

Chapter 7

Raising or No Raising?

Tongan has a phenomenon analogous to what has been called raising in Niuean, another Polynesian language that belongs to the Tongic subgroup. In this construction, the embedded clause contains an empty element coreferential with the argument in the matrix subject position, which is arguably a non-theta-position. However, raising in Tongan/Niuean differs from the raising in the ordinary sense in the following respects; a) it involves movement from a case position to another case position, and b) raising of object is also allowed. Considering that raising is generally allowed only from a non-case position to a case position, raising in Tongan should not be permitted. In this chapter, we will study a phenomenon in Tongan that superficially resembles raising. Our data show that raising in Tongan not only is a movement from a case-marked position, but also demonstrates the following peculiar characteristics: a) raising of O is allowed, but that of A is disallowed, and b) a pronominal argument cannot appear in the subject position of the raising verb. We will argue that these peculiar properties of Tongan raising construction suggest that these structures actually do not involve raising at all; rather, it is an instance of operator movement.¹

¹ As Gillian Ramchand and Lisa Travis (p.c.) point out, the lack of subject clitics in the matrix clause does not necessarily argue for an A-bar movement account as against an A-movement account; either

Since raising verbs are a special instance of a subclass of intransitive verbs, traditionally called “unaccusatives”, in §7.1, we will first discuss the characteristics of unaccusatives and consider how unaccusatives are captured in an ergative language. In §7.2, we will discuss how raising is treated in the standard theory. In §7.3, we will study the data of what seems to be raising in Tongan, and point out the problems which the raising analysis fails to account for. There are fundamentally six problems that need be explained: a) it is movement from a case position (hence, unlike English); b) it is movement across the CP boundary (contrary to the arguments of Stowell (1982) and Williams (1986)); c) movement is optional; d) raising of O is also permissible; e) raising of A is disallowed; and f) it does not apply to pronominal arguments. In §7.4, the properties of *ke*-clauses will be discussed. We will argue that the Tongan *ke*-clauses are on a par with what Raposo (1987) calls inflected infinitives. In §7.5, we will consider various accounts of raising in Niuean proposed in the literature (Seiter 1980, 1983; Chung and Seiter 1980; Massam 1985; Levin and Massam 1986, 1988). Having shown that none of the existing approaches satisfactorily accounts for the problems, an alternative account of the problematic phenomenon in Tongan will be proposed in §7.6. Specifically, we will argue that what seems to be raising is actually an instance of operator movement. In this view, A cannot appear in the matrix subject position of the construction in question due to the resumptive pronoun requirement. Prohibition of raising of pronominal arguments is due to the language-specific restriction that clitics must appear in a theta-position. The

way there needs to be some way for the NP in this position to acquire some kind of theta-role. As we will see below, what I call raising verbs here cannot take a thematic subject and that the NP in the matrix subject position of the raising construction must receive a theta-role by predication, i.e., coindexation with an operator. The reason why the subject clitic cannot occur in this position is because the subject clitic cannot be licensed unless it receives an external theta-role in the base generated position.

operator movement analysis assumes that an element in the matrix subject position is base-generated in that position, which is crucially a non-theta-position. Consequently, a pronominal argument cannot appear in that position because (clitic) pronouns in Tongan are licensed by being assigned an external theta-role in the base-generated position (cf. Chapter 6). Finally, in §7.7, we will consider the *tuku*-construction, which is similar to what has been regarded as raising-to-object in Niuean. Altogether, it will be shown that the Tongan constructions analogous to what has been claimed to be raising in Niuean in the literature can be explained better if we do not assume that they involve raising.

7.1 Unaccusatives

Perlmutter (1978) observes that there is a special class of intransitive verbs, whose sole argument is initially generated as an internal argument and call them unaccusatives as opposed to unergatives whose sole argument is base-generated as an external argument. Burzio (1986) argues that an unaccusative verb fails to case-mark its internal argument and fails to theta-mark its external argument. This generalisation explains why the internal argument of an unaccusative verb appears in the surface structure in the subject position, bearing NOM instead of ACC. That is, why we have (7.1a) and not (7.1b) or (7.1c).

- (7.1) a. I_i arrive t_i .
 b. * e arrive me.
 c. *It arrives me.

Due to the EPP, which requires the subject position to be filled, (7.1b) is ruled out. The sentence (7.1c) with an expletive *it* in the subject position is also banned because the internal argument will then be left caseless, violating the Case Filter. The caseless internal argument raises to the subject position, which is a non-theta position (otherwise the Theta Criterion would be violated) and a case position, where its case feature is checked off.

Burzio's generalisation accounts for the generation of unaccusative constructions in an accusative language. However, note that in an ergative language the subject of an intransitive verb consistently appears in ABS, which is assumed to be the case assigned to O, the internal argument. See the Tongan example below.

- (7.2) a. Na'e lava 'a e vaka.
 Pst arrive ABS def boat
 "The boat arrived."
 b. Na'e langa 'e Sione 'a e vaka.
 Pst build ERG Sione ABS def boat
 "Sione built the boat."

It should be noted that Burzio's generalisation that unaccusative verbs do not have case assigning ability becomes irrelevant in the active Agr approach, which the current study assumes. Since it is assumed that case features are checked by Agr, the internal argument of an unaccusative verb successfully checks off its case feature in the Spec position of Agro, which is the active Agr in the given system. A crucial assumption is that in an unaccusative construction, the external argument position, [Spec, VP] is not generated, thus it counts as intransitive, activating only one Agr instead of two. Similarly, in accusative languages, the fact that the subject appears in NOM can be accounted for by the assumption that the active Agr is Agrs in these

languages. As a result, the sole argument, whether generated as an internal argument or an external argument, will receive NOM.

It should be mentioned that the latest minimalist approach fails to account for the fact that in ergative languages, the subject of unaccusative verbs appears in ABS. S generated as an internal argument cannot check off its case feature with V because an unaccusative V by definition lacks case feature. In order to ensure that S of an unaccusative verb appears in ABS, one need to abandon the assumption that unaccusative verbs fail to assign case. Consequently, a coherent definition of unaccusative verbs is lost. In accusative languages, unaccusatives must lack case features, so that S appears in NOM, not ACC, whereas in ergative languages, we must assume that unaccusative verbs bear case feature [ABS]. We therefore argue that the active Agr hypothesis has an advantage over the bare phrase structure approach.

Based on the fact that S receives ABS in ergative languages, some suggest that all intransitive verbs in ergative languages are unaccusative. Levin (1983b), for example, shows that all intransitive verbs in Basque in fact belong to the unaccusative class. Basque is generally regarded as an ergative language with a split, marking some S's in ERG. However, Levin argues that Basque is actually an accusative language, marking the subject of unaccusative verbs in ACC, simply reflecting the fact that it is generated as an internal argument.² Granted that Levin's argument may hold with regard to

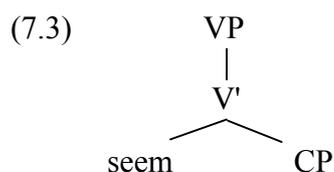
² In fact, Levin's (1983) argument may be applicable to the so-called "active ergative" languages, which mark the subject of unergative verbs in ERG and that of unaccusative verbs in ABS. Bobaljik (1993), on the other hand, argues that in active ergative languages, an unergative verb is treated as a transitive with an abstract cognate object in the complement position, thus retaining the hypothesis that S of unergative verbs bears ERG rather than S of unaccusative appears in ACC. Adopting the proposal of

Basque, not all languages with ergative case marking allow S to appear in ERG. For example, in Tongan, S is invariably marked as ABS including arguably unergative (i.e., volitional) verbs such as *kai* (“to eat”). Therefore, it is inappropriate to claim that all intransitive verbs are unaccusative in Tongan. On the contrary, empirical evidence suggests that most of the intransitive verbs in Tongan are unergative. As discussed in Chapter 6, alienable possessive pronouns and subject clitics occur exclusively with an external argument. These rules predict that the sole argument of unaccusatives cannot be a referent of a SCL or alienable pronoun. Intransitive verbs except for a few aspectual verbs and one-place predicates taking a sentential complement fail to pass these unaccusative tests. Thus, we conclude that unaccusatives in Tongan include aspectual verbs such as *kamata* (“to begin”) and *‘osi* (“to finish”) and one-place predicates such as the negative *‘ikai* and *pau* (“to be determined”), which obligatorily take a sentential complement.

