Tongan Raising: a Minimalist Analysis

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ABSTRACT
NEAL E. SNIDER: Tongan Raising: a Minimalist Analysis.
(Under the direction of Randall Hendrick.)

The Polynesian language Tongan has a set of raising predicates that take a complement clause and optionally allow either the ergative or absolutive argument of the complement predicate, but not both, to appear with the matrix raising predicate. This behavior appears to present a problem for the Minimalist syntactic theory of Chomsky (1995), which holds that there are no optional movements. This work argues that the raising is motivated by morphological requirements of the particle 'o that marks the complement clause. There are actually two dialects, the grammars of which are both consistent with Minimalist theory: One has a [+D] morphological feature on 'o and requires a DP to its left to check the feature. In this dialect, there is raising only of ergative-marked arguments in transitive clauses. The other dialect has a [+Focus] morphological feature, which allows for the raising of ergative- or absolutive-marked DPs in transitive clauses.

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LIST OF ABBREVIATIONS AND SYMBOLS

a	nonspecific article
ABS	absolutive case
Comp	complementizer
conj	conjunction
Emp	emphatic
ERG	ergative case
fut	future
impv	imperative
Intr	intransitive
past	past
pl	plural
Pred	predicative particle
prf	perfect
prog	progressive
sbj	subjunctive
Subj	subject
T	tense
TAM	tense-aspect-mood
the	specific article
Trans	transitive
uns	unspecified tense-aspect-mood
=	joins words of a gloss
⋆	ungrammatical in the reading indicated
⋆()	ungrammatical if the parenthesized material is omitted
?	marginal

Chapter 1

Introduction

Tongan has a small set of predicates which trigger a process of raising. The predicates *lava* 'can, be able', *hanga* 'turn to', and *kamata* 'begin' require a complement clause, and one of the arguments in the complement clause may optionally raise to the matrix clause, immediately following the raising predicate. When there is no raising, the lower clause is marked with the particle *ke*, as in the following example:

(1) 'E   lava ke lea   'a   e   pēpē.
    uns can sbj talk ABS the baby
    'The baby can talk.'

(Chung, 1978, p. 145)

When an argument of the embedded clause is raised into the matrix clause, *ke* is usually replaced by *'o*:

(2) 'E   lava 'a   e   pēpē 'o   lea.
    uns can ABS the baby talk
    'The baby can talk.'

(Chung, 1978, pp. 104-5)

Here, the one-place predicate *lea* 'talk' occurs with no further arguments in its clause, while its single absolutive argument *e pēpē* 'the baby' has raised into the higher clause with *lava*. Chung (1978) describes a dialect in which only subjects raise, but data reported in Hendrick (1997) shows a dialect in which either subject or object can raise. In this respect, the dialect described by Hendrick seems to resemble the related Polynesian language Niuean (Seiter, 1980).

The Minimalist theory of syntax (Chomsky, 1995) holds that there are no optional movements, so the apparent optionality of Tongan raising presents a challenge to this view. Minimalism also holds that raising operations exhibit a 'superiority' effect (enforced by Chomsky's Minimal Link Condition) which raises subjects preferentially over objects. This claim is also challenged by raising of objects in Tongan. My thesis is that Tongan raising is not optional, in fact it is triggered by the particle *'o*. I will further argue that the two Tongan dialects differ in the feature on *'o*: One has a [+D] morphological feature and requires a DP to its left to check the feature. This dialect allows raising of ergative-marked arguments in transitive clauses and absolutive-marked arguments in intransitive clauses. The other dialect has a [+Focus] morphological feature on *'o* and requires a DP with that feature to its left to establish a checking relationship. This dialect has raising of absolutive-marked DPs in transitive clauses, in addition to raising in the other environments mentioned above. Within each of these dialects, the behavior of Tongan raising is predicted by Minimalist theory.

Chapter 2

Tongan Syntax

As is the case with the majority of Polynesian languages, the canonical word order of Tongan is VSO:

(3) na'e 'omi 'e Sio 'a Mele
past bring ERG Joe ABS Mary
'Joe brought Mary.'

(Hendrick, 1997)

Tongan is an ergative language, as transitive subjects have different case marking (ergative) from intransitive and so-called middle subjects (absolutive). Tongan predicates divide into these three main classes:

Ergative predicates typically (although not always) denote semantically transitive events, with an ergative agent or experiencer and an absolutive patient or theme. This ergative subject will be denoted the A argument, as a mnemonic nod to its typical agentive status. The absolutive object of the transitive predicate may be labelled the O argument.

Absolutive predicates take a single absolutive argument and denote one-place events or activities. This single subject of an intransitive clause may be labelled S.

Middle predicates are intermediate in transitivity in the semantic sense. Like ergative predicates, they denote events involving a logical object. However, the second argument is typically unaffected by the action of the predicate and the subject is usually not as agentive as the subject of an ergative predicate. Middle predicates have the case marking of absolutive predicates, taking an absolutive-marked subject and an oblique object marked with a goal or locative particle.

<div align="right">(Dukes, 1998)</div>

An example of an ergative predicate can be found in (3). Examples of middle and absolutive predicates are as follows:

(4)a. Na'e hopo hake 'a   e   māhina 'i   langi tafitonga, pea 'afua foki
      past rise up ABS Det moon Loc sky clear   conj fine also
      'The moon rose up into a clear sky and it was fine too.'
   b. 'Oku manako 'a   Mele kia   Siale
      Pres. like   ABS Mele Goal Siale
      'Mele likes Siale'

<div align="right">(Dukes, 1998)</div>

Tongan represents tense, aspect, and mood in clauses by particles that appear before the verb. These are typically labelled Tense-Aspect-Mood (TAM) particles in the Polynesianist literature. With all the basic positions of the Tongan clause introduced, a more complete representation of the basic word order can be presented in the following schema:

Conj TAM Pronoun Verb [ErgativeDP] [AbsolutiveDP] [Obliques]

As indicated in the examples above, case marking in the domain following the verb follows an ergative-absolutive pattern. Ergative arguments are obligatorily marked with the prepositional particle *'e*, and absolutive arguments are marked with *'a*. However, the preverbal pronouns follow a nominative-accusative pattern and are obligatorily coreferential with the ergative argument of a transitive predicate and the absolutive argument of an intransitive, when the argument is pronominal. In (a) below, the pronominal subject *nau* 'they' of the transitive verb appears before the predicate, while (b) demonstrates that similar co-reference between the pronoun *ne* 'she' and the object argument is ungrammatical:

(5)a. Na'a nau 'ilo   'a   e   tangata 'i he 'ana
       past they know ABS the man   in the cave

    'They found a man in a cave.'

   b. * Na'a ne ui 'e   he tangata
        past she call ERG the man

    (The man called her)

(Chung, 1978, p. 33-4)

In intransitive and middle predicates, the preverbal pronoun is coreferential with the absolutive argument when it is pronominal, as exemplified below:

(6) 'Oku ou 'ahuina
    prog I besmoked

    'I'm covered with smoke.'

(Chung, 1978, p. 33)

5

A post-verbal pronoun that co-refers to a pre-verbal one is usually omitted, except in cases where emphasis is needed. The nominative-accusative pattern of Tongan preverbal pronouns gives rise to arguments that Tongan is only superficially, or morphologically, ergative. (Chung, 1978)

Chapter 3

Minimalist Theory

This analysis of raising in Tongan will be undertaken using the Minimalist framework of Chomsky (1995). There are several key aspects of Minimalist theory that are particularly relevant to a model of Tongan raising, particularly the economy conditions *Last Resort* and the *Minimal Link Condition*. Further, the behavior of Tongan raising appears to present some difficulties with these hypotheses. First, I will outline the basics of Minimalist syntax, and then highlight the points relevant to my analysis of Tongan raising.

3.1 Fundamental Concepts

Minimalist syntax assumes that human grammars have three basic components: a lexicon, an interface with the systems of production and perception (Phonetic Form, or PF), and an interface with a system of interpretive semantics (Logical Form, or LF). As Minimalism is in the tradition of generative grammar, the three components are related by derivation. LF and PF representations are composed of items drawn from the lexicon, so it is assumed that the derivation takes items from the lexicon and combines them in certain ways. Chomsky

(1991) proposed that the derivation is constrained by economy conditions such that the derivation must be minimal. If one derivation is shorter than another, then the shorter 'blocks' the longer, and the PF and LF representations corresponding to the longer are uninterpretable (Collins, 1997).

