

# Granville Sharp's First Rule and Syntax Searching

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For better or worse, an application of the construction known as "The Granville Sharp Rule" has come to be a litmus test of search capability in Bible Software. Searches sensitive to syntax should be able to more specifically locate constructions to which Granville Sharp's first rule would apply.

This *Logos Bible Software White Paper* examines Sharp's rule to determine what it states in order to construct syntax searches that locate possible examples of the construction. Additionally, the nuance and flexibility provided by syntax searching is examined to determine how syntax searching can assist in the location of examples of Granville Sharp's first rule<sup>1</sup> in different syntactic contexts.

## Granville Sharp's First Rule

Granville Sharp, in his Remarks on the Uses of the Definitive Article in the Greek Text of the New Testament: Containing many New Proofs of the Divinity of Christ, from Passages which are wrongly Translated in the Common English Version, specified six rules that describe the use of the article. The one we commonly refer to as "Granville Sharp" is his first rule. It is important to review how Sharp himself specified his first rule in order to properly understand how to specify a grammatical structure to assist in locating potential instances. Sharp states the principle thusly:

When the copulative  $\kappa\alpha$  connects two nouns of the same case, [viz. nouns (either substantive or adjective, or participles) of personal description, respecting office, dignity, affinity, or connexion, and attributes, properties, or qualities, good or ill], if the article  $\dot{o}$ , or any of its cases, precedes the first of the said nouns or participles, and is not repeated before the second noun or participle, the latter always relates to the same person that is expressed or described by the first noun or participle: i.e. it denotes a farther description of the first-named person.<sup>2</sup>

Sharp's rule can be succinctly stated as an *Article-Substantive-*  $\kappa\alpha$ *i-Substantive* combination (TSKS)<sup>3</sup> where the second substantive has no article. Sharp's rule states that when the substantives are personal nouns and not proper names, then the two substantives can be safely

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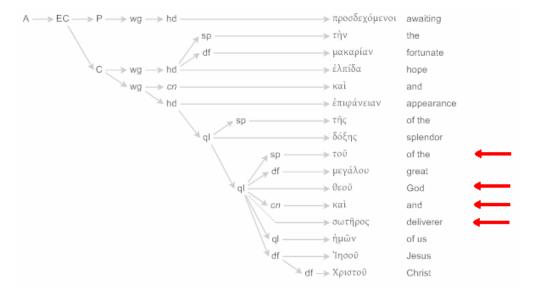
<sup>&</sup>lt;sup>1</sup> Sharp specified six rules on the use of definite articles in the New Testament, the rule commonly attributed to him is only his first.

<sup>&</sup>lt;sup>2</sup>Wallace, Daniel B. "Granville Sharp: A Model of Evangelical Scholarship and Social Activism" in *Journal of the Evangelical Theological Society* (41:605-606). The Evangelical Theological Society. 1998. Much of the background information on Granville Sharp in this paper is derived from Dr. Wallace's helpful article. Emphasis in the above quotation is Sharp's.

 $<sup>^3</sup>$  TSKS is how Wallace abbreviates article-substantive- $\kappa\alpha$ i-substantive in his grammar, so I continue its use here.



assumed to relate to the same person. Sharp applied this in Christological debates using Scriptures such as Titus 2.13:



According to Sharp's rule, in Titus 2.13 the personal nouns translated "God" and "Savior" (glossed "deliverer" above) refer to the same entity, thus supporting the deity of Christ.<sup>4</sup>

## Further Restrictions of Sharp's First Rule

Even Sharp's own statement of the rule isn't specific enough. Daniel B. Wallace, in his *Greek Grammar Beyond the Basics: An Exegetical Syntax of the New Testament*, provides further insight from Sharp on the application of his own rule:

Although Sharp discusses here only personal substantives in the singular, it is not clear from this statement whether he intended to restrict his rule to such. However, a perusal of his monograph reveals that he felt the rule could be applied absolutely only to personal, singular, non-proper nouns.

In other words, in the TSKS construction, the second noun refers to the *same* person mentioned with the first noun when:

- (1) neither is *impersonal*;
- (2) neither is plural;
- (3) neither is a *proper* name.

Therefore, according to Sharp, the rule applied absolutely *only* with personal, singular, and non-proper nouns. The significance of these requirements can hardly be overestimated, for those who have misunderstood Sharp's principle have done so almost without exception because they were unaware of the restrictions that Sharp set forth.<sup>5</sup>

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<sup>&</sup>lt;sup>4</sup> Daniel B. Wallace, *Sharp* Redivivus? *A Reexamination of the Granville Sharp Rule.*, pp. 32-45. Online: http://www.bible.org/page.asp?page\_id=1496. Accessed May 18, 2006.