7.2 Raising

Raising verbs form a special subset of unaccusative verbs. It should be noted that the membership in this class is extremely limited. In other words, raising is a rare syntactic phenomenon. Raising predicates typically take a sentential complement and no thematic subject. We assume the phrase structure (7.3) below for the raising verb.

Hale and Keyser (1993), Bobaljik argues that the operation normally taking place in the lexical syntax takes place at the overt syntax in active ergative languages.



The subject position is arguably non-theta position, for an expletive may appear in this position, as illustrated in (7.4a) below. The appearance of the expletive *it* is forced by the EPP.

- (7.4) a. It seems [that John likes rugby].
 b. John_i seems [to *t*_i like rugby].
 c. *It seems [to John like rugby].
 d. *John_i seems [that *t*_i likes rugby].

Some raising verbs may also take an infinitival clause as the complement. However, in this case, the embedded subject moves up to the matrix subject position as illustrated in (7.4b). This movement is obligatory due to the Case Filter; because the infinitival T cannot assign case, the embedded subject would remain caseless inside the embedded infinitival clause. For this reason, (7.4c) is ruled out. Therefore, the argument moves out of the embedded clause to the matrix subject position where it can check off its case feature. Note that raising out of the tensed clause is disallowed, as illustrated by (7.4d). The ungrammaticality of (7.4d) confirms that arguments cannot move from a case-marked position.

In terms of the active Agr hypothesis, we may assume that [–tense] clauses do not project Agrs (i.e., the Agr projection that is associated with T)³. Accordingly, the subject NP, which would fail to check its case feature, needs to undergo raising to the

matrix [Spec, Agrs] position in order to save the derivation. Raising is a movement driven by case reasons. Consequently, raising of objects is forbidden. Since infinitival clauses contain Agro (where applicable), the object can always check its case features inside the embedded clause. Raising from a case-marked position is prohibited as illustrated in (7.5) below.⁴

(7.5) a. It seems [that John likes Mary].

b. *Mary_i seems [to John like t_i].

To summarise, raising involves movement from a caseless position to a case position, which at the same time is not a theta-position. These two conditions are a consequence of the chain condition (Chomsky 1981, 1986b) that requires an (A-)chain to contain a unique theta-position and a unique case position.

7.3 Data: raising in Tongan

In this section, we will consider some Tongan data that demonstrate the construction analogous to what has been called raising in Niuean.⁵ Our data show the following two curious facts about Tongan: a) raising applies to only S/O but not A, showing an

³ However, as we will see shortly, it is a parametric choice. For example, Portuguese has a type of infinitival clause which arguably contains Agrs (Raposo 1987).

⁴ In Relational Grammar, Postal (1974) observes the same restriction on raising: namely, only subjects may undergo raising.

⁵ It should be mentioned that the phenomenon which our data exemplify has been overlooked in the literature. For example, Chung (1978: 153) argues that “raising is governed by a single verb, *lava*, and is not triggered by other modal, negative, or aspectual verbs”. Specifically, Chung argues that a) *lava* allows raising of S/A from *ke*-clauses and that b) raising changes *ke* into ‘*o*. However, contrary to her claim, our data show that verbs like *totonu* permits raising, which is more similar to that of Niuean: raising of O is also allowed, and *ke* remains *ke*. Problems with Chung’s analysis of *lava*-‘*o* construction are discussed in Chapter 5.

ergative pattern and b) it does not apply to pronominal arguments. These with other peculiar facts lead us to question the very assumption that the construction in question involves raising.

7.3.1 Ergative pattern

A few verbs in Tongan, such as *totonu* (“to be advisable”) and *ngalingali* (“to seem”), occur in a construction that is analogous to what has been called raising in Niuean. These verbs take a sentential complement and the subject position does not contain any overt element. See (7.6) below.

- (7.6) a. ‘Oku totonu *pro* [ke ‘alu ‘a Sione].
 Prs advisable that go ABS Sione
 “It is advisable that Sione go.”
- b. ‘Oku totonu *pro* [ke tuku ‘e Sione ‘a e ngaau].
 Prs advisable that stop ERG Sione ABS def work
 “It is advisable that Sione stop the work.”

Granted that the EPP applies universally, we assume that the subject position of the sentences in (7.6) is occupied by a null expletive *pro*.⁶ These verbs optionally allow raising of an embedded argument, as illustrated by (7.7) below.⁷

- (7.7) ‘Oku totonu ‘a Sione_i [ke ‘alu *t_i*].
 Prs advisable ABS Sione that go
 “Sione had better go.”

However, this derivation is problematic in the following respects. First, note that the embedded clause is introduced by the same element *ke* in both (7.6) and (7.7), indicating that there is no difference with respect to finiteness of the embedded clause. This makes the grammaticality of (7.7) puzzling, because (7.6) clearly shows that S/O

⁶ See Chapter 3 for discussion on the null expletive in Tongan.

as well as A can check its case feature inside *ke*-clauses. Given (7.6), raising out of *ke*-clauses should be banned, as it necessarily involves movement from a case position. Secondly, raising is optional in this case. In contrast, in English raising is compulsory (with infinitives) due to the Case Filter. Thirdly, as illustrated in (7.8) below, O may undergo similar optional raising. As mentioned above, it is acknowledged that raising of O is universally banned because O is always case-marked in the embedded clause.

- (7.8) a. ‘Oku totonu *pro* [ke taa’i ‘e he faiako ‘a e tamaiki pau’u].
 Prs advisable that hit ERG def teacher ABS def children naughty
 “It is advisable that the teacher hit the naughty children.”
- b. ‘Oku totonu ‘a [e tamaiki pau’u]_i [ke taa’i ‘e he faiako *t_i*]
 Prs advisable ABS def children naughty that hit ERG def teacher
 Lit. “The naughty children are advisable that the teacher hit.”

Considering that raising of S already involves movement from a case-marked position in Tongan, the fact that raising of O is permitted is not so surprising. Nevertheless, some explanation is in order. What is even more puzzling is the fact that raising of A is prohibited. Thus, for example, it is impossible to derive (7.9) from (7.8a). Raising of A results in ungrammaticality.

- (7.9) *‘Oku totonu ‘a e faiako_i [ke taa’i *t_i* ‘a e tamaiki pau’u].
 Prs advisable ABS def teacher that hit ABS def children naughty
 “The teacher had better hit the naughty children.”

(7.9) is ruled out not because the embedded A appears in ABS in the target position. Even if the raised A is preceded by the ERG-case marker, the sentence is still considered ungrammatical, as illustrated by (7.10) below.⁸

⁷ It should be noted that native speakers consider (7.6a) by far preferable than (7.7), in which the embedded S appears in the matrix subject. Thus, although (7.7) is not considered ungrammatical, it is a highly marked construction and rarely used in ordinary conversation.

⁸ It should be noted that native speakers consider (7.9) relatively more acceptable than (7.10). More importantly, native speakers find the ERG case marker in (7.10) absolutely unacceptable. This judgement confirms that the raised argument receives case in the target position, and not in the embedded clause.

- (7.10) *‘Oku totonu ‘e he faiako_i [ke taa’i t_i ‘a e tamaiki pau’u].
 Prs advisable ERG def teacher that hit ABS def children naughty
 “The teacher had better hit the naughty children.”