As a Minimalist derivation proceeds, a collection of items is drawn from the lexicon in a stage known as *Numeration*. A *Numeration* N is a set of pairs (LI, i), where LI is a lexical item, and i is an index representing the number of times the lexical item is selected. The syntax, or computational system as it is also known, maps N to a pair of representations (π, λ), where π is a representation at the level of PF, and λ is a representation at the level of LF. The computational system consists of the following basic syntactic operations: *Select*, *Attract*, *Delete*. A derivation initially proceeds when the syntax chooses one of the lexical items (via *Select*), reducing its index by 1. Derivations also involve a process called *Spell-Out*, where all elements relevant only to π are stripped away. Essentially, the progress of the derivation is passed to the cognitive module of production and perception. This is one of the two interfaces where the derivation must be consistent; for if there are any syntax-specific features remaining, the derivation is said to *crash* and nothing is produced. All operations before *Spell-Out* are termed *overt* because their effect on the ordering of elements is visible in the string that is produced and perceived. *Covert* movements occur after *Spell-Out* and do not affect word order (Adger, 1999; Collins, 1997).

3.2   Numeration and *Select*

The elements of N are merely bundles of features: phonological features which determine phonetic interpretation; semantic features which include interpretive information such as s-selectional information, argument structure, etc.; and syntactic or morphological features which are inherent in the lexical item or added during the *Select* operation. Morphological features include tense, case, and category labels such as D, V, N. Morphological features have a particular property called *interpretability*, which depends on the head on which they are instantiated. The *interpretability* property determines the interface (PF or LF) at which the property will be interpreted. For example, case features are never interpreted by the LF component; category features are interpretable only on the correct category: N is interpretable on DP, but not on D; and number and gender features are only interpreted on N, not I. The exact nature of *interpretability* is still a rich area for research, but the basic concept is the interface components (PF and LF) cannot interpret syntax-specific or inconsistent features (Adger, 1999).

3.3   *Attract*

One of the key claims of Minimalist theory is that syntactic processes traditionally known as 'movements', or processes where current features in the derivation are satisfied by an element already in the structure, are not marked, and are equivalent to 'mergers', where features are satisfied by new elements from the numeration. Therefore, the processes known schematically as *Move* and *Merge*, are part of the same operation, *Attract*. This equivalence allows

Minimalist derivations to interleave movements and lexical access. The two aspects of *Attract* are explained below.

3.3.1 *Merge*

Chomsky (1995) formally defines *Merge* as:

(7) $\text{Merge}(\alpha, \beta) = K$

$K = \{\gamma, \{\alpha, \beta\}\}$ where α,β are objects and γ is the label of K.

The operation *Merge* inputs two elements chosen by *Select* and maps them onto a single element with a structure that is predictable from that of the two inputs. *Merge* basically represents the fact that human languages are compositional; larger expressions are constructed out of smaller expressions. The precise nature of the output of the *Merge* operation is still a matter of debate (Collins, 2003), but Chomsky assumes it to apply only to the root nodes (or heads) of the two structures and to be unable to apply to the internal structure of the previously constructed expression. The merged expressions are traditionally represented as tree structures, but he further shows how they may be represented instead as set-theoretic entities, where the constituents are sets of sets within the structure. To explain using the example above, given two input items α and β, *Merge* will output $\{\gamma, \{\alpha, \beta\}\}$ where γ is the label, which is in turn some function of the inputs. Chomsky argues that γ is the target of the operation that motivated the *Merge* operation; so if α is the target, then the output of *Merge* is $\{\alpha, \{\alpha, \beta\}\}$. The use of sets in this way prevents any reference to X' or XP as distinct syntactic categories. (Adger, 1999)

Tree structures may still be used as a schematic device, but they contain extra information that is inaccessible to the syntax. The above example can be represented in tree notation as follows:

(8) α

α β
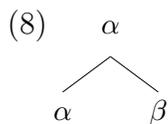
3.3.2   *Move*

The most interesting theoretical implications of Tongan raising arise from its interaction with the particular definition of syntactic movement in Minimalist theory. Chomsky (1995) defines *Move* as follows:

(9) Suppose we have a category Σ with terms K and α. Then we may form Σ' by *raising* α to *target* K. That operation replaces K in Σ with $L = \{\gamma, \{\alpha,K\}\}$. In the optimal theory, nothing else will change in Σ, and γ will be predictable. We take human language to be optimal in the former sense: there are no additional mechanisms to accommodate further changes in Σ...The operation Move forms the chain CH= $(\alpha, t(\alpha))$, $t(\alpha)$ the trace of α. Assume further that CH meets several other conditions (C-Command, Last Resort, and others)...

The *Move* operation, which is one aspect of *Attract*, applies to a single element of a structure, displacing it to another part of the structure and leaving a copy behind. As indicated by the last sentence in Definition 9, Chomsky includes several economy conditions in the definition of *Move*: *C-Command, Uniformity, Last Resort*, and the *Minimal Link Condition*. The first two conditions are rather straightforward, but the latter are more interesting conceptually and in the empirical domain of Tongan raising.

The *c-command* condition is simply that the target K must c-command α in the sense traditional to Generative grammar: α does not dominate K, and

every other element γ that dominates α also dominates K. *Uniformity* is a relational notion that is defined with respect to the feature in question. When two elements are potentially to form a chain through the *Move* operation, they must be *uniform* with respect to the target feature in the sense that either both elements are +F, or both elements are -F. In terms of the example above, the values (+ or -) for the feature F on both the target K and α must be compatible.

3.4 Economy Conditions

Another key feature of Minimalist theory is the role of economy conditions. These conditions constrain all syntactic processes, but their effects are most evident in how they constrain movement.

3.4.1 *Last Resort*

Chomsky (1995) defines *Last Resort* as follows:

(10) Move F raises F to target K only if F enters into a checking relation with a sublabel of K.

Move, and *Attract* in general, is defined such that it only applies to eliminate a feature on the attracting head, which is in the position to which the element has moved. Feature elimination occurs in the structural configurations which are the outputs of *Move*; these configurations are called *checking relationships*. *Move* operations always obey a principle known as *Last Resort*, in that it only applies to establish a checking relationship, which is also known as checking a feature. Further, features are of two basic types, strong and weak. Strong

features are those specified on heads, and must be checked immediately, as soon as they are merged. This process can be represented schematically as follows:

First, consider a set of elements $\{\alpha, \beta, \gamma, \delta\}$ that have already been Merged in the course of a derivation in the manner demonstrated in (11), where α has just been Merged and contains a target feature F which strongly attracts a feature F':

(11)

$$
\begin{array}{c}
\alpha \\
\alpha[\text{F}] \quad\quad \beta \\
\gamma \quad\quad \beta \\
\beta \quad\quad \delta[\text{F'}]
\end{array}
$$
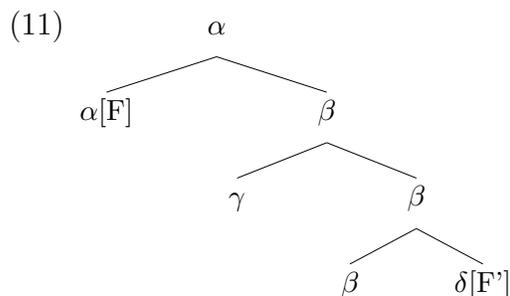
α will attract δ which has the compatible (*uniform*) value for its feature F, and δ will move to [Spec,α], yielding the structure in (12). Note that *Move* leaves a copy of δ in both positions. This is known as the *Copy Theory of Movement*. One of these copies is removed before *Spell-Out*, in the last type of syntactic operation relevant to this discussion: *Delete*.

(12)

$$
\begin{array}{c}
\delta[\text{F'}] \quad\quad \alpha \\
\alpha[\text{F}] \quad\quad \beta \\
\gamma \quad\quad \beta \\
\beta \quad\quad \delta[\text{F'}]
\end{array}
$$

13
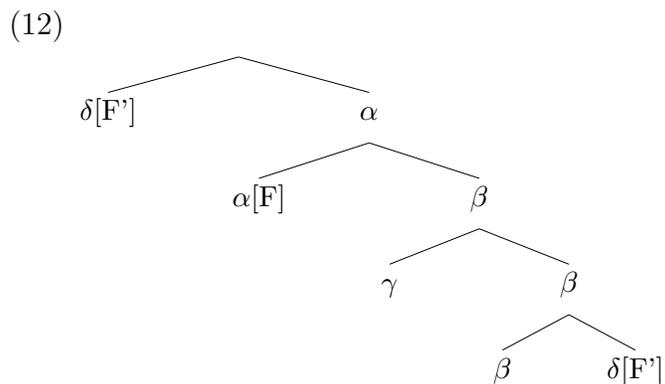
Although there are other intervening elements in the movement illustrated above, there is notably no other element or elements which contain the same feature F'. If there were more tokens of F', the final economy condition would constrain the movement, the *Minimal Link Condition*. The MLC is very important for an analysis of Tongan raising.

