Semantic and pragmatic constraints on Tuvaluan raising*

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Abstract

Tuvaluan, a Polynesian language, has a raising rule that applies to noun phrases bearing any grammatical relation in the subordinate clause and marks these noun phrases for a wide range of grammatical cases in the superordinate clause. This paper first shows that the rule in question is indeed a raising rule. It is then shown that the rule is constrained by semantic factors: it applies only to noun phrases that denote entities that are responsible for bringing about the situation described by the entire sentence. The consequence of this constraint is that raising applies overwhelmingly to subjects and, to a lesser extent, to direct objects, the two grammatical relations that most commonly denote responsible entities. Evidence for this analysis is provided by both elicited and textual data. In natural discourse, raising constructions are similar to raising constructions found in other languages, despite their unusual syntactic characteristics.

Introduction

Traditional accounts of raising maintain that raising may target the subject or the direct object of subordinate clauses and move them to the superordinate clause, where they are marked as either subject or direct object. English subject-to-subject raising, for example, moves the subject noun phrase *John* from the subordinate clause in (1a) to the superordinate clause, thus yielding (1b):[1]

(1) a. It seems [that John is ill].
    b. *John* seems [to be ill].

The other raising rule of English targets the subject of the subordinate clause and moves it to direct-object position in the superordinate clause:

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(2) a. John believes [that Mary is smart].
b. John believes *Mary* [to be smart].

To date, it has been assumed that raising applies universally to the same restricted range of arguments as it does in English. Noonan's (1985) inventory of raising rules across the world's languages includes the following patterns: subject-to-subject, subject-to-object, object-to-subject, and object-to-object (the latter is unattested in English but is found in Irish). Earlier, Postal (1974) restricted raising to subjects of subordinate clauses in universal grammar, arguing that rules that target the direct object of subordinate clauses are of a different nature (arguments and counterarguments to this view are presented in Horn 1985; Postal 1986; and McCloskey 1984).

But certain languages have raising rules that target much broader ranges of arguments. In Tuvaluan, a Polynesian language, raising can target noun phrases of any grammatical role and may assign to the raised noun phrase a wide variety of grammatical cases in the superordinate clause. Tuvaluan raising, which is optional, is illustrated by the following three pairs (the second sentence of each pair is the derived construction):[2]

(3) a. E see mafai loa [o puli ana fooliga i au].
Nps Neg can indeed Cmp forgotten his features to me
b. E see mafai loa *ana fooliga* [o puli i au].
NpsNeg can indeed his features Cmp forgotten to me
'I will never forget what he looked like.'

(4) a. E fakamasaua faeloa nee au ki ei [kee fai fakallei
Nps Cst + remember always Erg I to Anp Sbj do properly
ana aamioga].
his behavior
b. E fakamasaua faeloa nee au ki ei *ki ana aamioga*
Nps Cst + remember always Erg I to Anp to his behavior
[kee fai fakallei].
Sbj do properly
'I constantly remind him that he should watch how he behaves.'

(5) a. Kaati koo oti [ne logo koe [me i au koo see
perhaps Inc finished Pst hear you Cmp Cmp I Inc Neg
fano]].
go
b. Kaati koo oti *koe* [ne logo [me i au koo see
perhaps Inc finished you Pst hear Cmp Cmp I Inc Neg
fano]].
go
'You may already have heard that I will not be leaving.'

This paper seeks to answer the following questions: since Tuvaluan raising is optional, what factors dictate when the rule should apply and when it should not apply? Since raising can target any noun phrase in the subordinate clause, what noun-phrase types are most likely targets and why?

Because this raising rule is typologically unusual, the first section of this paper is devoted to showing that it is indeed a raising rule. In this discussion, I adopt a model of syntax that recognizes the existence of grammatical processes and that pays particular attention to the mapping of case marking onto grammatical relations. After I have established that the rule in question is undeniably akin to the raising rule of better-documented languages, I turn to the semantics and pragmatics of the rule. I show that raising applies to noun phrases that denote entities that are highly responsible in bringing about the situation denoted by the entire sentence. Since responsible entities are most likely to be encoded as subjects and, to a lesser extent, direct objects, raising targets these categories with much greater frequency than it does other grammatical categories. This analysis is supported by two sets of data: a body of elicited contrasts and text counts. The last section of the paper addresses the implications of this study, both for the cross-linguistic characterization of raising rules and for the diachronic development of raising in Polynesian languages.

1. Typological characteristics of Tuvaluan syntax

This section outlines the typological characteristics of Tuvaluan syntax that are relevant to the subsequent discussion. For more detailed discussions of Tuvaluan syntax, the reader is referred to Besnier (i.p.).