Some may argue that the raising of A is illicit because of the case conflict. A requires ERG, but ERG cannot be assigned in the target position, [Spec, Agro] of the matrix clause. As a result, derivation crashes. However, even this account needs to explain why raising of an argument from a case-marked position is permitted at all. Finally, it should be noted that the data show that raising applies exclusively to ABS-argument (i.e., S/O). This could be regarded as another example of syntactic ergativity in Tongan. In our attempt to account for the puzzling data of raising in Tongan, we need to consider why raising shows an ergative pattern, rather than allowing any argument to undergo raising.

7.3.2 Raising of pronouns

Another peculiar fact about raising in Tongan is that it does not apply to pronominal arguments. Thus, (7.11b) with a clitic pronoun in the matrix subject position is ungrammatical, while the pre-raising structure (7.11a) is grammatical.

- (7.11) a. ‘Oku totonu *pro* [ke u ‘alu].
 Prs advisable that 1.s. go
 “It is advisable that I go.”
- b. *‘Oku ou_i totonu [ke t_i ‘alu].
 Prs 1.s. advisable that go
 “I had better go.”

As we would expect, raising of pronominal A is disallowed as well.

(7.12) a. ‘Oku totonu *pro* [ke u tuku ‘a e ngaau].
 Prs advisable that 1.s. stop ABS def work
 “It is advisable that I stop the work.”

b.*‘Oku ou_i totonu [ke t_i tuku ‘a e ngaau].
 Prs 1.s. advisable that stop ABS def work
 “I had better stop the work.”

Note that in Tongan subject pronouns are clitics adjoined to T. Thus, sentences like (7.11a) and (7.12a) confirm that *ke*-clauses contain some tense element, to which a clitic may attach.

On the other hand, as we argued in Chapter 6, pronominal objects are not clitics. When a pronoun appears in the position immediately after the verb, we assume that the optional pronoun incorporation has applied: the incorporated pronoun has undergone the V-to-C movement along with the verb. (7.13) shows that raising of O is also prohibited.

(7.13) a. ‘Oku totonu *pro* [ke taa’i koe ‘e he faiako].
 Prs advisable that hit 2.s. ERG def teacher
 “It is advisable that the teacher hit you.”

b.*‘Oku totonu koe_i [ke taa’i t_i ‘e he faiako].
 Prs advisable 2.s. that hit ERG def teacher
 “You are advisable that the teacher hit.”

It should be noted, however, that if the raised pronominal O is preceded by a case-marker, the sentence becomes slightly acceptable, although it is still quite marginal.

(7.14) [?]‘Oku totonu ‘a kinautolu_i [ke taa’i t_i ‘e he faiako].
 Prs advisable ABS 3.pl. that hit ERG def teacher
 Lit. “They are advisable that the teacher hit.”

Similar effect obtains with regard to pronominal S. If pronominal S is realised as an independent pronoun and appears with a case marker, the acceptability of the sentence improves.⁹

(7.15) ⁹Oku totonu ‘a kinautolu_i [ke t_i ‘alu].
 Prs advisable ABS 3.pl. that go
 “They had better go.”

In brief, the data show that raising of clitics is strictly banned, while that of independent pronouns is relatively more acceptable.

In the subsequent sections, we will attempt to account for the aforementioned problems concerning raising in Tongan. As mentioned above, similar kind of raising from a case-marked position is also found in Niuean. Therefore, some Niuean data will also be included in our discussion.

7.4 *Ke*-clauses

So far, we have not defined the status of *ke*-clauses in Tongan. We have observed that *ke*-clauses are on a par with finite clauses in that case (both ABS and ERG) can be assigned inside *ke*-clauses. Assuming the active Agr model, the fact that ERG is assigned in *ke*-clauses means that they contain Agrs. In addition, the fact that pronominal clitics may also appear in *ke*-clauses suggests that *ke*-clauses must contain

⁹ Note that raising of pronominal S/O in this sense is definitely more acceptable with dual and plural pronouns, i.e., pronouns whose forms are not mono-morphemic. I suspect that it is because the rule of pronoun incorporation hardly applies to the dual and plural pronouns, while it almost obligatorily applies to singular pronouns.

a T-element, to which clitics may attach. However, the latter speculation is problematic because apparently *ke*-clauses do not contain a regular tense marker. Lack of tense marker in turn suggests that *ke*-clauses are infinitives. In short, *ke*-clauses exhibit properties that are characteristic of finite clauses as well as those characteristic of infinitives. It is necessary to clarify the status of *ke*-clauses in analysing the raising construction in Tongan, for a crucial factor that motivates raising is ascribed to the finiteness of the clause. In this subsection, we will discuss the properties of *ke*-clauses. We will argue that the Tongan *ke*-clauses are equivalent to inflected infinitives in Portuguese (Raposo 1987): they are infinitives in the sense that T is [–tense], while at the same time they contain agreement, both A_{grs} and A_{gro}.

7.4.1 Properties of *ke*-clauses as infinitives

Tongan *ke*-clauses behave like infinitives in the following respects. First, *ke*-clauses do not contain a regular tense marker; they are [–tense] in that they are not specified for a particular tense. Temporal interpretation of *ke*-clauses is determined by the matrix verb. With control verbs, tense of *ke*-clauses is interpreted as “unrealised” in the sense of Stowell (1982). With raising verbs, tense of *ke*-clauses is understood to be in the same time frame as that of the matrix clause. This kind of temporal interpretation is typical of infinitival clauses. In this respect, T of *ke*-clauses contains a kind of tense anaphora, which is somehow linked to the matrix tense. Secondly, *ke*-clauses allow a null subject, which appears to be PRO.¹⁰ See (7.16) below.

¹⁰ See Chapter 10 for analysis of control constructions in Tongan. It is not entirely clear whether or not the null subject in (7.16) is indeed PRO. Here we tentatively assume that it is, given the examples like (i) below, in which first person singular pronoun is the antecedent of the null subject. As we discussed in Chapter 4, in Tongan only third person singular pronoun may be *pro*. Thus, the empty category in (i) is most likely to be PRO, because the sentence would be ruled out otherwise.

- (7.16) a. ‘Oku loto ‘a Sione [ke PRO ‘alu].
 Prs want ABS Sione that go
 “Sione wants to go.”
- b. Na’e feinga ‘a Sione [ke PRO langa ‘a e fale].
 Pst try ABS Sione that build ABS def house
 “Sione tried to build the house.”

In the standard theory, it is assumed that PRO is allowed only in the subject position of infinitives. Therefore, sentences like (7.16a,b) strongly support the view that *ke*-clauses are infinitival.

7.4.2 Properties of *ke*-clauses as finite clauses

Ke-clauses, however, also show some properties that are characteristic of finite clauses.

For example, *ke*-clauses may contain an overt subject. See (7.17) below.

- (7.17) a. ‘Oku loto ‘a Sione [ke ‘alu ‘a Mele].
 Prs want ABS Sione that go ABS Mele
 “Sione wants Mele to go.”
- b. ‘Oku totonu [ke ‘alu ‘a Sione].
 Prs advisable that go ABS Sione
 “It is advisable that Sione go.”

In (7.17a), the *ke*-clause contains an overt subject *Mele* instead of PRO. (7.17b) is an example of a raising verb. Note that crucially, ERG is also assigned in *ke*-clauses.

- (7.18) a. ‘Oku loto ‘a Sione [ke tuku ‘e Mele ‘a e ngaau].
 Prs want ABS Sione that stop ERG Mele ABS def work
 “Sione wants Mele to stop the work.”
- b. ‘Oku totonu [ke tuku ‘e Mele ‘a e ngaau].
 Prs advisable that stop ERG Mele ABS def work
 “It is advisable that Mele stop the work.”