<sup>&</sup>lt;sup>5</sup>Daniel B. Wallace. (1999; 2002). *Greek Grammar Beyond the Basics - Exegetical Syntax of the New Testament* (1:271-272). Zondervan Publishing House and Galaxie Software.



The crucial aspects that will lead to proper application of Granville Sharp's first rule involve restricting the substantives to instances in the singular number, ensuring that they do not involve use of a proper name, and ensuring that the substantives themselves are personal.<sup>6</sup>

## Locating Instances of Granville Sharp's Rule: Morphological Approaches

Using language to describe the search in morphological terms, an approximation of Granville Sharp's first rule can be stated as follows:

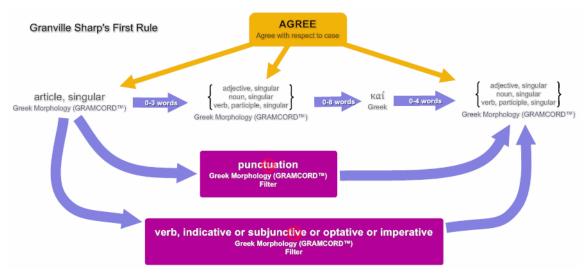
First, a singular article;

Second, a singular substantive which could be a noun, adjective, or a verb in the participle mood. It should agree in case with the preceding article;<sup>7</sup>

Third, the word καὶ;

Fourth, a singular substantive which could be a noun, adjective, or a verb in the participle mood. It should agree in case with the preceding article and the preceding substantive.<sup>8</sup>

This is a basic forumulation of Granville Sharp's first rule. Agreement in grammatical gender is not specified. Wallace notes that Sharp did not specify gender so the question as to whether he thought it applied is open. Therefore this particular formulation of Sharp's rule will allow for the possibility that gender does not agree, as is potentially the case in 1Jn 5.20. The query may be expressed in the Logos Bible Software Graphical Query Editor as follows:



<sup>&</sup>lt;sup>6</sup> For futher background and information on misapplication and misconception of Sharp's first rule, see Wallace, *Sharp Redevivus?*, pp. 6-13.

<sup>&</sup>lt;sup>7</sup> Since both are specified as singular in morphology there is no need to specify further agreement in number.

<sup>&</sup>lt;sup>8</sup> The substantives need not agree in part of speech. Cf. Wallace 1999, 275.

<sup>&</sup>lt;sup>9</sup> Wallace, JETS 41:4 p. 606, note 88 states, "Sharp did not specify that it must have complete grammatical concord, e.g. by also having the same gender. Thus whether Sharp would have applied his rule to 1 John 5:20 is not known."



This query returns 692 verses in the New Testament that potentially adhere to the TSKS construction. Note that this query includes constraints not stated above. These include:

- **Punctuation:** Specifying that no punctuation (major stops, or sentence-ending punctuation; and minor stops, such as commas) is to be present within the construction (from the first article to the last substantive).
- **Finite Verbs:** Specifying that no finite verbs appear in the construction.

Additionally, proximity constraints between TSKS elements have been specified. These constraints are actually based on hindsight. Wallace's listed TSKS instances<sup>10</sup> have been examined to determine the minimum proximity constraints to allow known TSKS instances to be located as search hits with the above query. These constraints include:

- **0-3 words** between the article and initial singular substantive (cf. Jn 5.24).
- **0-8 words** between the first singular substantive and καὶ (cf. Heb 7.1).
- **0-4 words** between καὶ and the second singular substantive (cf. Eph 2.14)

The goal of the above construction is to find as many *valid instances*<sup>11</sup> of the TSKS construction as possible without missing any. The query is thus necessarily broad. There are a few differences between this query and other possible implementations intended to locate TSKS constructions. These differences are:

- Including Nouns, Adjectives and Participles (all singular). Some examples of searching for TSKS constructions only search for nouns, or for nouns and adjectives, or for nouns and participles. Wallace notes 40 instances that include participles and six instances that include adjectives. The TSKS construction is about relationships between substantives, not simply relationships between nouns. To locate all potential instances, all three parts of speech must be specified in the query.
- No agreement in part of speech specified. This query locates where nouns, adjectives or participles occur on either side of the καὶ. This actually occurs in instances Wallace locates, e.g. Php 2.25<sup>12</sup> where a noun and an adjective are the substantives in an TSKS construction.
- No exclusion of articles within any portion of the TSKS construction. This seems a bit counterintuitive as one of the constraints of the construction is an anarthrous second substantive. However, there are some TSKS instances (e.g. Eph 2.14) that have articles that intervene between the substantives. Sharp's rule does not state that there are no articles between the first substantive and  $\kappa\alpha$ , or between  $\kappa\alpha$  and the second substantive. It only states that the second substantive is anarthrous. Thus the query must account for articles in these contexts in order to locate all valid TSKS instances.

