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Relative Clauses in Koine Greek: A Transformational Approach

Martin M. Culy

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RELATIVE CLAUSES IN KOINE GREEK
A TRANSFORMATIONAL APPROACH

by
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Bachelor of Arts, California State University Fresno, 1987

A Thesis
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Master of Arts

Grand Forks, North Dakota

August
1988
This Thesis submitted by Martin M. Culy in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota has been read by the Faculty Advisory Committee under whom the work has been done, and is hereby approved.

[Signatures]

This Thesis meet. the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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Title Relative Clauses in Koine Greek: A Transformational Approach

Department Linguistics

Degree Master of Arts

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Signature Martin M. Culy

Date July 10, 1989
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................... vi

ABSTRACT ................................................... vii

ABBREVIATIONS ............................................... ix

CHAPTER 1 INTRODUCTION .................................... 1

1.1 Survey of Literature on Relative Clauses 3
1.1.1 Traditional Literature 3
1.1.2 Linguistic Literature 6
1.2 The Greek Language 11
1.2.1 Historical Perspective 11
1.2.2 An Overview of Koine Syntax and Morphology 16
1.3 Government-Binding Theory 23

CHAPTER 2 A TYPOLOGY OF KOINE RELATIVE CLAUSES .......... 32

2.1 Strategies Employed 32
2.2 Idiomatic Usages of Relative Pronouns 36
2.2.1 Interpretative Relative "Phrases" 37
2.2.2 Conjoining Relative Phrases 39
2.2.3 Demonstrative Relative Phrases 40
2.2.4 Other Relative Phrases 42
2.3 Position of the Head Noun with Koine Relative Clauses 44
2.4 Internally Headed Relative Clauses 50
2.4.1 Adverbial IHRCs 52
2.4.2 Other Types 57

CHAPTER 3 AN ANALYSIS OF KOINE IHRCs ...................... 64

3.1 Analyses Proposed for Other Languages 64
3.1.1 Cole's Analysis 65
3.1.2 Williamson's Analysis 68
3.1.3 Problems Posed for These Analyses by Koine 70
3.2 A Proposed Analysis of Koine IHRCs 81
3.2.1 The Modified Williamson Analysis 94
3.2.2 The Full D-Structure Analysis 104
3.2.3 The Downward Movement Analysis 107
3.2.4 Conclusions 115

CHAPTER 4 ATTRACTION .................................... 123

4.1 Attraction 123
4.2 Inverse Attraction 129
4.2.1 Downward Movement and Inverse Attraction 143
I would like to express my gratitude to several individuals who contributed to the completion of this work.

First of all, I would like to thank the Chairman of my Advisory Committee, Stephen Marlett, for his patience, encouragement, and helpful comments as he read through numerous drafts of this thesis. I would also like to thank the other two members of my Advisory Committee, Robert Dooley, for his detailed critical comments that have helped to eliminate many errors from this thesis, and Albert Bickford, for his helpful comments and particularly for his suggestions relating to the organization of this thesis which served to improve it considerably.

Second, I would like to thank my wife Jo-Anna for her support, patience and hard work as she made many sacrifices to allow me more time to work on this thesis.

Finally, I would like to acknowledge my Lord Jesus Christ, who gave me the inner strength to see this thesis through to fruition and without whom I can do nothing.
ABSTRACT

In this thesis I consider the unique set of facts presented by relative clauses in Koine Greek. I give a thorough overview of relativization in Koine including idiomatic usages of the relative pronoun. In particular, I examine the phenomena of internally-headed relative clauses, attraction and inverse attraction.

I give a basic overview of the Greek language, discussing both the historical context as well as the facts of Koine syntax and morphology that are pertinent to the understanding of this thesis.

I provide a basic typology of Koine relative clauses discussing relativization strategy, examples where a relative pronoun is used for purposes other than to introduce a relative clause, and relative clause types. I argue that Koine does not have prenominal relative clauses, a position that runs contrary to some of the existing literature.

After providing an overview of internally-headed relative clauses and suggesting several categories, I deal with the peculiar facts presented by them and argue that these facts are best analyzed by adopting a downward movement analysis.

To accomplish this I begin by considering recent
analyses that have been posited for other languages exhibiting internal heads. These are demonstrated to be inadequate for the case marking facts presented by Koine internal heads. I consider three alternative analyses of the Koine data and conclude that the downward movement analysis is superior.

Next, I discuss the two types of attraction. I posit that the facts presented by regular attraction—where the relative pronoun assumes the case of its antecedent—can be accounted for by a minor extension of the Wh-Case Convention. In the case of inverse attraction—where the head noun is apparently attracted to the case of the relative pronoun—I show that by utilizing the downward movement hypothesis proposed for internally-headed relative clauses we are able to provide a formal analysis of this phenomenon.

Finally, I provide a comprehensive set of appendices in which I categorize every example of a relative clause in the New Testament, as well as the different uses of the Koine relative pronoun.
ABBREVIATIONS

ACC -- accusative
DAT -- dative
Dem -- demonstrative
Det -- determiner
FEM -- feminine
GEN -- genitive
IHRC -- internally headed relative clause
IND -- indefinite
LF -- logical form
MASC -- masculine
NOM -- nominative
PERF -- perfect
PF -- phonetic form
PL -- plural
PM -- phrase marker
Pron -- pronoun
REL -- relativizer
RC -- relative clause
RP -- relative pronoun
RS -- relative specifier
SING -- singular
3 -- third person
In this thesis I consider the unique set of facts presented by relative clauses in Koine Greek. I give a thorough overview of relativization in Koine including idiomatic usages of the relative pronoun. In particular I examine the phenomenon of internally-headed relative clauses, attraction and inverse attraction. An internally-headed relative clause, or IHRC, can be defined as a relative clause in which the nominal being modified by the relative clause is physically positioned within the relative clause rather than preceding it. Attraction occurs when a relative pronoun assumes the case of its antecedent (i.e., the head noun) rather than the case that would be expected given its grammatical relation within the relative clause. Conversely, inverse attraction occurs when the antecedent assumes the case of the relative pronoun. I propose an analysis of each of these three phenomena utilizing the framework of Government-Binding theory.

In order to accomplish this I begin by considering what has already been said about Koine relative clauses by traditional grammarians (section 1.1.1), and what has been said concerning relative clauses in general (section 1.1.2). In section 1.2, I give a basic overview of the Greek language, discussing both the historical context (section
1.2.1) as well as the facts of Koine syntax and morphology that are pertinent to the understanding of this thesis (section 1.2.2). In the final introductory section (1.3), I give a basic overview of Government-Binding theory, leaving many of the details to be presented in Chapter 3 where they come to bear on the analysis proposed.

Chapter 2 provides a basic typology of Koine relative clauses. This chapter is purely descriptive in nature and is not crucial for understanding the formal theoretical issues dealt with in Chapters 3 and 4. Relativization strategy is discussed in section 2.1. In section 2.2, I deal with those examples that utilize a relative pronoun for purposes other than to introduce a relative clause. In Section 2.3, I discuss relative clause types in Koine. It is in this section that I argue that Koine does not have prenominal relative clauses, a position that runs contrary to some of the existing literature. In concluding Chapter 2, I give an overview of internally headed relative clauses in Koine suggesting several categories (section 2.4).

In Chapter 3, I deal with the peculiar facts presented by internally headed relative clauses in Koine and argue that these facts are best analyzed by adopting a downward movement analysis. To accomplish this I begin by considering recent analyses that have been posited for other languages exhibiting internal heads (section 3.1). These are demonstrated to be inadequate for the case marking facts presented by Koine internal heads (section 3.1.3). In
section 3.2, I consider three possible analyses of the Koine data and conclude that the downward movement analysis is superior.

Chapter 4 deals with two final facts that are presented by Koine relative clauses. In section 4.1, I discuss the phenomenon of attraction—where the relative pronoun assumes the case of its antecedent—and argue that a minor extension of the Wh-Case Convention provides us with a simple account of the facts. Finally, in section 4.2, I deal with the extremely rare phenomenon known as inverse attraction—where the head noun is apparently attracted to the case of the relative pronoun. By utilizing the downward movement hypothesis proposed in Chapter 3, I am able to provide a formal analysis of this phenomenon.

Finally, I provide a comprehensive set of appendices in which I categorize every example of a relative clause in the New Testament, as well as the different uses of the Koine relative pronoun. Throughout this thesis, I will regularly refer the reader to these appendices for an exhaustive list of examples exhibiting the particular construction being discussed.

1.1 Survey of Literature on Relative Clauses

1.1.1 Traditional Literature

Koine Greek, being the language in which the New Testament was originally written, has been the subject of a
vast amount of literature. Unfortunately, little of this has utilized the tools of modern linguistics. Few of the traditional grammarians have gone into much depth regarding the syntax of Koine. This, of course, includes the syntax of relative clauses.

Generally, we find that traditional Greek grammarians simply note that relative pronouns agree with their antecedent in person, number and gender, but receive their case from the embedded clause. Regarding attraction, most grammarians tell us that the case of the relative pronoun may, on occasion, be "attracted" or "assimilated" to the case of the antecedent. Others go a step further and specify that this only occurs when the antecedent is in the genitive or dative case. Very few make any reference to inverse attraction; and fewer still mention the peculiar syntax of clauses with internal heads.

The best treatment of these phenomena can be found in Robertson 1934 and 1930, Moulton 1908, and certain volumes of The International Critical Commentary. Arndt and Gingrich (1979) and Alford (1958) are helpful as well, though to a lesser degree. Other commentators such as Marshall (1978) and Brucc (1982a) and (1982b) are helpful, although their comments are restricted to the particular books they are considering.

The syntax of internally headed relative clauses is described as "incorporation" of the head noun into the relative clause by Robertson (1934), Dana and Mantey (1927),
Blass and Debrunner (1961) and others. Moule (1960:130) simply states that "where necessary", i.e., in certain instances where the antecedent is not overt in its pre-RC position, thereby leaving ambiguity, "the relevant noun [antecedent] is then placed after the relative pronoun". Turner (in Moulton 1963:324) states that the head noun may be attracted into the relative clause, and notes that the noun must be anarthrous, i.e., not modified by an article. Jannaris (1968:354) refers to it as the head noun being "transposed" and also notes that the noun must be anarthrous and end up in clause-final position. What ne means by saying that the "substantive" (internal head) must end up at the "end of the relative clause" is unclear, since this is generally not the case.

Few grammarians, if any, can be said to attempt an explanation of these phenomena. Clearly this is not the purpose of these writers, or perhaps those that would have liked to propose an explanation did not possess the tools with which to accomplish it. However, it is interesting to note that most of the terms used by traditional grammarians to describe the phenomenon of internally headed relative clauses hint at movement of the head into the relative clause. Jannaris' description of it being "transposed" is especially vivid. I return to this notion of "movement" in Chapter 3 where I consider several possible analyses of the syntax of internally headed relative clauses.
1.1.2 Linguistic Literature

Extensive literature has been published by linguists on the topic of relative clauses. Some authors have dealt with the construction in specific languages, e.g., Bird (1968), Cole (1982), Gorbet (1976), Kuroda (1976), Platero (1974), Williamson (1987), and many others. Comrie (1981), Downing (1978), Keenan (1978), Thompson (1971) and others have taken a cross-linguistic approach in an attempt to determine universal properties of relative clauses. Keenan's work is particularly ambitious. Another volume worthy of note is Peranteau, et al, 1972 which is made up of a series of articles completely devoted to relative clauses.

Until quite recently, very little had been said concerning the structure of internally-headed relative clauses. While typologists have noted several generalizations regarding the construction (these will be mentioned below), until Fauconnier 1971 and Gorbet 1976 little had been said concerning its structure. More recently, Williamson (1987) and Cole (1987) have given considerable attention to this phenomenon. It is to these two articles that I turn in Chapter 3 as I consider the data exhibiting this phenomenon in Koine.

Relativization Strategies

Following Comrie (1981:140-144), relativization strategies can be divided into four distinct types based on the "expression of the role of the head noun within the embedded
clause". The four types are: (1) non-reduction, (2) pronoun-retention, (3) relative-pronoun, and (4) gapping. They can be described as follows.

Type (1), non-reduction, simply means that the head noun appears in its full form in the embedded clause. Either basic word order, normal case marking, or both are maintained to denote the function of the noun phrase within the embedded clause. In type (2), pronoun-retention, the head noun is replaced with a pronominal copy bearing all the syntactic properties of the head noun.

Type (3), relative-pronoun, is the type most commonly found in European languages like English. This type differs from pronoun-retention in that it is a special pronoun used to introduce the relative clause and is therefore limited to the clause-initial position. Since word order is no longer a means of indicating the function of the head noun within the embedded clause, case marking or some other feature is typically employed.

In type (4), gapping, there is no NP within the embedded clause that is coreferential with the head noun.

These four strategies vary with respect to how explicit they make the role of the head noun within the relative clause; with type (1) being the most explicit and type (4) the least.

Comrie (1981) notes that any language may employ more than one of these relativization strategies. However, there are constraints on their distribution when more than one is
First of all, he posits the following accessibility hierarchy constraining the relativization of nominals within a given language (p. 149):

(5) subject > direct object > non-direct object > possessor

Thus, if a language is able to relativize non-direct objects it will also be able to relativize direct objects and subjects. Based on this hierarchy, he proposes the following universal constraint (p. 151):

(6) Any relative clause strategy must cover a continuous segment of the accessibility hierarchy.

This means that any given language should not be able to employ one relative clause strategy for subjects and non-direct objects while not using it for direct objects, as this would be a violation of his "continuous segment" specification in (6). However, a language may use one strategy for subjects and direct objects and a different strategy for non-direct objects and/or possessors.

Position of the Relative Clause in Relation to its Head

In general, there are three basic types of relative clauses, with respect to the position of the head noun, that are attested cross-linguistically: postnominal, prenominal and internal-head. The first of these is the type found in
English where the head noun that is being modified precedes the relative clause, i.e., the relative clause occurs postnominally:

(7) The boy [who has red hair] ran away.

(8)

In prenominal relative clauses the relative clause precedes the head noun which it modifies. This is exemplified by the Basque example below, taken from Comrie (1981:134):

(9) [emakumeari liburua eman dion] gizona
woman book has given man

'The man who has given the book to the woman.'
The third relative clause type is usually referred to as head-internal relative clauses or internal(ly)-headed relative clauses. Throughout the remainder of this thesis I will customarily refer to this type simply as IHRCs. It is exemplified in the Bambara example below, taken from Comrie (1981:138):

(11) Tye be [n ye so min ye] dyo
man PRESENT I PAST house REL se. build
'The man is building the house that I saw.'

In this example the word so 'house' is clearly both the head noun and a constituent of the relative clause, since it is bordered by the relativizer min to the right, and by the embedded subject n, and the past tense marker ye, to the left. I will not attempt to draw a phrase marker here for this structure as that will be the focus of Chapter 3.

In addition to the recognition of these three types, the following generalizations have been made by typologists concerning them.
Postnominal relative clauses occur in virtually all verb initial languages, most verb medial languages and many verb final languages (Keenan 1978:4-6). This relative clause type utilizes all relativization strategies except non-reduction' (Keenan 1978:7-21).

Only verb-final languages use prenominal relative clause as the only or most productive relativization strategy (Shopen 1985:144). Further, prenominal relative clauses overwhelmingly use gapping as their relativization strategy while never employing relative pronouns (Maxwell 1979:364).

According to the existing literature, internally-headed relative clauses (IHRCs) have been attested solely in SOV languages. However, although Koine is not an SOV language it clearly has IHRCs (see section 2.4 and Chapter 3). This type is never the sole strategy in the languages utilizing it (Keenan 1978:41-44).

1.2 The Greek Language

1.2.1 Historical Perspective

Greek, a member of the Indo-European language family, was one of the first languages to develop a written form. Although the Greeks had a writing system as early as 1400 B.C., this was lost when Greece was invaded by the Dorians. In the eighth century B.C. a new writing system was established under Phoenician guidance, this time an
alphabetic system as opposed to the earlier syllabary.

A great body of Greek literature is extant from the ninth to fourth century B.C. This period is known as the "classical period". The particular form of Greek spoken during this period is appropriately known as Classical Greek. There were three principle dialects during the classical period: Ionic, Doric and Aeolic. Attic, a variety of Ionic spoken in the capital city of Athens, eventually became the dominant dialect and later the lingua franca in the eastern Mediterranean.

Greek was the language of the Byzantine empire from its inception in 330 A.D. until its destruction in 1453 A.D. The Greek of this period is usually referred to as Byzantine Greek.

The present form of the language, Modern Greek, covers the period from the fall of the Byzantine empire in 1453 until the present.

Between the classical period and Byzantine period, roughly from 330 B.C. until 330 A.D., the form of Greek spoken was adapted in such a way as to be used by the whole of the vast Alexandrian empire. This form is generally referred to as Hellenistic or Koine ('common') Greek. Throughout this thesis I will customarily use the term 'Koine' to make reference to this stage of the Greek language's development.

The following chart taken from Black 1988 is helpful in visualizing the period to which this thesis is devoted,
namely the Koine period:

(12) Early Greek 2000-900 B.C.
Classical Greek 900-330 B.C.
**Koine Greek** 330 B.C.-330 A.D.
Byzantine Greek 330-1453
Modern Greek 1453-Present

**Performance Versus Competence in a Finite Corpus**

In dealing with an old form of a language I am faced with certain disadvantages. I do not have the luxury of being able to question native speakers to determine if a particular syntactic construction is well-formed based on native speaker intuition. Nor can I ask how the various relative clause constructions differ with regard to semantic and pragmatic features. I am working with a finite set of data.

How then do we determine which of the data is to be treated as grammatical? Can we treat such statistically uncommon syntactic devices (in Koine) as internally headed relative clauses and inverse attraction as data falling within the realm of grammatical competence, or are they simply to be viewed as performance errors? Throughout this thesis I will assume that all of the data in question reflects grammatical competence. There are primarily two reasons for this stance.

First of all, we must recognize that written and oral communication differ greatly with regard to their respective level of grammatical competence. We typically find far
fewer performance errors in written communication than in oral communication, because of the opportunity to correct errors before the message is transmitted. This tendency towards fewer performance errors in written communication is presumably increased when the document in question is a carefully thought out work, e.g., the New Testament manuscripts.

Second, and more important, we have evidence from the transmission of the New Testament manuscripts that the data in this thesis is, in fact, grammatically well-formed. Perusal of the textual apparatus in any Greek New Testament makes it very clear that Greek scribes copying the New Testament manuscripts often made changes as they copied. These changes were sometimes intentional and sometimes unintentional. Unintentional changes were simply honest errors due to a scribe misreading the text he was copying from or not hearing the person who was dictating correctly. Of greater interest here are intentional changes, which were generally a result of the scribe trying to correct what he perceived to be an error in the text. This could also be an editorial effort to improve the grammar, vocabulary or spelling (Carson 1979:21-24).

Significantly, of the approximately 5,000 manuscripts representing part or all of the Greek New Testament there are no textual variants in any of the examples of inverse attraction. Of the 65 possible examples of internally headed relative clauses we find a total of four variant
readings. These are found in Matthew 24:44, Luke 6:38, John 9:14, and Acts 25:18. Only one of these examples, Luke 6:38, could be construed as a correction of a performance error. In this example the variant reading is a regular postnominal relative clause. However, the variant also adds modifiers to the head of the relative clause making the use of an internal head more difficult if not impossible. Thus, there are reasons, other than the correction of an ungrammatical structure, for the change from an internal head to an external head.

Given the overwhelming absence of variants in the data, intentional or otherwise, there is only one possible conclusion: the data is well-formed. It is best viewed as reflecting genuine grammatical competence rather than being dismissed as performance errors.

