clines (2001) lists the sense under the designation "of direction". The lexicon by Koehler and Baumgartner (1995) simply states that מָל designates source or origin. This brief overview of the treatment of the origin sense of מָל, reveals some of the complexity of this matter. The grammars and lexica did not all identify origin as a distinct sense, nor did they give the same (or any) explanation as to how it relates to the primary sense. What is needed, therefore, is a systematic and theoretically sound account of 1) whether the origin sense of מָל should indeed be regarded as a distinct sense and 2) if it is, what its relation to the primary sense and to the other senses of μ is.

METHODOLOGY

In order to answer these two questions the Principled Polysemy Approach (Tyler and Evans 2003) is used as methodological framework. The approach is situated in the cognitive semantic approach which is a subfield of cognitive linguistics.

Spatial semantics

One subfield of cognitive semantics that is especially relevant for the present study is that of spatial semantics, since the preposition is essentially a spatial relation marker. It is therefore important to have a good understanding of the way in which spatial particles (and spatial relations in general) have been treated in the framework of cognitive linguistics and in that of cognitive semantics. Zlatev (2006:173) gives the following definition of spatial expressions: "spatial expressions are conventional specifications of the location or the change of location (i.e., translocation) of an object". With this definition in mind some of the basic concepts that have been employed in spatial semantics will now be examined.

The term "primary sense" corresponds to that which Tyler and Evans (2003) call the "proto-scene" (cf. Tyler and Evans 2003:4 where they equate the two terms.)

⁸ Although many of the senses of מָן are not spatial in nature, it is hypothesised that they were derived in a principled manner from an earlier spatial sense (cf. Radden and Dirven 2007:304; Tyler and Evans 2003:47).

In attempts to describe the semantics of spatial expressions several spatial concepts have been proposed. The following, however, according to Zlatev (2006:174), is a list of the concepts that are regarded as important for a descriptive system of spatial relations: "trajector, landmark, frame of reference, path, region, direction, and motion". For the sake of clarity, the concepts relevant to the description of powill now be briefly discussed.

Trajector (TR) and landmark (LM)

The TR can be defined in simple terms as the thing that is to be located. The TR can be static or dynamic, an animate or inanimate object, or even a whole event. The LM, on the other hand, serves as the reference point for the TR¹⁰ (Radden and Dirven 2007:305; Zlatev 2006:174).

When working with TRs and LMs it is important to consider the dimension of the LM. Radden and Dirven (2007:309) convincingly show that by determining the dimension¹¹ of a LM, we can more or less determine the spatial region where the TR is located with regard to the LM (i.e., the spatial configuration between the two).

In the Euclidian system of space three dimensions are specified: length (one dimensional), length and width (two dimensional), and length, width, and depth (three dimensional). It is noteworthy that a point in space can also be described as having zero-dimensionality, that is, it has no shape of its own. Not only can zero-dimensionality be applied to LMs with no shape of their own, but also to those whose shape is indeterminate or irrelevant (Radden and Dirven 2007:309–311).

The TR and LM are also referred to as figure and ground, respectively (Radden and Dirven 2007:305). This notion comes from gestalt psychology, which demonstrated that human beings automatically organise the elements that are present in a visual scene into a more prominent figure and a less prominent background (or ground) (Radden and Dirven 2007:28).

-

⁹ Zlatev (2006:174) notes that different authors may use different terms for these concepts, but in essence the idea behind each remains the same.

The dimension of the LM refers to its geometrical shape. The shape of the trajector is irrelevant since it does not influence its spatial relationship with the LM (Radden and Dirven 2007:309).

Spaces that are one- or two-dimensional have the property that TRs may come into contact with, or may be in contact with them as LMs. A TR is, typically, in lateral or sideways contact with a one-dimensional LM. In English, an example of this is "on the line". TRs are usually considered to be in vertical contact with a two-dimensional LM, for example "on the desk" (Radden and Dirven 2007:310).

A three-dimensional space is generally a container. With prepositions that are used with three-dimensional spaces, the shape of the LM is not the important element, but rather the interior cavity, because that is what constitutes a container (Radden and Dirven 2007:313).

