Universiteit
Leiden
The Netherlands

# Word order and information structure in New Testament Greek

Kirk, A.

**Citation**

Kirk, A. (2012, November 21). *Word order and information structure in New Testament Greek*. *LOT dissertation series*. Retrieved from https://hdl.handle.net/1887/20157

| | |
|---|---|
| Version: | Not Applicable (or Unknown) |
| License: | Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden |
| Downloaded from: | https://hdl.handle.net/1887/20157 |

**Note:** To cite this publication please use the final published version (if applicable).

Cover Page

Universiteit Leiden

The handle http://hdl.handle.net/1887/20157 holds various files of this Leiden University dissertation.

**Author**: Kirk, Allison
**Title**: Word order and information structure in New Testament Greek
**Issue Date**: 2012-11-21

# Chapter 3. The VSO-SVO alternation

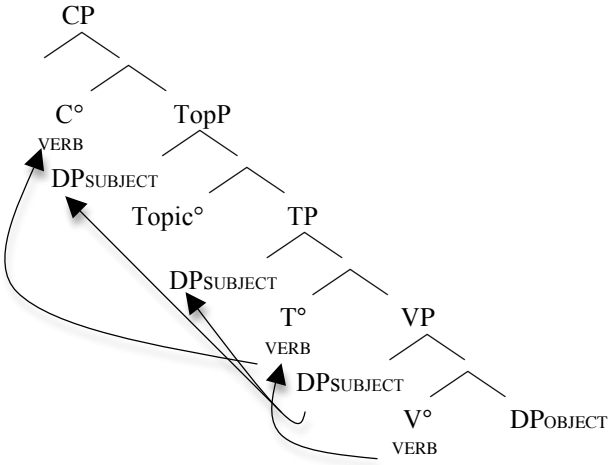
## 1 Introduction

In the last chapter I have shown that VSO and SVO clauses constitute neutral clauses in NT Greek, where neutral clauses correspond to clauses in which no arguments are topic or focus material. Other word orders were shown to have particular characteristics typically associated with pragmatic markedness. These include SOV and O-initial clauses. In some instances, the marked properties of objects in O-initial strings were shown to be similar to subjects in some SVO clauses. SVO clauses were shown to be either neutral or non-neutral.

In this Chapter, and in Chapter 4, I examine the relation between linear strings and hierarchical structure. I assume the basic tripartite division of clause structure into the lexical domain, VP, the inflectional domain, TP and the Left Periphery, CP, as introduced in Chapter 1. The focus of this Chapter is the VSO-SVO alternation, where I am mostly concerned with the syntactic positions that subjects and verbs occupy in these surface strings, while Chapter 4 deals with the positions of constituents in the marked word orders. Note that the examples illustrated in this chapter and in Chapter 4 are not all included in the preliminary survey of clauses in Chapter 2. Rather, they come from all over the NT, and I illustrate particular sequences to argue certain points.

Verbs and subjects are both found in more than one surface position, as illustrated in (1). Verbs are first merged in the lexical domain, V°, and move systematically to T°. In some instances, verbs surface in this position, and in others they raise further to C°. Subject DPs surface in three distinct positions: in their VP-internal base position, in the Specifier of the Tense Phrase, Spec,T, and in the Specifier of a dislocated Top(ic) Phrase, Spec,Top.

(1)



Section 3 of this chapter focuses on verb movement. The fact that V to T raising always takes place is suggested by the following two theoretical considerations. The NT Greek verbal inflection paradigm shows distinctions for all persons and numbers, and NT Greek is a pro-drop, or null subject language. This property is related cross-linguistically to V to T raising, which is the correlation behind the Rich Agreement Hypothesis (see Rohrbacher 1999; Koeneman 2000; Bobaljik 2002). NT Greek also shows a large variety of synthetic tense-mood-voice distinctions, a phenomenon which has recently been suggested to correspond to V to T raising (Biberauer & Roberts 2010).

The surface position of the verb is determined based on its position with respect to adverbs and particles, which I use as landmarks to distinguish the VP from the TP domain, and the TP from the CP. For example, the modal particle *án* is used to distinguish TP from CP, and the fact that verbs are found following *án* suggests that they are in T°. Verb raising to C° is suggested by the fact that verbs are found preceding the evidential/inferential particle *ára*, which, as I show, must be in the CP domain. Based on the fact that verbs raise to T systematically, but not to C systematically, I speculate that the driving force behind V to C movement is discourse driven. This would form a parallel with Modern Greek, where V to C movement corresponds to focus stress on the verb (see Roussou & Tsimpli 2006). However, this can't be tested for NT Greek, with no access to intonation.

In Section 4, I discuss subject positions. In VS orders, subjects follow adverbs that modify the VP, and they follow shifted object pronouns, in VOS orders. These facts indicate that they do not raise from the VP. The fact that subjects can stay in their base position raises the interesting question of why (and to where) subjects do raise, in SVO strings. If subjects do not have to raise to Spec,T for structural purposes relating to Case or person/number features, and if the canonical subject position, Spec,T does not have to be overtly filled, there is a question of whether it is projected at all. Alexiadou & Anagnostopoulou (1998) argue that this projection is not activated in Modern Greek, as well as in some Romance languages that allow null and postverbal subjects. Under this analysis, all preverbal subjects are left-dislocated, in the Spec,Top projection in Figure 1. This is a claim which has been refuted for many of the Romance languages (see Costa 1998, 2004; Goodall 2001; Cardinaletti 1997; Sheehan 2010).

As I showed in Chapter 2, SVO can be a neutral order in NT Greek, which would suggest that not all preverbal subjects are topicalized, according to the proposed definition of the derivation of a neutral clause given in (12) in Chapter 2, repeated here as (2).

(2) Derivation of a neutral clause:
A clause in which no element is derived through topic or focus movement.

Yet, as I show in Section 4, it is difficult to find preverbal subjects in the Spec,T position. Even subjects that one would expect to occupy Spec,T rather than Spec,Top, such as negative quantifiers, and indefinites are shown to be located higher than Spec,T. Furthermore, there is no evidence for the presence of a null expletive in VS orders, or clauses with no overt subjects, suggesting that Spec,T is

not occupied by a null element. These facts suggest that the Spec,T position is only optionally projected, to host a preverbal subject that is not a topic or focus. This corresponds to the fact that SV and VS clauses occur under the same conditions, with no apparent difference in meaning. Neutral clauses have a derivation in which the subject is in Spec,V (in VS orders), or in Spec,T (in SV orders). Non-neutral clauses host subjects in a dislocated position.

Before presenting the NT Greek facts and the proposed derivations for SVO and VSO orders, I first give an introduction to the notion of a VSO-SVO alternation, illustrating briefly the way in which it instantiates in Modern Standard Arabic and Modern Greek.

## 2 Introduction to the VSO-SVO alternation

An SVO-VSO predominant word order alternation is commonly attested cross-linguistically. This generalization is partly captured by Greenberg's (1966:79) sixth language universal, given in (3).

(3) All languages with dominant VSO order have SVO as an alternative or as the only alternative basic order.

Some examples of VSO languages that Greenberg lists are Welsh, Hebrew and Berber (Greenberg 1966:Appendix II). Some of these characterizations are refuted in more theoretically oriented literature, and for some, the statement that they have a *basic* SVO alternate is refuted. For example, as Doron (2000) discusses, Modern Hebrew is an SVO language, while Biblical Hebrew was VSO, with SVO as an alternate. Furthermore, Greenberg classifies Modern Greek as an SVO language, while currently scholars say that it is VSO (see Roussou & Tsimpli 2006; Alexiadou & Anagnostopoulou (1998).

Other languages that Greenberg does not mention, but which display the VSO-SVO alternation are Arabic and Modern Greek, which I discuss below.

### 2.1 The VSO-SVO alternation in Arabic

The basic word order of Arabic is usually described as VSO (see Fassi Fehri 1993). This is not uncontroversial, as it has been claimed that the basic order is SVO (Fassi Fehri 1993 gives references in note 9). A neutral VSO clause is given in (4), adapted from Fassi Fehri (1993:19).

(4) kataba r-rajul-u r-risaalat-a MODERN STANDARD ARABIC
wrote the-man-NOM the-letter-ACC
haaḏaa ṣ-ṣabaaḥ-a
this the-morning-ACC
'The man wrote the letter this morning.'

Arabic allows scrambling of the subject over the verb, as well as the object, as shown by the examples in (5) from Fassi Fehri (1993:20). If there is no overt case morphology on the nominals, as in (5a) and (5b), the interpretation corresponds to first argument being the subject, and the second the object. If there is overt case morphology, as in (5c), an object can linearly precede the verb and subject.

(5) a. ntaqada ʕIisaa mussaa MODERN STANDARD ARABIC
criticized ʕIisaa Muusaa
'ʕIisaa criticized Muusaa.'
b. ʕIisaa ntaqada muusaa
ʕIisaa criticized Muusaa
'ʕIisaa criticized Muusaa.'
c. zayd-an intaqada muusaa
Zayd-acc criticized Muusaa
'Zayd, Muusaa has criticized.'

One famous property of Standard Arabic preverbal versus postverbal subjects is their difference in agreement patterns (see Mohammad 1990; Bahloul & Harbert 1993; Aoun, Benmanoun & Sportiche 1994; Harbert & Bahloul 2002).

Example (6), from Harbert & Bahloul (2002:45) shows that when a plural subject is postverbal, the verb only agrees with the subject in gender and not number (6a). This is referred to as weak agreement. When the plural subject is preverbal, both gender and number agreement occur on the verb, known as full agreement. Weak (only gender) agreement is ungrammatical (6b) in this order.

(6) a. qadim-a (/*qadim-uu) al-ʔawlaadu. MODERN STANDARD ARABIC
came-3MS came-3MPL the-boys-3MPL
'The boys came.'
b. ʔal-ʔawlaadu qadim-uu (/*qadim-a).
the-boys-3MPL came-3MPL came-3MS
'The boys came.'

Another asymmetry between pre- and postverbal subjects in Arabic concerns agreement with conjoined subjects. The phenomenon is known as closest conjunct agreement, or left conjunct agreement, illustrated in (7), from Doron (2000:77).

(7) laʕibat maryam wa- zayd fi-l-bayt MODERN STANDARD ARABIC
played-3FS Mariam-F and Zayd-M in-the-house
'Mariam and Zayd played in the house.'

In the VS sequence in (7), the feminine subject Mariam is conjoined with the masculine subject Zayd. The agreement on the verb is feminine singular. Thus, the verb shows agreement with the left conjunct of the conjoined subject.

On the other hand, in SV sequences with conjoined subjects, verbs show dual agreement, and in the case of a combination of masculine and feminine genders, the agreement is always masculine, regardless of whether the feminine (8a) or the

masculine noun (8b) is closer linearly to the verb (the examples in (7) are from Harbert & Bahloul (2002:50)).

(8) a. al-waladu wa ʔal-bintu xaraj-aa — MODERN STANDARD ARABIC
the-boy-M and the-girl-F left-MD
'The boy and the girl left.'

b. al-bintu wa ʔal-waladu xaraj-aa
the-girl-F and the-boy-M left-MD
'The boy and the girl left.'

This pattern of closest conjunct agreement with postverbal but not preverbal subjects is also a property of Irish and Welsh (see McCloskey 1986; Bahloul & Harbert 1992), Biblical Hebrew (see Doron 2000), among other languages.

## 2.2 The VSO-SVO alternation in Modern Greek

In Modern Greek (MG), all permutations of subject, verb and object are possible. This is shown in example (9), adapted from Phillipaki-Warburton (2008: 1), where in all orders *o Janis*, "John" is the subject and *ti Maria*, "Maria" the object.

(9) a. SVO — MODERN GREEK
o Janis filise ti Maria
the-NOM John-NOM kissed-3SG the-ACC Mary-ACC
'John kissed Mary.'

b. VSO
Filise o Janis ti Maria.

c. VOS
Filise ti Maria o Janis.

d. OVS
Ti Maria filise o Janis.

e. OSV
Ti Maria o Janis filise.

f. SOV
O Janis ti Maria filise.

MG is an interesting case with respect to the notion of basic word order, since, as I also mentioned in Chapter 2, both SVO and VSO have been claimed to be the basic word order of the language. As I mentioned above, Greenberg (1966: 107) includes MG as an example of an SVO language. Lescaratou (1989: 273) reports that traditional grammar books, citing Tzartzanos' Greek Grammar (1963: 273-277),

claim that the most neutral word order in main clauses is SVO.

Phillipaki-Warburton (2008, and elsewhere), Tsimpli (1990), Roussou & Tsimpli (2006) argue that the basic order is VSO. Alexiadou (2006: 134) shows that VSO is the word order that is felicitous as the response to a wide focus question such as "What happened?", as shown in (10). The response can be uttered with neutral intonation (Roussou & Tsimpli (2006:318)). Importantly, the SVO option is not an appropriate response.

(10) What happened?
   a. molis espase o Janis tin kristalini lamba — MODERN GREEK
      just broke the-John-nom the crystal lamp
      'John just broke the crystal lamp.'
   b. *molis o Janis espase tin kristalini lamba.

A question with narrow focus on the subject, such as "Who repaired my computer?" triggers an SVO response (Roussou & Tsimpli 2006, note 3), as shown in (11). Crucially, the VSO order is not a felicitous answer to this question.

(11) Who repaired my computer?
   a. O Janis episkevase ton ipolojisti mu — MODERN GREEK
      the John repaired the computer my
      'John repaired my computer'.
   b. *Episkevase o Janis ton ipolojisti mu.

Another interpretational difference between SVO and VSO is that in the former, the indefinite subject has to receive a specific interpretation, while in the latter, the subject can be either specific or non-specific, as reported in Alexiadou & Anagnostopoulou (1998:518).