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<sup>&</sup>lt;sup>10</sup> For the purposes of this paper, valid instances are the 80 listed by Wallace, *Sharp Redivivus*?, pp. 19-22; plus the christologically significant texts Titus 2.13 and 2Pe 1.1.

<sup>&</sup>lt;sup>11</sup> *i.e.*, Wallace's instances.

<sup>12</sup> Wallace, Sharp Redivivus?, p. 22.



Adding query support to account for some of these items will reduce the total number of hits located, but it will also rule out valid TSKS instances. For example, specifying that no article appear between the  $\kappa\alpha$  and the second substantive will reduce verse count from 692 to 378, but it comes at the expense of missing three valid TSKS instances (Eph 2.14; 1Jn 2.4; 1Jn 2.9). Filtering out articles between the first substantive and  $\kappa\alpha$  will similarly rule out valid TSKS instances (e.g. Eph 2.14). Removing articles between the article and first substantive will have similar effect (e.g. Mt 13.20; 27.40; Heb 12.2).<sup>13</sup>

The variation in number of words and morphology of words surround the elements of valid TSKS constructions is fairly vast. While a majority of the valid instances of the TSKS construction are relatively straightforward in construction, if the goal is to locate them all then the query must have broad constraints. The resulting list of hits to sift through will be large—approximately one valid instance for every nine false positives based on this particular query. Steps to reduce hit count, such as filtering out articles or ratcheting down on word proximities will result in false negatives.

## Locating Instances of Granville Sharp's Rule: Syntactic Approaches

Would a syntactic approach to locating TSKS constructions fare any better than the morphological approach?

Because Granville Sharp's first rule really involves relationships between different words and different groups of words along with morphological criteria, it makes sense to think about approaching a search for instances of Sharp's rule in the context of a syntax search.

A syntactically annotated New Testament allows for the searching of these sorts of grammatical relationships, but it will necessarily require more specificity in formulating the query. This is due to specifying both the morphological criteria and agreement for each term along with syntactic relationships between terms and larger syntactic structures. *The OpenText.org Syntactically Annotated Greek New Testament* (SAGNT) is used in the balance of this section.

## **Connectors versus Conjunctions**

In the OpenText.org SAGNT, the word-level annotation (morphology and dictionary forms of words) relates strictly to the context-free morphological form of the word. Distinctions that involve the function of the word in a particular context are, for the most part, taken care of at higher levels of annotation—the word group level and the clause level.

This has direct bearing on searching for potential instances reflecting Granville Sharp's rule because of how conjunctions such as καὶ are handled. At the word level, OpenText.org has no morphological part of speech called "conjunction". Things that other morphologies would label a conjunction are simply called particles. If the particle serves to join words or word groups, it is

<sup>13</sup> Wallace, Sharp Redevivus?, pp. 19-22.



labeled as a *connector* and works within word groups in the same way that modifiers do. If the particle serves to join clause components or even clauses, it is labeled a *conjunction* and works within clauses in the same way that clause components do.

This is important because the TSKS construction is based on the relationship between substantives—nouns, adjectives and participles. In the OpenText.org SAGNT, nouns and adjectives are joined with *connectors*, participles (verbal elements usually represented in embedded clauses) are joined with *conjunctions*. This distinction in the level of annotation at which the particle functions means that, when looking at Granville Sharp's first rule from a syntactic perspective, one likely needs to run two queries: one with  $\kappa\alpha$  as connector joining nouns and adjectives within and between word groups, another with  $\kappa\alpha$  as conjunction joining clause components.

## **Nouns and Adjectives Joined with Connectors**

Nouns or substantive adjectives could be joined in two primary syntactic contexts: within a series of modifiers working within a word group, or between word groups. One syntax query, utilizing an object-level "OR", can be written to account for both of these contexts.

#### **Connecting Word Groups**

The basic query to locate TSKS constructions could look something like this:

```
Clause Component
Word Group
Head Term
Modifier: Category = Specifier
Word: Part-of-Speech = article
Modifier: Category = Definer, Qualifier. May Repeat 0 to 1 times
Word: Singular noun or adjective

Word Group
Connector
Word: Lexeme: καὶ. Any descendant.
Head Term
Modifier: Category = Specifier. Not Present.
Word: Case = agree with previous substantive. Singular
```

To locate the TSKS construction when nouns or substantival adjectives are in adjacent word groups, the basic assumption is that the TSKS is contained within the same clause component.<sup>14</sup> The component is specified to contain two word groups. The first word group contains the head term, which includes the primary term of the word group and all modifiers acting upon the head term. The second word group contains a connector, which is outside of the head term but inside of the word group, and the head term.