3.4.2 *Minimal Link Condition*

In Chomsky (1995), the *Minimal Link Condition* (MLC) is defined as follows:

(13) K attracts α only if there is no β, β closer to K than α, such that K attracts β.

The MLC is simply the requirement that the closest checkable feature be attracted. It accounts for such empirical effects as the ban on Super-Raising, the Head Movement Constraint, and the *Wh*-Island constraint. The MLC is the implementation in a system of economy conditions of the filters and constraints which accounted for these phenomena in previous versions of Transformational grammar. The effect of the MLC is represented schematically as follows: Suppose that in the structure introduced in (11), the element γ also contained the feature F' that corresponds to the target feature on α, F:

(14)

14
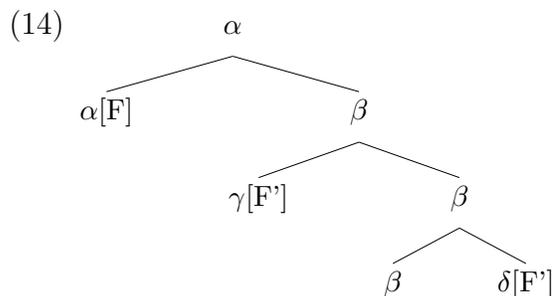
The MLC insures that only the nearest feature will move and form the checking relation with the target. Therefore the following is the only allowed configuration of (14) after *Move*:

(15)

```
        γ[F']              α
                    α[F]          β
                          γ[F']        β
                                  β       δ[F']
```
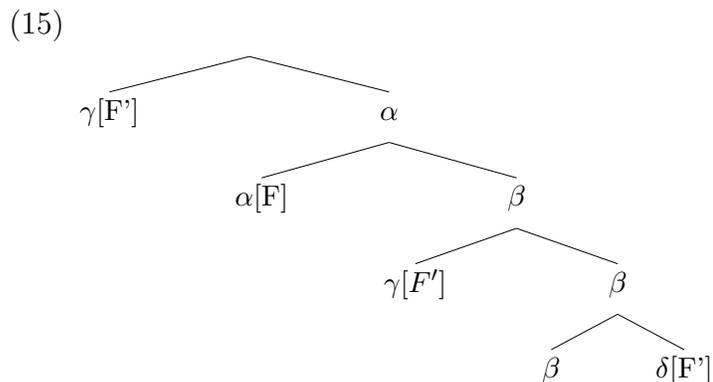
The movement of any other compatible feature is not allowed. Therefore configurations like the following are blocked:

(16)

```
                    *
        δ[F']              α
                    α[F]          β
                          γ[F']        β
                                  β       δ[F']
```
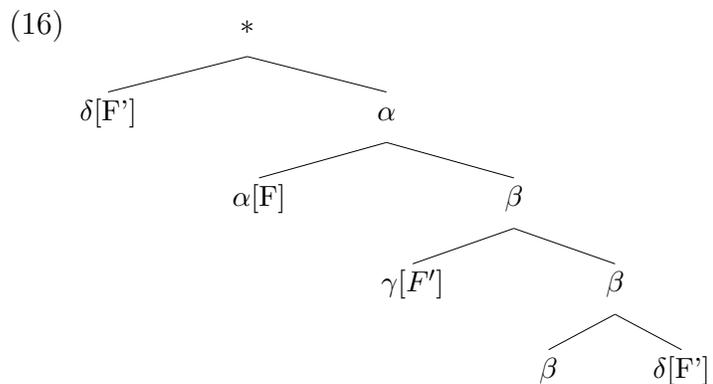
Note that the definition of *Move* is such that the moved element is actually the feature itself, so it applies to eliminate a feature rather than a category. Therefore, if the movement takes place before *Spell-Out*, the feature will bring along (*pied-pipe*) an amount of morphological material (such as a category).

The pied-piping of this material occurs to satisfy the interpretability require-
ments of the PF interface; PF cannot interpret morphological features that are
scattered throughout the derivation. When *Move* occurs after *Spell-Out*, only
the feature itself moves. (Adger, 1999)

3.5 Example Derivation

Collins (1997) provides a good, step-by-step example of a simple derivation
using the set notation introduced in Chomsky (1995). An example of a Tongan
derivation using tree notation may be found in Section 4.5.1.1. Consider the
sentence:

(17) The girl left.

The Numeration for this sentence is:

(18) N = {(the, 1), (girl, 1), (left, 1), (T, 1)}

There are initially no formed syntactic objects. The complete derivation is
as follows:

(19)a. N = {(the, 1), (girl, 1), (left, 1), (T, 1)}
    S = ∅

  b. *Select* girl : N = {(the, 1), (girl, 0), (left, 1), (T, 1)}
    S = {girl}

  c. *Select* the : N= {(the, 0), (girl, 0), (left, 1), (T, 1)}
    S = {girl, the}

  d. *Merge* (girl, the)
    S = {{girl, the}}

  e. *Select* left : N = {(the, 0), (girl, 0), (left, 0), (T, 1)}

S= {{girl, the}, left}

f. *Merge* ({girl, the}, left)
   S= {{{girl, the}, left}}

g. *Select* T : N = {(the, 0), (girl, 0), (left, 0), (T, 0)}
   S = {T, {{girl, the}, left}}

h. *Merge* (T[D], {{girl, the}, left})
   S = {{T[D], {{girl, the}, left}}}
   T has a strong *Extended Projection Principle* feature D that must be satisfied, which forces the following step.

i. *Move* {girl, the}
   S = {{girl, the}[D'], {T[D], {girl, the}[D'], left}}}
   This step establishes the checking relation that removes the D feature on T.

j. *Merge* ({girl, the}, {T, {{girl, the}, left}})
   S = {{{girl, the}, {T, {{girl, the}, left}}}}

k. *Delete* ({girl, the}, {T, {{girl, the}, left}})
   S = {{{girl, the}, {T, {{**girl, the**}, left}}}}

3.6 Minimalist Theory and Tongan Raising

Tongan raising presents particular difficulties for Minimalist theory, as it appears to be an optional movement, thereby violating *Last Resort*. Further, the apparent ability to raise of either the A or O argument in transitive clauses violates the *Minimal Link Condition*. This section illustrates these problems, and links their solution to the features on the TAM particle *'o*.

As mentioned above, Tongan raising is a process where one argument of a subordinate clause can appear in the matrix clause, when the matrix predicate is

lava 'be able', *hanga* 'turn to', or *kamata* 'begin'. When there is no raising, the lower clause is marked with the TAM-particle *ke*, as in the following examples:

(20) 'E   lava ke lea   'a   e   pēpē.
uns can sbj talk ABS the baby
'The baby can talk.'

(Chung, 1978, p. 145)

The argument of the subordinate predicate *lea* 'talk' remains in the lower clause, which is marked by *ke*.

(21)a. 'E   lava ke tonu eni?
uns can sbj right this
'Can this be right?'

   b. Na'e puke lahi 'a   e   ki'i   tamasi'ī, ka na'e lava pē   ke ne 'alu
   past sick very ABS the small child   but past can Emp sbj he go
   'The child was very sick, but he could walk'

(Chung, 1978, p. 146)

In (a) the pronominal argument *eni* 'this' of *tonu* 'right' in the *ke*-marked lower clause remains there. (b) shows the pronominal argument *ne* remains in the *ke*-marked lower clause with its predicate *'alu* 'go'.