(12) a. Ena pedhi deavase to "Paramithi horis Onoma." — MODERN GREEK
      a child read the "Fairy Tale without a Title"
      'A certain child/one of the children read "Fairy Tale without a Title".'
   b. Deavase ena pedhi to "Paramithi horis Onoma".

The preverbal subject in (12a) has a 'strong' partitive or specific interpretation, as shown by the translation. The postverbal subject in (12b) is noted to have a weak, existential interpretation, most naturally. The important generalization is that preverbal subjects always have a specific interpretation.

NT Greek shares many properties with Modern Greek. As we saw in Chapter 2, all word order permutations of subject, verb and object are attested in NT Greek. Like Modern Greek and unlike Arabic, there is no strong/ weak agreement contrast. Many other similarities come out from the sections to follow. The major difference seems to be that NT Greek would constitute a VSO language with an SVO alternative basic order, while SVO in Modern Greek is a marked order.

## 3 NT Greek verb positions

In this Section, I argue that finite verbs in NT Greek main clauses occur in T° and in C°. These are the two positions in which evidence can be shown to support. It is in theory possible that verbs target positions intermediary to these two (see Ledgeway & Lombardi 2005), however there is a lack of data containing the appropriate diagnostics, namely instances of ordered adverbials that could distinguish one intermediary projection from another, following Cinque (1999). In 3.2 I discuss the relationship between rich verbal inflection and verb raising to T. Particularly, rich person number agreement inflection, as well a high degree of synthesis in the tense-mood-aspect system have been noted to correlate with verb raising to T.

In 3.3 I show, based on the respective position of verbs and adverbs that modify the VP, that verb raising occurs in NT Greek. I show that in many cases verb movement ends at T, based on the fact that verbs most often follow the modal particle *án*, which constitutes a landmark between the TP and CP domains. However, verbs are also found, although rarely, preceding *án*, suggesting that verbs can raise to C°. There is a complication, however, since this particle displays second position effects, which could suggest that its placement is partly determined by phonological (post-syntactic) factors. The idea that V to C movement takes place is strengthened by the fact that verbs precede the non-second-position inferential particle *ára* "then", or "therefore".

I first provide some very general background on some proposed verb positions in the literature on VSO languages, in 3.1.

### 3.1 Previous analyses of VSO word orders

There are many ways to derive a string where the verb precedes the subject, as in the Irish clause in (13) from McCloskey (2005:2).

(13) Sciob an cat an t-eireaball den luch. MODERN IRISH
cut the cat the tail off-the mouse
'The cat cut the tail off the mouse.'

There are two major strands of analysis of VSO word orders. One line of approach assumes head movement of the verb to either the C head position, or a head position in the T domain. The other approach does not assume head movement, but instead remnant XP movement following extraction of the subject and object (see, for example, Massam 2000, 2005; Bury 2010).[27]

In a head-movement approach, the verb can raise to T° or to C°. The oldest variety of the head movement approaches proposes verb movement to C°, applied to the Celtic languages (Emonds 1980; Sproat 1985; Déprez & Hale 1986; Stowell 1989). This analysis generalizes the V to C operation in Germanic V2 languages,

[27] Another approach I haven't mentioned in the main text is subject lowering into the VP (see, for example, Chung 1998, Chapter 4 concerning Chamorro).

proposed by den Besten (1983).

The V to T approach came about with various theoretical developments, such as the VP internal subject hypothesis (see Kuroda 1988; Sportiche 1988; Koopman & Sportiche 1991 for varying proposals for VP-internal subjects, and the discussion in McCloskey (1997, Section 6)), and the split INFL hypothesis (see Pollock 1989, Chomsky 1993). These developments made it possible to propose verb movement to only to a projection in the INFL (what I have been calling T) domain. There is robust literature arguing for this in Celtic (see, for example, Guilfoyle 1990; Bobalijk & Carnie 1996; McCloskey 1996b, 2001, 2005 for Irish; Roberts 2005 for Welsh). It is also the standard analysis of Arabic (for example, Fassi Fehri 1993; Benmamoun 2000; Harbert & Bahloul 2002) and Modern Greek (for example, Alexiadou & Anagnostopoulou 1998; Tsimpli 1990; Roussou & Tsimpli 2006).

As I discuss in 3.2.3 below, one indication that the verb raising seen in V2 Germanic languages such as German and Dutch is distinct from the one in the Celtic languages, Arabic and Greek, is that there is a root / non-root asymmetry in German and Dutch.[28] Verb movement to C occurs in main, but not subordinate clauses. The verb stays low in subordinate clauses, as shown by the Dutch subordinate clause in (14). In Celtic, Arabic and Greek, on the other hand, VSO is also found in subordinate clauses. The Irish subordinate clause in (15), from Harley, Carnie & Pyatt (2000:42) illustrates this.

(14) *that* –S-O-V MODERN DUTCH
Ik denk dat hij de hond heeft gezien.
I think that he.NOM the dog has.3SG seen
'I think that he saw the dog.'

(15) *that* - V-S-O MODERN IRISH
Ceapaim go bhfaca sé an madra.
think.PRES.1SG that see.PAST he.NOM the dog
'I think that he saw the dog.'

Complementizers are assumed to be C° elements. In Dutch, when the complenentizer is present, V to C movement does not occur, which is originally why V to C movement was proposed for V2 languages. In Irish, on the other hand, when C° is filled with the complenentizer, the verb still raises.

In summary, there seem to be different targets of movement for verbs across languages. A verb can raise to T° or to C°, and sometimes this is dependent upon the clause type.

[28] I am leaving aside embedded verb second as found, for example, in North Germanic languages (see Vikner 1995).

## 3.2 Verb movement in NT Greek

In this subsection I first give five arguments for V to T raising in NT Greek, and one clear argument for V to C raising. Starting with V to T raising, the first two arguments concern the relationship between morphological properties of the verb and syntactic raising. NT Greek shows two properties typically associated with V to T movement: rich person and number agreement, and null subjects, or 'pro-drop'. I discuss these properties in 3.2.1 and 3.2.2, respectively. In 3.2.2 I present a new proposal put forth by Biberauer & Roberts (2010) connecting null subjects and V to T movement. They suggest that the real driving force behind V to T movement is related to morphological properties of tense, rather than person and number. This hypothesis also predicts that NT Greek has V to T raising.

Another argument for V to T raising comes from placement facts. In 3.2.3 I use the respective position of adverbs and verbs as evidence for verb raising. In 3.2.4 I show that NT Greek allows verb initial subordinate clauses, which indicate that verb movement in NT Greek terminates at T. In 3.2.5 I examine the position of verbs with respect to the modal particle *án*. The placement facts indicate that verbs move either to T or to C.

In 3.2.6 I illustrate the distribution of another particle which occupies a C position. Verbs are found preceding this particle, indicating that they are in a C° position. Therefore, NT Greek has both V to T and V to C movement. While the motivation for V to T movement is taken to be related either to rich person and number agreement, or to rich tense synthesis, the motivation for V to C movement is not clear.

### 3.2.1 The Rich Agreement Hypothesis

There is a long noted correlation between rich person and number inflection on verbs and V to T movement. The idea that the former is what causes the latter has been stated as the Rich Agreement Hypothesis (RAH) (see Vikner 1995, 1997; Rohrbacher 1999; Bobalijk & Thráinson 1998; Koeneman 2000). This hypothesis has accounted for synchronic variation cross-linguistically, as well as diachronic variation. A synchronic example is the difference between Mainland Scandinavian dialects and Icelandic, with respect to the distribution of verbs and negation.

While Icelandic has relatively rich verbal inflection, showing differentiation across genders, numbers and tenses, Danish, a Mainland Scandinavian dialect only shows a distinction between tenses. The two paradigms in Table 1 below, from Bobaljik (2002:131) illustrate this for the verb "hear".

| | **ICELANDIC:** *heyra* 'hear' | | **DANISH:** *høre* 'hear' | |
|---|---|---|---|---|
| | Present | Preterite | Present | Preterite |
| 1st SG | heyr-**i** | heyr-**ði** | hør-**er** | hør-**te** |
| 2nd SG | heyr-**ir** | heyr-**ði-r** | hør-**er** | hør-**te** |
| 3rd SG | heyr-**ir** | heyr-**ði** | hør-**er** | hør-**te** |
| 1st PL | heyr-**um** | heyr-**ðu-m** | hør-**er** | hør-**te** |
| 2nd PL | heyr-**ið** | heyr-**ðu-ð** | hør-**er** | hør-**te** |
| 3rd PL | heyr-**a** | heyr-**ðu** | hør-**er** | hør-**te** |

**Table 1: Agreement paradigms of Icelandic and Danish**

The difference between Icelandic and Danish respective word order of verbs and negation is shown in (16), taken from Bobalijk (2002: 130), from Platzak (1986: 209). The examples are subordinate clauses, in order to avoid V2 contexts where V is in C.

(16) a. … að hann keypti ekki bókina ICELANDIC
that he bought not the.book
'… that he did not buy the book.'
b. … at han ikke købte bogen DANISH
that he not bought the.book
'… that he did not buy the book.'

In Icelandic, the V *keypti*, "bought" precedes the negation, while in Danish the V *købte* follows it. Negation is standardly taken to mark the left edge of the VP in these languages (see Vikner 1995; Bobalijk & Jonas 1996), and so verbs move out of the VP in Icelandic but not in Danish.

The contrast between English and French concerning the relative position of verbs and VP-level adverbs is also accounted for in this way. As (17) shows, in French the adverb *souvent* intervenes between the verb and the object, while the equivalent adverb in English, 'often' precedes the verb, leaving the verb and the object string adjacent. The examples in (17) from Pollock (1989: 367) (originally from Emonds 1976) illustrate this.

(17) a. Jean embrasse souvent Marie FRENCH
Jean kisses often Marie
'Jean often kisses Marie.'
b. John often kisses Mary.

Under Pollock's (1989) analysis, I, or INFL is split into various projections. French verbs raise to an INFL projection, while English ones do not. Many authors have correlated this to the fact that English has fairly poor subject verb agreement morphology, while French has a more rich system (not an uncontroversial claim; see below).

In diachronic syntax, the RAH accounts for the correlation between the loss of verb movement and the loss of agreement inflection in various languages (see Roberts 1993 concerning English; Platzack & Holmberg 1989 concerning Mainland

Scandinavian dialects). I illustrate this with Swedish, with examples from Koeneman (2000). Old Swedish has a more rich verbal paradigm than Modern Swedish. The two paradigms are given in Table 2, for the present tense.

| | **OLD SWEDISH: *älsk-a*, 'love'** | **MODERN STANDARD SWEDISH: *bita*, 'bite'** |
|---|---|---|
| 1st SG | älsk-a(r) | biter |
| 2nd SG | älsk-a(r) | biter |
| 3rd SG | älsk-a(r) | biter |
| 1st PL | älsk-um | biter |
| 2nd PL | älsk-in | biter |
| 3rd PL | älsk-a | biter |

**Table 2: Agreement paradigm in Old and Modern Standard Swedish**

Old Swedish shows the opposite pattern of the relative positions of verbs and negation to Modern Swedish, as shown by (18) below, from Koeneman (2000:60-62). Thus, Old Swedish patterns with Icelandic (see (16a) above), and Modern Standard Swedish with Danish (see (16b) above).

(18) a. … æn han sivngær ægh thigianda messu… OLD SWEDISH
if he sings not silent mass
'… if he doesn't sing 'silent mass'
b. … att Johan inte køpte boken MODERN STANDARD SWEDISH
that Johan not bought book-the
'…that John did not buy the book'

The RAH has been stated in a few different ways. One formulation states that V to T movement takes place if and only if the verbal agreement is rich, thus morphology is the driving force behind V to T movement. The hypothesis stated in this way has two implications: first, that every language with rich verbal inflection displays V to T raising, and second that a language with poor verbal inflection does not have V to T raising. Although the correlation between rich verbal inflection and V movement to T is fairly strong at least in Indo-European languages, many have shown that the RAH, formulated as a bi-conditional, is not without exception even among Indo-European languages. For example, as Vikner (1995) discusses, French verbs, when pronounced do not have any distinctions between first, second and third person. Yet, French has V to T raising. Other examples show that certain dialects of Norwegian and Faroese with poor inflection do display V to T raising (see Jonas 1996).

A weaker version of the RAH is unidirectional, only predicting that languages with rich verbal agreement have V to T raising. For example, Bobaljik (2002 and elsewhere) has argued that rich verbal inflection to be a side-effect of the syntactic relationships between V and T, rather than the driving force.

NT Greek has distinct verbal forms for all persons, and singular and plural numbers with no suppletion, at least in most tense-voice combinations.[29] Table 3

[29] One example of syncretism is in the thematic aorist active paradigm, where the 1st

shows the present active declension of *lúo:* (λύω) "I loose". Table 4 does not include dual numbers, as the dual is not used in the NT (Moulton, Howard & Turner 2006: 57). This is the only relevant difference between Classical and NT Greek relating to person and number inflection.

| | **NT GREEK** | |
|---|---|---|
| | SG | PL |
| 1st | lú-**o: (**λύ-**ω)** | lú-**omen** (λύ-**ομεν**) |
| 2nd | lú-**eis** (λύ-**εις** ) | lú-**ete** (λύ-**ετε**) |
| 3rd | lú-**ei** (λύ-**ει)** | lú-**ousi(n)** λύ-**ουσι(ν)** |

**Table 3: Subject agreement paradigm of *lúo:* (λύω), "I loose"**

The fact that NT Greek shows such rich person and number inflection is an indication that verbs raise to T, under either version of the RAH.

### 3.2.2 Null subjects

The pro-drop, or null subject phenomenon refers to a clause in which no overt subject is expressed, as in the example in (19) from NT Greek.