<sup>&</sup>lt;sup>14</sup> This, of course, allows for searches unique to syntax databases, e..g., "does the TSKS construction occur within a clause subject? complement? adjunct?"

<sup>&</sup>lt;sup>15</sup> Actually, is a "sibling" to the head term. They are at the same level of annotation, thus are siblings within the parent word group.



#### Word Group 1: Specifying the Article

Within the first word group, the relationship between the article and the substantive it modifies must be specified. When stating searches using strictly morphological terminology, this involves specifying not only part of speech (definite article) but also specifying agreement (concord) between the article and another word. Additionally, morphologically based searches usually involve specifying a proximity limit, a number of words that may occur between the article and its substantive. In English, this could look like:

Find a word that is an article that occurs *one to three words* before a noun or adjective where the noun or adjective *agree with* the article in case, number and gender.

This sort of search would return a search hit with an article and a potentially related noun or adjective. The results would need to be reviewed in order to determine which were appropriate. Additionally, only instances where the article is within one to three words of the substantive would be located. Instances where the article is far removed would not be located at all.

The OpenText.org SAGNT is different in that it not only specifies morphological classification, but it also specifies modification relationships between words. One of the modification relationships noted is that of *specification*. This relationship is defined as follows:

**Specifier:** A *Specifier* is a modifier that classifies or identifies the word it modifies. Common examples of specifiers are articles, *e.g.* ή ἀδελφή, and prepositions, *e.g.* ἐν δόξη. In a prepositional phrase such as εἰς τὸν λόγον, both εἰς and τὸν are specifiers of λόγον.  $^{16}$ 

Therefore, in terms of the OpenText.org SAGNT, in order to locate where an article modifies a substantive, one simply needs to look for that relationship. In English, this could look like:

Find a *specifier* that is an article and the *head term* it directly modifies.

In this instance, the relationship itself is more important than the morphological criteria and proximity of words that approximate the relationship. This is an important distinction. It allows one to begin to consider searching in terms of relationship between words and larger-level clausal units. It is a bit of a shift in thinking, particularly when searching tools in Logos Bible Software<sup>17</sup> and other Bible software have been geared toward analysis only at the level of morphology, but making the shift allows for different sorts of queries (*e.g.*, where [word] is subject and [word] is predicator) and more detailed and accurate methods of stating existing sorts of queries. The example of locating nouns and adjectives along with their articles falls into the latter category.

In this instance, in the context of the TSKS construction, two different word groups are assumed and the connection between these word groups is based on the head terms. Thus each head term of each word group should be the noun or article. The first word group, therefore, could look soemthing like this:

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<sup>&</sup>lt;sup>16</sup>Porter, S., O'Donnell, M. B., Reed, J. T., Tan, R., & OpenText.org. (2006; 2006). *The OpenText.org Syntactically Analyzed Greek New Testament Glossary*. Logos Research Systems, Inc.

<sup>&</sup>lt;sup>17</sup> i.e. the Greek and Hebrew morphological search dialogs and particularly the Graphical Query Editor.

 $<sup>^{\</sup>rm 18}$  That is, the word within the head term that everything else in the head term modifies.



```
Word Group 1

→ Head Term 1

→ Modifier 1: Category = Specifier

→ Word 2: ((Part-of-Speech = article))

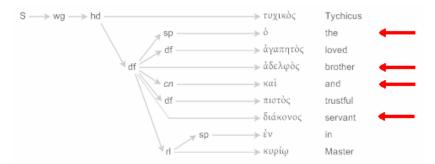
Add: Word / Any / Gap / OR

→ Word 1: ((Part-of-Speech = adjective AND Number = singular) OR (Part-of-Speech = noun AND Number = singular))
```

Here, the modifier (a specifier) occurs before the word (Word 1) it modifies, a singular noun or adjective. The modifier itself contains another word, it is morphologically classed as an article. In this way, both morphological criteria and syntactic criteria are used to specify this portion of the query.

Note that the order in which the terms are specified is the order that will be located. So this will locate items where the article precedes the word it modifies. No proximity information (*i.e.*, within one to three words) is specified. The relationship is specified; the order and hierarchy of objects is specified. This information forms the basis of the query.