(i) ‘Oku ou loto [ke PRO ‘alu].
 Prs 1.s. want that go
 “I want to go.”

In the standard theory, ERG is assigned by [+tense] T. The fact that ERG is assigned inside the *ke*-clause indicates that the clause is finite, containing [+tense] T. Given the active Agr hypothesis, *ke*-clauses in (7.18) must contain Agrs, in which ERG is assigned.

In addition, verbs inflect for agreement in *ke*-clauses. In Tongan, only few intransitive verbs show agreement in number. *Ha'u* (“to come”) is such an exceptional verb. It agrees with the subject in number, with the plural form being *oo mai*. In (7.19) below, the embedded verb shows agreement with the embedded subject.¹¹

- (7.19) ‘Oku totonu [ke oo mai ‘a e tamaiki].
 Prs advisable that come pl. ABS def children
 “It is advisable that children come.”

This is unexpected if *ke*-clauses are infinitives. Verbs do not inflect in infinitival clauses while in finite clauses agreement is mandatory. Consider the English examples in (7.20).

- (7.20) a. John wants [to go/*goes].
 b. John goes/*go.

These properties of *ke*-clauses seem to suggest that they are in fact finite.

¹¹ Seiter (1983:326) cites the following examples to show that Niuean *ke*-clauses also contain Agr. See (i) below.

- (i) a. Kua kamata tuai e tagata naa [ke hake motokaa].
 Perf begin Perf ABS person that ke go-up car
 “That person has begun to go up by car.”
 b. Kua kamata tuai e tau tagata naa [ke oo hake motokaa].
 Perf begin already ABS pl. person that ke pl. go-up-pl. car
 “Those people have begun to go up by car.”

7.4.3 The subjunctive analysis

The data presented above suggest that Tongan *ke*-clauses are both finite and infinitival. Similar properties are shared by *ke*-clauses in other Polynesian languages such as Niuean (Seiter 1983, Chung and Seiter 1980) and Pukapukan (Chung 1977). Traditionally, the Polynesian *ke*-clauses are regarded as subjunctive clauses, with *ke* analysed as the subjunctive marker. It seems that the term “subjunctive” has been used because *ke*-clauses could be understood as both finite and infinitive, as shown above. As for Tongan, Churchward (1953) calls *ke* “prospective or forward-looking” conjunction. Churchward’s insight shares our observation that *ke*-clauses have the unrealised temporal interpretation.

7.4.4 Inflected infinitives

Given the fact that *ke*-clauses permit PRO in the subject position, we would like to keep the assumption that *ke*-clauses are infinitival. On the other hand, we need to account for the problematic fact that an overt NP may also appear and be case-marked in the same position. Raposo (1987) points out that a similar construction exists in European Portuguese, and shows that what he calls inflected infinitives in European Portuguese contain Agr(s) despite its lack of tense. Generally, if a clause lacks tense it also lacks agreement features (e.g., English infinitives). Raposo argues, however, that lack of tense does not necessarily entail lack of agreement. This is what we find in European Portuguese. See (7.21) below. The embedded verb shows agreement with the embedded subject, but does not inflect for tense.

(7.21) European Portuguese (Raposo 1987: 86)

- a. Será difícil [eles *aprovarem* a proposta].
“It will be difficult they to-approve-Agr the proposal.”
- b. Será difícil [PRO *aprovar* a proposta].
“It will be difficult to-approve the proposal.”
- c. *Será difícil [eles *aprovar* a proposta].
“It will be difficult they to-approve the proposal.”

Note that European Portuguese also has non-inflected infinitives, which do not allow an overt element to appear in the subject position, as illustrated by (7.21c) above. The inflected infinitive form cannot be used in finite clauses, as illustrated by (7.22a) below. (7.22b) shows that the correct inflection is *-vam* in finite clauses.

(7.22) European Portuguese (Raposo 1987: 86)

- a. *Será difícil [que eles *aprovarem* a proposta].
“It will be difficult that they to-approve-Agr the proposal.”
- b. Eles *aprovam* a proposta.
“They approve the proposal.”

Thus, the inflected form *-varem* is used exclusively for a certain type of infinitives. Raposo argues that the overt subject receives case inside the infinitival clause; since adjectives are not case-assigners in Portuguese, ECM is not possible in structures such as (7.22a). Raposo proposes that Agr in the inflected infinitives assigns case in place of the absent [+tense] T. In terms of the active Agr model, this means that Agrs checks off the case of NP. As we have argued earlier in this chapter, presence of T (or absence thereof) is irrelevant to case assignment to an argument. It is thus assumed that uninflected infinitives do not project Agrs.¹²

¹² On the other hand, an empty subject is also allowed in the inflected infinitives. Raposo (1987) claims that the empty category subject in the inflected infinitives is *pro*, and not PRO. See (i) below.

(i) Será difícil [*e* *aprovarem* a proposta]
We will return to this point in Chapter 10.

Clauses of a similar sort are also found in Modern Greek (*oti*-clauses) and Romanian (*șă*-clauses) (cf. Watanabe 1993a,b). Such clauses are analysed as subjunctive in the literature, yet the mystery remains as to why the empty subject (presumably PRO) is permitted in these clauses. Watanabe (1993a,b) argues that what is allowed in the subject position depends on the contents of tense of the embedded clause. Watanabe proposes that tense of these clauses is richer than that of infinitives but more deficient than that of indicatives, and that as a result, it may license both overt NP and Null subjects.¹³ While the empty subject is assumed to be PRO in this approach, other approaches mostly assume that the empty category subject is *pro*, thus bears case assigned by T, avoiding the problem that the clauses in question allows both overt subjects and PRO.

Given the striking resemblance of *ke*-clauses to the inflected infinitives in European Portuguese, we follow Raposo's (1987) analysis that these clauses lack tense, but crucially contain Agr projection(s). As mentioned above, the embedded verb shows agreement, indicating that Agr exists in *ke*-clauses. T contains a tense anaphor, which itself is [-tense] and dependent on the matrix tense for its temporal interpretation. Case is checked by Agr: ABS is checked by Agro, and ERG, by Agrs.¹⁴ In the subsequent discussion, we assume that *ke*-clauses are inflected infinitives.

¹³ To be precise, Watanabe (1993a,b) proposes that tense of such clauses is associated with both NOM and Null, and that whether a particular clause allows an overt subject or PRO is determined by the feature checking by C. See Chapter 10 for more details.

¹⁴ We leave open the question of whether the empty subject is PRO or *pro*. Control phenomenon in Tongan is discussed in Chapter 10.

Finally, note that we also assume that *ke*-clauses are CP's for the following reason. Word order inside *ke*-clauses is VSO. As argued above, we assume that VSO order results from the V-to-C movement. Thus, we consider that the VSO order in *ke*-clauses is also a consequence of the V-to-C movement. Because of this assumption, *ke* cannot be a complementiser, base-generated in C. C must be empty in the base structure so as to serve as a landing site for the T+V cluster. Instead, we propose that *ke* is a tense anaphor, which has a phonetically overt form. The fact that subject clitics appear immediately after *ke* supports this view, for clitics in Tongan attach to T.

7.5 Raising in Niuean

We have observed in §7.3 that raising in Tongan is odd in the following respects. First, raising is optional. Second, arguments move from a case position, which generally is not permissible. Thirdly, raising of O is allowed, while that of A is prohibited. This is contrary to the universal restriction on raising that only subjects may undergo raising.¹⁵ Finally, raising does not apply to pronouns: pronouns cannot appear in the matrix subject position. So far, we have been referring to the phenomenon as raising, because the construction in question is analogous to what has been called raising in Niuean in the literature.¹⁶ In this section, we will consider the

¹⁵ However, note that this generalisation does not exactly apply to ergative languages under the current approach, because ABS-arguments, namely, S and O are governed (i.e., case-marked) inside the embedded clause. Thus, theoretically, raising of S/O is expected to be illegal. Nevertheless, our Tongan data show a reverse situation.