(19) kaì légei autô:i
and say.3SG.PRES.IND.ACT him.DAT.SG.M
'and he said to him,'
καὶ λέγει αὐτῷ, (Mt 9:9)

Recent typologies of null subjects distinguish various types of null subjects. In some languages, not only subject pronouns, but also object pronouns can be dropped. One example is Chinese (see Huang 1984). This type of pro-drop is recently referred to as radical pro-drop or discourse pro-drop (see Neeleman & Szendröi 2007).

Another pattern of pro-drop is referred to as partial pro-drop (see Holmberg 2005; Biberauer 2010). In partial pro-drop languages, such as Finnish, only expletive, or non-referential subject pronouns can be dropped. Partial pro-drop languages contrast with full pro-drop, or 'consistent' null subjects, in Holmberg's (2005) terminology. In these languages, referential subjects, and not just expletive subjects can be dropped.

There is long held typological correlation between rich person and number inflection and the type of pro-drop found in consistent null subject languages. (Perlmutter 1971; Tarladsen 1980). Roberts and Holmberg (2010: 3) note that this observation was already noted by Ancient Greeks scholars, quoting a passage from Apollonius Dyscolus on Ancient Greek.

The intuition is that verbs that are inflected for person and number do not require further specification as to what the subject is. This intuition has been formulated

---

person singular is the same as the 3rd person plural.

syntactically in various ways. One option is that the requirement that all clauses have a subject, where this subject occurs in a particular syntactic position, (the Extended Projection Principle of Chomsky 1982), is not universal (see Borer 1986, and a more current variation in Alexiadou & Anagnostopoulou 1998). Under Alexiadou & Anagnostopoulou's (1998) analysis, verb movement to T is sufficient to identify the formal features on T, and therefore subjects are not required in the Spec,TP subject position. Another is that the empty category *pro* occupies the canonical Spec,TP subject position (Rizzi 1982; Chomsky 1982). When a verb moves to T, the person and number features of the verb are copied onto the empty pronominal, licensing it. These proposals imply a direct relationship between V to T movement and pro-drop. Notice, however, that not all languages with V to T movement have consistent null subjects. For example, French has V to T but not pro-drop.

In 3.2.2.1 I first establish that NT Greek is a consistent null subject language, and then in 3.2.2.2 I illustrate a recent proposal from Biberauer & Roberts (2010), concerning the correlation between consistent null subjects, rich tense inflection and V to T movement.

#### 3.2.2.1 NT Greek null subjects

NT Greek shows all of the relevant properties defining consistent null subject languages. As already shown by (19) above, referential third person subjects can be dropped, and they often are. Example (20) illustrates dropped first and second person pronouns.

(20) ouk oîda tí légeis
NEG know.1SG.PERF.IND.ACT what.ACC.SG.N say.2SG.PRES.IND.ACT
'I don't know what you are saying.'
Οὐκ οἶδα τί λέγεις (Mt 26:70)

Similarly to other consistent null subject languages, NT Greek second and third person pronouns are expressed when they are emphatic. For example, in (21) below, the referents of the two subject pronouns *egó:* "I" and *autós* "he" are contrasted with one another as to what they use to baptize. The referent of "he" is already familiar in the discourse.

(21) expressed (focused) S pronouns: 1st person, 3rd person
egò: ebáptisa humâs húdati
I.NOM.SG baptize.1SG.AOR.IND.ACT you.ACC.PL water.DAT.SG.N
autòs dè baptísei humâs
he.NOM.SG.M PCL baptize.3SG.FUT.IND.ACT you.ACC.PL
en pneúmati hagío:i
in spirit.DAT.SG.N holy.DAT.SG.N
'I baptized you in water, but he will baptize you in the holy spirit.'
ἐγὼ ἐβάπτισα ὑμᾶς ὕδατι, αὐτὸς δὲ βαπτίσει ὑμᾶς ἐν πνεύματι ἁγίῳ. (Mk 1:8)

Consistent null subject languages show the following property. In bi-clausal constructions in which a subordinate clause contains an overt subject pronominal, a reading where the subject of the main clause is co-referential with the subject of the subordinate clause is not easily available (see Frascarelli 2007, among others). Example (22), adapted from Roberts & Holmberg (2010: 7) illustrates this.

(22) a. I Maria jelase afou ikhe ton Yianni MODERN GREEK
The Mary laughed after saw the Yiannis
'Mary*i* laughed after she*i* saw Yiannis.'
b. I Maria jelase afou afti ikhe ton Yianni
The Mary laughed after she saw the Yiannis
'Mary*i* laughed after she?*i*/*j* saw Janis.'

If the pronoun *afti* is present, the reading where 'Mary' and 'she' are co-referent is not easily available, as indicated by the question mark preceding the co-indexed *i* in (22b). In English, on the other hand, the co-indexed reading is easily available.

In NT Greek, it is the norm that subordinate clauses whose subjects are co-referential with matrix clause subjects do not contain overt pronouns. For example, in (23), the subject of the subordinate clause is unexpressed, and it refers to the subject of the main clause, the demonstrative pronoun *ekeînos*.

(23) kaì ekeînos oîden hóti ale:t$^{h}$ê:
and this.NOM.SG.M know.3SG.PERF.IND.ACT that true.ACC.PL.N
légei
speak.3SG.PRES.IND.ACT
'(And the one who saw it bore witness, and his testimony is true,) and this one*i* knows that [*pro*]*i* says true things, (so that you also may believe it)'.
(καὶ ὁ ἑωρακὼς μεμαρτύρηκεν, καὶ ἀληθινὴ αὐτοῦ ἐστιν ἡ μαρτυρία,) καὶ ἐκεῖνος οἶδεν ὅτι ἀληθῆ λέγει, (ἵνα καὶ ὑμεῖς πιστεύσητε.) (Jn 19:35)

Furthermore, (24) shows a case in which an expressed third person pronoun, in a clause that is adjoined to a clause that contains an expressed DP subject, does not refer to that DP. Rather, it refers to the subject of the previous clause, "a man", the clause being the first line of a parable about the man.

(24) kaì ho spóros blastâi
and D.NOM.SG.M seed.NOM.SG.M bring.forth.3SG.PRES.SUBJ.ACT
kaì mne:kúne:tai
and lengthen.3SG.PRES.SUBJ.MID
ho:s ouk oîden autós
as NEG know.3SG.PERF.IND.ACT he.NOM.SG.M
'(Thus is the kingdom of God, as if a man*i* should plant a seed in the ground, and should sleep, and rise night and day,) and the seed*j* should spring up and grow, in a way which he*i* doesn't know.'

(Οὕτως ἐστὶν ἡ βασιλεία τοῦ θεοῦ ὡς ἄνθρωπος βάλῃ τὸν σπόρον ἐπὶ τῆς γῆς καὶ καθεύδῃ καὶ ἐγείρηται νύκτα καὶ ἡμέραν,) καὶ ὁ σπόρος βλαστᾷ καὶ μηκύνηται ὡς οὐκ οἶδεν αὐτός. (Mk 4:27)

In the glossed example in (24), the first clause contains the expressed DP subject, *ho spóros* "the seed". The adjunct clause contains the third person pronoun *autós*, which agrees in gender and number with *ho spóros*. However, *autós* does not refer to *ho spóros*, although the subordinate clause is adjoined to the matrix clause in a similar way to (23) above. Instead, the pronoun refers to a person already previously introduced, "a man" (see the translation or the Greek text).

When pronouns referring back to an expressed subject of a matrix clause are overtly expressed, they are marked. For example, consider (25).

(25) hò epoíe:sen Davìd hóte
REL.ACC.SG.N do.3SG.AOR.IND.ACT David when
epeínasen autòs kaì
hunger.3SG.AOR.IND.ACT self.NOM.SG.M and
hoi met' autoû
D.NOM.PL.M with him.GEN.SG.M
'(Don't you know this,) what David*i* did when he*i* himself was hungry, along with those who were with him?'
(Οὐδὲ τοῦτο ἀνέγνωτε) ὃ ἐποίησεν Δαυὶδ ὅτε ἐπείνασεν αὐτὸς καὶ οἱ μετ' αὐτοῦ ὄντες; (Lk 6:3)

In this example, a "when" clause containing the third person pronoun is adjoined to a preceding matrix clause in which the subject, "David" is spelled out. The pronoun does refer to David. In this case, however, the pronoun is conjoined with another DP, "and those who were with him". This could be an instance of an intensive use of the pronoun meaning "he himself" (Robertson 1934: 679). It could also be the case that the conjoined phrase needs an overt host.[30]

#### 3.2.2.2 Null subjects, tense syncretism and V to T movement

Recently, Biberauer & Roberts (2010) put forth a proposal that covers more typological correlations concerning null subjects, verbal inflection and V to T movement. Crucially, they make a distinction between person and number inflection and tense inflection. In this system, what drives V to T movement is tense inflection, rather than person/number inflection. The gist of the analysis is as follows. Both T and V carry unvalued features, making them active in the derivation. While V lacks a valued Tense feature, T is valued for Tense. T, being a functional head is not specified with respect to argument structure, while V is specified as having argument structure. Within the Agree based system of Chomsky (2000, 2001), this

[30] To say that the conjoined phrase needs an overt host is compatible with a reading in which the postverbal subject is a type of afterthought, or a tail constituent in functional terminology.

means that T and V always establish an Agree relation. In languages like English (as well as V2 Germanic languages), the tense on the verb is licensed in this way, with no movement to T. In null subject languages, on the other hand, T bears an EPP feature, relating to rich tense synthesis, triggering V movement to T.

Biberauer & Roberts (2010) discuss the contrast between Romance languages, which have V to T, and Germanic languages, which do not. A typical example of the latter is English, where verbs do not raise (see (17b) above).[31] The difference is that the Romance languages have more synthetic (non-periphrastic) tense distinctions than the Germanic languages. These tense distinctions also encompass aspect and mood. For example, Italian shows the distinctions in (26a), French those in (26b), while English shows only the distinctions in (26b).

(26) a. Italian
*parlo* (present), *parlerò* (future), *parlerei* (conditional), *parlavo* (imperfect), *parli* (present subjunctive), *parlassi* (past subjunctive), *parlai* (preterit)
b. French:
*parle* (present indicative/subjunctive), *parlerai* (future), *parlerais* (conditional), *parlais* (imperfect), *parlai* (preterite), *parlasse* (past subjunctive).
c. English:
*speak* (present), *spoke* (past)

Biberauer & Roberts' (2010) proposal accounts for more cross-linguistic variation concerning null subjecthood and V to T movement. V to T movement is not available due to rich person and number inflection, but to tense synthesis. Pro-drop, on the other hand, is available due to rich person and number inflection. This explains the contrast between English (also Mainland Scandinavian), French and Italian/ Modern Greek (among other languages). The differences are summarized in Table 4.

| | Rich person, number | Pro-drop | Tense synthesis | V to T |
|---|---|---|---|---|
| MG, Italian | Yes | Yes | Yes | Yes |
| French | No | No | Yes | Yes |
| English | No | No | No | No |

**Table 4: Cross-linguistic variation concerning V to T movement**

The tense/aspect/mood/voice system in NT Greek is similar to the very complex system in older Classical Greek (for details on the Classical system, see Smyth 1984:112-142; see also Rijksbaron 2006; Lamers & Rademaker 2007). However there are some distinctions that are lost, and periphrastic forms are quite common in the NT, with perfects and imperfects (for example, A 21:33). Furthermore, Robertson (1934:326) points out that the optative mood is infrequent in the NT, and

[31] These authors assume that verb movement to C in the V2 Germanic languages does not proceed through T.

the subjunctive is mostly limited to the aorist and present.

Even though periphrasis occurs, and certain moods are infrequently attested, NT Greek has more synthetic tense/aspect/mood distinctions than Modern Italian and French. Table 1 below illustrates the attested tense, aspect and mood combinations from the verb stem *poié-*, "do", "make". Not all of the forms are found in all person/number combinations, so the table includes both third singular and third plural forms. Note however, that the person and number inflection is fused to the tense-aspect-mood stem, and that none of the forms in Table 5 are distinguished only through the person number inflection.

| **Tense/aspect, mood, voice** | **form attested** | **cf.** |
|---|---|---|
| Present indicative | poieî (ποιεῖ) (3sg) | Mt 5:32 |
| Aorist indicative | epoíe:sen (ἐποίησεν) (3sg) | Mt 12:3 |
| Imperfect indicative | epoíoun (ἐποίουν) (3pl) | Lk 6:23 |
| Future indicative | poié:sei (ποιήσει) (3sg) | Mt 21:40 |
| Perfect indicative | pepoíe:ken (πεποίηκεν) (3sg) | Mk 5:19 |
| Present subjunctive | poiê:i (ποιῇ) (3sg) | Jn 5:19 |
| Aorist subjunctive | poié:se:i (ποιήσῃ) (3sg) | Mt 5:19 |
| Aorist optative | poié:saien (ποιήσαιεν) (3pl) | Lk 6:11 |

**Table 5: attested tense/aspect/mood forms of *poiéo:*, "do", "make"**

Old Greek verbs also inflect for voice, however I've only included active forms in Table 5. Various tense-aspect-mood combinations are also found in the medio-passive voice, and the aorist tense-aspect has a distinct passive form.

In summary, while the Rich Agreement Hypothesis claims that V to T movement corresponds to rich person and number inflection, Biberauer & Roberts (2010) propose that V to T movement is the consequence of a high degree of tense synthesis. As I have shown in 2.2.2.1 and 2.2.2.2, NT Greek displays both of these properties, and it is therefore expected that V to T movement takes place.

### 3.2.3 The respective position of verbs and VP level adverbs

In the last subsection I gave two theoretically motivated reasons for assuming V to T movement, that stem from morphological facts. Here I discuss language-internal placement facts that suggest V to T movement.

