LONG ABSTRACT

In Chapter 1 we state that advances have been made in lexicography which have not been applied to lexical semantics in the GNT. Some of the most promising are from CL and its understanding of structural lexicology. In 1.2 we say that words have various senses and we need criteria on which to base our understanding of a word in context. Our claim is that Greek-English lexica would be improved if they mentioned structural indicators for WSD, especially collocations & colligations.

We raise the following questions: Does a word or phrase have a different meaning when that word or phrase is present with certain other words (*collocations*), with certain grammatical structures (*colligations*), and with words from certain semantic domains or sets (*semantic preference*)? If so, can paying attention to the collocations, colligations and semantic preferences help us disambiguate a *polyseme* (a word with potentially different meanings) in a GNT passage? Also, when faced with two words which seem to have the same meaning (called synonyms, *near synonyms* or *similonyms*) can we distinguish between them by observing their collocations, colligations and semantic preferences? In this study, we answer yes to the above questions and will illustrate our findings using several GNT words and passages. We claim that *the different senses of polysemous lexemes often occur with different collocations and colligations*. We will demonstrate this claim below throughout this study.

In 1.4 we trace the history of CL from the 1200s to the present day and introduce some of the main contributors and their publications. In 1.5 we make the claim that CL has not yet been adequately applied to biblical studies, apart from O'Donnell's initial work, but that it should be done. In 1.6 we clarify that this study is a preliminary investigation as a first step in making up this lack of application of CL to the GNT. Just as corpus studies in English have shown the different uses of, e.g., *eye* vs. *eyes*, CL studies in the GNT will reveal similar patterns. This study seeks to apply to the GNT principles explained by Sinclair, Stubbs, Francis, Hunston, Hoey and others in the area of structural lexicology in English

In chapter 2 we present a theory and method for carrying out such a study. Though native-speaker intuition is an important part of the lexicographical endeavor, it

must be checked empirically by recourse to a large corpus of texts which have occurred in actual usage.

Corpus design is a very important foundational step. In 2.2 we state that a corpus should be large enough to contain enough usages so that patterns can be observed. In 2.3 we state that we need at least 50 examples of usage in order to be able to find helpful information about how meaning is linked to collocations. In 2.6 we speak of appropriate samples for the corpus. We chose examples which were available to us for a reasonable price or free, were already available in digital format and had English translations. In 2.8 we focus on synchronic method, using texts between 200 B.C. to 200 A.D. in order to avoid the problem of having words in our corpus whose meanings have changed because of chronological distance from the NT.

In 2.9 we raise a number of issues related to linguistic variables. We feel that at the current state of CL as applicable to GNT lexical semantics there are several variables which we can take into consideration, and yet there are several which we cannot. Namely, for GNT lexical semantics, there is not enough data to make reasonable hypotheses about the differences in meanings of lexical items used by those of different ages or educational backgrounds. The data available to us is too sparse for us to be able to tell differences due to age, gender and geography. (In our corpora, however, we did make an effort to exclude those known for Atticism.) We also noticed a few idiolectic usages. But for the most part we were unable to detect differences in meaning based on dialect, variety, sociolect, or register.

In chapter 3 we state that our primary goal throughout this study is to improve our understanding of the meaning of the GNT through understanding lexical items. We are seeking in each instance to answer the question, "What does this lexical item mean in this utterance?" We look at how to determine the meaning of a lexical item and how to describe that meaning in a lexical entry.

In 3.2 and 3.3 we explain what type of definitions we use: they are semasiological, they use a partially meta-linguistic approach, and use sentential definitions which are more helpful for non-native speakers. In 3.5 we mention the importance of connotative meaning. In 3.6 we discuss the importance of context. We

discuss the *idiom principle* developed by Sinclair and the theory of *lexical priming* developed by Hoey. We also briefly touch on the theory of *scripts* and *themes* developed by Shank and Abelson and *relevance theory* developed by Sperber and Wilson. These principles support the argument that an important part of using context to disambiguate meanings is the lexical priming effect of the general frame of reference (assuming optimal relevance), the pre-understood scripts and themes of life settings, and the collocations, colligations and semantic preferences and sets in which the words in question occur.