These predicates also participate in a raising process where one argument of the lower predicate appears in the matrix clause, and *ke* is usually replaced by *'o*:

(22) 'Oku lava 'e   he tangata ko   'ená 'o langa 'a   e   fale   lelei.
prog can ERG the man   Pred that 'o build ABS the house good
'That man can build good houses'

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Here, the two-place predicate *langa* 'build' occurs with its absolute argument *e fale lelei* 'a good house' in its clause, while the ergative argument *he tangata ko* 'that man' has raised into the higher clause with *lava*. Either argument of the lower clause may raise, as in the following examples[1]:

(23)a. 'E lava 'a   e   lea   faka-Tonga 'o ako 'e   Pita.
     uns can ABS the language Tongan   'o learn ERG Pita
     'Pita can learn Tongan'

    b. 'E lava 'e   Pita 'o ako 'a   e   lea   faka-Tonga.
     uns can ERG Pita 'o learn ABS the language Tongan
     'Pita can learn Tongan'

In (a), the absolutive argument *e lea faka-Tonga* 'the Tongan language' of the two-place predicate *ako* 'learn' appears in the higher clause, while in (b) the ergative argument *Pita* of the same predicate *ako* appears in the higher clause. The movement also appears to be optional, as in the following example where both arguments remain in the lower clause:

(24) 'E lava 'o ako 'e   Pita 'a   e   lea   faka-Tonga.
    uns can 'o learn ERG Pita ABS the language Tongan
    'Pita can learn Tongan'

Such an optional movement is contrary to minimalist assumptions, where all syntactic operations must be motivated, typically in order to satisfy a morphological requirement of some previously-merged constituent. Also, the requirements of the Minimal Link Condition are such that only the nearest of

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[1]Chung reports that raising is restricted to subjects of the lower clause.

two competing features may move. In example (23a), one DP, *'a e lea faka-Tonga*, appears to move over another, *'e Pita*. In the following analysis, I will present a unified description of the behavior of *'o*, and demonstrate how this behavior is consistent with Minimalist assumptions about the nature of syntactic processes.

Chapter 4

Analysis

First, I will demonstrate that the phenomenon to which I have been referring as 'raising' is indeed a movement effect. Next, I will attempt to explain how this phenomenon can the explained in a Minimalist syntactic framework, given the fact that it appears to be optional. There are two possible motivations for movement in Minimalist theory, semantic and morphological. First, I demonstrate that a semantic motivation is not descriptively adequate for this effect. I then show that a morphological, feature-checking explanation is best. The feature-checking argument proceeds by first showing that Tongan raising does not occur to check a case feature repeatedly. Finally, I argue for the nature of the particular feature needed, and discuss the consequences and limitations of this hypothesis.

4.1 *lava + 'o* is Raising

The first step in the demonstration that the movement that I term 'raising' is indeed a movement phenomenon is to demonstrate that the argument originates

in the embedded clauses. Chung (1978) offers three pieces of evidence that point to this conclusion.

4.1.1 The raised DP originates in the embedded clause

Tongan has verb agreement for a small class of intransitive verbs. These verbs are optionally marked in agreement with their subject. The agreement is optional in the sense that plural DPs can occur with singular or plural verbs, as in (25), but singular DPs only occur with singular verbs, as in (26). The agreement is morphologically marked by suppletion, *'alu* 'go' has the plural form *ō*, and *ha'u* 'come' has the plural form *omi*.

(25)a. Te mau ō   atu 'apō   'i he hongofulu.
       uns we go=pl away tonight at the ten
       'We are going away tonight at ten.'

   b. Te mau 'alu atu 'apō   'i he hongofulu.
      uns we go away tonight at the ten
      'We are going away tonight at ten.'

(Chung, 1978, pp. 147-8)

(26)a. * 'E omi   ia ki-ate kimautolu 'apongipongi.
          uns come=pl he to-pro us   tomorrow

   b. 'E ha'u ia ki-ate kimautolu 'apongipongi.
      uns come he to-pro us   tomorrow
      'He is coming to us tomorrow.'

(Chung, 1978, p. 148)

In raising sentences, the raised DP can trigger agreement in the embedded clause, even though it appears in the higher clause:

(27)a. Te nau lava 'o omi   'apongipongi?
       uns they can 'o come=pl tomorrow

       'Can they come tomorrow?'

   b. 'Oku mau loto ke ha'u (ia) 'apongipongi?
       prog we   want sbj come he   tomorrow

       'We want him to come tomorrow.'

<div align="right">(Chung, 1978, p. 148)</div>

In (a) above the agreeing pair *nau* 'they' and *omu* 'come=pl' appear in different clauses when the higher predicate is a raising predicate. In (b), there is no raising predicate, so lower singular predicate *ha'u* 'come' does not agree with the plural argument *mau* 'we' of the higher predicate

The ability of the raised DP to trigger agreement is evidence that it originates in the embedded clause. The raised DP triggers agreement in the embedded clauses, therefore it originates there.

4.1.2   The raised DP is a syntactic argument of the higher clause

The moved DP acts as an argument of the higher clause containing the raising predicate, as it is subject to several clause-bounded syntactic processes that are restricted to subjects.

Tongan has a phenomenon of Quantifier Float where the quantifier *kotoa* 'all' appears as the final element of an DP that is the subject or direct object of a predicate. After QF has applied, *kotoa* appears to the immediate right of the governing predicate. In (a), QF has not occurred and *kotoa* appears on the right edge of the DP *'a e fanga pató*, while in (b) it appears on the right of the governing predicate *vākē*.

(28)a. 'Oku vākē   'a   e   fanga pató kotoa.
　　　 prog make=noise ABS the pl   duck all
　　　 'The ducks were all making noise.' (No QF)

　b. 'Oku vākē   kotoa 'a   e   fanga pató.
　　　 prog make=noise all   ABS the pl   duck
　　　 'The ducks were all making noise.' (QF)

(Chung, 1978, pp. 215-6)

In raised constructions, *kotoa* appears with the raised DP in the higher clause, as below where *kotoa* is to the right of the governing raising predicate *lava*. This argument is clearly in the higher clause because the position of the floated quantifier indicates that *lava* is now governing the DP.

(29) 'Oku lava kotoa 'e   hoku ngaahi kaume'a 'o haka 'a   e   me'akai
　　 prog can all   ERG my   pl   friend   'o cook ABS the food
　　 faka-Siana.
　　 Chinese
　　 'My friends all can cook Chinese food.'

(Chung, 1978, p. 114)

Also, the raised DP is further subject to pronominal clitic raising. If the DP argument of the lower clause is a pronoun and an A or S argument, it will appear as a pronominal clitic to the left of the predicate in the higher clause. (a) below shows the subject of the lower clause *ke* 'you' in the clitic subject position of the higher clause, and (b) shows *mou* 'you=pl' in a similar position:

(30)a. Te ke   lava pē   koe 'o hola mama'o.
　　　 uns you can Emp you 'o run far
　　　 'You can run away by yourself.'

　b. Te mou   lava 'o kaukau momoko?
　　　 uns you=pl can 'o bathe   cold
　　　 'Will you be able to take cold baths.'

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Finally, the raised DP undergoes Possessor Marking when the predicate is nominalized. Possessor Marking is a process by which the subject of a nominalized verb is assigned the *'a* form of the possessive. No other argument or associated DP can take this form. When an argument of a lower predicate has been raised and the raising predicate has been nominalized, the DP subject takes the *'a* possessive form. In the example below, *ho'o* - a *'a*-possessive pronoun - is the logical subject of *fakahā*, but appears as the possessor in the nominal headed by *lava*:

(31) Na'e nau fiefia 'i ho'o lava 'o fakahā vave ange ki-ate kinautolu.
Pst they happy Caus your can 'o show fast away to-pro them
'They appreciated your being able to tell them so quickly.'
(*ho'o* is an *'a* possessive pronoun)

(Chung, 1978, p. 149)

4.1.3 Phenomenon is not Control

The strongest evidence that the argument raises from the lower clause to the higher one containing a raising predicate comes from the case marking of the DP. As mentioned previously, the subject of a transitive clause (the A argument) is assigned ergative case, while the subject of an intransitive clause (the S argument) is assigned absolutive case. The assignment of these cases is determined by the clause in which the argument is initially merged. This case remains unchanged when the DP is raised to become the argument of a higher clause. In control structures, the case marking of the higher subject is determined by the transitivity of the higher predicate, not by the predicate in the

lower clause. In (a) below, *e tangatá* 'the man' is the logical argument of both of the one-place predicates *alu* 'go' and *folau* 'sail', and gets absolutive case consistent with its Subject status. In (b), *e kau sōtia* is the logical subject of both the one place predicate *alu* and the two-place predicate *maumau'i* 'destroy'. However, it gets the absolutive case of the higher predicate in whose clause it appears, instead of the ergative case marking that would be assigned by the lower predicate:

(32) a. Pea na'e 'alu 'a   e   tangatá 'o folau mama'o.
       and Pst go   ABS the man   'o sail   far
       'Then the man went and sailed away.'

    b. Na'e 'alu 'a   e   kau sōtia   'o maumau'i 'a   e   vaka
       Pst   go   ABS the pl   soldier 'o destroy   ABS the ship
       'The soldiers went and destroyed the ship.'

