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Chapter 7. Conclusions

This thesis set out to examine word order in the Koine Greek of the New Testament. I focused on the following domains: declarative clauses, questions, and relative clauses. The important questions were what the basic or neutral word order of the language is, and how the orders are derived. In this final chapter, I summarize the findings of my study.

In Chapters 2 and 3, it was shown that NT Greek is best described as VSO language. It has an SVO alternative basic order, which has been claimed to be the case for all VSO languages (Greenberg 1966).

In Chapter 2 I discussed the notion of basic word order. I illustrated the different conclusions found in previous work on NT Greek basic word order, showing that the conclusions vary based on many factors. For example, it seemed to vary based on which books are examined, and based on which types of clauses are considered. Also, different conclusions stemmed from differing ideas of what basic word order is. I conducted a survey of main declarative clauses in four books of the NT: Matthew, Luke, First Corinthians and Revelation, looking at the relative positions of subjects, verbs and objects. The results are repeated in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>Matthew</th>
<th>Luke</th>
<th></th>
<th>Cor</th>
<th>Revelation</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO</td>
<td>52</td>
<td>14</td>
<td>8</td>
<td>11</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>VSO</td>
<td>7</td>
<td>13</td>
<td>0</td>
<td>12</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>SOV</td>
<td>2</td>
<td>5</td>
<td>13</td>
<td>1</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>OVS</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>VOS</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>OSV</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>64</td>
<td>37</td>
<td>29</td>
<td>24</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Word orders in four books (Table 4, Chapter 2)

I took the view that the frequency of occurrence is not the most important factor in determining what the most basic word order is. For one, frequency of occurrence seems to be somewhat skewed by particular text types. For example, in Matthew, SVO is attested 52 times, but 38 out of these instances occur in the genealogy list. Secondly, taking the Greenbergian approach (Greenberg 1966) in defining markedness as being directly related to frequency is problematic given that most frequently, clauses do not contain both subjects and objects in this language. Clauses with null subjects are very common in the text.

My study was intended to assist in creating generalizations about the types of constituents that occur in these orders and what their status is to the broader context, rather than to weigh their relative frequencies. I adopted the view that a neutral clause is one in which any given constituent is not topic or focus material. Both
VSO and SVO seem to occur in such clauses. The VSO and SVO sentences in (1) and (2) are repeated from Chapter 2 (examples (16) and (17) therein).

(1) VSO clause

\[
\text{élaben dè p̄óbos pántas}
\]

\[
\text{seize.3SG.AOR.IND.ACT PCL fear.NOM.SG.M everyone.ACC.PL.M}
\]

‘And everyone was afraid, (and they glorified God, saying, ‘A great prophet is risen up among us’ and, ‘God has visited his people’).’

(2) SVO clause

\[
\text{kaì ékstasis élaben hápantas}
\]

\[
\text{and amazement.NOM.SG.F seize.3SG.AOR.IND.ACT everyone.ACC.PL.M}
\]

‘And everyone was amazed, (and they glorified God, and they were filled with fear, saying, ‘We have seen strange things today’).’

I showed that there are trends for particular lexical items such as reflexive pronouns to occur as subparts of subject and object constituents in SOV clauses. Another example is the property of constituents preceded by the particle \textit{kai} occurring in SOV and O-initial orders. I described this using the somewhat vague term ‘emphasis’. It was shown that subjects in SVO strings are often pragmatically marked, appearing to constitute topic material, just having been introduced or specified. Similarly, Objects in O-initial clauses showed this property. The marked properties of constituents across word orders are repeated here as Table 2.

<table>
<thead>
<tr>
<th></th>
<th>SVO</th>
<th>SOV</th>
<th>OVS</th>
<th>OSV</th>
<th>VSO</th>
<th>VOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S is emphasized</td>
<td>Yes (37)</td>
<td>No</td>
<td>Yes (1 Cor 12:11)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>O is emphasized</td>
<td>No</td>
<td>Yes (26)-(29)</td>
<td>Yes (Lk 2:35)</td>
<td>Yes (25)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>S is just specified</td>
<td>Yes (34), (36)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>O is just specified</td>
<td>No</td>
<td>No</td>
<td>Yes (23)</td>
<td>Yes (24)</td>
<td>No</td>
<td>Yes (Lk 16:14)</td>
</tr>
<tr>
<td>Contrast with parallel clauses</td>
<td>Yes (33)</td>
<td>Yes (15)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 2: Marked properties of word orders (Table 5, Chapter 2)
Given that SVO and VSO are both significantly attested at least in some books, and that they are both found as neutral clauses led me to narrow down the basic word order to SVO and VSO. The fact that both seemingly neutral clauses and clauses that are clearly pragmatically marked are found in SVO orders indicated that while an SVO surface string is described as a single entity, there is a structural duality among SVO clauses. To gain more insight into the structure of SVO and VSO clauses, and determine which of these is the underlying order, I examined the SVO-VSO alternation from a cross-linguistic and theoretically oriented perspective in Chapter 3.

