INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
UNIVERSITY OF CALIFORNIA

Los Angeles

Heavy Pied-piping in Nweh

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Linguistics

by

Michael Akamin Nkemnji

1995
The dissertation of Michael Akamin Nkemnji is approved.

Dominique Sportiche
Claudia Parodi
Hilda Koonman, Committee Co-Chair
Russell Schuh, Committee Co-Chair

University of California, Los Angeles
1995
To my grandparents (RIP) and parents

To my family

To my friends
# TABLE OF CONTENTS

List of Tables and Figure ix  
List of Abbreviations and Symbols x  
Acknowledgments xi  
Vita xiii  
Abstract xiv

<table>
<thead>
<tr>
<th>Chapter One</th>
<th>INTRODUCTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>The Issue(s)</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>The Language</td>
<td>5</td>
</tr>
<tr>
<td>1.3</td>
<td>Dialects</td>
<td>6</td>
</tr>
<tr>
<td>1.4</td>
<td>Previous Work on Nweh</td>
<td>8</td>
</tr>
<tr>
<td>1.5</td>
<td>Basic Grammatical Sketch</td>
<td>8</td>
</tr>
<tr>
<td>1.5.1</td>
<td>Segment Inventory</td>
<td>9</td>
</tr>
<tr>
<td>1.5.2</td>
<td>Word Order and Categories</td>
<td>11</td>
</tr>
<tr>
<td>1.5.3</td>
<td>Agreement</td>
<td>12</td>
</tr>
<tr>
<td>1.5.4</td>
<td>Tense / Aspect</td>
<td>15</td>
</tr>
<tr>
<td>1.5.4.1</td>
<td>Aspect</td>
<td>15</td>
</tr>
<tr>
<td>1.5.4.2</td>
<td>Tense</td>
<td>16</td>
</tr>
<tr>
<td>1.5.4.2.1</td>
<td>Present</td>
<td>17</td>
</tr>
<tr>
<td>1.5.4.2.2</td>
<td>Past</td>
<td>18</td>
</tr>
<tr>
<td>1.5.4.2.3</td>
<td>Future</td>
<td>20</td>
</tr>
<tr>
<td>1.5.4.3</td>
<td>Tense / Aspect Interaction</td>
<td>22</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>Chapter Two</th>
<th>THE DETERMINER PHRASE (DP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Preliminaries</td>
</tr>
<tr>
<td>2.2</td>
<td>Nweh Nominals</td>
</tr>
<tr>
<td>2.3</td>
<td>Nweh Noun Classes</td>
</tr>
<tr>
<td>2.4</td>
<td>Problems with Contemporary Noun Classification</td>
</tr>
<tr>
<td>2.5</td>
<td>DPs in Nweh</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Noun - DP</td>
</tr>
<tr>
<td>2.5.1.1</td>
<td>The Marking of the Genitive DP</td>
</tr>
<tr>
<td>2.5.1.2</td>
<td>Internal Structure of the N₁-DP₂ Construction</td>
</tr>
<tr>
<td>2.5.2</td>
<td>Noun-Possessive Pronoun</td>
</tr>
<tr>
<td>2.5.3</td>
<td>Asymmetry between Lexical and Pronominal Genitives</td>
</tr>
<tr>
<td>2.5.4</td>
<td>Noun - Demonstrative</td>
</tr>
<tr>
<td>2.5.5</td>
<td>Noun - Quantifier</td>
</tr>
<tr>
<td>2.5.6</td>
<td>Noun - Numeral</td>
</tr>
<tr>
<td>2.5.7</td>
<td>Noun - Relative Qualifier</td>
</tr>
<tr>
<td>2.6</td>
<td>Towards a <em>Nom</em> category in Nweh</td>
</tr>
<tr>
<td>2.7</td>
<td>For a <em>ClassP</em> Projection</td>
</tr>
<tr>
<td>2.8</td>
<td>Deriving the Order of Constituents and Agreements within DP</td>
</tr>
<tr>
<td>2.8.1</td>
<td>The Genitive/Possessive Agreement</td>
</tr>
<tr>
<td>2.8.1.1</td>
<td>DP Agreement: Spec-Head or &quot;Head-Spec&quot;?</td>
</tr>
<tr>
<td>2.8.1.2</td>
<td>A Derivational Account of Genitive Pronouns</td>
</tr>
<tr>
<td>2.8.2</td>
<td>The Noun - Demonstrative Agreement</td>
</tr>
<tr>
<td>2.8.3</td>
<td>Deriving the &quot;Double Agreement&quot;</td>
</tr>
<tr>
<td>2.8.4</td>
<td>The Noun - Numeral Agreement</td>
</tr>
<tr>
<td>2.8.5</td>
<td>The Noun - Relative Marker Agreement</td>
</tr>
<tr>
<td>2.9</td>
<td>The Relative (Clause) Construction</td>
</tr>
<tr>
<td>2.9.1</td>
<td>What can be Relativized?</td>
</tr>
<tr>
<td>2.9.2</td>
<td>Positions from which Relativization is Legitimate</td>
</tr>
<tr>
<td>2.9.3</td>
<td>Distribution of Gaps and Resumptive Pronouns</td>
</tr>
<tr>
<td>2.9.4</td>
<td>The Internal Structure of the Relative Clause</td>
</tr>
<tr>
<td>2.9.5</td>
<td>Relative Clause Extraposition (Kayne (1994))</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Chapter Three</th>
<th>(DP) COORDINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>3.2</td>
<td>Coordination Strategies</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Zero Strategy</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Overt Strategy</td>
</tr>
<tr>
<td>3.2.2.1</td>
<td>bó Coordination</td>
</tr>
<tr>
<td>3.2.2.2</td>
<td>mà Coordination</td>
</tr>
<tr>
<td>3.3</td>
<td>Coordination and Accompaniment</td>
</tr>
<tr>
<td>3.4</td>
<td>The Syntax of DP Coordination</td>
</tr>
<tr>
<td>3.5</td>
<td>Coordination Involving Pronominal DPs</td>
</tr>
<tr>
<td>3.5.1</td>
<td>System of Pronominal Reference in Nweh</td>
</tr>
<tr>
<td>3.5.2</td>
<td>Simple Pronouns</td>
</tr>
<tr>
<td>3.5.3</td>
<td>Compound (Personal) Pronouns</td>
</tr>
<tr>
<td>3.6</td>
<td>Deriving the &quot;Compound Pronominal&quot; Forms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Four</th>
<th>ADJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>4.2</td>
<td>The Issue</td>
</tr>
<tr>
<td>4.3</td>
<td>Adjectives in Nweh</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Class iii (&quot;Transitive&quot; Adjectives)</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Class ii (&quot;Intransitive&quot; Adjectives)</td>
</tr>
<tr>
<td>4.3.3</td>
<td>Class i (&quot;Pure&quot; Adjectives)</td>
</tr>
<tr>
<td>4.4</td>
<td>Adjectives as heads of DPs: A Case of Syntactic Adoption?</td>
</tr>
<tr>
<td>4.5</td>
<td>A Proposal</td>
</tr>
<tr>
<td>4.6</td>
<td>&quot;Incorporation as a Theory of Grammatical Category Changing&quot;?</td>
</tr>
<tr>
<td>4.7</td>
<td>&quot;Pseudo&quot; NP Head as an Adjunct</td>
</tr>
<tr>
<td>4.8</td>
<td>More Evidence for Noun Adjunction</td>
</tr>
<tr>
<td>Chapter Five</td>
<td>NEGATION</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>5.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>5.1.1</td>
<td>A Puzzle</td>
</tr>
<tr>
<td>5.1.2</td>
<td>A Proposal</td>
</tr>
<tr>
<td>5.2</td>
<td>Sentential Negation in Nweh</td>
</tr>
<tr>
<td>5.2.1</td>
<td>A Possible Analogy</td>
</tr>
<tr>
<td>5.2.2</td>
<td>The Problem</td>
</tr>
<tr>
<td>5.2.3</td>
<td>The Analysis</td>
</tr>
<tr>
<td>5.2.3.1</td>
<td>NegP Structure for Nweh</td>
</tr>
<tr>
<td>5.2.3.2</td>
<td>NegP is Head-Initial</td>
</tr>
<tr>
<td>5.2.3.3</td>
<td>The Status of the Negative Morpheme tempta</td>
</tr>
<tr>
<td>5.3</td>
<td>Deriving the Surface Word Order</td>
</tr>
<tr>
<td>5.3.1</td>
<td>The Apparent Head-Final Character of NegP</td>
</tr>
<tr>
<td>5.3.2</td>
<td>Verb Movement and the HMC</td>
</tr>
<tr>
<td>5.4</td>
<td>Implications and Consequences</td>
</tr>
<tr>
<td>5.5</td>
<td>Problems and Speculations</td>
</tr>
<tr>
<td>5.5.1</td>
<td>Failure of Higher &quot;Verbal Heads&quot; to Undergo Head Movement</td>
</tr>
<tr>
<td>5.5.1.1</td>
<td>Asymmetry between Transitive and Non Transitive Verbs</td>
</tr>
<tr>
<td>5.5.1.2</td>
<td>&quot;Intransitive&quot; Verbs</td>
</tr>
<tr>
<td>5.5.2</td>
<td>Characterizing the Negative Variants</td>
</tr>
<tr>
<td>5.5.2.1</td>
<td>Focus / Emphasis in Nweh</td>
</tr>
<tr>
<td>5.5.2.2</td>
<td>Focus by Means of a Focus Marker</td>
</tr>
<tr>
<td>5.5.2.3</td>
<td>Focus by Movement / (pseudo-) Clefting</td>
</tr>
<tr>
<td>5.5.2.4</td>
<td>Focus Verb Construction</td>
</tr>
<tr>
<td>5.5.3</td>
<td>Clausal Negation with Adverbial Adjunct Clauses</td>
</tr>
<tr>
<td>5.5.4</td>
<td>Because-Clauses and Negation</td>
</tr>
<tr>
<td>Chapter</td>
<td>Section</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Chapter Six</td>
<td>Extending the Analysis: INTERROGATIVES</td>
</tr>
<tr>
<td>6.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>6.2</td>
<td>Interrogatives in Nweh</td>
</tr>
<tr>
<td>6.3</td>
<td>Non Interrogative-Word Questions</td>
</tr>
<tr>
<td>6.3.1</td>
<td>&quot;Neutral&quot; Yes/No Questions</td>
</tr>
<tr>
<td>6.3.2</td>
<td>&quot;Neutral&quot; Yes-No Question Marking</td>
</tr>
<tr>
<td>6.3.3</td>
<td>&quot;Non-Neutral&quot; Yes/No Questions</td>
</tr>
<tr>
<td>6.3.3.1</td>
<td>&quot;Evidential&quot; Questions</td>
</tr>
<tr>
<td>6.3.3.2</td>
<td>Tag Questions</td>
</tr>
<tr>
<td>6.3.3.3</td>
<td>Alternative Choice Questions</td>
</tr>
<tr>
<td>6.3.3.4</td>
<td>Echo Questions</td>
</tr>
<tr>
<td>6.4</td>
<td>The Syntax of Interrogatives</td>
</tr>
<tr>
<td>6.5</td>
<td>Unifying Yes-No Questions and Wh- Questions</td>
</tr>
<tr>
<td>6.5.1</td>
<td>(Wh-) Question Word Questions</td>
</tr>
<tr>
<td>6.5.2</td>
<td>Analysis of Wh- Questions</td>
</tr>
<tr>
<td>6.5.3</td>
<td>Indirect Wh- Questions</td>
</tr>
<tr>
<td>6.6</td>
<td>Summary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Seven</th>
<th>CONCLUSION</th>
<th>248</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>REFERENCES</td>
<td>250</td>
</tr>
</tbody>
</table>
# LIST OF TABLES AND FIGURE

1.1: Map: Principal Region where *Nweh* is spoken 7
2.1: Nweh Noun Classes 29
2.2: Genitive Pronouns 41
2.3: Demonstrative Pronouns 45
2.4: "wh-Agreement" 59
2.5: Form of the Relative Marker 77
3.1: Simple Pronominal Forms 122
3.2: Compound Personal Pronominal Forms 123
3.3: Compound Independent Pronominal Forms 125
3.4: "Underlying Representation" of Compound Pronouns 126
4.1: "N₁-AP₂ Agreement" 140
6.1: Phonological Environment for various Forms of "Lengthening" 220
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agr(s)</td>
<td>(Subject) Agreement marker</td>
</tr>
<tr>
<td>Asp^o</td>
<td>Aspect marker</td>
</tr>
<tr>
<td>AspP</td>
<td>Aspect phrase</td>
</tr>
<tr>
<td>CM</td>
<td>Case marker</td>
</tr>
<tr>
<td>$C^0$ / Comp</td>
<td>Complementizer</td>
</tr>
<tr>
<td>C/O(P)</td>
<td>Conjunction operator (phrase)</td>
</tr>
<tr>
<td>Conj(P)</td>
<td>Conjunction (phrase)</td>
</tr>
<tr>
<td>contr.</td>
<td>contrastive (reading)</td>
</tr>
<tr>
<td>Cop.</td>
<td>copula</td>
</tr>
<tr>
<td>excl.</td>
<td>exclusive</td>
</tr>
<tr>
<td>G/O(P)</td>
<td>Genitive operator (phrase)</td>
</tr>
<tr>
<td>incl.</td>
<td>inclusive</td>
</tr>
<tr>
<td>Int(P)</td>
<td>Interrogative (phrase)</td>
</tr>
<tr>
<td>Loc</td>
<td>Locative (marker)</td>
</tr>
<tr>
<td>Neg</td>
<td>Negative (marker)</td>
</tr>
<tr>
<td>Perf</td>
<td>Perfective (marker)</td>
</tr>
<tr>
<td>pro</td>
<td>null argument</td>
</tr>
<tr>
<td>Prog.</td>
<td>Progressive</td>
</tr>
<tr>
<td>Spec</td>
<td>Specifier</td>
</tr>
<tr>
<td>Temp. Loc.</td>
<td>Temporal locative</td>
</tr>
</tbody>
</table>

$X^0$ : word level category (variable)

XP : phrasal category variable

* : denotes an ungrammatical expression

*(X) : ungrammatical, if the material $X$ is not expressed

(*X) : ungrammatical, if the material $X$ is expressed

** : (un)acceptability varies from ungrammatical to being regarded as awkward or "non native".

? : awkward expression.
ACKNOWLEDGMENTS

Many people have contributed towards making this study possible. It will be difficult for me to adequately acknowledge the contribution of all those who have helped in one way or another, let alone mention all of them. Let me begin by saying that the successful completion of this study is due, in part, to the financial support I got as a graduate student in the Department of Linguistics, at UCLA and the linguistic training I received from the same Department. I salute the excellent faculty of the Department of Linguistics, at UCLA!

I owe a lot of gratitude to the members of my committee; I could not have picked a better committee. My committee co-chair, Russ Schuh, has been a very stimulating source of influence. Russ has been my academic advisor ever since I came to UCLA. All along, Russ provided keen advice as well as exerted friendly pressures to make sure I stayed focused. I have benefited in particular from his extensive knowledge of African Languages. Russ carefully studied each non-final draft of this dissertation and made many helpful comments and suggestions on how to develop and improve upon them.

My other committee co-chair, Hilda Koopman, has had a lot of influence on my work. My approach to the theory has been shaped in more than one way by her. Hilda did not only provide invaluable advice and encouragement, but questioned and challenged me at each turn, thus providing motivation to explore more ideas.

In fact, the extent to which she has made herself available and the amount of input she has contributed go beyond any reasonable expectations. I learned a lot from discussions with Hilda, whether it be in class, in her office or at her home.
Dominique Sportiche has always maintained a special influence on my work, making “break-through” suggestions in those cases. Nweh exhibited complexities that made the data seem almost impossible to lend itself to a theoretical analysis. Many of his suggestions have been incorporated into the final version of this dissertation.

I appreciate the encouragement and enthusiasm of my “outside” committee member, Claudia Parodi. Claudia provided very helpful suggestions on how to improve this work. I had some very helpful discussions with Claudia.

Among other faculty in the Department of Linguistics, I would like to thank Tim Stowell, Anna Szabolcsi, Raimo Anttila, Ed Stabler, Anoop Mahajan, Tom Hinnebusch, and Pat Keating, for various forms of support towards the completion of this dissertation. Our hard working staff members, Anna Meyer and John Bulger, are not forgotten. I would also like to acknowledge the helpful feedback I got through seminars and informal discussions, with colleagues in the department.

When I had questions on the data or needed help with grammaticality judgments, the Nkemnji’s in Platteville, Wisconsin, were always ready to lend a helping hand. Special thanks to all my friends (outside UCLA) who have been very supportive, particularly Sherreth E. Wade, who in addition to moral support, also provided secretarial support by dictating the hard-to-read hand written drafts so that I could keep my eyes on the keyboard.

Finally, I want to extend a different kind of thanks to my family back home, in Cameroon, who had to bear the “burden” of my being away for so long. Thanks especially to my parents for their unaltering love and support.

To those mentioned here and all others, let me say it once more: nkónté (thanks!).

xii
VITA

Born, Fontem, Cameroon

1984
License ès Lettres (B.A.Hons.)
Université de Yaoundé, Cameroon

1985
Maîtrise,
Université de Yaoundé, Cameroon

1989
M.A., African Area Studies,
University of California, Los Angeles

1989 - 1990
Graduate Student Researcher,
African Studies Center, UCLA.

1992
M.A., Linguistics,
University of California, Los Angeles

1990 - 1992
Teaching Assistant,
Department of Linguistics, UCLA.

1992 - 1993
Teaching Associate,
Department of Linguistics, UCLA.

1994 - 1995
Teaching Fellow,
Department of Linguistics, UCLA.

PUBLICATIONS AND PRESENTATIONS

In H. Koopman and M. Kural, eds., UCLA Occasional Papers in
Linguistics 14, 57-72. Department of Linguistics, UCLA.

presented at the 24th Western Conference on Linguistics (WECOL),
University of California, Los Angeles.

Trends in African Linguistics I: Theoretical Approaches to African

in Nweh" Paper presented at the 26th Annual Conference on African
Linguistics (ACAL26), University of California, Los Angeles.
ABSTRACT OF THE DISSERTATION

Heavy Pied-piping in Nweh

by

Michael Akamin Nkemnji
Doctor of Philosophy in Linguistics
University of California, Los Angeles, 1995
Professor Hilda Koopman, Co-Chair
Professor Russell Schuh, Co-Chair

This study proposes a restrictive approach to word order variation and agreement relations in Nweh, a Grassfield Bantu language spoken in South-West Cameroon.

Until recently, the standard approach to (cross-linguistic) variation within the Principles and Parameters theory has been to say that there exists some parameter within the system of Universal Grammar (UG) and that variation is a reflection of different value assignments to such a parameter. Thus, variation in linear order for example, would be attributed to a parametric variation in word order. Recently, this standard assumption has been called to question and it is increasingly being suggested that to achieve a restrictive theory of syntax, severe restrictions must be imposed on the range of syntactic representations accessible to the human language faculty (see for example, Sportiche (1993), Kayne (1994)). Following along this reductionist approach, I begin with the hypothesis that even though on the "surface" Nweh displays "mixed" word

xiv
order properties (that in some cases vary between a head-complement and a complement-head order) it can be analyzed as having an underlying symmetrical word order. I study a number of varied syntactic constructions in Nweh that display "mixed" typological word order properties. Based on the properties displayed by these constructions, I argue that Nweh can be analyzed as being completely uniform in terms its linear constituent order. I then propose that the underlying word order symmetry is destroyed by pied-piping (movement) to designated specifier positions. Thus, in essence, denying an approach which views word order variation as a result of some parametric value assigned to different constructions.

The assumption that there is pied piping to designated specifier positions has additional consequences in Nweh that go beyond those concerning linear order. It straightforwardly explains the various (overt) agreements patterns, particularly within the noun phrase. I propose that the incidence of word order asymmetry and agreement are directly linked to pied piping. The sort of pied-piping proposed here, suggests that syntactic movement is not limited just to minimal, \((X^0)\) heads and "extended" maximal \((XP)\) projections like \(DPs, Ps\) but that move \(\alpha\) also affects sub-\(DP\) constituents (bigger than \((X^0)\) heads) like \(NumP, ClassP\) as well as higher level clausal constituents like \(IP/AgrP\) and \(NegP\).
Chapter One

INTRODUCTION

1.1 The Issue(s)

This work studies word order alternation and agreement patterns in *Nveh*, a Grassfield Bantu language spoken in Cameroon.

Knowledge of a native language is undoubtedly one of, if not, the most complex ability and set of facts that any human being ever acquires. However, amazingly enough, normally developing children are able to acquire and use language within a relatively short period of time. This normally happens well before they are able to perform other relatively simple cognitive tasks such as basic "one plus two" arithmetic. The question is how is this possible? The consensus among linguists is that linguistic knowledge is essentially innate, hence the term Universal Grammar (UG). Then comes the questions of the nature of UG, how it is represented, and how to precisely characterize the variations in linguistic systems. A central idea that has guided recent linguistic research that seeks to answer these questions has been to pursue a restrictive theory of grammar and to impose severe limitations on the range of syntactic representations accessible to the human language faculty. Because of the desirability to attain a highly restrictive
theory of syntax, the idea of parameters in language, which explains patterns of variation (between languages and even within the same language) as a reflection of the assignment of different parametric values is being abandoned, in favor of an invariant syntactic representation that limits all linguistic variation essentially to the lexicon (see Sportiche (1993), Kayne (1994), for important contributions along this line of research). It is the goal of the present work to take a step in this direction by proposing a restrictive approach to word order variation and agreement relations in Nweh.

Languages, on the surface, appear to be very "inconsistent". One area where variation is immediately obvious is that of surface word order. Within Nweh, for example, the order of constituents varies between a head-complement order and a complement-head order, depending on the particular construction and even within the same construction. I outline a number of syntactic constructions in Nweh that display such "mixed" typological word order properties. These constructions range from simple phrases to higher level clauses. Based on the properties displayed by these constructions, I argue that Nweh can be analyzed as being completely symmetrical in terms its underlying linear constituent order. I then propose a restrictive analysis of Nweh constituent order, in which the word order variations in the various constructions can be accounted for in a uniform manner, without resort to a theory of (head-initial / head-final) parameters.

I argue that the head of a phrase must always precede its associated complement. To account for the constructions that have their complements to the left of their heads, I propose that they be reanalyzed as a consequence of a specific movement derivation -heavy pied piping-, according to which the complement (of the head in final position) has raised, in most cases pied piping every other constituent that follows it, to some
designated higher specifier position thus stranding the head in final position. I state the
condition governing such pied piping in (i).

(i) Movement of a YP complement of X, must be to Spec. XP
or to the specifier position of some "extended projection" of X.

There is the implicit assumption that constituents that are embedded within the pied
piped complement, will maintain a head-complement order, assuming that no further
derivation occurs.

Because of such movement, the underlying word order symmetry that exists in syntax is
"destroyed" resulting in "mixed" typological order and the sort of word order
asymmetry that can be seen on the surface.

The assumption that there is pied piping to designated specifier positions has
additional consequences in Nweh that go beyond those concerning linear order. It
straightforwardly explains the various (overt) agreement patterns, particularly within the
noun phrase. It does so in essence by treating agreement as a relation between a head
and the content of its specifier position. The rich and extensive system of agreement in
operation particularly in the nominal system of Bantu languages is well attested in the
literature but has, to my knowledge, not been given an adequate analysis. Herein, the
incidence of word order asymmetry and agreement is directly linked to pied piping. To
the extent that there is movement, there is word order asymmetry and overt agreement.
Thus, when one examines declarative sentences where very little movement occurs,
giving the fact that inflectional categories like tense are expressed as independent
morphemes, we find near perfect word order symmetry and very little agreement
compared to say the agreement in the DP where there is supposedly a lot of movement,
as the incidence of word order asymmetry as well as the rich agreement suggests. The
above facts suggest an answer to the question as to why different XPs exhibit different
types of movement and why movement is rampant in some XPs and limited or absent in others. A plausible explanation is that movement is triggered by the need to license some (morphological) property.

This study is primarily a contribution to the description of the syntactic phenomena of Nweh. However, in my linguistic training I have been attracted by the higher levels of abstraction and theoretical speculations because I believe if substantial progress can be made in this direction, it offers a good possibility of moving closer towards formulating a general theory of language. In this regard, I use theoretical discussions to try to account for some of the descriptive facts observed and to relate these facts to what has been said about similar constructions in other languages. The theoretical discussions are couched within the Principles and Parameters framework, known in its earlier versions as the Government and Binding Theory (Chomsky 1981). The discussions, however, do not provide complete answers to the issues raised. For the most part, they raise questions, provide "novel" and interesting data and encourage further research into the issues. Needless to say this is but an introductory study and can be but a beginning in the examination of an ever intriguing and complex issue - "the knowledge of grammar". However, as an old Nweh proverb declares: á nči t mō ata tāa tā ndūāa alū? "a calabash (of palm-wine) begins with a drop". I hope this study will be a first step towards an adequate description of Nweh grammar.

The work is organized as follows: In the rest of this chapter I present an introductory overview of the language. In chapter 2, I examine the modified noun phrase (DP). The first part of chapter 2 is basically descriptive, where I describe and outline the various relations and extensive agreements within the DP. The second part
presents a unified account of the various agreement relations. The coordinated DP is
examined in chapter 3, focusing on pronominal coordination which exhibits some very
interesting properties. Chapter 4 focuses on Adjectives, particularly on a class of
adjectives that exhibit properties typical of nouns. The main concern of chapter 5 is the
alternant forms of negation that obtain in negative sentences, giving rise to "mixed"
typological word order properties like S-V-X and S-X-V. In chapter 6, I discuss
interrogatives: I show that the analysis proposed for negatives in chapter 5 can be
extended to interrogatives. Chapter 7 presents the conclusions of the dissertation,
underscoring the major proposals and assumptions made, as well as their implications
for the theory.

1.2 The Language

Nweh [ŋwé], referred to in some references as Ngwe, is a language spoken by
mbọŋwé "Nweh people". mbọŋwé are popularly referred to as the Bangwa people.
The term Bangwa (an appellation coined from the days of colonial administration)
derives from ba- / bə- (a typical Proto Bantu noun class 2 prefix) plus ŋwé. In its
early usage the term Bangwa was used to refer to the language, the people, as well as
"the land". Nowadays, the people refer to themselves as mbọŋwé and the appellation
Nweh is used for the language and the land.

Nweh is spoken as a first language by about eighty-five thousand people, most
of whom live in the administrative unit known as Lebialem Division,1 in the South-
West region of Cameroon. The typical linguistic situation of the area and of Cameroon

1 Lebialem is generally referred to, particularly by "outsiders", as Fontem; Fontem being the locus of
the Divisional administration and one of the Sub Divisions that make up Lebialem Division.
at large, is such that most people grow up being bi- or tri-lingual. For example, in the
case of Nweh most children grow up speaking *Nweh* as their first language, since it is
the main, and in most cases the only, language spoken at home. As the children grow
up they learn to speak Pidgin English, through social encounters with other children
outside the home. Formal language instruction begins in *Nursery School* where
children are taught using either English or French (depending on the region) as the
primary medium of instruction.

1.3 Dialects

Nweh (the geographic location) lies across a very mountainous topography. It is
divided into nine (traditional) geo-administrative units known as *chiefdoms* (see map,
p.7). Each of these nine chiefdoms speak a distinct but mutually intelligible dialect of
Nweh. Thus, there are nine recognizable varieties of Nweh; These can be grouped into
three main dialect groups (see Dunstan 1966, Nkemnji (1985)). The nine areas:2
Njoagwi (Fotabong III), Essoh-Attah (Foreke Chacha), Lebang (Fontem), Lewoh
(Fotabong I), Ndungatet (Foto), Nwabetaw (Fonjumetaw), Nwengong (Fossungu),
Mmockmbie (Fozimombin), Mmockngie (Fozimondi), run from south to North-East
and are characterized basically by a continuum of sound (phonological) and word
change which extends to their Eastern neighbors -the Bamboutos and the Dschang. On
the whole the degree of mutual intelligibility dependents on proximity. In this context, it
might be useful to note that the variety of Nweh spoken in Fontem (Lebang) is the one
that I manipulate best.

---

2 The names in parenthesis although concurrently used to refer to the chiefdoms, are actually
appellations of the chiefs who govern these chiefdoms.
There is no text for this page.
Amongst its neighboring peoples, the Dschang to the East, the Bamboutos to the North-East, the Mundanis to the North and North-West, the Banyangs to the West and the Mbos to the South, mbọ̀gwe have close linguistic affiliations only with their (North-) Eastern neighbors.

1.4 Previous Work on Nweh

There is a notable absence of any descriptions of Nweh. There are no descriptive grammars of the language. In fact, Nweh as a whole has not been studied in any depth. To my knowledge, M. Elizabeth Dunstan is responsible for the only partial extant description of aspects of Nweh. Apart from Dunstan's (1966) Ph.D. thesis on Nweh, and three of her articles, the only other published paper on Nweh is a review of one of Dunstan's articles by Morfaw (1976).

1.5 Basic Grammatical Sketch

In this section, I sketch out those aspects of the grammar of Nweh that are particularly relevant for a better understanding of the data and issues discussed in subsequent chapters. These include, an outline of the segment inventory, word order, agreement, and tense / aspect.
1.5.1 Segment Inventory

The discussion of the inventory of segments is based partly on Dunstan (1966), since I have not done a systematic phonological analysis of Nweh. The consonants are shown in the chart below.

\[
\begin{array}{ccccccccccc}
\text{(bi)lab.} & \text{lab. dent.} & \text{alveo.} & \text{post. alv.} & \text{pal.} & \text{velar} & \text{lab. vel.} & \text{glottal} \\
plosives & p & b & t & d & j & k & g & kp & gb & ? \\
\text{fricatives} & \beta & f & v & s & z & š & ž & \gamma \\
\text{affricates} & pf & ts & dz & tr & č & j & kx & gy \\
\text{nasals} & m & (ŋ) & n & j & ŋ \\
\text{trills} & p & b & r \\
\text{approx.} & l & ų & w & h \\
\end{array}
\]

All consonants can occur in word/stem initial position. In other positions there are restrictions on the classes of consonants that can occur. For instance, the only consonants that show up in word final positions are /m, n, ŋ, p, t, k, b, d, g, ?, h/.

Stops are generally devoiced in word final position. [l] and [d] are in complementary distribution in certain environments. Common environments for the complementarity include: l \rightarrow d / [nas.] \rightarrow d \rightarrow l / [+a] , where ""]" denotes a word edge and "+" denotes a word/morpheme boundary.

Nweh has three vowel heights (high, mid and low) and three places of articulation (front, central and back). The vowels are shown in the following chart.
<table>
<thead>
<tr>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td>ø</td>
</tr>
<tr>
<td>Low</td>
<td>e</td>
<td>æ</td>
</tr>
</tbody>
</table>

Vowels may occur long. The following diphthongs also occur: [ie], [ei], [ui], [ue], [ia],
[oa], [ua], [ua].

Apart from consonant and vowel segments, Nweh also has tones in its lexicon.

The tonal complexities of Grassfield Bantu languages is a fact well attested in the
literature. There are at least three distinctive tone levels in Nweh, excluding the glides
and other tonal variations that result from tonal phenomena of the sort discussed in
Hyman and Schuh (1974).

Dunstan identifies three tone levels (high, mid and low) but also notes the existence of
an "extra high pitch" which she considers to be a variation of the high tone (see Morfaw
(1976) for details). Morfaw (1976) argues that what Dunstan labels as the "extra high
pitch" is actually a separate contrastive tone level. He refers to this as the "higher high
tone", and proposes that there are actually four distinctive tones in Nweh. Herein, I
distinguish three tones but make use of the notion of downstep to distinguish between
the phonetic contrast between high tones.

The lexical tone bearing unit is generally the syllable.
1.5.2 Word Order and Categories

Nweh is an SVO language, with a rigid word order for some constructions. In terms of its phrase structure, heads precede their complements in Nweh. Thus, in a noun phrase the head noun precedes the nominal satellites. Some examples follow in (1).

(1)  
   a. ndià zàá 
    house his  'his house'
   b. ndià juó 
    house this  'this house'
   c. ndià Njikem  'Njikem's house'

In adjective + noun attributive constructions, adjectives appear to project an AP (adjective phrase) in which they occur head initially and behave like syntactic heads in that they trigger their own agreement. A detailed treatment of adjectives is presented in chapter 4.

Prepositional phrases are directly amenable to the head-complement order. The prepositional head occurs initially in its phrase, with the preposition governing and assigning case to the noun phrase complement to its right.

(2)  
   a. anti akéb 
    inside box  'inside the box'
   b. apfèn ndià 
    behind house  'behind the house'
   c. anbó núa 
    to/from child  'to/from the child'
Complements of the verb follow the verb. Thus, like other phrase types, the verb phrase has a head-complement order.

(3)  
a.  ndú ábë
    eat fufu
    'eat fufu'

b.  ndúá nkáp anbó füa
    beg money from chief
    'beg money from the chief'

c.  ndúá a füa nkáp
    beg CM chief money
    'beg the chief for money'

1.5.3 Agreement

One of the most salient features of Nweh (and Bantu language family in general) is its rich and extensive (syntactic) agreement.

By syntactic agreement, I refer to the phenomenon whereby certain linguistic forms systematically vary their form/shape from one syntactic context to another in order to reflect information of some other linguistic element that occurs within the same syntactic unit. A typical case in English is that of subject-verb agreement illustrated in (4).

(4)  
a.  I like fufu

b.  He likes fufu

In (4) we observe that the verb varies its form to agree with its subject.
It is the case in Nweh that verbs agree with their subjects. Examples follow in (5) - (6).

(5)  a. séŋ à kē? npfēt nzō
    bird Agr P-1 eat palmsn×^3
    'the bird ate palmnuts'

   b. bāsēŋ é kē? npfēt nzō
    birds Agr P-1 eat palmsn×
    '(the) birds ate palmnuts'

(6)  a. oʃfōŋ è kē? npfēt nzō
    cow Agr P-1 eat palmnuts
    'the cow ate palmnuts'

   b. bōfōŋ é kē? npfēt nzō
    cows Agr P-1 eat palmsn
    '(the) cows ate palmnuts'

As the data illustrate, the agreement varies depending on the subject noun phrase. In (5a) the agreement is 🅠, agreeing with the subject noun phrase séŋ 'bird', and in (5b) the agreement is 🅡, agreeing with bāsēŋ 'birds'. The variation in the form of the subject agreement marker is dependent on the noun class of the subject noun phrase.

All satellites of the noun as well as any phrase that is predicated of a nominal projection must agree with the head noun in class. Thus, verbs agree with their subjects. Also, determiners (demonstratives), genitives, possessive pronouns, relative pronouns, numerals agree with the nouns they modify. A detailed discussion on noun classes is presented in chapter 2.

---

^3 Nweh makes an "internal" distinction between past and future tenses depending on degree of remoteness (see section 1.5.4). The use of P-1, P-2, P-3 for past and F-1, F-2, F-3 for future, is intended to reflect such internal distinctions. The data in (5)-(6) shows that Nweh does not have overt (in)definite determiners that would translate as a or the in English.
Nweh is pro-drop in the singular. Put differently, it can be said that pro subject is singular in Nweh. Thus, singular subject noun phrases can be phonetically null as in (7c).

\[(7)\]
\[\begin{align*}
&\text{a. Njikem à kè? npfôt akêndôŋ} \\
&\text{N. Agr P-1 eat plantains} \\
&\text{'Njikem ate plantains'} \\
&\text{b. juí à kè? npfôt akêndôŋ} \\
&\text{he Agr P-1 eat plantains} \\
&\text{'s/he ate plantains'} \\
&\text{c. [ e ] à kè? npfôt akêndôŋ} \\
&\text{pro Agr P-1 eat plantains} \\
&\text{'s/he ate plantains'}
\end{align*}\]

One might contend that what I refer to as agreement is actually a pronoun and hence the subject. But this is not the case. As (7) shows this agreement marker occurs with lexical NPs (7a) and with overt pronouns (7b).

Unlike singular subjects, plural subjects cannot be null. I assume this is because the plural agreement marker is the same for all persons. It is therefore, not possible to uniquely identify the features of the subject from the agreement marker.

\[(8)\]
\[\begin{align*}
&\text{a. mà-Njikem é kè? npfôt akêndôŋ} \\
&\text{mà N. Agr P-1 eat plantains} \\
&\text{'Njikem and co. ate plantains'} \\
&\text{b. bó é kè? npfôt akêndôŋ} \\
&\text{they Agr P-1 eat plantains} \\
&\text{'they ate plantains'} \\
&\text{c. * [ e ] é kè? npfôt akêndôŋ} \\
&\text{pro Agr P-1 eat plantains} \\
&\text{'they ate plantains'}
\end{align*}\]

\(^4\) See chapter 3 for the analysis of Coordination in Nweh.
The subject noun phrase in (8) must be overt, and cannot be null as the ungrammaticality of (8c) indicates. The ungrammaticality of (8c) can be explained by the fact that the features of the subject noun phrase are not fully recoverable from the agreement marker ʤ-, since all the plural subjects select this same agreement cf. (5b) and (6b).

1.5.4 Tense / Aspect

1.5.4.1 Aspect

There are two morphological markers that can be identified as having an aspectual function - asé and nā. Verbs marked with either of these aspectuals are interpreted as on-going at a particular reference point. Evidently, these two markers appear to be fusing in certain cases into one morpheme viz., 'ase-na'. For instance, they can cooccur as in (9d). As I show in (9) both asé and nā occur preverbally and are preceded by tense; they both select for a verb with a verbal suffix (fv). The phonological shape of the verbal suffix is (C)V. For verbs that end in a vowel, the fv is simply an extension of the last stem vowel. On the other hand, verbs that end in a consonant, generally have the suffix /a/. When the final consonant of the stem is an underlyingly voiced alveolar stop /d/, it changes to a [l] when the final suffix is added e.g. "eat" /npféd/ + /a/ --> [ npfēlā ].

This complementarity between [l] and [d] is accounted for by the rule that we saw above: /d/ --> [ i ] / -- + a (where + denotes a morpHEME boundary).
In terms of semantics, asé and nā have almost the same function in the sense that they are both used to mark on-going (incompletive) events. As a point of departure, I will gloss asé and nā simply as Asp (Aspect).

(9) a. Njikem à ké? npfél akêndòŋ
    N. Agr P-1 Asp eat fv plantains
    'Njikem was eating plantains'

b. Njikem à ké? asé npfél akêndòŋ
    N. Agr P-1 Asp eat fv plantains
    'Njikem was eating plantains'

c. ? Njikem à ké? nā npfél akêndòŋ
    N. Agr P-1 Asp eat fv plantains
    'Njikem was eating plantains'

d. Njikem à ké? asé-nā npfél akêndòŋ
    N. Agr P-1 Asp eat fv plantains
    'Njikem was eating plantains'

The two morphological markers show some cooccurrence restrictions with different tenses. These will be presented following the discussion on tense.

1.5.4.2 Tense

Tense is generally used to refer to the location of the time point of one event by making reference to another event, very often the speech event. Nweh presents a very interesting tense system. It distinguishes three past tenses and three future tenses, in addition to a present tense, thus giving a seven-way tense distinction. Corresponding to the three semantic categories of past and future, there are also three morpho-syntactic markers. The division of tense into three semantic categories is based on the degree of remoteness. Thus for past tense, there is a past tense marker referring specifically to
'yesterday's' events, one referring to 'today's' past events, and another for events prior to yesterday. The future patterns along similar lines. Thus there is a morphological future marker that makes reference to future events within today, one that refers to 'tomorrow future', and another for 'Distant future' (i.e. beyond tomorrow).

1.5.4.2.1 Present

Present events/situations are morphologically unmarked for tense. Instead, events/situations that have a present time reference are construed as on-going, and therefore marked by a non-completive aspect marker, as in (10). The presence of an aspect marker is obligatory for eventive verbs but not required for stative verbs.

(10) a. Njikem à 'se ñduţi abé
N. Agr Asp eat fv fufu
'Njikem is eating fufu'

b. mbāp jūo é 'se ñdēmā
meat this Agr Asp smell fv
lit. 'this meat is smelling'

c. Aka à- bōŋ nkāp
A. Agr own money
'Aka has money' (= Aka is rich.)

Present tense can be said to be relatively simple, and operates essentially as in English where there is a distinction between stative and eventive predicates. This is not the case with Past and Future tenses.

5 In Nweh when a word ends with a vowel and the following word or morpheme begins with a vowel, it is generally the case that some degree of elision takes place across morpheme boundary. Where the elision is "complete", I indicate this by a' e.g. a ase = a 'se.
Within the Past tense, there exist different morphological markers for Immediate past (P-1), i.e. Past within "today"; Near Past (P-2) i.e. Past restricted to "yesterday"; and Distant (remote) Past (P-3) i.e. any time in the Past prior to "yesterday".

P-1 is marked by *kê?*. Examples in (11) are in the P-1 tense:

\[(11) \quad \begin{align*}
&\text{a. } \text{mù ñ- kê? ndú abé} \\
&\quad \text{I Agr P-1 N-eat fufu} \\
&\quad \text{'I ate fufu (today)'} \\
&\text{b. } \text{Njikem à- kê? nzó nyó} \\
&\quad \text{N. Agr P-1 N-kill snake} \\
&\quad \text{'Njikem killed a snake (today)'}
\end{align*}\]

Each of these sentences reports an event which took place prior to the speech time, but within the same day the statement is uttered. Further time specification can be achieved through the use of a temporal adverbial like 'at lunch', 'this morning' as long as the adverbial falls within the temporal frame already established by the tense marker (P-1).

The near past (P-2) is marked as *kê*. The examples in (5) give examples of P-2.

\[(12) \quad \begin{align*}
&\text{a. } \text{Njikem à kê luú abé} \\
&\quad \text{N. Agr P-2 Ø-eat fufu} \\
&\quad \text{'Njikem ate fufu (yesterday)'} \\
&\text{b. } \text{mù ñ kà zóó nyó} \\
&\quad \text{I Agr P-2 Ø-kill snake} \\
&\quad \text{'I killed a snake (yesterday)'}
\end{align*}\]

I should note here that P-1 and P-2 relate strictly to utterance time. They are not relative. For instance P-2 means "yesterday"; It does not mean 'the day before today'. Thus, a verb phrase marked with the tense marker *kê* makes reference to an
event that took place “yesterday”, irrespective of whether the temporal adverbial ajúa ‘yesterday’ is overt or not. Again one can further narrow down the context by specifying with an adverbial like ñitrò ñjúa ‘last night’ (lit., “yesterday night”). Note also that there is variation in the form of the verb depending on the tense marker. Thus, while P-1 selects the N-prefix form of the verb e.g. nduí “eat”, P-2 and P-3 select the Ø-prefix form of the verb cf. luí “eat”.

In a matrix clause the distant past is used to characterize all events which took place prior to yesterday. It is expressed as le. The examples in (13) are in the distant past tense (P-3).

(13) a. Njikem à- lè luí abé
   N, Agr P-3 eat fufu
   ‘Njikem ate fufu (before yesterday)’

b. mù ñ- dè luí abé
   I1Agr P-3 eat fufu
   ‘I ate fufu (before yesterday)’

P-3 is not as ‘restrictive’ as P-1 and P-2. Notice that in (13) no exact reference point in the past is specified. The actual event time could range from as recent as two days ago to as distant as years ago. To specify the exact date, temporal adverbials are used, as in (14).