Principled polysemy approach

Within the framework of cognitive semantics, Andrea Tyler and Vyvyan Evans developed the principled polysemy approach. This approach proposes a methodology to analyse polysemous prepositions in a way that is verifiable and objective (Evans and Green 2006:342). This is done by means of 1) determining when something should count as a distinct sense as opposed to when the meaning is context-dependent, ¹² and 2) by establishing the central or prototypical sense of the preposition (Tyler and Evans 2001:731, 733).

A central assumption of this approach is that the senses of a spatial particle are related to each other in some motivated way. These senses constitute what is called a semantic network. Not all usages of a linguistic form are contained in this network, but only those meanings that are instantiated in the long-term semantic memory of the language users. Other senses or uses are constructed on-line when regular utterances are interpreted (Tyler and Evans 2003:7). The difficulty that arises is how to distinguish between these two types of use.

This part of the methodology aims to address the problem that Cuyckens and Zawada (2001:xv) describe as "a problem that any account of polysemy ... needs to come to terms with", namely, to distinguish between "those aspects of meaning that give rise to different polysemous senses of a word vs. those that are manifestations of a single sense".

Determining a distinct sense of a preposition

For determining whether a sense of a preposition should be considered to be a distinct sense, Tyler and Evans (2001, 2003) provided two criteria. First, "for a sense to count as distinct, it must contain additional meaning not apparent in any other senses associated with a particular form" (Tyler and Evans 2003:42–43). By this they mean that a distinct sense must have a non-spatial meaning or that the configuration between the LM and the TR should be different from that in the primary sense of the preposition.

The second criterion they propose entails that some instances of the sense in question should be context independent. This means that examples of the sense should be available "in which the distinct sense could not be inferred from another sense and the context in which it occurs" (Tyler and Evans 2003:43).

Determining the primary sense of a preposition

The principled polysemy approach also provides criteria for determining the primary sense of a preposition. The criteria include the following (Tyler and Evans 2003:47): "(1) The earliest attested meaning, (2) predominance in semantic network, (3) use in composite forms (Langacker 1987), (4) relations to other spatial particles, and (5) grammatical predictions (Langacker 1987)." In a larger study (Lemmer 2014) these criteria were applied to all the occurrences of קוֹ found in the book of Judges. The outcome of that study was that the primary sense of קוֹ contains two elements: 1) the source of a motion and 2) the separation of TR from a LM. The following example illustrates the primary sense of קוֹ:

(3) Judges 4:14

וַיֵּרֶד בָּרָק מֵהַר תָּבוֹר

And Barak went down from Mount Tabor.

The TR goes down (movement takes place) from the mountain and thus comes to occupy a position away from the LM. The LM is therefore the locational source of the

TR in this motion event. ¹³ The verb ירד serves to specify the trajectory ¹⁴ of the TR's movement away from the locational source. The spatial relation that exists between the LM and the TR is conceptualised as the TR being located away from the LM after movement has taken place, thus separation has taken place. ¹⁵ The primary sense is diagrammed below in figure 1.



Figure 1: The primary sense

In this diagram the TR is represented by the solid black sphere before movement has taken place and by the dashed, slightly shaded sphere after movement has taken place. The LM is represented by the circle with the thick outline, while the sphere of the LM's influence is represented by the dashed empty circle. The arrow indicates that the TR undergoes movement. In the primary sense the sphere of influence of the LM involves both situations in which the TR can be contained by the LM and situations in which it is located in the proximity of the LM.

THE ORIGIN SENSE OF מָן

The proposed origin sense of אָן relates to contexts where a TR's origin (i.e., hometown, native country, or tribe etc.) is indicated by אָן. Consider the following example:

(4) Judges 17:7

וַיָהִי נַעַר מִבֵּית לֶחֶם יְהוּדָה מִמְּשְׁפַּחַת יְהוּדָה

And there was a young man from Bethlehem in Judah, from the family of Judah.

¹³ This corresponds to the first element of the primary sense, namely that מָן indicates the source of a motion.