In 3.7 we discuss at length issues involved to polysemy since they must be clarified so that the reader can see the theory behind the way we have lumped and split definitions later in the study. In the suggestions which we offer for GNT lexical entries (in chapters 5-8), we seek to steer a middle course between lumping and splitting, and between word and context, with the expressed goals of 1) making the meaning of a lexical item clear in each GNT usage and 2) keeping the lexical entry small enough to be manageable and user-friendly for exegetes who are used to using GNT English-Greek lexica and English dictionaries.

CL affords us empirical evidence of what the most common (typical) meaning of a lexical item is. This should inform our exegesis since we should default to understanding it as the most common meaning, unless context indicates otherwise.

In chapter 4 we state that our premise in its simplest form is that combinations of words carry distinct meanings. In chapter 3 we alluded to this in our discussion of polysemy, the phenomenon that most words have more than one meaning. Different meanings of a polyseme are often associated with how the word is combined with other words to form a *unit of meaning*. In this chapter we discuss the various terminology used when discussing units of meaning, the process we used in deciding the sense of units of meaning, our approach to writing lexical definitions and an extended English example (*with*).

We discuss the different terminology for units of meaning and the issue of regular vs. fixed wording, as well as freedom in open and closed grammar. We also discuss computer terminology. We explain the approach we use in identifying which

collocations are markers of distinct meanings. We have an extended example of *with* to demonstrate this with English, using several COBUILD definitions.

We introduce the various terminology used in the literature to describe units of words which express distinct meanings, as well as the nomenclature common in computational studies. We explain the method we used in determining the meaning of lexical items in our study and in comparing our findings with the standard NT Greek-English lexica, various Bible translations and commentaries. We cite several English examples from the literature and discuss the analysis of *with* found in COB[4].

In chapter 5, we say that the goal of this study is to show how the application of CL to NT Greek lexical semantics can assist us in disambiguating polysemes and in differentiating near synonyms. It is our argument that specific senses can often be disambiguated by noting the collocations of the lexical item in question. We are not free to look up a word in a NT Greek-English lexicon and chose any of the listed definitions as applicable to a given NT verse. We must rather seek to determine which collocations are normally used with which meanings. Here we give more English examples of collocations which disambiguate.We also specify the difference between collocation and colligation, the latter referring the phenomenon of collocating with a grammatical structure.

In this chapter we define more clearly the concepts of collocations and colligations and offer several English illustrations. We then discuss the means of measuring the strength of a collocation (MI, t-score, z-score). And finally we use CL to define several senses of σύν, introducing its default meaning (two or more entities involved in the same activity) and the relative frequency and collocational indicators for a few of its rarer meanings (means, manner) and a possible idiolectic use in Philo. Our findings are applied to several NT verses, including 1 Cor 10:13 and 2 Cor 4:14, where σύν does not express contemporaneity or cause/result, but rather the default meaning which is being involved in the same activity (God made the πειρασμός and ἔκβασις; Jesus and believers resurrect).

In this chapter 6 we continue our examination of collocations for σύν as well as collocations for ζάω and δύναμις. Commentators have claimed that ζήσομεν σὺν αὐτῷ

in 2 Cor 13:4 refers to Paul being lively or vigorous when he visits the Corinthians. Our study of collocations show that it would be more natural to refer to Paul living, probably refering to the resurrection life of Christ in him.

In this chapter we examine δύναμις and the meaning when collocated with σύν, μετά and ἐν. With the two former, it usually means *with an army*, though only rarely for the latter. We showed the influence this had on our understanding of Matt 24:30, Mark 13:26, and Luke 21:27, that it could be speaking of Jesus coming with an army. We followed this with a discussion of the meaning of σὺν τῇ δυνάμει τοῦ κυρίου ἡμῶν Ἰησοῦ in 1 Cor 5:4, showing how collocations are beneficial for WSPD in this complicated verse. We discuss the interesting and possible interpretation that it means that Jesus will be present at the excommunication with his army, though show that it is not possible to firmly establish this meaning and that it would be wiser to understand it as the power of Jesus being gathered together with Paul and the Corinthians.