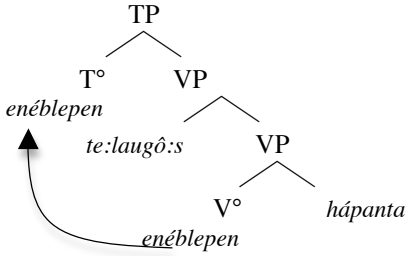
A common diagnostic employed in the literature to show that a verb has moved from the VP concerns the respective positions of a verb and a VP level adverb. An adverb (ADV) that modifies the VP is taken to mark the left edge of that VP. Therefore, if the verb linearly precedes the adverb, it suggests that the verb has moved out of the VP.

I have not found manner adverbs in clauses with overt subjects, verbs and objects, however the clause in (27) below shows a sequence of V-ADV-O.

(27) V-ADV-O
kaì enéblepen te:laugô:s hápanta
and see.3SG.AOR.IND.ACT clearly all.ACC.PL.M
'and he saw everyone clearly.'
καὶ ἐνέβλεπεν τηλαυγῶς ἅπαντα. (Mk 8:25)

In this example, the manner adverb *te:laugô:s* "clearly" appears after the finite verb *enéblepen*, "he saw". The strong quantifier object occurs after the V. This indicates that the verb has raised from the VP, and that the object is in-situ in the VP. This is shown schematically in (28) below.

(28)




### 3.2.4 VSO in subordinate clauses

As I mentioned above in 3.1, many have argued that verb movement in the Celtic languages is only to T, since there is no root non-root asymmetry in word order. That is to say, VSO is found in main as well as subordinate clauses. Example (29), from McCloskey (1996b: 50) illustrates a VSO subordinate clause in Irish.

(29) gheall sé go bhfillfeadh sé ar an bhaile MODERN IRISH
promised he COMP return[COND] he on home
'He promised that he would return home.'

As I mentioned in 3.1, the idea is that the C head is filled by the complementizer in subordinate clauses, and since the same word orders appear in main and subordinate clauses, verb movement must only be to T in all clauses.

There is no root non-root asymmetry in NT Greek. VSO orders are commonly found in subordinate clauses, an example in (30). In this example, the VSO clause is initiated by *hóti* "that".[32]

[32] As I mentioned in Chapter 2 (note 18), the complementizer *hóti* sometimes introduces direct speech, and does not necessarily introduce subordination. However, the clause in (30) is introduced by *é:kousan*, "heard" rather than "said", and appears to be a true subordinate clause. Furthermore, VSO is also found in "when" clauses initiated by the complementizer *hóte* (for example, Mt 13:53) and in "because" clauses initiated with *hína* (for example, Mk 12:19).

(30) VSO in a subordinate clause
kaì é:kousan hoi períoikoi
and hear.3PL.AOR.IND.ACT D.NOM.PL.M neighbour.NOM.PL.M (…)
hóti emegálunen kúrios
that exalt.3SG.AOR.IND.ACT lord.NOM.SG.M
tò éleos autoû met' autê:s
the.ACC.SG.N mercy.ACC.SG.N his.GEN.SG.M upon her.GEN.SG.F
'And her neighbours (and her cousins) heard that the Lord had exalted his mercy upon her;'
καὶ ἤκουσαν οἱ περίοικοι (καὶ οἱ συγγενεῖς αὐτῆς) ὅτι ἐμεγάλυνεν κύριος τὸ ἔλεος αὐτοῦ μετ' αὐτῆς, (Lk 1:58)

This suggests that verb movement in NT Greek is only to T. I note, however, that it is also possible that verb movement in subordinate clauses is distinct from verb movement in main clauses. One approach along these lines is found in Harley, Carnie & Pyatt (2000). They show that in Old Irish, there is a requirement that C° be filled. This is achieved through merging the complementizer in subordinate clauses, and by V to C movement in main clauses. I find no evidence suggesting that C° is always filled in NT Greek.

### 3.2.5 Verb placement with respect to the modal particle *án*

In Classical Greek and NT Greek, the modal particle *án* occurs in so-called irrealis clauses, often with subjunctive or optative verbs. It has a fairly high position in the clause, and Roussou (1998) claims that this particle occurs between the CP and TP domains, approximately Rizzi's (1997) Fin° in Classical Greek.

If this is the case in NT Greek, then the order *án*-V would indicate that the verb is in T, and the order V-*án*, that the verb is in C. In fact, both orders are found, as shown in (31) and (32) below. In (31), a dislocated object precedes *án* and the finite verb follows it. This clause is the apodosis of a conditional sentence. The fronted object *tòn patéra mou* "my father" is preceded by the particle *kaí*, and is defined in a contrasting set with the object in the protasis. It is presumably fronted to the left periphery.

(31) O – *án* - V
kaì tòn patéra mou
also D.ACC.SG.M father.ACC.SG.M my.GEN.SG
àn é:ideite
PCL know.2PL.PLPF.IND.ACT
'(if you had known me), you would have known my Father also.'
(εἰ ἐμὲ ᾔδειτε,) καὶ τὸν πατέρα μου ἂν ᾔδειτε. (Jn 8:19)

In (32), on the other hand, the verb precedes *án*, and the indirect object pronoun *emoí* follows *án*.

(32) V – *án* - O
episteúete àn emoí
believe.2PL.IMPF.IND.ACT PCL me.DAT.SG
'(For, if you believed Moses), you would believe me, (for he wrote about me.)'
(εἰ γὰρ ἐπιστεύετε Μωϋσεῖ,) ἐπιστεύετε ἂν ἐμοί, (περὶ γὰρ ἐμοῦ ἐκεῖνος ἔγραψεν.) (Jn 5:46)

If *án* is really a stable landmark separating T from C, then the verb in (31) is in T, and in (32), in C. However, the situation is not so simple, since the particle *án* shows second position effects in the New Testament, or in other words, is post-positive (Robertson 1934:424). Crucially, it is not found clause-initially.[33] It is usually preceded by a single constituent, as in (31) and (32) above. If other second position particles such as *dé* and *gár* are present, the modal particle follows them (examples are in Chapter 6).

The fact that there seems to be a requirement that the particle *án* occur linearly following one constituent, no matter of its type suggests either that the head of the projection hosting the particle has a requirement that something move into its Specifier, or that the distribution is partly effected by phonological properties. For example, Halpern (1995) proposes that enclitic elements, which need phonological material to their left, undergo a prosodic flip, surfacing after the phonological word that is closest in the syntax (I discuss this in more detail with regard to the second position particles *dé* and *gár* in Chapter 6). If this is the case for *án*, then the fact that verbs are found preceding it does not necessarily indicate that they are in C, since there is a possibility that they are ordered in this way after the syntax. That is to say, whichever element is highest in the syntactic structure will end up preceding *án*, whether it is a C or T element. That the verb precedes the mood particle in (32) then indicates only that it precedes the pronominal object in the syntax, therefore it could be in T. Notice however, that the particle is a stable landmark to identify lower verbs as TP material. That is, even if it is subject to phonological re-ordering, it still has a stable syntactic position, which is Fin°, following Roussou (1998). The phonological properties of the particle would affect its relative position with respect to material to its left, rather than material to its right, since under this hypothesis, it needs a host to its left.

Therefore, example (31) is evidence for terminal verb movement to T°, but (32) is not necessarily evidence for verb movement to C°. It is necessary to use a

[33] More accurately, the modal particle *án* is not found clause-initially. However, the homophonous conditional particle *án* "if" is found as the first word in two instances (e.g., Jn 20:23), in both of which the words following the particle are enclitics. This conditional particle is supposed to be the contracted form of the conditional particle *eán* (ἐάν) "if", which is supposed to be the concatenation of the conditional *ei* (εἰ) "if" and the modal particle *án* (see Jannaris 1898:419-420). The diachrony of the conditional *án* and the modal *án* is an extremely interesting issue that is left for future research. What is important here is that the modal particle shows second position effects.

landmark that is not possibly subject to phonological re-ordering, in order to identify verbs in C°.

### 3.2.6 Verb placement with respect to the particle *ára*

The particle *ára*, "then" or "therefore" has a stable position in the clause. It is described as an inferential paratactic conjunction (Robertson 1934:1189). The term paratactic conjunction means that it links two main clauses, and does not introduce subordination. Smyth (1984:635) describes it as a 'connective, confirmatory, and inferential particle marking the immediate connection and succession of events and thoughts'.[34] The important thing for the present purposes is that it is a conjunction of sorts, and is therefore very high in the structure, in the CP domain.

This particle is useful as a landmark to identify the syntactic positions of elements preceding it, since it does not display second position effects. This is witnessed by the fact that it is found frequently as the first word of the clause, as in (33) (see also Robertson 1934:1189-98).

(33) *ára* - S - V
ára hoi pántes apét$^{h}$anon
PCL D.NOM.PL.M all.NOM.PL.M die.3PL.AOR.IND.ACT
'For, the love of Christ controls us, having concluded this, that one died for all, (therefore everyone died)'.
(ἡ γὰρ ἀγάπη τοῦ Χριστοῦ συνέχει ἡμᾶς, κρίναντας τοῦτο, ὅτι εἷς ὑπὲρ πάντων ἀπέθανεν·) ἄρα οἱ πάντες ἀπέθανον· (2 Cor 5:14)

When *ára* is not the first word, only a few types of elements are found preceding it. These include conjunctions and complementizers, *wh*-interrogatives and negation. Examples of these are given in (34) - (36) respectively, below.

In (34), the conjunction *ei* "if" precedes *ára*. The verb follows the particle, and the subject, *he: epínoia tê:s kardías sou* "the thought of your heart" occurs postverbally.

(34) C – *ára* – V -S
ei ára ap$^{h}$et$^{h}$é:setaí soi he:
if PLC discharge.3SG.FUT.IND.PAS you.DAT.SG D.NOM.SG.F
epínoia tê:s kardías sou
thought.NOM.SG.F D.GEN.SG.F heart.GEN.SG.F your.GEN.SG.F
'(Therefore, repent of this wickedness of yours,) if, perhaps, the thought of your heart may be forgiven you.'
(μετανόησον οὖν ἀπὸ τῆς κακίας σου ταύτης, καὶ δεήθητι τοῦ κυρίου) εἰ ἄρα ἀφεθήσεταί σοι ἡ ἐπίνοια τῆς καρδίας σου· (A 8:22)

[34] The way in which 'inferential' is used by Greek grammarians is somewhat from what it means in modern linguistics, where inferentiality is generally seen as a part of an evidential system (see Aikhenvald 2004).

Example (35) shows the *wh*-interrogative *tí* "what" preceding *ára*, in an indirect question.

(35) *wh*-interrogative - *ára* - V
tí ára ho Pétros
what.ACC.SG.N PLC D.NOM.SG.M Peter.NOM.SG.M
egéneto
become.3SG.AOR.IND.MID
'(And when it became day, there was a great stir among the soldiers,) as to what happened to Peter.'
(Γενομένης δὲ ἡμέρας ἦν τάραχος οὐκ ὀλίγος ἐν τοῖς στρατιώταις,) τί ἄρα ὁ Πέτρος ἐγένετο. (A 12:18)

The question in (35) is posed by Jesus' disciples after Jesus' statement that a rich man can hardly enter the kingdom of heaven. The question expresses the attitude, "if not them, then who?"

Finally, the sentence in (36) is a negated question posed to Paul after the questioner has learned that Paul speaks Greek. In the string, the negative morpheme *ouk* is sentence-initial, preceding *ára*. The subject of the question, *sú* "you" follows the particle. The copular predicate follows the subject.

(36) NEG – *ára* – S - V
ouk ára sù eî
NEG PCL you.NOM.SG be.2SG.PRES.IND.ACT
ho Aigúptios …
D.NOM.SG.M Egyptian.NOM.SG.M
'Then you are not the Egyptian (who before these days made an uproar and led out into the wilderness four thousand men that were murderers)?'
οὐκ ἄρα σὺ εἶ ὁ Αἰγύπτιος (ὁ πρὸ τούτων τῶν ἡμερῶν ἀναστατώσας καὶ ἐξαγαγὼν εἰς τὴν ἔρημον τοὺς τετρακισχιλίους ἄνδρας τῶν σικαρίων;) (A 21:38)

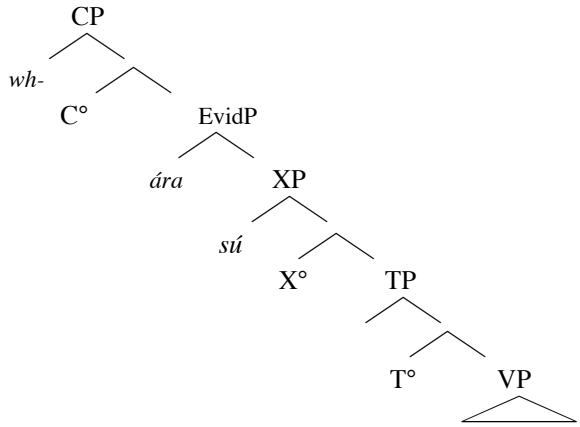
The elements found preceding *ára* share the property of being C elements. Complementizers are assumed to occupy one of the highest positions in the structure, a C head position. Similarly, *wh*-interrogatives are standardly assumed to occupy the Spec- of a projection in the C domain. The position of negation in (36) is not as clear. Greek finite negation is most often found cliticized preceding the predicate/ DP/ modifier that it is negating (see Chapter 4). These negative morphemes, when they occur in questions, are traditionally treated as question particles. In Chapter 5, I argue that these particles occur in C in questions.

Now consider the elements that follow *ára*. In (34) and (35) it is the verbs. In (36) the pronominal subject directly follows *ára*. The presence of an overt personal pronoun is in itself indicative of emphasis, and suggests a left peripheral status of the subject.

Compiling the data in (34) – (35), *ára* should be higher in structure of the Left Periphery than a discourse oriented projection, and lower than the position hosting

*wh*-interrogatives. These elements, taken together, yield the structure in (37). In this depiction, the particle *ára* heads the projection EvidP (Evidential Phrase) in the Left Periphery, and a discourse oriented projection is lower, labeled as XP in (37).