According to Evans and Tyler (2004:5) a trajectory can be defined as "the shape of the motion event".

This corresponds to the second element of the primary sense, namely that η indicates separation between the TR and the LM.

In this example we have a young man (the TR) and Bethlehem in Judah (the LM). In this sentence no motion verb is present to indicate the young man's movement away from the LM. The verb that we have is היה ("to be"). The TR cannot, therefore, come to occupy a position away from the LM. The relation between the TR and the LM in (4) has to be non-spatial in nature since it does not indicate physical separation or the source of a motion event but rather the origin of a person. The configuration between the TR and the LM in this example is therefore different from the configuration that existed in the primary sense. This thus satisfies the first criterion of the methodology for determining a distinct sense a preposition.

The second criterion now requires that this sense of origin should not be determinable from the primary sense and the context in (4). We have seen that this sentence means that the young man originated from Bethlehem, not that he was somehow physically separated from it. If η in (4) were to be taken to indicate source/separation (as in the primary sense), the origin sense could not have been construed from the context. Hence, η in this sentence would only make sense if an origin sense of this preposition were present in the semantic memory of the language users.

The origin sense of מָן thus satisfies both the criteria and can be regarded as a distinct sense of the preposition. The question remains as to how this sense came to be derived from the primary sense. It will now be argued that another sense of מָלו, namely the material source sense, served as the experiential basis for the development of the origin sense.

(5) In Judges 13:14 we find an example of the material source sense.

מְכּל אֲשֶׁר יֵצֵא מָגֶּפֶן הַיַּיִן לֹא תֹאכַל וְיַיִן וְשֵׁכָר אַל תַּשְׁתְּ

She will not eat of anything that comes from the vine, neither let her drink wine or strong drink.

The TR in (5) is the indefinite "anything". The LM is the vine. Although the relation between the TR and the LM in this example is spatial in nature, the configuration between them nonetheless differs from that in the primary sense.

It was shown in the discussion on the primary sense that the TR (which is a distinct entity) comes to occupy a position that is away (separated in space) from the LM and that the LM serves as the locational source of the motion of the TR. In the case of (5), however, the LM brings the TR into being and it is therefore not a distinct entity. The TR could not have existed without the LM and, hence, there exists a specific, non-arbitrary relationship between them, which was not the case with the primary sense. In this instance, that which comes out of the vine does not even have to be separated from it. It can remain connected to it by means of a stem for some period after it has appeared. The configuration between the TR and the LM can be described as the TR emerging from the LM, but it does not necessarily come to occupy a location separated from it. This confirms that the configuration is different from that in the primary sense and, consequently, the first criterion is satisfied. מ cannot be interpreted as indicating separation, because that would mean that she was allowed to eat grapes that were still connected to the vine. The sense that is conveyed by in this sentence can only be understood correctly if it prompts for the material source sense, which is present in semantic memory.

The relation of the origin sense to the primary sense

The way in which the origin sense is related to the primary sense can plausibly be explained by looking at one of the most basic human experiences, that of pregnancy and birth. One of the main tenets of cognitive linguistics is that our bodily and sensory experiences lead to conceptualisations which are displayed in language. Consider the following example in which is used to describe birth in Biblical Hebrew.

¹⁶ Tyler and Evans (2003:215) used this explanation for the material source sense that the English preposition "out of" displays.

Evans and Green (2006:156–157) explained that the assumption that "conceptual structure is embodied" is one of the guiding principles of cognitive semantics. This means that, as human beings, we have bodily experiences which are determined by the physical nature of our bodies as well as by the nature of our environment. Our experience of the world is therefore embodied and this has an important impact on our cognition.

(6) Ecclesiastes 5:14

בַּאֲשֶׁר יַצַא מִבֶּטֶן אָמוֹ עַרוֹם יַשׁוּב לַלֶּכֶת כְּשֶׁבָּא

As he came out of his mother's womb he will go again, as he came.