The basic order of sentential constituents in Tuvaluan is VSO. Because word order is used to mark pragmatic information like topicality and focusing, many word-order variations are grammatical (Besnier 1986a). Sentences (6a)–(6c) illustrate, respectively, a basic VSO sentence, an OVS structure, and a SV(S)O with an optional postverbal pronominal trace of the subject:

(6) a. Ne ffuti nee au te paala teelaa.
Pst pull Erg I the kingfish that
b. Te paala teelaa ne ffuti nee au.
the kingfish that Pst pull Erg I
c. Au ne ffuti (nee au) te paala teelaa.
I Pst pull Erg I the kingfish that
'I caught that kingfish.'

Subordinate clauses, however, are strictly verb-initial.

Subjects of intransitive verbs and direct objects are marked with the prepositional case marker *a* (when contrastive) or θ, and postverbal subjects of transitive verbs are marked with *nee*, as illustrated in (6a)–(6b) above. Preverbal transitive subjects are marked with θ (or *a*), as illustrated in (6c). Thus case marking follows an ergative-absolutive pattern in verb-initial sentences. In verb-medial sentences, noun phrases are not case-marked, except for the optional (but frequent) ergatively marked postverbal pronominal trace of preposed transitive subjects. Major oblique case markers include *i* and *ki*, which mark a wide variety of semantic roles, including locatives (for *i*), directionals (for *ki*), unaffected patients, causes, and temporals (for both *i* and *ki*):

(7) a. Maatou ne onoono *i* te faatele *i* te maneapa *i* te poo.
we-3 Pst watch at the dancing in the maneapa in the night
'We watched the *faatele*-dancing in the *maneapa* last night.'

b. Au koo kaitaua *ki* toku taina *i* ana aamioga fia sili.
I Inc angry to my sibling because-of his behavior want superior
'I am upset with my brother because of the airs of superiority he puts on.'

Zero-pronominalization is common in Tuvaluan. But, unless the context dictates a different interpretation, zero pronouns are interpreted as denoting third-person entities:

(8) Koo vau.
Inc come
'He/she is coming.'

There are four major types of sentential complements, three of which are relevant here. The first type is marked with the 'all-purpose' complementizer *o* (examples [9a]–[9c] are not raising sentences):

(9) a. Laaua ne olo [*o* maattau (laaua) i motu].
they-2 Pst go Cmp angle they-2 at islets
'They went angling from off of one of the islets.'

The second type is marked with the subjunctive complementizer *kee*:

(9) b. Faiva ne fai mai [*kee* fanatu koe].
Faiva Pst say Dxs Sbj go + Dxs you
'Faiva told me that you should go (and see him).'

Most verbs that can take *o* complements can also take *kee* complements, and vice-versa. However, in *o*-subordinated clauses that are not comple-

ments of raising verbs, one nonoblique noun phrase in the superordinate clause must be coreferential with one nonoblique noun phrase in the subordinate clause. Equi deletion may take place in both types of complex structures. This rule, which is illustrated in (9a), is optionally triggered by a restricted set of verbs (some of which can also trigger raising). It is controlled by either the subject or the direct object of the superordinate clause and deletes either the subject or the direct object of the subordinate clause, as described in Besnier (i.p.). Equi deletion clearly differs from raising, as will be shown presently.

The third complementation strategy, which is associated with a restricted number of verbs, consists in apposing the subordinate clause to the superordinate clause:

(9) c. A kofe koo ffati [ne fai valevale nee tamaliki].
Cnt fishing-rod Inc broken Pst do careless Erg children
'The fishing rods are broken from being handled carelessly by the children.'

Raising can take place in all three types of complex structures.

2. The syntax of Tuvaluan raising

In this section, I support the claim that the rule illustrated in (3a) through (5b) is indeed a raising rule and outline some of its syntactic properties. The raising verb *kkafi* 'to be capable (of doing something)' will be used to illustrate the discussion. Sentence (10a) is a construction to which the rule has not applied, and (10b) is the equivalent sentence to which the rule has applied:

(10) a. E kkafi [o kake Niu ki luga i te niu
Nps capable Cmp climb Niu to top at the coconut-tree
teelaa].
that

b. E kkafi *nee Niu* [o kake ki luga i te niu
Nsp capable Erg Niu Cmp climb to top at the coconut-tree
teelaa].
that
'Niu is capable of climbing to the top of that coconut tree.'

In this section, I refer to the noun phrase that is claimed to undergo raising as 'the Noun Phrase', and to the rule that I claim is raising as 'the Rule'.

Showing that the Rule is a raising rule is a three-step process. First of

all, the Noun Phrase must be shown to originate in the subordinate clause; that is, it must be shown to be treated by some grammatical processes as an argument of the subordinate clause, even though it does not surface in that clause. Second, it must be shown to act as a surface argument of the superordinate clause. Finally, the Rule must be distinguished from equi-deletion rules; in other words, it must be shown that the Noun Phrase does not originate in both the subordinate and the superordinate clauses, to be then deleted in the subordinate clause by a deletion rule under equivalence with a coreferential noun phrase in the superordinate clause.