<div align="right">(Chung, 1978, p. 150)</div>

In raised sentences, the case marking of the argument in the higher clause is that assigned by the lower predicate. If the lower predicate is transitive, then the raised DP is ergative if it originated in Agent position. In (a) below, the argument of the higher predicate *lava* takes the ergative case assigned by the lower two-place predicate *langa* 'build', absolutive case typical of predicates with one argument is ungrammatical:

(33) a. 'Oku lava 'e   he tangata ko   'ená 'o langa 'a   e   fale   lelei.
       prog can ERG the man   Pred that 'o build ABS the house good
       'That man can build good houses.'

    b. * 'Oku lava 'a   he tangata ko   'ená 'o langa 'a   e   fale   lelei.
        prog can ABS the man   Pred that 'o build ABS the house good

<div align="right">(Chung, 1978, p. 151)</div>

Further, in the examples below, the emphatic pronoun *koe* 'you' must be marked ergative for the expression to be grammatical, consistent with its origin as the agent argument of the lower two-place predicate:

(34)a. Te ke lava 'e   koe 'o lau 'eku mata'itohi?
       uns you can ERG you 'o read my   handwriting

       'Can **you** read my handwriting?'

   b. * Te ke lava koe 'o lau 'eku mata'itohi?
         uns you can you 'o read my   handwriting

<div align="right">(Chung, 1978, pp. 151)</div>

The argument gets absolutive case if it originated in object (O) position as with *e lea faka-Tonga* 'the Tongan language' below:

(35) 'E lava 'a   e   lea   faka-Tonga 'o ako 'e   Pita.
     uns can ABS the language Tongan   'o learn ERG Pita

     'Pita can learn Tongan'

<div align="right">(Hendrick, 1997)</div>

If the lower predicate is intransitive, as is *kai* 'eat' below, then the raised DP *koe* must be unmarked (absolutive), reflecting its initial status as the S argument. If *koe* is marked ergative, as in (b), ungrammaticality results:

(36)a. Te ke toe   lava koe 'o ki'i   kai?
       uns you again can you 'o small eat

       'Can **you** eat just a little more?'

   b. * Te ke toe   lava 'e   koe 'o ki'i   kai?
         uns you again can ERG you 'o small eat

<div align="right">(Chung, 1978, p. 151)</div>

27

4.2   Raising is not Semantically Motivated

Another possible motivation of Tongan raising is for semantic reasons. In minimalist terms, constituents may move to change scope relations. For example, Fox (1999) has argued that Quantifier Raising in Japanese and English at LF are both motivated by changes in quantifier scope. Raising has also been argued to apply only when its application results in a change of scope relations. Scope relations also interact with relative scope of modal operators. Specifically, the traditional difference between deontic and epistemic modals has been treated as a relative scope fact: a deontic interpretation obtains when a DP has wider scope than the modal; when the modal has wider scope an epistemic reading results. Wurmbrand and Bobaljik (1999) present data from several languages which continues this longstanding debate about the nature of movement to change scope relations in modals. Deontic modality is that which expresses modal forces such as permission and obligation; it is exemplified in the following English sentences:

(37) a. According to FBI regulations, FBI agents must wear suits.
  b. There may be singing but no dancing on my premises.

(Wurmbrand and Bobaljik, 1999)

Epistemic modality expresses the speaker's evaluation of the likelihood of embedded propositions according to what is believed or known about the facts, background situation, etc:

(38) a. John must be the leak in the FBI.
  b. 'During the demonstration,' the Chief of Police instructed his officers, 'there may be windows broken by rioters.'.

If deontic and epistemic modals differ in the scope of the subject with respect to the modal, a potential hypothesis about a semantic motivation for Tongan raising could be that it is correlated with the deontic/epistemic distinction, and therefore it is motivated to change scope relations in much the same spirit as Fox's treatment of QR. However, Chung (1978) observes that the deontic sense merely triggers the raising process more frequently, and both deontic and epistemic modalities are possible with raising. Therefore, Tongan raising is not semantically motivated.

4.3   Raising is not Motivated to Repeatedly Check Case Feature

An alternative account of the motivation for the movement of arguments in Tongan raising structures could be to check a case feature on the raising predicate. Given that the DP would have already merged to check case in the embedded predicate, this raising would be classified as Multiple Case Checking (Massam, 2000). First, I will demonstrate that raising predicates do not have a case feature to be checked, and then that the case feature on DPs cannot be checked repeatedly.

First, as demonstrated above, the raised DP very clearly bears the case of the embedded predicate. Intransitive predicates such as that in example (1) assign absolutive case to their argument, and this case also appears on the argument in the raised structure, as in (2). Transitive predicates such as that

in example (23) assign ergative case to their subjects (the A argument) and absolutive case to their objects (the O argument). When either argument is raised to the higher clause with the raising predicate, it retains the case of the lower clause.

Further, if the case feature of a DP could be checked repeatedly, and two raising predicates were available in a clause, then the DP would raise through both predicates in the phenomenon known as 'Super-Raising.' The following data demonstrate that such Super-Raising, as in (39b), is prohibited:

(39)a. Te lava 'a   e   me'akai 'o fakatau 'e   Pita.
      uns can ABS the food   'o buy   ERG Pita
      'The food will be able to be bought by Pita.'

   b. * 'E lava 'a   e   me'akai 'o kamata 'e   Pita fakatau.
       uns can ABS the food   'o begin   ERG Pita buy

(Hendrick, 1997)

(a) and (b) above show two raising predicates *lava* and *kamata* present in the higher clauses. If the DP's case feature could be checked repeatedly, then it could check it with both *kamata* and *lava*. However, *e me'akai* 'the food' may only raise once to the nearest predicate *kamata*, as in (a). Raising again to *lava*, as in (b), is not grammatical.

4.4   Syntactic Status of *ke* and *'o*

I have shown that the morphological properties of the raising predicate do not seem to trigger the movement. My primary hypothesis is that a morphological property of the functional particle *'o* is the trigger. Before demonstrating the nature of the morphological feature that motivates Tongan raising, I will argue

for the syntactic status of the particles *ke* and *'o*, which play the central role in determining when the raising occurs. The fact that *ke* is a complementizer, while *'o* has the status of Tense, makes this phenomenon consistent with other languages. English provides an example of these so-called Extended Projection Principle phenomena, where the Tense constituent has a nominal feature to be checked.

4.4.1 *ke* is complementizer

The other particle which plays a central role in Tongan raising is *ke*. There is no consensus in the literature as to the syntactic status of *ke*. Chung (1978) characterizes *ke* as simply a tense-aspect-mood particle. This is undoubtedly the case, for like all the other TAMs, it always appears clause-initially:

(40)a. 'E lava ke lea 'a   e   pēpē.
       uns can sbj talk ABS the baby
       'The baby can talk.'

(Chung, 1978, p. 145)

(41)a. 'E   lava ke tonu eni?
       uns can sbj right this
       'Can this be right?'

   b. Na'e puke lahi 'a   e   ki'i   tamasi'ī, ka na'e lava pē   ke ne 'alu
      past sick   very ABS the small child   but past can Emp sbj he go
      'The child was very sick, but he could walk'

(Chung, 1978, p. 146), (146)

31

However, *ke* only appears in complement clauses of certain predicates, among them the raising predicates of interest here, although not in the raising structures themselves. Further, it cannot appear as the utterance-initial TAM, and is correlated with the predicative 'force' of the embedded clause. Thus, I will assume that *ke* is a complementizer, and semantically marks subjunctive mood in subordinate clause complements of certain predicates.

4.4.2 *'o* is tense

As previously discussed, there is debate in the literature as to the syntactic category of the particle *'o*. It has been argued to be tense, complementizer, or conjunction because it participates in syntactic processes which usually involve these systems. I will present evidence that *'o* is most accurately described as tense.

In her argument for *'o* as a "complementizer of result", Chung presents several arguments that *'o* cannot be a conjunction. First, the semantic distribution of *'o* is limited, it only occurs when the event described by the embedded clause is a result of the event in the higher clause. If the events are unrelated, the result is a true coordinate structure, and the conjunction *pea* is used:

(42)a. * Ko   e   tufunga   ia 'o ko   e   tangata faufakatau au.
        Pred the carpenter he 'o Pred the person   seller   I

    b. Ko   e   tufunga   ia pea ko   e   tangata faufakatau au.
       Pred the carpenter he and Pred the person   seller   I

      'He is a carpenter and I am a salesman.'

(Chung, 1978, p. 35)

Also, embedded clauses with *'o* act as subordinate clauses, as they allow DPs to be extracted. In the sentences below, either argument of the predicate in an *'o* clause can be topicalized. If these were co-ordinate structures, the Coordinate Structure Constraint (Ross, 1967) would predict that they should be ungrammatical.