One complication known from examining Wallace's grammar, however, is that the substantive (Word 1 in the above graphic) may have words that further modify the substantive, such as in Eph 6.21:



In Eph 6.21,  $\mbox{a}\gamma \mbox{a}\pi \mbox{d} \mbox{c}$  (beloved) modifies the noun  $\mbox{a}\delta \mbox{a}\lambda \mbox{d} \mbox{c}$  (brother). So this is an option that needs to be accounted for in the syntax query. Thinking syntactically in terms of the OpenText.org SAGNT, this simply means that there may be another modifier between the specifier and the head term itself. That modifier could be anything, one word or a heavily nested series of words. But it is still just a modifier.

```
Word Group 1

→ Head Term 1

→ Modifier 1: Category = Specifier

→ Word 2: ((Part-of-Speech = article))

→ Modifier 2: Category = { Definer, Qualifier } — May Repeat 0 to 1 times

Add: Modifier / Connector / Word / Any / Gap / OR

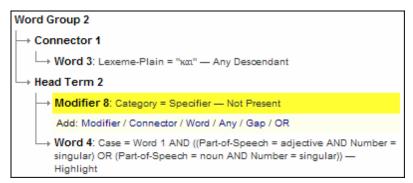
→ Word 1: ((Part-of-Speech = adjective AND Number = singular) OR (Part-of-Speech = noun AND Number = singular))
```



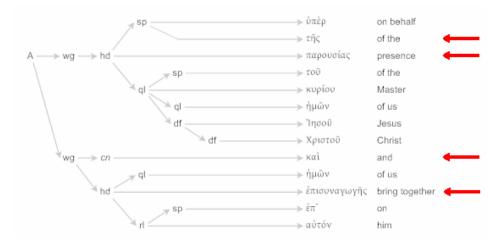
In the above example, the highlighted modifier is optional. it may occur once, or it may not occur at all. No matter what sort of structure the modifier contains, if it occurs it will be accounted for.

#### Word Group 2: Specifying the Connector and Second Head Term

The second word group contains two primary elements, the connector and the head term. The connector contains a word that is  $\kappa\alpha$ , the head term contains a word that is singular and agrees in case with the substantive in the previous word group. Note that, like above, a modifier may appear before the primary word of the head term. To meet Granville Sharp's specification, that modifier cannot be a specifier. For this word group, then, the first component listed is a modifier that is a specifier that is marked as "Not Present".



This results in search hits as one would expect, but also allows hits such as 2Th 2.1:



Note that 2Th 2.1 does not fit Wallace's statement of Sharp's rule. But morphologically and syntactically, it fits his specification of the rule, so it shouldn't be overlooked or ignored.

## **Connecting Modifiers Within Word Groups**

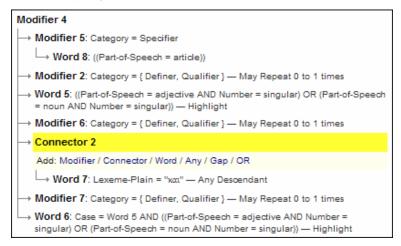
The second part of the query accounts for relationships similar to those specified above. However, instead of joining word groups, in this portion the connector joins modifiers. Therefore, the object of this portion of the search really is a modifier that contains the morphological and syntactic structure specified by Granville Sharp's first rule.

```
Modifier: Category = Specifier
Word: Part of Speech = article
```

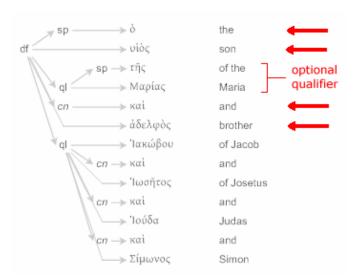


Modifier: Category = Definer, Qualifier. May Repeat 0 to 1 times. Word: Singular noun or adjective Connector
Word: Lexeme: καὶ.
Modifier: Category = Definer, Qualifier. May Repeat 0 to 1 times. Word: Case = agree with previous substantive. Singular

The structure of this query is much the same as the previous query that spanned word groups only without the word group boundaries. The order of items is specified, with optional modifiers accounted for, and proper morphological criteria and agreement specified. In the Syntax Search dialog, the structure of the query looks like this:



The order of the structure within the modifier, including optional modifiers, is specified; proximity units are not. The query relies on relationships between words instead of nearness constraints. An example of a hit with the first substantive modified by an optional qualifier would be in Mark 6.3:



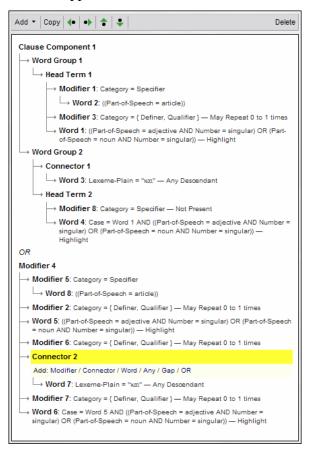
Mark 6.3 is, according to Wallace, an instance of Granville Sharp's first rule applied. This instance also shows the flexibility of criteria allowed through optionally specifying an additional modifier. Morphologically stated queries would necessarily rely on order and proximity to account for these sorts of qualifiers.