¹⁶ Chung (1977) notes that Pukapukan also exhibits a similar type of optional raising.

Niuean data and various analyses proposed in the literature. It will be shown that none of the existing proposals successfully account for the peculiarity of the data.

7.5.1 Data

Raising in Niuean exhibits the properties similar to those of raising in Tongan: it is a movement from a case marked position, and raising of O is allowed.¹⁷ See (7.23) below.

(7.23) Niuean (Seiter 1980: 158)

- a. Kua kamata [ke hala he tama e akau].
Perf begin that cut ERG child ABS tree
‘‘It began that the child cut the tree.’’
- b. Kua kamata e tama_i [ke hala *t*_i e akau].
Perf begin ABS child that cut ABS tree
‘‘The child began to cut the tree.’’
- c. Kua kamata e akau_i [ke hala he tama *t*_i].
Perf begin ABS tree that cut ERG child
‘‘The tree began for the child to cut.’’

The verb *kamata* takes a sentential complement and a non-thematic subject. As illustrated by (7.23b) and (7.23c), the embedded A as well as O may also appear in the matrix subject position. Sentences like (7.23b) and (7.23c) have been considered as derived as a result of raising (Seiter 1980, 1983; Chung and Seiter 1980; Massam 1985; Levin and Massam 1986, 1988). There has been much discussion concerning (7.23c), in which the embedded O presumably has been raised. As mentioned above, raising of O is universally banned because it is a movement from a case-marked position. Curiously enough, raising of A, (7.23b) has been taken for granted in the

¹⁷ However, as we will see shortly, unlike Tongan, raising of A is allowed in Niuean. Moreover, raising freely applies to pronominal arguments as well.

literature despite the fact that this also involves movement from a case-marked position. As argued above, raising out of *ke*-clauses is problematic, whether the raised argument is S, A or O, because it necessarily involves movement from a case-marked position.

7.5.2 Analyses

Attempts were made to account for the problematic properties of the raising construction in Niuean. However, none of them seem to be empirically tenable or theoretically feasible. For example, Chung and Seiter (1980) propose that raising of O is a consequence of the passive-to-ergative reanalysis, which took place some time ago in the history of the Polynesian languages. The passive-to-ergative reanalysis hypothesis was originally proposed in an attempt to account for the distribution of two types of case marking in the Polynesian languages. It is argued that the Proto-Polynesian had an accusative case-marking system with a passive rule, which alters the underlying O into the surface S and the underlying A into some oblique argument (Chung 1977, 1978; Hohepa 1969).¹⁸ The Proto-Polynesian passive construction was then reanalysed as an ergative construction, with the oblique-marked agent reanalysed as the ERG subject. In this view, ABS-marked O in Niuean was the passive S prior to reanalysis, and being S, it should be allowed to undergo raising. One crucial flaw in this argument is that it overlooks the fact that case is the key factor that forces (or allows) raising. Raising of O is prohibited in accusative languages because O appears

¹⁸ Note that some others argue for the ergative-to-passive reanalysis (Clark 1976, Gibson and Starosta 1990).

in a case position, and not because it is not the subject. Besides, this approach cannot explain why in Tongan raising of A is not possible.

Seiter (1980) argues for the raising analysis as follows. First of all, Seiter gives the following reasons for rejecting the possibility that the argument in the matrix subject position in sentences like (7.23b, c) is base-generated. First if it were base-generated in the matrix subject position, the embedded clause would contain only one argument, and therefore, the sole argument should be marked in ABS. However, in (7.23c), the sole argument appears in ERG. Second, the embedded verb shows agreement with the argument in the matrix subject position. Thirdly, quantifier float is possible: a quantifier modifying the argument in the matrix subject position may appear on its own in the embedded clause. He argues that these facts suggest that the embedded clause must contain an argument that triggers each of these phenomena at some stage of derivation. The null pronoun analysis is also rejected because an overt pronoun cannot appear in the embedded clause in place of the gap.¹⁹ Finally, the PRO analysis is refuted as well. Noting that in Niuean control of PRO applies exclusively to S/A, but not O or oblique objects, Seiter argues that the PRO analysis fails to provide a comprehensive account because a) in Niuean sentences involving verbs such as *kamata* the gap may occur as O as well as S/A, and b) they do not allow oblique objects to be the gap. It is argued that it is impossible to posit a rule, which derives the full range of sentences involving the *kamata*-type verbs. It should be noted that in Relational Grammar, on which Seiter's argument is based, raising is also considered

to apply exclusively to S/O (Postal 1974). Seiter argues that the Niuean data is a counter-example, which suggests that Postal's generalisation should be modified.

Massam (1985) suggests that raising of the type represented by (7.23b) and (7.23c) above involve two cyclic movements. Massam argues that Niuean has a rule that moves an embedded argument to the position adjoined to the embedded clause, which she calls Spec 2. This movement is a kind of scrambling, hence optional. (7.24) below is an example of this type of raising.

(7.24) Niuean (Seiter 1980: 196)

- a. To nakai toka e au [ke kai he pusi e ika].
Fut Neg let ERG 1.s. that eat ERG cat ABS fish
Lit. "I will not let that the cat eat the fish."
- b. To nakai toka e au [e pusi_i [ke kai t_i e ika]].
Fut Neg let ERG 1.s. ABS cat that eat ABS fish
"I will not let the cat eat the fish."

Massam argues that in (7.24), the matrix verb *toka* is a case assigner: it assigns ABS to the complement. Therefore, the moved NP is case-marked in this position, and thus remains there.^{20,21} On the other hand, it is argued that raising verbs such as *kamata* are not case assigners. Consequently, the raised NP is forced to move further up to the matrix subject position in order to satisfy the Case Filter. In this approach, sentence (7.23b) is considered to have the structure (7.25) below.

¹⁹ Note that all of these problems can be solved by the operator movement analysis, which will be discussed shortly. In the operator movement analysis, the embedded clause contains an operator, which acts on behalf of the coindexed argument.

²⁰ In the current approach, what Massam (1985) suggests may be taken as an instance of Exceptional Case Marking. In this view, the raised argument subsequently moves up to [Spec, Agro] of the matrix clause, where it may check off its case feature. However, note that Massam does not assume this subsequent movement.

²¹ Tongan has a corresponding verb, *tuku* ("to leave, let"), which appears in the similar constructions. We will return to this point shortly.

- (7.25) Kua kamata e tama_i [*t*'_i [ke hala *t*_i e akau].
 Perf begin ABS child that cut ABS tree
 “The child began to cut the tree”

The embedded A has undergone two cyclic movements: first to Spec 2 and then to the matrix subject position. Because the movement to Spec 2 is scrambling, it is optional and is applicable to A, S and O.

However, it should be noted that scrambling generally applies after case assignment. Therefore, usually a NP that undergoes scrambling carries its case along. For example, in Japanese, NP's are always accompanied by the same particle indicating its case whether or not scrambling has taken place.

(7.26) Japanese

- a. Taro-ga Hanako-ni hon-o age-ta.
 Taro-NOM Hanako-Goal book-ACC give-Pst
 “Taro gave Hanako a book.”
- b. Hon-o Taro-ga Hanako-ni age-ta.
 book-ACC Taro-NOM Hanako-Goal give-Pst
- c. Hanako-ni Taro-ga hon-o age-ta.
 Hanako-Goal Taro-NOM book-ACC give-Pst

Similarly, in Tongan, case markers appear on the same NP regardless of the word order.²²

- (7.27) a. Na'e tamate'i 'e Sione 'a Taniela.
 Pst kill ERG Sione ABS Taniela
 “Sione killed Taniela.”
- b. Na'e tamate'i 'a Taniela 'e Sione.
 Pst kill ABS Taniela ERG Sione

²² Here we assume that the VOS order is generated as a result of scrambling. See Chapter 8 for discussion.