(14) mù ñ- dè ràá? ànà jùó ñgü? bè? è
   I Agr P-3 cultivate farm this year like-this
   ‘I cultivated this farm last year’ (lit. a year like this)

Where temporal adverbials are used to render a time reference more specific, the tense marker and the adverbial must "agree" i.e., the adverbial must semantically fall within

---

6 The alternant forms l - d are phonologically conditioned by the rule: l --- > d/ [+Nasal] ---. This is a very productive rule in Nweh.
the time frame established by the tense marker. The ungrammaticality of (15) shows that one cannot combine a remote past and a temporal adverbial like ọjúà 'yesterday', since the adverbial does not fall within the semantic frame established by the distant P-3 marker.

(15) * mùù ń- dè rààp  jùù  ànà  ọjúà
   I Agr P-3 cultivate this farm yesterday 'I cultivated this farm yesterday'.

The mismatch between the tense marker and the adverbial in (15) can be corrected by changing one of them and putting in another which is compatible with the time frame.

1.5.4.2.3 Future

The future tense patterns along the same lines as past tense. Therefore we will also subdivide it into three sub categories: immediate (today) future (F-1), near (tomorrow) future (F-2), and distant (remote) future (F-3).

'Immediate future' is marked by (n)ýù. It specifically refers to an event yet to come but which is projected to take place later within the same day that the statement is uttered. It cannot mean that the event is projected to occur beyond the 'speech day'. Examples of sentences in the F-1 tense follow in (16).

(16) a.   mùù ń-  ýù  lùù  abé
   I Agr F-1 eat fufu
   'I will eat fufu (later today)'

b.   Njikem ń-  ýù  zsú  nyó
    N.   Agr F-1 kill snake
    'Njikem will kill a snake (later today)'
The tense marker for 'near future' (F-2) is ìó. Parallel to 'near past', 'near future' refers to an event projected to take place "tomorrow" with no further specification on the exact moment. Even without the temporal adverbial, it can be translated as an event projected to occur "tomorrow" as the gloss in (17) indicates.

(17)

a. mú ñ- dó luí abé
   I Agr F-2 eat fufu
   'I will eat fufu (tomorrow)'

b. juú à- ló luí abé
   he Agr F-2 eat fufu
   'he will eat fufu (tomorrow)'

Parallel to P-1 and P-2, F-1 and F-2 relate strictly to utterance time. They are not relative. F-2 for instance, means "tomorrow"; it does not mean 'the day after today'.

The distant future (F-3) is marked by le? . Examples involving the distant future tense are given in (18).

(18)

a. Njikem à- le? luí abé
   N. Agr F-3 eat fufu
   'Njikem will eat fufu (some time in the future)'

b. mú ñ- dé? luí abé
   I Agr F-3 eat fufu
   'I will eat fufu (some time in the future)'

As we saw in the case above, reference to a specific time point in the future can be specified through the use of adverbials. The adverbial used, must fall within the time frame already established by the tense marker.

---

7 See footnote 6.
8 See footnote 6.
To summarize, there are three morphological past tense markers -kèʔ, kâ, lê, forming a chronological sequence from immediate past to distant past. Similarly, there are three morphological future tense markers -(n)yâ, lô, lêʔ, forming a chronological sequence from immediate future to distant future. We have also seen that present tense is morphologically unmarked and that Nweh requires the use of an aspect marker to indicate present time reference for eventive verbs.

In complex predicates, there are cooccurrence restrictions between the matrix and the embedded tenses. Taking the case of the past tense(s), if P-1 occurs in the matrix clause, then any other tense (P-1, P-2, P-3) can occur in the subordinate clause; however, if P-2 occurs in the matrix clause, only P-2 or P-3 can occur in the embedded clause. We get a more tight restriction with P-3, in that if P-3 occurs in the matrix clause, only P-3 can occur in the embedded clause. Parallel restrictions obtain for future tense with respect to ordering of future events in complex predicates. This makes P-3 appear to be the default past tense marker and F-3 the default future tense marker.

### 1.5.4.3 Tense / Aspect Interaction

The aspect marker nâ can be used for all tenses; asê is restricted to the present and past tenses.

In all forms of the past tense, asê and nâ can occur as examples (19) indicate. They can even cooccur as in (19c).

(19) a. Atem â- kèʔ asê nphéla akèndòŋ
A. Agr P-1 Asp eat fv plantains
‘Atem was eating plantains’
b. ? Atem ą- kê? nā npfēla akêndōŋ
   A. Agr P-1 Asp eat f v plantains
   'Atem was eating plantains'

c. Atem ą- kê? asē-nā npfēla akêndōŋ
   A. Agr P-1 Asp eat f v plantains
   'Atem was eating plantains'

Such substitution does not appear to affect the meaning as the examples in (19) all imply that the action denoted by the verb had some 'internal' duration.

As we have seen above, present tense is morphologically unmarked. Since the morphological aspectual markers that we have seen accompany events that are yet to attain an end point, verbs in the present must take one of the aspectual markers. Although both asē and nā occur freely with present tense, unlike with past tense where we observed that the meaning is invariable, we do get a variation in meaning with the present tense as the examples in (20) indicate.

(20) a. Atem ą- 'sē npfēla akêndōŋ
   A. Agr Asp eat f v plantains
   'Atem is eating plantains'

b. Atem ą- nā npfēla akêndōŋ
   A. Agr Asp eat f v plantains
   'Atem eats plantains' (habitual)

In (20a) where the verb is marked with asē we get the present progressive reading; however, in (20b) where the aspect marker is nā, we get a habitual interpretation.

With future tense, there is an even tighter restriction. Only nā can occur with all the future tenses; asē cannot directly occur with the future as (21b) shows. The aspectual nā occurs with all forms of the future. In the examples in (21), I use only the F-2 ('tomorrow' future) marker to illustrate, but the other future tenses work the same way. (21c) shows that asē cannot follow nā.

23
(21)  
a. Atem à- ló ná pfêla akèndôŋ  
A. Agr F-2 Asp eat f v plantains  
'Atem will be eating plantains (tomorrow)'

b. * Atem à- ló asé pfêla akèndôŋ  
A. Agr F-2 Asp eat f v plantains

c. * Atem à- ló bô ná-asé pfêla akèndôŋ  
A. Agr F-2 Cop Asp eat f v plantains  
'Atem will be eating plantains'

However, (21b) becomes grammatical just in case a copula is added as (22b) indicates.

(22)  
 a. * Atem à- ló bô ná pfêla akèndôŋ  
A. Agr F-2 Cop Asp eat f v plantains

b. Atem à- ló bô asé pfêla akèndôŋ  
A. Agr F-2 Cop Asp eat f v plantains  
'Atem will be eating plantains'

c. Atem à- ló bô asé-ná pfêla akèndôŋ  
A. Agr F-2 Cop Asp eat f v plantains  
'Atem will be eating plantains'

Notice the direct contrast between (21) and (22). (22a) shows that ná cannot immediately be preceded by a copula but asé can as in (22c). This suggests that asé is some kind of "temporal locative". The suggestion is supported by the fact that locatives and asé can occur in the same position cf. (23a) and (23b). Moreover, the temporal locative asé and the locative PP appear to be in complementary distribution, and hence, cannot both be overt, as the ungrammaticality of (23c) suggests.

(23)  
a. Atem a- ló bô á-ndíâ (ná) pfêla akèndôŋ  
A. Agr F-2 Cop at home (Asp) eat f v plantains  
lit., 'Atem will be at home eating plantains'

24

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
b. Atem a- ló bô asé (nâ) pféla akèndôŋ
   A. Agr F-2 Cop Loc (Asp) eat f v plantains
   'Atem will be (temp. loc.) eating plantains'

c. * Atem a- ló bô ándìa asé (nâ) pféla akèndôŋ
   A. Agr F-2 Cop in house Loc. (Asp) eat f v plantains

Nweh allows the use of imperfective aspect with stative verbs as (24) suggests.

(24) Njikem à kë? asé (nâ) nzáá lé nkáp è te abò jú bô
    N. Agr P-1 temp.loc.(Asp) know f v that money Agr Neg bag his Neg
    'Njikem was aware (of the fact) that there is no money in his pocket'

The grammatical overview sketched above is intended to prepare the reader for
the data and discussions presented in subsequent chapters. As a consequence, it is not
only selective, but limited in scope and focuses on the bare essentials that are necessary
for a better assimilation of the data to be presented herein. Some of the issues and data
presented in this introductory overview are subsequently repeated and elaborated upon
in the sections where they are directly relevant.
Chapter Two

THE DETERMINER PHRASE (DP)

2.1 Preliminaries

This chapter deals with the category traditionally referred to as the Noun Phrase (NP). In my discussion of the noun phrase in Nweh, I adopt the DP theory (Abney (1987)). Based on cross-linguistic evidence from a number of languages, showing that a possessive NP can cooccur with a determiner within the same noun phrase, and faced with the question of how to bring gerundive NPs like "Sherr's singing the Blues" into X-bar theory, Abney (1987) proposed that nominals are actually headed by determiners, and that the Noun Phrase (NP) be reanalyzed as a Determiner Phrase (DP). To incorporate the DP into X-bar theory, Abney (ibid.) suggests that the determiner D is a functional head taking an NP as its complement, and whose specifier position can be occupied by a possessor. This approach has been generally adopted and expanded on in the literature with some modification, particularly with respect to the number of functional categories that can intervene between the head noun and its maximal projection, DP or what Grimshaw (1991) refers to as the extended projection (See amongst others Szabolcsi (1987), Ritter (1990), Carstens (1991), Valois (1991)).

Some of these studies have argued for certain structural parallels between the noun phrase (DP) and the clause (CP), (see Szabolcsi (1987), Valois (1991) and
references therein). Most of these earlier studies that have argued for a cross
categorial symmetry between the clause and the noun phrase have focused on
structural similarities but not so much on parallelisms with respect to syntactic
processes applying within DP or CP. It is one of my goals here to push the similarities
between DP and CP beyond a structural similarity to also include derivational
(movement) symmetries. By so doing I will provide a unified account of certain word
order asymmetries that exist within the DP and the clause in Nweh. In order to
achieve this goal, I start by outlining the noun class system of Nweh (section 2.3). I
then give a detailed description and analysis of various constituents of the noun
phrase (DP). Based on the description, I propose a reductionist account of how the
complex agreements and the word order variations within DP can be reasonably
accounted for within the Principles and Parameters framework. In order to make this
discussion a contribution to the collectivity, rather than just a neatly organized set of
data, I constantly intersperse the descriptive data with theoretical speculations to
show how the data can be explained and/or related to what other linguists have
proposed for similar constructions in other languages.

2.2 Nweh Nominals

Nweh is a noun class language. This implies that the basis of the nominal system of
Nweh is the class system that is typical of Bantu languages. Therefore, Nweh like
other Bantu languages, subcategorizes nouns into a set of discrete classes based on the
agreement patterns they govern. Following this pattern, nominals in Nweh fall
roughly into eight classes, when noun class membership is established on the basis of
the genitive pronominal agreement. Thus, on the one hand αfɔŋ "cow" and kūŋa "pig" and on the other hand, αfɔŋ "cow" and bɔfɔŋ "cows"1 are assigned to different noun classes on the basis of the different agreement patterns that they each govern as illustrated in (1).2

(1) a. kūŋa ɡɛ
    1 pig 1 my    'my pig'

b. αfɔŋ ɡɛ
    9 cow 9 my    'my cow'

c. bɔfɔŋ me
    6 cows 6 my    'my cows'

2.3 Nweh Noun Classes

The classification of Nweh nouns into noun classes that is established here is based solely on the set of genitive pronominal agreement patterns that a particular noun governs. Based on this criteria, eight noun classes (five singular and three plural) have been established for Nweh (see table 2.1). Of the three plural classes, noun class 10 has almost completely disappeared, thus leaving just two active plural classes. Following a convention first introduced by Bleek around 1851 and practiced by Meinhof (1899) (See Kadima (1969), Guthrie (1970), Welmers (1973)), I refer to each noun class by a number. A table of Noun Classes follows.

1 αfɔŋ "cow" and bɔfɔŋ "cows" also involve a number (sing./pl.) distinction, that is predictable from class (class being the "superordinate" category). However, I will show that Nweh has developed a system where number in certain cases plays a syntactic role independent of class. On the basis of this I will argue for a NumP (Number Phrase) projection in Nweh.

2 The numbers in the gloss refer to the class number of the head noun (see table 2.1). The numbers are used here to indicate agreement between the head noun and its modifier(s).
<table>
<thead>
<tr>
<th>Class</th>
<th>Examples</th>
<th>Gloss</th>
<th>Poss. Agreement</th>
<th>Pronoun</th>
</tr>
</thead>
</table>
| 1     | ȵ-gỹẽ  
 ə-suχ  
a-ɓọ  
ø-sẹ̄n | 'guest/stranger'  
'friend'  
'nursing mother' 
'bird' | Sing.  
Dual  
Plural | 1  
gẽ  
bọgọ  
ũbụ́u | incl.  
excl.  
ũwùh | 2  
gọ  
ụbụ́u | excl.  
wụ́u |
| 2     | ba-šụ́ń  
ma-ɓọ  
e-kpwé | 'friends'  
'nursing mothers'  
'bones' | Sing.  
Dual  
Plural | 1  
bẹ́  
bọgọ  
ũbụ́u | incl.  
excl.  
ũbụ́u | 2  
bọ́  
bụ́u | excl.  
bụ́u | 3  
|i| gaáb |
| 3     | ø-nkẹ́?  
ə-shá | 'lamp'  
'face' | Sing.  
Dual  
Plural | 1  
gẹ́  
bọgọ  
ũbụ́u | incl.  
excl.  
ũwùh | 2  
gọ́  
gwụ́u | excl.  
gwụ́u | 3  
| i | gaáb |
| 5     | la-bu?  
la-páp  
lə-len | 'bundle/parcel'  
'wing'  
'name' | Sing.  
Dual  
Plural | 1  
lẹ́  
lọgọ  
lábụ́u | incl.  
excl.  
lụ́u | 2  
ló  
lụ́u | excl.  
lụ́u | 3  
rọ́  
láb |
| 6     | ba-len  
m-bu?  
ba-nkẹ́?  
m-ɓọ́  
bã-mbáé | 'names'  
'bundles'  
'lamps'  
'hands'  
'goats' | Sing.  
Dual  
Plural | 1  
mé̄  
mọgọ́  
mámúu | incl.  
excl.  
mụ́u | 2  
mọ́  
mụ́u | excl.  
mụ́u | 3  
mĩ́  
máá́b |
| 7     | a-kpwé  
a-kọ́?  
a-sé̄m | 'bone'  
'hip'  
'Palm-oil mill' | Sing.  
Dual  
Plural | 1  
jẹ́  
jọgọ́  
jájụ́u | incl.  
excl.  
jú́h | 2  
jó  
jú́u | excl.  
jú́u | 3  
záá  
jáá́b |
| 9     | ø-fọ́ŋ  
ø-mù́ń  
ø-ŋgẹ́p  
ø-nkpọ́bé | 'cow'  
'goat'  
'fowl'  
'finger/toe nail' | Sing.  
Dual  
Plural | 1  
jẹ́  
jọgọ́  
jájụ́u | incl.  
excl.  
jú́h | 2  
jó  
jú́u | excl.  
jú́u | 3  
záá  
jáá́b |
| 10    | é-mnọ́  
é-ngẹ́p  
é-nkpọ́bé | 'goats'  
'fowls'  
'finger/toe nails' | Sing.  
Dual  
Plural | 1  
jẹ́  
jọgọ́  
jájụ́u | incl.  
excl.  
jú́úu | 2  
jó  
jú́u | excl.  
jú́u | 3  
záá  
jáá́b |
2.4 Problems with Contemporary Noun Classification

Nowadays it is becoming increasingly difficult to directly correlate contemporary number assignment (especially in Grassfield Bantu languages) with that of cognate classes in Proto-Bantu. More so, because of changes that have taken place in the various noun classes, due mainly to phonological reduction processes. This is particularly true of the Grassfield Bantu languages. In most of these languages, there has been a significant reduction in the number of classes. For example, in one Grassfield Bantu language, Nchufie (also referred to as Banfanji) there are as few as four noun classes (Nkemnji (1994)), thus making it almost impossible to assign any class numbering in such a language, that would correlate with that of Proto Bantu. It is this situation that has forced some linguists to seek alternate ways of labeling the classes such as using this morphological form of agreement marker to designate the noun the classes cf. Nchufie $y⁰$ -class, $nǐŋ⁰$ -class, $w⁰$ -class and $pəŋ⁰$ -class. Also, nouns that are survival of lost classes often retain their prefixes in the classes into which they are adopted, thus making the noun prefixes a not so reliable indicator of class. Since the initial class numbering was based to a large extent on nominal concord prefixes cf. Bleek (1851) (cited in Kadima (1969)), it is also difficult to establish a direct numbering correlation for Grassfield Bantu languages, where noun classes are established essentially on the basis of the genitive agreements ("possessive concord"), which is the one area where full noun class concord can still be observed. Nweh for example, has noun class prefixes that do not correspond in any regular fashion to proto Bantu prefixes. This situation is different in the Narrow Bantu
languages where noun class membership can still be determined from nominal prefixes.

An attempt has been made to correlate the numbering with those of cognate classes in Proto Bantu, through the comparative reconstruction between Grassfield Bantu and (Narrow) Bantu established by Hyman (1972). While the numbering in most cases can be said to directly correlate with some of Proto Bantu, there are notable gaps in my numbering. There is the absence of class 4 and class 8. In Nweh, class 2 and class 8 have fused into just one class. I have opted to designate this class as class 2 rather than say class 8 because most of the nouns in this class have class 1 singulars, thus making it easier to pair class 1 and class 2 as forming some kind of gender cf. class 1 and class 2 generally pair up as the "human" gender in most, if not all Bantu languages. Other classes that have merged are classes 4 and 6. The choice to label this class as class 6 instead of say class 4 is guided by the fact that nouns in this class have both class 3 and class 5 singulars.

The practice in Bantu studies has been to label morphologically "deviant" nouns (i.e. nouns having the same concord but differing in "noun class" prefix) as sub classes. Because of noun class loss/merger that has resulted in significant "noun movement" across classes, this convention is generally ignored here. We observe that noun class 5 and to some extent noun class 7 are the only noun classes in Nweh whose members can be determined based on their nominal prefixes. The other classes either have nouns with varied prefixes or nouns in other classes that share the same prefixes.

The different noun class agreements are distinguished either segmentally, tonally, or by a combination of both strategies. There is a striking regularity that can be observed in the morphological make-up of these agreement pronouns. Focusing
just on the first person singular pronouns. It can be observed that while the initial segment and the tone varies, viz., \( g' \), \( b' \), \( g' + \), \( l' \), \( m' \), \( j' \), \( j' \), the second segment more or less stays constant, viz., \( e \). I will use this fact to motivate a claim that genitive agreement pronouns are bimorphemic—comprising a class marker and a pronominal element.

In the past, there has been some speculation as to whether there was some (direct) semantic correlation between the different classes. While it is now clear that such a correlation can only be arbitrary, since there are nouns of various semantic types dispersed across the different noun classes, there are some classes that display some loose correlation with semantic features. For example, gender 1/2 in Nweh (and across Bantu) comprises predominantly "[+human] nouns"; Noun class 7 comprises a large number of "body parts"; Gender 9/10 is predominantly an "animal class"; and most plural mass nouns are in class 6.

### 2.5 DPs in Nweh

My definition of what constitutes a DP is based on the (internal) structure of the constituent under consideration, and on its (external) distribution. By external distribution, we will consider a constituent that can occur in a DP position such as the subject position, the direct object position or as the object of a preposition. In terms of the internal structure, the constituent has to be headed by a noun. In this later category I will like to consider two sub categories: the modified noun phrase and the coordinated noun phrase. I look at the modified noun phrase in this chapter. The
analysis of the coordinated noun phrase and coordination will be presented in chapter 3.

The DP in Nweh can be made up of just a head Noun, or a head N and one or more satellites of the noun. The noun satellite can be another DP, a possessive pronoun, a demonstrative pronoun, a numeral or quantifier, a relative clause, an adjective ³ or even a combination of several or all of these qualifiers. A discussion on each of the possible combinations follows below.

2.5.1 Noun - DP

The head noun can precede another DP, and this DP can be a possessor, theme, or agent. This is the case with genitive DPs, (N₁ of DP₂), or what is traditionally referred to as the "Associative Construction" in the literature on Bantu languages. The genitive construction can express a relation of possession as in (2). The data in (2) also shows that inalienable possession is expressed in the same way as alienable possession cf. (2a) vs. (2c).

(2) a. ngēp Zisuh fowl Z. 'Zisuh's fowl' (Poss.)
   b. akēb aZisuh box AM Z. 'Zisuh's box' (Poss.)
   c. akpù 'Njikèm a
      leg AM N. 'Njikem's leg' (Poss.)

³ Adjectives in Nweh exhibit very interesting (agreement) properties. I will not discuss adjectives here. A complete discussion on Adjectives is taken up in Chapter 4.

⁴ The apostrophe (') denotes a deleted vowel that is as a result of a phonological process that deletes a contiguous vowel across a morpheme boundary.
d. foto Njikem
  ‘Njikem's picture’ (Poss. / theme)

e. * Njikem foto

The data in (2), with the exception of (2b) and (2c), suggest that genitive noun phrases generally do not show an overt (segmental) associative morpheme (AM) between the head noun and its modifier. Rather, most genitive DPs are marked tonally (see section 2.5.1.1). I will show that the presence or absence of an associative marker in genitive DPs like (2) is dependent on the noun class to which the possessed (or head) noun belongs. The ungrammaticality of (2e) suggests that satellites of the noun must follow the head noun (N₀), rather than precede it. Apart from the relation of possession, the associative construction is also used to express other sorts of relations e.g. material make-up, content, purpose cf. (3).

(3)

a. ndia acê?
  house soil
  'mud (brick) house'

b. lakên ntsâ
  pot water
  'water pot' (a pot of for water)

2.5.1.1 The Marking of the Genitive DP

Tone plays a significant role in the marking of the genitive construction. All noun classes involve a tonal agreement marking: In addition to the tonal agreement, noun class 7 also involves a segmental agreement marker, as already noted above in (2b). There are several factors to consider with respect to the role of tone in the genitive
construction. Apart from the lexical tones of the nouns in a genitive relation, it is also important to know the noun class of the head noun (N₁), because the genitive (or associative) marker is a tonal morpheme which varies between Low and High tone, depending on the noun class of the head noun. Class 1 and class 9 govern a low tone genitive marker, while all other classes govern a high tone genitive marker. This is typical of Grassfield Bantu languages. Thus, going back to the possessive agreement pronouns (table 2.1), one observes that class 1 and class 9 also have low tone genitive pronouns while other classes have a high tone genitive pronoun. In Nweh, nominal prefixes generally do not have an underlying (lexical) tone of their own. These prefixes are assigned low tone by default. In the genitive construction, the "associative tone" is often realized on the prefix of DP₂; in other words the head noun determines the agreement on the genitive DP as the examples in (4) indicate.

<table>
<thead>
<tr>
<th>N₁</th>
<th>AM</th>
<th>DP₂</th>
<th>&quot;Output&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>əfōŋ</td>
<td>ɓafũa</td>
<td>əfōŋ ɓafũa</td>
</tr>
<tr>
<td></td>
<td>`</td>
<td>+ 9L + 2 chiefs</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>ɓafōŋ</td>
<td>ɓafũa</td>
<td>ɓafōŋ ɓafũa</td>
</tr>
<tr>
<td></td>
<td>`</td>
<td>+ 6H + 2 chiefs</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>ekpwé</td>
<td>ɓafōŋ</td>
<td>ekpwé ɓafōŋ</td>
</tr>
<tr>
<td></td>
<td>`</td>
<td>+ 2H + 6 cows</td>
<td></td>
</tr>
</tbody>
</table>

However, if DP₂ has a zero prefix, then the situation gets a little bit complicated.

Below, I consider some general possibilities.

One possibility is that the associative tone does not surface at all, because there is no segment for it to link to. This appears to hold true especially in the cases where DP₂ begins with a low tone.
\begin{tabular}{llll}
\(N_1\) & \(AM\) & \(DP_2\) & "Output" \\
\hline
\(a\) & afàŋ & fùà & afàŋ fùà \\
9 cow & 9L & 1 chief & 'the cow of the chief' \\
\(b\) & ànà & á fùà & ànàa fùà \\
7 farm & 7H & 1 chief & 'the farm of the chief' \\
\(c\) & bafàŋ & fùà & bafàŋ fùà \\
6 cows & 6H & 1 chief & 'the cows of the chief' \\
\(d\) & labèm & afàŋ & labèm 'fàŋ \\
5 belly & 5H & 9 cows & 'the belly of the cow' \\
\end{tabular}

Examples like (5a) might suggest a rule of tone coalescence, since the associative tone selected by the head noun afàŋ "cow" (class 9) and the adjacent tones are identical—all are low tones. However, (5c) and (5d) suggest otherwise. The associative tone governed by the head noun in these cases is high, since the head noun in (5c) is class 6 and class 5 in (5d).

One other general tone phenomenon observed when DP2 has a zero prefix, is that when DP2 begins with a high tone, the "floating" associative tone (which can either be high or low) is going to cause downstep on the following high tone on DP2. Downstep on DP2 is more evident after a high associative marker than it is after a low associative marker.

\begin{tabular}{llll}
\(N_1\) & \(AM\) & \(DP_2\) & "Output" \\
\hline
\(a\) & lapàp & sèŋ & lapàp sèŋ \\
5 wing & 5H & 1 bird & 'the wing of the bird' \\
\(b\) & ntfòŋ & nbùi & ntfòŋ nbùi \\
1 thief & 1L & 9 dog & 'one who steals dogs' \\
\(c\) & akpù & á nbùi & akpù ' nbùi \\
7 leg & 7H & 9 dog & 'the leg of the dog' \\
\end{tabular}
If there is an overt genitive marker like in the case of class 7 nouns, that trigger an "associative a" then there is no surface tone perturbation either on N₁ or on DP₂.

\[
\begin{array}{llll}
N₁ & AM & DP₂ & "Output"
\end{array}
\]

\[
\begin{array}{lllll}
(7) & a. & \text{asém} & á & \text{fùà} & \rightarrow & \text{asém} & \vec{a} & \text{fùà} \\
& & 7\text{palm-oil mill} & 7\text{H} & 1\text{ chief} & & \text{'the oil mill of the chief' } \\
& b. & \text{asáb} & á & \text{nùà} & \rightarrow & \text{asáb} & \vec{a} & \text{nùà} \\
& & 7\text{chewing-stick} & 7\text{H} & 1\text{ child} & & \text{'the chewing-stick of the child' } \\
& c. & \text{akèndɔŋ} & á & \text{bɔŋyɔ} & \rightarrow & \text{akèndɔŋ} & \vec{a} & \text{bɔŋyɔ} \\
& & 7\text{ plantains} & 7\text{H} & 2\text{ guests} & & \text{'the plantains of the guests' } \\
& d. & \text{akɔŋ} & á & \text{ʃɔŋ} & \rightarrow & \text{akɔŋ} & \vec{a} & \text{ʃɔŋ} \\
& & 7\text{ hip} & 7\text{H} & 9\text{ cow} & & \text{'the hip of the cow' } \\
\end{array}
\]

I treat the "a"-prefix" on DP₂ as an agreement marker on the genitive DP that is selected by noun class 7, in addition to tone (thanks to Russ Schuh (pc) for initially bringing to my attention the fact that this a-prefix is most likely a reflex of the Bantu "associative a"). I assume that nouns of other noun classes select a possessive agreement marker which is a floating tone. The above facts are stated as a descriptive generalization sketched in (8).

\[
(8) \quad \text{The agreement on the genitive DP is determined by the "class features" of the head noun.}
\]

The generalization in (8) suggests that class is a morphosyntactic entity that plays an important role in the syntax. This fact will become increasingly evident as we cruise along.
2.5.1.2 Internal Structure of the N₁-DP₂ Construction

I will argue that the "noun of noun" or N₁-DP₂ construction has a structure like (9).

(9) \[ N₁ \ [ AM \ [ DP₂ \ldots \]

Following the articulated DP structure (Abney (1987) and others) (9) can be derived from a structure like (10).

(10)\footnote{The generalization stated in (8) implies that \textit{class} is a category of syntactic relevance; This justifies having a ClassP projection. I have not yet justified the projection of other functional categories assumed here for Nweh, such as NumP, G/OP (Genitive Operator Phrase). I provide language internal justification for these functional categories a little later in the chapter.}

\begin{center}
\begin{tikzpicture}
\node {DP}
child {node {Spec} edge from parent[draw=none]}
child {node {D'}}
child {node {G/OP}
child {node {Spec}}
child {node {G/O'}}
child {node {G/O}}
child {node {NumP}
child {node {agr}}
child {node {Spec}}
child {node {Num'}}
child {node {Num}}
child {node {ClassP}}
child {node {Spec}}
child {node {Class'}}
child {node {Class}}
child {node {NP}}
child {node {N}}
child {node {int. arg.}}}
\end{tikzpicture}
\end{center}

The structure in (10) raises two immediate questions: Where does the DP originate and where does it end up? I will assume as a point of departure that the external argument (possessive DP / agent DP) is in Spec, NumP. It is not directly relevant here whether such a DP is based generated in this position or whether it gets there by

The important issue to note here is that the structure in (10), without any further derivation, will give us the wrong surface word order (DP$_2$ - N$_1$). Both the possessor and the external argument (agent) are projected higher than the head noun, and therefore asymmetrically c-command the head noun, one would expect that both the possessor and the agent should precede the head noun (i.e. the order should be DP$_2$ - N$_1$) if asymmetric c-command directly translates to linear precedence. However, this is not the case. The surface linear order that we get is N$_1$ - DP$_2$.

There are two ways in which one can derive this surface (N$_1$ - DP$_2$) order. One can either say that there is head movement of the noun, N$_1$, to a higher head position or that there is some kind of XP movement. The facts (some of which I discuss below) suggest that the head movement analysis is unavailable, so I will not adopt the head movement approach. First, the head noun is very low in the tree, therefore, raising the question as to how a head noun can raise above the many intervening (functional) projections. Secondly, there is evidence that the projection that moves is definitely bigger than just a head noun, as it can contain nominal satellites like adjectives. In order to account for the fact that DP$_2$ follows the head noun in Nweh, I will argue for an analysis where a sub projection of the head noun, ClassP, raises to Spec, G/OP 6, in order to "check" the genitive features of that head G/O$^0$. Recall, we saw above that depending on the noun class to which N$_1$ belongs the genitive marker can either be a low or high floating tone, or the associative $\dot{a}$ of class 7. I assume that such an agreement is projected on the genitive operator head, G/O$^0$. This implies that

---

6 I use G/OP (Genitive Operator Phrase) to designate a projection which nouns use as a "base of operation" to trigger the various class agreements.
the content of G/O\textsuperscript{0} crucially depends on noun class. The raising of ClassP to Spec. G/OP checks the features of G/O\textsuperscript{0}. This raising has further consequences in that it triggers pied piping of the complement of Class\textsuperscript{0} viz., NP, thus resulting in the surface order N\textsubscript{1} - DP\textsubscript{2}. The derivation is sketched in (11).

(11)

\[ \text{Spec} \quad \text{D'} \quad \text{Spec} \quad \text{G/O'} \quad \text{Spec} \quad \text{NumP} \quad \text{Spec} \quad \text{Num'} \quad \text{Spec} \quad \text{ClassP} \quad \text{Spec} \quad \text{Class'} \quad \text{Class} \quad \text{NP} \quad \text{N}\text{ikem} \quad \text{akēb} \]

\[ \Rightarrow \text{akēb ā Njikem} \quad 7\text{box 7poss. Njikem} \quad "Njikem's box" \quad (\text{Poss.}) \]

2.5.2 Noun - Possessive Pronoun

There is one possessive pronoun each corresponding to first, second and third person singular, same for second and third person plural. For the first person plural there are three pronominal forms: a dual (two of us), an exclusive (us, but not including you)
and an inclusive (us, all) 7. The following Nweh possessive pronouns refer to noun class 9 (singular) and noun class 6 (plural). (See Table 2.1: [Nweh Noun classes] above for the complete paradigm).

<table>
<thead>
<tr>
<th></th>
<th>Singular (class 9)</th>
<th>Plural (class 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>jè</td>
<td>mé</td>
</tr>
<tr>
<td>2</td>
<td>jò</td>
<td>mó</td>
</tr>
<tr>
<td>3</td>
<td>zàá</td>
<td>mìí</td>
</tr>
<tr>
<td>1 (dual)</td>
<td>jògò</td>
<td>mògò</td>
</tr>
<tr>
<td>(incl.)</td>
<td>jàjuùś</td>
<td>mòmuùś</td>
</tr>
<tr>
<td>(excl.)</td>
<td>jùh</td>
<td>mùh</td>
</tr>
<tr>
<td>2</td>
<td>jùùs</td>
<td>mùs</td>
</tr>
<tr>
<td>3</td>
<td>jàb</td>
<td>màáb</td>
</tr>
</tbody>
</table>

The possessive pronoun generally occurs in post nominal position and agrees in class with the head noun cf. (12).

(12) a. sëŋ gè
     1bird 1my  'my bird'

b. òfɔŋ jè
     9cow 9my  'my cow'

c. òfɔŋ mé
     6cows 6my  'my cows'

7 These are complex pronominal forms with interesting syntactic properties. For a more elaborate discussion on pronouns see chapter 3.
However, it is possible to get the order where the possessive pronoun precedes the head noun, as in (13); Where this is the case, the (possessive) pronoun is preceded by an agreement marker and receives a contrastive focus reading.

(13) a. á- gè sèn
  1Agr. 1my 1bird  'my (contr.) bird'

  b. è- jè afèn
  9Agr. 9my 9cow  'my (contr.) cow'

  c. é- mé bafoñ
  6Agr. 6my 6cows  'my (contr.) cows'

We notice that when the possessive pronoun precedes the noun, it is prefixed with a vowel. The vowel prefix agrees with the head noun; In fact, it is identical to the pronominal agreement form that is selected by the third person subject NP, i.e. AGRs. Compare the subject agreements in (13) with those in (14).

(14) a. sèn á kè? npfèt nzò
  1bird 1Agr P-1 eat palmnuts
  'a/the bird ate palmnuts'

  b. afèn è kè? npfèt nzò
  9cow 9Agr P-1 eat palmnuts
  'a/the cow ate palmnuts'

  c. bafoñ è kè? npfèt nzò
  6cows 6Agr P-1 eat palmnuts
  'a/the cows ate palmnuts'

Given the 'limited' nature of this type of agreement that we get in (13), it is not completely obvious how the agreement should be accounted for. It is plausible to assume that it is AGRs as well. Since demonstratives exhibit this same agreement pattern, I will not sketch a derivation here, but wait until section 2.8.3 to give a unified derivational account. To jump ahead, I will analyze the construction as

42
involving a focus projection above G/OP, since the genitive pronouns in such constructions get a contrastive focus reading. The "contrastive agreement" will be derived by XP movement to Spec, G/OP, followed by head movement of G/O₀ to Foc₀.

2.5.3 Asymmetry between Lexical and Pronominal Genitives

There are interesting asymmetries between lexical and pronominal genitives with respect to thematic roles. I do not have a formal account of the phenomenon but the brief exposition below serves to illustrate some of the properties.

Genitive NPs can be of a variety of thematic types: the most common type being the possessor relationship.

(15) a. ndìa fìa
    house   chief   'the chief's house' (Poss.)

b. ndìa àché?
    house soil   'mud (-brick) house' (Mod.)

c. fótò Njikem
    picture N.   'Njikem's picture' (Theme/Poss./Agent)

The internal and external arguments of (process) nominals appear to vary more with respect to linear order, when these arguments are realized as lexical DPs, as (16) illustrates. In (16) Njikem can either be the theme or possessor/agent as the readings indicate.

(16) a. [ fótò [ ndìa Njikem ]]
    picture house N.
    A picture of Njikem's house [Njikem =theme]
When one of the genitive arguments is pronominalized the same freedom is not observed. Pronominalizing one of the arguments results in an unambiguous interpretation because of the overt agreement between the head noun and the genitive pronoun cf. (17); but it is interesting that pronominalization of the embedded possessors yields ungrammatical results cf. (17b).

(17) a. fötò ndia gĩ
   I picture 9house 1his
   'his picture of a house' / *a picture of his house

   b. *? fötò ndia zaá
      I picture 7house 7his
      'a picture of his house' / *his picture of a house

Equally interesting, is the fact that the pronoun must correspond to the "right-most" DP (17a), (18b) and that the "inner" DP cannot be pronominalized (18c).

(18) a. fötò Zisuh Njikem
      picture Z. N.
      'Njikem's picture of Zisuh' [Njikem =Poss.]

   b. fötò Zisuh gĩ
      picture Z. his
      'his picture of Zisuh'

   c. * fötò gĩ Njikem
      picture his N.

The analysis I have proposed can straightforwardly be extended to account for why the "freedom" observed in (16) disappears when either one of these arguments is pronominalized. Pronouns, unlike lexical DPs, incorporate. Observe the contrast between the readings in (16) and those that obtain in (17) where one of the arguments
is a pronominal. These facts show that lexical DPs modifiers show limited agreement with the head noun, whereas pronominal DPs modifiers show full agreement with the head noun. The asymmetry in behavior between lexical and pronominal DPs with respect to agreement, appears to be true in many languages cf. English pronouns and other cases of DP-Pronoun contrast noted in Koopman (1993a).

2.5.4 Noun - Demonstrative

Nweh has three dimensional demonstratives distinguished in terms of proximity. Like the possessives the demonstratives all agree in class and number with the head noun.

Table 2.3: [Demonstrative Pronouns]

<table>
<thead>
<tr>
<th>Noun Classes ---&gt;</th>
<th>1/3</th>
<th>2</th>
<th>5</th>
<th>6</th>
<th>7/9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>this / these (near speaker)</td>
<td>ṭwùč</td>
<td>bũč</td>
<td>ḥuč</td>
<td>mʊč</td>
<td>juč</td>
</tr>
<tr>
<td>that / those (near listener)</td>
<td>ṭwʊč</td>
<td>bũč</td>
<td>ḥuč</td>
<td>mʊč</td>
<td>juč</td>
</tr>
<tr>
<td>that / those (over there)</td>
<td>ṭi</td>
<td>bĩ</td>
<td>rā</td>
<td>mĩ</td>
<td>zā</td>
</tr>
</tbody>
</table>

The demonstratives, like the possessive pronouns, generally follow the (head) noun. However, there are cases where they do occur in prenominal position. When they occur preominally, they bear an agreement marker identical to that described above for the prenominal possessive pronouns. cf. (19) versus (20).
(19)  

\[ \begin{align*}  
\text{a. } & \text{afən jùo} & \text{9cow \ this} & '\text{this cow}' \\
\text{b. } & \text{bafən mùo} & \text{6cows \ 6these} & '\text{these cows}' \\
\text{c. } & \text{bafən mî} & \text{6cows \ 6those} & '\text{those cows}' \ (\text{over \ there}) \\
\text{d. } & \text{sèn \ gWùo} & \text{1bird \ 1this} & '\text{this bird}' 
\end{align*} \]

(20)  

\[ \begin{align*}  
\text{a. } & \text{è- jùo \ afən} & \text{Agr \ this \ cow} & '\text{this cow}' \ (\text{contrastive \ reading}) \\
\text{b. } & \text{è- mùu \ bafən} & \text{Agr \ these \ cows} & '\text{these cows}' \ (\text{contrastive \ reading}) \\
\text{c. } & \text{è- mî \ bafən} & \text{Agr \ those \ cows} & '\text{those cows}' \ (\text{contrastive \ reading}) \\
\text{d. } & \text{à- \ gWùo \ sèn} & \text{Agr \ this \ bird} & '\text{this bird}' \ (\text{contrastive \ reading}) 
\end{align*} \]

Why is it that the demonstrative pronoun bears a vowel initial agreement marker only when it is in prenominal position? I will provide the same answer I propose for the possessive pronouns; That is, to say that the "contrastive agreement" is derived by XP movement to Spec, G/OP, followed by head movement of G/O° to Foc°. Other possible alternatives will also be discussed.

2.5.5 Noun - Quantifier

Aside from numerals, there are very few quantifiers that can occur as nominal modifiers. However, I choose to discuss quantifiers and numerals separately because numerals, unlike quantifiers show some interesting agreement asymmetries.
with respect to noun class. The most frequently used quantifier is \textit{bačem} 'all'. To a limited extent \textit{bəzəə} 'plenty, many' occurs with a few nouns. It appears to be difficult to get an indefinite (non specific) reading with these quantifiers. Quantifiers generally occur in post nominal position.

\begin{tabular}{lll}
(21) & a. & \textit{éwuəŋkəə} \textit{bačem} \\
& & children all \\
& b. & * \textit{bačem} (é)\textit{wuəŋkəə} \\
& & all children \\
& c. & \textit{bəndia} \textit{bačem} \\
& & houses all \\
& d. & * \textit{bačem} \textit{bəndia} \\
& & all houses \\
& e. & \textit{ndia nɛɛm} \\
& & house all \\
& f. & \textit{nyɛt nɛɛm} \\
& & body all \\
\end{tabular}

\begin{tabular}{lll}
(22) & a. & \textit{mbó bəzəə} \\
& & hands many \\
& b. & * \textit{bəzəə mbó} \\
& & many hands \\
& c. & \textit{bətů bəzəə} \\
& & heads many \\
& d. & * \textit{bəzəə bətů} \\
& & many heads \\
\end{tabular}

As the data in (21) and (22) illustrates, quantifiers can only occur in post nominal position. Quantifiers generally show singular/plural (number) agreement and only limited class agreement. When a quantifier like \textit{all} is applied to mass/collective nouns it means "the whole" and has an \textit{n} prefix. cf. (21e) and (21f). The patterns
displayed here should tell us something about the base position of quantifiers (as well as other modifiers) with respect to the noun. Nweh is rigidly head-initial in its constituent order, but we see that certain heads like quantifiers (and as we will show below, demonstratives) can be in final position within their phrasal projections. How do we explain such variation? To give a hint here, I will argue that the noun phrase (NP complement of D) or one of the (phrasal) projections of N0, (ClassP, for example) raises to a higher position, thus leaving the Q or D in final position. This approach is going to derive the various agreement as well as the alternant word orders that we get within the DP.

2.5.6 Noun - Numeral

There are cardinal numbers like mòrfi ‘one’, bòbìa ‘two’, bòtì ‘three’, lakwá ‘four’, bòtè ‘five’, nòlì ‘six’, sàmbìa ‘seven’, lòkhò ‘eight’, lòbì ‘nine’ lògém ‘ten’ ... Nweh has a ten-base counting system. Notice that some of these numerals begin with what appears to be a reflex of some noun class prefixes cf. la (class 5) and bò (class 2/6). With the exception of mòrfi ‘one’ that is singular and occurs with singular nouns as in (23), the rest are plural and occur with plural nouns. As we observe, the noun-numeral construction forms an "associative construction" cf. (23c) where there is overt segmental agreement.

(23) a. kúyà mòrfi
    pig   one    'one pig'

b. ndìa mòrfi
    house one    'one house'

48
Numerals that have the \textit{ba}- prefix show some kind of limited (phonological) agreement with the noun class of the head noun. There are three such numerals: \textit{bobìa} 'two', \textit{batìt} 'three', \textit{batèè} 'five'. Recall plural nouns that have the \textit{ba}- prefix fall basically into two noun classes: class 2 and class 6. While agreeing numerals that modify class 2 nouns have the prefix \textit{ba}-, cf. (24a), agreeing numerals that modify class 6 (and all other plural classes) select \textit{n}-, cf. (25a). Notice the contrast between (24) and (25).