2.1. *The Noun Phrase originates in the subordinate clause*

Three rules of morphosyntax treat the Noun Phrase as an argument of the subordinate clause, whether or not it appears overtly, thus indicating that the Noun Phrase originates in the subordinate clause.

Quantifier float is the first of these rules. In simple sentences, the noun-modifying quantifier *katoa* 'all' optionally floats from a noun phrase, regardless of its grammatical function in the clause, to become an adverbial modifier of the verb, as illustrated in (11a)–(11b):

(11) a. Tino katoa koo olo ki motu.
people all Inc go to islets
'All the people went to the islets.'

b. Tino koo olo *katoa* ki motu.
people Inc go all to islets
'The people all went to the islets.'

In complex constructions, *katoa* can also float as long as it does so within either the subordinate clause or the superordinate clause. It cannot be launched by a noun phrase in the superordinate clause and be attached to the verb of the subordinate clause. Sentence (11c) is thus ungrammatical because *katoa*, which is attached to the subordinate verb, can only have originated from the only plural noun phrase in the sentence, which is an argument of the superordinate verb:

(11) c. *Ne aumai nee tino te gatu foou [o pei *katoa*
Pst bring Erg people the shirt new Cmp put-on all
nee au].
Erg I
'All the people brought me a new shirt for me to put on.'

Quantifier float is thus clause-bound in Tuvaluan.[3]

In sentences where the Rule has applied, however, the quantifier can be launched by the Noun Phrase within the subordinate clause even though the Noun Phrase does not appear overtly in the same clause. In the following three examples, the only noun phrase from which *katoa* could have originated is the pronoun *laatou* 'they', which appears overtly only in the superordinate clause:

(11) d. E kkafi *nee laatou* [o kkake *katoa* ki luga i te
Nps capable Erg they-3 Cmp climb all to top at the
niu].
coconut-tree
'They are capable of all climbing to the top of that coconut tree.'

e. E kkafi *nee laatou* [o see fakatakavvale *katoa*
Nps capable Erg they-3 Cmp Neg Cst+beaten all
nee au].
Erg I
'They are all capable of not getting beaten by me [at a game].'

f. E kkafi *nee laatou* [o see puli *katoa* taku
Nps capable Erg they-3 Cmp Neg forgotten all my
laauga i ei].
speech at Anp
'They are capable of all not forgetting my speech.'

The above three examples indicate that the Noun Phrase is present in the subordinate clause at some stage in the derivation.

Reflexivization is another process that points to the same conclusion. In Tuvaluan, ordinary nonzero pronouns can be interpreted as reflexive anaphors if they are bound by a clause-mate antecedent. When a reflexive interpretation applies, the emphatic adverb *loa* (here glossed as 'indeed') is frequently added:

(12) a. Ne taa nee Niu a ia loa.
Pst kill Erg Niu Cnt he indeed
'Niu killed himself.'

The one requirement that applies to the reflexive interpretation of a pronoun is that it be a clause-mate of its antecedent. Thus, in the following sentence, if the pronoun *ia* is to be interpreted as a reflexive pronoun, it must be coreferential with its clause-mate *Faagota* and cannot be coreferential with *Niu*, which is not in the same clause:

(12) b. Ne fai mai Niu [kee taa nee Faagota a ia loa].
Pst say Dxs Niu Sbj kill Erg Faagota Cnt he indeed
'Niu told me that Faagota should kill himself/*him.'

In sentences where the Rule has applied, however, a pronoun in the subordinate clause may have a reflexive interpretation even if its antecedent appears overtly only in the superordinate clause:

(12) c. E see tii kkafi *nee ttino* [o puulea
Nps Neg often capable Erg the + person Cmp control
ia loa].
he indeed
'A person is often not capable of controlling himself.'

The rule of reflexive interpretation of pronouns thus indicates that the Noun Phrase is present in the subordinate clause at some stage in the derivation.

Finally, Tuvaluan has a rule of subject–verb number agreement. This rule is lexically governed by some intransitive verbs. When the subject of an agreeing verb is nonsingular (that is, dual or plural), the consonant preceding the stressed vowel of the verb is geminated (a few verbs have suppletive singular and nonsingular forms). Compare the singular form of the verb *saasaale* 'to stroll' in (13a) with its nonsingular form *saassaale* in (13b):

(13) a. Te tamataene koo saasaale i te mataafaga.
the young-man Inc stroll on the beach
'The young man is strolling on the beach.'
b. Tamataene koo saassaale i te mataafaga.
young-men Inc stroll-Agr on the beach
'The young men are strolling on the beach.'

Verbs can only agree with their own subject; agreement cannot be controlled by the subject of a different verb. Thus the following sentence, in which the subordinate verb is made to agree with the subject of the superordinate verb, is ungrammatical:

(13) c. *E iloa nee tamaafine [me i te tamataene
Nps know Erg young-women Cmp Cmp the young-man
koo saassaale i te mataafaga].
Inc stroll-Agr on the beach
'The young women know that the young man is strolling on the beach.'