(37)




The examples in (38) and (39) show that finite verbs are also found preceding *ára*.

(38) V - *ára* - O
Heurísko: ára tòn nómon
find.1SG.PRES.IND.ACT PCL D.ACC.SG.M law.ACC.SG.M
'Therefore, I find it a law, (that when I want to do good, evil is present with me).'
Εὑρίσκω ἄρα τὸν νόμον (τῷ θέλοντι ἐμοὶ ποιεῖν τὸ καλὸν ὅτι ἐμοὶ τὸ κακὸν παράκειται·) (R 7:21)

(39) C - V - *ára*
epeì o:p$^{h}$eílete ára
since ought.2PL.IMPF.IND.ACT PCL
ek toû kósmou exelt$^{h}$eîn
from D.GEN.SG.M world.GEN.SG.M exit.AOR.INFIN.ACT
'(I wrote to you in a letter not to company with adulterers: Not altogether with the adulterers of this world, or with the covetous, or extortioners, or with idolaters;) for then you would have to go out of the world.'
(Ἔγραψα ὑμῖν ἐν τῇ ἐπιστολῇ μὴ συναναμίγνυσθαι πόρνοις, οὐ πάντως τοῖς πόρνοις τοῦ κόσμου τούτου ἢ τοῖς πλεονέκταις καὶ ἅρπαξιν ἢ εἰδωλολάτραις,) ἐπεὶ ὠφείλετε ἄρα ἐκ τοῦ κόσμου ἐξελθεῖν. (1 Cor 5:10)

If the structure of the left periphery suggested above is correct, then the verbs in these examples are in the C° position in (37). Notice that examples (38) and (39) do not contain both subjects and objects, and therefore only show that verbs can occupy

this position. It is not clear how frequent V to C movement is, nor what drives it. We know that verb movement does not proceed to C° consistently, based on subsections 3.2.4 and 3.2.5 above.

As I discuss in Chapter 5, verb movement to C occurs in object *wh*-questions (that is, direct, not indirect questions), and in that case there is a clear formal trigger. While I take the placement facts concerning *ára* to be strong evidence for verbs in C, there is no clear trigger for the movement. Roussou & Tsimpli (2006) claim that there are two derivations for VSO in Modern Greek; one with the verb in T, and one with the verb in C. The two derivations correspond to different readings. This is shown in example (40), from Roussou & Tsimpli (2006: 329). While the clause in (a) is pronounced with neutral intonation, and can be the response the broad focus question, "What happened?", the clause in (b) can be used as an emphatic statement or a yes–no question, if it bears the interrogative intonation.

(40) a. [T Estile [o Petros to gramma]] MODERN GREEK
sent-3SG the Peter the letter
'Peter sent the letter.' (neutral clause)
b. [C Estile [o Petros to gramma]]
sent-3SG the Peter the letter
'Peter did send the letter.' / 'Did Peter send the letter?'

Roussou & Tsimpli claim that V to C movement involves verb focusing, and if there is an interrogative feature on C, the clause is a question. The Modern Greek facts form an interesting parallel with NT Greek, in that NT Greek seems to show V to C movement in questions, at least content questions and possibly in *wh*-questions (for details, see Chapter 5). Since we do not have access to intonation, we can't test the prosodic properties of the verbs in (38) and (39). However, we can speculate that the statements are emphatic, as in Modern Greek, but this issue can't be fully solved here.

## 3.3 Section summary

To summarize this section on NT Greek verb movement, I first presented cross-linguistic and theoretically motivated arguments for verb movement to T, which concern the morphological properties of verbs. NT Greek has rich person and number inflection, which has been linked to V to T movement (see 3.2.2) as well as pro-drop. Furthermore, NT Greek has a large degree of synthesis in the tense-aspect-mood system, which has been shown to correlate to V to T movement (see 3.2.3). I then showed that verbs move out of the VP in NT Greek, based on the fact that they precede adverbs that modify the VP. In 3.2.4 I took the fact that VSO is found in subordinate clauses to indicate that verb movement terminates at T, at least in the usual case. In 3.2.5 I discussed the respective position of verbs and the mood particle *án*. Finally, I showed, based on the relative placement of verbs and the particle *ára*, that V to C movement can take place in NT Greek. The conclusion is that V to T movement is the usual case, and it is evidenced (or possibly driven) by

morphological properties of the verb. Therefore, when a verb moves to C, movement is taken to proceed through T. Verb movement to C is only clearly motivated in *wh*-questions, as I discuss in Chapter 5. In clauses where verbs precede *ára*, I can only speculate that the movement is pragmatically driven, similarly to in Modern Greek.

## 4 Subject positions

We have just seen in Section 3 that there is more than one position for finite verbs in declarative clauses. In this Section, I show that there is also more than one subject position. In principal, there are two neutral positions: Spec,*v* and Spec,T. However, many preverbal subjects are topics, or other kinds of dislocated elements, and therefore non-neutral. There are preverbal subjects that are neutral, in Spec,T, but they are very limited.

### 4.1 VP-internal subjects

In Chapter 2, I proposed that the clause in (41) ((16) in Chapter 2) was neutral in terms of information structure.

(41) Neutral VSO clause (=(16) in Chapter 2)
élaben dè p$^{h}$óbos pántas
seize.3SG.AOR.IND.ACT PCL fear.NOM.SG.M everyone.ACC.PL.M
'And everyone became afraid, (and they began to glorify God, saying, 'A great prophet is risen up among us' and, 'God has visited his people').'
ἔλαβεν δὲ φόβος πάντας (καὶ ἐδόξαζον τὸν θεὸν λέγοντες ὅτι Προφήτης μέγας ἠγέρθη ἐν ἡμῖν, καὶ ὅτι Ἐπεσκέψατο ὁ θεὸς τὸν λαὸν αὐτοῦ.) (Lk 7:16)

I assume that verb movement is only to T in (41), since as I showed in Section 3, V to T movement is the norm, while V to C is predicted to correspond to emphasis on the verb. The relative linear positions of the subject and verb therefore suggest that the subject is in the VP/vP. Furthermore, the fact that the subject does not have a topic or focus interpretation indicates that the subject is in its base position in the VP, rather than moving to a vP level left peripheral focus projection, as has been proposed for the Italian clause (see Cardinaletti 1997; Belletti 2001).

Therefore, the interpretation of the subject, and its relative position with respect to the verb indicate that it is in its base position. In the rest of this subsection I provide support for this claim, based on adverb position and the relative position of subjects and shifted objects.

### 4.1.1 Adverb placement

In Subsection 2.2.1 I used VP level adverbs to mark the left edge of the VP. This diagnostic showed that Vs move out of the VP. Now, consider the example in (42).

(42) katepéste:san homot$^{h}$umadòn hoi
step.down.3PL.AOR.IND.ACT unanimously D.NOM.PL.M
Ioudaîoi tô:i Paúl
Jew.NOM.PL.M D.DAT.SG.M Paul.DAT.SG.M
'(And when Gallio was the deputy of Achaia,) the Jews revolted unanimously against Paul (and brought him to the judgment seat).'
(Γαλλίωνος δὲ ἀνθυπάτου ὄντος τῆς Ἀχαΐας) κατεπέστησαν ὁμοθυμαδὸν οἱ Ἰουδαῖοι τῷ Παύλ (καὶ ἤγαγον αὐτὸν ἐπὶ τὸ βῆμα,)
(A 18:12)

In the main clause in (42), the V *katepéste:san* "revolted", or "put their foot down", precedes the manner adverb *homot$^{h}$umadón* "with one accord", or "unanimously". Following the adverb are the subject *hoi Ioudaîoi* "the Jews" and indirect object/PP *tô:i Paúl* "against Paul".

The fact that the subject follows the adverb indicates that the subject and the PP have not moved out of the vP. Furthermore, there is no contrast involving the subject, and so does not seem to be focus material.

I haven't found an example of the sequence V-S-X-O in NT Greek, which could suggest that postverbal subjects always stay inside the vP. This forms a contrast with Modern Irish, as shown by (43), from McCloskey (1996a), and Roberts (2005:11).

(43) Níor shaotaigh Eoghan ariamh pingin MODERN IRISH
Neg-Past earned Owen ever penny
'Owen has never earned a penny.'

The adverb *ariamh* is a V/vP level adverb, and so marks the left edge of the V/vP. The subject *Eoghan* occurs to the left of this adverb, showing that it has raised from the V/vP.

### 4.1.2 Shifted objects

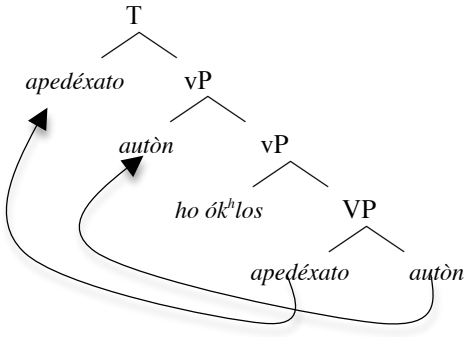
VOS orders are very common with pronominal objects in NT Greek. In the VOS clause in (44), the object pronoun *autón* directly follows the verb, preceding the subject.

(44) VOS
apedéxato autòn ho ók$^{h}$los
receive.3PL.AOR.IND.MID him.ACC.SG.M D.NOM.SG.M crowd.NOM.SG.M
'(And when Jesus returned), the crowd received him'
(Ἐν δὲ τῷ ὑποστρέφειν τὸν Ἰησοῦν) ἀπεδέξατο αὐτὸν ὁ ὄχλος
(Lk 8:40)

Pronominal objects undergo leftward movement in many languages, and are spelled out in a fairly low position in the clause. This process is often referred to as object shift (see Holmberg 1986, 1999; Vikner 1994; 2005 concerning Scandinavian languages). In Chomsky (2000), it is claimed that shifted objects land in a Specifier of *v* (see also Richards 2004).

In NT Greek, adverbs are found preceding subjects (see (42)), suggesting that the subjects stay in-situ, and this is compatible with an analysis of object shift whereby the object is in a Specifier of *v*. I propose the derivation in (45) for the clause in (44). The verb moves to T, which I have claimed is the normal case for declarative clauses in Section 3 above. The pronominal object moves to a Specifier of *v* above the *v*P-internal base position of the subject. As indicated in (45), subjects start in the *v*P, and can also stay inside the *v*P, not raising overtly to Spec,T.

(45)




### 4.1.3 Interim summary

I have just shown distributional evidence supporting the fact that subjects can say *v*P-internal. The question is now how the syntactic relationship between the subject DP and the verb is established, and what the position of preverbal subjects is. Chomsky (1982) proposes the requirement that all clauses have a subject in a Case position (Chomsky 1982), referred to as the Extended Projection Principle (EPP).[35] In later theorizing, the EPP corresponds to a nominal [D] feature on AgrS (i.e., T) (Chomsky 1995), that triggers movement of the subject to Spec,T. For a subject that is postverbal (or not overt), the standard analysis, for the Romance languages, is that there is a null pronominal, *pro*, in Spec,T (Chomsky (1982; Rizzi (1982).

There are, however, many other standard and non-standard approaches that do not assume this empty category in Spec,T for null-subject languages with rich subject verb agreement, or 'free word order' languages with a rich system of pronominal affixes. Rather, the verbal inflection (or pronominal affixation) itself is the structural subject of the verb, or contains morphemes or features of it. This has been formalized in various ways (see Borer 1986; Ordóñes 1997; Alexiadou & Anagnostopoulou 1998; Platzack 2003 for standard Government and Binding (GB) /

[35] For some history about the EPP, see the introduction in Svenonius (2002).

Minimalist approaches; Bresnan & Mchombo 1987 for a non-standard (Lexical Functional Grammar) approach). In the next subsection I outline Alexiadou & Anagnostopoulou's (1998) proposal, which shares properties with Borer's (1986) GB account (see Roberts & Holmberg 2010: 3). Both proposals argue that there the Spec,T (Spec,Agr or NOM-S in their respective terminologies] position for subjects is not universal.

## 4.2 Alexiadou & Anagnostopoulou (1998)

Alexiadou & Anagnostopoulou (1998) (henceforth A & A) take the view that in languages with rich person and number inflection, there is no requirement that an element be in the canonical Spec,T position. They discuss facts from Celtic, Modern Greek (MG), Icelandic and English, creating a typology of languages that allow VS orders, based on the parametrization of the T position (in their terminology Agr). Basically, they claim that the Null Subject Parameter is the source for the cross-linguistic variation. For the sake of simplicity, I discuss only the data from English, a non null subject language and MG, a null subject language.

There are a number of asymmetries between English and MG VS structures. First of all, in English VS orders an expletive *there* is required in Spec,T (46), unlike in Greek (47).

(46) a. *(There) arrived a man
b. A man arrived

(47) a. efige o Petros — MODERN GREEK
left the Peter
'Peter left.'
b. o Petros efige
the Peter left
'Peter left.'

Second, in English only intransitive verbs can appear in VS orders, while in MG all types of predicates occur in VS(O) orders. The contrast is shown in (48) and (49).

(48) *There built a man a house.

(49) ektise i Maria to spiti — MODERN GREEK
built the Mary the house
'Mary built the house.'

A well-known property of expletive constructions in English, among other languages, is that they are ungrammatical if the associate of the expletive is definite.[36] An example is given in (50).

[36] There are various counter-examples to this with English existential expletive

(50) There arrived three men / a man/ *the man / *all the men / *each man / *every man

The phenomenon is known as the Definite Restriction (DR), or Definiteness Effect (Milsark 1977; Belletti 1988; Moro 1997).

A & A take the DR to indicate that definite subjects are incompatible with an expletive in Spec,T. They show (A & A 1998: 496) how show that this restriction is absent in Modern Greek. This is illustrated in (51) below.