(24) a. \quad \textit{bakùyà bobìa} \begin{tabular}{l} pigs two \end{tabular} \textit{two pigs}'

\hspace{1cm} b. \quad * \textit{bakùyà mbìa} \begin{tabular}{l} pigs two \end{tabular} \textit{two pigs}'

(25) a. \quad \textit{bandìa mbìa} \begin{tabular}{l} houses two \end{tabular} \textit{two houses}'

\hspace{1cm} b. \quad * \textit{bandìa bòbìa} \begin{tabular}{l} houses two \end{tabular} \textit{two houses}'

Numerals with the appropriate prefixes can be used "pronominally". For example if one asked, 'how many eggs are there?', the answer can be \textit{ê mbìa} 'two'. Nouns in themselves govern third person singular subject agreement as the following sentences indicate.

(26) a. \quad \textit{bobìa à fàñ nòlía mòfìi} \begin{tabular}{l} two Agr big pass one \end{tabular} \textit{two is bigger than one}'

\hspace{1cm} b. \quad \textit{mòfìi à tè fàñ nòlía bòbìa bò} \begin{tabular}{l} one Agr Neg. big pass two Neg. \end{tabular} \textit{one is not bigger than two'}
2.5.7 Noun - Relative Qualifier

Here, I examine nouns that are modified by a clause that is headed by some kind of relative element. As I show in (27), the relative clause follows the head noun and the relative marker agrees with the noun class of the head noun.

(27) a. ndia zã å Atem à lè jùọ
   house 9RM A. Agr P-3 buy
   'the house which Atem bought.'

b. bandìa m1 Atem à lè jùọ
   houses 6RM A. Agr P-3 buy
   'the houses which Atem bought.'

c. kùŋà g1 Atem à lè jùọ
   1pig 1RM A. Agr P-3 buy
   'the pig which Atem bought.'

d. bökùŋà b1 Atem à lè jùọ
   2 pigs 2RM A. Agr P-3 buy
   'the pigs which Atem bought.'

This suggests this relative element must be analyzed as a head. The relative marker that agrees in noun class is composed of a morpheme that is identical to the "over-there" demonstrative pronoun (see Table 2.3:[Demonstrative Pronouns], section 2.5.4) and a vowel that is identical to the final vowel of the demonstrative pronoun. In fact, the "relative marker" (RM) differs from the demonstrative pronoun basically in tone and duration (length). While the demonstrative pronoun has a short low-toned vowel, the relative marker has a long vowel with rising tone. I will analyze what I refer to here as a "relative marker" as being bimorphemic. I will argue it is composed of a demonstrative and complementizer, CO that is simply a "non-contentive" vowel slot. As I stated earlier, it is possible to get more than one nominal qualifier. Where
this is the case, the qualifiers must all agree with the *noun class* of the head noun.

We notice this in (28) where we have a relative marker occurring with a possessive pronoun (28a) and (28b), a relative marker and a demonstrative pronoun (28c) and (28d) or all three as in (28e).

(28)

a. ndia jè zà á Atem à lè jùò
   9house 9my 9RM A. Agr P-3 buy
   'my house which Atem bought.'

b. kúŋa gë gi'í Atem à lè jùò
   1pig 1my 1RM N. Agr P-3 buy
   'my pig which Atem bought.'

c. ngàŋ gi'í à bón ndia á Menji
   1person 1that 1RM Agr own 'house in Menji'
   'that person who has a house in Menji'

d. ndia zà zà á bəcön é lè tùá
   9house 9that 9RM thieves Agr P-3 burn
   'that house which (the) thieves burnt.'

e. ndia jè zà zà á bəcön é lè tùá
   9house 9my 9that 9RM thieves Agr P-3 burn
   'that my house which (the) thieves burnt.'

Both (28a) and (28b) involve relativization of an object. Observe that in (28a) and (28b), both the possessive pronoun and the relative marker agree in noun class with the (relativized) noun. This is also true of the demonstrative pronoun and the complementizer in (28c) and (28d). (28c) involves relativization of the DP in subject. Notice that in (28c) the subordinate clause subject agreement is with the matrix (relativized) subject ngàŋ 'person'. The "relative marker" and the demonstrative pronoun agreement is also with the relativized subject ngàŋ. In (28d) the relative and the demonstrative pronoun agreements are with the relativized (matrix) subject ndia 'house' and the embedded clause subject agreement is with the (embedded) subject bəcön 'thieves'. (28c) and (28d) also illustrate a clear asymmetry between subject
and object relatives. How can all these agreement patterns be derived in a principled way? Assuming, as commonly adopted in the literature, that agreement is a Spec-head relation, it follows that for the head noun to check/trigger agreement on all the agreeing heads in (27) - (28), it must be the case that an NP, or some functional XP projection of No must have transited through the specifier position of the agreeing heads. There are two ways in which this can be achieved: By movement of an operator (OP) (Chomsky 1982) or by "head raising" (Vergnaud 1974, 1985 and others).

One could argue for an approach where the (relativized) head noun is base generated, and an operator (OP) that has the relevant class features is moved through the various specifier positions to check for the agreements on the agreeing heads. However, I will argue such an approach has more problems. Aside from how the OP gets the relevant class features, such an OP must be assumed to originate at least in Spec, ClassP or lower in order to check agreement on all agreeing heads. Recently, it has been argued that movement to specifier position (for licensing purposes) is landing-site selective (Sportiche (1990), Beghelli and Stowell (1994)). It is therefore conceivable that some specifiers will not be a possible landing site for the OP because such specifiers are "reserved" for particular XP types. Consequently, movement of the OP will either be blocked or be forced to skip over certain specifiers, thus resulting in a violation of economy/minimality (Chomsky (1992)). I will not adopt the OP movement analysis herein. Rather, I will assume a head raising analysis according to which the nominal head of the relative clause starts from a somewhat lower position, before being "promoted" to a higher (relative clause head) position. The details of how such 'promotion' takes place will be elaborated upon below (see section 2.9.4).
Apart from providing an account of how all the agreements within DP are derived, I will also try to provide a unifying account of the alternate ordering of constituents, that is possible in certain cases, when more than one nominal qualifier occurs in a DP cf. (29a) and (29b). In addition, I will attempt to exemplify the categorial restriction that we observed earlier with respect to word order alternation. For instance, as I pointed out above, only pronominal (as opposed to lexical) possessors can precede the head noun cf. (30).

(29)  
   a.  băsuș bē bī bābaia  
       friends my those two  
       'those two friends of mine'       lit. 'those my two friends'
   b.  băsuș bē bābaia bī  
       friends my two those  
       'those two friends of mine'
   c.  ?* băsuș bābaia bē bī  
       'friends two my those'

(30)  
   a.  ndia Njikêm  
       house Njikem  
       'Njikem's house'
   b.  * Njikêm ndia  
       Njikem house
   c.  ndia zā  
       house that  
       'that house'
   d.  ē- zā ndia  
       Agr that house  
       (contrastive reading)  
       'that house'
   e.  ndia Njikêm zā  
       house N. that  
       'that Njikem's house'
   f.  ndia jē zā  
       house my that  
       'that my house'

53
(30a) and (30b) suggest that when a satellite of the head noun is a lexical NP, a projection of Noun must undergo XP-internal movement to some higher Spec position. However, if the possessor is focused, the possessor then undergoes further movement to higher head, most likely to Foc⁰ cf. (30d), (30g) and (30h).

In an attempt to account for the various syntactic phenomena observed within the determiner phrase (DP) in Nweh, I have so far assumed without much justification that the number (singular/plural) features of the noun can be teased apart from class and treated as projecting a functional XP projection -NumP (see Carstens (1991)). While such an assumption appears to be driven more by theory internal reasons, there appear to be some language particular facts from Nweh that pushes one to assume a NumP projection. I now propose to examine some of the language-internal facts.

### 2.6 Towards a NumP Category for Nweh

I have in some cases simply assumed the existence of a NumP category aside from ClassP, in Nweh. The motivation for such an assumption has been essentially theoretically driven and has not had much empirical justification. In this section, I will provide some facts from Nweh, that strongly suggest that Nweh has developed a
system where number is becoming a relevant syntactic category, independent of class in certain cases.

The initial motivation for treating number in Bantu as a syntactic category independent of class is based on cross-linguistic considerations and comes essentially from non-Bantu languages in which number is a recognizable independent morpheme. For example, Dryer (1981) (see Carstens (1991), Valois (1991)) notes the existence of singular, plural, dual, and trial number words in Yapese (an Austronesian language). Even more significant is Dryer's (ibid.) observation that the order of the number word and the head noun parallels that of the verb and its complement, viz., the order is Num<N for head initial languages and N<Num for head final languages. Dryer sees this order parallelism as compelling evidence for treating number as a head, taking an NP complement. Based on Dryer's insight, Carstens (1991) argues that extending such an analysis (where number is considered a syntactic category) to Bantu will provide a unified account both for number words and number morphology. She therefore, suggests that number is a syntactic category in Bantu and proposes that number in Bantu is spelled out on the noun class prefixes.

The difficulty in translating facts from languages that have an independent number marking to the Bantu languages lies in the fact that number and class are inextricably fused in the Bantu nominal system, with class being the "super ordinate" category from which number is generally predictable. In languages like English, the morphophonemics of plural marking is trivial, in the sense that if a noun is plural, regardless of its morphology, there is a unified set of ramifications, such as pronominal or demonstrative agreement, determiner and quantifier choice and verb agreement (to the limited extent that English has any). This is not the case for Noun class languages like Nweh. One must know what class a plural noun belongs to in
order to get the syntactic and morphological agreements correct. The problem with conflated inflectional forms, however, is not limited to Bantu languages.

To provide a principled derivational account of complex (conflated) inflectional (verb) forms [cf. cook + edpast --> cooked versus eat + edpast --> ate] Chomsky (1992) proposes a "feature checking approach" whereby a lexical item (verb in this case) is drawn from the lexicon fully inflected, say [(V+T) + Agr] and that each of these morphemes (inflectional affixes) is the head of a syntactic projection (TP and AgrP). The verbal complex must raise by LF through these various projections in order to "check off" the properties of the inflectional affixes, the tense and the agreement features of the verb (see Chomsky (1992) for details).

Following this principled approach to the problem of conflation, I will propose that nouns in Nweh and in Bantu can be argued to be derived by the same approach. That is, the noun is drawn from the lexicon fully inflected, say [[(NUM+CLASS)+ N]]. (The morphemes may be conflated as it is case with Class and Num in Nweh.) The nominal complex then raises in overt syntax (or by LF) to Class and Number in order to cancel out the class and the number features of the noun. The major advantage of this approach is that lexical derivation becomes cross-linguistically similar, if not identical, from the point of view of the syntax. However, to fully bring out, as well as substantiate, such an argument, one needs independent language internal motivation that such inflectional affixes behave like syntactic elements, thus justifying their projection in the syntax. While it is evident that class is syntactically relevant in Nweh, according such a status for number is not so evident. I start with evidence that favors that postulation of a NumP category for Nweh.

There appears to be good evidence that Nweh has developed a "number agreement" system, particularly for purposes of "external" agreement. One such area
is the case of subject verb agreement. Verb agreement with the DP subject depends crucially on number i.e. on whether the subject is singular or plural, and to the extent where class is relevant at all it is secondary.

(31)  a.  njá à ké? nphét nzó
    1child 1Agr P-1 eat palmnuts
    'the child ate palmnuts'
    (cf. classes 1 & 7)

 b.  afõŋ à ké? nphét nzó
    9 cow 9Agr P-1 eat palmnuts
    'the cow ate palmnuts'
    (cf. classes 3, 5, & 9)

 c.  bõbõŋ à ké? nphét nzó
    2 birds 2Agr P-1 eat palmnuts
    'the birds ate palmnuts'
    (cf. classes 2, 6, & 10)

There are only two singular subject-verb agreements; Classes 1 and 7 take the á agreement as in (31a), while classes 3, 5, and 9 take the é agreement as in (31b). All plural noun classes have the same é subject-verb agreement cf. (31c). This suggests that number is relevant for external agreement purposes, independent of class.

The agreement governed by the quantifier (bɔ/ñ)čêm "all/the whole" provides even more compelling evidence to support the argument that Nweh is increasingly developing a system with number as a relevant morphosyntactic category. The quantifier (bɔ/ñ)čêm shows limited class agreement with the head noun, but full number agreement.

(32)  a.  ndia  nčêm
    9house 9 all
    "the whole house" / "entire household"

 b.  abɔ  àčêm
    7 bag 7 all
    "the whole bag"

 c.  ??  lɔpɔp  lɔčêm
    5 wing 5 all
    "the whole wing"
d. séŋ ñčɛm
   1bird 1 all               "the whole bird"

e. bɔsɛŋ  bɔčɛm
   2 birds 2 all            "all the birds"

f. mbɔ bɔčɛm
   6 hands 6 all            "both hands"  (lit., all the hands)

"Pure adjectives" in Nweh show only number agreement, with the noun they modify (see chapter 4 for a subcategorization of adjectives in Nweh).

(33) a. bànŋ  séŋ
      1red 1bird               'red bird'

b. bɔbɔŋ  bɔsɛŋ
   2 red 2 bird              'red birds'

c. bànŋ  ɔfɔŋ
   9 red 9 cow               'red cow'

d. bɔbɔŋ  bɔfɔŋ
   6 red 6 cows              'red cows'

e. bànŋ ' akpwé
   7 red 7 bone              'red bone'

These examples involving adjectival modification appear to be the one case where agreement is entirely with number and where class does not even play a secondary role.

In Nweh, the Wh-interrogative which shows class agreement for all noun classes as indicated in the table 2.4.
Table 2.4:  ["Wh- Agreement"]

<table>
<thead>
<tr>
<th>Noun Class</th>
<th>Example</th>
<th>Wh-question: Which -x- ? 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sēŋ</td>
<td>'bird'</td>
</tr>
<tr>
<td>2</td>
<td>bāsēŋ</td>
<td>'birds'</td>
</tr>
<tr>
<td>3</td>
<td>nkēʔ</td>
<td>'lamp'</td>
</tr>
<tr>
<td>5</td>
<td>lōkēŋ</td>
<td>'pot'</td>
</tr>
<tr>
<td>6</td>
<td>bōkēŋ</td>
<td>'pots'</td>
</tr>
<tr>
<td>7</td>
<td>akpwé</td>
<td>'bone'</td>
</tr>
<tr>
<td>9</td>
<td>aʃōŋ</td>
<td>'cow'</td>
</tr>
<tr>
<td>10</td>
<td>ènkpəbḗ</td>
<td>'finger/toe nails'</td>
</tr>
</tbody>
</table>

The interrogative pronoun awṓ “who/whose?” shows number, but apparently, no class agreement. When the pronoun refers to a singular noun the form is invariably awṓ “who/whose?” (sing.); When referring to a plural noun the form is mawṓ "who/whose?” (pl.). One could argue that the interrogative pronoun 'who' agrees in [+human] feature, and that since noun class 1 and noun class 2 typically pair up to form the "human" gender in most Bantu languages, awṓ / mawṓ "who" (sg./pl.), agrees actually with class 1 and class 2. rather than with number. However, plausible as it sounds, this does not appear to be the case as there are (adjectival) nominals that refer to [+human], found in classes other than class 1 and class 2, cf. (34), but the [+human] interrogative pronoun awṓ does not vary its form to reflect the class of the

8 See chapter 6 for an analysis of the interrogative construction and how questions are marked.
(adjectival) nominal. This would not be the case if the interrogative awọ agreed in class.

(34)  a.  àbìà
    7 crazy one        "a crazy person"

  b.  ìyùìyù
    7 lunatic          "a lunatic"

Even though the nominals in (34) belong to class 7, they would be referred to or interrogated with the same interrogative pronoun, thus suggesting that the primary feature that the interrogative pronoun agrees with is number (sing./pl.) and not class. The above fact also suggests that it is not just the physical object per se, that determines the noun class into which the object gets assigned, but that there are a number of other factors (for example, phonology) such as the name of the object, that play a significant role in determining the noun class into which a ("new") noun gets assigned. Thus, the same physical object could be assigned into different classes if there are different names that are used to refer to this object.

There is a significantly reduced number of plural noun classes in Nweh (basically two). It is also evident that the be - prefix initially restricted to noun class 2 is becoming the predominant plural noun prefix and is being extended to plural nouns in other classes (e.g. class 6) that originally had different prefixes. This makes the situation in Nweh appear to be like that in say, French or Spanish, where plural morphology can be added to a noun which retains its gender marking. The above facts evidently suggest that Nweh is shifting towards a system where number is becoming a primary syntactic feature, in certain cases, manifested independent of class and therefore, the postulation of a NumP category for Nweh is not just theoretically motivated but also has some language internal justification.
2.7 For a ClassP Projection

As we have seen over and over again, there is a certain dependency relation that holds between nouns of a given class and the kinds of agreements that show up on nominal modifiers, (cf. noun class 1 takes gè, gô, gi ... possessive agreement, gwuô, gi, gwuô ... demonstrative agreement etc.) and for some noun classes the kind of prefix that will show up on the noun, particularly in those Bantu languages where nouns of a particular class can be associated with a particular nominal prefix (cf. also Nweh class 5 la-, class 7 a- prefixes). Such a dependency relation can be captured in a number of ways: One can maintain the traditional approach and say that class is a lexical property of the noun; While this is certainly true, it does not answer the question as to how the syntax treats such lexical information. Alternatively, one can say that class is like a feature (part of the building blocks) on the noun and that the feature value "percolates" onto the head of the noun, so that the noun ends up being specified for a particular class with no special affix attached to it. There are a number of problems with both of these approaches. First, the fact that borrowed nouns are easily assigned a class and with consistency from one native speaker to another, suggests that class is not simply a "hard-wired" property of the noun, but that there is some mechanism in operation that is used for noun class assignment. Second, one will fail to capture a significant generalization shared by nouns within a single class. Also, it raises the question as to why class of all nominal features should be the overriding feature. The behavior of each noun class particularly in relation to the agreements it governs, suggests that "class" behaves syntactically as though it were not just a feature on the
noun, but an independent syntactic element. For this reason I will treat "class" as the head of its own phrasal projection, ClassP (Class Phrase). I will then say that class takes an NP as its complement as sketched above cf. (10), (see also, derivation (11)).

2.8 Deriving the Order of Constituents and Agreements within DP

Bantu languages are renowned for their very rich and complex agreement patterns. The one area of grammar that epitomizes this intricate agreement is the Bantu DP. Within the DP, and elsewhere, noun class plays a pervasive role in the syntax of Bantu languages, particularly with respect to agreement. Thus, any DP modifier or any XP predicate that is predicated of a DP agrees with the (lexical) head of the DP projection in "class". "Class" here being an amalgamation of several things, viz., class, person, number and case. The above implies that demonstratives (determiners), adjectives, possessives, numerals, genitives, ... all agree with the nouns that they modify and that predicates -verbal, adjectival, nominal- agree with the DP subject that they are predicated of. All the agreements basically revolve around the "class" of the head noun. However, to my knowledge, there is neither an adequate account nor a formal characterization for a syntactic derivation of the Bantu noun class agreement within the DP.

The "traditional" approach has simply been to regard the Bantu genitive agreement as idiosyncratic, therefore implying that it must be learned. Such an approach fails to take into serious consideration the question of learnability and the ease of acquisition or how borrowed nouns get assigned into one of the noun classes. To my knowledge, the first significant departure from the traditional approach is
Carstens' (1991) analysis of the DP in KiSwahili. In her dissertation, Carstens, (ibid.) analyzes the Bantu noun class as a gender system and noun class prefixes as gender-specific spelling-out of number features. She then goes on to propose that the noun phrase is embedded within two functional projections, Number phrase and Determiner phrase. Thus, for her number can be separated from class, but she views class as an idiosyncratic property of an individual lexical item. While Carstens' proposal constitutes a departure from the traditional view of noun class, according to which class and number are inseparable, it does not go far enough particularly in her analysis of agreement. An analysis that treats gender as a lexical property of the noun and number as a functional head which selects an NP complement, gives the implication that number is the primary categorial feature for Bantu noun classes, which is not the case. Class is the "super ordinate" category in Bantu noun classification and in terms of DP-internal agreement number is almost entirely predictable from class. One must know what class a (singular/plural) noun belongs to in order to get the syntax and the morphology correct. This makes class a category of syntactic relevance. In this section, I will attempt to capture the very crucial descriptive notion of noun class agreement in syntactic terms. Essentially, adopting Chomsky's (1992) suggestion, I will propose a principled account of the agreement patterns and word order possibilities within DP. Assuming that within the DP, the noun starts out fully inflected for class and number, the nominal complex must then raise (Spec to Spec) through the various functional projections in order to "check off" the class and number features. This approach will enable me not only to reduce the various agreements observed within the DP to just one - the familiar Spec-Head agreement phenomenon, but also to derive the different constituent-orders within DP in a principled and systematic fashion.

63
2.8.1 The Genitive/Possessive Agreement

As I stated above possessive pronouns in Nweh must agree with the nouns to which they refer as the data in (35) illustrates.

(35)  
a.  ḍshù̓g gè  
1friend 1my  
'my friend'

b.  ndîá jè  
9house 9my  
'my house'

c.  båšù̓g bé  
2friends 2my  
'my friends'

d.  bándia mé  
6houses 6my  
'my houses'

The possessive pronoun agrees in class with the head noun. The translations of the DPs in (35), 'my friend', 'my house'... suggest that the noun is the head and the possessive pronoun is the specifier. If this is correct, then it will imply that the agreement is marked on the specifier; This will be a problem for the restrictive spec-head agreement approach pursued herein. A look at the constituent order shows that the possessive pronoun and (as we observed earlier) other satellites of the noun, typically follow the head noun. However, Nweh has a head-complement order. Given the DP hypothesis (Abney, (1987)) which I have adopted herein, one would expect the order of the head noun and the determiner to be D < N and the order of the head noun and the possessor to be Poss. < N.

Earlier, I established that the possessor is projected higher, outside the argument structure of the noun. Given the head-initial character of Nweh, one would expect the constituent order between the possessor and the noun to be Poss. < N. However, the
data in (35) shows that the surface order runs counter to what we expect, given the relevant theoretical assumptions.

2.8.1.1 DP Agreement: Spec-Head or "Head-Spec"?

Apart from the word order asymmetry, we also find that the agreement relations in DP appear to be contrary to what the theory would predict. According to the Spec-head agreement hypothesis (Chomsky (1986a)), the XP (element) in the specifier position determines the features of the head. This was initially applied to the case of subject-verb (subject, Infl.) agreement. The Spec-head agreement relation has since been generalized to other categories as well (see for example, Koopman (1987), Kinyalolo (1991)). However, if the Spec-head agreement hypothesis were to always hold true, we would, a priori, expect the features of the possessor to show up on the head noun, with the XP in Spec triggering agreement on the head. But this is not what we observe. The agreement with the head noun shows up on what appears to be the modifier.

In languages that subcategorize nouns into classes and/or genders, modifiers of the noun typically agree with the head. This implies that within the DP, the head noun typically determines the feature-content of say the specifier (using specifier here loosely to refer to determiners, demonstratives, possessives...). Such is the situation in languages like Nweh, French, Spanish etc. In this sense, the agreement phenomenon in class/gender based languages like Nweh, is different from what the Spec-head agreement hypothesis would predict.
One way to account for this fact is to say that agreement is parameterized as Carstens (1991) suggests. For example, one can say there are two ways in which agreement is licensed (say, spec-head and head-spec) and that different languages (or for that matter, different constructions within the same language) vary along these two agreement parameters. However, because of the increased disfavor for a theory of parameters and the desire to achieve a restrictive theory of grammar, such a solution is theoretically, less desirable.

While it is (theoretically) desirable to attain a restrictive theory of grammar, it is very difficult to do so. One way of making headway towards such a goal has been to attempt to seek unified accounts of constructions that vary not only within the same language but even between different languages; Such as reducing various sorts of agreement processes in general to follow from relations between a head and the content of its phrasal specifier (Koopman (1987), Sportiche (1990), Kinyalolo (1991)). Given the fact that it is desirable to attain a restrictive theory of syntax, the immediate question is whether the agreements within the DP in Nweh can be construed in terms of a relation between a head and its phrasal specifier. I will herein provide a derivational analysis of Nweh (genitive) pronouns that will enable us to provide a restrictive theory of agreement, and account for all the agreements as typically involving a relation between a head and the content of the specifier position of such a head. This will not only eliminate the need for a parameter, but will also do away with the complications associated with inventing a new type of agreement relation of the sort proposed in Carstens (1991).
2.8.1.2 A Derivational Account of Genitive Pronouns

Herein, based on data mainly from Nweh, I propose a new analysis that reduces the analysis of genitive agreement in Bantu at large, to independently motivated principles of current syntactic theory. Recall, from the morphological analysis of genitive pronouns (cf. Table 2.1) that we saw that genitive pronouns have an alternating (consonantal) segment and a vowel which stays more or less constant; And that the distinction between some classes is based entirely on tone marking. Based on this ‘regularity’ aspect of genitive pronouns in Nweh, I will propose that genitive pronouns in Nweh be analyzed as bimorphemic, i.e. as composed of two morphemes: (1) a class agreement morpheme (made up of a consonant segment and a tone) and (2) a pronominal root (made up of a vowel). It is not immediately obvious where to place the tone: I assume that the tone is associated with the class morpheme. I have proposed that the class morpheme heads the functional projection, ClassP. An approach such as the one proposed here, will enable us to incorporate the notion of class, which as we have seen is not only an active morphosyntactic category but is equally important in the description of the Bantu nominal system, into a Phrase Structure representation.

The fact that the class morpheme should show significant variation while the pronominal part stays more or less consistent, supports such a division. Therefore, taking just class 1 first person singular genitive pronoun, ge ‘my’ (35a), I will analyze it as consisting of ge+e -a class 1 agreement morpheme ge- and a pronominal root -e. Since ge- represents class information, the agreement will be triggered/checked on some head by class 1 nouns in the spec, position of that head.
-e can either be analyzed as functional head expressing possession or as a clitic pronoun. I will adopt the latter option because if -e were a possessor head then one would expect it to show up even when the possessor is a lexical noun, not just when it is a pronominal. The morpheme ge is derived in the syntax through incorporation of -e to the functional head G/O°. The derivation is sketched in (36).

(36)

In (36), I assume the following steps in the derivation: the NP headed by akendõ is the chief's plantains"
without violating any locality (economy) principles. The raising of ClassP to Spec, G/OP is going to trigger pied piping of the NP in Spec, ClassP. thus deriving the surface word order N < possessor. ClassP raising also has the additional consequence of ensuring that the G/O<sup>0</sup> features are checked off and that the correct genitive agreement is triggered. Finally, if the external argument of the noun in Spec NumP is a pronoun it must incorporate into G/O<sup>0</sup>. I assume that such "genitive pronouns" are clitic-like. This assumption correctly allows incorporation of such (genitive) pronouns but rules out any such incorporation by lexical genitives. Following, is a summary of the discussion on genitive pronouns.

What is traditionally been referred to in the literature on Bantu nominals as the genitive/possessive pronoun herein has been reanalyzed as being derived compositionally from two independent morphemes. Based on data from Nweh, I have suggested that the position in which the derived morpheme ends up in overt syntax is a head position which in some cases is different from that occupied by demonstratives. Demonstratives have been shown to occupy the D<sup>0</sup> position, whereas the derived genitive pronoun is under G/O<sup>0</sup> (head of G/OP). I have proposed that both lexical and pronominal genitives are in Spec, NumP but that pronominal genitives (because their clitic-like properties) do incorporate into G/O<sup>0</sup> and thus, show "full agreement" but that lexical genitives do not incorporate. The incorporation also causes the genitive pronoun to fuse with the class morpheme to form what is commonly referred to as the "genitive pronoun". An approach such as the one advocated for here, provides an interesting explanation regarding the synchronic behavior of genitive pronouns in Nweh and in Bantu at large. In the rest of the discussion on DP agreement, I will show that the other agreements within DP can be
derived using essentially the same derivational strategy that I have proposed for the
genitive pronominal agreement.

2.8.2 The Noun - Demonstrative Agreement

We saw above that demonstratives show agreement with the noun. The
demonstrative pronouns can be analyzed in the same manner as the genitive pronouns,
i.e. as being biformemic, comprising an "agreement prefix" and a root. Given the
analysis of the genitive agreement just sketched, the demonstrative agreement can
straightforwardly be derived in a similar manner, viz., NP raises to Spec ClassP;
Num₀ incorporates to D₀ thus making Spec, DP and Spec, NumP "equidistant to
ClassP. Next, ClassP raises over Spec, NumP to Spec, DP to check off the features of
the D₀ head. The derivation is sketched in (37).

(37)
The ClassP in Spec. DP is going to trigger agreement on the D0 head / check off the features of D0. This also explains why in Nweh DP, the D0 head is in final position even though Nweh is an otherwise rigidly head initial language.

2.8.3 Deriving the "Double Agreement"

We have seen that Nweh possessors are post nominal. I have argued, in part based on the agreements within DP, that this order obtains as a result of the raising of a projection of the noun (pied piping the NP along) to a position higher than that in which the possessor is located. However, we have also seen cases in which the possessive pronoun ends up higher than the NP. The examples are repeated in (38).

(38)  a. à- gè 'suo
      1Agr 1my 1friend
          'my (contr.) friend'
 b.  è- jè n'dia
      9Agr 9my 9house
          'my (contr.) house'
 c.  è- bë bâ'suo
      2Agr 2my 2friends
          'my (contr.) friends'
 d.  è- më bândia
      6Agr 6my 6houses
          'my (contr.) houses'

Above, I noted that examples like (38) are used contrastively and that the possessive pronouns receive contrastive focus. Given this observation, I will propose that there is a Focus Phrase (FocP) immediately dominating the G/OP, and that the head of G/OP, G/O0 incorporates into the Foc0 head, after the ClassP has raised to Spec. G/OP. This will have the immediate advantage of explaining the Poss.<NP word order that obtains in such focus constructions. The derivation follows in (39).
A focussed possessive pronoun bears a vowel prefix that shows limited agreement in class with the head noun. This limited agreement is identical to the subject-verb agreement that these NPs will trigger on Infl when in subject position, also known as AGRs. It is not completely obvious how the initial agreement on the possessive pronoun is triggered on the possessive pronoun. However, according to the "feature checking" approach (Chomsky (1992)) the agreement is a given. Assuming that this "DP-initial" AGRs is based generated under Foc⁰, it would imply that at LF the NP or some projection of the noun must raise to Spec, FocP in order to check off the agreement features on Foc⁰.
2.8.4 The Noun - Numeral Agreement

Recall from the examples in (23), section 2.5.6, that some numerals show a limited form of overt agreement with the noun. Herein, I analyze numerals as Q(uantifier)-heads taking a NumP as complement. The agreement patterns as well as the word order possibilities will provide support for this approach. This yields a DP structure like (40). Movement will proceed in the normal way as sketched in (40). With the ClassP in Spec QP, we will expect agreement to be checked off on the Q head.

(40)

2.8.5 The Noun - Relative Marker Agreement

In the relative (clause) construction in Nweh, the relative marker (RM) agrees with the (relativized) head noun in class as (41) and (42) reiterate.
(41)  a.  ndía zà ā  
    9house 9RM  
    'the house which...'  

     b.  ndía zà zà ā  
    9house 9that 9RM  
    'that house which...'  

     c.  ndía jè zà ā  
    9house 9my 9RM  
    'my house which...'  

     d.  ndía jè zà zà ā  
    9house 9my 9that 9RM  
    'that my house which ...'  

(42)  a.  kúpà gī ī  
    1pig 1RM  
    'the pig which...'  

     b.  kúpà gī gī ī  
    1pig 1that 1RM  
    'that pig which...'  

     c.  kúpà gè gī ī  
    1pig 1my 1that  
    'my pig which..'  

     d.  kúpà gè gī gī ī  
    1pig 1my 1that 1RM  
    'that my pig which...'  

What I refer to as the relative marker is actually composed of the "over-there" demonstrative pronoun and an extra vowel segment that is identical to the final vowel of the demonstrative pronoun. I have simply glossed this as RM (relative marker), but in my analysis of relative clauses I will attempt to show that the RM is compositionally derived in the syntax. I will propose a new category DemP, and that there is DP movement to Spec, DemP (to check-off the agreement features of the demonstrative) followed by lengthening of the final vowel of the demonstrative pronoun to fill the "non-contentive" C₀ vowel slot. I therefore analyze the RM zà ā in (41) as composed of the demonstrative pronoun zà + the C₀ ā. Similarly, the RM gī ī in (42) is composed of the demonstrative pronoun gī + the C₀ ī. All the nouns that belong to the same noun class as ndía 'house' (i.e. class 9), will govern the RM  

74
zàà (see Table 2.1: [Nweh Noun Classes]). Similarly, nouns of class 1 like kúŋà 'pig' govern the RM gĩ ĩ.

The question is how to provide a satisfactory analysis of relative clauses that correctly derives the agreements observed within the relative clause? To provide a satisfactory answer to this problem, I will in the following section, give a descriptive outline of the relative clause construction in Nweh, followed by a syntactic analysis which I believe provides a reasonable account of the agreement within the relative clause in Nweh.

2.9 The Relative (Clause) Construction

In this section I will provide an analysis of the relative construction in Nweh that is consistent with some of the most recent theoretical analysis of relatives, notably Kayne (1994).

Two main types of relative clauses are generally distinguished in the literature: restrictive and non-restrictive relative clauses. In English, restrictive and non-restrictive relatives are distinguished by the presence of an intonation break that is present in non-restrictive, but absent in restrictive relatives. In writing the intonation break is usually indicated by commas. Nweh does not appear to make any (syntactic) distinction between restrictive and non-restrictive relatives. Therefore, in my discussion on relative clauses I do not make such a distinction. This section is organized as follows: I will start by giving some descriptive facts about relative clauses in Nweh and the issues that a descriptively adequate analysis of relative clauses should be able to account for. I will show that the 'standard' analysis of

75
relative clauses (one that assumes that the head noun is based-generated outside the relative clause) cannot adequately account for such issues. Adopting the basic insights of Kayne (1994), I will suggest one way in which Kayne’s approach can be modified to account for the relative construction in Nweh.

2.9.1 What can be Relativized?

It is generally the case that only noun phrases can be relativized. In the case of Nweh, a relativized noun phrase cannot be contained within another category, say within a PP, as Nweh does not allow relative pronoun pied piping. The relativized noun phrase can correspond to a subject, a direct object or an object of a preposition. However, we will see that an oblique NP behaves differently from other NPs with respect to relativization.

(43) a. ṁaŋ j עילֶ תי א קא fia nkāp anbō Zinkeng ajūa person RM Agr P-2 give money to Z. yesterday The person who gave money to Zinkeng yesterday

b. nkāp j zà ā Njikem ā kā fia t j anbō Zinkeng ajūa money RM N. Agr P-2 give to Z. yesterday The money which Njikem gave to Zinkeng yesterday

c. ṁaŋ j עילֶ Njikem ā kā fia nkāp anbō *(jú j) ajūa person RM N. Agr P-2 give money to RP yesterday The person to whom(m) Njikem gave money yesterday

d. ṁūa j עילֶ mú zāā 50 *(גילה) child RM I know mother his The child whose mother I know

(43) illustrates a number of properties regarding relative clauses. We observe that the head noun precedes the relative clause. Recall Nweh has a head-complement order.
The fact that the head noun obligatorily precedes the relative clause suggests that the relation between the head noun and the relative clause is a local relation. We observe from (43) that there is a relative element which I have glossed as the relative marker (RM) that intervenes between the head noun and the relative clause. As pointed out above, this relative element agrees with the head noun in (noun) class. Thus we see that in (43a) the relative element is gî ğı, agreeing with ngâng ‘person’, whereas in (43b) it is zà a in agreement with nkâp ‘money’. Taking agreement to be a spec-head relation as I have standardly assumed, it must be the case that the relativized NP, or some zero operator at some point must have been in a spec-head relation with this relative element. There is another interesting fact about the so called relative marker: The form of the RM is identical to one of the forms of the demonstrative pronoun as table 2.5 below indicates. Nweh has three dimensional demonstratives that are distinguished in terms of proximity. In the relative construction, the relative marker (RM) has the same form as the "over there" demonstrative (See also Table 2.3: [Demonstrative Pronouns] for details). This is also true for subject and object relatives in Dutch, as pointed out by Hilda Koopman (personal communication).

<table>
<thead>
<tr>
<th>Noun Class</th>
<th>form of the demonstrative pron.</th>
<th>form of the relative marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 / 3</td>
<td>gî</td>
<td>gî ą</td>
</tr>
<tr>
<td>2</td>
<td>bî</td>
<td>bî ą</td>
</tr>
<tr>
<td>5</td>
<td>râ</td>
<td>râ ā</td>
</tr>
<tr>
<td>6</td>
<td>mî</td>
<td>mî ą</td>
</tr>
<tr>
<td>7 / 9 / 10</td>
<td>zà</td>
<td>zà ā</td>
</tr>
</tbody>
</table>
We observe a very regular pattern here. The relative marker is composed of the "over there" demonstrative pronoun and a "final vowel" that is identical to the vowel of the demonstrative pronoun. An adequate account of the relative construction must be able to explain this parallel.

Despite the formal similarity, it appears the demonstrative and the relative marker occur in different positions as they can cooccur as in (44).

\[(44)\]
\[
a. \text{màngùi กิ กิ่ก bó Zinkeng ē ké? nfuì? woman that RM RP Z. Agr P-1 come 'That woman who came with Zinkeng' }\\
b. \text{nia gʷuò กิ่ก ā là nà ngwaá child this RM Agr P-3 prog sick 'This child who was sick'}
\]

The fact that the demonstrative pronoun and the relative marker do cooccur suggests that the relative marker does not occupy the same position as the demonstrative pronoun. Above, I noted that it is generally the case that only noun phrases can be relativized; The relativized noun phrase can, of course, be a pronominal (\(45b\)).

\[(45)\]
\[
a. \text{bəgən bìi ē te nkáp bōŋ people RM Agr neg money have 'People who do not have money'}\\
b. \text{bó bìi ē te nkáp bōŋ they RM Agr neg money have 'They who do not have money'}\\
c. \text{*[e] bìi ē te nkáp bōŋ RM Agr neg money have}
\]

\[9\] The examples in (45) have a word order that allows the verb to be in "sentence-final" position. This is only possible with the negative construction. I discuss the syntax of negation in chapter 5.

78
(46)  a.  bɔndrɔ mǐ 1 mbɛŋ è kɛ? ndό  ' ndùŋ
clothes RM rain Agr P-1 fall on
'The clothes which rain fell on'

b.  [e] mǐ 1 mbɛŋ è kɛ? ndό  ' ndùŋ
pro RM rain Agr P-1 fall on
'The ones which rain fell on' *(speaking of clothes).*

(46b) would lead one to think that Nweh has head-internal or headless relatives. In
(46b) the head noun of the relative clause is understood but unpronounced. Based on
the contrast between (45c) and (46b) I will argue that (46b) is not a headless relative.
The apparent absence of the head noun in (46b) stems from the [+/- human]
parameter. Only [+ human] nouns have overt pronominal forms, [-human] pronouns
have a zero pronominal form, which corresponds to a "silent pronoun", pro. This
distinction will be important when we look at the distribution of gaps and resumptive
pronouns. If the relative head could be empty, there would be no reason why (45c)
should be ungrammatical. Notice that the subject in (46) cannot be pronominalized.
The basic pronominal paradigm in Nweh distinguishes forms on the basis of person,
number, case and human/non-human. The NP subjects in (45) and (46) differ with
respect to one of these parameters ((non-) human).

2.9.2 Positions from which Relativization is Legitimate

As we observed from (43), only noun phrases can be relativized. We also noted that
when an oblique noun phrase is relativized a resumptive pronoun is obligatory. In
some positions resumptive pronouns appear to freely vary with gaps; in some
positions only gaps or resumptive pronouns are permitted.
(47) a. ṣeṣṣi ẹ́ tọ́ a kọ́n a-Zinkeng
person RM AGRs like CM Z.
'The person who loves Zinkeng'

b. ṣeṣṣi ẹ́ Njikem ẹ́ kọ́n (agí ẹ́)
person RM N. Agr like him
'The person whom Njikem likes'

c. ṣeṣṣi ẹ́ mbàn ẹ̀ kẹ́? ndó *(agí ẹ́)
person RM rain Agr P-1 fall him
'The person on who(m) it rained'

d. bogá ẹ́ bí ẹ́ fúá ẹ̀ kẹ́? níá nkáp anbó *(bó ẹ́)
persons RM chief Agr P-1 give money to them
'The people to whom the chief gave money'

(47a) shows that when a subject is extracted by relativization,\(^{10}\) we never get a resumptive pronoun in the subject position from which extraction has taken place. On the contrary a resumptive pronoun is obligatory if an oblique argument is extracted cf. (47c) and (47d). (47b) indicates that we optionally get a resumptive pronoun if a matrix direct object is extracted. I assume when a resumptive pronoun is optionally present it is simply repeated for emphasis.

Based on (47c) and (47d), we concluded that the object of a preposition when relativized requires a resumptive pronoun; however, (48) appears to go contrary to this conclusion.

(48) a. n̄díà ẹ́ ńjikèm ẹ̀ kẹ́? ńjì̄ ńyó ẹ̀ kú̄̀ṣ anti --
house RM N. Agr P-1 see snake Agr enter inside pro
'The house which Njikem saw a snake go inside'

b. īlè̄kèn ń̄jáñ N̄jikèm a kẹ́? ńyì̄ ńtsá anti --
pot RM N. Agr P-1 put water inside pro
'The pot which Njikem poured water into'

\(^{10}\) Relativization appears to be the only strategy by which one can effect any kind of (syntactic) long distant extraction in Nweh.
What appear to be gaps in (48) are not real gaps. Recall that in Nweh only [+human] entities have overt pronominal forms: therefore in (48) since the relativized NPs are all [-human], I assume that there is still a silent pro in the object position of these prepositions. Thus, independent of relative extraction it is still possible to get these apparent gaps if the object of the preposition is pronominalized cf. (49).

\[(49)\]  
a. Njikèm à kè? nyíhí ntsá antí lükèŋ  
   N. Agr P-1 put water in(side) pot  
   'Njikem poured water into the pot'

b. Njikèm à kè? nỳíhí ntsá antí --  
   N. Agr P-1 put water inside pro  
   'Njikem poured water into it'

2.9.3 Distribution of Gaps and Resumptive Pronouns

We have observed that when relative clause extraction takes place, some positions (notably subjects and objects) normally have gaps whereas other positions (notably objects of prepositions and genitive arguments) obligatorily require resumptive pronouns. This same distribution is a widespread phenomenon across African languages (see Koopman (1984)). To account for the distribution of gaps and resumptive pronouns I will adopt a suggestion made by Russ Schuh (personal communication) to the effect that the answer lies in part in the nature of the relative marker. Thus, if a language has a "pronominal" relative complementizer, then it can pied pipe the NP or PP containing it on its way to Comp; Otherwise, pied piping is not possible. Thus, comparing English and Nweh, (or for that matter, most African languages), the WH relative pronouns in English are true pronouns, as can be shown
in case marking (who, whom, whose) and also [+/-human] marking (who, which) thus it can pied pipe cf. (50a) and (50b). On the contrary, the complementizer in Nweh, even though it appears to have the form of a (demonstrative) pronoun, is not a pronoun. In fact, I will argue that the Comp (C⁰) head in Nweh is simply a “vowel slot” with no independent segmental content. Since the Nweh complementizer is non-pronominal, pied piping is therefore not possible and the only option is the resumptive pronoun strategy cf. the fully grammatical (50c) and the ungrammatical (50d). To support this claim, we just need to look at the behavior of the non-pronominal complementizer, that in English. It behaves just like the Nweh complementizer in that it cannot pied pipe. Thus, if one uses the complementizer that, the sentence either comes out ungrammatical, (50d) & (50e), since English does not allow a stranded genitive complement or substandard as in (50f), if one attempts to use the resumptive pronoun strategy (available in Nweh) to “rescue” the structure in English.