Significantly, a Noun Phrase that has undergone the Rule can control agreement even though it is not overtly present in the subordinate clause, which suggests that the Noun Phrase is part of the subordinate clause when agreement applies:

(13) d. E kkafi *nee maatou* [o saassaale i te mataafaga].
Nps capable Erg we-3 Cmp stroll-Agr on the beach
'We are capable of strolling on the beach.'

The three grammatical processes described in this section all indicate that, at some stage in the derivation of sentences that have undergone the Rule, the Noun Phrase is an argument of the subordinate clause.

2.2. *The Noun Phrase is a surface argument of the superordinate clause*

Three facts about Tuvaluan morphosyntax provide evidence for treating the Noun Phrase as a surface argument of the superordinate clause: the rule of advancement-to-possessive; the fact that the Rule can apply recursively to multiply embedded structures with raising verbs; and case-assignment rules.

The first process is a rather unusual rule, which I shall refer to as advancement-to-possessive (following Seiter 1980) and which optionally extracts the subject of a relative clause and marks it as a possessive modifier of the head of the relative clause (see Besnier i.p. for further details). Thus, for example, advancement-to-possessive extracts the subject noun phrase *Faagota* from the relative clause in (14a) and turns it into a possessively marked argument of the head noun phrase of the relative clause *te lama*, as in (14b); both versions are grammatical because the rule of advancement-to-possessive is optional:

(14) a. Teenei te lama [ne sseu nee Faagota].
this the swamp-taro-plant Pst hoe Erg Faagota
'This is the swamp-taro plant that Faagota hoed.'
b. Teenei te lama *a Faagota* [ne sseu].
this the swamp-taro-plant of Faagota Pst hoe
'This is the swamp-taro plant that Faagota hoed.'

Advancement-to-possessive cannot extract the subject of an *o*-subordinated clause within a relative clause.[4] In the following example, the subject of the relative clause is extracted across both the clause boundary of an *o*-subordinated clause and a relative-clause boundary, and the result is ungrammatical:

(14) c. *Teenei te puaka *a maatou* [ne aumai nee Luta [o
this the pig of we-3 Pst bring Erg Luta Cmp
faagai]].
feed
'This is the pig that Luta brought for us to feed.'

Yet a Noun Phrase that has undergone the Rule can be advanced to possessive, as illustrated in (14d)–(14e):

(14) d. Temotou fale ko te fale *a te matagi lasi* [seki kkafi
our-3 house Foc the house of the wind big Neg capable
[o fakamalepe ki lalo]].
Cmp Cst + destroyed to bottom
'Our house is the one that the hurricane was not capable of destroying.'

e. Teenei te niu *a Faagota* [ne seki kkafi [o
this the coconut-tree of Faagota Nps Neg capable Cmp
kake i ei]].
climb at Anp
'This is the coconut tree that Faagota was not capable of climbing.'

Since advancement-to-possessive cannot apply to *o*-subordinated clauses within a relative clause, the advanced noun phrase in sentences like (14d)–(14e) cannot be analyzed as having originated in the subordinate clause embedded in the relative clause. Thus it must originate from the superordinate part of the relative clause. Hence, the Noun Phrase is an argument of the superordinate clause when advancement-to-possessive applies.

The second argument for treating the Noun Phrase as a surface argument of the superordinate clause is provided by the fact that the Rule can apply recursively in multiply embedded raising constructions. In the following sentence, both the verb *ttau* 'must' and the verb *kkafi* 'capable of' are raising verbs; when multiply embedded, they can trigger the Rule recursively:

(15) a. Koo ttau *koe* [o kkafi [o kake ki luga i te
Inc must you Cmp capable Cmp climb to top at the
niu teelaa]].
coconut-tree that
'You must be capable of climbing to the top of that coconut tree.'

In the above sentence, the Noun cannot be analyzed as having been raised by *ttau* directly from the doubly embedded subordinate clause, because the Rule is clause-bound with the verb *ttau*, as illustrated by the following ungrammatical sentence:

(15) b. *Koo ttau *koe* [o fanatu au [o ffoo]].
Inc must you Cmp go + thither I Cmp massage
'You must do the necessary for me to come over and massage you.'

Finally, as will be shown presently, case marking is assigned to Noun Phrases primarily by the verb of the superordinate clause in a more or less idiosyncratic fashion. Although the semantic role of the Noun Phrase in the subordinate clause has some effect on the case that is most likely to be assigned to the Noun Phrase in the superordinate clause, the range of case-marking possibilities is determined exclusively by the superordinate verb. This fact implies that the superordinate verb treats the Noun Phrase as one of its arguments.

The three processes described above indicate that the Noun Phrase is treated as an argument of the superordinate clause at some stage in the derivation.