Presentation of the Data

I have in most cases simply provided a free translation and a word by word gloss with my examples, as could be found in any interlinear New Testament, rather than giving a strict morpheme by morpheme gloss. This is simply to make the examples clearer to the reader who is less familiar with the Greek language. I have, however, glossed the relative pronouns; first of all, to identify them; and secondly, to specify their case. I have also bracketed the relative clause or underlined the construction being illustrated in each of the examples.
The Greek text used is the 21st edition of Eberhard Nestle's *Novum Testamentum Graece*, with the literal interlinear gloss provided by Alfred Marshall (Marshall and Nestle 1960).^1^

1.2.2 An Overview of Koine Syntax and Morphology

The following structural rules will be assumed throughout this thesis without an attempt to support or prove them using Greek data. They are adapted from Marlett (in preparation).^2^

(13)

Determiner Rule: \( \bar{N} \rightarrow \bar{D}, \bar{N} \) (Optional)

Adjunct Rule: \( \bar{N} \rightarrow \bar{N} \)

Complement Rule: \( \bar{N} \rightarrow N \) (\( \chi \))

The Determiner Rule states that a noun phrase may optionally be expanded (recursively) by the addition of a determiner, which may either precede or follow the head noun. Unlike in English, determiners in Koine can be "stacked", i.e., the grammar allows for multiple determiners for a single head noun. This is illustrated below:

(14) Acts 5:36

\[ \text{τούτων} \quad \text{τῶν} \quad \text{ἡμερῶν} \]


'...these days...'
Furthermore, the above example illustrates the fact that Koine noun modifiers agree with their head in number, gender and case.

The Adjunct Rule specifies that an N-double-bar can be rewritten as an N-bar with an optional adjunct. This is exemplified below where the prepositional phrase is the adjunct:

(16) Acts 7:38

\[ \text{τὴ ἐκκλησίᾳ ἐν τῇ ἐρήμῳ} \]
the church in the desert

'...the church in the desert...'

(17)
Finally, the Complement Rule specifies that an N-bar can be rewritten as an N with an optional complement. This is exemplified below where the possessor NP is the complement:

(18) Ephesians 6:6

δοῦλοι Χριστοῦ
slaves Christ:GEN
'...slaves of Christ...'

The above rules are similar to those found in Radford (1988:167-285). The main difference is that the Determiner Rule must be recursive in Koine.\(^3\)

Case and Agreement

I will not go into a careful analysis of the rules of case assignment in Koine Greek, other than in the areas where it is pertinent to my arguments. When I speak of case in Koine I will use the four case system: nominative, genitive, dative and accusative. I will assume the following rules:
(20)  

(a) S-Structure subjects are marked with nominative case morphology.

(b) S-Structure direct objects and some oblique noun phrases are marked with accusative case morphology.

(c) S-Structure indirect objects and some oblique noun phrases are marked with dative case morphology.

(d) S-Structure possessors and some oblique noun phrases are marked with genitive case morphology.

The case of the oblique noun phrase is determined by the preposition which governs it.

It should be noted that some verbs in Koine can take a direct object in the genitive case, others may take a direct object in the dative case. I will only note cases such as these when they relate to the argument being proposed.

Furthermore, as has been illustrated above (14), the following agreement rule applies to nominal modifiers:

(21) Koine noun modifiers agree with their head in number, gender and case.

Finally, I will note the following verb agreement rule (22) which is illustrated by example (23):

(22) Koine verbs agree with their S-Structure subject in person and number.

(23) Luke 8:45

οἱ ὅχλοι συνέχουσίν σε
the crowd:PL press upon:3:PL you

'...the crowds press upon you...'
Morphology

The only significant aspect of Koine morphology for the purposes of this thesis is the form of the relative pronoun. A table listing the forms of the standard relative pronoun is provided below. To avoid confusion I have also glossed the case of every relative pronoun used in examples throughout this thesis.

(24)

MORPHOLOGY OF KOINE RELATIVE PRONOUN

<table>
<thead>
<tr>
<th>Singular</th>
<th></th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOM ointment</td>
<td>ointment</td>
<td>ointment</td>
</tr>
<tr>
<td>GEN ointment</td>
<td>ointment</td>
<td>ointment</td>
</tr>
<tr>
<td>DAT ointment</td>
<td>ointment</td>
<td>ointment</td>
</tr>
<tr>
<td>ACC ointment</td>
<td>ointment</td>
<td>ointment</td>
</tr>
</tbody>
</table>

Indefinite Relative Pronouns

The "indefinite" relative pronoun consists of a relative pronoun, in the appropriate case, followed by ointment (which is generally used to give a conditional sense to the verb phrase). This has the semantic force of the English "whoever, whatever, etc.", and can be used to denote that the clause is irrealis. The term "indefinite" is not meant to be taken in the strict sense, although it is usually appropriate; it is simply a convenient label. There are 100 examples of this construction in the New Testament.
(see Appendices H and L).

(25) Matthew 5:19

[ὅσον ἐὰν οὖν λύσῃ μίαν τῶν ἑντολῶν
RP:NOM-IND therefore breaks one the commandments
tούτων τῶν ἐλαχίστων καὶ διδάξῃ οὕτως τοὺς
theses the least and teaches thus the
ἀνθρώπους], ἐλάχιστος κληθήσεται ἐν τῇ
men least he shall be called in the
βασιλείᾳ τῶν οὐρανῶν:
kingdom of the heavans

'Therefore, whoever breaks one of these least commandments, and teaches men to do so, shall be called the least in the kingdom of heaven.'

While the indefinite relative pronoun is generally used without an overt antecedent, especially when the antecedent is a subject, there are counter-examples to this (compare Acts 7:3 with Matthew 5:19 above).

(26) Acts 7:3

καὶ δεῦρο εἰς τὴν γῆν [ἡν ἄν σοι
and come into the land RP:ACC-IND to you
δεῖξω].
I will show

'...and come into the land which I will show to you.'

Pied Piping

The phenomenon of "pied piping", where a Wh-phrase contained within a PP is moved carrying the preposition with it, is an obligatory process in Koine. (It should be noted
that throughout this thesis I follow the assumption that relative clause formation involves Wh-Movement (see Lasnik and Uriagereka 1988:76, and Radford 1988:480-491). This means that the relative pronoun will always be part of a moved Wh-phrase.) Appendices E and I list the references with relative clauses exhibiting this construction. Consider the examples below in which I have underlined the preposition and the relative pronoun:

(27) Romans 10:14

\[\Pi\delta\varsigma\ \sigma\omicron\nu\ \epsilon\pi\kappa\alpha\lambda\epsilon\sigma\omega\nu\tau\alpha\iota\ [\epsilon\iota\varsigma\ \sigma\omicron\nu\ \omicron\upsilon\varsigma\kappa\nu\kappa\] 

how therefore can they believe \[\text{in} \] \rpacc \ RP:ACC not

\[\epsilon\pi\iota\sigma\tau\epsilon\upsilon\omega\sigma\omicron\nu;\] 

they believe in

'Therefore how can they call on one in whom they do not believe?'

(28) 1 Tim. 6:12

\[\epsilon\pi\iota\lambda\alpha\beta\omicron\upsilon\ \tau\zeta\varsigma\ \alpha\iota\nu\nu\iota\upsilon\ \zeta\omega\varsigma\varsigma\ [\epsilon\iota\varsigma\ \eta\upsilon]\] 

lay hold of the eternal life \[\text{to} \] \rpacc

\[\epsilon\kappa\lambda\nu\theta\eta\varsigma\] 

you were called

'Lay hold of eternal life, to which you were called...'

Notice that both of the English glosses would be perfectly well-formed without pied-piping, since it is not an obligatory process in modern English.

(29) How can they call on one \textbf{who} they do not believe \textit{in}?

(30) Lay hold of eternal life, \textbf{which} you were called \textit{to}. 
I will assume that pied piping, however it is to be dealt with schematically, does not weaken the cross-linguistic generalization that relative pronouns occur in the clause initial position (Comrie 1981:142). Perhaps it would be an improvement on the generalization to state that a moved Wh-phrase occurs in the clause-initial position.

1.3 Government-Binding Theory

In this thesis I will assume the framework of current transformational syntax often referred to as Government-Binding Theory, although the theories of government and binding are small parts of the overall theory of transformational syntax. The basic framework of this theory is defined in Chomsky 1981 and 1982, Radford 1981 and 1988, Van Riemsdijk and Williams 1986, and Lasnik and Uriagereka 1988.

As much has changed within the theory over the seven years spanned by these works, I have chosen to use Lasnik and Uriagereka 1988, the more explicit of the two most recent volumes, as my guide in areas where opinions in the earlier literature vary.

I will assume the following model of grammar (31) throughout this thesis. D-Structure is essentially synonymous with "deep structure" (Lasnik and Uriagereka 1988:1, footnote 2), and is directly generated by phrase structure rules and lexical insertion. S-Structure
represents the output of any movement rules that have been applied to D-Structure. Phonetic Form (PF) is synonymous with the traditional notion of "surface structure" (Chomsky 1981:18), and represents the constituent structure of the actual phonetic string. It is between S-Structure and PF that phonological rules, stylistic movements and deletions apply. Finally, Logical Form (LF) is the basis for semantic interpretation. It is derived from S-Structure by movement rules that are applied to give certain categories, e.g., quantifiers their proper scope.

(31)

```
D-Structure
     
S-Structure  

Phonetic Form  Logical Form
```

Case marking rules and case filters are applied to the output of transformational rules at S-Structure.

The Binding Theory also imposes constraints on S-Structure. The following are general definitions related to Binding Theory. There are three binding conditions that constrain the distribution of empty categories, e.g., traces.
(32) **Binding Conditions**

Condition A—An anaphor must be bound in its governing category. (Lasnik and Uriagereka 1988:36)

Condition B—A pronominal must be free in its governing category. (Lasnik and Uriagereka 1988:36)

Condition C—An R-expression (referring expression) must be A-free, i.e., it cannot be bound by an antecedent in an argument "A" position. (Lasnik and Uriagereka 1988:42)

"Binding" is defined as:

A binds B iff

(i) A c-commands B
and (ii) A and B are coindexed
(Lasnik and Uriagereka 1988:33)

"C-command" is defined as:

For A and B nodes in a tree
A c-commands B iff every branching node dominating A dominates B and neither A nor B dominates the other
(Lasnik and Uriagereka 1988:32)

At this point I will not belabor the issue of how the Binding Conditions apply to Koine (this will be discussed more fully in Chapter 3) other than to point out the following: Wh-traces as defined by Lasnik and Uriagereka (1988) and others are classified as R-expressions and therefore are subject to Condition C. In Koine, I do not diverge from this view or the view that Wh-Movement operates solely to, or through, COMP (SPEC of Ĉ). Thus, a moved Wh-phrase or an intermediate trace will always be in an Ā-position (non-argument position) leaving the wh-trace A-free in accordance with Condition C.
The assignment of case to the moved Wh-phrase is accomplished through the Wh-Case Convention:

(33) **Wh-Case Convention**

A moved Wh-phrase inherits the case of its trace.
(Radford 1981:339)

**X-Bar Theory**

The notions of X-Bar Theory presented in this thesis come primarily from, in addition to those volumes listed above, Jackendoff (1977). I have deviated from Jackendoff by adopting the view that \( \bar{X} \), rather than X-treble bar, is the maximal projection of X. Furthermore, as considerable improvements in the theory of X-Bar Theory have been made since 1977. I have adopted those found in Radford (1988). It will be helpful to note several aspects of Radford’s views on X-Bar Theory, especially as they relate to Wh-Movement.

In chapter 9, particularly pages 499-515, Radford shows that while early evidence supported the view that Wh-Movement was an adjunction rule in which the Wh-phrase was adjoined to C (COMP= Complementizer)--see (Chomsky 1981:53), more recent evidence has shown this analysis to be flawed. Radford (p. 502) cites the following analysis for Wh-Movements which was held in the early 1980s. The sentence:
(34) What will he do?

would have (35) as its S-Structure representation:

(35)

\[
\begin{array}{c}
\bar{S} \\
C \quad \bar{S} \\
N \quad C \quad \text{he do} \\
\text{What} \quad \text{will} \\
\end{array}
\]

In this structure the moved Wh-phrase was Chomsky adjoined to C (COMP=Complementizer). Support for this analysis relied on evidence showing that only languages having clause-initial Complementizers have Wh-Movement. Thus, languages, like Chinese, with clause-final Complementizers, should not exhibit Wh-Movement but rather leave the Wh-phrase in situ. This, in fact was observed to be the case...for a time.

Recent evidence from several languages, however, has shown this claim to be false and thus calls for the abandoning of the C-adjunction analysis. The reason for this is simple. As Radford notes (1988:503), data from Vata and other languages illustrate the fact that a language with clause-final Complementizers can indeed have a Wh-Movement rule that moves the Wh-Phrase to the clause-initial position. Obviously such movement cannot have the C node as
represented in (35) as its landing site since in these cases that potential landing site is in the clause-final rather than clause initial position. Radford, building on the work of others, proposes the following revisions which yield considerable descriptive and theoretical advantages.

Radford (and others) have proposed a $\tilde{C}$ constituent (Complementizer Phrase) which is equivalent to $\tilde{S}$. This constituent expands as $[\text{Specifier}, \tilde{C}]$, with the Specifier being a base-generated $\tilde{X}$ node which serves as the landing site for any moved Wh-phrase. Furthermore, the notion of $S$ is redefined as $\tilde{I}$ (IP=Inflectional Phrase). Thus, a derivation of (34) would be represented as (36):

\[(36)\]

In (A) we have I-Movement; and in (B) we have Wh-movement. Thus, in languages having clause-final Complementizers, the structural difference can be accounted
for at D-Structure where $\tilde{C}$ expands as $[\tilde{I}, C]$ rather than $[C, \tilde{I}]$.

It is these revisions that I will utilize throughout this thesis in my arguments, and thus my phrase markers. The reader should further note that in all phrase markers in this thesis the "I" (INFL) node is left unfilled, i.e., it neither contains a constituent nor is it represented as being empty. As the "I" node has no bearing on the arguments presented, and the vast majority of inflection in Koine is attached to the verb, I have adopted this convention as a convenience.

Finally, in the discussion on Koine relative clauses in Chapters 3 and 4 it will be readily apparent that the $\tilde{C}$ node is always empty. In Koine there is a constraint on Wh-Movement which prohibits extraction from a clause with an overt complementizer. Thus relative clauses within certain complement clauses are excluded since relative pronouns are obligatorily extracted. For an in-depth treatment of this topic see Marlett (to appear).

Further orientation to Government-Binding Theory will be provided when the need arises.
There are no revisions found in Nestle's 26th edition that have any bearing on this thesis. Although I did not have direct access to Nestle's 26th Edition, I was able to check for any changes from the 21st addition through the use of GRAMCORD, a computer retrieval system, developed by Paul Miller, which allows the user to search the Greek New Testament for virtually any syntactic construction. This system uses Nestle's 26th edition of the Greek New Testament.

These rules do not account for all the facts of constituent order and cooccurrence within the noun phrase. However, further refinements are unnecessary for the understanding of this thesis.

This presents us with the theoretical dilemma of how to have both a recursive Determiner Rule and a recursive Adjunct Rule. I will leave this issue to others. While I recognize that the Adjunct Rule must be recursive I have not shown this in my formalization of the rule.

This should not be confused with ὁστις (a combination of the relative pronoun ος and the indefinite pronoun τις), which through a long tradition of grammarians gained the
name "indefinite relative pronoun". This is a misnomer, as any Greek grammarian would admit. By my own calculations this relative pronoun has a definite antecedent in approximately 90% of the examples and indefinite in only 10%. The distribution of the this relative pronoun is illustrated in Appendix L.

Throughout this thesis I will assume that other types of movement, e.g., Wh-Movement cannot have the C-node as a potential landing site.
In this chapter I will give a broad description of Koine relative clauses. I begin by pointing out that Koine uses the strategy of relative pronouns in all relative clauses (2.1). This section is followed by a description of the other ways in which relative pronouns are used besides introducing a relative clause (2.2). In section 2.3, I discuss the position of the relative clause with respect to its head, arguing that only postnominal and internally headed relative clauses occur. Finally, in section 2.4, I give a description of the types of internally headed relative clauses found in Koine and note three instances where Koine IHRCs function adverbially.

2.1 Strategies Employed

Every relative clause in Koine Greek is introduced by a relative pronoun. Whereas many languages utilize different strategies for relativizing different types of nominals, e.g., obliques as opposed to subjects, Koine uses the same type of strategy for all nominals. This is exemplified in the data below. In (1) we have subject relativization:

(1) Acts 1:23

Καὶ ἔστησαν δύο, Ἰωσὴφ τὸν καλοῦμενον
and they set two Joseph the being called
In (2) we have object relativization:

(2) Acts 1:4

καὶ συναλιζόμενος παρήγγειλεν αὐτοῖς ἀπὸ and meeting with he charged them from

Ἰεροσολύμων μὴ χωρίζεσθαι ἄλλα περιμένειν τὴν Jerusalem not to depart but to await the

ἐπαγγελίαν τοῦ πατρὸς [ἡν ἤκούσατέ promise of the father RP:ACC you heard

μου],
of me

'And meeting with them He charged them not to depart from Jerusalem, but to wait for the promise of the Father which you have heard from me.'

In (3) we have indirect object relativization:

(3) Hebrews 7:4

Θεωρεῖτε δὲ πιλίκος οὗτος, Ιῶ (καὶ) Behold but how great this RP:DAT also

δεκάτην Ἀβραὰμ ἐδωκεν ἐκ τῶν ἄκροθινών a tenth Abraham gave of the spoils

ὁ πατριάρχης].
the patriarch

'Behold how great this man was to whom the patriarch Abraham gave a tenth of his spoils.'

And in (4) we have oblique relativization:
(4) Acts 20:18

when but they came to him he said

to them you understand from first day

from RP:GEN I set foot in Asia

'...you understand that from the first day on which I set foot in Asia...'

There are, however, some curious examples where other strategies are used in combination with the relative pronoun. Consider Mark 7:25:

(5) Mark 7:25

But immediately, a woman hearing about Him, whose daughter had an unclean spirit, came and fell at His feet.'

Here we have a relative pronoun ης that is the possessor of the NP το θυγάτριον 'the daughter'. Notice, however, that the same NP also has a pronominal possessor αὕτης 'her'. This is what has traditionally been described as a "pleonastic" or "redundant" pronoun. Such a construction, was attested, but rare, in classical Greek. Its more frequent usage in the New Testament (although it is
still used sparingly, see Appendix D) may be related to the frequency of use in the LXX (the Septuagint, a third century translation of the Hebrew Old Testament). In the LXX, this is clearly due to a literal following of the Hebrew text, where pleonastic pronouns are common. Presumably, out of reverence for the text, and since the usage was not unknown in Greek, these passages were translated literally. For examples of this in the LXX see Gen. 1:11, Ex. 6:26, Num. 13:33; 35:25.

(5) Exodus 6:26

οὗτος Ἄαρών καὶ Μωυσῆς, οἷς εἶπεν αὐτοῖς
this Aaron and Moses RP:DAT said to them

ὁ θεὸς ἐξαγαγεῖν τοὺς γένος Ἰσραήλ
the God to bring out the sons Israel

ἐκ γῆς Αἰγυπτου
out of the land of Egypt

'This is Aaron and Moses to whom God said to bring the children of Israel out of the land of Egypt.'

This presents a difficult structural problem. What is the D-Structure of examples such as (6)? The relative pronoun οἷς and the pronoun replacer αὐτοῖς 'them', if both present at D-Structure, would occupy the same node. This is clearly unacceptable. A possible alternative is to say that at PF a Wh-trace may be expressed pronominally. I will return to this issue in Chapter 3.

The redundant use of a pronoun replacer is not the only such "pleonasm" found in Koine relative clauses. There is one example in the New Testament where in addition to the
relative pronoun, there also appears to be noun retention, i.e., the head noun is present both in the matrix clause and in the embedded clause.