(50)  a. The claim [on which] my theory is based

b. The child whose mother Njikem saw --

c. ȵ₉₉ ə ̄ g̃₁ Njikem a kẹ? njiọ a- 3c g̃i child RM N. Agr P-1 see CM mother his 'The child whose mother Njikem saw'

d. * ȵ₉₉ 3c g̃₁ Njikem a kẹ? njiọ -- child mother RM N. Agr P-1 see 'The child whose mother Njikem saw'

e. ** The child that mother Njikem knows --

f. * The child that Njikem knows -- mother

g. *? The child that Njikem knows his mother

With respect to preposition stranding, English allows preposition stranding but Nweh does not. Since in Nweh the relative complementizer cannot pied pipe the preposition,
the option is the resumptive pronoun strategy. This raises the question of why gaps are not possible when prepositional objects are extracted in Nweh but possible in subject or object position? One plausible explanation is that prepositions are not proper head governors in Nweh. This will imply that the indirect object position is not a properly head-governed position in Nweh, thus a trace in this position would violate the Empty Category Principle (ECP) which requires that traces (non pronominal empty categories) must be lexically head governed or antecedent governed.

2.9.4 The Internal Structure of the Relative Clause

In my analysis of relative clauses in Nweh, I will adopt the head raising/promotion analysis or relative clauses proposed in Kayne (1994). I will show that such an approach enables one to better account for certain properties of the relative (clause) construction in Nweh, such as the formal similarity between the relative marker and the demonstrative pronoun, the agreement relationship (/coreferentiality) that holds between elements outside of, and within the relative clause, and issues relating to the phenomenon of relative clause extraposition.

The standard analysis of relative clauses since "On WH-Movement" (Chomsky (1977)) assumes that relative clauses are based generated from a structure like (51).
According to (51), the NP head of the relative clause is base generated external to the relative clause CP and there is a "restatement" of this external head within the relative clause by an operator (OP) that is moved to Spec, CP and coindexed with the external head of the relative clause through Comp (Chomsky, 1977)). This is referred to in the literature as the "base generation" account.

Given the current state-of-affairs, it has become increasingly difficult to maintain a structure like (51). One such difficulty has been how to correctly account for the nature of the relationship between the relativized noun and the gap or pronominal element within the relative clause (see Vergnaud 1974, 1985 for a discussion of some problems of the base generation account).

Vergnaud (1974, 1985) proposes an alternative to the "base generation" analysis. Vergnaud argues for an analysis wherein the derivation of the RC involves the "promotion" of material from the embedded clause into a matrix position, where it fills an originally empty slot. The crucial argument used to motivate the "promotion" analysis comes from the behavior of idiom chunks like 'take part' (French: "prendre part"), 'make headway', 'take advantage'... The essential insight is that in their idiomatic usage, the noun phrases in these idioms are restricted to occurring with specific verbs cf. ungrammaticality of (52).
(52)  
a.  * Bill likes advantage  
b.  * Sam gave part

However, *advantage, part can occur with verbs other than take, just in case it is the  
head of a relative clause containing the verb take as in (53).

(53)  
a.  He outlined the part that Sam took -- in the arrest of his son.  
b.  * Sam took in the arrest of his son, the part that he outlined.

Based on such arguments, Vergnaud concludes that relative clauses involve promotion  
of material from an embedded clause to a matrix position (see Vergnaud (1974) for a  
detailed discussion).

Kayne (1994), modifying Vergnaud's (ibid.) proposal, proposes that the  
structure of the relative clause is as in (54).

(54)  
[ DP D0 CP ]

The empirical motivation for Kayne's proposal stems, in part, from certain contrasts  
that can be observed between the possessive and relative construction in English noted  
in (55). The examples and grammaticality judgments in (55) are those of Kayne  
(1994).

(55)  
a.  *? I found the (two) pictures of John's/his.  
b.  I found the (two) pictures of John's/his that you lent me.

Based on the contrast shown by possessives and relatives in constructions like (55a)  
and (55b), Kayne proposes that in (55b) the (two) pictures of John's/his is actually not  
a constituent contrary to the case of (55a); Instead, Kayne argues. (two) pictures of  
John's/his that you lent me forms a constituent distinct from the. The category of
such a constituent, Kayne argues, cannot be DP given the ungrammaticality of (55a), instead, he suggests it must be a CP. Therefore, for Kayne, although the cannot have say (two) pictures of John's as its complement, it can have as its complement (two) pictures of John's that you lent me. Kayne argues that for the above assumption to be true, the head of the phrase (two) pictures of John's that you lent me cannot be present in (two) pictures of John's. This leads him to conclude that the head of the former must be that and that that phrase is a CP, containing the NP/QP (two) pictures of John's in its specifier position (as a result of movement). Kayne argues that the raising analysis provides a direct answer to where relative clauses are attached: For Kayne, relative clauses are not plausibly complements of the noun, nor are they right-adjointed to the noun or some projection of the noun given the fact that his theory, the Linear Correspondence Axiom (LCA), disallows right-adjunction in general. Kayne argues instead, that the relative clause must be a complement of the determiner, D₀. Specifically, Kayne (1994) argues that Universal Grammar (UG) makes available for relativization a [DP D₀ CP] structure.

Kayne points out that his approach to relatives has the added advantage that it permits one to understand straightforwardly an observation by Vergnaud (1974) that in English a proper name (of a city) can normally not occur with the cf. (56a).
However, the fact that (56b) is fully grammatical again suggests that the proper noun (NP) that follows the definite article, is not a sister to this definite article but has been raised to Spec, CP, by movement.

(56) a. * the Paris
     b. the Paris that I knew

86
In the following discussion, I will adopt certain positions from Kayne that are well motivated and use them as a basis for constructing further arguments for how relative clauses in Nweh should be analyzed. Essentially, I will adopt Kayne's proposal that relative clauses have a [DP D₀ CP] structure. However, my analysis will differ from Kayne's in one important respect: crucially, I will argue that there is "DP recursion". In other words, I will propose and defend the possibility that the DP is more complex than currently assumed, particularly in those cases where a D selects a CP complement.

From a purely descriptive point of view, one would like to say that a DP like (57) which contains a relative clause should, following X-bar theory, be represented as in (58).

(57)  The book (that) Atem bought --

(58)  

\[
\begin{array}{c}
\text{DP} \\
\text{Spec} \\
D' \\
D \\
\text{Spec} \\
?P \\
\text{Spec} \\
? \\
\text{CP} \\
...[e]...
\end{array}
\]

What is the categorial identity of the node designated by the ?P in (58)? Given the fact that generally only nouns can be relativized, it would be axiomatic to think of the category node designated by a ? in (58) as a noun. This will imply that the noun takes the CP as a complement. Such an assumption raises important questions with respect
to theta theory. Within the Principles and Parameters framework it is generally believed that lexical items theta mark their complements in the configuration:

\[ X' \rightarrow X \ YP \]

According to Stowell (1981) the lexical properties ("\( \emptyset \)-grid") of X determine what appears in the complement position (YP). There appears to be the suggestion that the structure of a phrase (XP) is a direct reflection of the thematic properties of the head (X) of XP. This seems to argue against a structure where the CP occurs as a complement to N but N does not theta mark its CP complement. There are several ways around this problem. One is to establish a distinction between structural complements (i.e. complements that are as a result of X-bar theory) and theta-complements that are as a result of the lexical properties of the head (See Campbell (1989), for arguments along this line). Campbell (ibid.) suggests that theta theory in itself determines the content of a phrase and a combination of theta theory and X-bar theory determine its structure. Campbell discusses cases of so-called light verbs of the sort in (59).

(59) Fred gave anchovies a try.

where he argues that the NPs anchovies and Fred in (59) are thematically related to a predicate represented by the NP a try, and that gave has essentially a place holding function, and does not assign any theta roles to its complements in this construction. It therefore appears that a lexical \( X^0 \) category can S-select a particularly \( X^{max} \) as its complement (by virtue of X-bar theory) but will not assign a theta role to this \( X^{max} \). If one adopts the view that an element is either a theta role assigner or a theta role recipient but not both, then this explains why the head noun fails to assign a theta.
role to its CP complement. The reason is because the noun is itself an theta role recipient prior to undergoing NP raising.

To avoid saying that the CP is a complement of the noun, and the theoretical problems associated with such an assumption, I will assume following Kayne (1994) that Universal Grammar makes available the structure [\(\text{DP} \text{D}^0 \text{CP}\)] for relative clauses and that in languages like Nweh, English... that do not allow "head-internal" relatives, a well formed "headed" relative clause requires that some nominal constituent must raise from within the relative clause CP, to a position where it is governed by \(\text{D}^0\) in Overt syntax. This is going to force raising of the NP to a position from which it is governed by \(\text{D}^0\).

While the analysis I will sketch here adopts the essential features of Kayne's account, my analysis differs from Kayne's in one very important respect. A crucial difference between my RC structure and that proposed by Kayne is that I posit an additional functional category DEMP ("Demonstrative Phrase") intervening between DP and CP, and I propose that the relativized NP is actually in Spec, DemP in overt syntax.

The relative clause structure I will propose and defend for Nweh is sketched in (60), where I denote the mystery category ?P of (58) as a DemP. I should point out here that Nweh lacks definite and indefinite articles. Definiteness on a noun is generally expressed by demonstratives or possessive pronouns or not syntactically marked at all.

89
The structure in (60) has the immediate advantage of having the D^0 and the NP form a constituent aside from the CP, so that relative clause extraposition can correctly affect the D^0 and the NP independent of the CP. Additional justification for an extra functional category comes from (selectional) restrictions that obtain between the relativized noun phrase and the elements of the relative C^0. Recall, that the relative marker must agree with the head of the relativized NP in class.

Given the structure in (60), A-bar movement moves a DP to Spec, CP. The second step of the derivation involves ("internal") movement of the NP-complement of D^0, to Spec, DP (where it checks agreement on D). Next, the whole DP in Spec, CP is then raised to Spec, DemP, where it checks the demonstrative agreement on Dem^0. I suggested earlier, that the relative C^0 in Nweh is simply a vowel slot with no independent segmental content; It might have tonal features. I will propose here that there is "extension"/lengthening of the final vowel of the Dem^0 head to fill the "Vowel slot" of C^0. This has an immediate advantage in that it explains the formal similarity.
that exists between the demonstrative pronoun and what I have referred to as the relative marker. The relative marker is essentially a demonstrative pronoun, plus a lengthened final vowel which I take to be the "spell-out" of C₀.

An important feature of Kayne's theory of RCs adopted here is that the CP occurs as a complement of D₀. This is a significant departure from Chomsky's (1977), according to which the relative clause CP is an adjunct of the NP. However, I have suggested that Kayne's proposal does not appear to go far enough. Based on evidence particularly from the rich agreement within the DP in Nweh as well as evidence from other languages, for example, Hungarian, (Anna Szabolcsi (pc)) which suggest that the determiner system may actually more complex than standardly assumed, I have proposed that there is "DP recursion" within the relative construction. Below, I will show that by assuming an extra functional projection between DP and CP, the proposal allows us to derive certain problematic facts relating to relative clause extraposition (noted in Kayne (1994)), in a more intuitive fashion.

2.9.5 Relative Clause Extraposition (Kayne (1994))

Consider the following sentences taken (with their grammaticality judgments) from Kayne (1994), p. 124.

(33) A man just walked in who we knew in high school.
(34) ?? The man just walked in who we knew in high school.
(35) The very man just walked in that I had been telling her about.
(36) * The only man just walked in that I had mentioned to her.
Following Sportiche's (1988) reanalysis of quantifier floating as quantifier stranding, Kayne analyzes the above sentences not as involving relative clause extraposition as commonly thought, but as cases of relative clause stranding, in which the NP is moved leftward, stranding the relative clause. However, given his relative structure Kayne has some problems explaining the contrast observed in (33) - (36). Kayne explains the contrast in judgment between (33) and (34) on the one hand, and between (35) and (36) on the other hand, by assuming that in (33) "a man" is moved leftward from within the DP [a man who we knew in high school] which presupposedly has the structure [D CP]. He assumes that (36) also has the structure [D CP], and attributes the ungrammaticality of (36) to the fact that leftward movement of the NP "the only man" in (36) has applied to a non-constituent, which under standard assumptions is bad because non-constituents cannot be moved. Thus, for Kayne English the is of the category D but a is not; He treats a as a quantifier. Consequently, "a man" in (33) is a constituent but "the man" in (34) does not form a constituent.

Even more problematic and less obvious, is the suggestion that the contrast between (35) and (36) follows from an assumption that the in (35) is actually a demonstrative whereas the in (36) is not. The obvious question is when can one tell when the is a demonstrative and when it is a determiner? Such a suggestion is rather stipulative and cannot be derived in a principled and consistent fashion. Observe from (61) that "a man" and "the man" can occur in the "same" position and exhibit the "same" syntactic properties with respect to the phenomenon Kayne reanalyzes as relative clause stranding.

(61) a. The man who the Police arrested had just walked in.
b. A man who the Police arrested had just walked in.
Given Kayne's LCA which completely rules out rightward adjunction, one must say that both DPs "a man" and "the man", have undergone leftward movement from a position embedded within the clause. It follows under standard assumption that both the / a must form a constituent with the NP man aside from CP, at the time that the DP the/a man is raised, in order for the relative clause CP to be stranded. The relative clause structure proposed by Kayne (1994) does not provide us with a straightforward way of handling such issues. I will suggest that Kayne's insightful proposal can be modified to solve the problems associated with relative clause extraposition, if one assumes the possibility of DP recursion, as it will allow us to have an additional (functional) projection intervening between DP and CP. Observe that the problems that arise with the relative clause extraposition examples above revolve around the determiner system. Given my relative clause structure in (60), one can maintain the insights of Kayne's theory by saying that the definite determiner originates in D₀ whereas the indefinite determiner originates lower in Dem⁰: Then say that the relativized NP does not remain in Spec, CP but must raise further to Spec, DemP where it is governed by D₀. One needs to ensure that in languages like English both D₀ and Dem⁰ cannot be overt. To ensure that both D₀ and Dem⁰ are not overt, one can formulate a "Doubly filled D₀ filter" analogous to the "Doubly filled Comp filter". The problem of a doubly filled D₀ will not arise for Nweh, since the only overt "determiners" that Nweh has are demonstratives; The problem will also not arise for languages that allow both a determiner and a demonstrative to be overt. Let's see how the proposal outlined here deals with the problem of relative clause extraposition noted above.

Going back to the examples in (61) (see also Kayne's (33) and (34)), I will want to propose that the NP man (or its DP projection) is actually not in Spec, CP but
rather in Spec, DemP. The NP *man* has been raised to Spec, DemP via Spec, CP. If the overt head is D we get the correct order "the man" with *the* in D⁰ and *man* in Spec, DemP. If Dem⁰ is filled with the indefinite article *a* and D⁰ is null, then when the NP *man* moves to Spec, DemP, the indefinite article in Dem⁰ must be incorporated into D⁰ to get the correct order "a man". Thus, D⁰ always ends up being filled. Given such a derivation, further movement of either *a man* or *the man* is possible while standing the CP, because the D⁰ and the NP in Spec, DemP can form a constituent aside from the CP. And therefore, 'extraposition' of *the/a man* follows directly under my proposal without resort to idiosyncratic rules that attempt to characterize when D⁰ *the* is actually a demonstrative and when it is a determiner as it is the case under Kayne's analysis. Further motivating evidence for the assumption that a DemP occurs as a complement of D⁰, and for the relative clause structure proposed above comes from the fact that in many languages demonstratives can cooccur with definite articles. For example, Szabolcsi (pc) points out that in Hungarian, demonstratives can follow the definite article and be separated from it by a possessor phrase.

The agreement phenomenon within the relative clause in Nweh, provides additional evidence for a relative clause structure like (60). Recall, that RCs in Nweh obligatorily have a relative marker (RM) that intervenes between the head noun and the relative clause, and that the RM agrees with the head noun in *class*. Even more interesting is the fact that the form of the RM is identical to (differing only in the length of the final vowel) and show the same agreements as the demonstrative pronoun cf. (62) and (63).
(62)  a.  ngaŋ gi
   1person 1that 'that person'

   b.  laŋeŋ ra
   5pot 5that 'that pot'

   c.  bakŋ mi
   6pots 6those 'those pots'

(63)  a.  ngaŋ gi mbi ë kë? ndœŋ (agĩ)
   1person 1RM dog Agr P-1 bite (him)
   'the person whom a dog bit'

   b.  laŋeŋ ra a Atem ë kë? njœ (agĩ)
   5pot 5RM A. Agr P-1 buy
   'the pot which Atem bought'

   c.  bakŋ mi A tem a kë? njœ (agĩ)
   6pots 6RM A. Agr P-1 buy
   'the pots which Atem bought'

How do we explain the formal similarity between the relative marker and the demonstrative pronoun? Given my proposal as to how relative clauses in Nweh should be analyzed as well as the RC structure I have proposed here (for Nweh), the answer is straightforward. The relative CO in Nweh is actually a vowel slot with no independent segmental content. I assume the demonstrative pronoun, DemO selects this type of CO, that has tonal but no independent segmental content. Thus, what appears to be a relative complementizer is actually a demonstrative pronoun whose final (vowel) segment has been lengthened to "support" the (tonal) features of CO. A derivation follows in (64).
In (64) a DP is A-bar moved from within the relative clause to Spec, CP. The NP complement of the D then moves to Spec, DP checking the agreement on D⁰ (which will be the demonstrative pronoun)¹¹. The DP as a whole, then raises to Spec, DemP thus checking the agreement on Dem⁰. The Dem⁰ head then lengthens its final vowel to fill the "empty" relative CO slot.

The analysis of the relative construction developed here correctly precludes, in a language like Nweh, a relative clause with an indefinite head e.g. a person that a dog bit--. The analysis predicts that since what appears to be a relative pronoun is actually a demonstrative, the NP head of a relative clause is always definite. This is

¹¹ Except where necessary, I use D⁰ for "Determiner/Demonstrative". Recall, the only determiners that Nweh has are demonstrative pronouns.
consistent with the facts of the language. It also provides a plausible explanation for the lack of non restrictive relative clauses in Nweh.

Additional evidence, trivial though, for the relative clause structure proposed here, as well as for the derivation sketched in (64), comes from the fact that the form of the relative C\(^0\) (which I have argued, actually derives from a demonstrative pronoun) is completely different from the complementizer of sentential complementation cf. (65).

(65) a. ng\~an g\~i\' m\~u k\~e? nj\~u? nk\~x\~o ng\~u l\~e ba\~con \~e k\~e l\~e ag\~i
   person RM I P-1 hear message say that thieves Agr P-2 beat him
   lit., 'The person who I heard the news that thieves attacked (yesterday).'

b. ng\~an g\~i\' Njikem l\~a s\~ou\~ collection mb\~e\~u? ng\~u l\~e mb\~u \~e l\~a l\~u\~n ag\~i
   person RM N. P-3 tell lie say that dog Agr P-2 beat him
   lit., 'The person who Njikem told a lie that the dog bit (him).'

Recall, that it is possible to get both a relative C\(^0\) and an overt demonstrative pronoun as in (66).

(66) a. ng\~an g\~i\' g\~i\' mb\~u \~e k\~e? nd\~u\~n (ag\~i)
   person that RM dog Agr P-1 bite (him)
   'that person whom a dog bit'

b. l\~ek\~en r\~a r\~a Atem \~a k\~e? nj\~u\~c --
   pot that RM A. Agr P-1 buy
   'that pot which Atem bought'

It is interesting that when there are two demonstrative pronouns as in (66), only the lower demonstrative pronoun has a lengthened final vowel. This fact supports my theory that the lengthening of the final vowel of the demonstrative pronoun is actually because of the need to fill the "non-contentive" relative C\(^0\) slot.
The proposal sketched above explains certain phenomena associated with relative construction in Nweh. For instance, it derives the agreement between the head noun and the relative marker in terms of the familiar Spec-head agreement that I have standardly assumed. It also gives a straightforward account of the formal similarity between the relative pronoun and demonstrative pronoun that obtains in Nweh. It provides an explanation for why Nweh relative clauses are basically restrictive.
Chapter Three

(DP) COORDINATION

3.1 Introduction

In chapter two I examined the internal structure of the modified noun phrase. The focus of the present chapter is the coordinated noun phrase. I will discuss how two or more syntactic units - NPs, VPs, APs... can be put together to form a "conjoined" syntactic unit of the sort \( X \) and \( Y \). I will not discuss disjunction type coordination of the sort \( X \) or \( Y \). The focus of concern will be on certain interesting asymmetries that arise with respect to pronominal coordination. Pronouns are generally considered not to form a part of speech on their own, but to be under the category noun. However, it might be necessary in certain cases (from a semantic and a syntactic standpoint) to differentiate pronouns from nouns. For instance, in Nweh the strategy used for coordination varies depending on the syntactic category of the conjuncts, and as we will see pronominal DP coordination works very differently from lexical DP coordination. I will begin by sketching an overview of the different strategies that Nweh employs in coordination. The focus of the chapter will be the syntax of pronominal coordination.
It is generally the case that only elements of the same syntactic category can be coordinated, although apparent exceptions can be found. For instance, languages generally allow a (proper) noun to be conjoined with a pronoun e.g. *Atem and I*. However, the two categories are often considered to both be of the category DP.

Nweh is no exception to the above generalization. Thus, in Nweh DPs are generally coordinated with DPs. VPs with VPs, clauses with clauses, etc.

### 3.2 Coordination Strategies

Coordinated structures generally fall into two types: (1) *Syndetic* i.e. where the conjuncts of the coordinate structure are united by the use of an overt coordinating conjunction like "and" or "with": (2) *Asyndetic* or *Paratactic* i.e. where the conjuncts are not united by any overt coordinating conjunction. The latter simply uses pauses (in speech) and commas (in writing). I will refer to these respectively as the Overt strategy and the Zero strategy.

#### 3.2.1 Zero Strategy

In Nweh, coordination is achieved basically by the zero strategy. With the exception of DPs, which involve some kind of overt marker associated with coordination between the conjuncts, coordination of all other syntactic categories is essentially paratactic, where the conjuncts are simply juxtaposed, with no overt coordinating conjunction. Below, I illustrate with examples of IP and VP coordination.
Sentential coordination involves the juxtaposition of two or more clauses, characterized by the absence of an overt tense marker in the second and subsequent conjuncts.

(1) a. Atem a kɛ? ndáá abé Njikem à láá ṣẹ̀?
   A. Agr P-1 N-cook fufu N. Agr Ø-cook soup
   'Atem cooked fufu and Njikem cooked soup'

b. Atem a kɛ? ọgụdụ mbe? Njikem à ọgụdụ æsàa
   A. Agr P-1 N-go farm N. Agr Ø-go market
   'Atem went to the farm and Njikem went to the market'

c. Atem a kɛ? ọgụdụ mbe? Njikem à láá abé
   A. Agr P-1 N-go farm N. Agr Ø-cook fufu
   'Atem went to the farm and Njikem cooked fufu'

d. Atem à kɛ? ndáá abé Zishu á ćúú alóó Njikem á láá ṣẹ̀?
   A. Agr P-1 N-cook fufu Z. Agr Øboil yams N. Agr Ø-cook soup
   'Atem cooked fufu, Zishu boiled yams and Njikem cooked soup'

In the unmarked case, it appears the events of both clausal conjuncts are usually somehow related cf. (1a) and (1b). However, as (1c) suggests, there appear to be no requirement that the events of both conjuncts must be related.

With the zero strategy of coordination, there are very subtle nuances with respect to tense/aspect marking that determine whether a coordinate reading is obtained or just a sequential reading. The basic requirement is that only the first conjunct can have an overt tense marker. The tense marker cannot be overt in subsequent conjuncts. If the second or subsequent clausal conjunct has an overt tense marker, then the interpretation that results is two independent clauses having a (sequential) reading of two events which may be unrelated and not a coordinated reading, even if the tenses are identical as in (2a).
(2)  a. Atem a kê? ndáâ abé Njikem à kê? ndáâ npê?
A. Agr P-1 N-cook fufu N. Agr P-1 N-cook soup
’Atem cooked fufu (today); Njikem cooked soup (today)’

b. Atem a kè gyôdâ mbë? Njikem à kê? ngôdâ osâa
A. Agr P-2 Ø-go farm N. Agr P-1 N-go market
’Atem went to the farm (yesterday); Njikem went to the market (today)’

The fact that in sentential coordination, the second and subsequent conjuncts, even though cannot have an independent tense marker, must have an independent agreement marker seems to suggest that the sentence (IP/AgrP) is actually a projection of Agrº rather than say of Tenseº.

Sentential coordination appears to be limited to declarative sentences, as interrogative clauses cannot be coordinated. Coordination of negatives sentences, not only does not sound natural, but seems to be limited to negative sentences that have the verb in clause final position.

(3)  a. Atem à kê? te mbë? gyôdâ Njikem à te osâa gyôdâ
A. Agr P-1 Neg farm go N. Agr Neg market go
’Atem did not go to the farm and Njikem did not go to the market’

b. *? Atem à kê? te gyôdâ mbë? bô Njikem à te gyôdâ osâa bô
A. Agr P-1 Neg go farm Neg N. Agr Neg go market Neg
’Atem did not go to the farm and Njikem did not go to the market’

Verb Phrase coordination, like coordination of other categories that use the zero strategy, is achieved by juxtaposition of two VPs. In VP coordination (like in IP coordination) only the verb of the first conjunct is fully inflected; The verb(s) of the subsequent conjunct(s) are dependent on the inflection of the first verb. This is evident from the fact that the verb of the second and subsequent conjuncts appears in the (sequential) infinitival form in which the verb gets an N-prefix (i.e. the citation form of the verb).
(4)  a. Njikem à lè lāá abé nčūũ akendǒŋ
   N. Agr P-3 [Ø-cook fufu] [N-boil plantains]
   'Njikem cooked fufu and boiled plantains.'

   b. Atem à kó čūũ akendǒŋ ndáá abé
      A. Agr P-2 [Ø-boil plantains] [N-cook fufu]
      'Atem boiled plantains and cooked fufu'

Since VP coordination neither involves an overt conjunct, nor an overt subject or
subject agreement, a question arises as to whether there is a difference in principle
between a coordinated VP construction and the so-called Serial Verb construction
(SVC). This is a difficult question. In terms of the syntax, there appear to be no
difference between a SVC and a coordinated VP construction. In terms of the
semantics these two constructions can be distinguished by a property that has been
referred to as "object sharing" - a property which is typical of Serial Verb
Constructions but not of the coordinated VP construction.

(5)  a. Atem a` kó čūũ akendǒŋ npfět álóʊŋ
       A. Agr P-2 Ø-boil plantains N-eat yams
       'Atem boiled plantains and ate yams'

       b. Atem a` kó čūũ akendǒŋ npfět --
          A. Agr P-2 Ø-boil plantains N-eat pro
          'Atem boiled plantains and ate them'

In (5a) where the objects of V₁ and V₂ are distinct, (5a) has the interpretation of a
coordinated VP or two unrelated events in a sequential relation. However, in (5b)
where the object of V₂ is pro and hence, identical to the object of V₁, the most
felicitous interpretation is that of a Serial Verb construction, where, although there
appear to be two events, they are read and interpreted as "one" single event. However,
if the coordinated VPs are, (or for that matter the second VP conjunct, is) non-
transitive, it becomes very difficult to distinguish a coordinated VP construction from
a Serial Verb construction, even in terms of their meanings as (6) indicates.

(6) a.  ati ã kɔ leb asɛ ñeɛe
calabash Agr P-2 [fall ground] [break]
'The calabash fell down and broke'
(lit., The calabash broke as a result of falling down).

b.  Njikem ã kɔ lóo asɛ ntuŋ
N. Agr P-2 [rise ground] [exit]
'Njikem stood up and walked out'

c.  Njikem ã kɔ nóo balù mbiä
N. Agr P-2 [drink wine] [drunk]
'Njikem drank himself silly'
(lit., Njikem became drunk as a result of drinking wine).

Although the examples in (6) are translated as involving coordination, the semantics
suggests that they are more of the Serial Verb construction-type, because of the logical
succession of events or causal relation between VP₁ and VP₂.

3.2.2 Overt Strategy

The overt conjunction strategy¹ is restricted to DP coordination. There are basically
two markers functioning as conjunctions: bó and mà. Both can be translated as "and,
with". The choice of either bó or mà as a marker of coordination depends largely on
the "cardinality" of the conjuncts as I show below.

¹ For purposes of description and exposition, I will refer to the "markers" that appear between the DP
conjuncts as "(pronominal) conjunctions". However, in the analysis to be developed here, I will argue
that such markers are strictly speaking, not conjunctions: I will argue one of these markers is actually a
plural pronoun. I will then propose a way in which the pronoun is derived.
3.2.2.1  bó  Coordination

The "pronominal conjunction" bó is identical to the third person plural pronoun bó "they". In fact, in the analysis to be developed here, I will argue against calling bó a "coordinating conjunction". Since bó is associated with coordination and shows up in noun phrases translated as conjoined, I will, as a point of departure, refer to bó as a "pronominal conjunction". The use of the pronominal conjunction bó (compared to the use of mú) is syntactically very restricted. bó is most appropriately used as the conjunction when there are just two conjuncts: [DP bó DP] as in (7).

(7) a. Atem bó Njikem  
    A. conj. N.  'Atem and Njikem'  

b. ngèṣàŋ bó mbèzàŋ  
    corn conj. groundnuts  'corn and groundnuts'  

c. núa bó Njikem  
    child conj. N.  '(the) child and Njikem'  

(8) a. *juú bó Njikem  
    he conj. N.  'he and Njikem'  

b. *Njikem bó juú  
    N. conj. him  'Njikem and him'  

c. *mù bó gò  
    I conj. you  'I and you'  

d. *gò bó mú  
    you conj. I  'you and me'  

As the examples in (7) indicate both conjuncts must be lexical DPs. bó does not appear to allow either of the conjuncts to be a pronominal DP as the ungrammaticality of the examples in (8) suggest.
As noted above, the "conjunction" bó is actually a third person plural pronoun bó "they". Payne (1985), notes that one of the strategies that some languages use for noun phrase conjunction is the "pronoun strategy" where the conjuncts are linked by a plural pronoun which indicates the number and person of the conjoined NP. This appears to be the case in Nweh with '[DP bó DP]' coordination. If one believes that in Nweh a (plural) pronoun is actually used as the coordinating conjunction in [DP bó DP] type coordination, such an assumption could permit one to straightforwardly explain why there is complementarity between having bó as the coordinating conjunction and having a pronominal as one of the conjuncts. However, in order to validate the above assumption, one must first answer the question as to why a pronoun should function as a coordinating conjunction. Unless one can provide an answer to this question, the assumption that a pronoun functions as a coordinating conjunction appears to be untenable. The coordinated DPs in (7) can occur as subjects (9a), objects (9b), objects of prepositions (9c), as well as with instrumentals (9d).

(9)  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Atem bó Njikem ë ké? njúç mb5</td>
</tr>
<tr>
<td></td>
<td>Agr P-1 buy goat</td>
</tr>
<tr>
<td></td>
<td>'Atem and Njikem bought a goat'</td>
</tr>
<tr>
<td>b.</td>
<td>Njikem à ké? nčúu ngesaŋ bó mbezán</td>
</tr>
<tr>
<td></td>
<td>Agr P-1 boil corn conj. groundnuts</td>
</tr>
<tr>
<td></td>
<td>'Njikem boiled corn and groundnuts'</td>
</tr>
<tr>
<td>c.</td>
<td>Njikem à ké? nfa nkap an bó Atem bó Zishu</td>
</tr>
<tr>
<td></td>
<td>Agr P-1 give money to A. conj. Z.</td>
</tr>
<tr>
<td></td>
<td>'Njikem gave money to Atem and Zishu'</td>
</tr>
<tr>
<td>d.</td>
<td>Njikem à ké? ntem mbín m5 lakąŋ bó ngwú5</td>
</tr>
<tr>
<td></td>
<td>Agr P-1 shoot deer with spear conj. gun</td>
</tr>
<tr>
<td></td>
<td>'Njikem shot a deer with a spear and a gun'</td>
</tr>
</tbody>
</table>
(10) a. Atem bó Njikem é ké? njúc mb5
   A. conj. N. Agr P-1 buy goat
   'Atem and Njikem bought a goat'

   b. bó Njikem é ké? njúc mb5
      they N. Agr P-1 buy goat
      'Njikem and him bought a goat'

   c. bó júi é ké? njúc mb5
      they he Agr P-1 buy goat
      'They (dual) bought a goat'

   d. múù à ké? njúc agáp Njikem
      I Agr. P-1 see them N.
      'I saw him and with Njikem'

There appears to be good evidence that the pronominal conjunction bó is actually the same bó that is used as the third person plural pronoun cf. (10b). Examples like (10b) would lead one to think that the pronominal conjunction bó can allow one of its conjuncts to be null or pro. However, this is not the case. Observe that in such apparent cases of '[pro bó DP]' or '[DP bó pro]' bó shows case distinctions cf. (10b) versus (10d); Moreover, we find bó cooccurring with pronominals as in (10c), when we established above that bó as a pronominal conjunction is incompatible with a pronominal DP conjunct. If (10c) were to be interpreted as pro bó júi i.e. [pro conj. DP], there will be no way of explaining the ungrammaticality of (8a) - (8d), particularly (8c) and (8d). The above facts therefore, suggest that bó in examples like (10b), (10c) and (10d) is a third person plural pronoun and not a coordinating conjunction. However, I argue later that the "pronoun phrase" construction in (10b), (10c), and (10d) is derived from a construction that involves coordination with a "null" conjunction. This approach will be extended to (10a), thus bringing DP coordination in line with coordination of other syntactic
categories. In order words, I will explore the idea that DP coordination also involves a null coordinating conjunction.

Based on the examples in (10), particularly (10b) - (10d), I will argue that in Nweh all syntactic categories prefer the zero coordinating conjunction strategy. I will further propose that the coordination of DPs involves a derivational process that triggers a plural pronoun which indicates the overall number and person of the conjoined DP and any subsequent conjuncts are to be understood as included in the (number) reference of the plural pronoun. I discuss the details of the analysis under section 3.5.3, where I discuss the "Compound Pronouns".

3.2.2.2 \textit{må} Coordination

The use of \textit{må} as a conjunction is more general and less restrictive than the use of \textit{bò}. If coordination involves more than two conjuncts, the conjunction must be \textit{må} cf. (11a) versus (11b). Less frequently, \textit{må} is used as the conjunction if there are just two conjuncts, this is particularly true if at least one (or all) of the conjuncts is a pronominal DP (11c) and (11d).

(11) a. \begin{verbatim}
Atem må Njikem må Zishu må ...
A. conj. N. conj. Z. conj. ...
'Atem and Njikem and Zishu and ...
\end{verbatim}

b. *? \begin{verbatim}
Atem bò Njikem bò Zishu bò ...
A. conj. N. conj. Z. conj. ...
'Atem and Njikem and Zishu and ...
\end{verbatim}

c. \begin{verbatim}
Njikem må mû
N. conj. I
'Njikem and/with me'
\end{verbatim}

108
d. mú mà gò
   I conj. you
   'I and/with you'

e. ngêsāŋ mà mbezāŋ
   corn conj. groundnuts
   'corn and/with groundnuts'

The coordinated DPs in (11) generally occur as direct objects cf. (12a). However, they can also occur as subjects or as objects of prepositions.

(12) a. Njikem à ké? npfét mbezāŋ mà ngêsāŋ mà ngāpsāa
      N. Agr. P-1 eat groundnuts conj. corn conj. beans
      'Njikem ate groundnuts, corn and beans'

    b. Atem (mà) Njikem mà Zishu é ké? ngyśā aśāa
       A. (conj.) N. conj. Z. Agr. P-1 go market
       'Atem (and) Njikem and Zishu went to the market'

    c. Atem mà Njikem *(mà) Zishu é ké? ngyśā aśāa
       A. conj. N. conj. Z. Agr. P-1 go market
       'Atem, Njikem and Zishu went to the market'

When there are more than two conjuncts, it is felicitous to repeat the coordinating conjunction in between all the conjuncts. However, as (12b) illustrates, the repetition of the conjunction in between conjuncts is optional in subject position. In other positions the repetition of the conjunction is generally required. The coordinating conjunction must, however, be overt in between the last two conjuncts cf. (12c).

There are cases of coordination in which mà can be used along with bó, as in (13) where the first two conjuncts are conjoined by bó and subsequent conjuncts are connected by mà.
In a [DP bó DP] coordination mà can be used to "inflect" or "prefix" one or both conjuncts depending on whether the conjuncts are proper names or lexical nouns.

As (14a) indicates mà can be used to inflect the last conjunct of a coordinate structure: Where this is the case, the noun inflected with mà (except for proper names) must be [+plural] cf. ungrammaticality of (14b), and must occur in a coordinate structure as the second/last conjunct cf. the fully grammatical (14a) versus the ungrammatical (14d) and (14e). (14c) shows that coordination of plural non-proper names with bó requires that the second (and subsequent) conjunct(s) be inflected with mà as in (14a).
For proper names occurring as part of a coordinate structure, mà can also be used to inflect the first conjunct, if and only if, the second conjunct is also inflected as such cf. (15c) versus (15d).

(15) a. mà-Njikem
    mà N. 'Njikem and co.'

    b. mà-Njikem bó mà-Zishu
    mà N. conj. mà Z. 'Njikem & co. and Zishu & co.'

    c. Njikem bó mà-Zishu
nenjikem and Zishu & co.'
    N. conj. mà Zishu

    d. * mà-Njikem bó Zishu
    mà N. conj. Z. 'Njikem & co. and Zishu'

The contrast between the fully grammatical (15c) and the ungrammatical (15d) raises a number of questions. The most obvious question is what is the explanation for such a contrast? To answer this question, I will propose that there is a requirement in Nweh that forces conjuncts of a coordinate structure that vary in number (sg./pl.) to occur in the order SINGULAR < PLURAL rather than *PLURAL < SINGULAR. I state such a requirement in (16).

(16) When two conjuncts of a coordinate structure vary in number (sg./pl.),
they must occur in the order <SINGULAR conj. PLURAL>.

Additional justification for such a requirement will become more evident when I outline my account of the derivation of "compound pronouns" (section 3.6).

As we observe from (15a) above, mà can be used to inflect (proper) human names even when they do not appear in a coordinate structure. Where this is the case, mà has the effect of associating the name with at least one other individual, thus,
giving the name a plural sense and calling for an agreement that would go with a plural (pro)noun cf. (17a) versus (17b).

(17) a. mà-Njikem ɛ kê? npfét akendɔŋ
   mà N. Agr. P-1 eat plantains
   'Njikem & co. ate plantains'

b. Njikem à kê? npfét akendɔŋ
   N. Agr. P-1 eat plantains
   'Njikem ate plantains'

c. * mà-jú ɛ kê? npfét akendɔŋ
   mà he Agr. P-1 eat plantains
   'He & co. ate plantains'

d. * mà- bó ɛ kê? npfét akendɔŋ
   mà they Agr. P-1 eat plantains
   'They & co. ate plantains'

As (17c) and (17d) indicate, pronouns (unlike lexical DPs) cannot be inflected with mà. Therefore, mà has a dual function: mà can either be used as a "conjunction" or to inflect a conjunct as is the case in (15). These two functions of mà are in complementary distinction.

3.3 Coordination and Accompaniment

Accompaniment and coordination are very closely related. In fact, accompaniment is also expressed by the conjunction bó. This makes the two constructions almost impossible to distinguish from a syntactic point of view. The one instance where accompaniment and coordination are clearly separable is when the two DPs are not directly linked by the coordinating conjunction bó. cf. (18a) - (18c) versus (18d).
(18) a. Atem bó Njikem é kē? ɲŋyɔa əsāa  
A. conj. N. Agr. P-1 go market  
'Atem and Njikem went to the market'

b. bó Njikem é kē? ɲŋyɔa əsāa  
They N. Agr. P-1 go market  
'He and Njikem went to the market'

c. bó mā-Njikem é kē? ɲŋyɔa əsāa  
They ma-N. Agr. P-1 go market  
'They and Njikem went to the market'

d. Atem à kē? ɲŋyɔa əsāa bó Njikem  
A. Agr. P-1 go market with N.  
'Atem went to the market with Njikem'

(18a) and (18b) can be read either as an accompaniment or as a coordinate construction. On the contrary, only the accompaniment interpretation is available for (18d).

3.4 The Syntax of DP Coordination

I will herein develop a theory of DP coordination that involves Kayne's (1994) conceptions of the antisymmetry of syntax. Thus, I will assume following Kayne that coordinating conjunctions are heads that serve to bring coordinate structures in line with the antisymmetric requirement imposed by the Linear Correspondence Axiom (LCA) Kayne (1994). This implies that the constituent structure of a conjoined DP like [[Atem] bó [Njikem]] must following X-bar theory, be as in (19).

(19) [XP Atem [X_1 bó Njikem]]
The idea is that coordination takes the form '[(DP₁ [ and DP₂])]’ with the entire phrase a projection of \textit{and}. Let’s call the head occupied by \textit{and} Conjo and its phrasal projection ConjP. Two questions arise here: (1) What is the head of Conjo in Nweh that would correspond to English \textit{and}? (2) What exactly is the nature of the relation of the (two) DP conjuncts to the coordinating head, Conjo?

Beginning with the first question, I propose that in Nweh, Conjo is actually devoid of segmental contents. This proposal has the advantage that it treats all coordination in Nweh, as involving a null coordinating conjunction. However, it raises questions as to how to treat the plural pronoun \textit{bó} which is associated with coordination and which I have hitherto referred to as a "pronominal conjunction". To answer this question, I propose to treat the \textit{bó} that shows in DP coordination as a type of pronominal agreement triggered by Spec-head agreement and by incorporation of Conjo to some head.

Recall, that this "pronominal conjunction" indicates the person and number features of the conjoined DP. In other words, it agrees with the ConjP. Given the restrictive approach to agreement that I have pursued herein, which basically seeks to reduce the various agreements in Nweh to a relation between a head and the content of its specifier, it must be the case that the pronoun is in the head of some projection, into whose specifier position a DP conjunct has moved. Given standard assumptions about movement and agreement, it must be the case that the projection on which the pronominal agreement is triggered is located above ConjP. This suggests a structure like (20).