2.3. *The Rule is not a deletion rule*

Theoretically, the Rule could be posited as a deletion rule, which would derive sentence (16b) from (16a) by deleting the noun phrase *Niu* in the subordinate clause under coreference with the Noun Phrase in the superordinate clause:

(16) a. *E kkafi *nee Niu* [o kake Niu ki luga i te
Nps capable Erg Niu Cmp climb Niu to top at the
niu teelaa].
coconut-tree that

b. E kkafi *nee Niu* [o kake ki luga i te niu
Nps capable Erg Niu Cmp climb to top at the coconut-tree
teelaa].
that
'Niu is capable of climbing to the top of that coconut tree.'

However, the Rule differs in fundamental ways from other deletion processes in Tuvaluan. First of all, Tuvaluan has a rule of equi deletion, which is optionally triggered by verbs like *fano* 'to go' and *aumai* 'to bring'. Equi deletion is controlled by either the subject or the direct object of the superordinate clause and deletes either the subject or the direct object of the subordinate clause. In contrast, the Rule targets not only subordinate subjects and direct objects, but noun phrases of any grammatical category, as will be shown presently. Its output also includes noun phrases that are marked as subject, direct object, and oblique arguments of the superordinate verb. Clearly, equi deletion and the Rule have different domains, which suggests that the two rules are of a different nature.

Furthermore, if the Rule were a deletion rule, the following example

would have to be interpreted as having a zero-pronominal subject in the superordinate clause:

(17) a. E kkafi θ [o kake au ki luga i te niu
Nps capable Cmp climb I to top at the coconut-tree
teelaa].
that
'I am capable of climbing to the top of that coconut tree.'

But a zero pronoun is normally interpreted as having a third-person referent (see example [8]). Thus, if the subject of the superordinate clause in (17a) were a zero pronoun, it would have to refer to a third-person entity. As a result, it could not trigger the deletion of the subject of the subordinate clause, since the latter refers to a first-person entity. Yet the Rule can target the subject of the subordinate clause in (17a), as the following illustrates:

(17) b. E kkafi *nee au* [o kake ki luga i te niu
Nps capable Erg I Cmp climb to top at the coconut-tree
teelaa].
that
'I am capable of climbing to the top of that coconut tree.'

A deletion account thus fails to account for grammatical sentences that are clearly derived by applying the Rule. The Rule is thus not a deletion rule, and the subject of the superordinate clause in (17a), if we adhere to the standard treatment of raising, is the subordinate clause.

2.4. *Syntactic properties of Tuvaluan raising*

In 2.1–2.3, it was established that the Noun Phrase is an argument of the subordinate clause at some stage in the derivation, that it is a surface argument of the superordinate clause, and that the Rule is not a deletion rule. The Rule is thus akin to raising rules in other languages. Following are a few properties of Tuvaluan raising.

Tuvaluan raising is triggered by a restricted number of verbs: some aspectual verbs (*kaamata* 'to begin', *maasani* 'usual', *oti* 'finished'), some modal verbs (*kkafi* 'capable of', *mafai* 'possible', *talia* 'allow'), some affect verbs that denote emotions, attitudes, and points of view (*loto* 'to desire', *see tioa* 'no wonder', *taumafai* 'to try'). As illustrated earlier, raising is optional and cyclic.

Some raising verbs can only raise a noun phrase from a subordinate clause to the superordinate clause in which it is directly embedded. With

the raising verbs *ttau* 'must' and *maua* 'to be able to', any attempt to raise a noun phrase across another clause boundary yields ungrammatical results:

(18) a. E ttau [o fai mai nee ia [kee fanatu koe]].
Nps must Cmp tell hither Erg he Sbj go + thither you
'It is necessary for him to say that you should come over.'

b. *E ttau *mo koe* [o fai mai nee ia [kee fanatu]].
Nps must with you Cmp tell hither Erg he Sbj go + thither

But other raising verbs allow raising to take place across another clause. Such is the case of *maasani* 'usual, used to':

(19) a. E maasani [o vau ia [o ffoo au]].
Nps used-to Cmp come he Cmp massage I
'It is usual for me that he comes over to massage me.'

b. E maasani *au* [o vau ia [o ffoo]].
Nps used-to I Cmp come he Cmp massage

Other verbs that allow such long-distance raising include *mafai* 'possible' and a number of aspectual verbs: *tuai* 'not yet', *oti* 'finished', etc. It is unclear why different raising verbs should behave in different ways in this respect.

Long-distance raising is an unusual property of Tuvaluan raising. In English, for example, tough movement has this property, but not raising. The Tuvaluan equivalents of tough-movement verbs, *faigataa* 'difficult' and *faigoofie* 'easy', also trigger a raisinglike movement. This rule does not have any of the distinctive characteristics of English tough movement. In particular, *faigataa*-triggered movement applies to subordinate subjects (which English tough movement does not):

(20) a. E faigataa [o ssali kaleve au].
Nps difficult Cmp tap coconut-toddy I
'It is difficult for me to tap coconut toddy.'

b. E faigataa *au* [o ssali kaleve].
Nps difficult I Cmp tap coconut-toddy
lit.: 'I am difficult to tap coconut toddy.'