In Chapter 3, I argued that NT Greek is a verb-initial (VSO) language with an SVO alternative basic order. Regarding the syntactic position of verbs, theoretical considerations such as the correlation between rich inflection and V to T movement suggest that verbs raise at least to T in this language. It was, however, difficult to determine whether verb movement proceeded beyond T or not. That is, given the data available, TP could not always be clearly distinguished from CP. Digital searches of instances of adverbs collected from NT lexica were not revealing as to whether there is a strict ordering of adverbs. Had such an ordering been apparent, it would have been possible to use adverbials as landmarks between TP and CP, adopting for example the theory developed in Cinque (1999). Adverbs are commonly found string-initially, and appear to be topicalized, therefore not providing firm landmarks.

The relative position of verbs and the modal particle ἀν, at first sight, might seem to be a useful tool in distinguishing TP from CP. It has been argued that in Classical Greek, this particle instantiates the Fin(iteness) head in Rizzi’s (1997) version of the left periphery (Roussou 1998). If this were the case in NT Greek, one could say that there is both V to T and V to C movement, since verbs are found both following and preceding the particle. However, unlike Classical Greek, the NT Greek modal particle always occurs in second position. It is therefore not necessarily a firm landmark for identifying the syntactic projections of the elements surrounding it. The distribution of ἀν in Classical and NT Greek is a very interesting avenue for future research.

One diagnostic that I used to identify verbs that were in C was the inferential or illative particle ἀρα. This particle is clearly not a second position particle. Therefore, it is a more solid landmark for identifying syntactic positions. It likely heads an evidential projection in the left periphery. Along with CP material such as wh-interrogatives and question particles, verbs are occasionally found preceding this particle. This diagnostic was useful in identifying certain verbs as being in a high C projection; however, it did not provide a firm barrier between T and C. As shown in Chapter 5, the particle is very high in the left periphery, since left peripheral

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85 There are many complications with the particle. It is traditionally viewed as distinct from the conditional particle ἀν, which is the reduced form of the conditional ἀν. In Modern Greek, ἀν is a conditional particle, which does not occur in second position (Jannaris 1898: 419). The Koine Greek of the NT represents an intermediary stage between Classical and Modern Greek, and is therefore relevant for a diachronic investigation of the modal/conditional.
material is found following it. It is therefore possible that there is a V to C operation in declaratives, but there is nothing to differentiate this from V to T in most instances.

Concerning subject positions, it was argued that subjects occur inside the VP/vP, based on the fact that VP level adverbials are found preceding subjects. Also, shifted pronominal objects occur following verbs and preceding subjects. Recent research has shown that shifted pronouns in various languages target a projection of vP (Chomsky 2000; Richards 2004). This indicates that postverbal subjects are vP-internal. Concerning preverbal subjects, it was shown that certain types of subjects such as specific indefinites and negative quantifiers are not in the Spec,T subject position. This was based on the parallel (preverbal) distribution of negative quantifier objects and specific indefinite objects or genitive complements. Also, negative quantifier subjects were shown to be separated from verbs by argument and adverbial material, suggesting they are higher than Spec,T. Thus, even subjects that one would expect to be in Spec,T really do not seem to be. The only evidence for the Spec,T subject position comes from the fact that a few seemingly neutral clauses, namely the situational sentences, show the SVO order ((2) above).

The possible derivations for SVO and VSO clauses are summarized in (3). The arrows with dashed lines indicate movement that does not always take place.

(3)

The verb consistently moves to T, and in some instances moves to C. DP subjects remain in the VP, move to Spec,T, or move to a left peripheral topic projection.

In summary, the facts discussed in Chapter 3 suggest that although SVO is the most frequent order, the language is verb-initial. Looking at relative frequencies of clauses containing overt subjects, verbs and objects makes the frequency approach counter-intuitive, as mentioned above. The null subject property that this language displays can be related to its verb initial nature. That is, there is no obligatory Spec,T subject projection projection, along the lines of Alexiadou & Anagnostopoulou (1998). In less formal terms, this means that the rich person and
number agreement on verbs allows the subjects to be null. In this language, when subjects are overt, they are often pragmatically marked in preverbal position.