(7) 2 Corinthians 10:13

\[ \text{This verse is problematic in several ways. First of all, we have the unusual retention of the head noun in the relative clause in addition to the presence of the relative pronoun. To complicate matters more, both are "attracted" to the case of the genitive NP that modifies the antecedent. (The verb μερίζω 'to divide', excluding cases of attraction, takes its object in the accusative case.) This will be considered in Chapter 4 where I deal with the phenomenon of "attraction".}\]

\[ \text{2.2 Idiomatic Usages of Relative Pronouns}\]

\[ \text{In order to give a thorough account of the relative clauses found in the New Testament, it is necessary to} \]
mention several instances where the relative pronoun is used idiomatically. In some cases it is not even used to introduce a relative clause. Each of these cases is listed in the appropriate Appendix with the references in which they occur in the New Testament. Traditional grammarians have used both the term "relative phrase" and "idiomatic phrase" to describe these constructions, although in the case of interpretative relative "phrases" they are clearly relative clauses.

2.2.1 Interpretative Relative "Phrases"

There are three constructions that fall under the category of interpretative relative "phrase", which in fact is a type of non-restrictive relative clause. All use a neuter nominative relative pronoun and are distinguished according to which of the following verbs they use: ἐστιν 'is' (most common), ἔρμηνευεται 'is translated', or λέγεται 'is called'. The latter two are used exclusively in John's Gospel, although he utilizes ὁ ἐστιν (plus a verb) as well. All three are used to elaborate on the meaning of the antecedent. Consider these three examples from John.

(8) John 1:38

οἱ δὲ εἶπαν αὐτῷ ῥαββί, [ὁ the:PL and they said to him Rabbi:MASC RP:NOM

λέγεται μεθερμηνευόμενον διδάσκαλε], ποῦ is called being interpreted Teacher where
'And they said to him, "Rabbi, (which means 'Teacher'), where are you staying?'"

(9) John 1:41
εὑρήκαμεν τὸν Μεσσίαν, ιupiter eστιν
we have found the Messiah: MASC RP:NOM is
μεθερμηνευόμενον χριστός
being interpreted Christ
'
"...we have found the Messiah," (which means Christ).

(10) John 1:42
социальн κηφᾶς, [ο]  έρμηνεύεται
you shall be called Cephas: MASC RP:NOM is translated
Πέτρος
Peter
'
"...you shall be called Cephas" (which is translated Peter).

While interpretative relative "phrases" most often elaborate on the meaning of an antecedent that is a proper name, they are not limited to such. Consider: (11):

(11) Mark 15:16
οἱ δὲ στρατιώται ἀπήγαγον αὐτὸν ἐσω τῆς
the but soldiers led away him inside the
court:FEM RP:NOM is praetorium
αὐλῆς

"But the soldiers led him away inside the court, which is the praetorium..."

For an exhaustive list of the examples found in the New
2.2.2 Conjoining Relative Phrases

I have placed two kinds of constructions under this heading following Robertson (1934). The first is formed by combining the preposition ἐν 'in, on, etc.' with a dative masculine relative pronoun. This can be either singular or plural, resulting in the adverbial meanings 'while' or 'meanwhile'. Consider these examples:

(12) Luke 5:34

μὴ δύνασθε τοὺς νίκους τοῦ νυμφωνίας
not you are able the sons of the bride-chamber

ἐν ὧν ὁ νυμφίος μετ' αὐτῶν ἐστιν κοινῆσαι
while the bridegroom with them is to make


νηστεύσαι;
to fast

'Are you able to make the children of the bride-chamber fast, while the bridegroom is with them?'

(13) Luke 12:1

'Εν οἷς ἐπισυναχθεῖσῶν τῶν μυριάδων τοῦ ὀχλοῦ
meanwhile being assembled the myriads of the crowd

'Meanwhile, as a multitude of a crowd was assembled...'

Of course, not all instances of this combination are idiomatic usages; some are normal relative clauses modifying an antecedent.
(14) Matthew 3:17

οὗτος ἐστιν ὁ νόος μου ὁ ἅγιος ἀγαπητός,
this is the son of me the beloved

[ἐὰν ὦ] εὐδόκησα
in RP:DAT I am well pleased

'This is my beloved Son in whom I am well pleased.'

There are other examples that are less clearcut than those listed above and in Appendix G that some might want to include in this category.

The second construction coming under this heading is formed by combining the preposition ἀντί 'for, instead of, etc.' with a genitive plural relative pronoun. The semantic force of the relative phrase being something like the English "because". This is illustrated below:

(15) Luke 12:3

ἀνθ' ὁν ὅσα ἐν τῇ σκοτίᾳ
for RP:GEN:PL as many things as in the darkness

εἴπατε ἐν τῷ φωτὶ ἀκούσθησεται,
you said in the light will be heard

'Because as many things as you said in the darkness will be heard in the light.'

Other examples of this construction can be found in Luke 19:44 and Acts 12:23.

2.2.3 Demonstrative Relative Phrases

In this relative phrase the relative pronoun is
combined with μὲν/δὲ (particles used to introduce clauses that contrast, μὲν being the particle that introduces the first clause) to give the semantic force of "the one/the other" or "some/other".

(16) Matthew 21:35

καὶ λαβόντες οἱ γεωργοὶ τοὺς δούλους αὐτοῦ
and taking the husbandmen the slaves of him

ὁν μὲν ἔδειραν ὁν δὲ
RP:ACC:SING some they flogged RP:ACC:SING other

ἀπεκτείναν, ὁν δὲ ἐλιθοβόλησαν.
they killed RP:ACC:SING other they stoned

'And the husbandmen, taking his slaves, flogged one, killed another, and stoned another.'

The reader should notice that the relative pronouns do not individually agree in number with their antecedent, i.e., three "singular" relative phrases have been used to modify a plural antecedent.

This construction is virtually identical in its semantics to the combination of the article and μὲν/δὲ. Romans 14:2 is a perfect example of the apparent interchangeability of the two constructions.

(17) Romans 14:2

ὁς μὲν πιστεύει φαγεῖν πάντα
RP:NOM:SING the one believes to eat all

ὁ δὲ ἄσθενὼν λάχανα ἐσθιέι
the other being weak herbs eats

'One man believes he may eat anything, another, who is weak, eats only herbs.'
The first clause uses the relative pronoun ὁς plus μὲν, while in the second part of this μὲν/dae construction the article ὁ is used with ὧς.

In demonstrative relative phrases the relative pronoun, in combination with μὲν/dae, functions as a type of nominal. Notice that in (16) the verbs ἐρω 'flog', ἀποκτείνω 'kill', and λιθοβολέω 'stone' are not part of a relative clause introduced by the relative pronoun but rather are conjoined VPs in the matrix clause. This is true in all examples of demonstrative relative phrases. For an exhaustive list of the examples of this construction in the New Testament see Appendix I.

2.2.4 Other Relative Phrases

There are other constructions similar to those mentioned above that could possibly be included as relative phrases. However, since the evidence that they are idiomatic usages is less clear, I will only mention them in passing.

A dative relative pronoun combined with ὄνομα (in the nominative case) is the formula for ascribing a name to the antecedent. This usage seems to be a typical example of what has been called the "dative of possession" by traditional grammarians.

(18) Luke 1:26

πόλιν τῆς Γαλιλαίας Ὡς ὄνομα Ναζαρέθ
city of Galilee RP:DAT:SING name Nazareth

Another possible example is the combination of the preposition ἀπό 'from' with a relative pronoun. However, it is difficult to call this an idiomatic phrase since the relative pronoun varies in gender. It seems to agree with an implicit head noun, perhaps ἡμέρα 'day, time', which is feminine, in some instances (e.g., Luke 7:45), and χρόνος 'time', which is masculine, in others (e.g., Luke 13:25).

(19) Luke 7:45

αὐτὴ δὲ ἀφ’ ἡς εἰσήλθον οὐ διελείπεν
she but from RP:FEM:GEN I entered not ceased
καταφιλούσα μον τοὺς πόδας
fervently kissing of me the feet

'But she has not ceased from the time when I entered to kiss my feet.'

(20) Luke 13:25

ἀφ’ οὖ οὖν ἐγερθή σ’ σικοδέσποτης
from RP:MASC:GEN-IND is risen the house master

'From the time when the house master rises ..'

The positing of these antecedents is, however, somewhat speculative. Of course, even if this should be called an instance of an idiomatic phrase, there are numerous examples where the combination of ἀπό with a relative pronoun is used in the normal way to modify an antecedent.
2.3 Position of the Head \( \text{\textmu} \) with Koine Relative Clauses

At first glance Koine appears to be peculiar cross-linguistically in that it seems to have evidence of all three relative clause types: prenominal, postnominal and internally-headed.\(^1\) The postnominal type is by far the most common, encompassing more than 95% of the relative clauses found in the New Testament. Other than those listed in Appendix C, all relative clauses in the corpus are postnominal. The following examples illustrate the construction:

(21) John 2:22

\[ \text{ἐπίστευσαν τὴ γραφὴ καὶ τῷ λόγῳ} \]
they believed the scripture and the word

\[ [\text{ὁ ἐπευ} \text{ ὁ Ἰησοῦς}] \]
RP:ACC said the Jesus

'...they believed the scripture and the word which Jesus had said.'
(22) RP:ACC said the Jesus

(23) 1 Corinthians 4:17

Διὰ τούτῳ ὑμῖν ἐπεμψα ὑμῖν Τιμόθεον
because of this very I sent to you Timothy

[Ὄς ἐστίν μου τέκνον ἀγαπητὸν]
RP:NOM is my child beloved

'Because of this very thing I sent Timothy to you who is my beloved child...'

(24)

Timothy RP:NOM is my child
In both (21) and (23) the bracketed relative clause follows the head noun which it modifies. This, however, is not always the case. Consider (25) below, which appears to contain a prenominal relative clause:

(25) Luke 24:1

\[ \text{τῇ δὲ μιᾷ τῶν σαββάτων ὀρθοῦ βαθέως} \]
\[ \text{the but one the week while still very early} \]
\[ \text{ἐπὶ τὸ μνῆμα ἠλθον φέρουσαι} \]
\[ \text{upon the tomb they came carrying} \]
\[ [\text{ὡς ἦτοιμασαν ἀπώματα}] \]
\[ \text{RP:ACC they prepared spices} \]

'But on the first day of the week, while it was still very early, they came upon the tomb carrying the spices which they had prepared.'

Robertson (1934:718), however, lists this as an example of what is today called an internally headed relative clause. Thus he would bracket the verse as (26):

(26) Luke 24:1

\[ \text{τῇ δὲ μιᾷ τῶν σαββάτων ὀρθοῦ βαθεως} \]
\[ \text{the but one the week while still very early} \]
\[ \text{ἐπὶ τὸ μνῆμα ἠλθον φέρουσαι} \]
\[ \text{upon the tomb they came carrying} \]
\[ [\text{ὡς ἦτοιμασαν ἀπώματα}] \]
\[ \text{RP:ACC they prepared spices} \]

'But on the first day of the week, while it was still very early, they came upon the tomb carrying the spices which they had prepared.'
The question, then, is whether we treat this example and others like it as having structure (27) as a prenominal relative clause or, as having structure (28) as an internally headed relative clause:

(27)

With this example, and in fact in all the possible examples of prenominal relative clauses, there is no way to give a definitive answer, based on the data, as to whether it is a prenominal or internally-headed relative clause.
The reasons for this are simple: whether the head is a constituent of the relative clause or the matrix clause it would receive the same case marking in most of the examples. In the remaining examples the case marking could be attributed to attraction (Chapter 4) or conditions that will be discussed in Chapter 3. Romans 16:2 is one of the most likely candidates for a prenominal RC, but it can still be viewed as an IHRC based on the analyses presented in Chapter viewed as an IHRC based on the analyses presented in Chapter 3.

(29) Romans 16:2

παραστήτε αὐτῇ ἐν ὧν ὄντων
you may stand by her in RP:DAT-IND of you

χρήζη πράγματι
she may have need of thing:DAT

'you may stand by her in whatever thing she might need.'

In this verse the head πράγματι 'thing' is clearly getting its dative case marking from the preposition ἐν 'in, on, etc.', which would appear to be in the matrix clause (although this too is subject to debate since ἐν could be in SPEC of Č having been pied piped by the moved Wh-phrase).

Although some linguists have posited that Koine does in fact have prenominal RCs, e.g., Friberg (cited in Callow 1983a:34-36), all verses that are putative examples of prenominal RCs can be analyzed as IHRCs. It should be noted that the opposite is not true, i.e., all putative examples of IHRCs cannot be analyzed as prenominal RCs. Cross-
linguistically, prenominal RCs have never been observed to use relative pronouns as a relativization strategy (Maxwell 1979:364); yet all the Koine RCs that Friberg posits as prenominal use a relative pronoun. Friberg's analysis of basic word order in Koine also indirectly provides counter-evidence to his prenominal RC analysis. He presents strong evidence for positing VSO as the basic word order in Koine. Typologists, however, have observed that postnominal RCs are almost without exception the only strategy found in verb-initial languages (Shopen 1985:144).

Neither of these are strong arguments against the prenominal RC analysis; however, before making claims that go against the cross-linguistic norm, a reasonably strong argument or presentation of strong evidence should be produced. This has not been done, nor do I believe it is possible, in the case of Koine RCs.³

On the other hand, we must deal with the fact that IHRCs have been observed exclusively in SOV languages (Keenan 1978:44). Of those who have proposed an analysis of Koine basic word order, none have posited that it is SOV. Thus the fact that IHRCs are present in Koine is as typologically odd as the putative prenominal RC examples—at least in terms of word order typology. Here, however, the fact that Koine has IHRCs (in the traditional sense) is undisputed. I have therefore chosen to treat all putative prenominal RCs as IHRCs.

Additionally, I might note that the majority of the
traditional Greek grammarians have treated what appear to be prenominal RCs as IHRCs (e.g., Robertson 1934:718; Blass and Debrunner 1961:154). For those who would like to give further consideration to this question, I have noted those examples that might be construed as prenominal RCs in Appendix C.

**Extraposition**

Finally, we should note that Koine relative clauses may optionally be extraposed. For the purposes of this thesis it is not necessary to give a detailed account of this phenomenon but simply to note its occurrence. An example of extraposition is found in Hebrews 7:13.

(30) Hebrews 7:13

\[\text{φυλής ἔτέρας μετέσχηκεν, [ἀφ' ἦς οὐδεὶς} \]
\[\text{προσέσχηκεν τῷ θυσιαστηρίῳ]}
\[\text{'He belongs to another tribe from which no one has devoted himself to the altar.'}

In (30) the relative clause has been postponed to follow the verb phrase.

**2.4 Internally Headed Relative Clauses**

As was stated in section 1.1 there is a phenomenon in Koine that has been variously described as "incorporation",.
"assimilation", "transposition", etc. of a head noun into the relative clause. An exhaustive list of those verses exhibiting this phenomenon can be found in Appendix C. Mark 4:24 is a good example.

(31) Mark 4:24

\[\text{ἐν} \ [\underline{υ} \ \text{μέτρῳ} \ \text{μετρεῖτε}]\]
with \text{RP:DAT} measure you measure

\[\text{μετρηθήσεται} \ \underline{υμῖν}\]
it shall be measured to you

'With the measure with which you measure, it shall be measured to you.'

We need to consider what it is that makes this an IHRC. Our first clue comes from the position of the head noun in relation to the relative pronoun. The relative clause in Koine always has a relative pronoun in the clause-initial position. Anything that follows the relative pronoun is thus a constituent of the embedded clause. Secondly, we notice that there is no overt head external to the relative clause.

In order to understand the nature of the problem we are facing it is necessary to have a full account of the data. IHRCs in Koine can be subdivided into various categories. The first of these contains IHRCs that function as adverbials.
2.4.1 Adverbial IHRCs

There are three types of adverbial IHRCs: manner, reason, and time.

Manner

The construction ὑν τρόπον 'in the manner in which' functions as a manner adverbial. This construction is found in the following verses: Matthew 23:37, Luke 13:34, Acts 1:11; 7:28; 15:11; 27:25, and 2 Timothy 3:8. Consider the following example:

(32) Acts 27:25

οὔτως ἔσται καθ' ὑν τρόπον
thus it will be in RP:ACC manner

λελάληται
it has been spoken to me

'...thus it will be in the manner in which it was spoken to me.'

The preposition here has been elided from κατά to καθ', a very common practice in Greek. This phrase is always used with both the relative pronoun and the head noun in the accusative case. The preposition is optional to the construction occurring only in Acts 15:11 and 27:25. Matthew 23:37 is an example where the preposition is absent.

(33) Matthew 23:37

ποσάκις ἡθελησα ἐπισυναγαγεῖν τὰ τέκνα
how often I wished to gather the children
...How often I wanted to gather your children in the manner in which (as) a bird gathers her young under her wings.'

**Reason**

A second adverbial construction is δι' ἢν αἰτίαν 'the reason for which'. This IHRC, which functions as a reason adverbial, can be found in the following verses: Luke 8:47, Acts 22:24, 2 Timothy 1:6,12, Titus 1:13, and Hebrews 2:11.

(34) Luke 8:47

ιδοὺσα δὲ ἡ γυνὴ ὅτι οὐκ εἶλαθεν seeing and the woman that not she was hidden

τρέμουσα ἡλθεν καὶ προσπεσοῦσα αὐτῷ trembling she came and falling before him

δι' ἢν αἰτίαν ἡμετο αὐτοῦ] for RP:ACC cause she touched him

ἀπῆγαγειλεν ἐνώπιον παντὸς τοῦ λαοῦ declared before all the people

'And the woman, seeing that she was not hidden, came trembling and falling before him declared before all the reason for which she had touched him.'

This particular construction never occurs without the preposition in the New Testament.

**Time**

The third type of adverbial IHRC involves the relativization of a time word, e.g., ἡμερα 'day, time,
season', καιρός 'time', or ὥρα 'time, hour'. Of these three, the use of ἡμέρα is by far the most common, being found in Matthew 24:38, Luke 1:20; 17:27,29,30, John 9:14, Acts 1:2; 27:33, and Colossians 1:6,9. The other two are only found once each in the New Testament; καιρός in Acts 7:20, and ὥρα in Luke 12:40. These are illustrated below:

(35) Matthew 24:38

ἕως ἡμέρας εἰσῆλθεν Νῶε εἰς τὴν κυβωτόν ἕως τοῦ ἡμέρας εἰς τὴν κυβωτόν

'...until the day in which Noah entered into the ark.'

(36) Acts 7:20

ἐν καιρῷ ἐγεννήθη Μωϋσῆς ἐν καιρῷ

'At the time in which Moses was born...'

(37) Luke 12:40

καὶ ἡμείς γίνεσθε ἐτοιμοὶ, ότι ἡ ὥρα καὶ ὥρα καὶ ὥρα

'And you, be prepared because the Son of Man comes in an hour which you do not expect.'

The word ἡμέρα can also occur as an IHRC with the prepositions ἐν 'in, on, etc.' and ἀπό 'from'.
(38) John 9:14

It was the sabbath on the day in which Jesus made the clay and opened his eyes.

(39) Colossians 1:6

From the day in which you heard and fully knew the grace of God in truth.

This construction also occurs without the preposition:

(40) Luke 17:30

It shall be the same way in the day in which the Son of Man is revealed.

It is interesting to note that if the writer/speaker wishes to modify the time word in any way, e.g., with an adjective, a postnominal RC construction must be used. This is exemplified below:
(41) Acts 0:18

\[ \text{\textit{υπερτάσσεις απὸ πρώτης ἡμέρας}} \]
\[ \text{'you understand from first day} \]
\[ \text{[ αφί \ ης \ ἐπέβην \ εἰς τὴν \ Ἀσίαν]} \]
\[ \text{from RP:GEN I set foot in Asia} \]

'You understand that from the first day from which I set foot in Asia...'

Examples such as this, taken in comparison with example (39), might lead us to posit (42) as the D-Structure (where both an external and internal head are present) for all RCs. This analysis can be called a Full D-Structure analysis since there are no empty nodes at D-Structure.