(51) irthe to kathe pedi MODERN GREEK
arrived the every child
'Each child arrived.'

They take the fact that there is no expletive in VS orders in MG as an indication that the Spec,T position is not filled, and thus, not projected. In their analysis, the verbal inflection in a null subject language is specified enough to satisfy the [EPP], which corresponds to an uninterpretable Definiteness [D] feature on T, when the verb moves to T.

The parametric difference then lies in what exactly the category that checks the [EPP] is. It can be checked either through Move/Merge XP or Move/Merge X° (A & A 1998: 518). Languages with rich verbal inflection such as MG check the [EPP] through V head (X°) movement to T°, and languages with poor agreement such as English check it through XP movement (Move XP), or expletive insertion (Merge XP). Therefore, the [EPP] as a feature is universal, however there is no Spec,T position projected in null subject languages.

A consequence of A & A's analysis is that preverbal subjects in null subject languages are left-dislocated to the left periphery, undergoing A' movement rather than A movement, a proposal also put forth in Barbosa (1994), Dobrovie-Sorin (1994), among others. Postverbal subjects stay in-situ in the VP. This corresponds to the fact that at least in MG, preverbal subjects have the interpretation of topics, while postverbal subjects are pragmatically neutral (i.e, the neutral order is VSO, not SVO). The examples (52) are repeated from (12) above, from A & A (1998: 506).

(52) a. Ena pedhi deavase to "Paramithi horis Onoma." MODERN GREEK
a child read the "Fairy Tale without a Title"
'A certain child/one of the children read "Fairy Tale without a Title".'
b. Deavase ena pedhi to "Paramithi horis Onoma".

As I discussed in Section 2 above, the preverbal subject in (52a) has a 'strong' partitive or specific interpretation, while the postverbal subject in (52b) favours a

---

constructions, as discussed in Ward & Birner (1995) (see the references there). As a case in point, *there is the so-called List Sentence*, as discussed in Rando & Napoli (1978). Since the English examples only appear in existential constructions, I do not consider this issue further, focusing rather on the contrast between English and Greek non-copular verbs.

non-specific reading.

Further evidence that preverbal subjects in MG are A' moved comes from the contrast between MG and English with respect to scope ambiguities with indefinites and strong quantifiers. The examples in (53) and (54) illustrate this.

(53) Some student filed every article
∃ >∀, ∀>∃

(54) a. Kapios fititis stihiothetise kathe arthro MODERN GREEK
some student filed every article
∃ > ∀, ∗∀ > ∃
b. stihiothetise kapios fititis kathe artho
filed some student every article
∃ > ∀, ∀ > ∃

In English, an indefinite subject with a strong quantifier object has ambiguous scope; (53) can either mean that one single student filed every article, or that every article was filed by some student or another. In MG, on the other hand, when the indefinite subject is preverbal as in (54a), the indefinite has to have wide scope; only the reading where one and the same student filed every single article is available. In the VSO order in (54b), the scope is ambiguous as in English.

A & A's (1998: 505) explanation is that if the preverbal subject in (54a) were in an A position, the interpretation should remain ambiguous. A & A provide a number of arguments showing that preverbal subjects in MG are left-dislocated Topics, and I will not repeat them all here. In the following subsection I discuss some of the problems that have been brought up with A & A's account.

## 4.3 Arguments against Alexiadou & Anagnostopoulou (1998)

A & A's (1998) analysis makes a couple of very strong predictions. First, it predicts that all null subject languages have VSO orders, which is not true, for example in Modern Hebrew (see Doron 2000, note 8). Furthermore, even Italian, a consistent null subject language that A & A treat as an exemplar of their proposal, does not easily allow VSO orders (see Cardinaletti 2004; Belletti 2001; Pinto 1997; Sheehan 2010).

The proposal also makes the very strong prediction that all preverbal subjects are left-dislocated in null subject languages, since Spec,T is never projected. Many have shown that this prediction is not born out for the Romance null subject languages (for example, see Costa 1998, Chapter 3 concerning Brazilian Portuguese; Goodall 2001 concerning Spanish; Costa 2004 concerning European Portuguese; Sheehan 2010 concerning Spanish, Italian and European Portuguese). Here I go through some of the evidence that has been proposed suggesting that preverbal subjects are Spec,T subjects in the Romance null subject languages.

### 4.3.1 Basic SVO order

The first reason to believe that Romance languages have a Spec,T position is that SVO is the canonical, or basic word order. As I discussed in Chapter 2, the answer to a broad focus question yields a neutral clause in terms of information structure. In Italian, an appropriate answer to the question "What happened" is an SVO clause (Cardinaletti 2004; Alexiadou 2006).

Example (55), adapted from Costa (2004:16) illustrates this for European Portuguese. As shown by (55b') and (55b''), VSO and OSV are odd in this context.

(55) a. O que é que aconteceu? EUROPEAN PORTUGUESE
The what is that happened
'What happened?'
b. O Pedro partiu o braço.
The Pedro broke the arm
'Pedro broke his arm.'
b'. #Partiu o Pedro o braço.
broke the Pedro the arm
b''. #O braço, o Pedro partiu-o.
the arm, the Pedro broke it

If there were no canonical Spec,T position projected, and if preverbal subjects occupied a left peripheral Topic projection, then one would not expect a neutral clause to show SVO word order.

### 4.3.2 Preverbal negative quantifier subjects

Goodall (2001) and Costa (2004), among others, take the existence of preverbal negative quantifier subjects in the Romance languages as evidence that subjects move to the Spec,T position, rather than to a dislocated position (see also the discussion in Cardinaletti 1997: 43-44).

As Costa (2004: 122-23) shows, negative quantifier arguments are either pre- or postverbal in European Portuguese. Their distribution depends on whether they are new or given. This is shown in (56) and (57).

(56) a. Quem chegou? EUROPEAN PORTUGUESE
who arrived
'Who arrived?'
b. Não chegou ninguém
not arrive no one
'No one arrived.'
b'. *Ninguém chegou.
no one arrive

(57) a. O que é que ninguém fez? EUROPEAN PORTUGUESE
what did no one do?
'What did no one do?'
b. Ninguém chegou.
no one arrive
'No one arrived.'
b'. *Não chegou ninguém
not arrive no one

If the negative quantifier subject is focus material, it occurs postverbally (56), and when given, preverbally (57). As reported in Sheehan (2010: note 7) Italian and Spanish pattern the same way.

Negative quantifiers are generally thought to be impossible as Topics in many dialects of Italian (Cinque 1990), Spanish (Goodall 2001) and Portuguese (Costa 1998; 2004). In many dialects of Italian including the Veneto dialects, left-dislocated elements are optionally doubled with a clitic (see Cinque 1990; Benincà & Poletto 2004; Poletto 2000). The example in (58) (from Alexiadou 2006:138, from Poletto 2000: 141) shows that negative quantifier subjects can't be resumed with clitics in the central Veneto dialect, contrasting with other DPs.

(58) a. Nane el magna ITALIAN (CENTRAL VENETO)
John subject clitic eats
b. Nusun (*el) magna
Nobody subject clitic eats

Costa (2004) and Goodall (2001) taking the fact that negative quantifiers are non-topicalizable in European Portuguese and Spanish, argue that preverbal negative quantifier subjects such as the one in (57b) are in Spec,T, the canonical Spec,T subject position. However, Alexiadou (2006, note 8) notes the facts in Spanish and Greek are not as clear, and it has been shown that negative quantifiers undergo left-dislocated in Spanish, Italian and Greek (Ordóñez 1997; Giannakidou 2006). The data I show below suggest that preverbal negative quantifiers are moved to the Left Periphery in NT Greek.

### 4.3.3 Minimality

Another issue discussed in Costa (2004:14-15) is the violation of Minimality. Generally and informally speaking, a Minimality violation refers to the impossibility of a configuration in which the head and tail of a movement chain are separated by an intervening element that could potentially be the head of the chain.[37] For example, a *wh*-interrogative undergoing A' movement across an intervening potential A' position leads to ungrammaticality in many languages. The examples in

[37] For formal definitions of Minimality within the Government and Binding framework, see Chomsky (1986, Rizzi 1990) and in more recent theory, see Chomsky (2000), where Minimality is defined in terms of intervention.

(59) from Costa (2004: 14-15), illustrate this for European Portuguese. While (59a) is grammatical, (59b) is rejected by some speakers.

(59) a. Perguntei que livro o Pedro leu. EUROPEAN PORTUGUESE
I asked which book the Pedro read
'I asked which book Pedro read.'
b. *Perguntei que livro, à Maria, lhe deram.
I asked which book, to Maria, herCL-DAT they gave
'I asked which book they gave to Maria.'

According to Costa, (59a) is grammatical because the subject of the embedded *wh*-clause occupies an A position, which is not an intervener for *wh*-movement. In (59b), on the other hand, the left-dislocated phrase *à Maria*, "to Maria" constitutes an intervener for A'movement of the *wh*-interrogative. In other words, if preverbal subjects always occupied A' positions, there should be no contrast between (59a) and (59b), and example (59b) should be grammatical. If, on the other hand, the subject in (59a) is in Spec,T, its grammatically is expected, in contrast to (59b), which displays a typical Minimality violation.

### 4.3.4 Null expletives in VS orders

As I mentioned in 4.2 above, English shows Definiteness Restriction (DR) effects, which refers to the ban on the co-occurrence of expletives and postverbal definite subjects (see (50) above). A and A (1998) use the systematic lack of DR effects as an argument for the absence of a null expletive in Spec,T in MG.

While DR effects are not obviously present in the Romance languages, they are there in certain constructions. Sheehan (2010: 241) notes that DR effects are observed with unaccusative and passive verbs.[38] This is so only if there is an overt locative PP and the subject is not under narrow focus (this was first shown by Belletti (1988) for Italian). Sheehan (2010: 242) gives the following paradigm for European Portuguese (from Ambar 1992).

(60) a. Chegaram os técnicos ontem
arrived the technicians yesterday
'The technicians arrived (here) yesterday.'
b. A Lisboa chegaram os técnicos ontem
to Lisbon arrived the technicians yesterday
Lit. "In Lisbon arrived the technicians yesterday.'

[38] Unaccusative verbs are intransitive verbs whose subjects do not have agentive semantics, but are semantically similar to objects of transitive verbs (for example, English *die*, *sleep*). Since the DP doesn't show accusative case, but has a theta role similar to DPs that do show accusative case, the verbs are termed unaccusative.

c. Os técnicos chegaram a Lisboa ontem
the technicians arrived to Lisbon yesterday
'The technicians arrived in Lisbon yesterday.'
d. *?Chegaram os técnicos a Lisboa ontem.
arrived the technicians to Lisbon yesterday
'The technicians arrived in Lisbon yesterday.'

Sheehan (2010) argues that the DR effects are evidence for an element in Spec,T. The argument runs as follows. A null locative element satisfies the [EPP] in (60a), allowing the subject to remain postverbal. This accounts for why (60a) has a reading where the technicians did not just arrive anywhere, but at the location of the speaker. In (60b), the overt locative PP takes care of the [EPP], allowing the subject to remain postverbal. In (60c), the subject itself raises and checks the [EPP], and in (60d), neither the subject nor the locative PP raises. Unlike in (60a), there is an overt locative PP in (60d), precluding a null locative in preverbal position. Under this account, (60d) is unacceptable because the [EPP] is not satisfied.[39]

## 4.4 NT Greek preverbal subjects

I have just listed a number of problems with the analysis of Alexiadou & Anagnostopoulou (1998), in which it is claimed that null subject languages do not project Spec,T. The proposal seems to leave some very basic facts mysterious, such as the very general fact that SVO is the canonical word order among Romance languages. Nonetheless, other scholars accept the proposal, at least for MG (see Costa 1998:113; Miyagawa 2010). The facts in Romance versus MG are actually quite different (see Alexiadou 2006).

The situation in NT Greek is very interesting, given that SVO and VSO are both seemingly equal in terms of neutrality. Example (17) is repeated from Chapter 2 in (61) below.

(61) Neutral SVO clause (=(17) in Chapter 2)
kaì ékstasis élaben
and amazement.NOM.SG.F seize.3SG.AOR.IND.ACT
hápantas
everyone.ACC.SG.M
'And everyone became amazed, (and they began to God, and they were filled with fear, saying, 'We have seen strange things today').'
καὶ ἔκστασας ἔλαβεν ἅπαντας (καὶ ἐδόξαζον τὸν θεόν, καὶ ἐπλήσθησαν φόβου λέγοντες ὅτι Εἴδομεν παράδοξα σήμερον).
(Lk 5:26)

This example suggests that there is a Spec,T subject position in NT Greek, since

[39] For an entirely different approach to these types of data, see Moro (1997).

there is no way to construe the subject in (61) as a topic.

In the remainder of this Section, I try to distinguish subjects that are topicalized from subjects that are in Spec,T. First, in 4.5.1 I identify the left peripheral topic projection, based on instances of adverbs and clauses intervening between subjects and verbs. The fact that NT Greek has an available Topic projection is not at all surprising nor controversial.

Interestingly, I find no evidence of subjects in Spec,T aside from the seemingly neutral clause in (61) above. As I show in 4.5.2 and 4.5.3, even subjects that one would expect to occupy Spec,T clearly do not. These are indefinite subjects, and negative quantifier subjects. I find far more evidence for topicalized subjects than subjects in Spec,T. On the whole, the argumentation against Alexiadou & Anagnostopoulou (1998), presented in Section 3 above does not carry over to NT Greek. In 4.5.4 I discuss the lack of Definiteness Restriction effects, and the lack of null expletives, which suggests that there is no null *pro* in Spec,T. In 4.5.5, I provide a summary and informal analysis.