וא in this example displays the primary sense in which the womb of the mother (the LM) serves as the source of the TR's (the baby) movement. The context in this example does not, however, provide *only* the information that the LM is the source of the TR's motion; it also shows that the LM is the material source of the TR. In this scenario a mother's body produces a baby, partly from her own material. The baby is physically connected to the mother by means of the umbilical cord for nine months and is, furthermore, also contained by the mother during this period. With birth the baby comes out of the mother and thus becomes non-contained by the mother (Tyler and Evans 2003:215). This emergence of the baby from the womb corresponds with the element of source that was present in the primary sense. In this context, און therefore not only displays a locational source/separation sense, but also receives an additional semantic element of material source.

As soon as this material source sense associated with אָל became conventionalised in memory, it could be used with LMs that do not represent prototypical containers like the mother's body (Tyler and Evans 2003:215). As soon as this sense was instantiated in semantic memory, this usage can even be extended to refer to the fruit of plants. In example (5), אָן indicates that it is the material source from which the grapes come. The vine does not serve as the source of the TR's motion, nor does it have to become separated from the vine, but because א מון has acquired a material source sense it can be used in this example. This can be illustrated as follows:

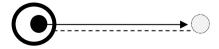


Figure 2: Material source sense

The vine (the LM) is represented by the circle with the thick outline. The arrow that starts from within the LM indicates that the LM is conceptualised as a container out of which the TR emerges. The TR is represented by a solid sphere before movement has taken place and with a shaded sphere after movement has taken place. The dashed line indicates that contact between the LM and the TR can optionally remain even after movement has taken place. This was not the case with the primary sense, where separation between the LM and the TR took place.

In the discussion of the material source sense it was explained that the material source of a TR can be indicated by as a result of the correlation between the experience and observance of birth, and the notion of material source. It will now be argued that origin can be indicated by since a strong experiential correlation between material source (birth) and origin exists. It will be shown that this sense is not directly derived from the primary sense, but rather from the material source sense. The following examples serve to illustrate this.

(7) Ruth 2:11

:וַתַּעַזְבִי אָבִיךּ וְאָמֵּךּ וְאֶרֶץ מוֹלַדְתַּהְ וַתַּלְכִי אֶל עַם אֲשֶׁר לֹא יָדַעַהְ הָּמוֹל שִׁלְשׁוֹם You left your father and mother and your land of birth and came to a people that you did not know yesterday or the day before.

In this verse, Ruth's origin (Moab) is described as her land of birth. In other words, this is the country in which she came from her mother's womb, as with the material source sense. Therefore, the fact that Ruth's parents were located in Moab and that she was descended from them, meant that Moab was classified as her country of birth. Moab was also her place of origin.

In the following two examples both the origin sense and the primary sense are used. These examples will now be discussed in order to illustrate the difference between the primary sense and the origin sense.

(8) Judges 19:17

ויאמר האיש הזקן אנה תלך ומאין תבוא:

And the old man said, "Where are you going? and where do you come from?"

(9) Judges 19:18

וַיֹּאמֶר אֵלָיו עֹבְרִים אֲנַחְנוּ מִבֵּית לֶחֶם יְהוּדָה עַד יַרְכְּתֵי הַר אֶפְרַיִם מְשֶׁם אָנֹכִי And he said to him, "We are passing from Bethlehem in Judah to the remote parts of the hill country of Ephraim, I am from there."

In Judges 19:17 (example (8)), the old man asks the traveller that he is speaking to, "אַין הָבוֹא "where do you come from?". We can assume that the old man is referring to the starting point of his current journey since he first asks, "Where are you going?". This is also the way that the traveller interprets the question since he answers that they (he, his concubine and his servant) have come from Bethlehem and are going to the hill country of Ephraim. Then he adds that he is "from there", referring to the hill country of Ephraim. By this he means that the hill country is his place of origin. In the former case he refers to the starting point of his journey, but in the latter case he clearly talks about the place from which he originates. The origin sense of בון can be illustrated as follows:

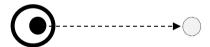


Figure 3: Origin sense

In figure 3, the LM indicates the origin of the TR, with the arrow indicating that the TR originated inside of the LM. This corresponds to the material source sense. The arrow, however, is dashed in this case, which serves to indicate that the movement out of the LM is optional, unlike the movement in the material source sense, where it is an integral part of the sense. Since the notion of movement is not part of the origin sense of 7a, the TR does not need to emerge from the LM.