Additionally, in regard to morphological queries, this example shows why disallowing articles between the first article and the last substantive could result in false negatives; seeing a structure as not qualifying as a hit when in reality it should qualify as a hit based on the relationships between syntactic components.

#### The Entire Query for Examining Connections

The query below implements the approaches mentioned in the above discussion.



This query returns 119 instances in the OpenText.org SAGNT. These instances are not all bona fide occurrences illustrating Granville Sharp's rule as the nature of the noun (is it a "personal" noun?) has not been taken into account.

## **Considering The Results**

Some checking of the hits can be done. Wallace, in his article *Sharp* Redivivus? *A Reexamination* of the Granville Sharp Rule, comprehensively lists all instances of the TSKS construction in the New Testament broken down by whether the substantives are nouns, adjectives, participles, or "mixed". <sup>19</sup> He lists instances that have direct Christological significance in a separate section. <sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Wallace, Sharp Redivivus?, pp. 19-22.



Wallace's instances total 82. His list allows a check to see if the results from the above search are accurate.

**Noun-based structure:** Of the verses Wallace lists, this syntax search does not locate 1Ti 6.15. This is due to the OpenText.org SAGNT marking of one noun as *vocative* and the other as *nominative*, preventing agreement matching on case. This case difference will be resolved in a future version of the OpenText.org SAGNT.

**Participle-based structure:** See <u>Considering the Results</u> below in regard to substantive participles joined by conjunction.

Adjective-based structure: This syntax search locates all of Wallace's listed instances.

Mixed element structures: Of the verses Wallace lists, this syntax search misses 1Ti 5.5. This is due to the  $\kappa\alpha$ i joining a noun with a participle as the predicator of an embedded clause. This type of TSKS construction can be located syntactically, but it will involve a separate search or an 'OR' portion to an existing search. Note, however, that any search (syntax search or morphology search) that relies on agreement in part of speech—that is, both substantive must be nouns, or both must be adjectives, or both must be verbs—will not locate any of these mixed element structures.

False positives related to Christologically significant passages: Wallace lists the following false positives that Sharp himself included. Two rely on "dubious textual variants" (Ac 20.28; Jude 4, this syntax search locates the Jude 4 reference) and four include proper names when such are explicitly ruled out in Sharp's own construction of his rule (Eph 5.5; 2Th 1.12; 1Ti 5.21; 2Ti 4.1; this syntax search locates all of these).

**Christologically significant passages:** Of the verses Wallace lists, this syntax search misses 2Pe 1.1. This is due to erroneous annotation of modifiers which will be corrected in a future version of the OpenText.org SAGNT.

## Participles Joined with Conjunctions

The basic query to locate instances of Granville Sharp's first rule where the substantives are participles in adjacent embedded clauses could look something like this:

```
Clause: Level = Embedded
Clause Component: Category = Predicator
Word Group
Head Term
Modifier: Category = Specifier
Word: Part-of-Speech = article
Modifier: Category = Definer, Qualifier. May Repeat 0 to 1 times
Word: Verb, Participle, Singular
Clause: Level = Embedded. May Repeat 0 to 1 times.
Clause: Level = Embedded
```

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<sup>&</sup>lt;sup>20</sup> Wallace, *Sharp Redivivus*?, pp. 32-34. There are two passages that Wallace classes as valid TSKS instances: Titus 2.13 and 2 Peter 1.1.

<sup>&</sup>lt;sup>21</sup> Wallace 1999, 276.



```
Conjunction
Word Group
Head Term
Word: Lexeme: καὶ

Anything
Clause Component: Category = Predicator
Word Group
Head Term
Modifier: Category = Specifier
Word: Part-of-Speech = article
Word: Verb, Participle, Singular;
Case = agree with previous substantive. Singular
```

The Head Terms that contain the substantive elements are similar to the head terms in the word group based query apart from morphology of the substantive. This query differs, however, in the clause-level structure enforced. The structure is an embedded clause with articular participle as predicator, followed by an optional embedded clause (discussed below), followed by another embedded clause that contains  $\kappa\alpha$  as a conjunction<sup>22</sup> and a non-articular (yet substantive) participle that agrees in case with the previous participle. Everything else—the optional modifiers and the "anything" block at the clause component level—help with the flexibility of the query.