(43)a. Na'a nau ha'u 'o 'omai 'a   e   pīsī   ma'a-ku.
       Pst   they come 'o bring ABS the peach for-me
       'They came and brought peaches to me.'

   b. Ko   e   pīsī   na'a nau ha'u 'o 'omai ma'a-ku.
      Pred the peach Pst   they come 'o bring for-me
      'It is the peaches that they came and brought to me.'

   c. Ko   au Na'a nau ha'u 'o 'omai ki ai   'a   e   pīsī.
      Pred me Pst   they come 'o bring to pro ABS the peach
      'It is me that they came and brought the peaches to.'

<div align="right">(Chung, 1978, p. 36)</div>

Finally, true coordinate structures with *pea* obey the Coordinate Structure Constraint in that extraction from the subordinate clause is not allowed, like it is for *'o* above. Below, (a) shows a coordinate structure with *pea*. (b) is an attempt to extract *e ta'ahiné* 'the girl' over *pea*, with resulting ungrammaticality.

(44)a. 'Oku ou sai'ia au 'i he tamasi'ī pea 'oku ke   sai'ia koe 'i he
       prog I   like   I   at the boy   and prog you like   you at the
       ta'ahiné.
       girl
       'I like the boy and you like the girl.'

   b. * Ko   e   ta'ahiné 'oku ou sai'ia au 'i he tamasi'ī pea 'oku ke
        Pred the girl   prog I   like   I   at the boy   and prog you
      sai'ia koe ai.
      like   you at pro
      (*It is the girl that I like the boy and you like)

<div align="center">33</div>

My primary evidence for the status of *'o* is distributional. *'o* fails to co-occur with an independent tense marker. Thus, I will assume that *'o* fills the grammatical position Tense in Tongan sentences.

4.5 Raising is motivated by checking feature on *'o*

In this section, evidence will be presented that, consistent with the Minimalist syntactic model, Tongan raising is motivated by the checking of a morphological feature. The data indicate that *lava + ke* always occurs in non-raised structures, while *lava + 'o* occurs with both raised and non-raised structures. I will show that *'o* carries a feature, either [+D] or [+F] depending on the dialect, which is an uninterpretable feature that must be checked (and erased) by raising.

4.5.1 The feature on *'o*

In *lava + 'o* structures, raising is always triggered. Chung (1978) calls *'o* "a morphological consequence of raising." Further, there are two main patterns among speakers in raising to *'o*: one where only the closest argument (A or S) may raise. This is the dialect of speakers interviewed by Chung (1978). The other pattern is one where any argument of the lower clause may raise, S, A, or O. This occurs in the dialect of the speakers interviewed by Hendrick (1997). I propose that *'o* has a morphological feature which must be checked. The nature

of the feature depends on the dialect. In the dialect of Chung's speakers, the feature is [+D] and must be satisfied by the nearest nominal element. The dialect of Hendrick's speakers has a feature on *'o*, which will be mnemonically called [+Focus], that is only given to one DP in the clause.

Thus, Tongan raising is fully consistent with Minimalist assumptions. The phenomenon may be explained by examining the behavior of the two dialects with respect to the features of *'o*. In the dialect described by Chung (1978), *'o* has the feature [+D]. When *'o*[+D] appears in a structure, the nearest nominal argument in the subordinate clause moves, as demonstrated by the following examples:

(45)a. 'E   lava 'a   e   pēpē$_i$[+D] 'o[+D] lea t_i.
 uns can ABS the baby   'o   talk
 'The baby can talk.'

 b. 'E   lava 'e   Pita$_i$[+D] 'o[+D] ako t_i 'a   e   lea
 uns can ERG Pita   'o   learn   ABS the language
 faka-Tonga[+D].
 Tongan
 'Pita can learn Tongan'

(Hendrick, 1997)

The other dialect, which was described by Hendrick (1997), *'o* has the feature [+Focus] and appears in structures involving raising of either the A or O argument. As the feature [+F] is only assigned to one nominal, only that one may raise, even over another argument. (a) below shows the raising of the first argument (A) in this dialect, and (b) shows the raising of the second argument (O).

(46)a. 'E   lava 'e   Pita$_i$[+F] 'o[+F] ako t_i 'a   e   lea   faka-Tonga.
     uns can ERG Pita   'o   learn   ABS the language Tongan
     'Pita can learn Tongan'

    b. Te   lava 'a   e   me'akai$_i$[+F] 'o[+F] fakatau 'e   Pita t_i.
     uns can ABS the food   'o   buy   ERG Pita
     'The food will be able to be bought by Pita'

(Hendrick, 1997)

Therefore, in both dialects, Tongan Raising obeys the Minimal Link Condition. In Chung's dialect, if 'o[+D] appears in a raising structure, and there are two nominal arguments, only the nearest DP will move. In Hendrick's dialect, raising of the either the A or O argument occurs in structures with 'o[+F] because only one DP is assigned the +Focus feature, therefore there are no other competitors to check the feature, and it may move over other DPs.

4.5.1.1   Derivation of Tongan Raising

This section demonstrates the derivation of Tongan raising in both dialects. Raising in the dialect described by Chung is exemplified by the sentence of example (45b), *'E lava 'e Pita 'o ako 'a e lea faka-Tonga*. Tongan raising may be represented schematically by beginning at the point in the derivation where the subordinate clause has been merged:

36

(47)

```
                    VP
          ╱──────────────────╲
        ako                  AgrS
                    ╱──────────────────╲
                 DP[D']                AgrO
                  ╱╲          ╱──────────────╲
                 ╱  ╲       DP[D']
                ╱____╲      ╱──────╲
                'e Pita   'a e lea faka-Tonga
```
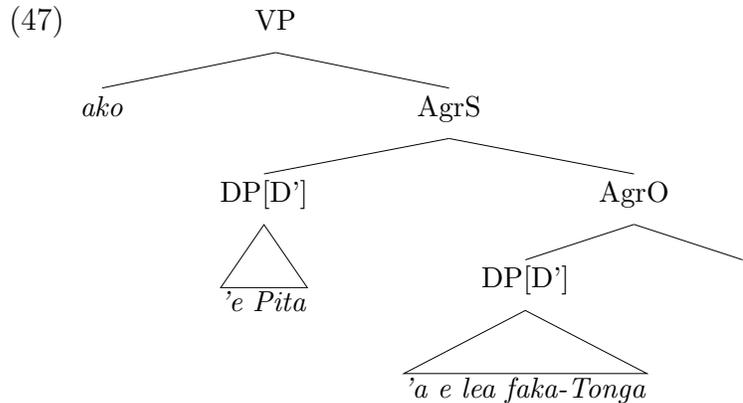
This derivational analysis of ergativity follows the suggestion of Chomsky (1995) that ergative and accusative languages are parameterized with respect to which Agr node is always present, or 'active'. In accusative languages, AgrS is active, so nominative case is always assigned in all predicate types. In ergative languages, AgrO is always active, so absolutive case is always assigned. Next, this clause is merged with the Tense node 'o:

(48)

```
                    TP
          ╱──────────────────╲
       'o[+D]                 VP
                    ╱──────────────────╲
                  ako                  AgrS
                            ╱──────────────────╲
                         DP[D']                AgrO
                          ╱╲          ╱──────────────╲
                         ╱  ╲       DP[D']
                        ╱____╲      ╱──────╲
                        'e Pita   'a e lea faka-Tonga
```
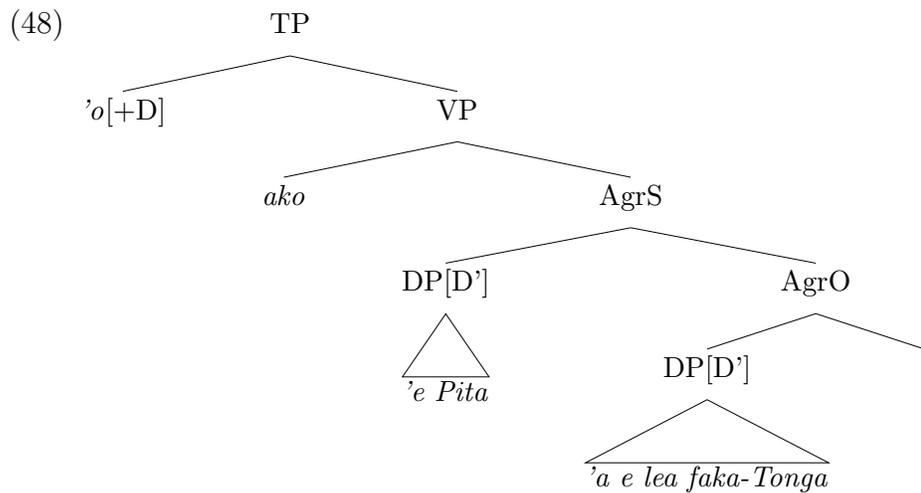
When 'o is merged, it has a feature [+D] that must be satisfied. This forces the next step, the merger of an item with the corresponding feature. There are two DPs available that satisfy this feature, so the nearer one moves, consistent with the MLC:

(49)

DP[D']
'e Pita

TP
'o[+D]
VP
ako
AgrS
DP[D']
'e Pita
AgrO
DP[D']
'a e lea faka-Tonga
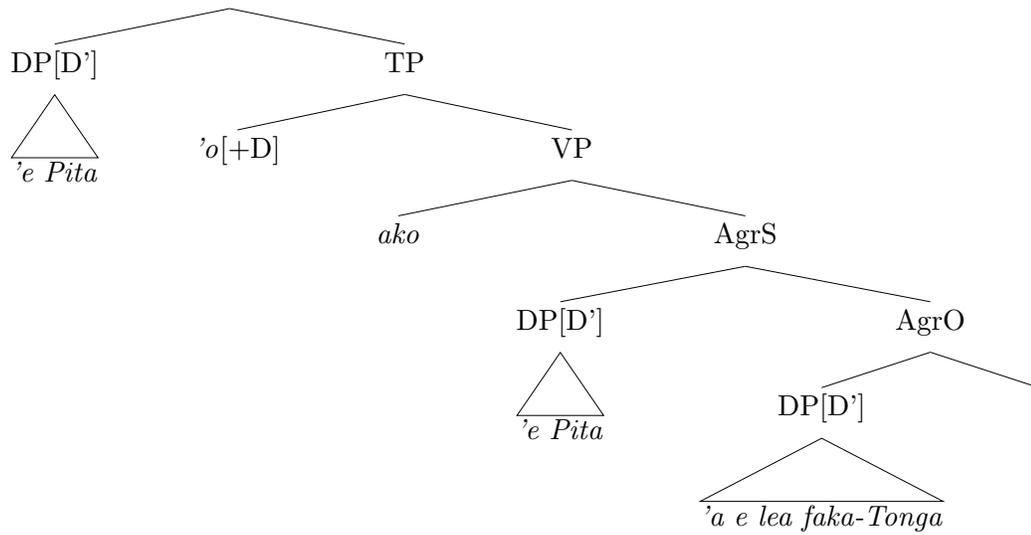
Finally, one of the copies of *'e Pita* is deleted:

(50)

DP[D']
'e Pita

TP
'o[+D]
VP
ako
AgrS
DP[D']
~~'e Pita~~
AgrO
DP[D']
'a e lea faka-Tonga
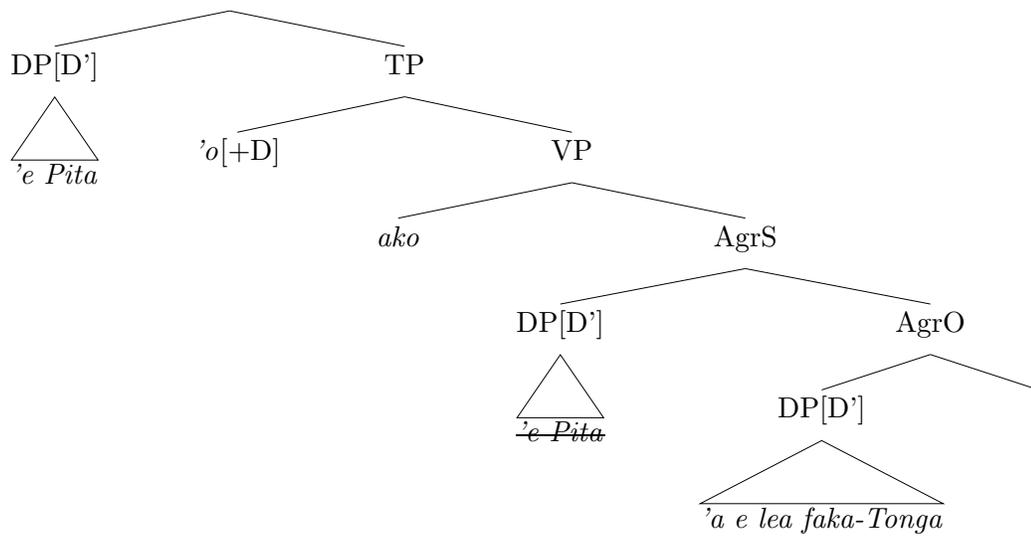
A derivation of raising in the dialect described by Hendrick may be exemplified by the sentence of example (46b), *Te lava 'a e me'akai 'o fakatau 'e Pita*. Beginning again at the point where the subordinate clause, including the T element *'o*, has been merged:

(51)

```
                    TP
            ┌────────┴────────┐
         'o[+F]               VP
                       ┌───────┴────────┐
                    fakatau            AgrS
                               ┌─────────┴─────────┐
                              DP                  AgrO
                             ╱△╲            ┌──────┴──────┐
                            'e Pita      DP[F']
                                         ╱──△──╲
                                      'a e me'akai
```
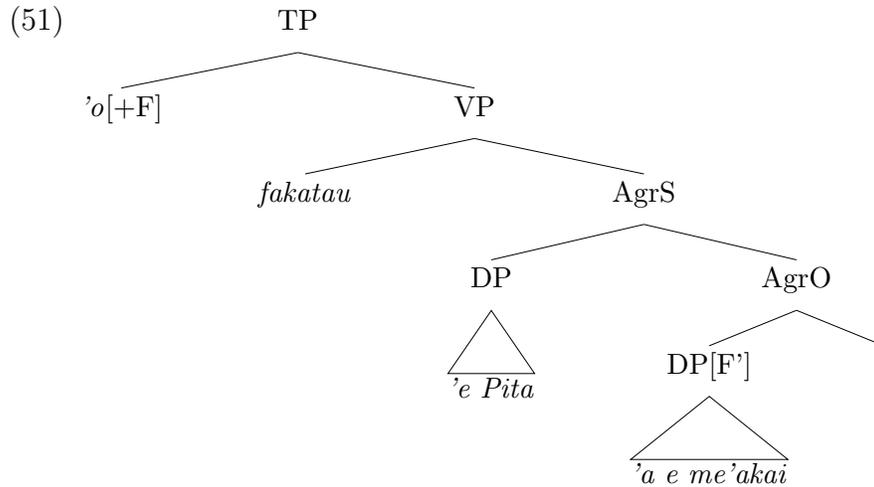
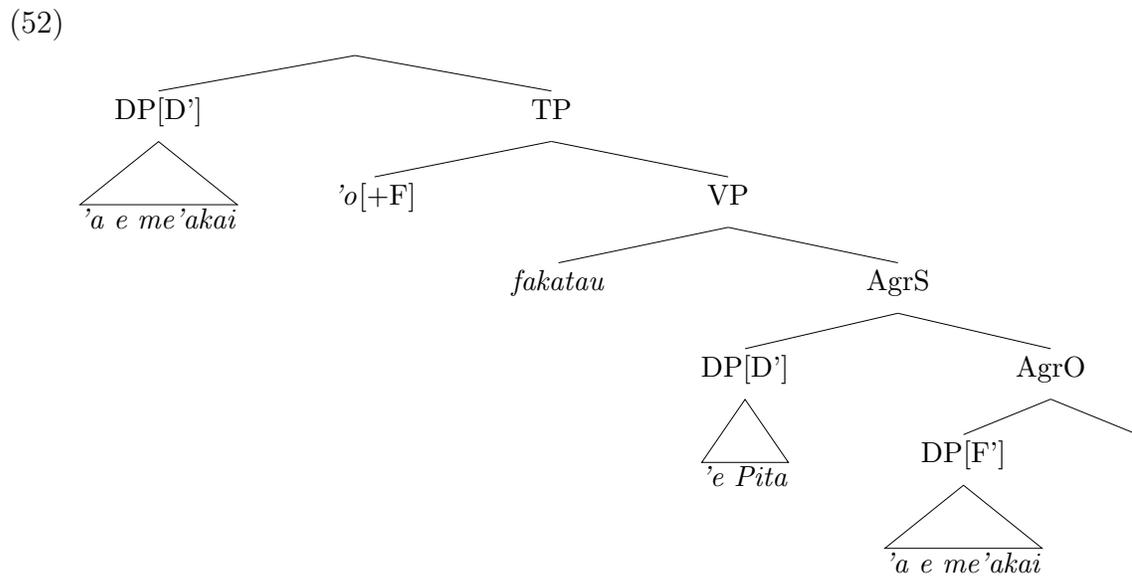The [+F] feature on *'o* now forces the merger of an item with that feature. In this case, only one of the DPs in the subordinate clause has that feature, so it moves over the other DP:

(52)

```
           ┌──────────────┴──────────────┐
        DP[D']                           TP
       ╱──△──╲                    ┌───────┴────────┐
    'a e me'akai               'o[+F]              VP
                                            ┌───────┴────────┐
                                         fakatau            AgrS
                                                     ┌────────┴────────┐
                                                   DP[D']            AgrO
                                                  ╱──△──╲      ┌───────┴───────┐
                                                 'e Pita    DP[F']
                                                            ╱──△──╲
                                                         'a e me'akai
```

4.5.1.2   A Residual Problem

One possible difficulty with the above analysis is that there is some variation among speakers with regards to the use of *'o* and *ke*. Chung (1978) states in her analysis that "*ke* must be replaced by *'o* once Raising has applied...despite

some variation in usage." Her informants did not regard as fully ungrammatical examples where *'o* appears in a non-raising structure.