### 4.4.1 Identifying TopicP: intervening adverbs and clauses

Subjects are found separated from the verb by at least one adverb. Recalling that in the default case, verbs move to T, this indicates that the subject does not occupy Spec,T, or at least that the subject and verb are not in a Spec-head configuration. Consider the example in (62).

(62) S-ADV-ADV-V
egò: dè limô:i
I.NOM.SG PCL hunger.DAT.SG.M
hô:de apóllumai
here perish.1SG.PRES.IND.MID
'(And when he came to himself, he said, How many hired servants of my father's have bread enough and to spare,) and I perish with hunger!'
(εἰς ἑαυτὸν δὲ ἐλθὼν ἔφη, Πόσοι μίσθιοι τοῦ πατρός μου περισσεύονται ἄρτων,) ἐγὼ δὲ λιμῷ ὧδε ἀπόλλυμαι. (Lk 15:17)

In this example, the subject pronominal *egò:* "I" occurs sentence-initially, followed by the second position particle *dé*. The particle is followed by two adverbial expressions, *limô:i* "with hunger" and *hô:de* "here". The first is the dative form of the noun *limós* "famine", or "hunger", used as an instrumental. The finite verb *apóllumai* "I perish" follows these adverbials, in sentence final position.

Aside from the fact that the two adverbials intervene between the subject and verb, the context of the example suggests that the subject is dislocated. First of all, it is a pronoun, and second it is being contrasted with referents in the previous clause, namely the speaker's father's servants. This is conducive to a contrastive topic reading.

In NT Greek, clauses are also found intervening between S and V. Consider the example in (63).

(63) he: gunè: [hótan
D.NOM.SG.F woman.NOM.SG.F when
tíkte:i ] lúpe:n ékʰei
labour.3SG.PRES.SUBJ.ACT grief.ACC.SG.F have.3SG.PRES.IND.ACT
'A woman, when she is in labour, has grief, (because her hour has come. But when the child is born, she no longer remembers her pain because of the joy that a person came into the world. And now you have grief.)'
ἡ γυνὴ ὅταν τίκτῃ λύπην ἔχει, (ὅτι ἦλθεν ἡ ὥρα αὐτῆς· ὅταν δὲ γεννήσῃ τὸ παιδίον, οὐκέτι μνημονεύει τῆς θλίψεως διὰ τὴν χαρὰν ὅτι ἐγεννήθη ἄνθρωπος εἰς τὸν κόσμον. καὶ ὑμεῖς οὖν νῦν μὲν λύπην ἔχετε·) (Jn 16:21)

In this instance, the preverbal subject is interrupted from the finite verb by a temporal subordinate clause initiated by *hótan* "when". The subject is under contrast, in this instance with a participant in a following clause, "you".

In my preliminary survey of word orders in Matthew, Luke, First Corinthians and Revelation in Chapter 2, Section 4, I excluded clauses like those in (63), (see Appendix 1, Section I). They were excluded since they are not straightforward SVO clauses. We are now in a position to evaluate these clauses from a comparative perspective, with the clauses collected in the survey. Both (62) and (63) support contrastive topic readings of the subject, and the subjects are both separated from the verbs by adverbs, or by an entire clause.[40] Thus, the subject is not a Spec,T canonical subject, but occupies a higher position in the sentence.

### 4.4.2 Topicalization of specific indefinites

Many SVO clauses don't contain extra material that can be used to distinguish Spec,Top from Spec,T. Therefore, another means has to be sought to identify the position of the subjects. In this section I use parallelism with object topicalization to argue that subjects in certain SVO clauses are topicalized.

In Chapter 2, I identified SVO clauses as appearing at the beginning of new stories, such as (64), repeated from (22) in Chapter 2.

(64) ántʰro:pós tis epoíei
man.NOM.SG.M INDEF.NOM.SG.M make.3SG.IMPF.IND.ACT
deîpnon méga
dinner.ACC.SG.N large.ACC.SG.N
'(And he said to him), "A certain man made a large dinner, (and called many, and he sent his slave on the hour of the feast to those who were called to say, 'Come, because it is ready'.")'
(ὁ δὲ εἶπεν αὐτῷ), Ἄνθρωπός τις ἐποίει δεῖπνον μέγα, (καὶ ἐκάλεσεν πολλούς, καὶ ἀπέστειλεν τὸν δοῦλον αὐτοῦ τῇ ὥρᾳ τοῦ δείπνου

[40] For more discussion about the structure of sentences such as the one in (63), see Chapter 6.

εἰπεῖν τοῖς κεκλημένοις, Ἔρχεσθε, ὅτι ἤδη ἕτοιμά ἐστιν.)
(Lk 14:16)

Examples like (64) are neutral in the sense that the referents are both new information, and the clauses are uttered out of the blue, as the introductions to stories. The subject is an indefinite DP, containing the indefinite *tis*, as discussed in Chapter 2. Since the subject is not familiar in the discourse, it might be expected to represent a canonical subject, and to occupy Spec,T. However, the indefinite *tis*, is not just a regular indefinite article comparable to "a". Rather, it is a specific indefinite, with "a certain *x*", or "this *x*" being a more suitable translation. Plain indefinites in NT Greek tend to surface as bare nouns.

In (64) above, the constituent *ánt$^{h}$ro:pós tis* "a certain man" is the topic of the story that follows, and it refers to a specific man (of course the man does not necessarily exist in the real world). This alone would not be a very valid reason for proposing that the subject is syntactically a topic (i.e., occupying a Topic projection), however dislocation of these types of specific indefinites is clearly visible when they are objects, or other non-subject constituents.

For example, consider the sentence in (65), which introduces the Parable of the Rich Fool. The first constituent, *ant$^{h}$ró:pou tinòs plousíou* "of a certain rich man", labeled GEN, is the genitive complement of the postverbal subject *he: k$^{h}$ó:ra* "the ground".

(65) GEN-V-S

| | | | |
|---|---|---|---|
| Ant$^{h}$ró:pou | tinòs | | plousíou |
| man.GEN.SG.M | INDEF.GEN.SG.M | | rich.GEN.SG.M |
| eup$^{h}$óre:sen | | he: | k$^{h}$ó:ra |
| bear.well.3SG.AOR.IND.ACT | | D.NOM.SG.F | ground.NOM.SG.F |

'(He spoke the parable to them, saying), "There was a certain rich man, and his ground was fertile (and he thought to himself saying, 'What will I do? Because I have nowhere to store my fruit'.".)[41]

(Εἶπεν δὲ παραβολὴν πρὸς αὐτοὺς λέγων,) Ἀνθρώπου τινὸς πλουσίου εὐφόρησεν ἡ χώρα. (καὶ διελογίζετο ἐν ἑαυτῷ λέγων, Τί ποιήσω, ὅτι οὐκ ἔχω ποῦ συνάξω τοὺς καρπούς μου;) (Lk 12:16)

The initial GEN constituent contains the same parts as the specific indefinite subject in (64): the indefinite *tis* (in (65) appearing as *tinós*, in the genitive case), and the NP *ánt$^{h}$ro:pos* "man" (also in the genitive case in (65)), with the addition of the adjective *plousíou* "rich". The discourse following (65) is about the rich man, and not his ground, and so the GEN seems to serve as a topic.

Another parable introduction is shown in (66), which introduces the Parable of the Barren Figtree (also cited in Friberg 1982:181). In this case, the object *sukê:n* "a figtree", is fronted to preverbal position.

[41] A more literal, but acceptable translation of this clause is "The ground of a certain rich man was fertile".

(66) OVS
Sukê:n eîk$^{h}$én
figtree.ACC.SG.F have.3SG.IMPF.IND.ACT
tis pep$^{h}$uteuméne:n …
INDEF.NOM.SG.M plant.ACC.SG.F.PERF.PART.MID
'A certain man had a figtree planted (in his vineyard, and he came looking for fruit in it and he didn't find any).'
Συκῆν εἶχέν τις πεφυτευμένην (ἐν τῷ ἀμπελῶνι αὐτοῦ, καὶ ἦλθεν ζητῶν καρπὸν ἐν αὐτῇ καὶ οὐχ εὗρεν). (Lk 13:6)

Notice that the object here is indefinite, consisting of just a bare NP with no specific indefinite article.[42] This shows that even indefinites that do not appear with the specific indefinite article *tis* can occur in preverbal position.

The examples in (65) and (66) show that indefinite constituents, either marked explicitly with the specific indefinite article *tis*, or even without an overt *tis*, undergo movement in NT Greek when they are topics of following stories. Thus, the preverbal position of subjects of this kind (as in (64) above) does not seem to be related to their subjecthood.

It would be strange to assume that the position of the subject in (64), the GEN in (65) and the object in (66) occupy distinct positions, but of course it is possible. Assuming, however, that they occur in the same position, one of the following two options emerge: specific indefinites that are preverbal are fronted to a topic projection (along the lines of Alexiadou & Anagnostopoulou 1998), or the Spec,T position is not connected particularly to subjecthood (for approaches along the second line see Miyagawa 2010, Holmberg & Nikanne 2002).

### 4.4.3 Negative quantifier subjects

In the NT Greek corpus, the large majority of negative quantifier subjects are preverbal. This is true of transitive and intransitive verbs, and negative existential constructions, as shown in (67) – (69).

[42] Although the specific indefinite *tis* is present in this clause, it is not part of the object, but constitutes the entire subject. I did not include this clause in the preliminary sample of word orders in Matthew, Luke, First Corinthians and Revelation in Chapter 2, because this indefinite subject pronoun is a clitic (also, the verb consists of two parts). When it does not cliticize onto a noun or other element with which it forms a constituent, it cliticizes somewhere else; in (66), it cliticizes onto the verb *eîk$^{h}$en*, "had", noticeable from the raised pitch accent on its second syllable (*eîk$^{h}$én*).

(67) transitive
kaì oudeìs bállei oînon
and no-one.NOM.SG.M put.3SG.PRES.IND.ACT wine.ACC.SG.M
néon eis askoûs palaioús
new.ACC.SG.M into vessel.ACC.PL.M old.ACC.PL.M
'and no one puts new wine into old bottles'
καὶ οὐδεὶς βάλλει οἶνον νέον εἰς ἀσκοῦς παλαιούς (Lk 5:37)

(68) intransitive
oudeìs érk$^{h}$etai pròs
no-one.NOM.SG.M come.3SG.PRES.IND.MID to
tòn patéra ei mè: di' emoû
D.ACC.SG.M father.ACC.SG.M if NEG through me.GEN.SG
'no one comes to the father, unless through me'.
οὐδεὶς ἔρχεται πρὸς τὸν πατέρα εἰ μὴ δι' ἐμοῦ. (Jn 14:6)

(69) existential
oudeís estin ek tê:s
no-one.NOM.SG.M be.3SG.PRES.IND.ACT from D.GEN.SG.F
sungeneías sou
lineage.GEN.SG.F your.GEN.SG
'There is no one from your lineage (who is called by that name).'
Οὐδείς ἐστιν ἐκ τῆς συγγενείας σου ὃς καλεῖται τῷ ὀνόματι τούτῳ.
(Lk 1:61)

As I discussed in 4.3 above, the subjects are taken to start in the VP, and raise to preverbal position. In (69) the negative quantifier raises, stranding the PP that modifies it, *ek tê:s sungeneías sou* "from your lineage".

Postverbal negative quantifier subject also occur, although far less frequently. One instance is given in (70). In this instance, a negative quantifier subject occurs postverbally, and the negative morpheme *ou* occurs preverbally.[43]

[43] NT Greek shows some negative concord or negative spread. However, there are also cases in which no negative morpheme occurs alongside a postverbal negative quantifier argument. In this respect, NT Greek does not seem to constitute a negative concord language (see Giannakidou 2000, Zeijlstra 2004 for typologies, and Chapter 4 for more on NT Greek negative doubling/concord).

(70) all' ou dúnatai oudeìs (…)
but NEG can.3SG.PRES.IND.MID no-one.NOM.SG.M
tà skeúe: autoû diaprásai.
D.ACC.PL.N goods.ACC.PL.N his.GEN.SG destroy.AOR.INFIN.ACT
'No-one can (having entered into a strong man's house), spoil his goods, (unless first he binds the strong man)'
ἀλλ' οὐ δύναται οὐδεὶς (εἰς τὴν οἰκίαν τοῦ ἰσχυροῦ εἰσελθὼν) τὰ σκεύη αὐτοῦ διαρπάσαι (ἐὰν μὴ πρῶτον τὸν ἰσχυρὸν δήσῃ,)
(Mk 3:27)

While the examples in (67) – (69) at first glance suggest that the negative quantifier subjects raise to Spec,T, it is not so likely when the position of other negative quantifiers is considered. In NT Greek, the distribution of negative quantifier subjects is the same as that of negative quantifier objects. Negative quantifier objects occur both pre- and postverbally. If postverbal, there is usually a preverbal negative morpheme. The most common constructions are shown in (71) - (73).

In (71), the negative quantifier object pied-pipes the adjective *átopon* "wrong" to preverbal position.

(71) S-QNEG-V
hoûtos dè oudèn átopon
this.NOM.SG.M PCL nothing.ACC.SG.N wrong.ACC.SG.N
épraxen
did.3SG.AOR.IND.ACT
'but this one did nothing wrong'
οὗτος δὲ οὐδὲν ἄτοπον ἔπραξεν. (Lk 23:41)

In (72), the negative quantifier moves to preverbal position, stranding the NP *aítion*, "blame". This is parallel to (69) above, where the negative quantifier subject strands the prepositional phrase.

(72) QNEG-V-NP
oudèn heurísko aítion
nothing.ACC.SG.N find.1SG.PRES.IND.ACT blame.ACC.SG.N
'I find no blame (in this man).'
Οὐδὲν εὑρίσκω αἴτιον (ἐν τῷ ἀνθρώπῳ τούτῳ.) (Lk 23:4)

In (73), the preverbal negative marker *ou(k)* occurs preverbally, and the negative quantifier postverbally. This construction is parallel to (70) above.