Therefore, Massam's assumption that the moved argument must be case-marked in the target position by the matrix verb raises a question. Apparently, the moved argument does not carry its case, as the raised argument is always marked in ABS.²³ This fact makes the scrambling hypothesis dubious. Besides, if one were to assume that the raised argument has its case feature checked in the target position, it would be necessary to explain why case features are checked in *ke*-clauses in some cases and not in some others.

In contrast, Yoon (1996) considers that sentences (7.23b,c) and (7.24b) are instances of ECM: the raised NP is in [Spec, Agro] of the matrix clause. Yoon argues that case is assigned in two positions, proposing that a chain may contain multiple case positions as long as each case position is uniquely governed by a case governor. In this approach, the raised NP in (7.24) first receives ERG in the embedded clause and subsequently receives ABS in the matrix clause. Adapted to the feature-checking approach, this means that the NP bears two case features [ABS] and [ERG], both of which need be checked off. Yoon's proposal is motivated by a phenomenon called case-stacking found in languages like Korean and Cuzco Quechua. In Korean, it is possible for an NP to appear with two case-markers, as shown below.

- (7.28) Korean (Yoon 1996: 110)
 Na-eykey-(man)-i paym-i mwusepta.
 I-DAT-(only)-NOM snake-NOM fearful
 "I am afraid of snakes."

²³ Thus, presumably that the following sentences are considered illicit although such data have never been cited in the literature.

- (i) a.* To nakai toka e au [he pusi_i [ke kai *t*_i e ika]]
 Fut Neg let ERG 1.s. ERG cat that eat ABS fish
 b.* Kua kamata he tama_i [*t*'_i [ke hala *t*_i e akau]]
 Perf begin ERG child that cut ABS tree

Case-stacking is allowed if one case is an inherent case and the other is a structural case. Yoon (1996) explains that it is possible because two case-markers occupy different slots. On the other hand, case-stacking is not permissible if two cases are both structural. This is because two case-markers are competing for a single slot. Therefore, only one case may surface. In Niuean, the case assigned on a later cycle has precedence over the one assigned on an earlier one.²⁴ Yoon's analysis, however, fails to account for the sentences like (7.23c), repeated below.

(7.23c) Kua kamata e akau_i [ke hala he tama t_i].
 Perf begin ABS tree that cut ERG child
 "The tree began for the child to cut."

In (7.23c), the raised argument has checked its case in [Spec, Agro] of the embedded clause. It is infeasible that the NP has two [ABS] features that need be checked in different positions. Thus, we have to give up the multiple case-marking analysis as well.

Finally, Levin and Massam (1988) propose another account, arguing that case assignment is optional in Niuean. If it is assigned, the argument is case-marked and therefore raising is not allowed. If, on the other hand, case is not assigned, then the argument moves to the matrix subject position, where it may receive ABS. This seems to account for the optional nature of raising in Niuean. However, their assumption of case assignment being optional is theoretically highly undesirable. As to why raising

²⁴ Incidentally, this analysis provides evidence for the claim that ERG is not an inherent case. Based on the Korean case-stacking data, Yoon (1996) argues that when there is a competition between an inherent case and a structural case, inherent case must always override the structural case: thus, with Icelandic quirky case subjects, inherent case surfaces suppressing the structural NOM. If this hypothesis is correct, whenever there is a competition between ERG and ABS, ERG should override ABS. However, in the Niuean examples, the raised argument consistently appears in ABS, suppressing the case previously assigned, whether ABS or ERG. This in turn suggests that both ERG and ABS are structural cases.

of O is permitted, Levin and Massam (1988) argue that the Binding Conditions A and B (Chomsky 1981) do not apply in Niuean. Note that Levin and Massam (1988) assume that raising of O in general is prohibited due to the Binding Condition A violation.^{25,26} Binding Condition A requires that a NP-trace be bound within its governing category. In the current case, the governing category for the trace is the embedded *ke*-clause. Thus, according to the Condition A, it must be bound by the subject. However, the trace is not bound within its governing category, yet the sentence is considered grammatical. The solution Levin and Massam propose is to assume that Binding Condition A does not apply in Niuean. The weakness of this account is that it allows case feature checking to be optional. It is not clear what determines whether a certain case feature is to be checked or not. In the case of Niuean raising, both ABS and ERG may or may not be checked inside the embedded clause. It is necessary to specify the condition(s) under which case feature checking becomes optional in order to justify this hypothesis.

In summary, despite the attempts to account for the peculiar properties of raising in Niuean, there has not yet been a satisfactory account in the literature. Since we cannot depend on any of the existing analysis to solve the puzzles our Tongan data pose, an alternative solution needs to be sought. In the following section, an alternative analysis is proposed. Specifically, we will argue that the construction in question does not involve raising, but is an instance of operator-movement.

²⁵ Binding Conditions: (A) an anaphor must be bound within its governing category; (B) a pronoun must be free within its governing category; and (C) a R-expression must be free. NP-traces are anaphors. (Chomsky 1981).

²⁶ It should be also noted that in the GB framework, case assignment is also capitulated in terms of government; an argument is case-marked by a case assigner that governs it.

7.6 Operator-movement analysis

The puzzling facts about the Tongan raising data can be accounted for rather elegantly if we assume that the construction in question does not involve raising, but is an instance of operator movement, something similar to the English *easy-to-please* construction.²⁷ See the following example.

(7.29) a. John_i is easy [PRO to please t_i].

b. It is easy [PRO to please John].

At a glance, (7.29a) seems to be derived from (7.29b) by raising the embedded O to the matrix subject position. However, this movement should not be allowed for the reasons mentioned above. Chomsky (1977, 1981) suggests that the correct representation of the sentence “*John is easy to please*” is not (7.29a), but in fact (7.30), which involves movement of an empty operator OP.

(7.30) John_i is easy [OP_i [PRO to please t_i]].

In this analysis, the subject *John* is base-generated in the matrix subject position, and linked to the empty operator in [Spec, CP] of the embedded clause by means of coindexation.

7.6.1 Tongan data

Adopting this analysis, let us propose that the Tongan raising construction have the structure below.

- (7.31) a. 'Oku totonu 'a Sione_i [OP_i [ke 'alu t_i]].
Prs advisable ABS Sione ke go
- b. 'Oku totonu 'a [e tamaiki pau'u]_i [OP_i [ke taa'i 'e he faiako t_i]].
Prs advisable ABS def children naughty ke hit ERG def teacher
- c. *'Oku totonu 'a Sione_i [OP_i [ke tuku t_i 'a e ngaau]].
Prs advisable ABS Sione ke leave ABS def work

In this analysis, an argument in the matrix subject position is base-generated in this position. The biggest puzzle, why raising in Tongan allows movement from a case position, is now solved. There is no NP-movement to begin with. The same reason accounts for the fact that the embedded O may appear in the matrix subject position. It is not an instance of raising of O, but simply an instance of operator movement from the embedded O-position.²⁸

Furthermore, this analysis correctly accounts for the other two peculiar properties of the Tongan raising. First, note that it is assumed that the argument in the matrix position is base-generated in that position and that the matrix subject position is a non-theta position. Since subject clitics in Tongan must be generated in a theta position in order to be licensed, pronominal arguments cannot appear in the subject position of these verbs. As for the independent pronouns, our data show that their appearance in

²⁷Thanks to Gillian Ramchand for bringing this point to my attention.