(42)

The writer/speaker would then have the pragmatic choice of deleting either the external head (and subsequently the extra preposition) or the internal copy of the head. Such an analysis has been dismissed by Gorbet (1976) as a possible analysis, at least for Diegueño. I will consider whether or not such an analysis is appropriate for Koine in the next chapter.
Occasionally, the time word is omitted, leaving simply the preposition and the RP. Compare (43) with (40):

(43) 2 Peter 5:4

αφ’ [ἡς γαρ οἱ πατέρες ἐκοιμήθησαν], πάντα
from RP:GEN for the fathers fell asleep all

οὔτως διαμένει απ’ ἀρχῆς κτίσεως
thus remains from beginning of creation

'From (the day) when the fathers died, all things remain as they were from the beginning of creation.'

2.4.2 Other Types

The remainder of the IHRC examples do not fall into any obvious category. Of these I will, at this point, make mention of the ones that are basic IHRCs, i.e., not particularly problematic, and leave the others to be dealt with in Chapter 3.

Two of these are the parallel passages to Mark 4:24 (29); namely Matthew 7:2 and Luke 6:38. The three other basic IHRCs are found in Matthew 10:11, Hebrews 7:14 and 1 Peter 1:10.

(44) Matthew 10:11

[εἰς ἣν (δ’) ἄν πόλιν ἢ κώμην εἰσήκοψε],
into (and) whatever city or village you might enter

'And into whatever city or village you might enter...'

(45) Hebrews 7:14

[εἰς ἣν φυλήν περὶ ἱερέων οὐδὲν
as to RP:ACC tribe concerning priests nothing
Moses spoke

'the tribe of which Moses spoke nothing concerning priests'

(46) 1 Peter 1:10

[περὶ τῆς σωτηρίας ἐξεζήτησαν καὶ ἐξηραύνησαν προφήται
concerning RP:GEN salvation sought out and
searched out prophets

'...concerning the salvation which the prophets sought after and searched for...'

In addition to these, all of the IHRCs that are listed in Appendix C as putative prenominal RCs fall under the category of basic IHRCs.
NOTES

Koine also has what has generally been referred to as "free" or "headless" relative clauses. In this type of RC there is no overt antecedent. A good example of this is Matthew 10:38.

(1) Matthew 10:38

καὶ ἸΩΣ οὐ λαμβάνει τὸν σταυρὸν αὐτοῦ
and RP:NOM not take the cross of him
καὶ ἀκολουθεῖ μου, οὐκ ἔστιν μου ἀξίος.
and follow me not is of me worthy

'And (the one) who does not take his cross and follow me is not worthy of me.'

This, and other, "free relatives" are characterized by the following phrase marker:

(2)

For further examples of this type of relative clause see Appendix K

I will refrain from using accent or breathing marks in the Koine phrase markers (PMS) as this will improve the format of the PMS.
There are a couple of other slightly different types of verses that might be construed as further examples of prenominal RCs. These come from Appendix C and include John 3:32; 5:38; 8:26 and Galatians 2:18. In these verses there is no overt head noun. However, there is a noun modifier which follows the relative clause. I maintain that there is no reason to posit that these are either prenominal RCs or IHRCs, although if they are indeed IHRCs they would still work within the analysis proposed in Chapter 3. I rule out the possibility of them being prenominal RCs for the same reasons that were listed in section 2.3. I propose the following PMs for John 5:38 and 8:26. The other two examples would have analogous structures.

(3) John 5:38

[ὅν ὅπερτειλεν ἐκείνος], τὸῦτο ὑμεῖς
RP:ACC sent he this you:PL

οὐ πιστεύετε.
not you believe

'You do not believe in this one whom he sent.'

Note: I do not deal with the challenge that the word order (Oblique NP, Subject NP, VP) poses for X-theory. I simply assume that it involves extraposition. The PM below would thus fill the SPEC of ċ node of the matrix clause.
(5) John 8:26

καγώ [ω ήκουσα παρ' αυτού] ταύτα
and I RP:ACC I heard from him these

λαλώ είς τόν κόσμον.
I speak in the world

'And I speak to the world those things which I heard from him.'
We are not able to get any clues from the New Testament as to what the correct structure of these examples is. The IHRC structure of these verses, i.e., with either the DEM outside of the RC or inside is unattested in the New Testament. However, the above structure with an overt head noun is also unattested.

There are, though, some reasons to lead us to adopt a normal postnominal RC analysis. First of all, we can eliminate one of the possible structures by making reference to Williamson's "Indefiniteness Condition" (see section 3.1.2). The IHRC structure where the DEM is inside of the RC would be a violation of this condition.

Secondly, if we posit the other IHRC structure for John
5:38, where the DEM is outside of the RC in accordance with the "Indefiniteness Condition", we would be faced with an IHRC without a head noun— an unattested structure.

However, given the above postnominal analysis, we eliminate potential problems of case assignment posed by an IHRC analysis and still maintain that prenominal RCs are unattested in Koine. For these reasons I propose that these four examples should be treated simply as normal postnominal relative clauses having empty head nouns.
In this chapter I propose a formal analysis of Koine IHRCs, arguing that an analysis utilizing downward movement provides us with the best account of the facts. I begin by considering two recent analyses posited for other languages exhibiting IHRCs (3.1.1 and 3.1.2). Next, I present the unique set of facts presented by the Koine data and conclude that neither of these analyses is able to account for these facts without considerable revision (3.1.3). Finally, I present a formal analysis of Koine IHRCs (3.2). I consider three possible analyses, each with a different D-Structure, concluding that a derivation utilizing downward movement provides the best analysis of the peculiar case marking facts presented by Koine IHRCs.

3.1 Analyses Proposed For Other Languages

In recent years, two different analyses have been posited for the structure of internally headed relative clauses in other languages using the Government-Binding framework. These can be found in Cole 1987 and Williamson 1987. I first review each of them, and then demonstrate that they cannot be readily adapted to handle the peculiar facts of Koine IHRCs which have until now not been
discussed in the theoretical literature on relative clauses.

3.1.1 Cole's Analysis

Cole posits that IHRCs are not in fact internally headed but rather have a pronominal phonologically null (external) head both at D-Structure and at S-Structure. Furthermore, he assumes that these null heads are coindexed with the NP in the relative clause. Thus, he proposes the following structure:

(1)

Using word order and case marking facts, primarily from Imbabura Quechua and Ancash Quechua, Cole argues that IHRCs cannot be considered internally headed in the sense that the nominal traditionally referred to as the "head" is a constituent of the matrix clause. Consider his example:

(2) \[ \text{nuna bestya-ta ranti-shqa-n alli} \]
\text{man horse-ACC buy-PERF-3per good}
\text{bestya-m ka-rqa-n}
\text{horse-EVIDENTIAL BE-PAST-3per}
'The horse the man bought was a good horse.'

He notes that the internal "head" (in bold) occurs between the subject and verb of the subordinate clause, and thus must be a constituent of that clause; and that it is marked with the accusative case. If it was a constituent of the main clause it would bear nominative case marking. He concludes from this, and other arguments, that constituents such as *bestya-ta* in (2) are not the S-Structure head but rather a constituent of the relative clause.

Cole assumes that IHRCs are found only in OV languages that manifest null anaphora. In section 3.1.3, I will demonstrate that the Koine data poses serious problems for this assumption. Thus, he claims, a language with IHRCs must exhibit left-branching structures (structures where the head is on the right) as opposed to, or in addition to, right-branching structures (structures where the head is on the left). He further argues for the following condition from Langacker 1969 and Ross 1969 which he refers to as the "Langacker-Ross Condition". Note that Cole uses the term "anaphor" to refer to any NP with a coindexed antecedent.

(3) An anaphor cannot both precede and command\(^1\) its antecedent.

While admitting that this condition is not widely accepted today, because it would require significant changes
in the Binding Theory, Cole demonstrates how (3) predicts that IHRCs will only occur in left branching structures like (1). A right-branching structure like (4) below would be disallowed because the anaphor both precedes and commands its antecedent.

(4)

Cole argues that "Reinhart's Condition" (5), which was formulated as a substitute for the "Langacker-Ross Condition", fails to make the correct prediction with regard to the structure of IHRCs since it would predict that (1) is ill-formed.

(5) An anaphor cannot command its antecedent.

He further notes that (5) would fail to predict the distribution of IHRCs cross-linguistically, i.e., that they only occur in languages with left-branching NPs.

Cole further posits that there is head raising at LF and that the result is the same structure as a "headed relative clause" (as opposed to the S-Structure of IHRCs
where the head is phonologically null). He posits the following LF representation of IHRCs:

\[
(6)
\]

Here, the lexical (internal) copy of the phonologically null (post-RC) head has raised to occupy the null head’s empty node.

3.1.2 Williamson’s Analysis

Williamson (1987) looks at the phenomenon of IHRCs using data from Lakhota Sioux. Consider the following example:

\[
(7) \left[_{\text{NP}} [_{\text{S}} \text{Mary owiza wa kage}] \text{k’u} \right] \text{he ophewathu}
\]

Mary quilt a make the-P Dem I-buy

'I bought a quilt that Mary made.'

As in Cole’s example, the "internal head" occurs between the subject and the verb and thus must be a constituent of the relative clause.

Williamson argues that IHRCs are indeed internally headed rather than having empty external heads or "any other
extra invisible structure" (1987:187-8) as posited by Cole. She posits that they are base generated by the same phrase structure rules used to generated simple clauses, producing the following D-Structure:  

(8)

Throughout the remainder of this thesis I will adopt Williamson’s terminology for referring to the two NPs in (8). The highest NP, which expands to the relative clause, will be referred to as the *mother* NP. The lower NP, which is a constituent of the relative clause, will be referred to as the *internal head*.

In agreement with Cole, Williamson posits that there is head raising at LF. She stipulates that the head is Chomsky-adjointed to $S_{rel}$.

(9)
Or in terms of the phrase structure in this thesis:

(10)

Williamson significantly points out that in Lakhota only indefinite NPs are allowed to be internal heads. (Definite NPs contain what Milsark (1974) has called "quantified expressions": "the definite determiner the, demonstratives, proper names, definite pronouns, and the quantifiers all, every, most, and so forth" (p. 175).) Williamson cites several examples such as (11) to substantiate this claim for Lakhota.

(11) *[Wichasa iyuha t'a pi] ki/cha] Lakhota pi men all die PL the/IND Lakhota PL

*'All men who died were Lakhota.'

She goes on to propose that this "Indefinite Condition" will apply to all languages manifesting internally headed relative clauses.

3.1.3 Problems Posed For These Analyses By Koine

Cole's assumption that only languages exhibiting null
anaphora can utilize IHRCs is completely consistent with Koine, as seen in Appendix K. However, several problems become evident in both Cole's and Williamson's analysis when considered in light of the Koine data. Both analyses posit that the "head" is base generated within the relative clause, and only undergoes movement at LF. Consider the following prepositional phrase from Luke 3:19:

(12) περὶ πάντων [ὅν ἐποίησεν πονηρῶν ὁ Ἡρῴδης]
     conc. all:GEN RP:GEN had done evils:GEN the Herod
     '...concerning all the evil things which Herod had done.'

Here, unlike in Cole's examples, the "head" πονηρῶν 'evils' is receiving its case from the matrix clause rather than the embedded clause. Specifically, it is being assigned genitive case by the preposition περὶ 'concerning' rather than the accusative case it should receive as the direct object of the relative clause. If this sentence is base generated with the "head" inside of the embedded clause and no movement takes place other than head raising at LF then we have no account for the genitive case marking, since case is assigned prior to LF.

This is, I believe, what led traditional grammarians to suggest that "movement" or "transposing" of the head noun had taken place. However, for such to be the case we would have to posit downward movement as in (13):
Such movement is generally ruled out by the Binding Conditions since the NP 'πονηρῶν' 'evils' would fail to bind its trace. Thus, as intuitively appealing as it might be to posit downward movement in an effort to assign the proper case, such an analysis is customarily rejected because of the consequences it would have for the Binding Theory. I will return to this in section 3.2.3 where I consider the downward movement analysis and its consequences for the Binding Theory in detail.

Secondly, related to Cole's analysis, we have the problem of the "Langacker-Ross Condition"—An anaphor cannot both precede and command its antecedent. This worked quite well with relative clauses that were clearly left-branching, but in Koine relative clauses are predominately, if not entirely, right-branching. Note that this does not weaken Cole's proposal that IHRCs occur only in languages that have left-branching NPs, for Koine does have such structures:

(14) Acts 1:8

τοῦ ἁγίου Πνεύματος
the holy spirit

(13)
'...the Holy Spirit...'

(15)

However, the fact that Koine RCs are right-branching does have implications regarding the validity of either the "Langacker-Ross Condition", or the "Reinhart Condition". Consider Luke 3:19 (12) once again. Under Cole's analysis it would have to have the following structure:

(16)

(In all the PMs the quantifier fills the $\overline{D}$ node, since it is a subclass of determiners in Koine.)

Notice that the anaphoric head of Cole's analysis both
precedes and commands its antecedent πονηρῶν 'evils', in violation of both the "Langacker-Ross Condition" and the "Reinhart Condition." The only possible solution to this problem, if Cole's analysis is to be maintained as is, would be to posit the following structure:

(17)

The problem with this is that structures like (17), but with an overt noun following the relative clause and quantifier, are unattested in the New Testament, whereas structures like (16), with the head noun between the quantifier and the relative clause, are common. Consider Matthew 15:13:

(18) πᾶσα φυτεία [ἡν οὐκ ἐφύτευσεν] every plant RP:ACC not planted

Finally, there is a matter of case assignment that must be clarified. Under Cole’s analysis there would be a determiner παντῶν ‘all’ modifying the pronominal phonologically null head in (17). Nominal modifiers agree with their head in case in Koine. Therefore, under this analysis we would have to assign case to a pronominal phonologically null head in order for the determiner to be assigned case marking.

For these reasons we have no choice but to conclude that the Cole analysis is inadequate for Koine IHRCs. Let us now consider how the Koine data is accounted for by Williamson’s analysis. Recall that Williamson posits the following S-Structure for IHRCs in Lakhota, here repeated as (20):
I see nothing in her analysis that specifies that the Det must branch to the right so I assume that (21) would use her proposed S-Structure for Luke 3:19:

Notice once again that we have the same problem that we had with Cole's analysis. If this structure is base generated and does not undergo movement until LF then we have no way of accounting for the fact that the internal head is receiving its case from the main clause. The major problem with this analysis, then, (just as it is one of the problems in Cole's analysis) is how to reconcile the case of the internal head in the Koine data.

Before moving on to this, let's consider Williamson's
other main proposal, i.e., only indefinite NPs can serve as internal heads.

Looking through the 65 examples of internally headed relative clauses in the New Testament I find only three verses that might serve as counterexamples to Williamson's proposal. Recall that in Williamson's analysis of Lakhota, definite NPs correspond with Milsark's (1974) class of "quantified expressions", and that proper names are part of this set. Consider then Mark 6:16:

(22) Mark 6:16

\[
\text{ἀκούσας} \ \text{δὲ} \ \text{ὁ} \ \text{Ἡρῴδης} \ \text{ἐλέγεν} \ \text{ὅν} \ \text{ἐγὼ}
\]

hearing but Herod said RF:ACC I

\[
\text{ἀπεκεφάλισα} \ \text{Ἰωάννην}, \ \text{οὗτος} \ \text{ἡ} \ \text{ἡ}
\]

beheaded John this was raised

'But hearing this Herod said, "This John, who I beheaded, has been raised."

'Ἰωάννην 'John' is in the accusative case and thus must be a constituent of the embedded clause, i.e., the direct object of the verb ἀπεκεφαλίζω 'to behead' at S-Structure. If it were a constituent of the matrix clause it would be in the nominative case since it would be the subject of the passive verb ἔγειρω 'to raise up'. Thus we have an apparent counter-example to Williamson's "Indefiniteness Condition", since a proper name is an internal head.

But is it really a counter-example? Consider Luke 3:19 yet again:
Concerning all the evils that Herod had done, notice that in the underlined noun phrase we have a proper name preceded by a definite article. Koine had both anarthrous (without an article) and articular (with an article) proper names, and both types were common in the New Testament. We commonly find Jesus' name preceded by the definite article in the Gospels and Paul's name commonly preceded by the definite article throughout Acts. This suggests that anarthrous proper names are indefinite in Koine, and thus there is no problem when an anarthrous proper name is an internal head. Only articular proper names would be excluded as internal heads. I therefore posit that in Mark 6:16 'Ἰωάννης 'John', and indeed any anarthrous proper name in Koine, can serve as an internal head without violating Williamson's "Indefiniteness Condition". This, of course, would involve a slight modification of Milsark's definition of "quantified expressions"; it would need to allow for language particular grammars to specify the conditions under which proper names are definite.

It is worth noting that the "Indefiniteness Condition" is in accord with various traditional grammarians, including Jannaris 1968 and Turner (in Moulton 1963), who have observed that the internal head must be anarthrous.

The two other possible counterexamples have a head noun that is modified by a quantifier in the matrix clause,
unlike the appositional demonstrative in (22). Recall that Luke 3:19 is one of these:

(24) Luke 3:19

\[\pi\epsilon\rho\iota \ \pi\alpha\nu\tau\omicron\nu \ [\tilde{o} \nu \ \epsilon\pi\omicron\nu\iota\sigma\epsilon\nu \ \pi\omicron\nu\rho\omicron\omega\nu \ \omicron \ \epsilon\iota\rho\omicron\delta\eta\zeta]\]

concerning all:GEN RP:GEN had done evils:GEN the Herod

(25)

\[\begin{array}{c}
\pi\epsilon\rho\iota \\
\text{concerning}
\end{array}
\]

\[\begin{array}{c}
\pi\alpha\nu\tau\omicron\nu \\
\text{all:GEN}
\end{array}
\]

\[\begin{array}{c}
\pi\omicron\nu\rho\omicron\omega\nu \\
\text{evils:GEN}
\end{array}
\]

The second example is found in Luke 19:37:

(26) Luke 19:37

\[\pi\epsilon\rho\iota \ \pi\omicron\sigma\omicron\omicron\nu \ [\tilde{o} \nu \ \epsilon\iota\delta\omicron\nu \ \delta\omicron\nu\alpha\mu\epsilon\omicron\omega\nu]\]

concerning all:GEN RP:GEN they saw powerful deeds:GEN

'*...concerning all the powerful deeds which they saw.'*

(27)

\[\begin{array}{c}
\pi\epsilon\rho\iota \\
\text{concerning}
\end{array}
\]

\[\begin{array}{c}
\pi\omicron\sigma\omicron\omicron\nu \\
\text{all:GEN}
\end{array}
\]

\[\begin{array}{c}
\delta\omicron\nu\alpha\mu\epsilon\omicron\omega\nu \\
\text{powerful deeds:GEN}
\end{array}
\]

Notice in each case the \[\tilde{D}\], which modifies the internal
head, agrees with it in case, even though it is external to the relative clause. This will be accounted for by the analyses proposed in section 3.2.

Rather than being counterexamples, both (24) and (26) could be viewed as providing evidence which clarifies the nature of Williamson’s "Indefiniteness Condition". Both have a quantified expression (παντὼν 'all' and παπατὼν 'all') that is modifying the internal head. In both examples, however, these occur outside of the relative clause. Thus Koine illustrates that the "Indefiniteness Condition" is a syntactic filter. Although an internal head may have a semantic modifier that is a quantified expression, this modifier must be external to the relative clause containing the internal head noun. Examples such as the following, where the quantifier is within the relative clause, are unattested and presumed to be ungrammatical:

(28) *περὶ [ὕν ἔποιησεν πάντων πονηρῶν ὅ Ἡρωδης]
concerning RP:GEN had done all evils Herod

(29) *περὶ [ὕν εἶδον παπατὼν δυσάμεον]
concerning RP:GEN they saw all powerful deeds

I thus find the Koine data to be consistent with Williamson’s "Indefinite Condition" for IHRCs. In every IHRC example in Koine the internal head is a single expansion of the Ν it heads, i.e., there are no examples where the internal head is syntactically modified by a
quantified expression at S-Structure; thus all Koine internal heads are syntactically indefinite. In examples where the semantics of the internal NP call for a modifier that is a quantified expression, namely examples (24) and (26), we find that the quantified expression is obligatorily generated outside of the relative clause leaving the internal head indefinite in terms of syntax. Williamson's "Indefiniteness Condition" thus provides the motivation for the peculiar discontinuity of the NPs found in Luke 3:19 and 19:37.