The other distinctive characteristic of English tough movement is the fact that it can take place over an intervening clause. This is also the case for movement with *faigataa* in Tuvaluan; but, as we just saw, this feature is also characteristic of some raising constructions. In short, there is no evidence for treating movement with *faigataa* as distinct from raising with other verbs.

All raising verbs can target subordinate noun phrases of any grammatical category (other than possessor and object of comparison). For

example, the verb *ttau* 'must' can raise the subject of an intransitive subordinate clause, thus deriving (21b) from (21a):

(21) a. Koo ttau [o fano Niu].
Inc must Cmp go Niu
b. Koo ttau *Niu* [o fano (ia)].
Inc must Niu Cmp go he
'Niu must be going.'

But it can also raise from the subordinate clause a transitive subject, as in sentence (21c); a direct object, as in (21d); or an oblique argument, as in (21e)–(21f) (for the sake of brevity, the nonraised equivalents of the following sentences are not given):

(21) c. Koo ttau *Niu* [o ssala (nee ia) tena manuia].
Inc must Niu Cmp look-for Erg he his luck
'Niu must go and seek his fortune.'
d. Koo ttau *Niu* [o polopolooki nee ana maatua (a ia)].
Inc must Niu Cmp scold Erg his parents Cnt he
'Niu ought to be scolded by his parents.'
e. Koo ttau *iaa Niu* [o faipati au ki ei].
Inc must at Niu Cmp speak I to Anp
'I must have a word with Niu.'
f. Koo ttau *iaa Niu* [o maua mai se sulu foou moo ia].
Inc must at Niu Cmp get Dxs a loincloth new Ben he
'Niu must be given a new loincloth.'

All other raising verbs can be shown to have the same range of targets. When a noun phrase is raised, it leaves a pronominal trace in the subordinate clause, as illustrated by the above examples. If the noun phrase is a nonoblique argument of the subordinate clause, the trace is optional; if it is an oblique argument, it is obligatory.

In the superordinate clause, the raised noun phrase can be assigned a variety of case markers, the range of which is determined idiosyncratically by the raising verb. Table 1 provides a summary of the range of case-marking possibilities allowed by all major raising verbs. No fewer than 12 different patterns can be identified.

3. Nonsyntactic constraints on Tuvaluan raising

From a morphosyntactic perspective, Tuvaluan raising is constrained by few factors, if any. However, when semantic and pragmatic factors are taken into consideration, raising in Tuvaluan turns out to be a highly constrained rule.

Table 1. *Case marking of raised noun phrases (legend: '+': allowed; '−': disallowed; '?': marginal; 'kee': allowed only if the complementizer is* kee*)*

	nee Erg	θ/*a* Abs	*i* Loc	*ki* Dir	*mo* Com	*ko* Foc
kkafi 'capable'						
mafai 'possible'	+	+	+	−	+	−
iloa 'know how to'						
maua 'able, get to'	+	?	?	−	?	−
kaamata 'begin'	+	+	+	−	+	−
taumafai 'try'	+	+	+	*kee*	+	*kee*
ttau 'must'	−	+	+	*kee*	+	+
see tioa 'no wonder' / *pili* 'close to'	−	+	+	−	+	+
maasani 'usual'	−	+	+	+	+	−
oti, palele 'finished' / *leva* 'a long time ago'	−	+	+	−	+	−
talia 'allow'	−	+	*kee*	+	+	*kee*
gaasolo 'become'	−	+	−	−	+	−
manako, loto 'desire' / *malie* 'agree'	−	−	−	+	+	+
faigataa 'difficult' / *faigoofie* 'easy'	−	+	+	−	+	−

Theoretically, if several noun phrases are present in a subordinate clause, raising may target any one of them and may assign to it one of several case markers in the superordinate clause. In sentence (22a), for example, any of the three arguments of the subordinate clause are potential targets for raising, as illustrated in (22b)–(22d):

(22) a. E maasani [o ave nee Sina te tamaliki ki te
Nps used-to Cmp send Erg Sina the child to the
loomatua].
old-woman
'Sina often sends the child to the old woman.'

b. E maasani *Sina* [o ave te tamaliki ki te loomatua].
Nps used-to Sina Cmp send the child to the old-woman

c. E maasani *te tamaliki* [o ave nee Sina ki te
Nps used-to the child Cmp send Erg Sina to the
loomatua].
old-woman

d. E maasani *te loomatua* [o ave nee Sina te tamaliki
Nps used-to the old-woman Cmp send Erg Sina the child
ki ei].
to Anp

In such cases, there is a semantic constraint that dictates which noun phrase is to be raised and whether raising should apply at all. To be the target of raising, a noun phrase must be semantically 'compatible' with the raising verb, in that it must denote an entity that is responsible for the performance of the action denoted by the entire sentence, or for the inception of the state denoted by the sentence. Contrast, for example, the following sentences:[5]

(23) a. E maasani *toku tagata nei* [o faagai saale nee au
Nps used-to my man this Cmp feed usually Erg I
ki ika ffoou].
with fish fresh
'My friend here is used to being given fresh fish to eat by me.'

b. ?E maasani *taku paipu* [o faagai saale nee au ki
Nps used-to my pipe Cmp feed usually Erg I with
puatolo].
cake-tobacco
'I usually feed my pipe with cake-tobacco.'