In Chapter 4, I investigated the marked word orders identified in Chapter 2. These were O-initial and SOV clauses. In order to account for these word orders, I examined topicalization and focus constructions in detail. This is difficult in a dead language, where we have no access to intonational countours. This is a valuable tool in distinguishing topics from foci. To gain a better understanding of topicalization and focusing in this language, it was necessary to first abstract away from the marked clauses discussed in Chapter 2, and to consider isolated instances of topics and foci. In particular, I looked for specific lexical items that are associated with topic and focus. For example, I investigated the focus particle *kat*, which places focus on the constituent that it directly precedes. In most of the instances I discussed, the focus was additive. I also examined corrective focus constructions of the form ‘not *x*, but *y*’ and ‘*x*, and not *y*’, and the adverb *mónon ‘only’*, which is indicative of exhaustivity. Regarding topics, I investigated the ‘as for’ topic marker, the preposition *peri*. With this strategy, it is possible to conduct digital searches with the *Thesaurus Linguae Graecae*, which provides one with many instances, from which it is possible to form generalizations. Another strategy I used was to look at narratives, in which new participants are introduced and re-introduced, and topics of discourse are shifted. This research showed that foci are often fronted, but are also found in what appears to be their base position. Topics are very often fronted, but I have not examined the issue of postverbal topics, since these are more difficult to identify, and the main focus was on the left periphery.

Recent research on the left periphery has suggested that the hierarchy proposed by Rizzi (1997) should be modified. In particular, it has been argued that Top(ic)P is not recursive (Benincà & Poletto 2004; Frascarelli & Hinterhölzl 2007). The latter authors argue that different varieties of topics occur in a specific order. They distinguish subvarieties of topics, based on different intonational contours. In the Italian clause, Topic projections are ordered such that shifting topics (in ShiftP) precede contrastive topics (in ContrP), contrastive topics precede foci (in FocP), and foci precede familiar topics (in FamP). In my view, the NT Greek data provide many instances of the order focus > familiar topic. There is also a strong indication that contrastive topics and shifting topics precede foci. However, there is no strong indication that shifting topics and contrastive topics co-occur in a particular order. This seems to be partly due to the fact that it is difficult to distinguish shifting topics from contrastive topics without access to intonational evidence. What appear to be shifting topics often carry contrast. I proposed the hierarchy of Topic and Focus projections in (4).

(4) TopP > FocP > FamP

Returning to SOV and O-initial clauses, it was shown that in many instances of SOV clauses, one element is a topic and one a focus. In many instances, subjects are shifting or contrastive topics, and objects are foci. In others, subjects are foci and objects are suggestive of familiar topics. Thus, SOV clauses are derived through
movement of both constituents to the left periphery. They further re-enforce the level of discourse projections in (4).

In Chapter 4, I also resumed the issue of the position of fronted quantifiers, namely, universal and negative quantifiers. As concluded in Chapter 3, preverbal negative quantifiers occur in the left periphery. The distributions of universal and negative quantifiers suggest that they are foci. I suggested that they undergo focus movement, in parallel with what has been argued for Modern Greek fronted negative quantifiers (Tsimpi & Roussou 1996). In some instances, however, quantifiers did not appear to occur in the Focus projection, particularly those that were referential. I suggested that quantifiers that are referential and linked to the discourse might be topicalized (Giannakidou 2000, 2006 concerning Modern Greek).

Chapter 5 was an investigation of word order in yes-no and content (wh-) questions. I focused both on the relative positions of subjects and verbs, and on the position of question particles and wh-interrogatives in the left periphery.

I concluded that there is no strong evidence for a movement operation distinct from canonical V to T movement in declarative clauses. There was shown to be a strong predominance for wh-VS orders among object questions, while adjunct questions such as “how”, “where” and “why” and yes-no questions showed similar word order variation as declarative clauses. That is, wh-SVO, wh-VSO and wh-SOV are all attested. At first, this was indicative of an argument versus adjunct asymmetry, and it suggested that V to C movement applies in object questions, forming a parallel with V to C movement in wh-questions in English and other modern European languages. For example, Rizzi (1996) proposes that V to C movement applies in wh-questions, placing the verb in the head of the projection hosting the wh-. However, upon closer inspection, it was shown that constituents other than subjects do intervene between object wh-interrogatives and verbs. Furthermore, subject questions do not show an adjacency between the subject wh- and the verb. Therefore there does not, in fact, seem to be an argument versus adjunct asymmetry in the data.

Since NT Greek is a verb-initial language, the object questions can all be accounted for with V to T movement, and in-situ subjects. Examples such as (5) below, shown in Chapter 5, can also be easily accounted for by assuming V to T movement.