\footnote{Following this across-the-board Zero conjunction strategy, \textit{mìa}, in those cases where it has a conjoined reading, can simply be reanalyzed as a comitative marker.}
In (20) I refer to the functional XP category dominating ConjP as C/OP (Coordination Operator phrase) analogous to G/OP (see chapter 2). Like the G/OP which I suggested is used to trigger the various genitive agreements within DP, I assume the C/OP is used as a "base of operation" to license coordination. It is evident that the C/OP and the G/OP share a number of parallels. For example, in chapter 2 I showed that pronominal genitives (unlike lexical genitives) and Num⁰ do incorporate to G/OP⁰. Similarly, I will show here that pronominal DP conjuncts (unlike lexical DP conjuncts) and Conj⁰ (which bears the number features of ConjP) also do incorporate to C/OP⁰. Following the parallels between G/OP and C/OP, I want to propose that in a coordinated DP construction, the higher pronominal conjunct incorporates to Conj⁰ and then both the [pron+Conj⁰] move to the C/OP⁰ head. However, if the higher conjunct is a lexical DP, it cannot incorporate to Conj⁰ but must move Spec-to-Spec to Spec, C/OP, where it triggers the "pronominal conjunction" agreement on the C/OP⁰ head by Spec-head agreement. The detailed derivation is sketched in (21).
This is how the derivation works: If there is no pronominal DP conjunct involved, the (null) Conj⁰ head (which is specified as [+plural]) incorporates onto C/O⁰. The incorporation forces the higher DP conjunct to raise (Spec-to-Spec) to Spec, C/OP, where it checks/trigger the pronominal agreement on C/O⁰ head. However, if one of the DP conjuncts is a pronominal, the pronominal (unlike the lexical DP) has to incorporate to Conj⁰, and then both [pronoun + Conj⁰] further raise to C/O⁰ head. Coordination expresses a relation between (two) DP conjuncts, X and Y. This implies that when two DPs are conjoined, only one DP conjunct can move to a higher position, than that to which the Conj⁰ head is located. In the case of (21) no further derivation is required, since one of the conjuncts must stay lower than Conj⁰.

An analysis such as the one sketched here will have the added advantage of unifying coordination involving lexical DP conjuncts (22a) and coordination involving pronominal DP conjuncts (22b), as well as coordination of a pronominal DP conjunct with a lexical DP conjunct (22c)
Observe from the examples in (22) that the subject agreement in all three sentences is plural. Recall, also that the third person pronoun bó that shows up in these examples in these constructions specifies the reference of all "participants".

The second question posed above, namely, the nature of the relation of the (two) DP conjuncts to the conjunction head, Conjo, is even more difficult than the first question. Kayne (1994) argues that a structure like "[[DP1 and ] DP2] in which the DP2 is right adjoined cannot be correct because it violates the LCA which assumes that specifiers and adjoined phrases must precede the phrases they are adjoined to. Moreover, as Kayne (ibid.) points out, while we can have a conjoined structure like Tom, Bill and Sam, it is not possible to have *Tom and Bill, Sam. Instead, Kayne argues that the first conjunct DP1 is in Spec, and.

While I agree with Kayne that DP1 is in Spec, ConJP. I will assume as a null hypothesis that the relation of the DP conjuncts to the Conjo head, is that of a Small Clause (SC) complement. In other words, it is possible that a coordinated DP structure like [Atem [bó Njikem]] actually derives from a SC structure like (23).

(23) 'bó [DP Atem Njikem]
Because coordination expresses a relation between (two) DP conjuncts, DP₁ is forced to raise higher than Conj⁰, probably to Spec, ConjP. While there might not be enough evidence for a SC structure like (23), nothing in my analysis hinges on that. For our purposes here, it does not matter precisely how the DP conjuncts start out; The crucial assumption is that the higher conjunct (e.g. *Atem* in (23)) ends up in Spec, C/OP in overt syntax, if it is a lexical DP and in C/O⁰ if it is a pronominal. Whether the conjunct is based generated in such a position or gets there by movement is a separate issue. Assuming that the conjuncts start out as a SC, the antisymmetry requirement, (Kayne (1994)) will force the DP small clause in (23) to have a head. This will imply that *[Atem Njikem]* corresponds to a headed small clause with *Njikem* as the head of the small clause and *Atem* left-adjointed to, or in the specifier position of, the phrase headed by *Njikem*.

The above assumption derives the [DP₁ [and DP₁]] analysis of coordination proposed in Kayne (1994) plus the fact that DP₁ raises to its surface position from inside a SC.

Since a coordinating conjunction establishes a relation between two XPs, I assume the DP in the specifier of the DP small clause (complement of conj⁰) raises to spec. ConjP. It is plausible that the raising is motivated in part for case theoretic reasons i.e. due to the limitation of case positions within the DP. I should note here that in [DP conj. DP] coordinate construction in Nweh, the two DPs get different case markings cf. (24).

(24) a. Zinkeng à kë? njįš a-Njikem bó Zishu
    Z. Agr P-1 see CM N. conj. Z.
    'Zinkeng saw Njikem and Zishu'

b. Zinkeng a kë? njįš agáp juā
    Z. Agr P-1 see them him
    'Zinkeng saw them (dual)' (lit., 'him and him'.)
Such case related facts are difficult to illustrate in a straightforward fashion because Nweh shows audible case distinction basically on pronominal DPs, and coordination involving a pronominal DP conjunct is incompatible with bó as the "pronominal conjunction" since pronominal conjuncts do incorporate to ConjO. Using the "conjunction" mà the point becomes more evident as we observe in (24c).

Below, I show how the approach to DP coordination being developed here permits one to explain straightforwardly how "compound pronouns" are derived.

### 3.5 Coordination involving Pronominal DPs

Pronouns are generally considered to fall under the "same" syntactic category as nouns. However, I will show that with respect to the syntax of "bó coordination", pronouns and nouns behave differently. One such difference which I already noted above is that in DP coordination, pronouns incorporate to the conjunction head ConjO, but lexical DPs do not. I used this assumption to account for the contrast between (25a) on the one hand, and (25b) - (25d) on the other hand.

\[
\begin{align*}
\text{(25) a. } & \text{ Atem bó } \text{ Njikem} \\
& \text{A. conj. N.} \quad \text{Atem and Njikem'} \\
\text{b. } & \text{ * juú bó } \text{ Njikem} \\
& \text{he conj. Njikem.} \quad \text{he and Njikem'} \\
\text{c. } & \text{ * Atem bó (juú) } \\
& \text{A. conj. he} \quad \text{Atem and him'}
\end{align*}
\]
d. * juí bó juí
   I conj. he
   'I and him'

e. bó Njikem
   they òNjikem
   'he and Njikem'

f. bó juí
   theyóhe
   'they (dual)' \(\text{lit.}, \text{they-he}\)

I take the ungrammatical examples in (25) to be a clear indication of the fact that \(\text{bó}\) is a plural pronoun and not a coordinating conjunction. If \(\text{bó}\) were a coordinating conjunction, there would be no reason why the examples in (25b) - (25d) are ungrammatical.

To express DP coordination where one of the conjuncts is a pronoun, the pronoun must incorporate, as proposed above, given us the order \(\text{pronoun} \prec \text{noun}\) as in (25e). The order \(\text{noun} \prec \text{pronoun}\) is not an acceptable order as the ungrammaticality of (25c) indicates. I state this requirement in (26).

\[(26) \quad \text{When a pronominal DP is conjoined with a lexical DP, they must occur in the order } <\text{PRONOUN conj. NOUN}>.\]

If coordination involves two pronominal DP conjuncts, then it is the higher DP conjunct (DP\(_1\)) that incorporates into Conj\(^0\) resulting in what I refer to as a "compound pronoun" cf. (25f), where this "first" pronoun is always [+plural] and indicates the overall number and person of the compound and the "second" (pronoun is interpreted/understood as included in the reference of the first pronoun. An obvious question that arises here is what is the derivation of compound pronouns like (25f) or for that matter the derivation of a "compound pronoun - noun" construction like (25e). I will herein argue that these constructions all be derived in the same way. In other words, (25a), (25e) and (25f) all derive from a coordinate structure.
Above, I have discussed how coordination works in Nweh. To provide a complete picture that would enable one to fully understand the link between examples like (25a), (25e) and (25f), as well as the derivation of compound pronouns, I propose to present a descriptive overview of the Nweh pronominal system.

3.5.1 System of Pronominal Reference in Nweh

Nweh has a complex pronominal system, that brings together properties generally found in Bantu languages as well as others that are peculiar to Nweh. Herein, I will depart from an accepted tradition in Bantu that treats the first person plural as having three independent forms: a dual, an inclusive and an exclusive form. Instead I will analyze Nweh pronouns as falling into two major classes: the simple and the compound pronoun types. By simple pronouns I refer to those pronouns that are monomorphemic and cannot be broken down, whereas the compound pronouns are derived by a combination of at least two (simple pronominal) morphemes and thus can be segmented into component parts.

3.5.2 Simple Pronouns

Nweh has a three person pronominal system: first, second and third person. This is further distinguished by number (singular/plural), thus giving a six simple pronominal forms. Although there are no special pronominal forms that distinguish human from non-human referents, there is +/- human distinction which corresponds to the presence versus absence of a pronominal form, since only [+ human] referents have overt
pronominal forms. This is true for subjects and objects but not for genitive pronouns. There is no gender distinction. The simple pronominal paradigm also shows a case distinction. There is an "independent" set for subjects and objects of prepositions (oblique); there is an accusative set for objects; and a genitive set for possessors. The genitive pronouns show noun agreement with the class of the noun. The agreement is marked both segmentally and tonally.\(^3\) The simple pronominal forms for Nweh are shown in table 3.1.

\begin{center}
\textbf{Table 3.1: [Simple Pronominal Forms]}
\end{center}

\begin{tabular}{llllll}
\textbf{Person} & \textbf{Number} & \textbf{Indep./Oblique} & \textbf{Gloss} & \textbf{Subj. Agr.} & \textbf{Accusative} & \textbf{Genitive} \\
1 & sing. & mû & I & ŋ & a-gé & gé \\
2 & sing. & gô / ø & you & ô & a-gô & gô \\
3 & sing. & juû & s/he & à / ê & a-gî & gî \\
1 & plural & buûh & we & è & a-gbuûh & gbûh \\
2 & plural & buûô & you & è & a-gbûô & gbûô \\
3 & plural & bó & They & é & a-gáp & gáp \\
\end{tabular}

As stated above, the genitive pronominal set show agreement with the class of the noun. The set displayed in table 3.1 is that used with nouns of class 1 (for a complete paradigm of genitive pronominal forms, see chapter 2 table 2.1).

Apart from the simple pronouns, there also exists compound personal pronouns that are derived by combining the persons categories of the simple forms.

\(^3\) For details on this sort of agreement, see chapter 2.

122
3.5.3 Compound (Personal) Pronouns

Nweh has eight compound personal pronouns. Although all compound pronouns are plural in the sense that each implies more than one person, there is still some kind of number distinction - there are four "dual pronouns" where the "cardinality" of the pronominal reference is exactly two. There are also four plural pronouns where the cardinality of the pronominal reference implies more than two.

Like the simple pronoun sets, the compound pronoun sets show a case distinction. Thus, there is the nominative, the accusative and the genitive sets. The genitive set also shows class agreement with the noun. There is no gender distinction.

The compound personal pronouns are displayed in table 3.2.

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Indep./oblique</th>
<th>Accusative</th>
<th>Genitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 + 2 (incl.)</td>
<td>dual</td>
<td>bōgò / būgò</td>
<td>abōgò / abūgò</td>
<td>bōgò / būgò</td>
</tr>
<tr>
<td>1 + 3 (excl.)</td>
<td>dual</td>
<td>būjú</td>
<td>a-wūjú</td>
<td>wūjú</td>
</tr>
<tr>
<td>2 + 3</td>
<td>dual</td>
<td>būj̣ụ́</td>
<td>a-wūj̣ụ́</td>
<td>wūj̣ụ́</td>
</tr>
<tr>
<td>3 + 3</td>
<td>dual</td>
<td>bōj̣ú</td>
<td>a-gāpjú</td>
<td>gāpjú</td>
</tr>
<tr>
<td>1 + 2 (incl.)</td>
<td>plural</td>
<td>bābū́̀ / būbū́̀</td>
<td>a-bābū̀̀</td>
<td>bābū̀̀</td>
</tr>
<tr>
<td>1 + 3 (excl.)</td>
<td>plural</td>
<td>būbó</td>
<td>a-wūbó</td>
<td>wūbó</td>
</tr>
<tr>
<td>2 + 3</td>
<td>plural</td>
<td>būḅḅò</td>
<td>a-wūḅḅò</td>
<td>wūḅḅò</td>
</tr>
<tr>
<td>3 + 3</td>
<td>plural</td>
<td>bōḅó</td>
<td>a-gāpḅo</td>
<td>gāpḅo</td>
</tr>
</tbody>
</table>
The person / number category in table 3.2 shows that each compound pronoun consists of at least two simple pronominal forms that are clearly segmentable. In descriptive terms, the dual compound pronouns appear to be derived by taking the first, second and third person (plural) forms of the simple pronouns and combining them with the second, or third person singular form. There are however two forms for the first person compound pronoun: one is derived by combining the first plural with third person singular, thus following the general pattern noted above; the other is derived by combining first person plural and second person singular. The distinction within the first person dual and the first person plural forms corresponds to pronominal reference that includes the addressee (1+2) and one that excludes the addressee (1+3).

The plural compound pronoun forms follow the same principle of combination as the dual pronoun forms. The only difference being that with the plural forms the first, second and third person plural (simple) forms are combined with third person plural and not with third person singular as is the case with the dual forms. A table that provides a summary of the composition of the compound pronouns is given below for the independent pronominal forms.
Table 3.3:  [Compound Independent Pronoun Forms]

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
<th>Nominative</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pl. + 2 sing.</td>
<td>dual</td>
<td>bôgô / buôgô</td>
<td>'I with you'</td>
</tr>
<tr>
<td>1 pl. + 3 sing.</td>
<td>dual</td>
<td>bujuû</td>
<td>'I with him'</td>
</tr>
<tr>
<td>2 pl. + 3 sing.</td>
<td>dual</td>
<td>buôjuû</td>
<td>'you (sg.) with him'</td>
</tr>
<tr>
<td>3 pl. + 3 sing.</td>
<td>dual</td>
<td>bôjuû</td>
<td>'he with him'</td>
</tr>
<tr>
<td>1 pl. + 2 pl.</td>
<td>plural</td>
<td>bôbûûô / bûbûûô</td>
<td>'we with you (sg./pl.)'</td>
</tr>
<tr>
<td>1 pl. + 3 pl.</td>
<td>plural</td>
<td>bûbô</td>
<td>'we with him/them'</td>
</tr>
<tr>
<td>2 pl. + 3 pl.</td>
<td>plural</td>
<td>buôbô</td>
<td>you(pl.) with him/them</td>
</tr>
<tr>
<td>3 pl. + 3 pl.</td>
<td>plural</td>
<td>bôbô</td>
<td>'they with him/them'</td>
</tr>
</tbody>
</table>

From Table 3.3, we observe that within the first person, compound pronouns distinguish between the reference that is inclusive of addressee and one that is exclusive of the addressee. For instance, the first person dual has two forms: bôgô (buôgô) “I with you (sing.)” (inclusive) and bujuû “I with him” (exclusive). The second person form refers to the speaker and some third party. Thus we get buôjuû “You(sing.) with him”: and buôbô “You(sing.) with them / You (pl.) with him/them”. The third person refers to two or more third parties that exclude both the speaker and the addressee.

---

4 These complex pronoun forms can equally be (and often are) translated with the coordinating conjunction “and”, thus ‘I with you’ = ‘you and I’.
The form of the compound pronoun is transparent. Each compound pronoun is bimorphemic. It is important to note here that the first segment of the compound must be morphologically [+plural] even though the referent may be singular. Thus, taking the first person dual exclusive form, we observe that it is made up of two morphemes: \textit{būh} "we" and \textit{jū} "he". However, the reading that we get is not *"we and him" but rather \textit{I and him}. This raises questions as to why and how a plural pronoun like \textit{būh} "we", which independently is [+plural] gets reinterpreted as "I" [+singular]. An adequate analysis of compound pronouns must provide an answer to such questions. I will argue that a compound pronoun like \textit{būjū} actually derives from the coordination of \textit{mū} + \textit{jū} by incorporation of \textit{mū} "I" to the \textit{C/O} head position where it gets marked [+plural] and then to \textit{C/O}.

In the following table I set out some examples of compound pronouns and the "input" forms from which I will propose they derive.

<table>
<thead>
<tr>
<th>&quot;Input&quot;</th>
<th>&quot;Output&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. mū ō gō I conj. you(_{(\text{sing.})})</td>
<td>bōgō / būgō 'we' (\textit{dual, incl.})</td>
</tr>
<tr>
<td>b. mū ō jū I conj. he</td>
<td>būjū 'we' (\textit{dual, excl.})</td>
</tr>
<tr>
<td>c. mū ō būō I conj. you(_{(\text{pl.})})</td>
<td>bābūō / būbūō 'we' (\textit{incl.})</td>
</tr>
<tr>
<td>d. būō ō jū you conj. he</td>
<td>būōjū 'you' (\textit{dual})</td>
</tr>
<tr>
<td>e. bō ō jū they conj. he</td>
<td>bōjū 'they' (\textit{dual})</td>
</tr>
<tr>
<td>f. bō ō bō they conj. they</td>
<td>bōbō 'they' (\textit{pl., excl.})</td>
</tr>
</tbody>
</table>
Observe that we never get compound pronouns like *mùju, *goju, or *juju where the first morpheme of the compound is [- plural]. Similarly, we never get forms like *bùōmu which derive supposedly from go + mu or *bogó which supposedly derives from jul + go. I will assume that the ungrammaticality of such compound pronouns follows from the general (if not universal) requirement that when persons are coordinated they must occur in the order: 1st person < 2nd person < 3rd person.

As I pointed out above, one very interesting feature of this construction is that certain pronouns, that in their simple (independent) form have a plural referent obtain a 'singular referent' interpretation in the compound pronoun constructions cf. (27c) and (27d).

(27) a. gò o kọ nkáp
you(sing.) Agr like money
'you like money'.

b. buó è kọ nkáp
you(plur.) Agr like money
'you like money'.

c. buó Njikem è kọ nkáp
you(plur.) N. Agr like money
'you(sing.) and Njikem like money'.

d. buó juú è kọ nkáp
you(plur.) he Agr like money
lit., 'you(sing.) and him like money'.

e. buó mà-Njikem è kọ nkáp
you(plur.) N. & co. Agr like money
'you(sg./pl.) and Njikem & co. like money'.

f. buó bó è kọ nkáp
you(plur.) they Agr like money
lit., 'you(sg./pl.) and them like money'.
Observe that in (27b) the second person pronoun *buŋ-backed* is plural: However, in (27c) and (27d) when it combines in a compound construction, it is interpreted as singular. Since the "first" pronoun always gets plural marking as a result of incorporation to Conj^0_, if it is "underlyingly" plural (i.e. if before incorporation it was already plural) then it is ambiguous between a singular and a plural interpretation cf. (27e), (27f), (see also table 3.3). To clear the ambiguity, the second conjunct has to be inflected with *mà* as in (27e).

The fact that the subject agreements the sentences in (27c) - (27f) are all plural agreements is in itself a strong indication that such compound (pronoun(s)) constructions are coordinated structures. As regards the question of how a plural pronoun like *buŋ-backed* ‘you’ (plural) gets a singular interpretation in examples like (27c) and (27d), I propose that such pronouns are "underlyingly" singular. This is supported by the fact that the same pronoun in (27f), where the second conjunct is plural and not inflected with *mà*, is ambiguous between a singular and plural interpretation. The only way to get a non ambiguous reading, in the case where the "first" pronominal conjunct is underlyingly plural, is to inflect the "second" conjunct with *mà* cf. (27e), even if the second conjunct is a plural (pronominal) DP. More examples follow in (28) and (29).

(28)  

| a.  | búŋ jú  
|     | we / he | "I and him" *(dual)* |
| b.  | búŋ mà-jú  
|     | we / mà-he | "we and him" |

(29)  

| a.  | búŋ bò  
|     | we / they | "I and they" ("we and them") |
| b.  | búŋ mà-bò  
|     | we / mà-they | "we and them" |
The argument that the first plural pronouns in (27d) is underlying singular, also follows from a requirement which I formulated above in (16), which requires conjuncts that vary in number to appear in the order SINGULAR < PLURAL but not *PLURAL < SINGULAR: If the first pronoun were singular, it would not precede the second pronoun which is singular. Below, I present a summary of my proposal as to how compound pronouns are syntactically derived, and some of the consequences of the proposal.

3.6 Deriving the "Compound Pronominal" Forms

In this section, I will provide a derivational account of the Nweh "compound pronoun" construction. The analysis of "compound pronouns" that I will sketch here, involves the (minimalist) conception of X0 incorporation and XP movement to specifier for purposes of licensing/checking morphological features (Chomsky, (1992)). Compound pronoun constructions definitely have the sense of a coordination of two pronominal DPs. I have proposed that the construction involves coordination with a "zero" coordinating conjunction. I further proposed that there is a functional projection, C/OP immediately dominating ConjP which is used as a "base of operation" for licensing coordination. I proposed that the "null" Conj0 head which is [+plural] incorporates to C/O0 in overt syntax. This incorporation forces the higher DP conjunct to raise to Spec, C/OP, thus checking/triggering the pronominal agreement on C/O0, which is already marked [+plural] as a result of Conj0 incorporation. A derivation follows in (30).
However, if one (or both) of the conjuncts is a pronominal, the (higher) pronominal incorporates to Conj⁰ and then both the [pron.+Conj⁰] move to the C/O⁰ head and no further derivation is required, as only one conjunct is required here to either move higher than, or incorporate into Conj⁰. A derivation involving a pronominal conjunct is sketched in (31).
The derivations sketched in (30) and (31), show that the [+plural] feature of the "pronominal conjunction" does not come from the DP in Spec, C/OP but from the Conjo head which has incorporated to C/Op. This assumption has the immediate advantage that it explains why the "first" pronominal conjunct must be [+plural]: It is because it incorporates to Conjo which is [+plural]. However, the first conjunct can differ with respect to person features, depending on the incorporating pronoun cf. (32).

(32)  a. mú ə Njikem I conj. N. ----> buh Njikem we / N. "I and Njikem"

b. gò ə Njikem you(sg.) conj. N. ----> buuŋ Njikem you(pl) / N. "you(sg.) and Njikem"

c. jú ə Njikem he conj. N. ----> bo Njikem they / N. "he and Njikem"

d. mú ə gò I conj. you (sg.) ----> buu gò we / you "I and you"

e. gò ə jú you conj. he ----> buuŋ jú you(pl.) / he "you(sg.) and he"

Even though the pronouns show up plural, they are read/interpreted as singular, thus suggesting that the plural feature on such pronouns comes from somewhere else and is not an inherent property of the pronouns. I have suggested that the pronouns get marked [+plural] as a result of incorporation to Conjo.

The analysis of compound pronouns developed here has a number of advantages. First, the analysis avoids the oddity of having to treat bó as a coordinating conjunction, since it is clearly not one. Secondly, the proposal treats the bó in [NP bó NP] e.g. Atem bó Njikem, and the bó in [bó NP] e.g. bóNjikem or bójú, basically as the same, namely a third person plural pronoun. In addition, the
analysis derives compound pronouns in a way that reflects the facts of the language.

For instance, the derivation maintains the general (if not universal) tendency for pronouns to tend to occur in the order $1^o < 2^o < 3^o$ person when conjoined, and the preference to want pronouns to precede nouns (in Compound Pronoun Constructions).
Chapter Four

ADJECTIVES

4.1 Introduction

Adjectives are treated here as constituting a sub class within the nominal system because a class of adjectives that I refer to as "pure" adjectives (to contrast this class with "derived" adjectives) trigger their own pattern of genitive agreement, and genitive agreement is considered to form the basis of the nominal system in Nweh and in Bantu languages at large. Unlike nominals that distinguish several different patterns of agreements (Noun Classes) (there are about eight Noun classes in Nweh), adjectives all govern the "same" agreement, and could therefore be said to constitute just one "Noun Class".

In this chapter, I will focus on these and other interesting puzzles relating to the fact that in Nweh certain adjectives have the property of being able to occur in positions where one would expect to find a noun and appear to enter into noun classification. In particular, I would like to address two questions: One, why do such adjectives have these nominal properties? Two, why is it the case that the pronominal class marker selected by the adjective is invariant? I will propose an
analysis of lexical argument structure of adjectives that provides an answer to both of these questions.

4.2 The issue

In many languages, English, French, Nweh, ... as well as in a lot of African languages, it is not uncommon for adjectives to show up in NP positions and assume functions typical of NPs. For convenience of exposition, let's begin with the English examples in (1).

(1) a. the poor
b. the rich
c. the blacks
d. the whites
e. the impossible

These adjectives have certain peculiarities. For instance, the English examples in (1 a-d) typically refer to animates [+human]. Despite the fact that they exhibit nominal behavior, these adjectives have properties that distinguish them from real nouns. For example, they are specified as definite; they have plural meaning even if not morphologically marked as plural; they can be modified by adverbs (2).

(2) a. the very poor
b. the extremely rich
c. the highly talented

while they can be conjoined with similar adjectives, coordination with real nouns is not possible as (3) shows.

134
(3)  a. the rich and the poor  
b. the Blacks and the whites  
c. * the rich and the students  
d. ?* the Blacks and the Professors  
e. the Professors and the students  

Adjectives in Nweh exhibit properties somewhat similar to those outlined above for English but they also show some very unusual properties.

4.3 Adjectives in Nweh.

In Nweh, as in many African languages, 'pure' adjectives are very few and might even be said to form a closed class in the sense that one can easily list all of them. By pure adjectives, I refer to those lexical items that are specified in the lexicon as belonging to the category of adjectives, as opposed to derived adjectives. In Nweh the pure adjectives are for the most part limited to Color and Size/Dimension adjectives. This paucity of adjectives raises the question as to how the full range of adjectival modification is expressed in these languages. Other adjectival meanings like Quality/Physical properties are expressed in the form of a predicate adjective. This is achieved through the use of a reduced-relative type construction. I will refer to these other adjectives as 'derived adjectives'. We can therefore say that there are two main types of adjectives in Nweh: 'Pure' or Non-derived adjectives and Derived adjectives. While derived adjectives have much in common with regular (stative) verbs I will show that they differ in significant ways from regular (stative) verbs. Even though derived adjectives on the surface appear to be the 'same', I propose that derived adjectives be further divided into two sub classes, corresponding to the verb-types from which they are derived. I therefore will distinguish three classes of
adjectives in this chapter. There appear to be a semantic correlation that runs through the different classes.

**Class I**  
**Non-derived (Pure) Adjectives**

(4)  
a. fën  
'bblack'  
b. bán  
'red'  
c. fân  
'white'  

(5)  
a. miä  
'big/large'  
b. siä  
'long/tall'  
c. kêm  
'short/stout'

- These are typically color adjectives (4) and some Size/Dimension adjectives (5).

**Class II**  
**Derived ('Intransitive') Adjectives**

(6)  
a. ṃfân  
'be big'  
b. ṃseh  
'be long'  
c. ṃvëh  
'be short'  
d. ṃfi  
'be sweet'  
e. ṃdrəš  
'be bitter'  
f. ṃbuät  
'be soft'

These are typically 'quality adjectives'. I will argue they are derived from unaccusative-type verbs.

**Class III**  
**Derived ('Transitive') Adjectives**

These are derived from transitive verbs. Thus the attributive adjectives in (7) are derived from their corresponding VP counterparts.

(7)  
a. ṃŋə? ngêsän  
'to grind'  
corn  
ngêsän  
ngə?  
corn  
Pf. ground  
'ground corn'
b. ṭjáŋ əsō ----> əsō ə-kāŋ
to fry fish Pf. fried 'fried fish'

c. ŋi-ŋu ləbō? ----> ləbō? le-cůu
to boil pumpkin pumpkin Pf. boiled 'boiled pumpkin'

Here the head noun corresponds to the internal argument of the verb. Below I discuss some properties of each of these three classes of adjectives such as their function within the noun phrase (attributive or predicative function); their distribution within the noun phrase (i.e. pre- or post-nominal); and their morphological properties i.e. whether or not they take a prefix. I will show that only the class I ('Pure') adjectives can occur independently without an overt head noun as well as select a pronominal class marker.

I discuss the derived adjectives first, and then focus attention on the pure adjectives as these are the ones that show unusual syntactic properties.

4.3.1 Class III ('Transitive' Adjectives)

Class III adjectives are derived from transitive (action) verbs. Thus, we observe from (7) repeated below as (8) that the attributive adjectives in (b), appear to simply be stative-like verbal forms derived from the active transitive verbs in (a). However, as I will show, they cannot be used as stative verbs in clauses.

(8) i. a. ṭgō? ṭgesāŋ
to grind corn

b. ṭgesāŋ ṭ-gō?o
9corn 9Pf. ground 'ground corn'
ii.  
  a.  ḫkán  a-sdk
      to fry  fish
  b.  a-sdk  a-kán
      10fish  10PF. fried  'fried fish'

iii.  a.  ḡcu  labṣ
      to boil pumpkin
  b.  labṣ  la-cuū
      5pumpkin  5PF. boiled  'boiled pumpkin'

We notice a semantic shift in the relation between the (a) examples in (8) and their corresponding stative-like forms in (b). These phrases also show a passive-like alternation. In the (b) examples, the head noun corresponds to the internal argument of the verb that we get in the active phrases in (a). The phrases in (a) designate actions, whereas those in (b) designate a property which is predicated of some noun. In the (b) examples the internal (theme) argument of the transitive verbs in (a) have been "preposed" and they now function as the syntactic subject of the predicates in (b), and these trigger (prefixal) agreement (PF.) on the adjective. As the gloss indicates the agreement is noun class agreement with the head noun.

Transitive ('verbal') adjectives basically have an attributive function, i.e. they occur only as nominal attributes and cannot be used as inchoative predicates (or as stative verbs in clauses) as the ungrammaticality of the (b) sentences in (9) indicate.

(9)  
  i.  a.  ngəsan  ḡ-gɔs
        corn  PF. ground  'ground corn'
    b.  * ngəsan  ē  gɔs
        corn  AGRs  ground

  ii.  a.  akẽndọŋ  ā-τuā
        plantain  PF. roast  'roasted plantains'
    b.  * akẽndọŋ  ā  τuā
        plantain  AGRs  roast

    'the plantain(s) roasted'
iii. a. lɔbɔŋ le-cúu
    pumpkin Pf. boiled  'boiled pumpkin'

b. * lɔbɔŋ e cúu
    pumpkin AGRs boiled  'the pumpkin boiled'

Class III adjectives cannot occur independently without an overt head noun or a proform (RM), cf. (10) and (11). Class III adjectives cannot be possessivized and therefore cannot trigger external (noun class) agreement on the possessive pronoun as I show is the case with 'pure' adjectives. They (unlike class II adjectives) cannot be modified by say an adverb.

(10) a. ngèsāŋ ŋ-gɔŋ
    9corn 9Pf. ground  'ground corn'

b. zàa ŋ-gɔŋ
    9RM 9Pf. ground  'that which is ground'

    (speaking of corn)

c. * ŋ-gɔŋ
    'ground'

(11) a. akèndɔŋ ì-tùa
    7plantains 7Pf. roast  'roasted plantains'

b. zàa ì-tùa
    7RM 7Pf. roasted  'that which is roasted'

    (speaking of plantains)

c. * ì -tùa
    'ground'

The proforms (RM) are identical to the relative marker that the nouns would trigger in a relative clause construction. However, the prefix agreement triggered by the head noun on the derived adjective differs from the subject agreement that the nouns would trigger on the verbs in a sentence. Below, is a table that summarizes these different agreements.
Table 4.1: \( [N_1 - AP_2 \text{ Agreement}] \)

<table>
<thead>
<tr>
<th>Noun Class</th>
<th>Proform Agreement (RM)</th>
<th>Prefix Agreement (Pf.)</th>
<th>Subject Agreement (AGR)</th>
<th>Example (speaking of (-X))</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 abɔ “nursing mom”</td>
<td>gli</td>
<td>n-</td>
<td>à</td>
<td>gli 1RM, n-tëbɔŋ 1Pf. bad</td>
</tr>
<tr>
<td>2 bɔśẹ̀ “birds”</td>
<td>bì i</td>
<td>bà-</td>
<td>é</td>
<td>bì i bà-tëbɔŋ</td>
</tr>
<tr>
<td>3 nkẹ̀ “lamp”</td>
<td>gli</td>
<td>œ-</td>
<td>é</td>
<td>gli œ-tëbɔŋ</td>
</tr>
<tr>
<td>5 lọbọ “pumpkin”</td>
<td>rà a</td>
<td>lè-</td>
<td>é</td>
<td>rà a lè-tëbɔŋ</td>
</tr>
<tr>
<td>6 bọlẹn “names”</td>
<td>mì i</td>
<td>bà-</td>
<td>é</td>
<td>mì i bà-tëbɔŋ</td>
</tr>
<tr>
<td>7 abò “bag”</td>
<td>zà a</td>
<td>à-</td>
<td>à</td>
<td>zà a à-tëbɔŋ</td>
</tr>
<tr>
<td>9 ẹfẹn “cow”</td>
<td>zà a</td>
<td>n-</td>
<td>è</td>
<td>zà a n-tëbɔŋ</td>
</tr>
<tr>
<td>10 énkpàbè “toe nails”</td>
<td>zà a</td>
<td>ç-</td>
<td>é</td>
<td>zà a ç-tëbɔŋ</td>
</tr>
</tbody>
</table>

### 4.3.2 Class II (‘Intransitive adjectives’)

Class II, the ‘intransitive’ adjectives typically denote qualities / physical properties. I argue these are derived from unaccusative verbs.

(12) ndìi “be sweet”
ndrá “be bitter”
nbùh “be spoiled”
ndèt “be heavy”
ndúŋ “be hot”
nbáŋ “be ripe”
njùŋ “be dry”

140
They have verb-like morphology. Thus, we observe from the examples in (12) that they all have an n-prefix which is characteristic of verbs in their citation (bare infinitival) form.

As nominal attributes, class II adjectives occur post nominally (like the class III adjectives) with an agreement prefix that is determined by the noun class of the head noun (see also Table 4.1 above). Examples follow in (13).

(13) a. afû à - lîi
    7medicine 7Pf. sweet 'sweet medicine'
b. mbɔzâŋ n jûŋ
    9peanuts 9Pf. dry 'dry peanuts'

We observe from (14a) and (14b) that class II adjectives can be used predicatively, in which case the noun phrase functioning as subject triggers subject agreement. Observe also that they can be tensed (14c).

(14) a. afû jûc â lî
    7med. 7this AGRs sweet 'this medicine is sweet'
b. mbɔzâŋ jûc è jûŋ mɔ
    9peanuts 9this AGRs dry perf. 'these peanuts are (already) dry'
c. mbɔzâŋ jûc è kɛ̀ tè jûŋ
    9peanuts 9this AGRs P-1 Neg dry 'these peanuts did not dry'

Like the transitive adjectives (class III), the intransitive adjectives (class II) cannot occur independently without the head noun or without a proform as (15) indicates.

---

1 I believe the lengthened final nasal segment is as a result of the tone change: The final segment is lengthened to bear the extra tone; it is therefore considered tonal rather than segmental. I should however, note here that tonal complexities are not fully understood at this time.
Class II adjectives also cannot be possessivized and therefore do not govern possessive pronoun agreement.

(15) a. afū à līi
    7med. 7Pf. sweet  'sweet medicine'

b. zāā à līi
    7RM 7Pf. sweet  'the sweet one' *(speaking of medicine)*

c. * à līi
    7Pf. sweet  'sweet [e]'

In terms of their internal distribution, class II adjectives can independently be modified by adverbs as in (16a), (16b) but not within a DP as (15c) shows.

(16) a. nyēm ndīi
    slightly sweet  'slightly sweet'

nbō ndīi
    very sweet  'very sweet'

b. nyēm n̄fān̄
    slightly big  'slightly big'

nbō n̄fān̄
    very big  'very big'

c. * nyēm ndīi afū
    slightly sweet med.  'slightly sweet medicine'

d. afū jūc à nyēm ndīi
    7med. 7this AGRS slightly sweet  'this medicine is slightly sweet'

Class II adjectives enter into comparatives.

(17) a. ndīi nčià
    be sweet pass  'sweeter than...' / 'oversweet'

b. n̄fān̄ nčià
    be big pass  'bigger than...' / 'oversize'

142
c. *afû jùṣ ã lî ṳ̀ nêîà á- zá
   med. this Agr sweet pass Agr that
   'this medicine is sweeter than that one'

d. ndíà jùṣ è fàŋ nêîà é- zã
   house this Agr big pass Agr that
   'this house is bigger than that one'

There is a neat parallel between class III and class II adjectives. I have suggested that both class III and class II adjectives are derived from verbs. The difference between the two classes is based on the verb type from which they are derived. It is clear that class III adjectives are stative-like forms that are derived from transitive verbs. I will claim that class II adjectives are stative-like forms derived from unaccusative verbs. To illustrate that class III and II adjectives derive from different verb-types, I will show that both verb types that we claim class III and class II adjectives are derived from behave differently. I refer to the verb classes using the same numbering that we used for the adjectives; so class II verbs will refer to the verb class from which class II adjectives are derived.

Class III verbs have just a causative usage and do not behave as inchoative verbs (cf. the (b) examples in (9) above). On the other hand, class II verbs only have the unaccusative usage cf. (18a) and (19a) but cannot be used as causatives as the ungrammaticality of (18c) and (19c) indicates.

(18)  a.     afû    á lî
      7medicine AGRs sweet
      'the medicine is sweet'

      b.     afû    à lî
      7medicine 7Pf. sweet
      'sweet medicine'

      c.     * ñ dî afû
      be sweet  medicine
      '(to) sweeten the medicine'
Thus, both classes of verbs do not undergo the causative / inchoative alternation. They are either strictly causatives (class III) or inchoatives (class II).

Generally, if a verb has both a causative and an inchoative usage, it is the case that two independent morphological forms (lexemes) exist: one for the causative usage, and the other for the inchoative usage. One can either say that such forms involve a 'morphological blockade' as the contrast between (20) and (21) that involve *ŋujŋ 'be dry' and nboθ 'to dry' seems to suggest. Alternatively, the examples might simply suggest a productive causative formation or productive inchoative verb pairs.

(19) a. mbazan ə jūŋ
    peanuts AGRs dry
    'the peanuts are dry'

    b. mbazan n jūŋ
    peanuts 9Pf. dry
    'dry peanuts'

    c. * n jūŋ mbazan
    be dry peanuts
    '(to) dry the peanuts'

(20) a. mbø mbazan
    to dry peanuts
    '(to) dry peanuts'

    b. mbazan m bø
    peanuts 9Pf. dry
    'dried peanuts'

    c. * mbazan é bø
    peanuts AGRs dry
    'the peanuts dried'

(21) a. * njūŋ mbazan
    be dry peanuts
    '(to) dry peanuts'

    b. mbazan n jūŋ
    peanuts 9Pf. dry
    'dry peanuts'

    c. mbazan é jūŋ
    peanuts AGRs dry
    'the peanuts are dry'

---

2 There appear to be a class of exception to this generalization possed by verbs like ndonə 'to melt'; nse 'to break' and nša 'to tear', that show the causative/inchoative alternation. It is not clear why this is the case.

144
The discussion above indicates that both class III and class II adjectives are derived, and that they share a lot in common. In the rest of the discussion, except where necessary, we will simply refer to class III and class II adjectives as 'derived' adjectives.

4.3.3 Class I ('Pure' adjectives)

Class I (Pure adjectives) form a very interesting class of adjectives and are actually the focus of this chapter. Class I adjectives can be said to form what one might call a closed class in the sense that one can easily list all of them. Semantically, Class I adjectives are basically adjectives of color and size/dimension. cf. (22) and (23) respectively.

(22)  
a. fǐn 'black'  
b. bāŋ 'red'  
c. fāŋ 'white'

(23)  
a. mīa 'big/large'  
b. sìà 'long/tall'  
c. kêm 'short/stout'

What makes this class of adjectives so interesting is that it seems to be neither fish nor fowl, so to speak. On the one hand, this class of adjectives behave typically like adjectives do but on the other hand, they exhibit nominal properties. I will start with those properties that class I adjectives either share with, or differ with respect to, other adjectives, and then go on to discuss properties that class I adjectives share with nouns.
Class I adjectives, unlike the derived adjectives have no overt prefix as we observe in (22) and (23). Class I adjectives occur prenominally within the noun phrase. Thus, their linear order is [Adj.-N] as in (24). As we noted above, derived adjectives invariably follow the noun, thus, giving us the linear order is [N-Adj].

(24)  
  a.  fiñ ndrō  
      black cloth  
      'black cloth'  

  b.  bāŋ liñ  
      red horse  
      'red horse'  

  c.  mía abō  
      big bag  
      'big bag'  

I have tried to analyze Nweh as an underlyingly rigid language with a head-complement word order. How can one explain the word order variation between the two classes of adjectives? This is one of the problems that we expect our proposal to account for.

Within the noun phrase, class I adjectives typically have an attributive function cf. (24). However, they can be used predicatively, in which case they are obligatorily reduplicated as in (25).

(25)  
  a.  ndrō é fiñ fiñ  
      cloth AGRs black  
      'the cloth is black'  

  b.  ndrō é bāng bāng  
      cloth AGRs red  
      'the cloth is red'  

  c.  ndrō é mía mía  
      cloth AGRs big  
      'the cloth is big'  

Reduplication in Nweh is a property of non-derived adjectives. Non-derived adjectives behave differently with respect to a number of properties, even though the same semantic context seems to be involved. Thus, we will see that one ('semantic')
adjective can have two lexemes each of which belongs to a different class, and exhibits behaviors typical of the class to which it belongs. I illustrate this phenomenon in (26).

(26) i. a. mía
   b. n-fâŋ

   'big / large'
   'be big/large'

ii. a. šià
    b. n-seh

   'tall / long'
   'be tall/long'

iii. a. kêm
    b. m-vaŋ

   'short / stout'
   'be short/stout'

In (26) the adjectives in (a) belong to class I, whereas those in (b) belong to the derived class of adjectives (class II). The adjectives in (26a) must be in pre-nominal position when used attributively cf. (27.i); They can be used as predicates, in which case they generally occur duplicated as in (27.ii). The corresponding stative-like forms in (26b) do not occur in pre-nominal position. They always occur in post nominal position as in (28). In terms of their morphology, they have verb-like morphology, thus their forms are predictable.

(27) .i a. mía ndía
             big house

       * ndía mia

       'big house'

  b. kêm alâŋâ
            stout chair

       * alâŋâ kêm

       'short chair'

   .ii a. ndía é miamia
           house Agr. big big

       'the house is (very) big'

  b. alâŋâ á kèmkêm
       chair Agr stout stout

       'the chair is short'
As indicated in (16) above, derived adjectives can independently be modified by adverbs like nyém 'slight', nbó 'very'. Class I adjectives cannot be modified by adverbs as the contrast in the pairs of phrases in (29) indicate.

(29)  a.  mbó / nyém nbáŋ (class II)
very / slightly be red
'very / slightly red/ripe'

** mbó / nyém báŋ (class I)
very / slightly red

b.  mbó / nyém m láŋ (class II)
very / slightly be big
'very / slightly big/large'

** mbó / nyém m lá (class I)
very / slightly big

Also, class I adjectives unlike other adjectives cannot take comparatives. Let me note here once more that such modification is possible when the adjective occurs either independently or as a predicate but not possible say, within the context of a DP.

Thus, there is no Nweh equivalent for "an overripe banana": rather one must say something which translates as "a banana which is overripe".
(30)  a. \( nb\dot{a}n \) \( \acute{n}c\dot{i}\ddot{a} \)  
be ripe pass  'too ripe / over-ripe'
* \( b\dot{a}n \) \( \acute{n}c\dot{i}\ddot{a} \)

b. \( mf\dot{a}n \) \( \acute{n}c\dot{i}\ddot{a} \)  
be big pass  'too big / bigger than'
* \( m\dot{a} \) \( \acute{n}c\dot{i}\ddot{a} \)

So far, I have shown that pure adjectives differ in important respects from the
derived adjectives. I will now turn our attention to some properties that not only set
class I (pure) adjectives further apart from the "derived" classes of adjectives, but also
makes class I adjectives similar to nouns.