These two sentences have the same syntactic structure, in which the direct object of the subordinate clause is raised to the superordinate clause. What makes (23b) infelicitous is the fact that a pipe has, as an inanimate object, no volitional power, and therefore cannot be instrumental in bringing about the state which the sentence refers to. In (23a), in contrast, the entity that experiences the usualness is the referent of the raised noun phrase *toku tagata nei*, and raising can apply.

The animacy of the raised noun phrase is not what is at stake in determining whether a noun phrase can be targeted for raising, as shown by the following contrast:

(24) a. Koo pili *mo te tamaliki teenaa* [o ita au ki ei].
Inc near with the child that Cmp angry I to Anp
'That child is getting to the point where I am getting angry at him.'

b. ?Koo pili (*mo*) *te tamaliki teenaa* [o kilo au ki ei].
Inc near with the child that Cmp look I to Anp
'That child is getting to the point where I can look at him.'

The above two sentences are derived from the following nonraised sentence:

(24) c. Koo pili [o ita au ki te tamaliki teenaa].
Inc near Cmp angry I to the child that
'It is getting to the point where I am getting angry at that child.'

In (24a) and (24b), the raised noun phrase, which is identical in both sentences, denotes an animate entity. Yet sentence (24b) is ill formed, because it is difficult to construct a context in which an individual would be the responsible party in getting someone to being in a position to look at him. In contrast, it is not unusual for an individual to be responsible for making someone else angry; hence sentence (24a) is well formed.

Similarly, volition is not the category at play here. In the following pair, the raised noun phrases denote the same entities, which, perforce, have the same status with respect to volition; but only the first sentence is acceptable:

(25) a. E kkafi *nee ia* [o see fakatakavale nee au].
Nps capable Erg he Cmp Neg Cst + defeated Erg I
'He is capable of not getting defeated by me.'

b. ??E kkafi *nee ia* [o fakatakavale nee au].
Nps capable Erg he Cmp Cst + defeated Erg I
'He is capable of getting defeated by me.'

The unacceptability of (25b) is due to the fact that it is difficult to imagine how an individual could be responsible for being capable of being defeated. The context in which such a sentence would be appropriate would have to be so convoluted that the sentence is almost ungrammatical.

Further evidence for a 'responsibility' analysis of the constraint on raising is provided by example (26). If both Niu and Tekie are equally responsible in performing the action denoted by the subordinate clause in sentence (26a), either noun phrase *Niu* or *Tekie* can be raised, as illustrated by sentences (26b)–(26c), even though they have different grammatical roles in the basic sentence (26a):

(26) a. E kkafi [o taa nee Niu te mutu foou fakatasi
Nps capable Cmp build Erg Niu the canoe new together
mo Tekie].
with Tekie
'Niu is capable of building the new canoe with Tekie.'

b. E kkafi *Tekie* [o taa nee Niu te mutu foou
Nps capable Tekie Cmp build Erg Niu the canoe new
fakatasi mo ia].
together with him

c. E kkafi *Niu* [o taa te mutu foou fakatasi mo
Nps capable Niu Cmp build the canoe new together with
Tekie].
Tekie

Thus the notion of responsibility is what determines whether or not a particular noun phrase can be raised. It is also what determines which noun phrase is the most likely target of raising in a subordinate clause with several arguments, as in examples (22b)–(22d). In such contexts, raising targets whichever noun phrase denotes the entity with the highest degree of responsibility in the action denoted by the entire sentence, whatever grammatical role may be assigned to that noun phrase.

The above constraint on Tuvaluan raising is reminiscent of a constraint on English raising constraints, which Bolinger (1967) labels 'consonance'. According to Bolinger, sentence (27a) is more natural than (27b) because, in the former, the surface relationship between the raising verb *believe* and the raised noun phrase *John* is 'consonant' with the semantic role of *John* in the subordinate clause:

(27) a. I believe *John* [to be telling the truth].
b. I believe *John* [to be telling a lie].

A more natural version of (27b), presumably, would be its nonraised equivalent (27c):

(27) c. I believe [that John is telling a lie].

These examples and others are discussed at greater length by Borkin (1974) and Newman (1981).[6] The constraints on Tuvaluan raising, however, appear to be stronger than consonance in English, in that the acceptability judgments on sentences (27) are considerably more subtle (and perhaps subjective) than Tuvaluan speakers' intuitions about raising in their language.