One complication of the query of embedded clauses can be seen in 1Jn 2.4, which has an embedded subordinate clause between the initial articular substantive and the  $\kappa\alpha$ :



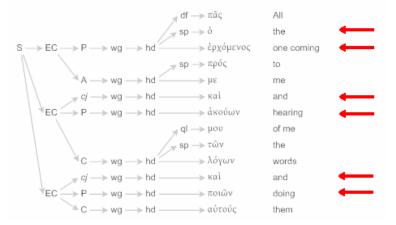
This example also shows the problem with assuming that no articles will exist between the  $\kappa\alpha$ i and the second substantive. In this case, the complement of the third clause has an articular noun structure before the predicator that contains the substantive. This instance, a valid TSKS instance according to Wallace, <sup>23</sup> would not be located if articles were filtered out of the query.

Because of the possibility of embedded clauses intervening between the substantives, an optional embedded clause is inserted into the query. This has the added benefit of locating multiple hits when, in contexts like Luke 6.47, there are multple  $\kappa\alpha$ i+anarthrous substantive structures likely linked to a preceding articular substantive:

<sup>&</sup>lt;sup>22</sup> While the query specifies a structure of Conjunction -> Word Group -> Head Term -> Word, it could simply specify Conjunction -> Word as long as the "Must be an immediate child of parent" option in the Word element options dialog is unchecked.

<sup>&</sup>lt;sup>23</sup> Wallace, *Sharp Redivivus?*, p. 21.

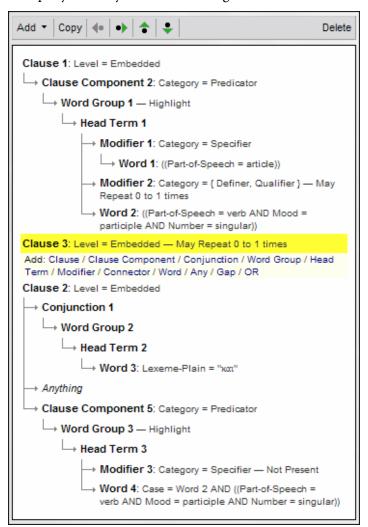




The addition of the optional embedded clause will cause the search results to list two instances in Luke 6.47, alerting the user to the possibility of continuing structures such as this.

#### The Entire Query for Examining Conjunctions

The formulation of the query in the Syntax Search dialog is below:





The first and last clauses in this formulation are roughly analogous to the two word groups in the previous formulation of the query.

This query returns 62 instances in the OpenText.org SAGNT.<sup>24</sup> Again, these instances are not all bona fide occurrences illustrating Granville Sharp's rule as the nature of the substantive has not been taken into account. But it is a smaller list. The earlier described morphological search returned 692 instances. Both syntax searches, with results combined, return 181 instances to evaluate.

#### Considering The Results

Wallace lists 39 instances of "Participles in the TSKS Personal Construction". 25 Of those 39 instances, the above query locates all but one. The instance not located is Acts 10.35. This is due to a discrepancy that will be adjusted in a future release of the OpenText.org SAGNT.

### **Conclusions**

As mentioned above, Granville Sharp's first rule has become a litmus test of sorts for searching capabilities of Bible Software products. This is because it is a rule that involves concepts that are familiar to most students of Hellenistic Greek: the relationship between words joined by καὶ.

Because of this, Granville Sharp's first rule has often been stated in morphologically flavored terminology: An article, followed by its substantive, followed by καὶ, followed by an anarthrous substantive that agrees in case with the previous substantive. The article and both substantives are singular in number. They likely agree in gender, but this may not necessarily be a requirement.<sup>26</sup>

When making a formulation of this rule using Logos Bible Software's Graphical Query Editor, a relatively clear form of the rule can be specified. But it returns 692 hits. Wallace notes that he has isolated 82 instances<sup>27</sup> that meet Granville Sharp's requirements. This means that one must sift through 692 hits to find 82; throwing out nearly 90% of the potential instances. Efforts to reduce the 692 hits using seemingly appropriate constraints (filtering articles, lower proximity constraints, part of speech agreement) do reduce total hits, but they also miss valid TSKS instances.

<sup>&</sup>lt;sup>24</sup> Note that some of these instances (e.g. Lu 6.47) are duplicates due to a string of καὶ+anarthrous substantive constructions after the articular substantive, as explained above.