Syntactically class I adjectives exhibit noun-like properties. From the
examples in (26a) we observed that pure adjectives, like nouns, denote entities rather
than a state or an attribute, as is the case with the derived adjectives (26b). Thus,
adjectives like \( fn \) 'black', \( m\dot{a} \) 'big'... can occur in isolation and would be interpreted
as "the black (one)", "the big (one)", respectively.

(31)  a. \( fn \sim b\dot{a}f\ddot{n} \)  
'black' (sg./pl.)
b. \( b\dot{a}n \sim b\dot{a}b\dot{a}n \)  
'red' (sg./pl.)
c. \( f\ddot{a}\ddot{o} \sim b\dot{a}f\ddot{a}\ddot{a} \)  
'white' (sg./pl.)
d. \( m\dot{a} \sim b\dot{a}m\dot{a} \)  
'big/large' (sg./pl.)
e. \( s\ddot{i}a \sim b\dot{o}s\ddot{i}a \)  
'long/tall' (sg./pl.)
f. \( k\ddot{e}m \sim b\dot{o}k\ddot{e}m \)  
'short/stout' (sg./pl.)

Here we also notice that class one adjectives can take number (singular/plural)
morphology. Number typically is associated with DPs/NPs. From the [N-Adj.]
attributive constructions like (9) some of which are repeated in (32), we noted that
nominal modifiers typically show agreement with the head noun, however we do not
see any such agreement in the examples in (33).
(32) a. ngèsàŋ ŋ-gɔ̀rɔ̀
9corn 9Pf. ground
'ground corn'
b. afū à -lí
7med. 7Pf. sweet
'sweet medicine'
c. ləbɔ̀? le-cù̀
5pumpkin 5Pf. boiled
'boiled pumpkin'

(33) a. fin ndrɔ̥ ~ * ndrɔ̥ fin
black cloth/dress
b. sià ndrɔ̥ ~ * ndrɔ̥ sià
long dress
c. mìà ndrɔ̥ ~ * ndrɔ̥ mìà
large dress

The fact that the noun does not trigger prefix agreement (Pf.) in (33) suggests one of two things: (1) either the heads of these phrases are not nouns, or (2) that the noun has not yet moved high enough within the DP to trigger agreement. For the moment let's leave both of these options open.

With regard to their external distribution, pure adjectives can appear independently in noun phrase positions without an accompanying head noun or proform like English one.

(34) a. Atem à kèʔ njù̄s (fin) mə̀j
A. S.Agr P-1 buy (black) goat
'Atem bought a (black) goat'

b. Atem à kèʔ njù̄s fin
Atem Agr P-1 buy black
'Atem bought a black (one)' (speaking of goats)

c. Atem à kèʔ njù̄s fin bó bàng
Atem Agr P-1 buy black conj. red
'Atem bought a black (one) and a red (one)' (speaking of goats)
d. Atem à kë? njùš fin bó bân mbô
Atem Agr P-1 buy black conj. red goat
'Atem bought a black (one) and a red goat'

The "coordination test" in (34c) further indicates that pure adjectives can occur independently in nominal positions without an overt head noun or proform. In contrast, derived adjectives cannot occur on their own in nominal positions.

(35) a. akèndôŋ à-tùā bó *(zàâ) à-kàŋ
7plantain 7Pf. roasted conj. 7RM 7Pf. fried
'roasted plantains and fried ones'

b. afú à-lìì bó *(zàâ) à-ròș
7med. 7pf. sweet conj. 7RM 7pf. bitter
'the sweet medicine and the bitter one'

c. bân ndró bó *(zàâ) fin
red 9cloth conj. 9RM black
'the red cloth and the black one'

In (35a) and (35b) that both involve derived adjectives, one cannot conjoin an NP like akèndôŋ à-tùā 'roasted plantains' with à-kàŋ 'fried (one)’ if there is no proform zàâ 'one' or an overt noun. But in (35c) that involve class I (pure adjectives) we notice just the opposite effect where the presence of a proform is not possible.

What makes (class I) pure adjectives the more unusual is the fact that they take possessive pronouns and appear to enter into noun classification cf. (37). Noun classification, as we have seen, is one of the hallmarks of Bantu nominals (see chapter 2). In (36), as we expect with nouns, the possessive pronominal class marker varies depending on the class of the head noun.

151
(36)  a. ndré jè
7cloth 9my 'my cloth'

b. asém ajiè
7oil mill 7my 'my oil mill'

c. asù  gè
1friend 1my 'my friend'

d. nkè? gè
3lamp 3my 'my lamp'

e. 5labó  lé
pumpkin 5my 'my pumpkin'

Interestingly, class I (pure) adjectives govern agreement in a way that is typical of nouns as the possessive pronominal agreement in (37) suggests.

(37)  a. fin gè
black my 'my black one' *(speaking of X)*

b. mía gè
big my 'my big one'

c. sià gè
long my 'my long one'

d. kêm gè
short my 'my short one'

e. bân gè
red my 'my red one'

The behavior of the adjectives in (37) parallel that of the nouns in (36). However, we notice that whereas the possessive pronouns in (36) vary their form to indicate agreement with the noun class of the head noun, those in (37) that involve pure adjectives, are invariant. If possessive pronominal agreement is indicative of the class to which a noun belongs, as it is commonly assumed, then the lexical heads that trigger class agreement in (37) must all belong to the same class. This leaves us with a
question as to what triggers the possessive agreement in (37). Is it some null element that triggers the agreement, or is it just a case of pure coincidence that all adjectives belong to the same class and thus trigger the same agreement? While the latter alternative is less likely, I will show in the following section that it is not enough to simply state that the adjectives in (37) all modify some empty noun. To skip ahead, I will argue that the behavior of such adjectives is in part due to their lexical property.

4.4 Adjectives as heads of DPs: A Case of Syntactic Adoption?

One of the most puzzling phenomenon concerning the behavior of pure adjectives is the fact that 'pure' adjectives modify nouns, say in an [Adj.-N] attributive construction as in (38), the possessive pronominal class marker seems always to be determined by the adjective, rather than by the noun that one would ordinarily construe as being the head of such a phrase.

(38) a. fin ndró gỳ
     black cloth my 'my black cloth'
     * fin ndró jì
     cf. (36a)

b. mía asém gỳ
     big palm-oil mill my 'my big palm-oil mill'
     * mía asém (a)jì
     cf. (36b)

c. bàŋ ngkè? gỳ
     red lamp my 'my red lamp'
     * bàŋ ngkè? gỳ
     cf. (36d)

Notice that the pronominal class marker gỳ 'my' in (38a), for example, is the same as that which the adjective fin 'black' independently selects cf. (37a) and unlike that
which the noun *ndrö* 'cloth' independently selects cf. (36a). These same facts hold true for (38b) and (38c).

Ordinarily, one would think that the head of the noun phrase in (38a) is *ndrö* 'cloth' and that the head in (38b) and (38c) is *asém* 'traditional palm-oil mill' and *nkè?* 'lamp' respectively. But strangely enough this does not appear to be the case, at least for syntactic phenomena like agreement. The phrases in (38) suggest that for the purposes of (external) agreement, it is the adjectives that determines the agreement and not the nouns that one would normally think of as being the heads of these phrases. It is a well known syntactic fact that heads determine agreement. The fact that the agreements in the phrases in (38) are determined by the adjectives and not by the nouns suggests that the adjectives are heads; It also suggests, though this might sound like a contradiction in terms, that these adjectives are in nominal positions or at least have nominal properties.

The facts that I have sketched above pose a fundamental descriptive dilemma. It is clear that class I (pure adjectives) show properties typical of adjectives; It is equally clear that they show properties typical of nouns.

In an attempt to capture the 'intersecting' nature of such adjectives, Martin (1986) quoting the *American Heritage Dictionary* refers to phrases of the sort 'the poor', 'the rich', 'the Blacks'... as "adnouns", thus suggesting a blend of adjectives and nouns. The question one must address, however is how does one account for the fact that adjectives can at the same time be nouns, without violating fundamental assumptions of syntactic theory, such as the universality of the lexical categories (N, V, A, P,...) and their inherent properties?
4.5 A Proposal

My proposal as to how to solve the questions posed above is to say that the behavior of pure adjectives stems from their underlying lexical properties. In other words I want to suggest that their structure is slightly more complex. I propose that pure adjectives have a complex lexical representation as in (39).

\[
\text{(39)} \quad [A \ [N^e] \ A]
\]

According to (39), I claim that pure adjectives project an empty nominal position in their lexical argument structure and that this empty argument position is licensed by incorporation. In other words even pure adjectives are "derived". Observed that the structure in (39) has the adjective head to the left, but Nweh is 'head-initial'. Since the lexical representation of pure adjectives involves an empty nominal in the head position, the noun must be assigned a class and by virtue of the Projection Principle, the noun must project a syntactic phrase. Because the head of the NP is null, the way its projection is fully licensed is by incorporation into the adjective. The derivation is sketched in (40).
The structure depicted in (40) indicates that pure adjectives are treated here as heads whose projections enter into the main projection line. This might seem unpopular given the fact that in most of the literature, adjectives are treated as adjuncts. However, there has been some recent work in the literature arguing that adjectives can and do enter into the main projection line (for important suggestions along this line of research, see Abney (1987), Sportiche (1994)).

4.6 "Incorporation as a Theory of Grammatical Category Changing"?

Given a lexical representation like (39), noun incorporation into the adjective will result in a structure like (41).

N-incorporation: (41) \[
\begin{array}{c}
\left[ [N \emptyset ] [A \Lambda ] \right]
\end{array}
\]
The representation in (41) raises the question as to what is the appropriate category label for a representation like (41)? William's (1981) has argued that the head of the word is generally its rightmost element. If he is right, then we have a straightforward explanation for why pure adjective behave the way they do. Such adjectives have an incorporated nominal but since the rightmost category is an adjective, they must behave as nouns headed by adjectives. I want to speculate on another possibility here; That is, to suggest that the syntactic category label for (41) 'intersects' between an adjective and a noun and therefore is capable of playing limited functions of either an adjective or a noun. Derived constructions in natural language often have peculiar properties that are unlike the categories from which they derive or that they yield even though they may share certain properties.

In much of the discussion on incorporation people tend to be agnostic as to the resulting category label when two independent words of different syntactic categories incorporate. I here suggest that there is the possibility that such a category will show a bit of each of the categories from which it is derived. I refer to the sort of incorporation that results in a syntactic category change as syntactic adoption, and to the resulting 'intersecting' head as an adopted head, if it ends up in the head position of a different syntactic category and assumes the properties of such a category.

Therefore, whenever a lexical item (other than what, semantically speaking would be considered the head) functions as the head of a phrase of a different category, head adoption will be assumed to have taken place. A typical case of syntactic adoption would be when adjectives function as heads of noun phrases.
4.7 "Pseudo" NP-head as an Adjunct

The structure depicted in (40) is going to correctly account for the cases where a bare adjective occurs in a nominal position as in (42): (see also (37)).

(42) a. mǔ ŋ- kóŋ fìn gwùó
    I AGRs like black this
    'I like this black (one)'  
    (speaking of X)

b. mía gwùó à bọŋ āgé
    big this AGRs please me
    'This big (one) pleases me'  
    (speaking of X)

The question arises as to the analysis of examples like (33), repeated below as (43), where an overt noun appears with a pure adjective?

(43) a. fìn ndré
    black cloth
    '(a) black cloth'

b. bǎŋ sén
    red bird
    '(a) red bird'

c. mía abó
    big bag
    '(a) big bag'

I will argue that the nouns in constructions like (43) are actually in an adjoined position and therefore are adjuncts not heads. I assume a structure like (44).
The structure in (44) is the same as that in (40) but with the DP in an adjoined position. Given a structure like (44), where the DP is in an adjoined position, it cannot interfere with the incorporation of the head noun. Thus we see that such adjoined NPs correctly do not block head movement. This apart, we see that the pronominal class marker of the phrases like (43) are determined not by the noun but by the adjective as (45) shows.

(45) a. fin ndré gè / *jè
    black cloth my 'my black cloth'

b. bán séŋ gè
    red bird my 'my red bird'

c. mía abò gè / *ajè
    big bag my 'my big bag'

Recall that Nweh is a language with a head-complement word order. By saying that the adjective is the head of phrases such as those in (38) and (43), we maintain
consistency with the word order pattern as all other phrases are underlyingly head initial.

An adjective always relates to some noun that can be construed as having the quality expressed by the adjective. Thus if there is no overt head noun that the adjective is predicated of, the logical tendency will be to ascribe the quality expressed by the adjective to the closest NP if such an option exists. In the case of (44), it is the adjunct NP that gets interpreted as being predicated of the adjective. Thus (43a) fin ndìá although translated as 'black cloth' literally means something like "the 'one' black, the cloth" i.e. the 'one' black such that (cloth, black), where what appears to be the head of the noun phrase is actually an adjoined noun phrase.

4.8 More Evidence for Noun Adjunction

The structure in (44), where the DP is assumed to be in an adjoined position is supported by the fact that there also exist parallel cases of NP/DP adjunction where a nominal adjunct intervenes between a head noun and a possessive pronominal class marker selected by the head noun.

(46) a. foto gê picture my 'my picture' (Poss./theme)
b. ndìá jê house my 'my house' (Poss.)
c. foto ndìá gê picture house my 'my picture of a house'
   *'A picture of my house'
Notice that in (46a) the possessive class marker is \( gê \) while in (46b) it is \( jê \). But in (25c) the pronominal class marker is \( gê \) -that which is selected by \( foto \) 'picture', even though \( ndía \) 'house' intervenes. This favors an analysis where \( ndía \) 'house' is an adjunct parallel to the structure in (44).

The solution I have proposed to account for the dilemma posed by pure adjectives straightforwardly explains a number of puzzles that we noted above, and others that at first sight appear to be due to mere coincidence. First, the proposal gives us an explanation as to why pure adjectives appear to take possessive pronouns. The reason is that these adjectives have incorporated a (null) noun. Second, the proposal not only explain why pure adjectives independently select a possessive class marker but why the class marker is invariant (cf. 37). This is due to the fact that the agreement in such cases is actually determined by the same empty nominal which incorporates into the adjective.
Chapter Five

NEGATION

5.1 Introduction

This chapter is devoted to exploring the ways in which sentential negation is expressed in Nweh. I have two basic aims here: (1) to expose some novel data on negation from a language which though similar in some respects, is unrelated to those languages that have been used to shape current theories on the syntax of negation. This notwithstanding, I will show that a reasonable analysis of the phenomena observed with respect to sentential negation in Nweh can be provided within the Principles-and-Parameters framework. (2) From a theoretical point of view, the analysis will provide overt/syntactic evidence for the existence of LF (i.e. covert) movement to specific specifier positions as a licensing mechanism for XPs. (Sportiche (1990), Moritz and Valois (1991), Beghelli and Stowell (1994)). To be more specific, I will show that heavy pied piping of certain constituents of the negative construction occurs in overt syntax. The treatment of negation proposed here will be extended in next chapter into an acceptable account of other phenomena associated with the interrogative construction in Nweh.
5.1.1 A Puzzle

In terms of its clause's constituent order, Nweh can be analyzed as being strictly head-initial. However, certain negative clauses pose an interesting challenge for such a highly 'restrictive' analysis, in that there are negative alternants in which the main verb can be in 'clause-final' position following all verbal complements and adjuncts. An example follows in (1).

(1) a. Njikèm à kè te- fiá nkèp anbò Atem ajúá bò
   N. Agr P-2 Neg give money to A. yesterday Neg
   'Njikèm did not give money to Atem yesterday'.

b. Njikèm à kè te - nkèp anbò Atem ajúá fiá
   N. Agr P-2 Neg money to A. yesterday give
   'Njikèm did not give money to Atem yesterday'.

c. * Njikèm à kè te - nkèp anbò Atem ajúá bò fiá
   N. Agr P-2 Neg money to A. yesterday Neg give
   'Njikèm did not give money to Atem yesterday'.

Observe that in (1a) the main verb fiá "give" is under V within the VP, but in (1b) the verb is in "sentence-final" position (to skip ahead, I will say that in (1b) the verb is under Neg^0 within NegP). The question here is how to relate the two sentences in (1a) and (1b). As the ungrammaticality of (1c) indicates, the verb and the negative morpheme bò cannot both be overt when the main verb shows up in "clause-final" position as it does in (1b). This implies that the verb and the negative morpheme bò must be vowing for the same position. Consequently, I will argue that the main verb and the negative morpheme bò are in complementary distribution in "clause final".

1 My reference to the position in which the verb and bò are in complementary distribution, as the 'clause-final' position is just for purposes of exposition: As my analysis will show the position appears to be clause-final because the constituent that follows it has raised to some higher position.
position. This complementarity between the verb and $bó$ gives rise to an alternation in word order between the unmarked, subject-verb-X (S.V..X..) and a marked, (S..X..V) word order (where ..X.. stands for any verbal complements and/or adjuncts).

What makes the negative construction in Nweh even the more interesting is the fact that some negative sentences fail to display the sort of alternation illustrated in (1). An example of a sentence where the alternation is not possible follows in (2).

(2)  
\begin{align*}
\text{a. } & \text{ Njikèm à te ló fiá nkàp anbò Atem ačùjù bó N. Agr Neg F-2 give money to A. tomorrow Neg `Njikem will not give money to Atem tomorrow'}. \\
\text{b. } & * \text{ Njikèm à te ló nkàp anbò Atem ačùjù fiá N. Agr Neg F-2 money to A. tomorrow give `Njikem will not give money to Atem tomorrow'}. \\
\end{align*}

Observe that in (2a) like in (1a), we have the unmarked word order (S.V..X). In (2b) unlike in (1b) it is not possible to get the marked word order (S..X..V) with the verb occurring outside the verb phrase. The puzzle is how to correctly relate (1a) and (1b) on the one hand and on the other hand (1a) and (2a), while excluding illegitimate examples like (2b) in contrast to (1b). To solve this puzzle, one would have to not only provide a detailed formal description of the structural properties of negation in Nweh, and how it relates to other syntactic phenomena, but one must also be willing to speculate cautiously.
5.1.2 A Proposal

The proposal I develop here is in conjunction with the "head-initial" character of the language. Specifically, I argue that the surface alternants in (1) be derived through a two-step derivation: (1) XP-Movement: an obligatory pied piping of some negative XP constituent to Spec of Neg(ation) P(hrases); and (2) Head Movement: an optional head movement of the verb to Neg$^0$-head of NegP. XP movement of a negative XP will be argued to be motivated for purposes of negative licensing. This explains why it is obligatory. The option of verb movement will be shown to have subtle correlations with focus/negative scope assignment. Before I go into the details of my proposal and the considerations that motivate such a proposal, I will review the different strategies by which sentential negation is marked in Nweh.

5.2 Sentential Negation in Nweh

Sentence negation in Nweh is marked by a clause-final negative morpheme bọ as well as by a negative morpheme te in the "verb phrase". Nweh therefore exhibits a pattern of "discontinuous negation", whereby the two morphemes used to mark sentential negation form a discontinuous constituent. This pattern of expressing negation by two non-contiguous morphemes can also be found among Romance languages such as French and Italian.

In Nweh, the position of the negative morpheme te in the verb phrase is immediately after the past tense marker but before the future tense marker. I will assume that the negative morpheme te is attached to the highest overt "verbal head" to
mark the constituent to be negated. When the two negative markers are both overt, as in (3) they have a fixed distribution.

(3)   a.  Njikèm à te asè pfèla² akèndɔŋ bɔ
g. Agr Neg Asp eat f'v plantains Neg
'Njikem is not eating plantains'

b.  Njikèm à kè te pfèt akèndɔŋ bɔ
g. Agr P-2 Neg eat plantains Neg
'Njikem did not eat plantains (yesterday)'

c.  Njikèm à te lòt pfèt akèndɔŋ bɔ
g. Agr Neg F-2 eat plantains Neg
'Njikem will not eat plantains (tomorrow)'

Observe that the negative morpheme bɔ, when overtly present is invariably in 'clause-final' position. Observe also that the other negative particle te generally occurs preverbally. However, the position of te in relation to tense varies. Whereas te follows the past tense marker (P-2) kè in (3b), it precedes the future tense marker (F-2) lò in (3c). In Nkemnji (1992), I proposed that future tense in Nweh is marked by an auxiliary and not by a tense marker per se. Following this proposal, the fact that negation is higher than the future tense marker follows straightforwardly: Since auxiliaries are considered to be verbs, they will be associated with the VP projection, which is lower than NegP. This will therefore give us a basic ordering between negation, tense and the verb as follows: [ TENSE < NEG < (AUX) VERB ].

(3a) and (3c) show that te can be preceded by an agreement marker. However, the subject agreement is not different from that which obtains in declarative sentences as it is the case in some other (African) languages such as Ewe, Vata (see Koopman (1984), so it is not completely obvious what category agreement attaches to. In

² The alternation between pfèt and pfèla is due to a rule: d --> /−/−/+ where "" denotes a word edge and "+" a morpheme/word boundary.
standard negation, both negative morphemes, *te ... bó* appear to be obligatory for
sentential negation, as the ungrammaticality of (4b) and (4c) suggest.

However, there are cases where both *te* and *bó* are not overt. Where this is the
case, there is overt evidence that the morpheme has been incorporated into another
morpheme cf. (4d) and (4e).

(4) a. Njikèm à- kè *te* pfét akèndòŋ ajuá *bó*
N. Agr P-2 Neg eat plantains yesterday Neg
'Njikem did not eat plantains yesterday'

b. * Njikèm à- kè *te* pfét akèndòŋ ajuá ø
N. Agr P-2 Neg eat plantains yesterday Neg

c. * Njikèm à- kè ø pfét akèndòŋ ajuá *bó*
N. Agr P-2 Neg eat plantains yesterday Neg

d. Njikèm à léé pfét akèndòŋ *bó*
N. Agr never eat plantains Neg
'Njikem has never eaten plantains'

e. Njikèm à bèʔ pfét akèndòŋ3
N. Agr Neg.imp. eat plantains
'Njikem should not eat plantains'

---

3 The negative imperative marker bèʔ appears to be derived from the two negative morphemes bó +
té as a result of a number of historical processes. First, there must have been a lost of *t* resulting in the
lowering of *e* to *é* and a compensatory process of creaky voicing on *e*, i.e. bó + té --> bó + è

The form of other negative adverbs seems to suggest this hypothesis, cf. the form for the negative
adverb 'never' is léé supposedly from *lè + té*: the form of the negative adverb 'not yet' is kèè'
probably from *k* ' + té. This initial step was most likely followed by a rule of vowel deletion (which
is still very productive in Nweh today) that deletes a vowel when there are two contiguous vowels
across a morpheme boundary: bó + è --> b + è. Finally, the creaky voicing on *è* later became a
glottal stop: Thus, b + è --> bèʔ. This hypothesis is supported by the fact that spectographic
analysis have shown a phonological correspondence in which creaky voicing in some Grassfield Bantu
languages (e.g. Nchufie) correspond to glottal stops in Nweh (see Introductory Remarks, Koopman

Assuming the plausibility of such an historical account, the D-structure ordering of the negative
morphemes must be bó ... té - an ordering which, I will show, is also strongly motivated by both the
syntactic facts of Nweh, as well as by comparative analogy with French. The fact that the negative
imperative marker does not undergo any word order alternation, as we see with some other negative
sentences, will suggest (given my analysis of such negative alternants) that there is no negation on the
verb phrase.

167
The examples in (4) raise a number of questions as to the sort of relation that exists between te and bɔ. The distribution facts suggest the relationship is neither one of spec-head in NegP, nor one of head-complement.

### 5.2.1 A Possible Analogy

Sentential negation in Nweh appears to be marked as in standard French, where there are two negative markers ne ... pas. It is plausible to think that French ne corresponds to Nweh te and French pas corresponds to Nweh bɔ. Interestingly, I will show that the correspondence, if any such correspondence can be established, is just the reverse of what would be expected given the order of occurrence of the morphemes. Thus, I argue based on the syntactic properties, that Nweh bɔ behaves like French ne and that Nweh te behaves like French pas. Despite such similarities, the negative construction in Nweh works very differently from languages like French and if one attempts to directly apply current syntactic treatments of negation that have been proposed for languages like French to Nweh, one will fail to come up with a reasonable analysis of negation in Nweh. I show that a more intricate analysis is required for Nweh.

I will very briefly note some of the properties that make Nweh different from a language like French. Although Nweh has two negative morphemes, just as French does, the second negative morpheme bɔ in Nweh shows up always in 'clause-final' position, following all other constituents: (clausal) complements and/or adjuncts cf. (3) - (4). bɔ can be left out (be "silent") in sentential negation; where this is the case, the main verb must be in clause final position and follow all other sentence

168
constituents -verbal complements as well as any adjuncts as in (1b). Despite the above differences, Nweh and French share certain parallels. I will show that it is possible to establish a subtle analogy between the two languages and that once such an analogy is carefully established, one can work out an analysis of Nweh sentential negation that will be similar in spirit to extant syntactic treatments of negation that have been proposed for languages like French.

In terms of the formal properties, French has a preverbal marker *ne* just like *te* in Nweh: Cooccurring with *ne* in French is *pas*, just like *bó* cooccurs with *te* in Nweh. In terms of their syntactic behavior, the morphemes in Nweh appear to be just the mirror image of those in French. For instance in Nweh *bó* can be silent cf. (1b); Similarly, *ne* in French, in certain cases is optional as in (5).

(5)  
   a. Je (ne) mange pas  
   b. (Ne) pas souvent manger

We therefore see that even though the order is *te* ... *bó* in Nweh, and *ne* ... *pas* in French, in terms of syntactic behavior, Nweh *bó* closely corresponds to French *ne*. We will see more of such correspondence when I show that for obvious reasons *bó* must be treated as the head of NegP in Nweh. Similarly, in French the head of NegP is considered to be *ne*.

### 5.2.2 The Problem

As indicated above, negative clauses pose an interesting challenge to a strictly head-initial analysis of Nweh phrase structure, as some negative alternants have the main verb in sentence-final position cf. (6b), (7b), and (8b).
The examples in (6) involve simple transitive verbs that take just one object NP complement; those in (7) are examples of a dative construction; while those in (8) involve a verb that takes a sentential complement. In all these examples we observe the same alternation between the sentences in (a) and those in (b).

I also alluded to cases in which we do not get negative alternants. One such case is when a negative sentence has future time reference (9) or when there is an aspect marker present in a sentence (10).

---

4 There are more complex cases of sentential negation where we do not get negative alternants. For instance, sentential negation of a serial verb construction typically does not allow word order alternation (see section 5.5.2.4). Similarly, clausal negation involving certain adverbial adjuncts also does not allow word order alternation: I discuss cases that involve because-clauses in section 5.5.4.
(9)  
\begin{align*}
(9) \quad &a. \quad Njikèm à te₁₆ pfé t akèndọ́n bọ́ \\
&N. \quad Agr \ Neg \ F-2 \ eat \ plantains \ Neg \\
'&Njikem will not eat plantains (tomorrow)' \\
\end{align*}

\begin{align*}
(9) \quad &b. \quad * \quad Njikèm à te₁₆ akèndọ́n pfé t \\
&N. \quad Agr \ Neg \ F-2 \ plantains \ eat \\
\end{align*}

(10)  
\begin{align*}
(10) \quad &a. \quad Njikèm à kè? \ te ase\ pfé la akèndọ́n bọ́ \\
&N. \quad Agr \ P-1 \ Neg \ Asp. \ eat \ plantains \ Neg \\
'&Njikem was not eating plantains' \\
\end{align*}

\begin{align*}
(10) \quad &b. \quad * \quad Njikèm à kè? \ te ase\ akèndọ́n pfé t \\
&N. \quad Agr \ P-1 \ Neg \ Asp. \ plantains \ eat \\
\end{align*}

The difference between (6) and (9) is the tense. This difference is enough to allow verb movement in (6) while blocking such movement in (9). One would therefore want to correlate the presence versus absence of verb movement with the system of tense marking. Also, in (10) where the tense is the same as in (6) -namely, past, negative alternation is not possible. Since (10) differs from (6) in that there is an aspect marker ase present in (10) but not in (6), I will want to argue that the presence of an aspect marker must be responsible for the absence of verb movement and consequently for the fact that we do not get negative alternants in examples like (9) and (10).

The properties of sentential negation outlined above, raise several analytical and theoretical questions, of which I would like to address the following:

(1) The existence of a Neg(ation) P(hrase) as a locus of sentential negation, has been generally assumed, since it was argued for by Pollock (1989). This assumption raises a question as to whether there are two NegPs used to mark negation in a single clause in Nweh as well as questions regarding the exact nature of NegP structure in Nweh.
(2) Once the first question is resolved, the issue of the constituent order in NegP must be addressed. Is NegP head-final or is the apparent head-final character of NegP construction a result of movement?

(3) The next issue I would like to address here concerns the complementary distribution between the verb and the negative morpheme $b\delta$, that results in a word order alternation between the verb and its complements and/or adjuncts.

5.2.3 The Analysis

5.2.3.1 NegP Structure for Nweh

I will argue that there is just one NegP per clause in Nweh, corresponding to one sentence negation. As Jesperson (1924) notes "whenever two negatives really refer to the same idea or word, the result is invariably a positive". This is generally assumed by theorists and Linguists to be true of all languages. Some examples illustrating the mutual 'destructive' effects of double negation follow.

(11) a. Not a soul in Los Angeles was not shaken by the earthquake.  
    (= everyone was shaken by the earthquake)

b. There was not a soul present at the funeral who did not weep.  
    (= everyone present at the funeral wept.)

c. Il ne pouvait pas ne pas voir qu'on se moquait de lui.  
   (= he realized that we were making fun of him.)

(The example in (11c) is from Jesperson (1924); however, the translation is mine.)

We do not see any such mutual 'destructive' effect in Nweh, as the readings / interpretations in (6a), (7a) and (8a) (repeated below) suggest.
Given the fact that the mutual destructive effect of double negation within the same clause is assumed to be universal, we can safely conclude that the absence of such effects in Nweh implies that only one NegP per clause is used to mark sentential negation in Nweh.

In the examples that follow below in (12) - (14), I show that the basic pattern of negating is essentially the same for non-verbal predicates and non-predicates or what translates in English as a Negative Polarity Item (NPI). However, nominal predicates like those in (12) never show "negative alternation" like verbs do. In other words, only verbs can move to Neg⁰, bó. Let me note here that Nweh does not seem to have any simple NPIs or N-words of the sort that obtain in languages like English, French, and Italian.
(12) a.  Njikèm à te ńćoį́ bó  
N. Agr Neg thief Neg  
‘Njikem is not a thief’

b.  Njikèm à te čiča bó  
N. Agr Neg teacher Neg  
‘Njikem is not a teacher’

(13) a.  te abó aje á júćo bó  
Neg bag AM my cop this Neg  
‘This is not my bag’

b.  te bán bó  
Neg red Neg  
‘Not the red (one)’

(14) a.  te á móį́ ajém bó  
Neg Agr some thing Neg  
‘Not something’  
(“nothing”)

b.  te é móį́ nùc bó  
Neg Agr some person Neg  
‘Not some person’  
(“nobody”)

The negative alternants discussed above suggest that the verb can either be under the V node within VP or in Neg^o within NegP. These two alternatives are sketched in (15).

(15) a.  [ te luį́ abé ]_i  [ Neg^o bó  [ [e]_i  ]]  
Neg eat fufu Neg  
juį́ a kė? te luį́ abé bó  
he Agr P-1 Neg eat fufu Neg  
‘he did not eat fufu’.

b.  [ te [e]_i  abé ]_j  [ Neg^o luį́ i  [ tį́ [e]_j  ]]  
Neg fufu eat  
juį́ a kė? te abé luį́  
he Agr P-1 Neg fufu eat  
‘he did not eat fufu’.

174
In (15a) there is just one movement: The negative morpheme *te* (or perhaps *te*
-phrase) has raised to Spec, NegP. pied piping the entire negative XP. hence the term
*heavy pied piping*. In (15b) there are two movements: First, the verb has moved out
of VP, then, the complement of Neg₀ has raised to Spec, NegP. When the verb is in
Neg₀, we get an alternation in word order in which the verb now follows its
complement and/or adjuncts instead of preceding it (15b). Given this fact, I propose
a rule of Verb movement to the position occupied by the negative morpheme *bɔ*.
Accounting for the complementary distribution between the verb and the negative
morpheme *bɔ* in terms of Verb movement, implies that *bɔ* must be the head of NegP
and that Neg₀ must be in a position from which it can govern the verb given the Head
Movement Constraint (HMC) which basically restricts the movement of a head X₀ to
a position of another head Y₀ that governs XP (the maximal projection of X₀). In
fact, I argue that *bɔ* is the head of NegP. In terms of the structural location of NegP
within the Phrase structure tree, it suggests that *bɔ* must be in a higher position from
which it can c-command the verb phrase, since head movement is always to a c-
commanding head position from which the moved head can antecedent govern its
trace (in this case, the verbal trace in VP). Saying that *bɔ* is the head of NegP
brings us to the next question I would want to address - the apparent head final
character of NegP.

175

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
5.2.3.2 **NegP is Head-Initial**

In descriptive terms, we have seen that $b\delta$ is always in sentence-final position following all complements and any adjuncts. However, if the head of NegP is clause-final, it raises two questions: first, NegP will be the only head-final category, which is highly unlikely; Second, rightward movement is not only unlikely in Nweh given it is leftward branching in its phrase marker, but has been argued to generally not be a legitimate type of movement even in so-called 'head-final' languages like Japanese (Kayne (1994)). Following an earlier proposal (Nkemnji (1992)) I will maintain that Nweh is consistent in its phrase structure / linear order and that complements always follow the heads with which they are associated. (see also, Kayne (1994), Sportiche (1993), for important work along these lines). I will argue that the relevant phrase marker for the NegP in Nweh is as in (16) and that the surface ordering is as a result of the pied piping of the complement of NegP to the specifier of NegP.

(16)  

\[ \text{Spec} \rightarrow \text{NegP} \rightarrow \text{Neg} \rightarrow \text{AspP} \rightarrow b\delta \rightarrow \text{Spec} \rightarrow \text{Asp'} \rightarrow \text{Asp} \rightarrow \text{VP} \rightarrow \text{spec} \rightarrow \text{V'} \rightarrow \text{V} \rightarrow \ldots \]

---

5 See also footnote 3 for a possible historical derivation that tends to favor the "$b\delta \cdot te" ordering of the negative morphemes.
Before embarking upon a review of some of the details of my analysis and the considerations that favor such an analysis, I wish to address a number of questions concerning the NegP structure proposed in (16).

5.2.3.3 The Status of the Negative Morpheme te

If bɔ is the head of NegP, then what is the status of te and how is it selected and/or licensed? In terms of its structural position te can be said to be in a position higher than bɔ (as proposed in Nkemnji (1992)) in Spec NegP. However, as I will show the complement of Neg^0 raises to Spec NegP in overt syntax which means te cannot be in Spec, NegP. An alternative will be to say that te is lower than bɔ, say inside the pied-piped complement. However, te does not block head movement of the verb to Neg^0. I argue that te is lower than bɔ. I further propose that te is in an adjoined position. The proposal that te is in an adjoined position will explain why te does not block head movement of the verb.

I would like to propose that te is a (verb phrase) negative scope marker. If this is the case, then it is plausible to assume that te can "move" around within the "extended projection" of the verb, depending on the scope of negation. I will therefore assume, as a point of departure, that te is a negative adverb that marks a negated (verbal) constituent, more specifically te is like negative morphology that can be realized on some constituent to be negated. This in essence suggests that such "negative morphology" must be treated as separate from the abstract syntactic X-bar category -NegP, that occupies a fixed position and plays a role in Phrase structure. The idea I want to explore here is that for certain functional categories, a distinction
must be drawn between syntactic heads (that are relevant for purposes of phrase structure) and morphological heads (the overt manifestation of such syntactic heads). While in some cases it would be possible to treat these two heads as each heading an independent projection, in other cases it might happen that the two heads (the syntactic and the morphological heads) cannot be clearly distinguished and one of the heads will have to be treated as a feature "spell-out" on some other head. The idea of distinguishing two types of heads is actually an extension of a proposal by Stowell (1992), who proposes a separation between tense morphology or tense affixes (that show up on an inflected verb in English) and the abstract X-bar theory tense category, TP. Herein, I will recognize just one head for negation - the syntactic head, NegP. I propose to treat the "morphological head" as an adjunct / "spell-out" feature on some other head or XP. Thus, the negative morpheme te is treated here as a feature on a negated "verb phrase". This approach of separating some morphological marker from the abstract X-bar category with which it would typically be "associated" does not seem to be an entirely new idea. To draw an analogy here, let's take the case of a fairly better understood functional category like CP. In English Wh-questions, the head of a Wh-interrogative clause -C' (that is [+Q]), is essentially "empty" in the sense that it does not contain an overt interrogative morpheme. However, it tells us the [+WH] scope; and the real Wh-question word itself is realized as a feature on DP.

(17)

```
CP
  Spec
     C'
       C
          [+Wh]
          IP
which student
```
Similarly, I will like to propose that most functional categories (Neg, for example) behave in a similar way, in the sense that the morphology is realized 'elsewhere' on a different category. However, such morphological affixes must be licensed at some point between overt syntax and LF by means of syntactic (head) movement that brings them to stand in a specific syntactic relation with their X-bar syntactic head. Given the above suggestions, I will assume $b\ddagger$ is the (syntactic) head of NegP and that $te$ is a negative adverb (feature "spell-out") which when adjoined to an XP category renders the XP [+negative]. This is similar in spirit to certain assumptions argued for by Moritz and Valois (1991) regarding the French negative quantifier personne. To derive the distribution of the French negative quantifier personne, Moritz and Valois (ibid.) propose that when a negative quantifier like personne moves to Spec XP, it has the effect of transmitting negative features to the XP by specifier-head agreement, thus rendering the XP as whole [+ negative]. As a consequence of this [+negative] marking on the XP, pied-piping of that XP is triggered and the XP as whole must move to Spec NegP. However, unlike Moritz and Valois, I would want to say that such N-words do not originate in Spec NegP. For one thing these N-words do not bear the sort of lexical relation to the Neg$^0$ head that specifiers typically bear to the heads whose specifier position they occupy. Moritz and Valois do not provide any direct evidence which forces them to assume that pas occupies Spec NegP. Herein, I will treat $te$ as a negative adverb that is licensed by being in a Spec-head relation with Neg$^0$, $b\ddagger$. To once again push the parallel / analogy between Nweh and French, I will show that there exists a cooccurrence restriction between $te$ and other negative adverbs in Nweh, similar to that which obtains in French between pas and negative quantifiers like jamais 'never', and personne 'nobody'. Nweh examples follow in (18).
I assume that tê originates as a VP level adjunct that attaches to the highest overt "verbal head" to mark a negated predicate. Given the structure in (16), the fact that
the verb can move to the Neg0 bô , across tê without violating the HMC suggests
that tê is not a (syntactic) head. As I will further elaborate, the presence of higher
verbal heads, such as aspectuals and auxiliaries block head movement of the verb to
Neg0. The question at this point is whether there is direct evidence which compels
one to assume that tê originates as an adjunct on some (extended) projection of the
verb. Based on its distribution, it is clear that tê must be higher than VP as it always
occurs in preverbal position. However, one can at this point ask why I do not assume
that tê is in Spec, NegP. Recent work in the Minimalist framework (Chomsky
(1992), Sportiche (1993)) suggests that XP movement particularly for the purpose of
"licensing" or "feature checking" is generally to a specifier position rather than
adjunction to another XP. Thus, I want to reserve Spec NegP for the licensing of
negative phrases; This apart, the relationship between bô and tê in the tê ... bô
negative construction does not appear to be one of Spec-head. In informal terms, tê
appears to mark the scope of negation in the sense that it triggers XP movement to
Spec NegP in the same way that Moritz and Valois (1991), argue that the French N-
word personne does. The analysis I wish to defend here, assumes certain features of
Moritz and Valois' analysis. In particular, I assume that tè like personne has the ability to transmit negative features. However, I assume negative features are transmitted not by Spec-head agreement but by feature percolation from a head X₀ to its maximal projection XP. I further assume that this triggers pied-piping of an XP (that is marked with the feature [+Neg.]) to Spec NegP. However, I argue that in Nweh, unlike in languages like French, such pied-piping of the complement of Neg₀ to Spec NegP, takes place in overt syntax rather than at LF.

5.3 Deriving the Surface Word Order

5.3.1 The Apparent Head-Final Character of NegP

We have seen that the negative morpheme bó which I have argued is the head of NegP, is always in clause-final position, and that when verb movement to Neg₀ takes place, the verb is also in clause-final position. The relevant examples are repeated in (19).

(19) a. Njikèm à kè? te pfèt akèndòŋ bó
    N. Agr P-1 Neg eat plantains Neg
    'Njikem did not eat plantains'

    b. Njikèm à kè? te akèndòŋ pfèt
    N. Agr P-1 Neg plantains eat
    'Njikem did not eat plantains'

Given the proposal that tè triggers negative pied-piping of the complement of Neg₀ to Spec. NegP, it follows that the apparent head-final word order that obtains in NegP, is as a result of the raising of the negative XP (in this case AspP) to Spec NegP.

181
stranding Neg^0 bô in clause final position as sketched in (20) (see also Nkemnji (1992) for a similar analysis arrived at from related but independent motivations).

(20)

\[
\begin{array}{c}
\text{AgrP} \\
\text{NP} \\
\text{Njikem} \\
\text{Agr} \\
\text{TP} \\
\text{T'} \\
\text{T} \\
\text{Spec} \\
\text{NegP} \\
\text{Neg'} \\
\text{Neg} \\
\text{AspP} \\
\text{Spec} \\
\text{Asp} \\
\text{VP} \\
\text{Spec} \\
\text{V'} \\
\text{V} \\
\text{NP}
\end{array}
\]

\[\text{cf. (19a). Njikêm à kê? te pfêt akèndɔŋ bô}
\]
N. Agr P-l Neg eat plantains Neg 'Njikem did not eat plantains'

The derivation sketched in (20), correctly derives the word order in (19a). To derive the word ordering that obtains in examples like (19b), with the verb in "clause-final" position, I propose that the verb first moves out of the 'scope' of negation by undergoing head-to-head movement to Neg^0, prior to XP movement of the [+Neg.] AspP to Spec NegP. The derivation follows in (21).
The two strategies of negating correspond loosely to what I call "complete predicate negation" and "partial predicate negation". With complete predicate negation (19a), verb movement does not take place, so the verb stays within the 'scope' of negation, and the VP predicate as a whole is negated (cf. derivation in (20)). With partial predicate negation (19b), the verb moves out of the scope of negation into Neg\(^0\), and just some partial constituent of the VP predicate is negated (cf. derivation in (21)). This, in part, could be an explanation for the fact that only main verbs move to Neg\(^0\). We do not get for example, head movement of the noun to Neg\(^0\) when non-verbal predicates are negated as in (12) - (14). Both strategies however, do require that the XP that has the feature [+Neg.] move to Spec, Neg\(^P\) in overt syntax for the purpose of feature checking/licensing.
The alternate strategies used in negating a single sentence suggest that we must admit more than one species of negation into our grammar, as well as provide some basis on which the negative alternants should be characterized. In section 5.5.2, I propose one way of characterizing the negative alternants by attempting to correlate the alternant forms of negation with scope of negation and negative focus.