3.2 A Proposed Analysis of Koine IHRCs

It has been shown that the "Langacker-Ross Condition" does not hold in light of the Koine data. Because Cole's arguments that IHRCs occur only in left-branching NPs were tightly bound to the validity of the "Langacker-Ross Condition", and because of the importance of the "Indefiniteness Condition" proposed by Williamson, I will consider a modification of her analysis in some detail. Ultimately, however, I will adopt an analysis which is distinct from both and involves downward movement of the head noun.

Before doing this we need to establish a firm grasp on the range of facts that must be dealt with. First of all, consider the following facts about case marking in Koine:

(30) All nominals and nominal modifiers must be marked for case.
(31) A modifier agrees with its head in case.

Now consider the facts presented by IHRCs in Koine:

(A) IHRCs possess both a relative pronoun and an internal head noun.

(B) In every example of an IHRC the relative pronoun agrees in case with the internal head.

There is agreement between the relative pronoun and the internal head not only in structures like (32) in which a relative specifier and the noun it modifies remain adjacent at S-Structure, but also in examples where a relative pronoun has been moved to SPEC of C while the internal head remains in situ (33).

(32)

(33) Luke 1:4

 tôn ἐπιγνώσει περὶ [藟ν]
that you might know concerning [藟ν]
That you might know the reliability concerning the things which you were instructed.

Example (33) also illustrates fact (C):

(C) Constituents of the relative clause, i.e., the relative pronoun and the internal head noun, appear to receive case assignment from a constituent of the matrix clause in some examples.

Finally, we have examples like (34), which illustrate fact (D), and further substantiate fact (C):

(D) In some examples we have a modifier of the internal head which is clearly outside the IHRC. This modifier still conforms to fact (B).

(34) Luke 3:19

'But Herod the tetrarch, being reproved by him concerning Herodias, the wife of his brother, and concerning all the evils which Herod had done...'

In order to understand this example we must first consider what evidence there is that πονηρῶν 'evils' is an internal head. We know that it must be the "antecedent" of
the relative clause since the quantifier παντὸν 'all' has to modify something and πονηρῶν 'evils' is the only candidate. The primary evidence that it is an internal head comes from its physical position. It is definitely inside the relative clause; the relative pronoun and verb are adjacent on the left and the subject NP of the relative clause is adjacent on the right. If this were the only fact to indicate that πονηρῶν is an internal head we would simply have another example analogous to those presented by Cole. Notice, however, that this is not the case. One of Cole's main arguments for positing that an internal head (defined by its position within the relative clause) is not, in fact, the head of the construction, is that in the languages which he considered the putative internal head always received its case from the relative clause rather than the main clause.

This is not true in (34). The verb ποιέω 'do' subcategorizes for a direct object in the accusative case. However, the head noun πονηρῶν 'evils' is in the genitive case. It is therefore not case marked as the direct object of the relative clause. Furthermore, neither the syntax nor the semantics of the relative clause allow πονηρῶν 'evils' to fill any other constituent node within the relative clause. The only case assigner in the entire sentence that assigns genitive case is the preposition περί 'concerning'. The enigma that faces us, then, is that while the head noun πονηρῶν 'evils' is in the right position to receive accusative case marking from the verb of the relative clause it
is somehow receiving genitive case marking from the preposition περὶ 'concerning' which is external to the relative clause.

Thus we can conclude that πονηρῶν 'evils' is the internal head of the construction (I) based on Cole's loose definition of an internal head, i.e., its physical position within the relative clause, and (II) based on case marking facts, i.e., the head of the relative clause is receiving its case from the main clause even though it is physically within the relative clause (this corresponds to Cole's implied definition of a true internal head).

If we claim that πονηρῶν 'evils' is an internal head of the relative clause we are immediately presented with a number of other difficulties. First of all, we would need to decide where the relative clause begins. Do we include the quantifier πάντων 'all' in the relative clause? It is also in the genitive case and so can only be considered a modifier of πονηρῶν 'evils'. Although this would mean that it was part of a discontinuous noun phrase, it would not be altogether surprising since discontinuous noun phrases are well attested in Koine (as illustrated below where the NP is underlined).

(35) Galatians 2:6

πρόσωτον Θεὸς ἀνθρώπου οὐ λαμβάνει
face God of man not receive

'God does not receive the face of man.'
(36) Galatians 3:7

οὗτοι νίοι εἰσιν Ἄβραμος
these sons are of Abraham

'These are the sons of Abraham.'

If, however, we do include the quantifier as part of the relative clause we would not only violate Williamson's "Indefiniteness Condition" (which we want to maintain) but we would also lose the generalization that moved Wh-phrases occur clause initially, which is otherwise always the case in Koine. If we maintain the generalization and say that the relative clause begins with the moved Wh-phrase then we leave what can only be semantically construed as the modifier of the head noun (πάντων 'all') stranded in the main clause. The generalization that the relative pronoun occurs clause initially must be maintained, however, not only on account of the evidence in Koine but also because of cross-linguistic evidence (Comrie 1981:142). Furthermore, as was established in section 3.1, evidence for the "Indefiniteness Condition" strongly points to any modifier of the internal head that is "definite" being base generated outside of the RC. Thus (34) illustrates fact (D).

Facts (A-D), then, are the basic range of facts that will have to be dealt with in any analysis of Koine IHRCs. Other facts, regarding the phenomenon of attraction will be presented in the next chapter. Facts (A), (B), and (C) are not dealt with in either Cole's or Williamson's analysis, since none of the languages dealt with utilize relative
pronouns as a relativization strategy. Apparently no example analogous to (33) in these languages exists—where the internal head is receiving its case assignment from a case assigner that is external to the RC. Finally, fact (D) is not dealt with in either analysis, apparently due to a lack of an example analogous to (34). Thus, a simple adoption of either analysis to account for the Koine data is impossible.

In formulating an analysis of Koine IHRCs, the first issue that must be dealt with is the appropriate D-Structure. While Williamson maintains that "RCs are produced by the same phrase structure rules used for simple clauses" (p. 188), she has not had to deal with the problem presented by fact (A), i.e., Koine IHRCs possess both a relative pronoun and an internal head noun.

Generally, it is assumed that relative pronouns fill the $\bar{N}$ node at D-Structure as in (37), which would represent subject relativization:

(37)

There is a great deal of evidence that (37) is indeed
the correct D-Structure for most clauses involving Wh-Movement in English. Consider (38) for example:

(38) I saw the man who John hit

Here the analysis is straightforward. However, consider now sentence (39) which involves interrogative Wh-Movement:

(39) Which flavor do you like?
Clearly, in cases such as this the Wh-word is a specifier and thus is appropriately base-generated in the SPEC node of the head noun. It is then the Wh-NP-phrase that is moved by Wh-Movement in (40).

This is the same D-Structure we have in the Koine examples of IHRCs and redundant (resumptive) pronouns. The relative pronoun, which I will henceforth maintain to be a relative "specifier" (RS), is base-generated in SPEC while the internal head or redundant pronoun is base-generated under the head $\bar{N}$ node. If we consider (41) to be the D-Structure of all RCs in Koine there would be no structural reason for excluding the combination of either pronoun-retention or non-reduction with a relative specifier (RS).
Thus an example like (6) from Chapter 2, here repeated as (42) would have the following D-Structure (43):

(42) Exodus 6:26

οὗτος Ἀαρὼν καὶ Μωυσῆς, [οἵς εἶπεν αὐτοῖς]
this Aaron and Moses RS:DAT said to them

ὁ θεὸς ἔξαψασεῖν τοὺς ὦντος Ἰσραήλ
the God to bring out the sons Israel

ἐκ γῆς Αἰγύπτου
out of the land of Egypt

'This is Aaron and Moses, to whom God said to bring the children of Israel out of the land of Egypt.'
Pleonastic pronouns, then, while being very unusual cross-linguistically are not ill-formed in terms of syntax. This structure accounts for fact (A). However, we still must deal with facts (B-D).

The first step is to establish the D-Structure of Koine IHRCs, determining where the head of the relative clause is generated. Recalling example (31) of chapter 2, here repeated as (44), we have three possible D-Structure representations, listed as (45), (46) and (47).³

(44) Mark 4:24

[ἐν ὧν μέτρῳ μετρεῖτε]
with RS:DAT measure:DAT you measure

μετρηθῆσαι ὑμῖν
it shall be measured to you

'With the measure with which you measure it shall be measured to you.'
First of all, we have structure (45), in which the head noun is generated inside the relative clause. This conforms to Williamson's D-Structure analysis of IHRCs, with the modification that the relative specifier is the SPEC of the internal head at D-Structure.

Example (45) differs from (46) and (47) below in that the mother NP (in bold) does not expand to a N but directly to C. This structure is an obvious violation of X-Theory, since the mother NP does not expand to a head noun node. This fact is left unexplained by Williamson. I assume from her article that she does not hold to X-Theory, perhaps rejecting it because the above structure (which I have modified to reflect X-Theory for the most part) was the best
way of dealing with the data. Indeed, if she is to maintain that there is no null head in IHRCs, such a structure will be the obvious result.

The second possible D-Structure generates the head noun both inside the relative clause and in the main clause. This is reminiscent of example (42) of Chapter 2, the structure that Gorbet (1976) dismissed as a possible analysis of IHRCs in Diegueño.

(46)

Finally, the third possible D-Structure has the head noun generated only in the main clause. This would be associated with a downward movement analysis which would lower the head noun into the relative clause:
Notice that the sole difference between (46) and (47) is that in the internal head node in (47) is empty at D-Structure.

Consider the viability of each of the above structures as D-Structure representations.

3.2.1 The Modified Williamson Analysis

The first possible analysis that we are dealing with posits a D-Structure that conforms with Williamson's analysis. Recall the PM in (45):
Since Lakhota does not have relative pronouns, Williamson simply maintains that the D-Structure and S-Structure are identical for IHRCs since there is no Wh-Movement. In Koine, however, Wh-Movement would move the entire PP to SPEC of Ĉ as in (48):
This would leave (49) as the S-Structure of (45) disregarding the question of whether the preposition is base-generated within the RC or in the main clause.
This appears to give us a clear account of the facts. Fact (B)--the relative specifier agrees in case with the internal head—is accounted for since they are part of the same NP. Fact (C) would only be problematic if the preposition was base generated external to the RC—this will be dealt with below. Fact (D) would be irrelevant for this example. However, consider once again Luke 3:19 where the internal head is in situ. (50) would represent the S-Structure of this verse under Williamson’s analysis.

Excluding the fact that we are faced with the difficulty of moving a Wh-word rather than a Wh-phrase (the same will be true of the Full D-Structure Analysis below), the obvious problem with this analysis is that it does not
give us an immediate account of fact (C). Since case marking is assigned to a moved Wh-phrase (or word in this case) by the Wh-Case Convention we would expect the relative specifier to be assigned accusative case—the case that its trace would be assigned by the verb ποιέω 'do'. However, it bears genitive case marking. We would also expect πονηρῶν 'evils' to be assigned accusative case by the same verb. However, it too bears genitive case marking. Thus we have a fact (C) phenomenon—the relative pronoun and internal head are being assigned case by a constituent that is external to the RC. In this example that constituent is the preposition περί 'concerning'.

In order to account for this fact we would have to have some sort of convention which would filter the case assigned to the mother NP down to the internal head and relative specifier. The case marking rules listed above as (30) and (31) could be collapsed into a single rule:

(51) **Case Inheritance Rule**

Nominal heads and their modifiers inherit the case of the maximal projection of the nominal from which they branch (where D, A, and relative specifiers are, by definition, categories that can serve as modifiers of the head noun).

How would this work? Consider the following prepositional phrase:

(52) Acts 10:40

ἔν τῇ τρίτῃ ημερα

on the third day
'...on the third day...'

Now consider the phrase marker in light of (51).

(53)

The highest $\tilde{N}$ would be assigned case by its governor, the preposition $\epsilon\nu$ 'on', which assigns dative case. Thus we would have the following output:

(54)

Applying Case Inheritance we find that each of the modifiers $\tau\eta$ 'the' and $\tau\rho\tau\tau\eta$ 'third', as well as the head noun $\eta\mu\epsilon\rho\alpha$ 'day' would inherit dative case marking from the mother NP, and we would have the correct output. The question is whether or not this rule would give us a satisfactory account of the Koine examples of IHRCs. Consider Mark 4:24 once again:
(55) Mark 4:24

\[ \text{ἐν [ἄφθαρτος μέτρῳ μετρεῖτε]} \]
\[ \text{with RS:DAT measure you measure} \]

\[ \text{μετρηθήσεται} \]
\[ \text{it shall be measured to you} \]

'With the measure with which you measure it shall be measured to you.'

Recall the S-Structure phrase marker (49) here repeated as (56):

(56)

One problem area that was mentioned above relates to the position of the preposition within the PM. Notice that I have parenthesized \( \text{ἐν 'with'} \) in two different positions even though it only occurs overtly one time. The problem is, as has already been mentioned, that we have no way of knowing, from this verse, whether the preposition is a
constituent of the main clause or the embedded clause. In this case, as will be demonstrated, it would not affect case marking.

If we consider the preposition in (56) to be base-generated in the embedded clause then we have an internal head, μέτρω 'measure', that is receiving its case from within the relative clause, specifically from the preposition, as we would expect. Thus if the preposition is base-generated in the RC (56), we would not have a problem with case assignment. However, what if the preposition is base generated external to the RC? Would Case Inheritance generate the correct case marking on the internal head? Such a structure with Case Inheritance applied can be represented as (57):

(57)

\[
\begin{array}{c}
\text{RP:DAT measure} \\
\text{μετρείτε} \\
\text{you measure} \\
\end{array}
\]
Notice that the mother NP (in bold) would receive dative case marking from the preposition ἐν 'with'. By applying Case Inheritance the internal head (also in bold) and its modifier, the Wh-trace, would both inherit dative case marking. Therefore, Case Inheritance generates a well-formed structure regardless of where the preposition is base generated.

Notice that Luke 3:19 (58) would be dealt with in the same manner.

(58)

Applying Case Inheritance to this PM, the mother NP would receive genitive case. Its head and modifiers, i.e., the entire internal Ἡ head, would then correctly receive genitive case marking by inheritance. The relative
specifier now in SPEC of Č would inherit genitive case marking from its trace. However, applying Case Inheritance we find that the relative specifier would inherit the case of the mother NP wherever it is, since it is by definition a "modifier" in terms of Case Inheritance. The genitive case of the relativespecifier could thus be accounted for without reference to the Wh-Case Convention.

One obvious problem with Case Inheritance, however, is that it would have to be stipulated in the rule that relative specifiers *optionally* inherit their case from the mother NP while other noun modifiers obligatorily inherit their case. If the rule did not make this stipulation it would generate the wrong case marking in normal postnominal RCs where the relative specifier receives its case by a case assigner in the relative clause. Consider (59) where the relative specifier is the direct object of the relative clause, and thus marked with accusative case rather than nominative case—the case of the mother NP.

(59) Matthew 2:9

ιδοὺ ὁ ἀστήρ, [ὁν εἰδοὺ ἐν τῇ
behold the star:NOM RS:ACC they saw in the
ἐντολή], προῆγεν αὐτοῦς
east went before them

'...Behold, the star, which they saw in the east, went before them...’
3.2.2 The Full D-Structure Analysis

The second possible D-Structure Analysis is represented in (46) and can be referred to as the "Full D-Structure Analysis" (FDS) since the assumption is that there are no empty nodes (i.e., with regard to the head noun of the relative clause). Under this analysis the grammar would optionally delete either the external head or the internal head at PF—after Wh-movement and case assignment had taken place. Mark 4:24 (55) would have the following derivation:

(60)
(a) Move Wh-Phrase to SPEC of ĉ.
(b) Assign case.
(c) Delete external head.

(61)
We are immediately presented with a problem by (a). Clearly, if we are to maintain this analysis—or Williamson's analysis—we will necessarily have to maintain that Wh-Movement can move a relative specifier out of a N without moving the head of the construction. Movement would not involve a Wh-*phrase* as in (40) but only the Wh-*word*. While examples such as (61) above do not pose a problem (since the entire Wh-PP-phrase could be moved to SPEC of Č and then have the necessary deletion rules take place) an example such as (62) where the internal head is clearly *in situ* would be problematic.


καὶ περὶ πάντων [ὅν ἐποιήσεν
and concerning all:GEN RS:GEN had done

πονηρῶν ὁ Ἡρῴδης]
evils:GEN Herod

'...and concerning all the evils which Herod had done...’
The internal head is not moved along with its SPEC in (63). This is contrary to present GB theory. The SPEC of \(\bar{C}\) node is generally considered an XP (X-phrase) node, i.e., it is the landing site for any moved Wh-phrase. This would be an NP in examples such as (40) 'which flavor', or a PP in examples with pied piping.

If the FDS analysis is to be maintained as is, the Wh-phrase that is moved (in this case a NP) would leave behind one of its constituents (the internal head). This is clearly undesirable. Secondly, it would be necessary to deal with facts (B), (C) and (D) with something similar to Case Inheritance--fact (A) has already been accounted for by the notion of "relative specifier". Together, these short-
3.2.3 The Downward Movement Analysis

The third analysis (using (47) as the D-Structure) would posit a downward movement. In this analysis the proposal would be that there is an external head noun that is base generated and subsequently lowered into the relative clause into an empty NP node. While such an analysis is generally dismissed without a second thought by those conversant in GB Theory, the uniqueness of the Koine data--facts (B-D)--forces us to consider the merits of such an analysis.

To consider this particular analysis I return to example (62). Use of an example having an overt subject in the relative clause eliminates the extra potential landing site for downward movement that is available in examples such as (55).


καὶ περὶ πάντων [ὁν ἐποίησεν and concerning all:GEN RS:GEN had done

πονηρῶν ὁ Ἰωάννης] evils:GEN the Herod

'...and concerning all the evils which Herod had done...'

The following PM would reflect the D-Structure of the prepositional phrase under the downward movement analysis:
Before considering the derivation of this, and indeed throughout the derivation of this example, I will point out those parts of GB Theory that are relevant in considering the well-formedness of the derivation. First of all, the reader needs to be familiar with the Subjacency Condition which is a constraint on movement rules.

(65) **Subjacency Condition**
No constituent can move across more than two bounding nodes in a single rule application (with the maximal projections N and I being bounding nodes).

With this condition in mind let’s consider the derivation of (64). I will not deal with the issue of when case assignment takes place at this time.
Notice that there are no Subjacency violations since Wh-Movement crosses only one bounding node (I) before landing in SPEC, and NP-Movement crosses only one bounding node (the same I) before landing in the empty N node of the internal N.

It is questionable whether Subjacency would be applicable to downward movement anyway since the intention of the condition is to exclude a constituent from being "moved out of more than one containing bounding node"
(Radford 1981:236), and downward movement does not move an NP \textit{out} of any bounding node. However, for the time being we will consider it a valid constraint on any type of NP-Movement.

How then would the downward movement analysis account for facts (B), (C) and (D)? Our primary problem would be assignment of the proper case to the lowered NP. Consider the following proposed convention:

(67) \textbf{Lowered-NP Case Convention}
A lowered NP inherits the case of its trace.