(5) \( \text{wh} \rightarrow \text{OV} \)

\begin{verbatim}
Tína seautón poieîs?
\end{verbatim}

whom.ACC.SG.M self.ACC.SG.M make.2SG.PRES.IND.ACT

‘(Are you then better than our father Abraham, who died? The prophets died, too). Who are you making yourself out to be?’

(μὴ σὺ μείζων εἰ τοῦ πατρός ἡμῶν Ἀβραὰμ, ὁ δὲ ἀνέπεσαν; καὶ οἱ προφῆται ἀνέπεσαν) τίνα σεαυτὸν ποιεῖς; (Jn 8:53)

86 As I mentioned in Chapter 4, negative words that are quantifiers in Classical and NT Greek are considered to be polarity items in Modern Greek.
In (5), the reflexive pronoun seautón intervenes between the wh- and the verb. The preceding context suggests that this constituent is a topic or a focus. In a V to T account, this example is the structural counterpart of an OV declarative clause with the addition of the object wh-interrogative.

The contrast in word orders between object and adjunct wh-questions (namely, the strong trend for wh-VS in object questions, and the freedom among adjunct questions) can be speculated on with a V to T account. Namely, in most object questions, the wh- is the only object constituent, and there is usually at most a subject and a verb in the sentence. In adjunct questions, on the other hand, the wh- is not an argument. There happen to be many adjunct questions that contain subjects, verbs and objects. The fact that wh-SOV occurs is therefore not surprising, if the same derivations are available in wh-questions and declarative clauses. The double object construction in (5) is an exception to the generalization that in most object questions, the wh- itself is the only object. In this example, the order wh-OV is witnessed.

While the V to T easily accounts for more of the data, it does not immediately explain the strong trend for wh-VS orders in object questions. Throughout this thesis, I have maintained the view that frequency of occurrence should not be the most important factor in investigating the structure of dead languages. It is plausible that the strong trend among object questions is merely coincidental; the subjects in these instances happen to be in-situ. Another possibility, of course, is that V to C movement does apply. However, there is no clear evidence for this in the absence of a clear landmark separating T from C, a situation that is familiar from the study of declarative clauses. Thus, I conclude that V to T is the normal operation in wh-questions.

Regarding the syntactic position of wh-interrogatives and question particles, I concluded that they occur in the same maximal projection. This was based on distributional parallels. A maximum of one topic constituent is found preceding question particles and wh-interrogatives. Similarly, one topic constituent is found preceding complementizers. This suggests that all of these elements occur within the same maximal projection. Question particles and wh-interrogatives are associated with interrogative force; complementizers are associated with declarative force. Therefore, I call the projection hosting complementizers, question particles and wh-interrogatives ForceP, using Rizzi’s (1997) split-CP terminology.

Left peripheral material was shown to follow wh-interrogatives and question particles. Specifically, focused elements occur between wh-s (also question particles), and verbs. This provided more support for the fact that wh-interrogatives occur in Spec.ForceP, and not Spec.FocP, in the hierarchy of left peripheral projections in (6).

(6) TopP > ForceP > EvidP > FocP > (Fam)TopP > Fin/IP

Given that the inferential particle ára is found preceding foci and following wh-interrogatives and question particles, I concluded that it heads an evidential projection, labeled EvidP. As I also discussed in Chapter 5, NT and Classical Greek are multiple wh-fronting languages, and the data from Classical Greek suggest that
there are superiority effects. I concluded that the structurally higher wh-interrogative moves to Spec,ForceP, and the structurally lower one to Spec,FocP, as argued in Bošković (2002, 2003) concerning Serbo-Croatian multiple wh-fronging.

In Chapter 6, I examined NT Greek relative clauses. There are a few surface varieties of relative clauses that all employ the same relative morpheme: head-external, headless (free) relatives, head-internal free relatives and correlative relative clauses. Some representative examples are repeated in (7) – (9).

(7) Head-external relative clause

mne:monedete toû lógoû
remember.2(PL,PRES,IMPV,ACT the.GEN.SG.M word.GEN.SG.M
[hoû egô: eîpon humîn ]
REL.GEN.SG.M I.NOM.SG say.1SG,AOR,IND,ACT you.DAT.PL
‘Remember that word which I said to you: (The servant is not greater than his lord).’

(8) Head-internal free relative clause

oudemían aitían épêrôn
no.ACC.SG.F charge.ACC.SG.F bring.3PL,AOR,IND,ACT
[hôn:n egô: hupenôoun pone:rô:n ]
REL.GEN.PL,N I.NOM.SG suspect.1SG,IMPF,IND,ACT evil.GEN.PL,N
‘(against whom the accusers, when they stood up,) brought forth no charge of those evil things which I suspected.’