<sup>&</sup>lt;sup>25</sup> Wallace, Sharp Redivivus?, pp. 20-21.

<sup>&</sup>lt;sup>26</sup> cf. 1Jn 5.20, where a masculine and femine noun may reflect Sharp's first rule. Because of this possibility, the queries in this paper do not specify agreement in gender, but only case. Agreement in number is implicit as all elements are specified as singular in number.

<sup>&</sup>lt;sup>27</sup> Wallace 1999, 273 notes 80 instances that are "not christologically significant"; he then lists two passages (Titus 2.13; 2Pe 1.1) as christologically significant (p. 276).



Syntax searching, on the other hand, returns a total of 181 instances including 81 of the 82 valid instances of the TSKS construction.<sup>28</sup> Understandably, searching based on syntax involves a bit of a shift in thinking and approach. Users of Bible software are used to thinking about such problems in morphologically-based terms along with some word proximity allowance. But shifting thinking to a syntactic context allows greater specificity in the formulation of queries. These syntactically informed queries, then, show promise of holding a larger proportion of hits relevant to the desired grammatical context.

In other words, specifying relationships with syntactic queries holds more promise for searching than approximating the same relationships with a combination of morphology, proximity and agreement. Syntax queries build on the foundation of morphology, proximity and agreement—all of these are useful and necessary capabilities—but they allow for the specification of relationships between words and between higher-level units. This innovation lifts the burden from morphological information and allows it to play the role it needs to play—that of providing word-level searching flexibility through specification of morphological criteria. Syntax, then, assists in the specification of relationships between morphological units and between other higher level units, such as clause components, word groups and modifiers.

It is this combination of syntax and morphology, applied to the text and made searchable, that offers capability to exegesis that has not before been available. It will be interesting to see where it leads.

## **Epilogue: A Personal Note**

Interestingly, as I worked through creating both the Graphical Query example and the Syntax Search examples, I found the process was relatively the same. The process involved conceiving of a very general form of the search with loose constraints, and then searching for it to see how many hits were found. The next step was thinking of ways in which the returned hits could be narrowed. That is, ways in which the general search could be modified to reduce false positives. This process happened both when thinking about the morphologically based search and when thinking about the syntax based searches.

The surpising thing was to realize that the basic process for both types of searches, in abstract, is exactly the same: posit, search, analyze, refine.

Even though the process is the same, in abstract, there are two primary differences between searching with consideration to morphology along and searching with consideration to syntax and morphology.

The first is a difference of vocabulary. We're used to thinking in terms of morphology when describing these sorts of things, so it is easier to apply morphological thinking to our query construction. We have not always been used to thinking of complex searches in terms of

<sup>&</sup>lt;sup>28</sup> And, as mentioned above, the last instance (1Ti 5.5) could be located with a syntax query that searches for where an articular noun or adjective is joined with a participle in an embedded clause by a connector. This search is left as an exercise to the reader.



morphology. But it has become its own *lingua franca* among exegetes and grammarians who look into these sorts of things. As tools with more capability in specifying proximity and morphological constraints have developed, this *lingua franca* has been reinforced to the point that other parties with interest in searching the Bible have picked up the lingo and begun to think in these terms as well. Syntactically annotated texts like the OpenText.org SAGNT<sup>29</sup> necessarily introduce new terms and concepts precisely because they are pioneering new levels and dimensions of text annotation. Understanding this new vocabulary—a new (or at least modified) *lingua franca*, if you will—is necessary and profitable for those interested in this sort of work.

The second is a difference of scope. Searching with sensitivity to syntax builds on the foundation that has been built up around the *lingua franca* of morphologically based searching. But syntax searching takes into account not only information about each word, but the function of groups of words, the relationships between words within groups and the relationships between the groups. Allowing all of this sort of information to be queried in one place is a massive change in scope. This can have effect simply in limiting proximity to one group instead of an arbitrary number of words, or it can involve more invovled relationships as some of the queries in this paper display.

To realize this is to realize that using syntactic and morphological information within the syntax databases implemented in Logos Bible Software is not an *either/or* proposition. It is a *both/and* proposition. The overall abstract process is much the same. Once one gains familiarity in with the vocabulary and scope of these databases, one will be able to ask much more detailed questions of the text, retrieving results that specifically adhere to the morphological and syntactic criteria desired.

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<sup>&</sup>lt;sup>29</sup> And other syntactically annotated texts available for Logos Bible Software, including *The Hebrew Bible: Andersen-Forbes Phrase Marker Analysis*, and the in-development *Lexham Syntactic Greek New Testament*.