Applying this convention to (67), notice that the lowered NP would inherit genitive case from its trace; the same agreement rule, i.e., Specifiers of $\bar{N}$ agree with their head noun in case, would then apply to the Wh-trace which is now the specifier of an NP in the genitive case. Finally, by the Wh-Case Convention the moved Wh-phrase would inherit the case of its trace. Thus, the downward movement analysis is able to account for all the facts with the minimal addition of the Lowered-NP Case Convention.

The question to be asked is, What consequences does such an analysis imply for GB Theory? The problems lie in the Binding Theory. Recall the Binding Conditions from Chapter 1, here repeated as (68):

(68) \textbf{Binding Conditions}

\begin{quote}
Condition A—An anaphor must be bound in its governing category. (Lasnik and Uriagereka 1988:36)
\end{quote}
Condition B--A pronominal must be free in its governing category. (Lasnik and Uriagereka 1988:36)

Condition C--An R-expression (referring expression) must be A-free, i.e., it cannot be bound by a constituent in an argument "A" position. (Lasnik and Uriagereka 1988:42)

"Binding" is defined as:
A binds B iff
(i) A c-commands B
and
(ii) A and B are coindexed
(Lasnik and Uriagereka 1988:33)

"C-command" is defined as:
For A and B nodes in a tree
A c-commands B iff every branching node dominating A dominates B and neither A nor B dominates the other
(Lasnik and Uriagereka 1988:32)

The first problem relates to the lowered NP itself. Lexical NPs must conform to Condition C. They must be free, i.e., they cannot be bound by their trace, as in downward movement, or by another NP. When we ask the motivation for such a requirement on lexical NPs we find that the answer begs the question. Why must lexical NPs be free? Because in well-formed clauses they are always free. Lasnik and Uriagereka (1988:40), however, have noticed that this is not always true. Consider the following examples from Thai which they cite (p. 40):

(69) coon₁ chōp coon₁
    'John¹ likes John¹'

(70) coon₁ khít wā̀ coon₁ chālāṭ
    'John¹ thinks that John¹ is smart.'
In both examples we have a perfectly well-formed sentence in which an R-expression binds another R-expression. Lasnik and Uriagereka further noticed that we cannot simply say that there is no Condition C in Thai since examples where an R-expression is bound by a pronoun are ill-formed. Thus, they conclude that the properties of the binder are significant in some languages. In Thai, an R-expression can be bound by another R-expression but not by a pronoun. Similarly, when we apply downward movement to Koine we notice that although an R-expression (lexical NP) cannot be bound by another R-expression in Koine, it can be bound by its trace.

Our second problem relates to the NP-trace. How do we determine whether the trace is an anaphor, pronominal, or R-expression (variable)? This is accomplished through Chomsky’s algorithm for functional determination of empty categories (Chomsky 1982:35), here listed as (71).

(71)
(a) An empty category is a variable if it is in an A-position and is locally A-bound [by an operator].
(b) An empty category in an A-position that is not a variable is an anaphor.
(c) An empty category [in an A-position] that is not a variable is a pronominal if it is free or locally A-bound by an antecedent with an independent θ-role.

Under this algorithm it is possible that an NP trace might be an anaphor in one environment, e.g., in a passive construction, and something else in another construction,
e.g., a downward NP-Movement construction. Now let's consider the S-Structure of (66):

(72)

Does this structure violate any of the Binding Conditions? First of all, given the standard view that NP-traces are anaphors, \( t_1 \) would be subject to Condition A which it obviously violates since its only potential binder does not c-command it. However, NP-traces thus far in Government-Binding Theory have always been the trace of an upward movement. Thus downward NP-traces need to be considered exclusive to other NP-traces.

Using Chomsky's algorithm we notice that the NP-trace \( t_1 \) is in an A-position but does not have a binder (since it is not c-commanded by the internal head). It therefore
is not a variable (because it is not $\bar{A}$-bound), and thus is automatically an anaphor. We therefore assign it the binary feature [+a]. Secondly, it is in an A-position and it is free. Therefore it is also a pronominal and is thus assigned the binary feature [+p]. These are the features associated with the more common designation PRO.

We are immediately presented with the apparent paradox that PRO must conform to both Condition A and Condition B. This at first glance would be impossible. However, as linguists working within GB theory have noted, it is easily remedied if PRO does not have a governing category. Van Riemsdijk and Williams (1986:279) have further pointed out that "the only way an NP-position can fail to have a governing category is for it to be ungoverned". This fits nicely with the PRO that is found in the subject position of English infinitival embedded clauses. However, the NP-trace in the example we have been considering is governed (by the preposition $\textit{kept}$ 'concerning'). The designation PRO is thus unacceptable if PRO is to be subject to both Conditions A and B.

It is worthy to note at this point that in early analyses, e.g., Radford (1981:379), PRO was simply treated as a pronominal and thus was subject to Condition B. Since in the common case of the English "subject of an infinitive embedded clause" PRO does not have a governing category, Condition B was said to apply vacuously. Notice that if such an analysis were adopted here, there would be no
Binding Condition violations since $t_1$ is free.

It appears, then, that certain modifications to Binding Theory would have to be made in order to accommodate the downward movement analysis. Perhaps by some means other than functional determination we must establish that downward NP-traces are an element that would be subject to Condition B (or even Condition C). There are elements of the theory itself that would make this desirable.

Consider the Empty Category Principle (ECP) which essentially requires that a trace be governed. If this is taken in light of Chomsky’s algorithm of functional determination of empty categories, we can immediately infer that the algorithm should never assign the features [+a], [+p], i.e., PRO, to an empty category that is a trace. This is obvious from the fact that ECP specifies that a trace must be governed, while if PRO is to conform to the Binding Conditions it cannot be governed. Thus we have a theory-internal dilemma if we insist on using functional determination as a means for determining which Binding Condition(s) are relevant to NP-traces that are a result of downward movement.

3.2.4 Conclusions

In comparing the three possible analyses listed above I would like to begin by noting the following comment from a "traditional" (though contemporary) Greek scholar. Marshall
(1978:149), in agreement with others, has stated that in the verse we have been discussing, Luke 3:19 (62), what has taken place is "relative attraction"... for an original περὶ πάντων τῶν πονηρῶν ἐποίησεν ὁ Ἡρῴδης ['concerning all the evils which Herod did']. This D-Structure is represented in (73):

Depending on which analysis is to be adopted, the determiner τῶν would either not be generated at D-Structure or would be deleted to conform to the "Indefiniteness Condition".
It could be claimed that Williamson’s analysis and the FDS analysis (noted in parentheses in the PM above) do not dispute Marshall’s claim, since we should not assume that he is attempting to equate what he perceives to be the “original” with linguistic D-Structure. The “original” is simply the basic thought that the writer was seeking to communicate. The writer then chose, for whatever pragmatic purpose, to use the IHRC structure to communicate his point. In doing so he had to obey both the “Indefiniteness Condition” and Koine case marking rules.

This may in fact be true. However, one cannot help but notice how the intuitions, if a non-native speaker of a dead language can be said to have intuitions, of Marshall and others are strikingly parallel to the downward movement analysis.

Now let’s consider the merit of each analysis. Notice that I did not go into any detail regarding how the FDS analysis would deal with facts (B) and (C). It is apparent that the only way that it could do so is to propose some convention that would have to be even more ad hoc than Case Inheritance, since case would have to be assigned to both the external and internal head by the same case assigner. Because of this, this analysis can only be described as being weaker than the modified Williamson analysis. Like the modified Williamson’s analysis, FDS would have to posit that the relative specifier is moved out of an internal NP that has an overt head, i.e., Wh-word Movement.
Williamson's analysis, as has been noted, has the further weakness of not conforming to established X-Theory. The type of structure she posits would thus require some modifications to the theory.

In comparison, the downward movement analysis provides us with a far more elegant solution to facts (B), (C) and (D). These facts are resolved straightforwardly from the derivation without substantial use of new conventions. Furthermore, the downward movement analysis obviates movement of the relative specifier out of the internal N while leaving the internal head behind—an undesirable necessity of the other two analyses.

While Case Inheritance accounts for facts (B) and (C), it does so simply by describing what is happening, i.e., the relative specifier and internal head are receiving their case assignment from the matrix clause preposition. It does not tell us why this is occurring. The downward movement analysis, however, provides the explanation we are seeking. The revisions that it would necessitate to GB theory must be considered if an account of the facts presented by Koine IHRCs is to be provided in a way other than simply positing a convenient descriptive rule that establishes no motivation for the phenomena associated with this construction.

The properties of the binder have been shown to be significant from the Thai examples (69) and (70). These alone would call for a revision of Condition C if it is to be considered a universal Binding Condition. The fact that
an NP-trace governs its "antecedent" in the rare instance of downward NP-Movement should not be overly surprising.

Secondly, the theory-internal dilemma presented above that occurs when we use Chomsky's algorithm for functional determination of empty categories to determine the applicability of the Binding Conditions to the lowered NP-trace illustrates the need to consider such traces from another perspective. The question we are faced with is whether or not the downward movement analysis warrants such revisions to the Binding Theory. Having considered the possible alternatives we find that the answer to this question is affirmative.
NOTES

1 For the purposes of this thesis "command" can be understood in the more limited sense of c-command (see section 1.3).

2 This structure is reminiscent of the structure of IHRCs proposed by Gorbet (1976:47) and Fauconnier (1971)—see Gorbet (1976:47, footnote 7) for a brief discussion of Fauconnier's analysis.

3 In the D-Structure PMs below I leave open the number of prepositions present in D-Structure for the time being. It should further be noted that so as not to confuse the reader who is not familiar with Koine I make no attempt to represent the constituents as being caseless at D-Structure, even though case marking occurs at S-Structure.

4 This is precisely what Cole would have to do if his analysis is to conform to the Binding Conditions. Consider his proposed structure for IHRCs (1), here repeated as (1):

(1)

\[
\begin{align*}
\bar{N} & \rightarrow C \\
\bar{N} & \rightarrow \bar{N}_1 \\
\bar{e}_i & (lexical)
\end{align*}
\]
Using Chomsky's algorithm for functional determination of empty categories the empty category in this PM would be assigned the features [+a] and [+p]. Thus, Cole's phonologically null head would be PRO and thus subject to Conditions A and B. However, his PRO is governed, just like the PRO in the downward movement analysis, and thus would entail a similar modification of the Binding Theory. Cole does not consider his PM in light of the Binding Conditions so we have no way of knowing how this was to be dealt with. I would assume, however, that he would use something other than functional determination in the case of the phonologically null head. Thus the problem with the downward movement analysis appears in Cole's analysis as well. The difference being that the downward movement analysis provides us with an account of facts (B) and (C), while Cole's analysis would need to posit a convention similar to Case Inheritance in order to deal with these facts.

An alternative would be to modify the notion of "Accessible SUBJECT" so that downward NP-traces would never have an Accessible SUBJECT and thus would not have a governing category. In so doing they would then not violate any of the Binding Conditions.

The issue of "attraction", mentioned by Marshall in the quote above, will be discussed in the next chapter.
Here Marshall is claiming that the accusative case of the relative pronoun ἃ is attracted to the genitive case of its antecedent rendering ὅν.
We turn now to the two final phenomena that necessarily must be accounted for in a thorough treatment of Koine RCs. They have commonly been referred to as "attraction" (section 4.1)—where the relative specifier assumes the case of its antecedent—and "inverse attraction" (section 4.2)—where the antecedent apparently assumes the case of the relative specifier.

4.1 Attraction

The phenomenon of attraction is fairly common in Koine. For an exhaustive list of those verses in the New Testament exhibiting this phenomenon, see Appendix A.

To understand it, consider first the normal situation, where attraction does not occur. According to the Wh-Case Convention a moved Wh-phrase inherits the case of its trace. This, in fact, is the general rule in Koine (as it is in English). Consider a relative clause where attraction does not occur.

(1) Matthew 2:9

ιδοὺ ὁ ἄστρον, [ὅν ἐξῆδον ἐν τῇ
behold the star:NOM RS:ACC they saw in the
ἀνατολῇ], προῆγεν αὐτούς,
east went before them
‘...Behold, the star, which they saw in the east, went before them...’

Matthew 2:9 can be assigned the following phrase marker:

Here we see that the relative specifier ὁ ن is in the accusative case. The verb ἰδέω ‘see’ takes a direct object in the accusative case; thus, the Wh-trace would receive accusative case marking and the moved Wh-phrase would inherit the case of its trace in accordance with the Wh-Case Convention.

Now consider these examples where attraction has occurred:
(3) 2 Corinthians 12:21

καὶ πενθήσω πολλοὺς τῶν προσμαρτηκότων
and I will mourn many of the having sinned
καὶ μὴ μετανοησάντων ἐπὶ τῇ ἀκαθαρσίᾳ καὶ
and not repenting over the uncleanness and
πορνείας καὶ ἁσελγείας [ἢ ἔπραξαν].
fornication and lewdness:DAT RS:DAT they practiced

'...and I will mourn for many of those having sinned and not repented of their uncleanness, fornication, and lewdness which they practiced.'

(4) Matthew 18:19

Πάλιν λέγω ὑμῖν ὅτι εἶδαν δύο
again I say to you that if two
συμφωνήσωσιν ἐξ ὑμῶν ἐπὶ τῆς γῆς περὶ
agree of you on the earth concerning
παντὸς πράγματος [οὗ ἔδαν αἰτήσωνται],
every thing:GEN RS:GEN-IND they ask
γενήσεται αὐτοῖς
it shall be done to them

'Again I say to you that if two of you on earth shall agree concerning anything--whatever you might ask, it shall be done for them...'

In (3) the relative specifier is the D-Structure direct object of the verb πράσσω 'practice' which takes its direct object in the accusative case. The relative specifier is, however, in the dative case--the case of its antecedent(s) in the main clause. Similarly, in (4) the relative specifier is the D-Structure direct object of the verb αἰτέω 'ask' which also takes an accusative direct object. Notice, however, that the relative specifier is in the genitive case--the case of its antecedent. "Attraction", the...
occurs when a relative specifier assumes the case of its antecedent, rather than the case of its trace.

Lasnik and Uriagereka (1988:96-98) in their discussion of proper government have pointed out that in order to allow for intermediate traces the "head of $\tilde{S}$" must be accessible to proper government. Intermediate traces would thus not violate the Empty Category Principle (ECP)—a trace must be properly governed. The notion "head of $\tilde{S}$" is argued to be COMP since intermediate traces were said to be Chomsky-adjoined to COMP. Using the phrase structure espoused in this thesis one would say that it is the SPEC of $\tilde{C}$ that is accessible to proper government. Thus they state (p. 97) that $\tilde{S}$ is a barrier to proper government, except that the head of $\tilde{S}$ is accessible.

We can carry Lasnik and Uriagereka's suggestion a step further and apply it to languages that have morphological case marking, like Koine. We can posit that SPEC of $\tilde{C}$ is also accessible to government, and thus to case assignment as well. Thus the except clause in Lasnik and Uriagereka's formulation of a barrier condition would allow government of the head of $\tilde{S}$ as well as proper government.

In the following S-Structure of Matthew 18:19, the relative specifier occupying the SPEC of $\tilde{C}$ node would then be accessible to government by the preposition $\pi\varepsilon\pi\iota$ 'concerning'. It then is assigned genitive case by the same case assigner as its antecedent.
In Koine, then, the Wh-Case Convention could be stipulated to be optional. Or we might simply modify it to read as follows:

(6) **Wh-Case Convention Extension**
A moved Wh-phrase may either inherit the case of its trace or be assigned case by its local governor.

The formulation of the rule is not important. What is important is the notion that the SPEC of Ĉ position is not only accessible to proper government but to government (and thus case assignment) as well.

Certain implications follow directly from (6). If the analysis for attraction presented above is correct, then we would predict that other constituents that are moved to SPEC of Ĉ should also be accessible to government. I will here briefly discuss one such example. It has been argued by
Marlett (to appear) that Koine has a "Raising to Object" construction. This construction is typically viewed as an example of Exceptional Case Marking (ECM) by proponents of GB syntax. Mark 10:36 is one such example:

(7) Mark 10:36

τί θέλετέ με ποιήσω υμῖν;
what you want me:ACC I may do for you

'What do you want me to do for you?'

The first person pronoun με is clearly the D-Structure subject of the complement clause. However, it is receiving its accusative case marking from the matrix clause verb θέλετε 'you want'. This would be accounted for by a rule similar to (6)—that applied to other types of moved constituents—if we understand these constructions to simply involve movement to SPEC of Ė. The moved NP would then be accessible to government by the main clause verb and it would accordingly be assigned accusative case. This would provide us with an alternative analysis to both the Š-Deletion analysis often proposed for this structure (in the GB framework) and the Raising to Object analysis.

Furthermore, other types of movement to SPEC of Ė are analogous to Wh-Movement in that the moved NP may either inherit the case of its trace or be assigned case by its local governor (as above). One such example from the New Testament where this is the case is John 13:29.
John 13:29

τινὲς γὰρ ἐδόκουν, ἐπεί τὸ γλωσσόκομον εἴξεν
some for thought since the bag had

Ἰούδας, ὅτι λέγει αὐτῷ Ἰησοῦς ἁγόρασον
Judas that said to him Jesus buy

[ῶν χρείαν ἔχομεν εἰς τὴν εἴρητιν, ἢ τοῖς
RS:GEN need we have for the feast or the

πτωχοῖς ἡν τι δῶ.
poor:DAT that something he should give

For some thought, since Judas had the bag (of money), that Jesus told him: "Buy what we need for the feast" or that he should give something to the poor.'

In (8) the NP τοῖς πτωχοῖς 'the poor' has been moved to the SPEC of C position. This is clear since it is to the left of the complementizer ἡν. However, notice that it is not assigned case by a local governor. On the contrary, it has inherited dative case marking from its trace. Thus, with further research it may become apparent that the Wh-Case Convention Extension is not limited to moved Wh-phrases but should be applied to movement to SPEC of C in general.

4.2 Inverse Attraction

We turn now to the especially peculiar phenomenon known as "inverse attraction" which exhibits the final fact that we must account for. In examples such as those listed below the antecedent has evidently been attracted to the case of the relative specifier.
(9) Matthew 21:42

Jesus said to them, "Have you never read in the scriptures, 'This stone which the builders rejected has become the cornerstone'?"

(10) 1 Corinthians 10:16b

'...Is not the bread that we break the communion of Christ's body?'

In (9) we find that the subject of the quotation clause 'stone' is in the accusative case (the case of the relative specifier) rather than the nominative case. Similarly, in (10) we find that the subject NP 'the bread' is in the accusative case (the case of the relative specifier) rather than the nominative case.¹

Consider the examples that we have from the New Testament. Since they are few in number I will discuss all of them here. A list of those verses in the New Testament exhibiting inverse attraction is also provided in Appendix B. Matthew 21:42, Mark 12:10, and Luke 20:17 are parallel
passages; in each case the verse is a direct quote from the LXX Psalm 118:22.

Notice that in 1 Peter 2:7, where the same verse is alluded to, the writer does not follow the practice of inverse attraction as in the LXX because he is not directly quoting the verse.

(11) 1 Peter 2:7

Τιμή τοις πιστεύοσιν, you therefore the believing ones

ἀπίστοσιν δὲ λίθος [ὁν ἀπεδοκύμασαν unbelieving ones but stone:NOM RS:ACC rejected

οἱ οἰκοδομοῦντες, οὗτος ἐγενήθη εἰς κεφαλῆν the building ones this has become for head

γωνίας of the corner

'Therefore, the honor is for you, the believing ones; but for the unbelieving ones the stone which the builders rejected has become the cornerstone.'

The interesting thing about six of the seven examples of inverse attraction (the exception is Luke 1:73) is that without inverse attraction the antecedent would be in the nominative case; i.e., the antecedent is a subject NP. What is the significance of this? In order to answer this we will need to consider each of the seven examples. Four of them have been dealt with above (since Matthew 21:42 is identical to Mark 12:10 and Luke 20:17). The remaining three I have listed below:
(12) 1 Corinthians 10:16a

Τὸ ποτήριον τῆς εὐλογίας [ὁ εὐλογοῦμεν],
the cup:ACC of the blessing RS:ACC we bless

οὐ γὰρ κοινωνία ἐστὶν τοῦ αἵματος τοῦ
not communion is of the blood of the

Χριστοῦ;

Christ

'Is not the cup of blessing which we bless a communion of the blood of Christ?'