The relation of the origin sense to the other senses of מָן

In the analysis of all the occurrences of אָ in the book of Judges by Lemmer (2014), the following 10 senses of אָ, in addition to the primary sense, were identified: position, exception, comparison, negative consequence, time, material source, origin, partitive, cause and agent. The following diagram serves to indicate the relation between the origin sense, the primary sense and the other senses of אָל.

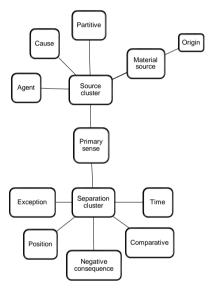


Figure 4: Semantic network for מָן

As explained previously, the primary sense for procession contains two elements, namely that of source, and that of separation. It was shown by Lemmer (2014) that all the senses of procession that were identified could be divided into two groups: those that relate to the primary sense via the source element, and those that relate to it via the separation element. For this reason the senses could be divided into two clusters, as shown in the network. It was explained above that the material source sense relates to the source element of the primary sense, and it is therefore placed in the source cluster. The origin sense was shown to relate to the primary sense through the material source sense, and is therefore also positioned in the diagram accordingly.

¹⁸ It is beyond the scope of this article to discuss these senses. For a detailed discussion of all of these senses refer to Lemmer (2014:76–105).

CONCLUSION

This paper has discussed the origin sense of the polysemic preposition primary in Biblical Hebrew. Two questions regarding this sense were investigated: 1) is the origin sense indeed a distinct sense, and 2) if yes, how is it related to the primary sense of the preposition. These two questions were addressed by employing the principled polysemy approached developed by Tyler and Evans (2013) within the larger theoretical framework of cognitive semantics. By applying the criteria set out by the methodology for determining a distinct sense it was shown that the origin sense can be regarded as a distinct sense of primary, since the configuration between the TR and the LM in this sense is different from the configuration that is present in the primary sense, namely that of locational source and separation. It was also shown that a plausible explanation for the development of the origin sense from the primary sense can be given by looking at the material source sense of the preposition. It was argued that origin can be indicated by primary sense is therefore not derived directly from the primary sense but rather from the material source sense.

The results of this research may lead to an improvement in the description of the origin sense of מָן in lexica and grammars of Biblical Hebrew. The method used in this paper may serve to provide a theoretically justifiable way of relating and organising the senses of מָן in a way that accounts for the polysemic nature of the preposition. Due to the scope of this research, however, only one of the senses of מָן was described. Further research should investigate all the senses of מְן to provide a complete picture of the semantic potential of the preposition. By doing a thorough analysis of all the occurrences that are found in the Hebrew Bible, a detailed dictionary entry of מָן could be developed which could be incorporated in a dictionary such as *The semantic dictionary of Biblical Hebrew* (De Blois 2000).

BIBLIOGRAPHY

- Achard, M and Niemeier, S (eds) 2004. *Cognitive linguistics, second language acquisition and foreign language teaching.* Berlin: Mouton de Gruyter.
- Barr, J 1992. Hebrew lexicography: informal thoughts, in Bodine 1992:137-151.
- Bodine, W R (ed.) 1992. Linguistics and Biblical Hebrew. Winona Lake: Eisenbrauns.
- Brown, F, Driver S R and Briggs C A 1907. *A Hebrew and English lexicon of the Old Testament: with an appendix containing the biblical Aramaic*. Oxford: Clarendon.
- Brown, E K (ed.) 2006. *Encyclopedia of language and linguistics*. 2nd ed. Boston: Elsevier. Clines, D J A (ed.) 2001. *The dictionary of Classical Hebrew*. Volume 5. Sheffield: Sheffield
- Clines, D J A (ed.) 2001. *The dictionary of Classical Hebrew*. Volume 5. Sheffield: Sheffield Academic Press.
- Cuyckens, H and Zawada, B E 2001. Introduction, in Cuyckens and Zawada 2001: ix-xxvii.
- Cuyckens, H and Zawada, B (eds) 2001. Polysemy in cognitive linguistics: selected papers from the fifth international cognitive linguistics conference Amsterdam, 1997.