²⁸Marantz (1984:116) also notes that the argument in the matrix subject position bears an A-bar relation with the embedded constituent, and not A-relation. To use his own terms, it is an s- structure constituent that does not correspond to an l-s constituent.

the matrix subject position is, albeit marginally, acceptable. This is because independent pronouns are not subject to the theta-role constraint.²⁹

Our analysis also explains why (7.31c) is ruled out, in which the matrix subject is linked with the trace of an empty operator in [Spec, Agrs]. As discussed in Chapter 5, the position vacated by operator movement must contain a resumptive pronoun if it is in [Spec, Agrs]. If we assume that the raising in question actually involves operator movement and that the empty category in the embedded subject is a trace, then naturally, the resumptive pronoun rule applies: a trace in A-function must be phonetically realised as a pronoun. On the other hand, a trace in S or O function remains phonetically null. The resumptive pronoun requirement correctly explains why (7.31c) is ruled out while (7.31a) and (7.31b) are fine. (7.32) below supports this account. If a pronoun appears in place of the trace, some native speakers consider the sentence acceptable, or at least somewhat better.

(7.32) ²‘Oku totonu ‘a Sione_i [OP_i [ke ne_i tuku ‘a e ngaau_e]].
 Prs advisable ABS Sione that he stop ABS def work
 Lit. “Sione had better he stop the work.”

The puzzling facts about raising in Tongan can be accounted for if we assume that the structure involves not raising but operator movement. It does not require movement from a case-position. The argument that appears in the matrix subject position is base-generated in that position. It receives a theta-role by a rule of predication, by being

²⁹ Note that a case marker must also be present for appearance of a pronoun to be legitimate. See (7.13b), repeated below. (7.13b) is ungrammatical for the following reason. A pronoun can appear in the position immediately following the verb if it has been incorporated into the verb. However, in (7.13b), incorporation of the pronoun *koe* into the verb *totonu* is impossible.

(7.13b) *‘Oku totonu koe_i [ke taa’i t_i ‘e he faiako].
 Prs advisable 2.s. that hit ERG def teacher
 “You are advisable that the teacher hit.”

coindexed with the operator in [Spec, CP] of the embedded clause. Thus, neither the Case Filter nor the Theta Criterion is violated. Since it is an instance of operator movement, the matrix subject may be coindexed with the embedded O. Because of the language specific rule that requires a trace in the ERG-marked position to be phonetically realised as a pronoun, sentences like (7.31c) are ruled out. Pronominal clitics are disallowed in the matrix subject position of this structure, because they would not satisfy the requirement that they be licensed by being assigned an external theta-role in the base-generated position.

There is another piece of evidence that the *totonu*-construction in question actually involves operator movement. It is known that *wh*-movement is constrained by the leftness condition: a *wh*-trace cannot be coindexed with a pronoun to its left (Chomsky 1976). Consider (7.33) below. (7.33a) is an example of strong crossover (SCO) and (7.33b), weak crossover (WCO).

(7.33) a. *Who_i does he_i say [his_i mother loves *t*_i]?

b. *Who_i does his_i mother love *t*_i?

Koopman and Sportiche (1982) propose that sentences like (7.33a,b) are ruled out due to the Bijection Principle, which requires that every A-bar position locally bind one and only A-position and every variable be locally bound by one and only A-bar position. In (7.33), *who* in an A-bar position binds more than one A-position and therefore, these sentences are ungrammatical. Crossover gives rise to ungrammaticality with regard to *totonu*-constructions, as illustrated by (7.34) below.

- (7.34) a. *Na'e totonu 'a Sione_i [OP_i [ke ne_i pehee [na'e 'ave 'e he'ene_i fa'ee t_i].
 Pst advisable ABS Sione that 3.s. say Pst take ERG his mother
 Lit. "Sione_i was advisable that he_i said his_i mother took (him_i)."
- b. ?Oku totonu 'a Sione_i [OP_i [ke 'ave 'e he'ene_i fa'ee t_i].
 Prs advisable ABS Sione that take ERG his mother
 "Sione_i is advisable that his_i mother take (him_i)."

Although some speakers accept WCO, allowing coreference between *he'ene* and *Sione*, (7.34a) involving SCO is considered totally nonsensical.³⁰ Chomsky (1977) also points out that *wh*-movement observes the complex NP constraint, as illustrated by (7.35b) below.

- (7.35) a. I found a book_i [OP_i [for you to insist that Bill should read t_i].
- b. *I found a book_i [OP_i [for you to insist on the principle that Tom should read t_i].

We find a parallel between the sentences in (7.35) and *totonu*-constructions in (7.36).

- (7.36) a. 'Oku totonu 'a Sione_i [OP_i [ke fakangofua'i 'e Pila 'a Mele [ke 'ave PRO t_i].
 Prs advisable ABS Sione that allow ERG Pila ABS Mele to take
 "It is advisable that Pila allows Mele to take Sione."
 Lit. "Sione is advisable that Pila allows Mele to take."
- b. *'Oku totonu 'a Sione_i [OP_i [ke fakamahino'i 'e Pila 'a Mele
 Prs advisable ABS Sione that convince ERG Pila ABS Mele
 'a e 'aonga [ke 'ave PRO t_i].
 of def importance to take
 "It is advisable that Pila convinces Mele of the importance of taking Sione."
 Lit. "Sione is advisable that Pila convince Mele of the importance of taking."

(7.36a) shows that the structure is an example of A-bar movement. If it were an A-movement, such a long distance movement should be ruled out because it would be an example of super-raising. Thus, we have a strong evidence for the operator-movement analysis. On the other hand, the fact that (7.36b) is ruled out shows that the

³⁰ As we will see in Chapter 10, a pronoun in the *ke*-clause is generally required to be disjoint in reference from a matrix argument. Thus, one may argue that (7.34a) is ruled out due to this disjoint reference requirement rather than because of the strong crossover violation. On the other hand, (7.35) below

totonu-construction does involve movement.³¹ These examples strongly support the operator movement analysis.³²

7.6.2 Niuean data

Note also that our alternative analysis can account for the Niuean data as well. According to the current analysis, the sentences in (7.23) above are assumed to have the following structure.

(7.37) Niuean

- a. Kua kamata e tama_i [OP_i [ke hala *t_i* e akau].
Perf begin ABS child that cut ABS tree
- b. Kua kamata e akau_i [OP_i [ke hala he tama *t_i*].
Perf begin ABS tree that cut ERG child

As illustrated by (7.37a), the position vacated by the operator movement contains a trace instead of a resumptive pronoun in Niuean. This apparent problem is easily resolved if we consider relativisation in Niuean. In Niuean, a relativised argument does not require a resumptive pronoun whether it is S, A or O (Seiter 1980, Chung and Seiter 1980). As illustrated by (7.38) below, occurrence of a (resumptive) pronoun yields ungrammaticality.

strongly supports our hypothesis that the *totonu*-construction is an instance of A-bar movement. I am grateful to Gillian Ramchand and Lisa Travis for bringing this point to my attention.

³¹ Raising from prepositional objects is also possible, though marginal, as illustrated by (i) below.

- (i) [?]Oku totonu ‘a Sione_i [OP_i [ke lea ‘a Mele ki ai_i]].
Prs advisable ABS Sione that speak ABS Mele to there
‘It is advisable that Mele talks to Sione.’
Lit. ‘Sione is advisable that Mele talk to (him).’

(Thanks to Gillian Ramchand and Lisa Travis for bringing this point to my attention).

Note that the trace in PP requires a resumptive pronoun. It seems that a resumptive pronoun somehow degrades the acceptability of the *totonu*-sentences. As shown earlier, raising of ERG-arguments with a resumptive pronoun is equally marginal.

³² Thanks to William O’Grady for bringing this point to my attention.