(53) ? 'E   lava 'o u 'alu.
    uns can 'o I go
  'Can I go?'

<div align="right">(Chung, 1978)</div>

Also Hendrick (1997), found structures where *lava + 'o* are present and raising has not occurred to be acceptable to his informants:

(54) 'E lava 'o ako   'e   Pita 'a   e   lea   faka-Tonga.
    uns can 'o learn ERG Pita ABS the language Tongan
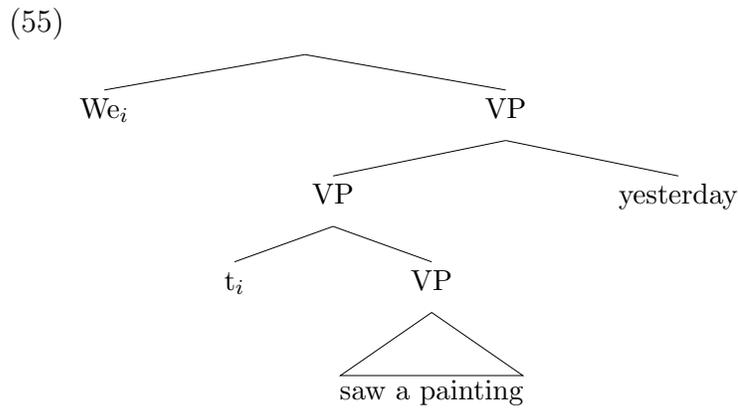 'Pita can learn Tongan'

<div align="right">(Hendrick, 1997)</div>

This difference can be integrated into the theory of covert movement. In this hypothesis, movements are either *overt* or *covert*, depending on whether they occur before or after *Spell-Out*. There appears to be some variation in the Tongan speech community as to whether raising is overt or covert. While it seems clear that the majority of Tongan speakers move the DP overtly, some speakers appear to allow movement after *Spell-Out*. This option will yield structures with *'o* rather than *ke* because raising has applied, but there will be no surface effect of the covertly moved element.
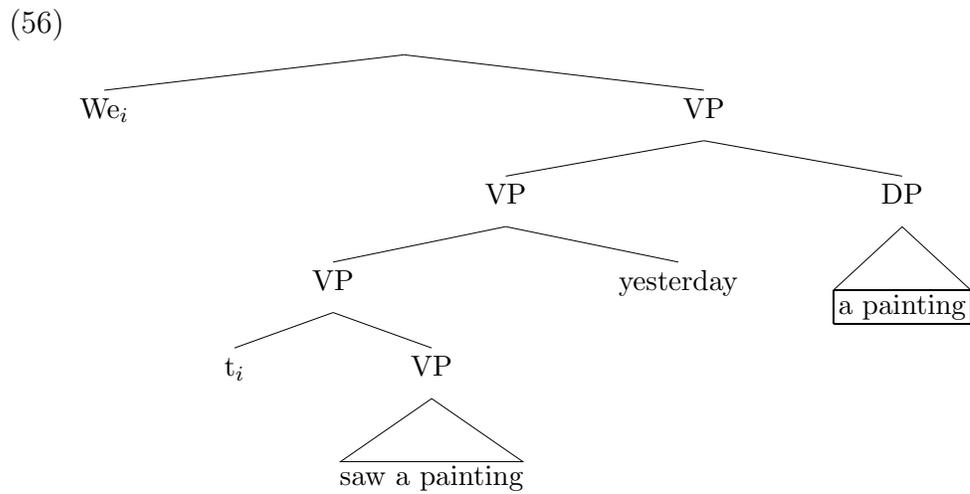
A similar process has been argued by Fox (2003) to occur in English Extraposition. He shows that sentences such as *We saw a painting yesterday by John*, which have an 'extraposed' adjunct (*i.e. by John*), are derived by covert

movement followed by late merger. In this case, the movement is motivated by quantifier raising. The process proceeds as follows:

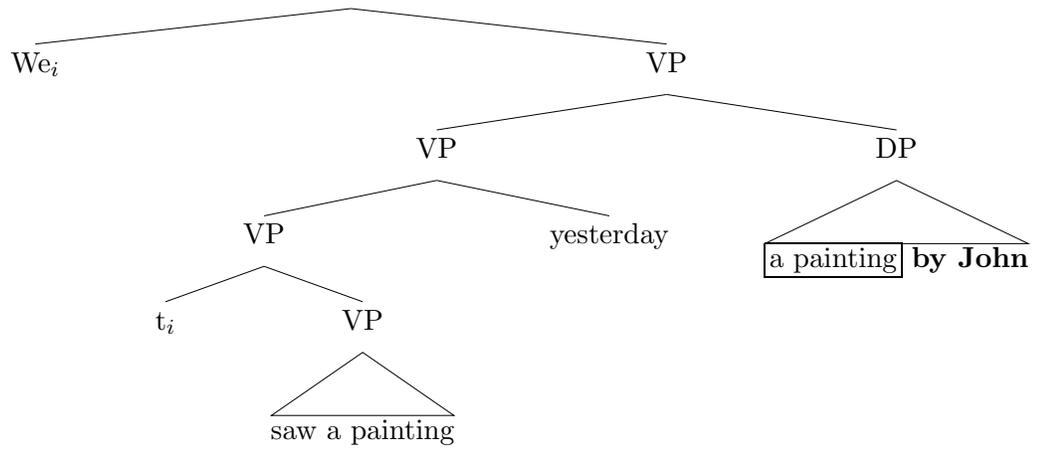The sentence begins without the adjunct:

(55)

```
        ┌──────────┴──────────┐
       We_i                    VP
                      ┌──────────┴──────────┐
                     VP                  yesterday
              ┌───────┴───────┐
             t_i              VP
                        ┌──────┴──────┐
                       saw a painting
```

Next, the DP *a painting* undergoes covert QR (to the right) to VP:

(56)

```
        ┌────────────┴────────────┐
       We_i                        VP
                          ┌──────────┴──────────┐
                         VP                      DP
                  ┌───────┴───────┐           ┌───┴───┐
                 VP           yesterday      [a painting]
            ┌─────┴─────┐
           t_i          VP
                  ┌──────┴──────┐
                 saw a painting
```

Finally, the adjunct *by John* is merged with the covert DP, thereby producing the extraposition effect:

41

(57)

```
           We_i                        VP
                          VP                       DP
                  VP            yesterday      a painting  by John
              t_i      VP
                   saw a painting
```

Chapter 5

Conclusion

This thesis has argued that Tongan raising is triggered by the properties of the particle *'o*. There are two dialects of Tongan which differ according to the feature on *'o*: Chung (1978) described one dialect, which has a [+D] morphological feature and requires a DP to its left to check the feature. In this dialect, the *Minimal Link Condition* allows only ergative-marked arguments to raise in transitive clauses, as both arguments have the [+D] feature. The other dialect has a [+Focus] morphological feature and requires a DP with the feature [+F] to its left to check the feature. This dialect, whose speakers were described by Hendrick (1997), allows either the ergative- or absolutive-marked DP to raise in transitive clauses. As only one argument is assigned the [+F] feature, the *Minimal Link Condition* does not constrain movement. Thus, the behavior of Tongan raising is predicted by Minimalist theory in that it obeys the Minimal Link Condition and the economy conditions on Movement.

This analysis of Tongan raising is interesting in the wider context of linguistic research in that Minimalist model has been presented that is consistent with the precepts of this Universal Grammar. This is one step closer to a fuller

understanding of Tongan syntax, and how its particular morphological features make it differ from other languages, yet still obeying the innate universals of human language.

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