(73) S-NEG-V-QNEG
humeîs ouk oídate oudén
you.NOM.PL NEG know.2PL.PERF.IND.ACT nothing.ACC.SG.N
'You don't know anything'
῾Υμεῖς οὐκ οἴδατε οὐδέν, (Jn 11:49)

These examples suggest that the driving force behind the preverbal placement of negative quantifier subjects is not [EPP] related movement, but rather that the (albeit optional) preverbal placement of negative quantifiers is a more general phenomenon. If it were the case that negative quantifier subjects occupied Spec,T and negative quantifier objects a distinct projection, we might expect an attestation of the sequence negative quantifier object > negative quantifier subject, which is not attested.

Furthermore, if the preverbal negative quantifier subjects were in Spec,T we would expect there to be no material intervening between the subjects and the verbs. This is, however not the case, as shown by (74) and (75).

In (74), there is adverbial material intervening between the negative quantifier subject and the verb. First of all, the manner adverbial "publicly"/ "in public" intervenes. The discourse-oriented adverb *méntoi* 'indeed' also intervenes, however it is a second position particle, and therefore it is unclear whether it is an intervener in the syntax, as I discussed in Section 3 above.

(74) oudeìs méntoi parre:síai elálei
no-one.NOM.SG.M indeed public.DAT.SG.F speak.3SG.IMPF.IND.ACT
perì autoû
about him.GEN.SG
'Indeed, no one spoke publicly about him (for fear of the Jews).'
οὐδεὶς μέντοι παρρησίᾳ ἐλάλει περὶ αὐτοῦ (διὰ τὸν φόβον τῶν ῾Ιουδαίων.) (Jn 7:13)

In (75), the direct object, which contains the reflexive pronoun *heautoû*, intervenes between the negative quantifier subject and the verb. The indefinite *pote*, "sometime" or "ever" also intervenes, alongside the second position particle *gár*. In (75), the subject appears to be fronted to the left periphery.

(75) oudeìs gár pote tè:n heautoû
no-one.NOM.SG.M PCL ever D.ACC.SG.F own.GEN.SG.M
sákra emíse:sen
flesh.ACC.SG.F hate.3SG.AOR.IND.ACT
'For, no-one ever hated his own flesh'
οὐδεὶς γάρ ποτε τὴν ἑαυτοῦ σάρκα ἐμίσησεν, (Ep 5:29)

I return to the issue of negative quantifier movement in Chapters 4 and 5. For now I conclude that preverbal negative quantifier subjects do not surface in Spec,T.

### 4.4.4 Minimality

As I discussed in 4.3.3 above, Costa (2004: 14-15) claims that the contrast in (76) (repeated from (59) above) indicates that the subject in (76a) is in Spec,T.

(76) a. Perguntei que livro o Pedro leu. EUROPEAN PORTUGUESE
I asked which book Pedro read
'I asked which book Pedro read.'
b. *Perguntei que livro, à Maria, lhe deram.
I asked which book, to Maria, herCL-DAT they gave
'I asked which book they gave to Maria.'

Although I haven't found a clause with parallel word order to (72b) in NT Greek indirect questions, it is possible to dislocate constituents in relative clauses. Consider the pair in (77).

(77) a. REL-S-V-I.O
hòn egò: katangéllo: humîn
REL.ACC.SG.M I.NOM.SG send.1SG.PRES.IND.ACT you.DAT.PL
'(and that this is Jesus Christ,) whom I send to you'
(καὶ ὅτι οὗτός ἐστιν ὁ Χριστός, [ὁ] Ἰησοῦς,) ὃν ἐγὼ καταγγέλλω ὑμῖν. (A 17:3)

b. REL-O-V-S
hô:i kaì dekáte:n apò pánto:n
REL.DAT.SG.M also ten.ACC.SG.F from all.GEN.PL.N
emérisen Abraám
divide.3SG.AOR.IND.ACT Abraham.NOM.SG.M
'(For, this is Melchisedec, king of Salem, priest of the most high God, who met Abraham returning from the slaughter of the kings, and blessed him), to whom Abraham gave also a tenth of all.'
(Οὗτος γὰρ ὁ Μελχισέδεκ, βασιλεὺς Σαλήμ, ἱερεὺς τοῦ θεοῦ τοῦ ὑψίστου, ὁ συναντήσας Ἀβραὰμ ὑποστρέφοντι ἀπὸ τῆς κοπῆς τῶν βασιλέων καὶ εὐλογήσας αὐτόν,) ᾧ καὶ δεκάτην ἀπὸ πάντων ἐμέρισεν Ἀβραάμ, (H 7:2)

In (77a), we have the word order REL-S-V. One would want to put the subject in Spec,T, if minimality were violated by A' movement of both the subject and the REL. However, in the relative clause in (77b), we have the word order REL-O-V-S. The object is dislocated, and notice that it is preceded by *kaí*, "also". As I pointed out in Chapter 2, and discuss further in Chapter 4, dislocation of constituents preceded by *kaí* is pragmatically motivated, and targets the left periphery of the clause. This means that the constituent *kaì dekáte:n apò pánto:n* "also a tenth of all" in (77b) is in the left periphery, hence movement of the REL and fronting of a constituent to the left periphery are not mutually exclusive in this language.

An argument supporting the subjects in Spec,T that appeals to minimality is therefore not applicable to NT Greek.

### 4.4.5 An absence of expletives and Definiteness Restrictions

In 4.2 above, I illustrated the lack of overt expletives, and of Definiteness Restriction (DR) in Modern Greek, as contrasted with English. In this regard, NT Greek patterns with Modern Greek. In presentational constructions, the SV-VS alternation is attested, however no expletive is found with the VS order. The examples in (78) and (79) illustrate this. In the English translations below the VS clause in (79), the expletive is required.

(78) SV presentational clause
Kaì se:meîon méga ó:p$^{h}$t$^{h}$e:
and sign.NOM.SG.N great.NOM.SG.N see.3SG.AOR.IND.PAS
en tô:i ouranô:i
in D.DAT.SG.M heaven.DAT.SG.M
'And a great sign appeared in heaven: (a woman clothed with the sun, and the moon under her feet, and on her head a crown of twelve stars;)'
Καὶ σημεῖον μέγα ὤφθη ἐν τῷ οὐρανῷ, (γυνὴ περιβεβλημένη τὸν ἥλιον, καὶ ἡ σελήνη ὑποκάτω τῶν ποδῶν αὐτῆς, καὶ ἐπὶ τῆς κεφαλῆς αὐτῆς στέφανος ἀστέρων δώδεκα,) (Rv 12:1)

(79) VS presentational clause
Kaì ó:p$^{h}$t$^{h}$e: állo se:meîon
and see.3SG.AOR.IND.PAS other.NOM.SG.N sign.NOM.SG.N
en tô:i ouranô:i
in D.DAT.SG.M heaven.DAT.SG.M
'And there appeared another sign in heaven; (behold, a great red dragon, with seven heads and ten horns, and seven crowns on his heads).'
καὶ ὤφθη ἄλλο σημεῖον ἐν τῷ οὐρανῷ, (καὶ ἰδοὺ δράκων πυρρὸς μέγας, ἔχων κεφαλὰς ἑπτὰ καὶ κέρατα δέκα καὶ ἐπὶ τὰς κεφαλὰς αὐτοῦ ἑπτὰ διαδήματα,) (Rv 12:3)

These sentences are uttered in close sequence to one another, and the first is out of the blue, and the second is enumerative. Both use the passive form of the verb *horáo:* (ὁράω) "to see", which means "appear".

The examples in (80) and (81) are a contrastive pair of presentational sentences with the copula.

(80) SV presentational clause
Kaì idoù ánt$^{h}$ro:pós tis ê:n
and look man.NOM.SG.M INDEF.NOM.SG.M be.3SG.AOR.IMPF.ACT
hudro:pikòs émprost$^{h}$en autoû
dropsied.NOM.SG.M before him.GEN.SG.M
'(And it happened, as he went into the house of one of the chief Pharisees to eat bread on the Sabbath day, that they watched him.) And look, there was a man with dropsy before him.'
(Καὶ ἐγένετο ἐν τῷ ἐλθεῖν αὐτὸν εἰς οἶκόν τινος τῶν ἀρχόντων [τῶν] Φαρισαίων σαββάτῳ φαγεῖν ἄρτον καὶ αὐτοὶ ἦσαν παρατηρούμενοι αὐτόν.) καὶ ἰδοὺ ἄνθρωπός τις ἦν ὑδρωπικὸς ἔμπροσθεν αὐτοῦ. (Lk 14:2)

(81) VS presentational clause
Kaì ê:n tis basilikòs
and be.3SG.AOR.IMPF.ACT INDEF.NOM.SG.M nobleman.NOM.SG.M
hoû ho huiòs e:st$^{h}$é:nei …
REL.GEN.SG.M D.NOM.SG.M son.NOM.SG.M be.ill.3SG.IMPF.IND.ACT
'(So he came again into Cana of Galilee, where he made the water wine.) And there was a certain nobleman whose son was sick (in Kapernaum).'
(Ἦλθεν οὖν πάλιν εἰς τὴν Κανὰ τῆς Γαλιλαίας, ὅπου ἐποίησεν τὸ ὕδωρ οἶνον.) καὶ ἦν τις βασιλικὸς οὗ ὁ υἱὸς ἠσθένει (ἐν Καφαρναούμ·) (Jn 4:46)

Both of the subjects in (80) and (81) contain the indefinite pronoun *tis* "a certain", and both are modified by additional material. In the SV clause in (80), the adjective *hudro:pikós* "afflicted with dropsy" follows the verb, marking the origin site of the moved subject. In the VS clause in (81), the relative clause "whose son was sick in Kapernaum" directly follows the postverbal subject.

In NT Greek, VS orders are very common with definite subjects, suggesting off the bat that DR effects are absent. An example is given in (82).

(82) kaì ê:lt$^{h}$en ho deúteros
and come.3SG.AOR.IND.ACT D.NOM.SG.M second.NOM.SG.M
'and the second one came'
καὶ ἦλθεν ὁ δεύτερος (Lk 19:18)

NT Greek examples such as (83) show that there are no DR effects of the type found in Romance (see 4.3.4 above).

(83) hóti érk$^{h}$etai ho Ie:soûs
that come.3SG.PRES.IND.MID D.NOM.SG.M Jesus.NOM.SG.M
eis Ierosóluma
into Jerusalem.ACC.SG
'(On the next day, a big crowd which came into the feast, when they heard) that Jesus was coming to Jerusalem,'

(Τῇ ἐπαύριον ὁ ὄχλος πολὺς ὁ ἐλθὼν εἰς τὴν ἑορτήν, ἀκούσαντες)
ὅτι ἔρχεται ὁ Ἰησοῦς εἰς Ἰεροσόλυμα, (Jn 12:12)

In (83), the definite subject is postverbal. A locative phrase follows the subject, in clause final position. If locative phrases (either null or overt) were suitable candidates for checking the [EPP], the locative phrase in (83) would be fronted. In other words, if what licenses inversion is the raised PP or a null locative element, it is unclear how inversion is licensed in (83).

These data suggest that there is no expletive or null locative phrase in VS orders, and therefore that the Spec,T position is not necessarily activated in NT Greek.

### 4.5 Summary

In this Section, I first showed that postverbal subjects surface in the VP, based on their relative position to VP level adverbs and shifted object pronouns. This formed a parallel with Modern Greek, and a contrast with Italian, where subjects in VSO orders are focused.

In my discussion of preverbal subjects, I showed that many preverbal subjects are not in Spec,T, even subjects which you would expect to find there, such as negative quantifiers and indefinites. The lack of expletives and Definiteness Restriction effects suggests that no element occupies Spec,T. The only evidence for the Spec,T position comes from example (61) above, which seems to be a neutral SVO clause. I have shown that in other SVO clauses, which at first sight seem neutral (such as parable introductions), the subjects are not in Spec,T. Therefore, there is much more evidence for dislocated subjects than for subjects in Spec,T.

NT Greek patterns much more with Modern Greek than with the Romance null subject languages. The Romance languages are SVO languages, and they have a canonical subject position, Spec,T, independent of rich verbal morphology. Modern Greek is a VSO language, and lacks Spec,T. Therefore, it seems that the degree of rich inflection doesn't distinguish between the presence or absence of the Spec,T position, it only gives null subjects. Spec,T doesn't universally project, because it is not a canonical subject position in VSO languages (see also McCloskey 1996a concerning Irish; Borer 1986, Doron 2000 concerning Hebrew; Alexiadou & Anagnostopoulou 1998 concerning Modern Greek).

## 5 Conclusions

The main conclusion from this section is that there are two structural positions for verbs in NT Greek, and three positions for subjects. From Section 3 I conclude that verb movement always proceeds to T, and terminates there in the typical case. In some instances, verbs are found in a higher position, which I identified as a projection of C. I suggest that the high position of verbs corresponds to some form of verbal emphasis, as in Modern Greek (see Roussou & Tsimpli 2006), however this is not testable in NT Greek.

From Section 4 I conclude that pragmatically neutral subjects can remain VP-internal, forming a contrast with the Romance languages (see Alexiadou 2006; Beletti 2001; Cardinaletti 2004; Sheehan 2010), and a parallel with Modern Greek (see Alexiadou & Anagnostopoulou 2001, 2007).

Second, pragmatically neutral subjects can move to Spec,T. I conclude, with Alexiadou & Anagnostopoulou (1998), that the Spec,T position is not activated with postverbal or null subjects in NT Greek, but assume that the Spec,T position can project in this stage of Greek.

Finally, the majority of preverbal subjects are in the left periphery. There is a lot of evidence for topicalized subjects (see also Friberg 1982), and also dislocation of negative quantifiers. In the next chapter I put forth a more complete picture of the Left Periphery.