(7.38) Niuean (Seiter 1980: 94)

- a. e tama [ne hau (*a ia) i Makefu]
 ABS child Nft come ABS he from Makefu
 “the child who comes from Makefu”
- b. ke he tama [ka kai (*e ia) e tau pateta]
 to child Fut eat ERG he ABS pl. potato
 “to the child who is going to eat the potatoes”

Thus, (7.37a) in which *ke*-clause contains a trace coindexed with the matrix subject does not violate any condition in Niuean.³³ Consequently, we may conclude that the operator movement analysis satisfactorily accounts for the Niuean data as well.

Another point to be noted is that pronominal arguments may freely occur in the matrix subject position in Niuean, as illustrated by the following examples. *Maeke* (“to be possible”) belongs to the same verb group as *kamata*.

(7.39) Niuean (Seiter 1980: 165, 180)

- a. Ai maeke a ia_i [OP_i [ke nofo t_i e nofoa nei].
 not possible ABS he that sit ABS chair this
 “He can’t sit on this chair.”
- b. To maeke a au_i [OP_i [ke aahi he kapitiga haaku t_i].
 Fut possible ABS 1.s. that visit ERG friend my
 “It will be possible for me to be visited by my friend.”

Note, however, that the pronoun in the matrix subject position is accompanied by a case marker. Niuean pronouns are independent pronouns, and not clitics, thereby not governed by the theta-role constraint. Therefore, sentences like (7.39a, b) are permissible.

³³ It should be noted that unlike Tongan, Niuean does not have clitic pronouns. Therefore, pronouns are preceded by a case marker in the sentences in (7.38).

7.6.3 Raising-to-object

The operator movement analysis proposed above also provides a satisfactory account for what has been called raising-to-object in Niuean (Seiter 1980, Massam 1985), exemplified by (7.24) repeated below.

(7.24) Niuean (Seiter 1980: 196)

- a. To nakai toka e au [ke kai he pusi e ika].
Fut Neg let ERG 1.s. that eat ERG cat ABS fish
Lit. “I will not let that the cat eat the fish.”
- b. To nakai toka e au [e pusi_i [ke kai e_i e ika]].
Fut Neg let ERG 1.s. ABS cat that eat ABS fish
“I will not let the cat eat the fish.”

Tongan has a corresponding verb *tuku* (“to leave, let”), which takes a *ke*-clause complement with the matrix subject marked in ERG. See (7.40a) below. As illustrated by (7.40b), the embedded subject may appear instead in the matrix object position.

- (7.40) a. Na’e tuku ‘e Sione [ke tangi ‘a e peepee].
Pst leave ERG Sione ke cry ABS def baby
Lit. “Sione let that the baby cry.”
- b. Na’e tuku ‘e Sione ‘a e peepee_i [ke tangi e_i].
Pst leave ERG Sione ABS def baby ke cry
“Sione let the baby cry.”

Sentences (7.24b) and (7.40b) are now understood to have the structure below.

- (7.41) a. To nakai toka e au e pusi_i [OP_i [ke kai t_i e ika]]
Fut Neg let ERG 1.s. ABS cat that eat ABS fish
- b. Na’e tuku ‘e Sione ‘a e peepee_i [OP_i [ke tangi t_i]]
Pst leave ERG Sione ABS def baby ke cry

The operator movement analysis, however, is confronted with one problem: (7.42) below apparently shows that with *tuku*, the argument in the matrix [Spec, Agro] can be coindexed with not only the trace in [Spec, Agro] but also the one in [Spec, Agrs].

- (7.42) ‘Oua ‘e tuku ‘a e kulii_i [ke tuli pehee’i kinautolu e_i].
 Not Fut leave ABS def dog ke chase like-that 3.pl.
 “Don’t let the dog chase them like that.”
 (Churchward 1959: 507)

However, careful investigation proves that this is only an apparent problem. See (7.43) below.

- (7.43) a. *Na’e tuku ‘e Sione ‘a e pusi_i [ke kai t_i ‘a e ika].
 Pst leave ERG Sione ABS def cat that eat ABS def fish
 “Sione let the cat eat the fish.”
- b. Na’e tuku ‘e Sione ‘a e pusi_i [ke ne_i kai ‘a e ika].
 Pst leave ERG Sione ABS def cat that 3.s. eat ABS def fish
- c. Na’e tuku ‘e Sione ‘a e ika_i [ke kai ‘e he pusi t_i].
 Pst leave ERG Sione ABS def fish that eat ERG def cat

My own research reveals two significant facts concerning the native speaker’s judgement on the sentences involving *tuku*. First, my informants consider (7.43a), in which the trace is in [Spec, Agrs], ungrammatical. They all insist that a clitic pronoun *ne* is obligatory in order for the sentence to be acceptable, as illustrated by (7.43b). Secondly, (7.43c), in which the trace is in [Spec, Agro] is definitely much preferred to (7.43b). Their judgement coincides with what the operator movement analysis predicts.

The question is why then (7.42) is permitted. We may argue that the key factor is a feature [\pm human]. As discussed in Chapter 6, personal pronouns cannot be used to refer to a [-human] entity. Therefore, *kulii* (“dog”) is realised as *pro* [3.s.] but not as *ne*.

- (7.43) Ko ‘eku kulii, ‘oku *ne/pro poto.
 Pred my dog Prs 3.s. smart
 “My dog, *he/it is smart.”

Thus, we may speculate that due to this restriction, in (7.42) the resumptive pronoun cannot be *ne*. Instead, we may assume that there is a covert resumptive pronoun *pro*. However, it is impossible to tell from the surface form whether the position contains a trace or a covert resumptive pronoun *pro*. Thus, some speakers exceptionally allow a personal pronoun *ne* as a resumptive pronoun to refer to a non-human entity.³⁴ To conclude, we have shown that the operator movement analysis can account for what has been called raising-to-object as well.

7.7 Summary

In this chapter, we studied a Tongan construction that is analogous to what has been regarded as raising in Niuean. First, we pointed out that the raising analysis is questionable because of the following peculiar properties of the construction in question: a) it involves movement from a case marked position, and b) raising of O is allowed. Having shown that none of the previous approaches satisfactorily accounts for the puzzling Niuean data, we put forth an alternative account, proposing that the construction in question actually does not involve raising but should be considered as an instance of operator movement. In our alternative approach, the construction in question does not involve NP-movement. Thus, it is not necessary to assume that an argument in the matrix subject position has undergone illegitimate movement out of a case-marked position. For the same reason, what has been taken as raising of O is no longer a problem; an argument in the matrix subject position may be coindexed with

³⁴ We could hypothesise that this exceptional use of *ne* has spread and now become obligatory.

an empty operator in the embedded O position. We have also shown that our alternative analysis offers a simple solution to the following puzzling facts about our Tongan data: a) the embedded A argument cannot appear in the matrix subject position, and b) pronominal arguments are excluded from the matrix subject position. We argued that the former is due to the resumptive pronoun constraint. As we have discussed in Chapter 5, in Tongan [Spec, Agrs] requires a resumptive pronoun when it is vacated as a result of operator movement. The latter is explained in terms of the licensing condition on clitic pronouns in Tongan: clitic pronouns in Tongan must be assigned an external theta-role in the base structure (cf. Chapter 6). Since the matrix subject position of the construction in question is a non-theta position, a clitic pronoun cannot be base-generated in that position. It was also shown that the operator movement analysis accounts for what has been claimed to be raising-to-object in Niuean (Seiter 1980, Massam 1985). In this construction, the argument in the matrix object position is coreferential with a null argument of the embedded clause.

To conclude, we have shown that the two constructions analogous to what has been claimed to be raising in Niuean do not involve raising. Raising constructions that exhibit similar problematic properties are also found outside the Polynesian languages. Haitian Creole (Déprez 1992), Modern Greek (Rivero 1986), Romanian (Watanabe 1993a, Williams 1987), and Igbo (Ura 1996) are said to allow raising from a case-marked position. We leave it to future research whether the alternative accounts proposed in the current study can also accommodate these odd instances of raising.