In chapter 7 we conclude our detailed study of collocations by examining the usage of συνίστημι and συνείδησις. We look in detail at συνίστημι in 363 uses, in our primary corpus and also in BDAG and LSJ. We discuss several of its senses especially as related to collocations (e.g., ἐκ, σῶμα, WARFARE). We examine and find wanting the claim that συνίστημι in Col 1:17 means *to cohere*, *to hold together*, and present evidence in support of the meaning *to bring into existence*, *to create*. Turning to συνείδησις we see that it means *conscience* when colligated with an evaluative adjective, but *consciousness* when colligated with a genitive phrase. We believe that the debate over its meaning in 1 Pet 2:19 can be resolved by noticing this colligation, and thus that there it means *consciousness*.

Using an unsupervised method we examine the differences between the near synonyms πλοῖον and ναῦς, and ἀγαπάω and φιλέω. We examin the common collocations of ἀγαπάω and φιλέω and present the possibility that ἀγαπάω collocates more naturally with Lord/God and is a reminder of the great commandment (Deut 6:5), and is thus gently significant in this passage.

In chapter 8 we discuss the issue of semantic preference. Sometimes a lexeme has a distinct sense when it is collocated, not with one specific word, but with any of a

group of words (semantic set) which share similar semantic features. We illustrate this with σύν when it is collocated with SMALLER PARTS, with TRANSPORTABLE ITEMS, or with FEATURES which are being emphasized.

Chapter 9 concludes this study. At the outset of this study we raised the following questions: Does a lexical item have a different meaning when accompanied by certain other words (*collocations*), by certain grammatical structures (*colligations*), and by words from certain semantic domains or sets (*semantic preferences*)? If so, can paying attention to the collocations, colligations and semantic preferences assist us in disambiguating polysemes in the GNT? Also, can we distinguish between synonyms in the GNT by observing their collocations, colligations and semantic preferences?

We have answered yes to the above questions and demonstrated this through the analysis of several lexical items and their interpretation in a number of GNT verses. We have shown how CL, which has been a fruitful method for the study of lexical semantics especially as applied to foreign language learning, can be applied in GNT lexicography.

A number of newer dictionaries for advanced learners of English have significantly improved their lexical entries through observations made by applying CL to their word meaning analysis. We believe that future Greek-English lexica can be improved by paying closer attention to structure in lexicography and that the application of CL to NT Greek lexicography will contribute to a better understanding of the meaning of many lexical items in the GNT. The findings of this study, therefore, are that NT Greek-English lexica would be improved if, based on findings from the application of CL, we were to add to our lexical entries information about each lexical item's collocations, colligations and semantic preferences.

This study is an initial inquiry into the use and application of structural lexicology for lexical semantics in the GNT. There is much that remains to be done if we desire to see this approach brought to fruition.

First, the HG corpus must be expanded. We were able to utilize two corpora with a combined 4 million tokens. This provided an initial point of departure, yet we believe that our lexicogrammatical conclusions for HG and the GNT would have been

on surer footing if we had had available to us a greater number of examples of a given node word with its collocations. As mentioned earlier, modern corpora are much larger than this.

Second, what is needed is a triparite lexicogrammar for HG. By this we mean that a reference work should be developed which includes an HG lexicon which is digitally linked to the HG corpus on which it is based and also linked to a grammar of HG usage. Through digital storage and hyperlinks it should be possible for a user to click on a lexical item in the HG lexicon and be given a real-time display of all HG usages in KWIC lines, which would then be sortable by collocations on positions from N-5 through N+5, and searchable by lemma, form, POS, tense, mood, voice, number and gender. This would be tied to an HG grammar which would function like a modern language usage guide, listing the settings in which the lexical items are used, complete with information about their collocations, colligations and semantic preferences. This would require a team of lexicographers working over a number of years with adequate corporate funding.