5.3.2 Verb Movement and the HMC

Although the word order facts are themselves indicative of verb movement, some of the most important evidence for the head movement of the verb comes from the fact that higher "verbal heads" like auxiliaries and aspectuals block verb movement. In section 5.3, I have argued that the contrast between pairs of sentences like (22a) and (22b) that illustrate the negative clause alternants must be correlated with the application of verb movement to Neg⁹.

(22) a. Njikëm a kë tē- flā nkap anbô Atem ajuá bó N. Agr P-2 Neg give money to A. yesterday Neg ‘Njikem did not give money to Atem yesterday’.
   b. Njikëm a kë tē- nkāp anbô Atem ajuá flā N. Agr P-2 Neg money to A. yesterday give ‘Njikem did not give money to Atem yesterday’.

Indeed, the fact that the presence of higher verbal heads, such as auxiliaries and aspectuals, block such movement (as one would expect given the HMC) reinforces the Verb movement analysis, as well as provides a straightforward account for the contrast between (23a) vs. (23b).
I sketch the mechanism of how this works in (24).

In (24) head movement of the verb to Neg\(^o\) is blocked by the presence of the future auxiliary \(l\(\)\). The verb cannot reach further than \(l\(\)\). This correctly rules out the ungrammatical sentence in (23b). The only movement that can legitimately take place is the movement of the \([+\text{neg.}]\) Asp\(P\) to Spec of Neg\(P\), giving us the correct order that obtains in (23a). Let me note here that those higher verbal heads that I claim block movement in examples like (23b), themselves do not undergo head movement to Neg\(^o\). This immediately raises the question. Why? especially given the fact that they are in the right structural configuration from which movement can legitimately take place. At this point I do not have a concrete explanation. The same question

185
arises with negative sentences that have verbs in a series, such as the "Focus Verb Construction" and the Serial Verb Construction (SVC). I take up this question later in the section where I outline some Problems and Speculations. For the moment, I propose to direct attention to a review of the proposals I have developed here and their implications for the theory of the syntax of negation.

5.4 Implications and Consequences

To correctly derive the negative alternants as well as certain word order asymmetries that obtain in the syntax of sentential negation in Nweh, I have argued for a two step derivation: One, an obligatory raising of a "negative XP" (i.e. a "verbal projection" to which te is adjoined) to the specifier of negation phrase (Spec, NegP) and two, an optional head movement of the verb to Neg^0,bs -head of NegP.

If the treatment of sentential negation in Nweh that I have argued for here is correct, as the data suggests, then the proposals would have some important consequences for the theory of the syntax of negation. A central assumption that has guided much recent work on XP movement and particularly XP movement for "licensing" purposes, is the idea that XP movement is generally to a specifier position rather than adjunction to another XP; and that XPs are licensed at LF by targeting specific Spec positions depending on the morphological and/or semantic properties (features) to be "licensed" or "checked". For example, Sportiche (1990) proposes that (complement) XPs are generally licensed in specifier positions. Moritz and Valois (1991) following along similar lines propose a licensing condition on negative XPs in French: They argue that LF movement of negative adverbs /
quantifiers in French target Spec of NegP. Beghelli and Stowell (1994) extend this idea to QPs by arguing that at LF, QP-movement for purposes of scope assignment must be landing-site selective, depending on the unmarked scope domain of the particular QP. The main claim, that I am belaboring to make here, is that a language like Nweh that has raising of negative phrases in overt syntax, to Spec of NegP provides overwhelming, as well as crucial evidence, in favor of the assumption that such XP raising of negative phrases, does actually take place covertly at LF in other languages.

5.5 Problems and Speculations

The following sections are designed to identify various problems and questions that arise from the analysis of sentential negation developed here. The sections however, do not provide concrete answers. While I speculate on possible solutions, they are intended mainly to provide more interesting data/facts as well as raise awareness of the issues, in the hope of provoking further investigation and research into the problems.

5.5.1 Failure of Higher "Verbal Heads" to undergo Head Movement

In section 5.3, I attributed the word order alternation between the pairs of sentences like (25) to the presence versus absence of verb movement to Negº.
(25) a. Njikêm a kê tê- flá nkáp anbó Atem ajúa bô
   N. Agr P-2 Neg give money to A. yesterday Neg
   ‘Njikem did not give money to Atem yesterday’.

b. Njikêm a kê tê - nkáp anbó Atem ajúa flá
   N. Agr P-2 Neg money to A. yesterday give
   ‘Njikem did not give money to Atem yesterday’.

I have shown that there is good evidence for accounting for the alternation in terms of
verb movement. One such evidence is the fact that higher verbal heads like aspectuals
and auxiliaries do block verb movement, as the ungrammaticality of (26b) and (27b)
indicates. Note also the contrast between (25b) and (27b).

(26) a. Njikêm à-kê? te ase pfê lâ akêndôŋ bô
   N. Agr P-1 Neg Asp eat fv plantains Neg
   ‘Njikem was not eating plantains’

b. * Njikêm à-kê? te ase akêndôŋ pfê lâ
   N. Agr P-2 Neg Asp plantains eat fv

c. * Njikêm à-kê? te pfê lâ akêndôŋ ase
   N. Agr P-2 Neg eat fv plantains Asp

(27) a. Njikem a-te îó flá nkáp anbó Atem ač5?5 bô
   N. Agr Neg F-2 give money to A. tomorrow Neg
   ‘Njikem will not give money to Atem tomorrow.’

b. * Njikem a-te îó nkáp anbó Atem ač5?5 flá
   N. Agr Neg F-2 money to A. tomorrow give

c. * Njikem a-te flá nkáp anbó Atem ač5?5 îó
   N. Agr Neg give money to A. tomorrow F-2

I have attributed the ungrammaticality of (26b) and (27b) to the fact that the presence
of the aspect/auxiliary marker blocks verb movement. This follows from the HMC
which requires that a head can only move to the next c-commanding head (see
derivation in (24)). However, aspectuals and auxiliaries that I claim block verb
movement, themselves do not move to Neg⁰ as the ungrammatical examples in (26c)
and (27c) indicate. This immediately raises a question as to why this should be the case, given the fact that such heads are in the right structural configuration from which movement can legitimately take place. One can account for the failure of aspectuals and auxiliaries to move to Neg⁰ bə in a number of ways: One could argue that head movement is limited to "contentive" heads. However, this will not be a satisfactory explanation, since we know of cases of head movement that involve non-contentive / functional categories. Another explanation could be that by head moving the aspectual or auxiliary we are not going to achieve "partial negation" since the verb will still be within the 'domain' of te-, the negative (VP) scope marker. This will follow, given my suggestion that the reason for verb movement is to achieve partial negation of some constituent within the VP predicate, and not a 'complete negation' of the VP predicate. I will however, not adopt any of these two alternatives. Instead, I will propose that the failure of aspectuals and auxiliaries to undergo head movement to Neg⁰ follows from the Empty Category Principle (ECP), which requires that traces created by movement must be properly governed.

Here is the basic insight of my proposal: To derive the marked word order that obtains in negative clauses, with the verb in clause-final position, I have argued that the verb first undergoes head movement to Neg⁰ and then the XP (that contains the trace of the verb) then raises to Spec NegP. For this to be possible without violating the HMC, I propose that the verb must move in two steps: first to Asp⁰, then to Neg⁰. The two step derivation ensures that the original (verbal) trace t₀ will be antecedent governed by the subsequent trace t₁ even after XP movement to Spec, NegP. Following Lasnik and Saito's (1984) idea of gamma marking, I assume that at LF the subsequent trace t₁ that is not properly governed can be deleted, since it will in essence, be an aspectual trace and not a verbal trace.
The ECP account I have adopted here has an additional advantage in that it gives us a possible explanation as to why nouns do not undergo head movement to bọ even though Nweh has nominal sentences (also referred to as copula sentences) cf. (28).

(28) a. Njikèm à te ñeʒŋ bọ
N. Agr Neg thief Neg
‘Njikem is not a thief’

b. Njikèm à te čiča bọ
N. Agr Neg teacher Neg
‘Njikem is not a teacher’

The reason, why the nouns in such sentences cannot move to Neg⁰, I believe, is that the nouns are too low to undergo head movement to Neg⁰ without violated the ECP. (see chapter 2 for a structure of the noun phrase).

5.5.1.1 Asymmetry between 'Transitive' and 'Non transitive' Verbs

I have argued that the negative alternants that can be observed in sentential negation in Nweh, are as a result of an optional rule of verb movement to Neg⁰ (substituting the Neg head bọ). We saw that if such verb movement is blocked, then the Neg⁰ head bọ must be overt. I will now present some data concerning the asymmetric behavior of transitive versus non-transitive verbs which also poses some problem for my analysis as outlined above. With respect to cases that involve some kind of barrier (such as the HMC) that blocks verb movement, transitive and non-transitive verbs pattern along the same lines. However, for those cases that do not involve any barrier to verb movement, there is a further split between 'transitive' and 'non-
transitive' verbs. I repeat some examples below. The (b) examples in (29) - (31) below, show some cases in which verb movement is blocked.

(29) a. Njikem à kë? te ase npfěla akendōŋ bó
N. Agr P-1 Neg Asp eat fv plantains Neg
‘Njikem was not eating plantains’

b. * Njikem à kë? te ase akendōŋ npfěla
N. Agr P-1 Neg Asp plantains eat fv

(30) a. Njikem à kë te ase ndée bó
N. Agr P-2 Neg Asp sleep fv Neg
‘Njikem was not sleeping (yesterday)’

b. * Njikem à kë te ase ndée
N. Agr P-2 Neg Asp sleep fv

(31) a. Njikem à te ló lée bó
N. Agr Neg F-2 sleep fv Neg
‘Njikem will not sleep (tomorrow)’

b. * Njikem à te ló lée
N. Agr Neg F-2 sleep fv

In (29) the verb *npfět 'eat' is a transitive verb, and as the (b) example shows, the presence of the aspect *ase blocks movement of the verb. In (30) and (31), the verb *nđé 'sleep' is intransitive. Movement of the verb is also blocked by the aspect in (30) and by the future auxiliary in (31). Whereas with transitive verbs one has the option of moving the verb to Neg⁰ or leaving it within VP, with intransitive verbs, verb movement appears to be obligatory when there is no barrier blocking movement; Alternatively, bó must disappear. The question is why this is so?
5.5.1.2 "Intransitive" Verbs

Most of the examples that I have used to argue for verb movement involve transitive verbs or verbs followed by an adjunct, where one can easily see whether verb movement has taken place or not. Simply by looking at the linear order of constituents. With negative sentences involving intransitive verbs, verb movement is not so transparent. Consider the following examples

(32) a. Njikem à kë te lé
   N. Agr P-2 Neg sleep
   'Njikem did not sleep (yesterday)'

b. * Njikem à kë te lé bô
   N. Agr P-2 Neg sleep Neg

We observed earlier that the verb and bô are in complementary distribution in sentence-final position: Because of this fact, we want to claim that verb movement has actually taken place in (32a) and therefore bô cannot be overt cf. ungrammaticality of (32b). This implies that verb movement is obligatory for intransitive verbs. But why should verb movement be obligatory with intransitive verbs? This is a question for which I do not have a concrete answer.

The claim that verb movement has obligatorily taken place in sentences like (32a) appears to be correct because if the head of the AspP (that I analyzed earlier as constituting a 'barrier' to verb movement) is overt in sentences like (32a) and (32b), the results we get would be the exact opposite of what obtains in (32a) and (32b) as I show in (33).
(33) a. *Njikem à kè te ase ndéē
N. Agr P-2 Neg Asp sleep fv
b. Njikem à kè te ase ndéē bó
N. Agr P-2 Neg Asp sleep fv Neg
‘Njikem was not sleeping (yesterday)’

Future tense which I have analyzed as involving an auxiliary, gives us similar results, as the examples in (34) indicate.

(34) a. *Njikem à te ló lée
N. Agr Neg F-2 sleep fv
b. Njikem à te ló lée bó
N. Agr Neg F-2 sleep fv Neg
‘Njikem will not sleep (tomorrow)’

However, the presence of an adverbial adjunct enables verb movement to be optional, and we can get the negative alternants when there is an adjunct following the verb.

(35) a. Njikem à kè te lé ajúá *(bó)
N. Agr P-2 Neg sleep yesterday Neg
‘Njikem did not sleep yesterday’
b. Njikem à kè te ajúá lé
N. Agr P-2 Neg yesterday sleep
‘Njikem did not sleep yesterday’

We notice that the presence of an (adverbial) adjunct following an intransitive verb makes intransitive verbs to pattern like transitive verbs in the sense that they allow negative alternation as in (35). It is not clear why this should be the case. However, the facts here suggest that the analysis of all adverbs as adjuncts that has generally been adopted in the literature, needs some serious rethinking.
5.5.2 Characterizing the Negative Variants

The alternate strategies used in negating a single sentence suggest that we must admit more that one species of negation into our grammar, as well as provide a basis on which the variants should be characterized. To provide such a basis I would like to propose that head movement of the verb observed in negative clauses is a syntactic process that can be correlated with the semantic property of focusing. In other words, verb movement is triggered by focus.

Because of the general absence of simple NPIs and N-words like English no-, none, ... it is difficult to negate a sentence constituent. For instance, in Nweh one cannot say "I saw nobody"; Instead, one must say "I did not see somebody" where the whole sentence (VP predicate) is negated. To make the problem even more difficult, the presence of the quantifier somebody makes the sentence ambiguous between a wide scope and a narrow scope interpretation. A question that arises is whether it can be possible in Nweh to syntactically negate just a (sub-) constituent of a sentence / predicate and if so, how? I will argue that this can be done using either one of two possible strategies by which syntactic focus is achieved. In other words, I will claim that the alternate structures that one gets for negative clauses has to do with where focus lies. Obviously this is an empirical question. The way the negative alternants are used in natural discourse, favor the view that the negative alternants have to do with where focus lies. For instance, the negative alternants in (36a) and (37a) force different continuations as indicated respectively in (36b) and (37b). A brief discussion of how focus / emphasis is marked in Nweh follows the examples.
(36) a. Njikem a ke te júṣ akendọ̀j bó
   N. Agr P-2 Neg buy plantains Neg
   Njikem did not buy plantains.
   
   b. i. ... júṣ a kò júṣ m̀ alóuŋ
       he Agr P-2 buy Foc. yams
       ‘he bought YAMS’.⁶
   ii. ... júṣ a kò jéu akendọ̀j jéu
       he Agr P-2 steal plantains steal
       ‘he (only) STOLE plantains’

(37) a. Njikem a ke te akendọ̀j júṣ
   N. Agr P-2 Neg plantains buy
   Njikem did not buy plantains.
   
   b. i. ... júṣ a kò júṣ m̀ alóuŋ
       he Agr P-2 buy Foc. yams
       ‘he bought YAMS’.
   ii. ?* ... júṣ a kò jéu akendọ̀j jéu
       he Agr P-2 steal plantains steal
       ‘he (only) STOLE plantains’

(36a) corresponds to what I would like to call "complete negation" and (37a)
corresponds to what I would like to refer to as "partial negation". Observe that in (36)
either the object alóuŋ 'yam' or the verb n-jéu 'steal' can be focused as I show in
(36b). However, in (37) the object but not the verb can be focused. This suggests
that in a negative sentence like (37a) where verb movement has taken place, there is
no negation on the verb per se. Therefore, there is the presupposition that Njikem
bought one thing but not the other; Consequently, the focus here has to be on the
object.

⁶ I use upper case here to designate the focused constituent.
5.5.2.1 Focus / Emphasis in Nweh

There are basically two types of focus or emphasis in Nweh: Contrastive and Non-contrastive focus. Depending on the type, focus is marked either by use of 'voice quality' such as loudness of voice, by use of a focus particle, or by syntactic movement. Non-contrastive focus is expressed just by loudness of the voice. Very often, a sentence final "attention calling" particle, similar to *hey!* in English is used along with loudness of voice.

This type of focus is generally on the whole clause and not just on some constituent of the sentence. Contrastive focus on the other hand, is usually on some constituent of the sentence. Contrastive focus can be achieved either by use of a focus marker or by syntactic movement. All the major sentence constituents -NP, VP, PP, AP can be focused. However, the strategy differs for each constituent.

5.5.2.2 Focus by Means of a Focus Marker

In Nweh, there is a morpheme *mə* which is used as a focus word/particle. *mə* basically has a contrastive function. *mə* can occur on any focused constituent of the clause other than the VP. *mə* is most commonly used on NPs but can be used with

---

7 I do not intend to get into a syntactic analysis of focus, except in those cases where focusing interacts with head movement in negative clauses.

8 For adjectives, this assertion holds only for the "pure adjectives" (see chapter 4).

9 Verb (phrase) focusing is effected by an entirely different strategy cf. (36b.ii); I call this the "Focus Verb Construction". The construction is similar to the "predicate cleft construction" discussed in Knopman (1984). I will discuss this construction in some detail later. Apart from deserving attention in its own right, the 'verb Focus Construction' interacts with head movement in negative clauses in an interesting way.
PPs and certain APs as well but not on VPs. *n* immediately precedes the focused XP, except when it is used to focus the subject (38a).

(38) a. Njikem m̩ a k̩? n̩u̩ akend̩n̩
N. Foc. Agr P-1 boil plantains
‘NJIKEM boiled plantains’. 10

b. Njikem a k̩? n̩u̩ m̩ akend̩n̩
N. Agr P-1 boil Foc. plantains
‘Njikem boiled PLANTAINS’.

c. Njikem a k̩? ny̩i̩ n̩tsa m̩ anti g̩m̩
N. Agr P-1 put water Foc. in(side) bottle
‘Njikem put water IN THE BOTTLE’.

d. Njikem a k̩ ū̩ akend̩n̩ m̩ əjə̪a
N. Agr P-2 boil plantains Foc. yesterday
‘Njikem boiled plantains YESTERDAY’.

As the examples in (38) indicate, *n* follows subject NPs (38a) but precedes (direct) object NPs (38b). NPs that occur as objects of prepositions cannot be focused using *n*. Instead, the prepositional phrase as a whole must be focused (38c).

5.5.2.3 Focus by Movement / (pseudo-) Clefting

Only NPs can be focused by movement. Clefting is a common means of expressing contrastive emphasis / focus, when the focus is on an NP. When NPs are focused by clefting they do not show any subject / object asymmetries unlike when they are focused by a focus marker. The cleft focus construction has formal similarities to the (restrictive) relative clause construction. For example, the antecedent of a relative

10 (38a) can be translated more accurately as a pseudo cleft: I choose not to do so because it fails to exhibit properties (such as the obligatory presence of an agreeing relative marker) that typical of the (pseudo-)cleft construction in Nweh.
clause in Nweh must be a noun (phrase) or pronoun; Similarly, the antecedent of a
cleft (focus sentence) must be a noun (phrase) or pronoun. As I suggested (in my
analysis of the relative (clause) construction, (section 2.9.4) both the cleft
construction and the relative clause construction involve "promotion" of material from
an embedded clause to a matrix XP. The only formal difference between these two
constructions is that the cleft construction has a focus marker mə which is absent in
the relative clause construction. Examples of these constructions follow in (39).

(39) a. Atem a kē? nčūū akendēŋ
A. Agr P-1 boil plantains
‘Atem boiled plantains’.

b. akendēŋ mə a zāā Atem a kē? nčūū
plantains Foc. Agr RM A. Agr P-1 boiled
‘it is plantains (and not something else) that Atem boiled’. 
lit., "Plantains is what Atem boiled"

c. akendēŋ zāā Atem a kē? nčūū
plantains RM A. Agr P-1 boiled
‘(the) plantains that Atem boiled’.

d. Atem mə a gīi a kē? nčūū akendēŋ
A. Foc. Agr RM Agr P-1 boil plantains
‘it is Atem (and not someone else) who boiled plantains’.
lit., "Atem is the one who boiled plantains’.

Notice that the object cleft (39b) and the subject cleft (39d) now have an identical
structure where the relativized NP invariably precedes the focus marker. This
suggests that there must be some constituent that can be said to be the locus of focus.
and that an NP is said to be focused if it bears a certain relation to such a focus
position. Now, if we compare (39b) a cleft , with (39c) -a relative clause, we notice
that the only formal difference is the focus marker mə that is present in (39b) but not
in (39c). This strongly suggests that the relative clause construction and the cleft
construction should be given the ‘same’ syntactic derivation, perhaps with the
relative clause construction serving as the input to a cleft construction. This suggests a structure like (40) (see chapter 2, section 2.9.4, for an analysis of relative clauses in Nweh).

\[(40)\]

\[
\text{FocP} \\
\text{spec} \quad \text{Foc'} \\
\text{Foc} \quad \text{DP} \\
\text{m\textasciitilde} \quad \text{Spec} \quad \text{D'} \\
\text{D} \quad \text{CP} \\
\text{spec} \quad \text{C'} \\
\text{C} \quad \text{AgrP} \\
\ldots
\]

5.5.2.4 Focus Verb Construction

When a verb is focused, we usually end up with two copies of the verb: the "original" verb and a "duplicated" copy of the verb. The duplicated copy of the verb shows up in its 'bare' (\(\emptyset\)-prefix) form, and does not appear to have any independent theta properties aside from those "original" verb. The verb and its copy appear to be in a chain relation. The theta properties of this chain are determined by the "original" verb. This suggests the other verb is simply a copy of the original verb. In descriptive terms, the duplicate copy of the focused verb shows up in "sentence-final" position, not in initial position as would be expected in a predicate cleft construction.
For example, compare the (non-focused) sentences in (41) with their focused counterparts in (42).

(41) a. núa a kê? ase ndéē
  child Agr P-1 Asp sleep
  'The child was sleeping'

b. Atem a kê? nčūū akendôŋ
  A. Agr P-1 boil plantains
  'Atem boiled plantains'

c. Njikem a lô fôō ŋkāp anbô Zinkeng
  N. Agr P-3 borrow money from Z.
  'Njikem borrowed money from Zinkeng'

(42) a. núa a kê? ase ndéē léē
  child Agr P-1 Asp N-sleep Ø-sleep
  'The child was (only) SLEEPING'

b. Atem a kê? nčūū akendôŋ čūū
  A. Agr P-1 N-boil plantains Ø-boil
  'Atem BOILED plantains'

c. Njikem a kê? ŋfôō ŋkāp anbô Zinkeng fôō
  N. Agr P-1 N-borrow money from Z. Ø-borrow
  'Njikem BORROWED money from Zinkeng'

(42a) involves a non-transitive predicate; (42b) involves a transitive verb and (42c) involves a complex predicate with an [-NP, PP] complement. In all three cases the copy of the main verb shows up in clause final position.

I have analyzed NP-focus by movement ((pseudo-)cleft construction) as involving movement of an NP to spec of FocusP. I showed that a focus marker that is associated with NPs occurs in the focus head position, and is licensed by having the focused NP in its specifier position. Here, I will show that VP focusing lacks such an overt focus marker. Instead, I will argue that the focused verb moves into the head of
FocP, followed by raising of VP to spec FocP. The derivation is sketched in (43), where the FocP immediately dominates the constituent that is focused.

I have proposed that since there is no verbal focus particle analogous to the nominal focus particle, when a verb is focused, it has to move to the head of FocP, and that focused constituents are licensed by moving the XP whose head receives focus to Spec of FocP. The question at this point is how do we end up with two copies of the verb when the verb is focused and why does only one (the higher) of these verbs get inflected? To explain this fact I will adopt the Copy Theory of Movement (Chomsky (1992)).

According to the Copy Theory of Movement, when a transformation moves a constituent from a position $X$ to a position $Y$, both the "tail" and the "head" of the chain created by movement, i.e. positions $X$ and $Y$ respectively, each contain a copy of the "moved" constituent. It is at spell-out that the grammar then decides which copy of the chain is visible at PF and hence pronounced and which is visible at LF and hence interpreted. There appears to be no requirement that the copies be deleted.
in order for the derivation to "converge" at PF: The choice seems to be one of particular language-internal considerations. Assuming the Copy Theory of Movement which analyzes move a as a process of copying followed by deletion, it follows that the "original" verb will not be able to delete because it will bear an offending trace when the VP raises to Spec FocP, since such a trace will not be properly governed. Analyzed as such, we get a straightforward understanding of why the both copies of the verb are legitimate PF objects and thus, have to be pronounced. The derived structure is sketched in (44).

(44)  
```
   NP
  /   \
Njikem Agr' Agr
     /  \
    T'  TP
       /  \
      T  FocP
         /  \
        VP_i Spec
           /  \
          V' čūū
             /  \
            V  [e]_i
              /  \
              NP
               | akendōŋ
               | nčūū
```  

There appear to be good reasons that the derivation sketched in (44) is by and large, correct. We focus here just on the evidence that has some bearing on negation. Recall that verb movement to Neg⁰ bő, that results in word order alternation in negative sentences is not possible when the a verb is focused. The relevant examples follow in (45) and (46).
(45) a. Atem a kē te čūū akendọŋ bó
   A. Agr P-1 Neg boil plantains Neg
   'Atem did not boil plantains'

   b. Atem a kē te akendoŋ čūū
   A. Agr P-1 Neg plantains boil
   'Atem did not boil plantains'

(46) a. Atem a kē te čūū akendọŋ čūū bó
   A. Agr P-1 Neg boil plantains boil Neg
   'Atem did not BOIL plantains'

   b. * Atem a kē te akendọŋ čūū čūū
   A. Agr P-1 Neg plantains boil boil
   'Atem did not BOIL plantains'

(45) shows that if the verb is not focused, it is possible to get alternate forms of negation. However, observe that in (46) where the verb is focused only one option of negating is available. How do we correctly block verb movement when the verb is focused? One way to account for the failure of verb movement in the verb focus construction is to say that the focus verb acts as an intervening head that blocks head movement of the main verb. Such a derivation will be as in (47).
Given the structure in (47) a question arises as to why the main verb cannot move when VP raises to Spec, FocP. The assumption here is that the verb in focus forms a chain with, and hence is licensed by, the main verb in VP. This implies that the main verb must be overt in order to license the copy of the verb in focus. This assumption also explains why the main verb cannot move to Neg⁰ even after the VP has raised to Spec, FocP. The only legitimate derivation is therefore to raise the complement of Neg⁰ as a whole to Spec of NegP thus giving us the correct ordering that we have in examples like (46a) (see derivation in (47)).

The Serial Verb Construction (SVC) behaves like the Verb Focus Construction. In a SVC where the two verbs appear to be independent, neither the
verb in the first VP (VP₁) nor the verb in the second VP (VP₂) can undergo verb movement to Neg⁰, bʃ. Examples follow in (48).

(48) a. Atem à kɛʔ ntúa akendɔŋ npfɛt
A. Agr P-1 roast plantains eat
 'Atem roasted plantains and ate (them)'

b. Atem à kɛʔ te túa akendɔŋ npfɛt bʃ
A. Agr P-1 Neg roast plantains eat Neg
 'Atem did not roast plantains and eat (them)'

c. * Atem à kɛʔ te túa akendɔŋ (n)pfɛt
A. Agr P-1 Neg roast plantains eat

d. * Atem à kɛʔ te pfɛt akendɔŋ (n)túa
A. Agr P-1 Neg eat plantains roast

(48a) is a declarative Serial Verb Construction (SVC). It can only be negated as in (48b), where (aside from the negative morphemes) the word order is basically the same as in the declarative sentence in (48a). The second strategy of negating, that has the verb in clause-final position is not available for SVC. We know that verb movement has not taken place in (48b) because the clause-final negative morpheme bO! that I have analyzed as the head of Neg⁰, is overt. In (48c) I show that the second verb (V₂) npfɛt 'eat' cannot move to bɔ. Given the fact that in a SVC, the VPs tend to occur in a "series" (sometimes VP₂ occurs as a complement to V₁) the inability of the second verb to move to bɔ can be said to follow from the HMC. Under standard assumptions, the higher verb will block movement of any subsequent verb(s). However, the higher verb (V₁) ntúa 'roast', itself cannot undergo head movement to Neg⁰, as the ungrammatical sentence in (48d) illustrates. Given the analysis of sentential negation sketched herein, one would reasonably expect the higher verb (V₁) to be able to move to bɔ. However, verb movement is not even an option for the SVC. This raises the same general question that arose above for the

205
Focus Verb Construction. That is, why is verb movement not an option for SVC? An even more difficult question is why the highest Verb ($V_1$) fails to undergo verb movement to $b\delta$, given the fact that it is in the right structural configuration from which movement can legitimately take place? At this point, I can only speculate on possible answers to these questions. A plausible solution will be to say that in such negative constructions like the Focus Verb Construction and the SVC, where verbs occur in a series, verb movement is not possible because the verbs that occur in a series form a verbal chain that cannot be broken. This will correctly rule out verb movement of either $V_1$ or $V_2$. Such a suggestion will also have the advantage that it will enable us to analyze negated SVC essentially in the same way that I have analyzed the Focus verb construction above.

5.5.3 Clausal Negation with Adverbial Adjunct Clauses

In this section I investigate the interaction of clause-modifying adjuncts with negation. When considered with regard to negation, adverbial adjunct clauses split into three major classes: (1) Those that allow verb movement and therefore, show negative alternation -herein referred to as the "alternating adjunct class"; This class includes time adverbials, manner adverbials, locative adjuncts, benefactives, and instrumentals that are expressed by a prepositional phrase. (2) Those that do not allow verb movement and consequently, where there is just one option of negating: "the non-alternating class"; This class includes before-clauses, purpose clauses, resultatives, SVC and instrumentals that are expressed by a SVC. (3) because- clauses that follow negation. Needless to say that I cannot discuss each of these constructions here, as
they do not have a direct impact on my analysis of sentential negation in Nweh. I will briefly look at because-clauses. Apart from deserving attention in their own right, because clauses are of interest to us here for a number of reasons. First, the familiar ambiguity that obtains when negative sentence is modified by a because-clause adjunct as in (49), is absent in Nweh.

(49) Njikem did not beat Atem because he was sick.
   a. Njikem beat Atem, not because he was sick.
   b. Because he was sick, Njikem did not beat Atem.

The reading in (49a) is the one where the head proposition is negated, whereas in (49b), it is the adjunct proposition that is negated. In Nweh, the two readings are expressed differently and therefore do not derive from the same underlying structure. A second reason why I think it is important to focus on because-clauses is that because-clauses are the only adjuncts that can occur following Neg⁰, b⁵. All other types of adjuncts must precede Neg⁰. Third, because-clauses share certain properties with other types of adjuncts in that they can also precede Neg⁰.

5.5.4 Because-clauses and Negation

In many languages, for example, English, French, Italian, when a sentence with a clause-modifying adjunct such as a because-clause is negated, such a sentence becomes ambiguous, resulting in two possible readings. Let us consider the English sentence in (49) repeated below.
(49) Njikem did not beat Atem because he was sick.
   a. Njikem beat Atem, not because he was sick.
   b. Because he was sick, Njikem did not beat Atem.

(49) can be given an interpretation where either the head proposition is negated as in (49a) or where the adjunct proposition is negated as in (49b). I will argue that familiar ambiguities such as those sketched in (49a) and (49b) are absent in Nweh. Therefore, a sentence like (49) gets two distinct structures depending on whether it is the head proposition or the adjunct proposition that is negated cf. (50).

(50) a. Njikèm à kê? tê leb Atem anuzàâ juú a kê? ase ñgwàâ bò N. Agr P-1 Neg beat A. because he Agr P-1 Asp be-sick Neg "Njikem beat Atem, not because he was sick."
   b. Njikèm à kê? tê leb Atem bò anuzàâ juú a kê? ase ñgwàâ N. Agr P-1 Neg beat A. Neg because he Agr P-1 Asp be-sick "Njikem did not beat Atem, because he was sick."
   c. Njikèm à kê? tê Atem leb anuzàâ juú a kê? ase ñgwàâ N. Agr P-1 Neg A. beat because he Agr P-1 Asp be-sick "Njikem did not beat Atem, because he was sick."

In (50a) the negative particle bò follows all complements and adjuncts. This is consistent with my analysis of sentential negation in Nweh that argues for the pied piping of the complement of Neg⁰ to Spec, NegP. This can straightforwardly be accounted for by a structure like (51) where the adjunct-clause (like other adjuncts in Nweh) is adjoined to VP and therefore a part of the VP that undergoes pied piping to Spec, NegP.

208
Given the structure in (51), the negative adverb *te* is going to turn the AspP into a [+neg] phrase. This forces the AspP projection to raise (pied piping everything that follows) to Spec of NegP, thus giving us the correct word order in (50a). However, the structure in (51) fails to explain why the matrix verb *leb* ‘beat’ cannot undergo head movement to Neg⁰ prior to the raising of AspP, giving us the order with the verb in sentence-final position.
(52) a. Njikèm  à kè? tè leb Atem anuzàâ júì  a kè? ase négwàâ  bò
N. Agr P-1 Neg beat A. because he Agr P-1 Asp be-sick Neg
"Njikem beat Atem, not because he was sick."

b. * Njikèm  à kè? tè Atem anuzàâ juì  a kè? ase négwàâ leb
N. Agr P-1 Neg A. because he Agr P-1 Asp be-sick beat
"Njikem beat Atem, not because he was sick."

(53) a. Njikèm  à kè? tè leb Atem bò anuzàâ juì  a kè? ase négwàâ
N. Agr P-1 Neg beat A. Neg because he Agr P-1 Asp be-sick
"Njikem did not beat Atem, because he was sick."

b. Njikèm  à kè? tè Atem leb anuzàâ juì  a kè? ase négwàâ
N. Agr P-1 Neg A. beat because he Agr P-1 Asp be-sick
"Njikem did not beat Atem, because he was sick."

Notice that this option is not a legitimate derivation as the ungrammaticality of (52b)
indicates. This suggests that the derivation of because-clauses sketched in (51) is not
correct. Below I will give an alternative analysis.

Observe that in (53) it is possible to get verb movement cf. (53b). However, the
example in (53a) poses a problem in that the because-clause follows the negative
morpheme bò. This is somewhat unusual. As far as I have been able to determine
because-clauses are the only type of adjuncts that can follow the negative morpheme
bò. This suggests that we must analyze because-clauses differently from the way in
which we have analyzed other types of adjuncts. The line I will adopt here is to say
that because-clauses are higher than VP.

Johnson (n.d.) proposes that clause modifying adjuncts denote higher order
relations between propositions. For example he suggests that a because-clause
denotes a causal relation between the adjunct proposition and the head proposition. If
a because-clause establishes an ordering relation between propositions, then this
ordering relation can be reflected in the syntax by treating because as a predicate-head taking these two propositions as its arguments. It would be intuitive to think of the complement clause of because as the internal argument of the matrix proposition as the external argument. Following the above suggestion, I will argue that in Nweh, because-clauses that occur in negative clauses have two structures corresponding to the two readings that we get cf. (50a) on the one hand, and on the other hand (50b) and (50c). I sketch the two structures in (54) and (55).

The structure in (54) is the structure for because-clauses like (50a) and (52a) where the adjunct proposition is negated.

(54)

```
AgrP           AgrP
  |           |   T
  NP          NegP
       |   Spec
       T
       kë?
```

cf. (50a) Njikèm a kë? tè leb Atem anuzà à ju a kë? ase ngwàà bò N. Agr P-1 Neg beat A. because he Agr P-1 Asp be-sick Neg "Njikem beat Atem, not because he was sick."
The structure in (54) correctly rules out verb movement because it would violate the ECP. Given the structure in (54), if the verb moves to Neg\(^0\) bô, the verbal trace left by such movement will not be properly governed when the complement of Neg\(^0\) moves to Spec, NegP. pied piping the VP (which is a part of the NegP complement). However, (54) leaves us with an unsolved problem as to why the PP to which the VP is adjoined must pied piped as a whole, instead of just the VP which is marked [+neg] by te. It is plausible to assume that the XP that is the complement position of Neg\(^0\) must pied pipe as a whole. A structure for because-clauses like (50b) and (53a) that involve negation of the head proposition is given in (55).

(55)

```
AgrP
  NP Njikem
  Agr TP
    a- Spec T'
       PP
         kê?
          NegP
            Spec
              Neg' bô
                AspP
                  P anuzâà
                    P'
                      AgrP
                        ...
```

cf. (50b) Njikèm à kê? te leb Atem bô anuzâà jui a kê? ase ngwâà
N. Agr P-1 Neg beat A. Neg because he Agr P-1 Asp be-sick
"Njikem did not beat Atem, because he was sick."

212
(50c) Njikèm à kè? Òtè Atem leb anuzàá juí ñ a kè? Òse ngwaá
N. Agr P-1 Neg A. beat because he Agr P-1 Asp be-sick
"Njikem did not beat Atem, because he was sick."

Given the structure in (55) it is possible to get verb movement to Neg⁰ cf. (53b).
Also, since the PP is higher than Neg it ensures that we are still going to get the
correct word order (where the adjunct clause follows negation) even after the
complement of Neg⁰ has raised to Spec, NegP.
Chapter Six

Extending the Analysis: INTERROGATIVES

6.1 Introduction

I have proposed that because of the relationship which must hold between certain constituents of a phrase marker, movement of one constituent might trigger pied piping of others. Guided by the intuition that languages are not as inconsistent with respect to word order as they appear to be, I argued that apparent "word/constituent disorders" are a result of a specific syntactic movement that I have referred to as heavy pied piping. From such a perspective, the syntax of DPs was outlined in chapter 2 and it was observed that determiners (demonstratives) and possessors typically follow the noun cf. (1).

(1) a. ndia zà
    house that 'that house'

b. ñúa gí
    child that 'that child'

c. ndia jè zà
    house my that 'that my house'
Based on the head initial character of Nweh and on the fact that alongside sentences like (1), one can also get sentences like those in (2), where the noun follows the determiner (demonstrative) /possessor with a nominal agreeing morpheme on the demonstrative/possessor, I concluded that DPs like those in (1) involve pied piping of some projection of the noun, ClassP for example, to a higher specifier position. In chapter 5, I have argued for an analysis of sentential negation in Nweh that involves obligatory raising of the complement of Neg0, pied piping its entire complement, to the specifier position of NegP in overt syntax. As a consequence of such heavy pied piping, NegP appears to be head final. In interrogatives, the interrogative morpheme shows up in "clause-final" position. I propose to extend the analysis of negatives to interrogatives, in an attempt to show that negatives are not the exception, and that pied piping is a wide-spread phenomenon in Nweh that affects a number of different constructions. I will also show that there exist other close syntactic similarities between negatives and interrogatives. The approach to interrogatives that I will develop here will be shown to derive the correct linear order that obtains in interrogatives, as well as suggest that Wh-movement is logically distinct from the syntactic process of how interrogatives are licensed. In other words, I will attempt to draw a distinction between the morphological features associated with Comp in Wh-questions for example, and the abstract syntactic X-bar category that I refer to as IntP.
(Interrogative Phrase), which I will propose plays a role in the theory of the phrase structure of questions. I begin by discussing the different interrogative-types that obtain in Nweh.

6.2 Interrogatives in Nweh

Questions in Nweh are generally marked by a clause-final intonational rise. In addition to a question intonation there is either a separate interrogative particle or the lengthening of some "clause-final" segment. I will discuss the two basic types of interrogatives in Nweh: "WH-Questions" and "Yes-No Questions". The term Wh-questions is generally used to refer to questions that involve an "independent" (wh-) interrogative word like akọ "what?", awọ "who?"... illustrated in (3)

(3) a. awọ a kẹ? npfét akẹndọŋ ŋ
    who Agr P-1 eat plantains Q
    'Who ate plantains?'

b. núa a kẹ lu ọ akọ ọ
    child Agr P-2 eat what Q
    'What did the child eat (yesterday)?'

Yes-No questions on the other hand, sometimes generally used to refer to questions that do not involve the use of such independent (Wh-) interrogative words. This latter type of questions include yes-no questions, tag questions, alternative (choice) questions and echo questions. These are illustrated in (4).

(4) a. Njikem a kẹ? npfét akẹndọŋ ŋ
    N Agr P-1 eat plantains Q
    'Did Njikem eat plantains?'

216
b. Njikem à kë? npfét akendöffent øbø
   N Agr P-1 eat plantains tQ
   'Njikem ate plantains, didn't he?'

c. Njikem à kë? npfét akendöffent ké álóuny ŋ
   N Agr P-1 eat plantains or yams Q
   'Did Njikem eat plantains or yams?'

d. Njikem à kë? npfét akendöffent lé ë
   N Agr P-1 eat plantains eQ
   'Njikem ate plantains?' (echo question)

As we observe from (3) and (4), both Wh-questions and yes-no questions in Nweh involve either lengthening of some final segment or a separate segmental question particle. I will sometimes refer to both of these strategies simply as different forms of "lengthening". It is also evident from these examples that questions do not show a difference in word order with their declarative counterparts. In the following sections, I present an analysis of both yes-no questions and Wh-questions. My focus however, will be on yes-no questions. Since yes-no questions neither involve an independent interrogative word of the sort found in Wh-questions, nor display any change in word order, they provide an interesting case study of how questions are marked as well as how they are licensed in the syntax.

### 6.3 Non Interrogative-word Questions

As noted above, the non interrogative-word questions can be sub categorized into four types: Yes-No questions, Tag questions, Alternative choice questions and Echo questions. I discuss them below in that order. As we will see, such a sub-
categorization is based on the question marking strategy used for each sub category and to some extent on the (presupposed) responses to such questions.

6.3.1 "Neutral" Yes/No Questions

Yes/No questions usually are neutral, with no predisposition to expect an affirmative or negative response. Yes-No questions can either be marked morphologically by a separate question morpheme or by lengthening of some final segment, accompanied by an intonational change. Whatever strategy is used, (segmental or lengthening) the interrogative marker shows up in overt syntax (s-structure) as a "clause-final" morpheme, but takes scope over the whole clause. Final segment lengthening and the morphological segmental question morpheme appear to be in complementary distribution. As I will show below, the conditions governing their distribution appear to be both phonological and syntactic-ranging from verb-type to tense/aspect interaction. I begin by discussing the phonological conditioning on the various forms of "lengthening" as a marker of neutral yes/no questions.

6.3.2 "Neutral" Yes-No Question Marking

Lengthening of some final segment appears to be the most common cue marking "neutral" yes-no questions in Nweh. As I have indicated above, yes/no question marking takes various forms depending on both phonological and syntactic factors. The table below summarizes the phonological conditions for the various forms of "lengthening" that are used to mark neutral yes/no questions. To illustrate, I have

218
taken words ending in all possible word-final (consonant/vowel) sound segments in Nweh, and inserted them in the carrier phrase *Njikem à kè? njúč -x-* (Spoken with a question intonation) which translates in English as "did Njikem buy -x-?". Before outlining the results, I will briefly discuss the phonotactics of consonants and vowels in word final position in Nweh.