(13) Luke 1:72-73

μνημοσύναὶ διαθήκης ἁγίας αὐτοῦ, ὀρκον
remember covenant:GEN holy his oath

[ὅτι ὡμοσευ ἐν πρός Ἀβραὰμ]
RS:ACC he swore to Abraham

'...to remember his holy covenant, the oath which He swore to Abraham...’

(14) Luke 12:48

παντὶ δὲ [ὁ ἐδόθη πολὺ], πολὺ
every:DAT but RS:DAT was given much much

ζητηθῶσαι παρ’ αὐτοῦ,
will be demanded from him:GEN

'But much will be demanded from everyone to whom much was given...’

In (12) we once again have an example of a subject antecedent that is in the accusative case. In (13) we have an object antecedent which would normally be assigned genitive case marking by the verb μνημοσύναὶ 'remember'; instead it is in the accusative case (the case of the relative specifier). The reader should note that the antecedent of the relative clause is in apposition to the NP
διαθήκης ἁγίας αὐτοῦ 'his holy covenant'. It is possible to dismiss this verse (our only apparent non-subject victim of inverse attraction) by arguing that μιμνημοναί has assigned accusative case to the antecedent, and that inverse attraction is not involved. This verb takes its direct object in either the genitive or accusative case. The obvious question would be whether or not it could assign genitive case marking to its direct object and accusative case to the appositive. The key evidence for this would be an example like (13) in which there is an accusative NP in apposition to a genitive direct object, but no relative clause. While I am not aware of such an example, I do not exclude it as impossible.

In example (14) we have a quantifier πᾶντι 'every' modifying an empty head noun. The NP of which πᾶντι 'every' is a part could be construed as being in apposition to αὐτοῦ 'him'. However, it is better to treat it as what Marlett (to appear) has called a "parenthetical noun phrase". As such we would once again have an antecedent, expected to be in the nominative case, attracting to the case of the relative specifier. A better gloss for (14) would be 'As for everyone to whom much was given, much will be required from him'. Thus while we would expect it to be in the nominative case we find that it is in the dative case (the case of the relative specifier).

Since the data is so limited in the New Testament with regard to this construction I have sought out other
examples. The three listed below are cited as examples of inverse attraction by Blass and Debrunner (1961:154-155).

(15) Genesis 31:16 (LXX)

Πάντα τὸν πλοῦτον καὶ τὴν δόξαν, [ἡ ἡμῶν] ἀφείλετο ὁ θεός τοῦ πατρὸς ἡμῶν], ημίν εἶσται καὶ τοῖς τέκνοις ἡμῶν

'all the wealth and glory which God took away from our father shall be ours and our children's.'

(16) Numbers 19:22 (LXX)

καὶ παντὸς [οὗ ἐδώ ἤγηται αὐτοῦ] every:GEN RS:GEN-IND will touch it

ὁ ἀκάθαρτος, ἀκάθαρτον εἶσται.

'the unclean:ACC will be unclean:ACC will be unclean.'

(17) The Shepherd of Hermas S.9.xiii.3

τοὺς δὲ λίθους, φησίν, [οὓς εἶδες the and stones:ACC he says RS:ACC you saw

ἀποβεβλημένους], οὗτοι τὸ μὲν ὄνομα εφόρεσαν being cast away these the name bore

'And the stones, he says, which you saw being cast away, these bore the name...’ (Harmer and Lightfoot 1984:383)

In (15) we have a heavy subject NP antecedent which is in the accusative case (the case of the relative specifier).
In (16) we have a subject NP made up of a quantifier παντὸς 'every' and an empty head noun, this time in the genitive case (the case of the relative specifier). There is also a pleonastic pronoun αὐτοῦ 'it' in the relative clause. Finally, in (17) we again have a subject NP τοὺς λίθους 'the stones' in the accusative case (the case of the relative specifier).

Before we can understand the significance of why six of the seven New Testament examples (if not all of them) and all three of the other examples listed above share the common characteristic that the antecedent is the subject of the main clause, we must understand the nature of attraction and inverse attraction a bit more thoroughly.

First of all, we need to consider what type of constituent can serve as a victim of each type of attraction. In nearly every example in the New Testament the victim of normal attraction, i.e., the relative specifier, would be assigned accusative case by the Wh-Case Convention. Therefore, traditional grammarians generally point out that accusative relative specifiers are the most likely to attract to the case of their antecedent. Such attraction is always to the case of either a genitive or dative antecedent. Attraction to an accusative antecedent would of course be masked. However, it should be noted that there are examples of dative relative specifiers attracting to the case of a genitive antecedent. Consider Acts 1:22 for example:
(18) Acts 1:22

ἐνώς τῆς ἡμέρας ἦς ἀνελήμφη ἅφεν ἡμῶν,
until the day RS:GEN taken up from us

'...until the day in which he was taken up from us.'

In (18) the relative specifier indicates time and should therefore be in the dative case. However, we notice that it is in the genitive case (the case of its antecedent).

Thus far, then, we have encountered accusative-dative attraction, accusative-genitive attraction, and dative-genitive attraction. Notice, however, that we had not encountered attraction involving a nominative constituent until this phenomenon of inverse attraction. How do all these facts come together?

Recall that in the instance of attraction we always have the following structure:
In this PM, the upper $\bar{X}$ can be either an $\bar{N}$ or a $\bar{P}$. Object and oblique relative specifiers that are moved to SPEC of $\bar{C}$ will always have a governor (for our purposes a c-commanding case assignor), either the verb or a preposition.

As stated in the Chapter 1, S-Structure subject NPs are assigned nominative case marking. What has not yet been discussed is how this case assignment takes place. The case assigner of subject NPs is considered to be the I-node within GB theory. The structural dilemma that arises is how a case assigner can assign case to a constituent which it does not c-command, since the notion of c-command is
elsewhere an obligatory condition for case assignment. Consider the following PM of a moved Wh-phrase of an RC that modifies a subject NP:

(20)

Clearly, the I-node does not c-command the subject NP in such a structure since we cannot say that every branching node dominating the I-node also dominates the subject NP. In a simple tri-branching structure such as (21) this would not be a problem.

(21)

In such a structure INFL does c-command the subject NP.
However, how is the problem illustrated in (20) to be resolved so as to maintain the more current phrase structure used in this thesis? Radford (1988:560) has proposed the following case marking rule:

(22) Assign NOMINATIVE case to an NP which is the sister of an I-bar immediately dominating a finite I.

While such a rule accounts for the facts, it is somewhat ad hoc in nature and presumes that the stipulation of a c-command relationship between the case assigner and assignee cannot be maintained.

Lasnik and Saito (1984:272, footnote 46) have noticed that if structure (20) is to be maintained as the correct structure then the notion of c-command, while being a necessary condition for antecedent government, cannot be a necessary condition for government. They propose the following definition of government which does not utilize the notion of c-command (p. 240):

(23) $\alpha$ governs $\beta$ if every maximal projection dominating $\alpha$ also dominates $\beta$ and conversely.

The maximal projection locally dominating the I-node is $\bar{I}$. This node also dominates the subject NP. With such a definition of government the problem of nominative case assignment is removed. Lasnik and Uriagereka (1988:63-64) note the necessity of a definition of c-command based on
maximal projections for the notion of Accessible SUBJECTs using the same phrase structure as above.

Whatever the best way of resolving this problem turns out to be, it will either have to somehow stipulate a relationship of government between the I-node and subject NP or use a rule such as that proposed by Radford. If we consider the notion of government (case assignment) in Koine we notice that, as we would expect, case assignment never crosses more than one bounding node. Regardless of what the proper analysis turns out to be, the assignment of case to the subject NP by the I-node would also only cross one bounding node, $\bar{I}$. However, in every instance of a subject NP that is modified by a relative clause the moved Wh-phrase, now in SPEC of $\bar{C}$, could not be assigned case by the I-node without violating the Barrier Condition (24).

(24) Barrier Condition
NP and S-bar are barriers to government.
Adapted from Radford (1981:323)

The $\bar{N}$ node would have to be crossed in any such example. Thus from any solution to this problem it should follow that in an example of a relative clause that modifies a subject NP, the moved Wh-phrase (now in SPEC of $\bar{C}$) is not accessible to government as it is in examples of RCs which modify non-subject NPs.

Thus the moved Wh-phrase cannot attract to the case of a nominative antecedent since the SPEC of $\bar{C}$ position within
a subject NP has no available governor. In such examples, ordinary attraction is impossible.

What we are looking for is some type of case assignment rule or syntactic derivation that will (A) limit inverse attraction to subject NP antecedents, and (B) allow the antecedent to assume the case of the relative specifier.

The best that we could do in terms of a case assignment rule would be something like (25):

(25) **Inverse Attraction**
    A subject NP may optionally assume the case of an adjacent relative specifier.

Such a rule would specify that only subject NPs are available for inverse attraction. This rule, however, is nothing more than a description of the phenomenon. It would be somewhat more palatable if, rather than positing the Wh-Case Convention Extension (see section 4.1), we posited a single attraction rule to cover both attraction and inverse attraction.

(26) **Attraction Rule (Optional)**
    A moved Wh-phrase may either be assigned case by its local governor or share its case with its adjacent antecedent.

Such a rule would optionally apply following the Wh-Case Convention. Thus if the moved Wh-phrase is not assigned case by its local governor (attraction) it can share its case (which was inherited in accordance with the
Wh-Case Convention) with its adjacent antecedent (inverse attraction). Such a rule, though, is not really a "single rule", nor does it capture any significant generalization.

This rule would assume that (27) is the appropriate S- Structure PM for 1 Corinthians 10:16 (10). We would have a normal postnominal relative clause in which the Wh-phrase has moved to SPEC of C.

(10) 1 Corinthians 10:16b

\[
\text{τὸν ἄρτον [ἀν κλωμέν, οὐχὶ κοινωνία}
\]

the bread:ACC RS:ACC we break not communion

\[
\text{τού σῶματος τοῦ Χριστοῦ ἐστιν;}
\]
of the body of the Christ is

'...Is not the bread that we break the communion of Christ’s body?’

(27)
Is this the only possible S-Structure? To answer this we turn now to our second option, a syntactic derivation. This is where the downward movement analysis is once again very helpful.

4.2.1 Downward Movement and Inverse Attraction

How might the downward movement analysis apply in order to account for inverse attraction? First of all, recall the determiner rule of Koine:

(28) Determiner Rule: $\bar{N} \rightarrow \text{SPEC},^{3} \bar{N}$

The comma between the two constituents indicates that the order is not fixed. In Koine quantifiers and demonstratives (both determiners) regularly occur on either side of the head noun with quantifiers showing a preference for the prenominal position and demonstratives showing a preference for the postnominal position. It is interesting to note that many traditional Greek grammarians have claimed that the relative pronoun (specifier) was originally a demonstrative, e.g., Robertson (1934:695) and Robertson and Davis (1933:320). It should not be surprising that relative specifiers could optionally be base generated to the right of the noun they modify, as in the case of all other Koine determiners with the exception of articles. Thus, we would have the following structure:
By utilizing the rule of downward movement we can now account for inverse attraction purely in terms of syntax. Consider the following derivation of 1 Corinthians 10:16 in which we have a normal postnominal RC at D-Structure which undergoes downward movement and then Wh-Movement:

(30)
To the output of downward movement we would then apply Wh-Movement:

(31)

Wh-Movement would thus move the Wh-phrase ὁρτον ὑν 'bread which' into the SPEC of C. Notice that the head NP, which was at one point in the derivation an internal head, would not violate the "Indefiniteness Condition" since its determiner remains in the main clause throughout the derivation. The moved Wh-phrase would then inherit the case of its trace (accusative case assigned by the verb κλάω 'break') and we would have a derivation of "inverse
attraction".

Although a syntactic derivation of inverse attraction necessitates base-generating the relative specifier to the right of the head noun, it has been noted that this is a common occurrence with other Koine determiners (excluding articles). While I would by no means suggest that the derivation for inverse attraction proposed above be used as an argument in favor of the downward movement analysis, I will maintain that the downward movement analysis does provide us with a non-descriptive option for deriving a clause exhibiting inverse attraction.

Since the Koine data is very limited, it would be necessary to compare data from other languages known to have attraction, such as Latin and Persian, to determine whether or not all languages that exhibit "normal" attraction also exhibit "inverse" attraction. Such studies might also lead to a better understanding of the phenomenon known as inverse attraction.
NOTES

1 Cartledge (1959:49-50) questions "whether this is really correct grammar or not"; however, we will assume, for reasons listed in Chapter 1, that the construction cannot simply be dismissed as a performance error.

2 While noting that attraction of a nominative relative specifier to the case of a non-nominative antecedent does not occur in the New Testament, Robertson (1934:715) indicates that this does occur in ancient Greek. However, I have found no evidence to substantiate this claim.

3 I treat the notation $\bar{D}$ as being a subset of SPEC of $\bar{N}$. In this sense the Determiner Rule could also be called a Specifier (of an NP) Rule.
In this thesis I have investigated the various facts presented by the Koine relative clause. I began my discussion by considering the typology of Koine relative clauses and then made a careful examination of the phenomena of internally headed relative clauses, attraction and inverse attraction.

5.1 Typology of Koine Relative Clauses

I demonstrated that there is strong evidence to maintain that Koine has postnominal and internally headed relative clauses, but that the evidence for prenominal relative clauses is wanting. I further showed that all putative prenominal RCs can be analyzed as IHRCs.

We have seen that Koine relative clauses are typologically peculiar. Strong evidence has been presented by others to indicate that Koine has VO as its basic word order. Thus the presence of IHRCs is surprising since typologists generally maintain that IHRCs are limited to SOV languages. Furthermore, we have seen that Koine IHRCs are unusual cross-linguistically in that they utilize a relative specifier in addition to the internal head. Neither of these peculiar facts have been cited in the past.
5.2 Internally Headed Relative Clauses

We have considered Koine IHRCs in some detail noting that previously proposed analyses dealing with IHRCs are inadequate for the Koine data. This is true primarily for two reasons. First of all, in Koine IHRCs there is both an internal head noun and a relative pronoun. This fact led us to the conclusion that relative "pronouns" in Koine must actually be viewed as relative specifiers. Furthermore, it has been noted that these two constituents always agree in case.

Secondly, the case assigned to these two constituents is not always done in conformity with the Wh-Case Convention. On the contrary, the assignment of case to the internal head and relative specifier is in some examples accomplished by a case assigner that is external to the relative clause.

In order to account for these facts I have shown the need to consider downward movement (of the head noun) as a viable type of NP-Movement. I have demonstrated how the above facts would directly follow from a derivation utilizing downward movement, while any alternative analysis would necessarily have to resort to a purely descriptive rule to account for the facts. This, I have shown, is neither desirable nor necessary.

The revisions that would have to be made to the Binding Theory are not without motivation from other languages. The Thai data would itself necessitate a revision of Condition C
analogous to what would be needed to make downward movement permissible. We have also seen how the use of Chomsky’s algorithm for the functional determination of empty categories produces a theory-internal problem by assigning the features [+a], [+p] to an NP-trace. Thus, according to this algorithm the trace in question should comply with Conditions A and B; i.e., it should be ungoverned. However, ECP demands that a trace must be properly governed.

It is clear that the downward movement analysis is the best way of accounting for the facts presented by Koine IHRCs. The revisions that such an analysis would entail for GB theory are minimal and should therefore be pursued.

5.3 Attraction

It has been demonstrated that the phenomenon of attraction can be easily accounted for by observing that the SPEC of C position is accessible to government. By making a slight modification to the Wh-Case Convention we are thus able to account for all examples of attraction. The Wh-Case Convention Extension provides us with a syntactic account of attraction (without any modification to GB theory) and obviates the need to resort to a descriptive analysis.

Furthermore, it has been observed that the Wh-Case Convention Extension has implications for other types of constituents that are moved to SPEC of C. In particular, we have seen that some types of NP-movement to SPEC of C adhere
to the principles of the WH-Case Convention Extension in that the moved NP may either inherit the case of its trace or be assigned case by a local governor. The depth of these implications will only be realized through further research.

5.4 Inverse Attraction

Finally, we have explored the complex phenomenon of inverse attraction. We have seen that this phenomenon is limited to subject NP antecedents and have therefore attempted to provide an analysis that would address this fact. By utilizing the downward movement analysis we are able to explain inverse attraction purely in terms of a syntactic derivation. It has been noted that due to the limited data available in Koine further research utilizing data from other languages exhibiting attraction would be necessary to establish stronger conclusions regarding this phenomenon.
APPENDICES
## APPENDIX A

### EXAMPLES OF ATTRACTION IN THE NEW TESTAMENT

<table>
<thead>
<tr>
<th></th>
<th>NOMINATIVE -- 0</th>
<th>GENITIVE -- 28</th>
<th>DATIVE -- 21</th>
<th>ACCUSATIVE -- 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### MATTHEW
- GEN--18:19
- DAT--24:50,50

### 2 THESALONIANS
- DAT--1:4

### MARK
- DAT--7:13

### LUKE
- GEN--*9:36; 15:16
- DAT--12:46,46; 24:25; 5:9

### THESSALONIANS
- DAT--1:4

### HEBREWS
- GEN--*3:14

### MARK
- GEN--1:13

### TIMOTHY
- DAT--*3:14

### LUKE
- GEN--1:13

### TIMOTHY
- DAT--7:13

### JOHN
- GEN--4:14; 15:20; 21:10
- DAT--13:5; 17:5,11,12

### JAMES
- GEN--6:10; 9:20; 11:29

### JOHN
- GEN--2:5

### 1 PETER
- GEN--4:11

### PETER
- GEN--1:21; 2:22; 6:10; 7:16; 17:31; 20:38

### JUDE
- GEN--15,15

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*Refer to Appendix M for an explanation of this verse.
APPENDIX B
EXAMPLES OF INVERSE ATTRACTION IN THE NEW TESTAMENT

MATTHEW
ACC--21:42

MARK
ACC--12:10

LUKE
ACC--1:73; 20:17
DAT--12:48

1 CORINTHIANS
ACC--10:16,16

*TOTALS

NOMINATIVE -- 0
GENITIVE -- 0
DATIVE -- 1
ACCUSATIVE -- 6

*Refer to Appendix M for an explanation of this verse.
APPENDIX C
EXAMPLES OF INTERNALLY HEADED RELATIVE CLAUSES
IN THE NEW TESTAMENT

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<tr>
<td>GEN--24:38</td>
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<td>DAT--7:2,2; 124:44</td>
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<td>GEN--1:6,9</td>
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<td>DAT--6:38; 12:40; 17:29,30</td>
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<td>ACC--8:47; 9:4; 10:5,8,10; 13:34; 24:1</td>
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<td>DAT--9:14; 111:6</td>
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<td>ACC--1<em>1:45; 1</em>3:32; 1<em>5:38; 16:14; 129; 1</em>8:26; 117:3</td>
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<td>DAT--7:20; 121:16</td>
<td>ACC--2:11; 7:14</td>
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<td>GEN--14:17</td>
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<td>DAT--16:2</td>
<td>GENITIVE -- 15</td>
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<td>ACC--7:1, 19, 19</td>
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1These are examples of putative pronominal relative clauses.
*Refer to Appendix M for an explanation of this verse.
EXAMPLES OF RELATIVE CLAUSES WITH REDUNDANT PRONOUNS
IN THE NEW TESTAMENT