(9) Correlative

[Li tô:n hôn apedokîmasan
stone.ACC.SG.M REL.ACC.SG.M reject.3PL,AOR,IND,ACT
hoi oikodomoulîtes, ] hoûtos
the.NOM.PL,M builder.NOM.PL,M DEM,NOM.SG.M
egenê:tê:e; eis kepâlê:n go:nías ]
become.3SG,AOR,IND,PAS to head.ACC.SG.F corner.GEN.SG.F
‘Which stone the builders rejected, this one has become head of the corner’.

I concluded that both head-external relative clauses and correlative relative clauses are derived through raising of the relative pronoun and of the head noun, if present. Following Kayne (1994) and Bianchi (1999), I argued that the NP associates (or ‘heads’) of head-external, head-internal and correlative relative clauses originate as complements of relative pronouns, which are one variety of determiners, Ds. For example, in an object relative clause, the relative DP (DPrel) starts off as the object
of the embedded verb. The head NP originates as the complement of Drel°, as shown in (10).

\[
(10) \quad \text{vP (embedded)}
\]

\[
\text{v°} \quad \text{DPrel}
\]

\[
\text{Drel°} \quad \text{NP}
\]

The different surface orders are due to different movement operations affecting NPs. Different movement operations affecting NPs seem to be due to the presence versus absence of a matrix determiner. Head-external relative clause CPs are selected by matrix Ds. In a head-external relative clause like (7), after the DPrel has moved to Spec,CP, the NP is attracted to the Spec, of DPrel. This is due to a nominal feature [N] on the matrix D, as shown in (11).

\[
(11) \quad \text{DP(matrix)}
\]

\[
\text{D°} \quad \text{CP (embedded)} \quad \text{[N]}
\]

\[
\text{DPrel}
\]

\[
\text{C°} \quad \text{TP}
\]

\[
\text{Drel°} \quad \text{NP} \quad \text{T°} \quad \text{vP}
\]

\[
\text{v°} \quad \text{DPrel}
\]

In a correlative, on the other hand, there is no matrix D° selecting the CP. The CP is adjoined to the matrix clause, IP, which contains a demonstrative that is coreferential with the relative and NP, if present. This is re-illustrated in (12).

\[
(12) \quad \text{IP}
\]

\[
\text{CP} \quad \text{IP(matrix)}
\]

\[
\text{C°} \quad \text{IP}
\]

\[
\text{vP}
\]

\[
\text{DPrel}
\]
In instances where the entire DPrel moves to Spec,CP, the surface order is [REL>NP]. Inversion does not take place, given there is no matrix D carrying a nominal feature. In other instances, the NP is first extracted from the DPrel, and is topicalized to a projection below the CP operator projection. This potentially yields the order [REL>V>NP], where the NP is stranded from the REL. In most instances, however, it is unclear whether the NP has moved from its base position or not.

The presence versus absence of a matrix determiner is also the source of the different morphological case patterns observed in relative clauses. The phenomenon of case attraction, illustrated by (9) above, indicates that matrix Case is accessible to the constituents contained in DPrel. In correlatives, there is no matrix D, and therefore no access to matrix Case. The conclusion is thus that inverse attraction, as illustrated by (9), is actually a failure of attraction of the NP to the Case of the matrix. Although the NP linearly precedes the relative pronoun, it is not an external head. It is not connected to the matrix clause through an external D. This corresponds to the fact that the matrix clause contains a co-referential demonstrative, which takes the matrix Case. I have not been able to account for case attraction in (non-correlative) head-internal relative clauses, where the NP is discontinuous from the relative pronoun, such as in (8) above. This is a very interesting avenue for future research.

In summary, this thesis has dealt with various aspects of NT Greek word order and clause structure. I have argued that NT Greek is a head-initial language, meaning that syntactic heads consistently precede their complements in the base structure. This is seen in various domains of surface word order. For example, the canonical position for the object is post-verbal. Deviations to this base order arise when objects are topicalized or focused, or undergo wh-movement. The head-initial nature is also observed in the realm of the DP, where relative pronouns precede their NP complements in the base structure. This order is also preserved on the surface in some instances, namely in head-internal relative clauses. Deviations to this order come about in the presence of a formal feature triggering movement of the NP complement.

Koine Greek has many aspects of clause structure that are on the surface similar to Modern Greek clause structure, but often the details of clausal syntax are significantly different (see Horrocks 1997; Mattheiu & Sitaridou). Future research will necessarily seek to understand the diachronic processes that have led from the syntactic structures of Koine described in this thesis to those in Modern Greek.