There are limitations on the type of sounds that one can get in word final position. Sounds that can occur in word/syllable final positions are limited to the following classes of sounds:

- **Nasals:** /m, n, ŋ /
- **Stops:** /p, t, k, b, d, g, ʔ /
- **Approximant:** /h/ (central)
- **Vowels:** /i, e, ə, u, ɔ, o, ʊ /

As we observe, unlike the case with consonants, there appear to be no restriction on the vowel phonemes that can occur in word final position. I should point out here that Stops are generally devoiced in word final position, and that Nasals appear to be tone bearing particularly in final position.
<table>
<thead>
<tr>
<th>Target sounds</th>
<th>Examples</th>
<th>&quot;Did Njikem buy (a(n)) -- ?&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>final Nasals</td>
<td>ɬabɛm &quot;stomach&quot;</td>
<td>Njikɛm à ké? njùo ɬabɛm ni</td>
</tr>
<tr>
<td></td>
<td>lɔvɛn &quot;tortoise&quot;</td>
<td>Njikɛm à ké? njùo lɔvɛn ɲ</td>
</tr>
<tr>
<td></td>
<td>akɛndɔŋ &quot;plantains&quot;</td>
<td>Njikɛm à ké? njùo akɛndɔŋ ŋ</td>
</tr>
<tr>
<td>final Stops (oral)</td>
<td>mbɛp &quot;meat&quot;</td>
<td>Njikɛm à ké? njùo mbɛb eë</td>
</tr>
<tr>
<td></td>
<td>nnát &quot;bush cow&quot;</td>
<td>Njikɛm à ké? njùo nnål eë</td>
</tr>
<tr>
<td></td>
<td>mbák &quot;rottan carrier&quot;</td>
<td>Njikɛm à ké? njùo mbag eë</td>
</tr>
<tr>
<td>final Glottals</td>
<td>gɡɔi? &quot;termites&quot;</td>
<td>Njikɛm à ké? njùo gɡɔi? ɡɔ</td>
</tr>
<tr>
<td></td>
<td>gɡɛh &quot;casow nut&quot;</td>
<td>Njikɛm à ké? njùo gɡɛh eë</td>
</tr>
<tr>
<td></td>
<td>ɬɔbūi? &quot;bundle/parcel&quot;</td>
<td>Njikɛm à ké? njùo ɬɔbūi? ūu</td>
</tr>
<tr>
<td>final Vowel (monosyllabic)</td>
<td>nбуi &quot;dog&quot;</td>
<td>Njikɛm à ké? njùo nбуi ū</td>
</tr>
<tr>
<td></td>
<td>nà &quot;animal&quot;</td>
<td>Njikɛm à ké? njùo nà ɲ</td>
</tr>
<tr>
<td></td>
<td>ƙɔxà &quot;pangolin&quot;</td>
<td>Njikɛm à ké? njùo ƙɔxà ɬ</td>
</tr>
<tr>
<td></td>
<td>ɡɡɔi? &quot;snail&quot;</td>
<td>Njikɛm à ké? njùo ɡɡɔi? ɡɔ</td>
</tr>
<tr>
<td></td>
<td>ɱfũi &quot;medicine/leaf&quot;</td>
<td>Njikɛm à ké? njùo ɱfũi ū</td>
</tr>
<tr>
<td></td>
<td>nkɔxɔi &quot;monkey&quot;</td>
<td>Njikɛm à ké? njùo nkɔxɔi ū</td>
</tr>
<tr>
<td>final Vowel (bi-/tri-syllabic)</td>
<td>azũo &quot;wooden hammer&quot;</td>
<td>Njikɛm à ké? njùo azũo ɔ</td>
</tr>
<tr>
<td></td>
<td>nvɛnà &quot;grasshopper&quot;</td>
<td>Njikɛm à ké? njùo nvɛnà ɲ / (lɛ)</td>
</tr>
<tr>
<td></td>
<td>ɛkwɔi &quot;bed&quot;</td>
<td>Njikɛm à ké? njùo ɛkwɔi ɔ</td>
</tr>
<tr>
<td></td>
<td>atatà &quot;Irish potatoes&quot;</td>
<td>Njikɛm à ké? njùo atatà ɔ</td>
</tr>
<tr>
<td></td>
<td>lɔkɔxu &quot;net / web&quot;</td>
<td>Njikɛm à ké? njùo lɔkɔxù ū</td>
</tr>
<tr>
<td></td>
<td>alạŋa &quot;chair&quot;</td>
<td>Njikɛm à ké? njùo alạŋa lɛ</td>
</tr>
<tr>
<td></td>
<td>ɬasũi &quot;hat&quot;</td>
<td>Njikɛm à ké? njùo ɬasũi lɛ</td>
</tr>
<tr>
<td></td>
<td>mbɛlɛ &quot;ring&quot;</td>
<td>Njikɛm à ké? njùo mbɛlɛ lɛ</td>
</tr>
</tbody>
</table>
As the table shows:

When the final morpheme ends in a +nasal consonant, this final nasal segment is lengthened. If the final morpheme ends in an oral stop consonant, we get a lengthened segmental interrogative particle ɓɓ. The tones on this segmental question particle might vary depending on the tone(s) of the noun stem. If the final morpheme ends in a glottal stop /ʔ/ or the (central) approximant /h/, the last stem vowel before the glottal sounds /ʔ/, /h/ is repeated after these sounds and it is this vowel that gets lengthen.

If the final morpheme ends in a vowel, the characterization of the phonological conditions for the various forms of "lengthening" as a marker of yes/no questions gets slightly more complex. I start with the cases that are more general and better understood.

If the final morpheme that ends in a vowel is monosyllabic, then we simply lengthen the final vowel. However, if the final morpheme that ends in a vowel is bi- or tri-syllabic, then we can either get lengthening of the final vowel or an independent interrogative segment ɓɓ. The major determining factor here appears to be the final tone of the noun (word). There is a general preference to use the separate interrogative segment ɓɓ if the last tone on the noun (stem) is a +high tone; Otherwise, the final vowel is lengthened as is the case with vowel-final monosyllabic words. This observation might be subject to some dialectal variation.

The duration of lengthening varies. One very clear case where a significant variation in the amount of lengthening is with clause final Wh-words. Wh-questions do not only involve a Wh-interrogative word, but also use "lengthening" as a question marker. However, when a Wh-word occurs in clause-final position in a
question, the lengthening is comparatively very reduced and never takes the form of an separate interrogative particle like \( \text{lé} \).

\[
\begin{align*}
\text{(5) a. } & \quad \text{aw}5 \quad \text{à kê? npfèt akendòŋ ŋ} \\
& \quad \text{who Agr P-1 eat plantains Q} \\
& \quad \text{′Who ate plantains?′}
\\
\text{b. } & \quad \text{Njikem à kê? npfèt ak}5 \circ \\
& \quad \text{N. Agr P-1 eat what Q} \\
& \quad \text{′What did Njikem eat?′}
\\
\text{c. } & \quad \text{Njikem à kêp fèt ak}5 \circ \text{ eji xuân} \\
& \quad \text{N. Agr P-2 eat what yesterday Q} \\
& \quad \text{′What did Njikem eat yesterday?′}
\end{align*}
\]

The amount of lengthening in (5b) is significantly reduced compared to that in (5a). One could account for the difference in lengthening here by proposing some kind of absorption rule when the Wh-word and the question morpheme are in a contiguous relationship. I do not attempt to represent this quantitative difference in length. Byrd (1994) presents an instrumental description of yes-no questions in Nchufie, spoken in N.W. Cameroon, in which she notes that the amount of lengthening varies, depending on whether the rhyme is underlyingly long or short. She reports that long rhymes lengthen by about 59\% as compared to 109\% for short rhymes. Since the duration of lengthening is not of any significance for our purposes here, I will not be concerned with that any further.

Above, I have outlined the phonological conditions for the various forms of "lengthening" used to mark "neutral" yes/no questions. There are also syntactic conditions on the form of "lengthening" that one gets for yes/no question marking. Below, I will examine the main syntactic conditions. The syntactic restrictions are even less well understood and more difficult to characterize than the phonological
restrictions. To fully understand the syntactic restrictions a detailed analysis of verb types in Nweh will have to be worked out. This being beyond the scope of this dissertation, I will basically be concerned with those syntactic restrictions that are of a general nature. These include tense/aspect interaction and the presence/absence of a verb complement or a following adjunct. The effects of tense/aspect on the choice of the form of "lengthening" used to mark a yes/no question, appears to be limited to "non-branching" VPs i.e. intransitive verbs, or an transitive verb a with pro object. If a verb has a complement or an (temporal) adverbial following it, the only conditions governing the form of the "lengthening" are the phonological conditions already discussed above cf. (6).

(6)  a. Njikèm à kë? npfét akèndọŋ ŋ N. Agr P-1 eat plantains Q 'Did Njikem eat plantains ?'

b. núa à kë? ndé ē
child Agr P-1 sleep Q 'Did the child sleep ?'

c. núa à kò lé ajúá ē
child Agr P-2 sleep yesterday Q 'Did the child sleep yesterday ?'

d. núa à kë? ndé azhá lé
child Agr P-1 sleep day (light) Q 'Did the child sleep during the day ?'

(6a) is straightforward. The sentence final morpheme ends in a +nasal consonant, therefore the nasal gets lengthened as a marker of a yes/no question. In the examples in (6b) - (6d) the clause final morphemes all end in a vowel. In (6b) the question marking is effected by lengthening because the final morpheme is a monosyllabic word that ends in a vowel: In (6c) we also get lengthening because the final morpheme is bisyllabic and ends in a -high tone vowel; In (6d) we get a separate
segmental interrogative marker because the clause final morpheme ends in a +high tone vowel. The above facts are all consistent with the phonological conditions outlined above cf. table 6.1. However, if the examples in (6) involve either an aspect marker as they do in (7), or have future time reference, then we notice that the interrogative marker will be different in certain cases cf. (7b).

(7) a. ɲa à kẹ? ase npfélá akènd÷ŋ ñ child Agr P-1 Asp eat fr plantains Q 'Was the child eating plantains ?'

b. ɲa à kẹ? ase ndée lé child Agr P-1 Asp sleep Q 'Was the child sleeping ?'

c. ɲa à kẹ ase ndée ajú à child Agr P-2 Asp sleep yesterday Q 'Was the child sleeping yesterday ?'

d. ɲa à lè ase ndée azómá lè child Agr P-3 Asp sleep day (light) Q 'Was the child sleeping during the day ?'

A comparison between the sentences in (6) and those in (7) shows that only (7b) is marked differently from the marking in (6b). I attribute this difference to the presence of the aspect marker. However, comparing (6a), (6c), (6d), to (7a), (7c), (7d), respectively, we do not observe any difference in the interrogative marking. The clauses in (7b) - (7d) all have the same verb, the only difference is that whereas (7c) and (7d) have temporal adverbials, (7b) does not have an adverbial. The final morpheme in (7c) has a -high tone whereas that in (7d) has a +high tone. This difference in final tone, in part, accounts for the difference in question marking observed. Because of the presence of the adverbial, (7c) and (7d) pattern more like (7a) which has a transitive verb.
To further illustrate the syntactic restrictions, I will take two sentences that end in the same segment but have different verb types and I will show that they use different "lengthening" strategies to form questions.

(8) a. Njikem a kê? nfû? 
   N. Agr P-1 come 
   'Njikem came.'

b. Njikem a kê? nfû? ūuu 
   N. Agr P-1 come Q 
   'Did Njikem come ?'

c. Njikem a lô fuû? lé 
   N. Agr F-2 come Q 
   'Will Njikem come ?'

d. Njikem a kê? ase nfû? â lé 
   N. Agr P-1 Asp come fv Q 
   'Was Njikem coming ?'

(9) a. Njikem a kê? npfêt ñkû? 
   N. Agr P-1 eat sugar cane 
   'Njikem ate sugar cane.'

b. Njikem a kê? npfêt ñkû? ūu 
   N. Agr P-1 eat sugar cane Q 
   'Did Njikem eat sugar cane ?'

c. Njikem a lô pfêt ñkû? ūu 
   N. Agr F-2 eat sugar cane Q 
   'Will Njikem eat sugar cane ?'

d. Njikem a kê? ase npfêlâ ñkû? ūu 
   N. Agr P-1 Asp eat fv sugar cane Q 
   'Was Njikem eating sugar cane ?'

We observe that in (8b) and (9b), where the clause final segment is a glottal stop, the interrogatives are marked in the same way. However, in (8c) and (8d) on the one hand and on the other hand (9c) and (9d) where there is an aspectual/future auxiliary present, we observe a difference in the form of "lengthening" that is used to mark the
questions. This suggests that the difference in the interrogative marking strategy that obtains between (8c) and (8d) on the one hand and between (9c) and (9d) on the other hand is due more to syntactic rather than phonological factors. The syntactic restrictions observed here with respect to tense/aspect marking and verb type, are very similar to those responsible for the presence versus absence of the Neg head bɛ in negatives (see chapter 5, section 5.5.1). This not only suggests a close similarity between negatives and interrogatives but it also seems to call for a unified account of both phenomena. However, such a connection will not become clear until a much deeper understanding of the facts is obtained through further investigation.

6.3.3 "Non-Neutral" Yes/No Questions

Non-neutral yes/no questions have a predisposition to expect an affirmative or negative response. Herein, I divide non-neutral yes/no questions broadly into "Tag questions" and what I call "Evidential Questions". These two are very similar, involving only a subtle distinction, which one obtains only from the possible responses that can be given as answers to such questions. In both types of questions, the speaker/inquirer presupposes a particular response type.

6.3.3.1 "Evidential" Questions

I use the term "evidential questions" (EQ) to refer to questions that are marked by the question morpheme k55. Such a question is prompted by some "direct evidence" that the inquire/speaker observes. Depending on the expected/presupposed response, the
proposition on which the question is based can either be positive or negative. In either case the expected response is simply an affirmative ?më "yes", used in this case (as is also the case with tag questions) to assert the truth value of the "evidential proposition". Let's set up a possible scenario where an evidential yes/no questions will be most felicitous:

If I expected Njikem to be home and on going over to Njikem's house, I notice that his car, for example, is not parked there, the most felicitous question to ask is an "evidential" question like (10). Here, there is "direct evidence", viz., the absence of Njikem's car, to suggest to me that Njikem is most likely not be home.

\begin{align*}
(10) \quad & \text{Njikem à te ándia bó k55 } \\
& \text{N. Agr Neg be house Neg EQ} \\
& \text{lit., "Njikem is not home k55 ?"}
\end{align*}

Expected response: ?më "yes" (he is not home.)

However, it might turn out that Njikem is at home (but his car is not there because he took it to the repair shop) in which case the other possible response will be ?më hni "no, yes" (he is home). This is similar to the response particle si in French. ?më hni is not a possible response type for the questions I refer to here as "tag questions". The opposite scenario will draw a positive evidential question. Thus, if I did not expect Njikem to be home, and on passing by his house, I see his car parked outside, the most felicitous question to ask will be an "evidential" question like (11).

\begin{align*}
(11) \quad & \text{Njikem ándia k55 } \\
& \text{N. be house EQ} \\
& \text{lit., "Njikem is home k55 ?"}
\end{align*}

Expected response: ?më "yes" (he is home.)

227
Again, there is "direct evidence", viz., the presence of Njikem's car, which tells me that Njikem is most likely at home. However, it might turn out that even though Njikem's car is there, Njikem himself is not home (probably someone gave him a ride), in which case the other possible response will be ṣmọnọ "no" (he is not home).

More examples of "evidential" questions follow in (12).

(12) a. Njikem a kẹ? npfet akendọ kọ5
   \[\text{N. Agr P-1 eat plantains EQ} \]
   'Did Njikem eat plantains?'
   
   expected response: ṣmọ "yes" (he did)
   possible response: ṣmọnọ "no" (he did not)

   b. Njikem a kẹ? te npfet akendọ bọ kọ5
   \[\text{N. Agr P-1 Neg eat plantains Neg EQ} \]
   'Didn't Njikem eat plantains?'
   
   expected response: ṣmọ "yes" (he did not)
   possible responses: ṣmọnọ "no" (he did)
                      ṣmọǹmọ "no, yes" (he did!)

   c. Njikem a kẹ? te akendọ npfet kọ5
   \[\text{N. Agr P-1 Neg plants eat EQ} \]
   'Didn't Njikem eat plantains?'
   
   expected response: ṣmọ "yes" (he did not)
   possible responses: ṣmọnọ "no" (he did)
                      ṣmọǹmọ "no, yes" (he did!)

While "evidential" questions are very similar to tag questions, when one considers the sort of answers that can be given to an "evidential" question that has a negated "evidential proposition" and the answers that can be given to a tag question that has a negated "tag proposition", these two question types begin to show some differences. For instance, a negated evidential question like (10), (12b) and (12c), can be given one of these three responses: ṣmọ "yes" (s/he did not); ṣmọnọ "no" (s/he did); or
Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
b. Njikem a kè? te npfét akendɔŋ bɔ əbɔ
expected response: ʔm̥ "yes" (he did not) / (it is not the case)
possible response: ʔm̥ʔm̥ "no" (he did) / (it is the case)
*? ʔm̥hm̥ "yes" (he did!)

N. Agr P-l Neg eat plantains Neg tQ
'Njikem did not eat plantains, did he?" (is it the case?)

e. Njikem a kè? te akendɔŋ npfét əbɔ
Expected response: ʔm̥ "yes" (he did not) / (it is not the case)
Possible response: ʔm̥ʔm̥ "no" (he did) / (it is the case)
*? ʔm̥hm̥ "yes" (he did!)

A. 14. Agr P-l come tQ
'Atem came, didn't he?" (is it the case)

b. Atem a kè? fuu əbɔ
expected response: ʔm̥ "yes" (he did) / (it is the case)
possible response: ʔm̥ʔm̥ "no" (he did not) / (it is not the case)
*? ʔm̥hm̥ "yes" (he did!)

A. Agr P-l Neg come tQ
'Atem did not come, did he?" (is it the case)

e. Atem a te lö fuu bɔ əbɔ
expected response: ʔm̥ "yes" (he will not) / (it is the case)
possible response: ʔm̥ʔm̥ "no" (he will) / (it is not the case)
*? ʔm̥hm̥ "yes" (he will!)

A. Agr Neg F-2 come Neg tQ
'Atem will not come, will he?" (is it the case)

The tag question marker (tQ) appears to be derived from ə "proarb, (it)" + nbɔ "to be", but the second morpheme comes out as bɔ which shows some formal similarity
with the 'clause-final' negative morpheme bọ. If the analogy between the tag question particle bọ and the negative morpheme bọ is correct, then the translation of the tag question should be "Is it not the case?". This not being relevant for our purposes here I will maintain that the tag question is positive. The more important observation is here is that the polarity of the "tag" itself is generally invariant cf. (13) and (14). However, the polarity of the "tag proposition" from which the tag question is formed varies depending on whether one presupposes a positive or a negative response. Thus, a tag question formed from a negative "tag proposition" presupposes a negative answer cf. (13b), (13c) and (14b), (14c); Whereas a tag question formed from a positive "tag proposition" presupposes a positive answer cf. (13a) and (14a).

6.3.3.3 Alternative Choice Questions

Alternative choice questions consist of a question that presents alternatives from which an answer has to be selected. The alternatives can range from simple DPs to full clauses that are linked by the connective ké which translates in English as "or". With alternative questions the questioned elements (the alternatives) are generally in focus cf.(15b), (15c) (see also Chapter 5 for focus marking). The conditions governing the type of question marking, as well as the question particle that one gets in alternative questions is the same as described above for yes-no questions.

(15) a. Njikem a kẹ? npfét (mọ) alóúŋ ké akèndọŋ ń
   N. Agr P-1 eat Foc. yams or plantains Q
   'Did Njikem eat yams or plantains?'

   b. Njikem ké Atem món a kẹ? npfét akèndọŋ ń
      N. or A. Foc. Agr P-1 eat plantains Q
      'Is it Njikem or Atem who ate plantains?'

231
6.3.3.4 Echo Questions

Echo questions (eQ) are formed by "echoing" a preceding statement or question uttered, and then adding an echo question particle éé which is more or less a repetition of the initial (yes/no or Wh-) question particle accompanied by final lengthening and an intonational change. An echo question can be formed by either the independent interrogative-word (Wh-) question formation strategy or by the "neutral" yes-no question formation strategy. If an echo question is formed using the interrogative word question formation strategy, the final vowel of the Wh-question word becomes é. Examples follow in (16) - (19), where the (a) examples are regular (Wh-) interrogative word questions and the (b) examples are echo questions.

(16) a. mbúi è kò lúŋ awɔ ɔ
dog Agr P-2 bite who Q
'who did a dog bite (yesterday) ?'

b. mbúi è kò lúŋ awé ē
dog Agr P-2 bite who eQ
'a dog bit who (yesterday) ?' (echo question)

(17) a. awɔ ò kè? npfét akendɔŋ ŋ
who Agr P-1 eat plantains Q
'who ate plantains ?'

b. awɔ ò kè? npfét akendɔŋ ɛɛ
who Agr P-1 eat plantains eQ
'who ate plantains ?' (echo question)

232
(18) a. Njikem à kéʔ npfēt akē s
   N. Agr P-1 eat what Q
   'what did Njikem eat?'

b. Njikem à kéʔ npfēt akē é
   N. Agr P-1 eat what eQ
   'Njikem ate what?'

(19) a. awē à kéʔ asē ndē lē
    who Agr P-1 Asp. sleep Q
    'who was sleeping?'

b. awē à kéʔ asē ndēe lē é
    who Agr P-1 Asp. sleep eQ
    'who was sleeping?'

(checkbox question)

Notice the change in the form of the question word in (16b) and (18b). This plausibly derives from the question word by deletion of the final vowel of the question word, when it immediately precedes the echo question particle. There is a very productive phonological rule in Nweh that deletes a vowel across a morpheme boundary when it is preceded by another vowel. This appears to be the case here. The (b) examples in (16) - (19) illustrate that lengthening is the most salient feature of question marking in Nweh.

Instead of just some constituent of the sentence, the clause as a whole can be subject to echo questioning. Where this is the case, the echo question has to take the form of a yes-no question. The echo question particle in this case is simply marked by the "original" yes/no question particle (of the proposition/question that is echoed) accompanied by an intonational change. Thus the echo question can be distinguished from the yes/no question simply by the intonation.

(20) a. Njikem à kéʔ npfēt akēndēn ē
    N. Agr P-1 eat plantains Q
    'Did Njikem eat plantains?'

    (yes-no Q.)

233
b. Njikem à kè? npfét akendőŋ ñí
N. Agr P-1 eat plantains eQ.
'Njikem ate plantains?' (echo question)

(21) a. ñúa à kè? ase ndé lé
child Agr P-1 Asp sleep Q.
'Was the child sleeping?' (yes/no Q.)

b. ñúa à kè? ase ndé lé è
child Agr P-1 Asp sleep eQ.
'the child was sleeping?' (echo question)

(22) a. Njikem à kè? npfét mbáp ëé
N. Agr P-1 eat meat Q.
'Did Njikem eat meat?' (yes-no Q.)

b. Njikem à kè? npfét mbáp ñëé
N. Agr P-1 eat meat eQ.
'(did you say) Njikem ate meat?' (echo question)

6.4 The syntax of Interrogatives

In chapter 5, I proposed that the 'clause-final' negative morpheme bɔ (which I argued to be the head of NegP) comes to be clause final as a result of the raising of its complement (pied pipining every constituent that follows) to Spec, NegP, thus stranding bɔ in clause final position. Based on certain parallels between negatives and interrogatives, some of which we noted above, I would like to propose that the same analysis can be extended to the analysis of interrogatives. Such an approach will have the advantage that one will have a unified account of the word order symmetry that obtains in both constructions. As I will show, the approach will also provide us with a straightforward understanding of the certain puzzles that are associated with the interrogative construction in Nweh.

234
Consider the following clauses:

(23)  a. Atem à kê? npfêt akendôŋ
A. Agr P-1 eat plantains
 'Atem ate plantains'

b. Atem à kê? npfêt akendôŋ ŋ
A. Agr P-1 eat plantains Q.
 'Did Atem eat plantain ?'

Just looking at the surface (linear) word order, the sentences in (23) appear to be (structurally) parallel. They are generally considered in the literature to both be of the category CP. However, it is further assumed that there are different types of CO (complementizers) depending on the properties of the proposition. The propositions in (23a) and (23b) differ precisely with respect to the type of CO that heads each of the CPs. While the CO in (23a) is [-Q]¹ (traditionally referred to as [-Wh]) the CO in (23b) is [+Q]. Nweh has an overt [+Q] complementizer, which shows up clause finally as a "lengthened" morpheme or in some cases as a separate question morpheme. There are two issues/questions that arise at this point: (1) The issue of the word order. If interrogatives are headed by a [+Q] CO, how comes the "interrogative head" shows up in clause final position given the head-complement word order in Nweh ?

(2) The question of "syntactic representation". What exactly is the correct analysis of clauses with a [+Q] CO ?

Let me begin with the first question -the question of the word order facts. I will analyze this as involving pied piping of the complement of the [+Q] head to its specifier position. In the preceding chapters, I have consistently analyzed

¹ In most cases I use [+/-Q] instead of [+/-Wh]. This is intended to make the discussion of questions more general, and not construed as being limited to Wh-questions.
constructions that appear to exhibit a head final character as involving movement, specifically pied piping of the complement of such a head to specifier position, thus stranding the head in "final" position. Pied piping has been shown to be a very active and widely spread phenomenon in Nweh. Given the assumption that the head final character that obtains in interrogatives is as a result of the pied piping of the interrogative complement to specifier position, it immediately raises the question as to what exactly is the structure of an interrogative clause. This brings me to the second problem raised above viz., the question of "syntactic representation".

I will discuss two alternative ways in which the latter problem can be addressed. One can adopt the "standard" approach that is currently practiced. This standard approach treats the interrogative/question marking [+Q] as a feature "spell-out" on the complementizer. This will suggest the following structure:

(24) \[ \text{CP} \ [ +Q ] \ [ \text{IP} ] \]

Under the standard approach, there is the assumption that the [+Q] marking is generated in C⁰ and that there is movement of a yes/no question operator to Spec, CP, given the *Wh-Criterion*, in particular Rizzi's (1991) reinterpretation of May's (1985, p.17) *Wh-criterion*, also referred to as the *Q-criterion* (see Sportiche (1993)).

**WH-Criterion or Q-Criterion**

At LF,

(i) A [+Wh] head must be in a Spec/head relationship with a [+Wh] XP.
If we consider the fact that in Nweh the [+Q] morpheme is clause final, it implies that the entire IP (complement of C⁰) has pied piped to Spec, CP. This yields a derived structure like (25).

(25)

\[
\text{CP} \quad \text{IP}_1 \quad \text{C'}
\]

\[
\begin{array}{c}
\text{Atem à kē? npfét akendəŋ} \\
\text{A. Agr P-1 eat plantains}
\end{array}
\quad \begin{array}{c}
\text{C⁰} \\
\text{[+Q]} \\
\text{ŋ} \\
\text{[e]₁}
\end{array}
\]


\[
\Rightarrow \text{cf. (23b). Atem à kē? npfét akendəŋ ŋ} \\
\text{A. Agr P-1 eat plantains Q.} \\
\text{'Did Atem eat plantain ?'}
\]

The standard approach not only works well for simple clauses like (23b) but also has a number of desirable consequences. First, it derives the correct surface word order in which the question morpheme occurs in "clause-final" position. Second, it provides us with a plausible explanation for the absence of overt (syntactic) Wh-movement in a Wh-in situ language like Nweh. The absence of overt Wh-movement is probably due to the fact that there is only one operator position available and the entire C⁰ complement has moved to this position, thus leaving no other position for a Wh-phrase to move to. As attractive as the standard approach appears to be, I will not adopt this approach here because of certain problems, some of which I discuss below. I will propose an alternative to the standard approach which I believe is more up-to-date and in line with recent theoretical developments.

In embedded interrogative clauses, we get both an overt [+Q] morpheme and a C⁰ (or what translates in English as a complementizer) gyū le "(say) that".

237
(26) a. Atem à kɛʔ ntʃʊɔstɛ aŋ lỳu lë ńuá a lɔ pɛt akendɔŋ ń
A. Agr P-1 ask him Comp child Agr F-2 eat plantains Q.
'Atem asked him whether the child will eat plantains ?'

b. Njikem à kɛʔ nsɔuŋ lỳu lë awɔ à kɛʔ npfɛt akendɔŋ ń
N. Agr P-1 tell Comp who Agr P-1 eat plantains Q.
lit., 'Njikem reported that who ate plantains ?'

Examples like (26) argue against generating the [+Q] morpheme in C⁰ because of the
presence of an overt [+Q] morpheme as well as an overt complementizer. This
notwithstanding, by saying that C is [+Q] we face a similar problem encountered
earlier within the LGB framework of X-bar theory with respect to Infl being [+Tns.]
and/or [+Agr]. Such an approach is tantamount to saying that C⁰ is dual headed, a
claim which goes contrary to the essential principles of X-bar theory.

We have seen that syntactic factors such as tense and aspect govern the "form"
of the question morpheme that one gets. This suggests that the question morpheme
behaves not simply as a feature on the complementizer, but as an independent
syntactic element. Because, of such conceptual problems I have opted to pursue a
different approach, let's call this approach the "split-Comp" approach. Under the
split-Comp approach I will treat the interrogative morpheme as an independent head,
call it the interrogative head (Int⁰). Following X-bar theory, Int⁰ will project an IntP
(Interrogative phrase). I will locate the IntP above CP, in order to allow for locality
between verbs that select questions and the IntP. Therefore, I will argue that a
(simple) yes/no question is headed by the Int⁰ head rather than by a [+Q] C⁰.
A structure follows in (27).
Because of the *Wh-criterion* the complement of Int<sup>0</sup> must move to Spec, IntP stranding the Int<sup>0</sup> head in "clause-final" position as shown in (27).

In other words, we have essentially reached the conclusion that the complement of Int<sup>0</sup> (like that of Neg<sup>0</sup>) must be pied piped to Spec, IntP in overt syntax. (See chapter 5, structure (20) for a similar derivation). Recall, I stated above that even though the yes/no question particle occurs in clause-final position, it takes scope over the whole clause.

So far I have focused on simple/direct yes-no questions. I will now like to turn my attention to the behavior of indirect yes-no questions. I will show that indirect yes/no questions operate in the same way as direct yes/no questions.

Consider the following sentences:

(28) a.  
Njikem à kë? ntšaté (agé) nyù lë mú n 'pfét akendôh ñ (éé)
N. Agr P-1 ask me Comp I Agr eat plantains Q. 'Njikem asked me whether I would eat plantains'

b.  
Atem à kë? ntšaté agí nyù lë núi à pfét akendôh fá (éé)
A. Agr P-1 ask him Comp child Agr eat plantains Q. "Atem asked him, 'will the child eat plantains ?'"

---

2 Apart from the use of pronoun that can sometimes serve as a clue, *Nweh* does not appear to show a structural difference between the way direct and indirect questions are marked. Thus (28b), although translated as a direct question is actually ambiguous and can equally be translated as an indirect question.
c. * Atem à ké? nšọté ağı nyù ɗe ɗua a pfet akendoŋ
A. Agr P-1 ask him Comp child Agr eat plantains
   "Atem asked him, 'the child will eat plantains'.

The ungrammaticality of (28c) can straightforwardly be explained as due to a violation of selectional restrictions. Nweh does not make a formal distinction between the way direct and indirect questions are marked. Because of the lack of structural differences between direct and indirect questions, it is important that we focus here on those sentences where the pronominal reference clearly tells us that we are dealing with an indirect question. It is important to make such a distinction because direct questions will not be of any help for our purposes here, since it is obvious that questions that are presented as direct quotes will obviously have all the relevant syntactic features of a question as they represent, word-for-word, the exact morphemes that the quotee used. Thus, the crucial example to focus on here is (28a). (28a) is clearly an indirect question because of the first person pronoun *mù "I" in the embedded clause. If it were a direct quote, the second person pronoun go "you" (the exact pronoun that the quotee used) should have been used instead of *mù "I". As (28a) clearly indicates, indirect yes/no questions also use a form of "lengthening" as a marker of yes/no questions. This implies that the interrogative marker (Int) is also available in indirect yes/no questions. This once more suggests that it is this interrogative morpheme (Int), rather than Comp, which heads the complement of a verb like ask. It therefore follows that (28c) is ungrammatical because the complement of the matrix verb ask is headed by a C⁰ (or a [-Q] C⁰) when ask c-selects a complement headed by Int⁰.

240
6.5 Unifying Yes-No Questions and Wh-Questions

The proposal developed here so far, maintains that yes/no questions are headed by an interrogative morpheme Int⁰, that projects an IntP (Interrogative Phrase) and that the head of the IntP is licensed by movement of the complement of Int⁰ to Spec. IntP (pied piping other constituents that follow). The question that arises at this point is if Wh-questions can be treated in the same way. In the following section I propose to relate the analysis of Wh-questions to the discussion sketched above for yes-no questions. I will not engage in a detailed discussion of Wh-questions in Nweh as this will take us far afield. Essentially, what I am concerned with here is to show that the analysis of yes-no questions developed here can straightforwardly be extended to Wh-questions. To skip ahead, I will propose and defend the hypothesis that Wh-questions work in the same way as yes/no questions. Specifically, I will argue that Wh-questions are also IntP headed by an Int⁰, and that the "feature" WH is more like a scope marker that serves to delimit the constituent that is questioned. This is analogous to the treatment of the negative morpheme tē as negative "morphology" on a negated constituent and bɔ as the head of NegP (cf. chapter 5). I will begin with an outline of some basic facts about Wh-questions in Nweh.

6.5.1 (Wh-) Question-word questions

Languages are generally assumed to fall into two classes depending on how they form Wh-questions. On the one hand, there are languages that require that the (Wh-) question word be moved in overt syntax from its base generated position to some "operator" (A-bar) position. For example, one Wh-phrase in English obligatorily

241
moves to Spec. CP in overt syntax. On the other hand, there are languages that either

disallow or do not require that the (Wh-) question word be moved (in overt syntax).

Nweh falls into the latter class. Nweh therefore, does not allow syntactic Wh-
movement.\(^3\) Thus the (Wh-) question-word stays in situ and is not moved to Spec,
CP at spell out as it is the case in languages that require overt syntactic Wh-
movement. In Nweh, when any element is questioned, a question word is used to
replace the questioned element, and the question word generally remains in situ.

(29) a.  Njikem à kë? npfét akendôŋ
       Agr P-1 eat plantains
       'Njikem ate plantains'

b.  aw5 à kë? npfét akendôŋ ŋ
       who Agr P-1 eat plantains Q
       'Who ate plantains ?'

c.  Njikem à kë? npfét ak5 c
       Agr P-1 eat what Q
       'What did Njikem eat ?'

d.  Njikem à k5 pfét ak5 ajúä á
       Agr P-2 eat what yesterday Q
       'What did Njikem eat yesterday ?'

I should again note here that when the Wh-word is in clause final position as in (29c),
the amount of lengthening in the interrogative domain is considerably shorter,
compared to the cases where a non Wh-word occurs in such a position (29b). I do not
attempt to represent the different amounts of lengthening that obtain in the
interrogative domain. We observe from (29) that interrogatives do not show any
word order changes from the declaratives.

\(^3\) (Pseudo-)Clefting / Relativization appears to be one strategy by which one can effect syntactic (long
distant) movement in Nweh. However, clefting is generally not regarded as movement to Spec. CP.
The examples in (30) show that Wh-questions (in addition to the Wh-word) have the same interrogative markers as yes-no questions.

(30)  

a. awó a kéʔ nfél akendéng ṃ

who Agr P-1 eat plantains Q

'Who ate plantains ?'

b. awó a kéʔ nfél mbàp éẹ

who Agr P-1 eat meat Q

'Who ate meat ?'

c. awó à kéʔ asè ndé lë

who Agr P-1 Asp sleep Q

'Who was sleeping ?'

d. awó a kéʔ nfél ṇkú? ūu

who Agr P-1 eat sugar cane Q

'Who ate sugar cane ?'

e. ajúšt abé zàã Atem a kéʔ ndá ā

which fufu RM A. Agr P-1 cook Q

'Which fufu did Atem cook?' lit. 'Which fufu is it that Atem cooked ?'

The conditions governing the distribution of the different forms of "lengthening" here are the same as those discussed above for yes-no questions.

6.5.2  Analysis of Wh-Questions

Since Wh-questions and yes-no questions share a number of significant syntactic properties, I will analyze Wh-questions in the same way as yes-no questions. I therefore propose to analyze Wh-questions as also being headed by an Int⁰.

Depending on the language specific factors, such as strong or weak (Wh-) features (cf. Chomsky (1992)), the Wh-phrase will have to move to Spec, CP in overt syntax or wait until LF to move to Spec, CP. I would like to propose that such Wh-
movement is independent of the process by which interrogatives are licensed. The licensing of interrogatives (invariably) takes place in overt syntax by movement of the complement of Int$^0$ to Spec, IntP. Therefore, a Wh-interrogative like (30c) is derived as sketched in (31).

(31)

=> cf. (30c) aw5 à kë? asë ndë lë
who Agr P-1 Asp sleep Q
'Who was sleeping?'

We have seen above, that there is phonological interaction between the type of sound that one gets in clause-final position and the form of the question morpheme. Such phonological interaction suggests that the Int$^0$ head must be string adjacent to the clause-final sound segment in overt syntax, or at some point in the derivation prior to PF. The surface constituent order is indicative of the fact that there is pied piping.
However, it is not clear as to what triggers pied piping. One can assume that Spec, IntP has strong features that triggers pied piping. However, a question arises as to why the entire CP must pied pipe, instead of say the Wh-phrase moving to Spec, IntP?

6.5.3 Indirect Wh-Questions

Above, I have argued that the interrogative marking found in simple/direct yes-no questions also occurs in indirect yes-no questions. Given the parallel that I have tried to established between yes-no questions and Wh-questions, the obvious question that arises at this point is whether indirect Wh-questions also have the same interrogative marking as the one found in yes/no questions and direct wh-questions. It would appear that indirect Wh-questions are not so marked. In fact, indirect questions are not headed by an interrogative morpheme at all.

I will propose that what translates in English as indirect Wh-questions cf. (32), are strictly speaking not questions in Nweh, and consequently are not headed by an IntO head. It is most likely that such clauses have CPs or IPs complements with some kind of question embedded within them. They are therefore not directly relevant for our purposes here.

(32) a. mú n kë? ntsuọtè agh ngàŋ gi' à kë? npfet akendêŋ
   I Agr P-1 ask him person RM Agr P-1 eat plantains
   lit., "I asked him who ate plantains"
   b. mú n kë? ntsuọtè agh ajêm záâ Njikem à kë? ndú --
   I Agr P-1 ask him thing RM N. Agr P-1 eat
   lit., "I asked him what Njikem ate"

   245
The complements here look more like relative clauses thus suggesting that they are either DPs or CPs complements. The indirect Wh-questions in (32) can be presented in the format of "direct" Wh-questions as in (33), in which case they will be headed by an interrogative morpheme (inf⁰). This is of course not surprising because questions presented as direct quotes will obviously have all the relevant syntactic features of a question, as they represent word-for-word the morphemes that the quotee used.

(33) a. mù n kë r tšwënë (a(q) à) nyù lë awɔ à kë r npfët akëndɔŋ ŋ
   I Agr P-1 ask (him) Comp who Agr P-1 eat plantains Q
   lit., "I asked (him) who ate plantains’
   who ate plantains’?

b. mù n kë r tšwënë a(q) à) nyù lë Njikem à kë r ndu akɔ ɔ
   I Agr P-1 ask him Comp N. Agr P-1 eat what Q
   'I asked him what Njikem ate'
   lit., "I asked him that 'what did Njikem eat'?”

Because of the fact that Nweh does not make a structural difference between the way direct and indirect questions are marked, the examples in (33) can also be translated as indirect Wh-questions, in which case they will pattern exactly in the same way as indirect yes/no questions cf. (28), therefore, indicating that the analysis of interrogatives sketched here is consistent with all the relevant facts/data.

Another advantage of the derivation of questions proposed here, is that it is very much in line with recent work in the Minimalist framework (Chomsky (1992)). A central assumption of these works is that XP movement is generally to specifier position and that such XP movement is landing-site selective (Sportiche (1990)), (Beghelli and Stowell (1994)). Thus, structurally case-marked DPs target Spec, AgrP; Wh-phrases target Spec of a [+Wh] CP (Chomsky (1986a)) and movement of negative phrases targets Spec, NegP (Moritz and Valois (1991)). Given the above, it
follows straightforwardly, that movement of interrogative XPs should target Spec. IntP.

6.6 Summary

I have proposed that a "split-Comp" analysis of interrogatives in Nweh provides a more elegant account of certain phenomena associated with questions in Nweh. I have proposed that interrogatives are headed by an Int⁰ head that projects an IntP. This Int⁰ head is like an operator that takes a (declarative) CP and makes it a question. However, the interrogative head / morpheme usually shows up in "clause-final" position but takes scope over the entire clause, particularly in the case of yes/no questions. Based on the head-complement order which is the unmarked constituent order in Nweh, as well as on other language internal factors, I have proposed that the Int⁰ head shows up in clause final position because its complement has raised to Spec. IntP, pied piping other constituents that follow it, and therefore, stranding the Int⁰ head in "clause-final" position.
Chapter Seven

CONCLUSION

Starting from the hypothesis that the underlying (linear) word order in Nweh is completely symmetrical, I have proposed that constructions which display word order asymmetries derive as a result of movement, specifically pied piping of some XP constituent (along with other XPs that follow) to some particular specifier position. The term pied piping is therefore, used here in a slightly different sense from its standard meaning. Herein, pied piping is used here to refer to movement which affects constituents which extend beyond "simple" maximal projections.

In the three chapters following the introductory chapter, I analyze word order in the noun phrase (DP) and constructions directly related to the noun phrase such as (DP) Coordination, and Adjectives. Following the approach where a lexical item starts out fully inflected and then raises Spec-to-Spec through the specifier positions of designated functional projections in order to "check off" the various (morphological) agreement features against the functional heads, I have proposed that it is as a result of such movement that the underlying word order symmetry is "destroyed", thus resulting in "mixed"/asymmetric word order. This approach, in essence, denies that word order variations are a reflection of different values assigned to some (word order) parameter of the system.
Extending this restrictive approach to word order in the DP, to higher level clauses like sentential negation and interrogatives that show mixed word order properties, also derives the correct surface linear order and leads to the generalization that *pied piping* is not limited to phrases but also occurs in clauses. This in effect leads to the conclusion that the cross categorial symmetry that has been suggested between the noun phrase (DP) and the clause (CP) goes beyond structural symmetries and extends to symmetries that include syntactic processes applying within the DP and the clause.

The approach and proposals developed here, have a number of other ramifications that go beyond linear order. One such ramification that I have explored herein, is the implication of the proposals for agreement, particularly within the DP where a pattern of extensive agreement has been shown to be in operation. By essentially restricting all agreements to a relation between an agreeing head and the content of its specifier position, I have proposed that the incidence of word order asymmetry and agreement are directly linked to pied piping. Therefore, the extensive agreement within the DP is shown to follow from the incidence of extensive movement (*pied piping*) internal to the DP.

While surface linear order provides the strongest evidence for the sort of *heavy pied piping* proposed herein, it is difficult to say with certainty what forces pied piping of such large syntactic constituents. However, if I am correct in assuming that the sort of pied piping proposed here is a reflection of the way languages operate, as the data overwhelmingly suggest, then it follows that syntactic movement is not limited to movement of minimal projections ($X^0$) and maximal projections (XPs) as standardly assumed, but that constituents smaller than DPs, and constituents as bigger than XPs, in some cases as big as whole clauses, are also visible for the rule *move α*. 

249
REFERENCES


Johnson, M. (n.d.) "Because clauses and negative polarity licensing." ms., UC Santa Cruz.


Ph.D. dissertation, MIT.

M.A. thesis, UCLA.


Chicago: The University of Chicago Press.


ms., UCLA.


M.A. thesis, UCLA.

*UCLA Occasional Papers in Linguistics 14, 57-72.*


Cambridge: Cambridge University Press.


ms., University of Geneva.

253