MARK
NOM--13:19
GEN--1:7; 7:25

LUKE
NOM--*23:51
GEN--3:16
DAT--12:48,48

ACTS
ACC--15:17

1 PETER
NOM--2:24

REVELATION
GEN--13:8,12; 20:8
DAT--7:2
ACC--3:8; 7:9

TOTALS
NOMINATIVE -- 3
GENITIVE -- 6
DATIVE -- 3
ACCUSATIVE -- 3
\[\frac{15}{15}\]

*Refer to Appendix M for an explanation of this verse.
### APPENDIX E

**EXAMPLES OF PIED PIPING WITHIN RELATIVE CLAUSES IN THE NEW TESTAMENT**

#### MATTHEW

| DAT | 3:17; 11:20; 17:5; 27:56 |
| ACC | 12:18; 21:44; 26:50 |

#### ROMANS

| GEN | 1:5; 5:2,11; 9:5 11:25; 14:15 |
| DAT | 1:6; 2:1; 5:2,12 7:6; 8:15; 14:21 |
| ACC | 6:17; 10:14; 12:3 |

#### 1 CORINTHIANS

| GEN | 1:9; 3:5; 7:1 8:6,6; 10:30 11:26; 15:2,6,25 |
| DAT | 7:24; 15:1 |
| ACC | 8:11; 10:11,13 |

#### 2 CORINTHIANS

| GEN | 2:3 |
| DAT | 4:4; 5:4; 11:21 |
| ACC | 1:10; 12:6 |

#### GALATIANS

| GEN | 3:19; 4:19; 6:14 |

#### JOHN

| GEN | 1:30; 13:24,38; 17:9 |
| DAT | 1:47; 4:52,53; 5:28; 19:41 |
| ACC | 5:45; 6:21; 10:35; 18:1 |

#### PHILIPPIANS

| GEN | 3:20 |
| DAT | 2:15; 3:12; 4:10,11 |
| ACC | 3:8 |

#### ACTS

COLOSSIANS
GEN--2:19; 4:10
DAT--1:14; 2:3,11,12; 3:7
ACC--1:29; 3:15; 4:3

2 THESSALONIANS
GEN--1:5; 2:10
ACC--1:11; 2:14

1 TIMOTHY
GEN--6:4
ACC--2:7; 6:12

2 TIMOTHY
DAT--2:9
ACC--1:11

HEBREWS
GEN--1:2; 2:5,10; 3:13
5:8,11; 7:13,19; 9:5
11:4,7,15; 12:28
13:10,23
DAT--2:18; 6:17,18; 9:2
10:29,32; 13:9
ACC--3:3; 4:13; 6:7; 7:20
7:20; 9:9,27; 11:18

JAMES
DAT--1:17

1 PETER
DAT--1:6; 3:19; 4:4
ACC--1:8; 2:7,8; 3:20;
5:12

2 PETER
GEN--1:4,19; 3:4,6
DAT--2:12; 3:1,10,13
3:16
ACC--1:17; 2:2; 3:12,16

REVELATION
GEN--2:25; 16:18; 17:2
DAT--18:19; 19:20

TOTAALS
NOMINATIVE -- 0
GENITIVE -- 111
DATIVE -- 81
ACCUSATIVE -- 65
257

*Refer to Appendix M for an explanation of this verse.
APPENDIX F
EXAMPLES OF INTERPRETATIVE RELATIVE PHRASES
IN THE NEW TESTAMENT

<table>
<thead>
<tr>
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<td>1:23; 27:33</td>
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<td>3:17; 5:41; 7:11,34; 12:42; 15:16,22,34,42</td>
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<td><strong>REVELATION</strong></td>
<td>21:17</td>
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**TOTALS**
NOMINATIVE -- 18

*Refer to Appendix M for an explanation of this verse.*
APPENDIX G
EXAMPLES OF CONJOINING RELATIVE PHRASES
IN THE NEW TESTAMENT

MARK
DAT--2:19

LUKE
GEN--12:3; 19:44
DAT--5:34; 12:1; 19:13

JOHN
DAT--5:7

ACTS
GEN--12:23
DAT--26:12

ROMANS
DAT--8:3

1 PETER
DAT--2:12; 3:16

TOTALS

| GENITIVE | -- 3 |
| DATIVE   | -- 9 |
APPENDIX H
EXAMPLES OF INDEFINITE RELATIVE PRONOUNS
IN THE NEW TESTAMENT

MATTHEW
NOM--5:19,19,21,22,22,31,32
10:14,42; 11:6; 12:32,32
15:5; 16:25,25; 18:5,6
19:9; 20:4,26,27
23:16,16,18,18
GEN--18:19
ACC--7:12; 14:7; 15:5; 16:19,19
18:18,18; 21:22,24; 23:3
26:48

MARK
NOM--3:29,35; 6:56; 8:35,35,38
9:37,37,41,42; 10:11,15
10:43,44; 11:23; 13:11
ACC--3:28; 6:22,23; 7:11
10:35; 14:44

LUKE
NOM--7:23; 8:18,18; 9:24,24
9:26,48,48; 12:8
17:33,33; 18:17
DAT--4:6; 10:22
ACC--9:5; 10:35; 20:18

JOHN
NOM--4:14
ACC--1:33; 2:5; 11:22
14:13; 15:7,16

ACTS
NOM--2:21
DAT--7:7; 8:19

ROMANS
NOM--10:13
ACC--9:15,15

1 CORINTHIANS
NOM--11:27
ACC--6:18; 16:2,3

2 CORINTHIANS
DAT--11:21

GALATIANS
ACC--5:17; 6:7

COLOSSIANS
ACC--3:17,23

JAMES
NOM--4:4

1 JOHN
NOM--2:5; 3:17; 4:15
ACC--3:22; 5:15

3 JOHN
ACC--5

TOTALS
NOMINATIVE -- 62
GENITIVE -- 1
DATIVE -- 5
ACCUSATIVE -- 42

110

*Refer to Appendix M for an explanation of this verse.
APPENDIX I
EXAMPLES OF DEMONSTRATIVE RELATIVE PHRASES
IN THE NEW TESTAMENT

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## APPENDIX J

### EXAMPLES OF NORMAL RELATIVE CLAUSES

### IN THE NEW TESTAMENT

#### MATTHEW

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<td>24:21; 27:33,57</td>
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<td>24:45,46; 26:13; 27:9,15,60</td>
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#### MARK

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#### LUKE

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<td>7:2,27; 7:32,49; 8:2</td>
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<td>9:13,13,17,17; 9:27,31,50</td>
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<td>10:30,39; 12:2,2; 12:10</td>
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<td>21:6; 23:27,29,29,*51</td>
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#### JOHN

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#### ACTS

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### Acts (cont.)

**ACC**
- 1:2, 4, 7, 16; 2:24, 36
- 3:2, 13, 15, 16, 21, 24
- 4:10, 10; 4:27; 5:25, 30, 32
- 6:3, 6, 14; 7:35, 43, 44, 45
- 8:6, 32; 9:5, 39, 39; 10:17
- 10:36, 37, 39; 12:4; 13:2, 41
- 14:26; 15:10; 17:3; 19:13
- 19:25, 27; 20:24, 28; 21:29
- 22:8; 23:29; 24:6, 14, 15, 19
- 25:7, 19; 26:15; 27:17
- 28:4, 15

### Ephesians

**NOM**
- 1:14; 3:5; 4:15
- 5:4, *5; *6:17

**GEN**
- 1:8; 3:20

**ACC**
- 1:9, 20; 2:4; 3:11
- 6:22

### Philippians

**NOM**
- 2:6; 3:21

**GEN**
- 3:19; 4:3

**ACC**
- 1:30

### Romans

**NOM**
- 1:25; 2:6, 23; 3:20
- 4:16, 18, 25; 5:14
- 8:32, 34, 34; 15:21; 16:5, 7

**GEN**
- 2:29; 3:8, 14; 4:7, 7, 8
- 9:4, 5; 15:18

**DAT**
- 1:9; 4:6, 24; 16:27

**ACC**
- 1:2, 27; 3:25; 9:23
- 10:8; 11:2; 14:22; 16:7

### 1 Corinthians

**NOM**
- 1:8, 30; 2:16; 3:11
- 4:5, 17, 17; 6:5; 10:13

**DAT**
- 7:20; 11:23
- 15:9

**ACC**
- 2:7, 8; 3:13, 14; 10:16, 16
- 15:1, 1, 15, 31

### 2 Corinthians

**NOM**
- 1:10; 3:6; 4:4, 6; 10:1
- 13:3

**GEN**
- 8:18; 11:15

**DAT**
- 7:7; 10:2

**ACC**
- 2:4; 8:22; 9:2
- 11:4, 4, 4; 12:4; 13:10

### Galatians

**NOM**
- 1:7; 3:16

**DAT**
- 1:5; 2:5; 3:1, 19; 4:9

**ACC**
- 1:23; 2:2, 4; 4:19; 5:21

### Titus

**NOM**
- 2:1, 14

**GEN**
- 3:6

**ACC**
- 1:2, 3; 3:5

### Colossians

**NOM**
- 1:7, 13, 15, 18, 24
- 2:10, 14; 4:9

**GEN**
- 1:23, 23, 25

**DAT**
- 1:27

**ACC**
- 1:4, 5, 28; 3:6; 4:8
- 4:17

### 1 Thessalonians

**NOM**
- 2:13; 5:24

**DAT**
- 3:9

**ACC**
- 1:10

### 2 Thessalonians

**NOM**
- 3:3

**GEN**
- 2:9

**ACC**
- 2:8, 15; 3:6

### 1 Timothy

**NOM**
- 4:10, 14

**GEN**
- 1:6, 15, 20; 6:10

**DAT**
- 4:6

**ACC**
- 1:11, 19, 20; 4:3
- 6:15, 16, 21

### 2 Timothy

**NOM**
- 1:6; 3:11

**GEN**
- 1:15; 2:17

**DAT**
- 1:3; 4:18

**ACC**
- 4:8, 13, 15

### 2 John

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*Refer to Appendix M for an explanation of this verse.*
APPENDIX K
EXAMPLES OF RELATIVE CLAUSES WITHOUT AN OVERT ANTECEDENT
IN THE NEW TESTAMENT

MATTHEW
NOM—10:38; 12:2,4; 13:4
14:36
DAT--11:27; 20:23
ACC--10:27,27; 11:4; 13:17,17
20:15; 22:9,10; 25:29; 28:20

MARK
NOM--2:24; 4:9,25,25; 5:33; 9:40
DAT--10:40
ACC--3:8,10,13; 4:25; 5:19,20
6:30,30; 7:4,36; 9:9,13
10:9,21; 11:23,24; 12:44
13:37; 14:8,9

LUKE
NOM--4:40; 6:2; 17:31
GEN--*7:47; *9:36; 11:8
13:25; 23:41
DAT--2:20; 7:4,43,47
9:43; 12:48,48
ACC--4:23; 6:3,46; 7:22; 8:18
8:39,39; 9:10,33
10:23,24,24; 11:6; 12:3
12:3,12,20; 14:22; 17:10
18:12,22; 19:21,21,22,22
19:26; 21:6; 22:60; 23:25

JOHN
NOM--1:12; 3:26; 10:8
GEN--1:27
DAT--3:26; 13:26
ACC--1:15,26; 3:11,11,34; 4:18
4:22,22,29,32,38,39,45
5:20,21; 6:29,37,39; 7:25
7:28; 8:*25,38,38; 10:6,36
10:41; 11:3,45,46; 12:50
13:7,27,29; 14:26; 15:14,15
16:13,15; 16:17,18; 17:2,7
17:24; 18:9,21; 19:22,37
21:25

ACTS
NOM--4:34; 5:36,37; 13:27
13:48; 26:29; 28:10
GEN--2:32; 3:15,21; 8:24
9:36; 10:14,39; 13:35
21:19,24; 24:8; 25:11
26:16,16,22
ACC--1:24; 2:33; 3:6,18
4:6,20,23,29; 8:30
9:6,15; 10:15,21
11:9,30; 13:37; 14:11
14:27; 15:4; 17:7,23
21:23; 23:19; 26:10
28:22

ROMANS
NOM--6:3; 8:14; 9:6,14,23
GEN--6:16,16,21; 14:22
15:21; 16:4
ACC--3:19; 4:21; 6:10,10
7:15,15,15,16,19,19
7:20; 8:24,25,29,30
8:30,30; 9:18,18,24
11:7,13; 15:4

1 CORINTHIANS
NOM--7:37; 15:10
DAT--7:39
ACC--2:9,9,13; 4:6,7; 7:36
10:15,20; 11:23;
12:23; 14:37; 15:3
*15:36,37,48,48

2 CORINTHIANS
NOM--1:20
GEN--12:17
DAT--2:10; 11:12
ACC--1:13,17; 2:10; 5:10
10:11,18; 11:12,17,20
11:20; 12:13
The verses in this appendix are of two types: (1) where there is noun overt noun phrase being modified, i.e., no
overt antecedent to the relative specifier; and (2) where there is no overt head noun. Relative clauses which modify NPs consisting solely of a demonstrative, adjective, etc., are considered relative clauses without an overt antecedent. Thus, I have not treated the traditional notion of "substantival" non-nouns as potential antecedents of a relative clause.
APPENDIX L

THE DISTRIBUTION OF ὉΣΤΙΣ

(144 examples)

Normal Definite (98 examples)

<table>
<thead>
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<th>Normal Definite (98 examples)</th>
<th>Ephesians</th>
<th>Philippians</th>
<th>Colossians</th>
<th>1 Timothy</th>
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Normal Indefinite (12 examples)

**MATTHEW**
5:39,41; 13:12,12; 18:4
23:12,12

**MARK**
9:1

**LUKE**
8:15; 14:15,27

**PHILIPPIANS**
4:3

Examples Without An Overt Antecedent (26 examples)

**MATTHEW**
7:24; 10:32; 16:28; 19:29

**MARK**
4:20

**LUKE**
15:7

**JOHN**
21:25

**ACTS**
9:35; 10:47; 13:31; 17:11
23:14

**ROMANS**
6:2

**GALATIANS**
4:24; 5:4

**EPHESIANS**
*6:2

**PHILIPPIANS**
*1:28; 3:7

**COLOSSIANS**
2:23

**2 THESSALONIANS**
1:9

**HEBREWS**
8:5; 13:7

**JAMES**
2:10; 4:14

**REVELATION**
1:7; 20:4

Indef. Relative Pronouns (*4 examples)

**MATTHEW**
10:33; 12:50

**ACTS**
3:23

**GALATIANS**
5:10

Pied Piping (*4 examples)

**MATTHEW** 5:25
**LUKE** 12:50; 13:8; 22:16

*Refer to Appendix M for an explanation of this verse.*
In this appendix I have included verses that either have several possible solutions, or simply are "abnormal" in some way. The peculiarity of these verses does not present any theoretical problem, but rather problems of structural or derivational ambiguity. In instances where these peculiar examples have been dealt with by the commentators listed in the Bibliography I have noted their comments.

Luke 7:47--This appears to be a lexicalization of some sort.

Luke 9:36--This is an example of a relative specifier being attracted to the case of an unexpressed antecedent, i.e., PRO (So Robertson 1930:Vol. 2, p.134). Since PRO does not receive case assignment, in examples such as this it might be necessary to have a base generated antecedent, rather than PRO, that is deleted at PF.

Luke 23:51--Some Greek texts have both a relative specifier and a redundant pronoun.

John 1:45, 3:32; 5:38; 8:26--These verses can easily be considered normal postnominal relative clauses with null
antecedents.

John 8:25—The relative specifier is the neuter form of θῶμεν. There is no overt antecedent.

Acts 24:13—This verse could be taken in three ways: (1) As an example of a non-overt antecedent with περί being a constituent of the relative clause that is pied piped; (2) As an example of attraction to a non-overt antecedent, with περί in the matrix PP; or (3) As a "double genitive" Arndt and Gingrich (1979:423) since the verb κατηγόρησε takes a genitive object.

1 Corinthians 3:17—The relative specifier agrees in number with the second argument of the equational clause.

1 Corinthians 15:36—This verse appears problematic since there is a nominative pronoun, which appears to be part of the relative clause, preceding the relative specifier. However, the pronoun is actually part of the matrix clause. An anarthrous nominative can be used in a vocative sense (Moulton 1908:71).

Ephesians 5:5—The problem here is that the relative specifier is neuter and the three possible antecedents are masculine. Abbott (1956:150-151) has an extensive note on this. The difficulty could be solved if we simply take the
relative specifier to be part of an interpretative relative phrase.

Ephesians 6:2--The gender of the relative specifier agrees with the second argument of the equational clause.

Ephesians 6:17--The relative specifier seems to take its gender (neuter) from the possessor of the antecedent rather than the antecedent itself. Alford (1958:Vol. 3, p. 148) and Robertson (1934:712-713) say that the gender is attracted to ἀνήμα, the second argument of the equational relative clause. Revelation 4:5, Matthew 15:16, and Galatians 3:16 would support this argument, but Ephesians 5:5 would present counter-evidence. A simpler solution would be to treat them all as examples of interpretative relative phrases.

Philippians 1:28--The gender of the relative specifier agrees with the second argument of the equational clause.

1 Timothy 3:15--The gender of the relative specifier agrees with the second argument of the equational clause.


Hebrews 9:2--This is a postposed relative clause.
Hebrews 10:37—In the phrase μικρὸν ὁσον ὁσον the double relative pronoun should be understood as a lexicalized form serving as an intensifier but carrying within its own semantic content the notion of smallness. Some New Testament Greek manuscripts read ὁσον ὁσον in Luke 5:3 rather than ὀλίγος 'little'. Robertson (1934:733) has called it an "imitation of the Hebrew in Habakkuk 2:3". This same phrase is also found in Isaiah 26:20 (LXX).

Hebrews 12:14—Robertson (1930:Vol. 5, p.437) simply notes that the preposition is "postpositive here". Alford (1958:Vol., p.247) suggests that it is placed after the relative specifier for the sake of rhythm and notes that this arrangement was commonly used by poets and tragedians but that it does not seem to occur often in prose. Moffatt (1952:209) suggests that it might be for the sake of rhythm as well, but also offers the possibility that the construction is used to avoid hiatus.

Hebrews 13:11—The structure of this verse is difficult to determine because the embedded clause is part of a heavy NP.

Hebrews 13:11

[ὁν γὰρ εἰσφέρεται ζῶν τὸ αἷμα
RS:GEN for is brought in animals the blood

περὶ ἁμαρτίας εἰς τὰ ἁγία διὰ τοῦ
concerning sin into the holy through the
high priest of these the bodies are burned

outside of the camp

'For the bodies of those animals, whose blood (concerning sin) is brought into the holy place by the high priest, are burned outside of the camp.'

Miller (1988) gives the following literal translation, "For the animals of which the blood is brought into...". Robertson (1930) has "the blood of which beasts"; and notably the Authorized Version (AV) has "the bodies of those beasts, whose blood...". Several things are evident from these renderings. First of all, Miller’s rendering puts ζώων in the matrix clause and το ἀιμα in the embedded clause, while on the surface they appear to be part of one noun phrase, "the blood of the animals". But what if Miller is treating the verse as an IHRC? Robertson (1930:448), in fact, seems to make this claim, though in traditional terms. He states that the antecedent is ζώων, as in Miller’s rendering, and that it is "incorporated into the relative clause (thus an IHRC) and attracted to the case of the relative pronoun (inverse attraction). In essence, the rendering of the Authorized Version makes the same claim.

The Authorized Version treats τοὺτων as a specifier of ζώων. Robertson (1930:448) and (1934:719) makes the same implication. While τοὺτων should definitely be construed as a modifier of ζώων it could also be treated as "resumptive", being necessary after an exceptionally long NP.

Under Wh-Movement and the downward movement analysis,
the derivation would be as follows:

Whether τούτων is to be viewed simply as a SPEC of the entire NP or as "resumptive", there would be no violation of the "Indefiniteness Condition" in this derivation.


________. To appear. *Issues in Greek Complementation*.

________. In preparation. *A Course in Greek Syntax*.


GREEK REFERENCES