 Amsterdam: John Benjamins.
- De Blois, R 2000. Towards a new dictionary of Biblical Hebrew: based on semantic domains. Available: http://www.sdbh.org/documentation/Paper_SBL_2000.pdf. [Accessed 2017/06/09.]
 - 2000–. Semantic dictionary of Biblical Hebrew. http://www.sdbh.org/.
- De Regt, L 1997. Multiple meaning and semantic domains in some Biblical Hebrew lexicographical projects: the description of zera', *Zeitschrift für Althebraistik*, 10/1:63–75.
- Elliger, K and Rudolph, W (eds) 1997. *Biblia Hebraica Stuttgartensia*. Stuttgart: Deutsche Bibelgesellschaft.
- Evans, V and Green, M 2006. *Cognitive linguistics: an introduction*. Edinburgh University Press.
- Fromkin, V and Rodman, R 1993. *An introduction to language*. 5th ed. Fort Worth: Harcourt Brace Jonanovich.
- Gesenius, H F W and Tregelles, S P 1857. Genenius's Hebrew and Chaldee lexicon to the Old Testament scriptures. London: Samuel Bagster.
- Joüon, P and Muraoka, T 2006. A grammar of Biblical Hebrew. Rome: Editrice Pontificio Istituto Biblico.
- Koehler, L and Baumgartner, W 1995. *The Hebrew and Aramaic lexicon of the Old Testament*. Volume 2. Leiden: Brill.
- Langacker, R W 1987. Foundations of cognitive grammar. Volume I: theoretical prerequisites. Stanford: Stanford University Press.
- Lee, Y S 2016. Description of the BH lexeme אָל: a cognitive approach. Unpublished master's dissertation: Stellenbosch University.
- Lemmer, L 2014. The polysemic nature of the preposition מְי in Biblical Hebrew: a study in the book of Judges. Unpublished master's dissertation: North-West University.
- Lyle, K A 2012. A cognitive semantic assessment of אַת and אַמ semantic potential. Unpublished master's dissertation: Stellenbosch University.
- Mena, A K 2012. The demantic potential of עַל in Genesis, Psalms, and Chronicles. Unpublished master's dissertation: Stellenbosch University.
- Nerlich, B and Clarke, D D 1997. Polysemy: patterns of meaning and patterns in history, *Historiograhia Liguistica* 24/3:349–385.
- Radden, G and Dirven, R 2007. Cognitive English grammar. Amsterdam: John Benjamins.

- Rodriguez, D 2011. חחת: A cognitive linguistic analysis of the Biblical Hebrew lexeme. Unpublished master's dissertation: University of Stellenbosch.
- Scanlin, HP 1992. The study of semantics in general linguistics, in Bodine 1992:125–136.
- Tawil, H 2005. The semantic range of the Biblical Hebrew HLL: lexicographical note X, *Zeitschrift für die alttestamentliche Wissenschaft*, 117/1:91–94.
- Tyler, A and Evans, V 2001. Reconsidering prepositional polysemy networks: the case of over, *Language*, 77/4:724–765.
- ______ 2003. The semantics of English prepositions: spatial scenes, embodied meaning, and cognition. Cambridge: Cambridge University Press.
- _____ 2004. Applying cognitive linguistics to pedagogical grammar: the case of over, in Achard and Niemeier 2004:257–281.
- Van der Merwe, C H J, Naudé, J A and Kroeze, J H 1999. *Biblical Hebrew reference grammar*. Sheffield: Sheffield Academic Press.
- Waltke, B K and O'Connor, M P 1990. *An introduction to Biblical Hebrew syntax*. Winona Lake: Eisenbrauns.
- Zlatev, J 2006. Semantics of spatial expressions, in Brown 2006:173–180.