One consequence of the semantic constraint on Tuvaluan raising is that idiom chunks like the following cannot be raised, because parts of an idiom rarely denote a responsible entity:

(28) a. E see maua [o too taku moe].
Nps Neg get Cmp fall my sleep
'I cannot fall asleep.'
b. *E see maua *taku moe* [o too].

(29) a. See tioa [o fakamatamata Nanumaga ki te
Neg wonder Cmp act-vainly Nanumaga to the
kaulaa felo].
branch-of custard-apple
'No wonder Nanumaga is proud of its Malay custard-apple trees.'
(a metaphor: 'Everyone is entitled to be proud of what one has.')

b. ??See tioa (*mo*) *te kaulaa felo*
Neg wonder with the branch-of custard-apple
[o fakamatamata ki ei Nanumaga].
Cmp act-vainly to Anp Nanumaga

The ill-formed status of the raised sentences (29b) and (30b) contrasts with the pattern found in English and other languages, where raising can target idiom chunks.

The semantic constraint on raising, however, does not appear to apply with equal strength to all noun-phrase types. In particular, the grammatical role of raising targets on subordinate clauses has some effect on the acceptability judgment on raised sentences. The constraint appears to be weakest for subjects, whether they denote responsible agents, as in (30a), or responsible nonagents, as in (30b):

(30) a. Koo pili *au* [o maua ia].
Inc near I Cmp get he
'I am getting close to finding him.'

(30) b. Koo pili *ia* [o puli i au].
Inc near he Cmp forgotten at I
'He is getting close to being forgotten by me.'

Even when the subordinate subject is only marginally responsible, it can still be raised. This is less true of direct objects; a direct object is not likely to be raised unless it denotes an entity which is clearly more responsible than the subject; thus (30c) would be acceptable only in certain specialized contexts:

(30) c. ?Koo pili *mo ia* [o maua nee au].
Inc near with he Cmp get Erg I
'He is getting close to being found by me.'

Finally, the constraint on raising applies most stringently to indirect objects and other obliques. These categories can only be raised if they denote entities that are clearly more responsible than either the subordinate subject or the direct object (whether these are overtly present or not), and if it is this feature that the speaker wishes to emphasize. Raising oblique noun phrases that do not clearly answer to this description produces marginal results at best:

(30) d. ??Koo pili *mo ia* [o faipati au ki ei].
Inc near with he Cmp speak I to Anp
'He is getting close to being spoken to by me.'

e. ??Koo pili *mo ia* [o manavasee au moo ia].
Inc near with he Cmp fear I Ben he
'He is getting close to being feared about by me.'

Why these patterns? From a cross-linguistic perspective, entities that are most likely to be responsible for a situation are typically encoded as subjects; the next most likely category are direct objects, and the least likely categories are obliques (see Dik's [1978, 1979] 'semantic function hierarchy'). The patterns that we find in Tuvaluan appear to be the result of a partial grammaticalization of this universal tendency: the grammatical category which generally represents responsible entities is most readily targeted by raising, and the categories which do not normally represent responsible entities are not easily targeted by raising, even though syntax permits them to be raised. As we shall see in the next section, these patterns are clearly reflected in the textual distribution of raising constructions.

Furthermore, I mentioned in the last section that raised noun phrases are case-marked in the superordinate clause in a semi-idiosyncratic, semi-rule-governed manner (see Table 1). But what appears to be idiosyncratic at first glance is in fact systematic. There is a correlation between the case marking that is assigned to raised noun phrases in superordinate clauses and the grammatical role that it plays in the subordinate clause from which it was raised. This correlation is not absolute. It is not evidenced by judgments of grammatically and ungrammaticality, but by judgments of relative idiomaticity.

Simply, the more oblique the role of the noun phrase in the subordinate clause, the more obliquely it is marked in the superordinate clause. The case assigned to the raised noun phrase in the superordinate thus has a tendency to reflect the grammatical role of the noun phrase in the subordinate clause. The ideal case-marking patterns for the raising verb *kaamata* 'to begin' are illustrated by the following:

(32) a. Koo kaamata *nee Faagota* [o oka ana niu].
Inc begin Erg Faagota Cmp husk his coconuts
'Faagota is beginning to husk coconuts.'

b. Koo kaamata *Faagota* [o matea fakallei nee au].
Inc begin Faagota Cmp see well Erg I
'I am beginning to see Faagota well.'

c. Koo kaamata *i Faagota* [o ffiu au i ei].
Inc begin at Faagota Cmp tired I with Anp
'I am beginning to get tired of Faagota.'

Once again, these patterns are only tendencies. They are also constrained by the range of case-marking patterns allowed by each raising verb, which are shown in Table 1.

To summarize, there are two constraints on raising in Tuvaluan: (1) the more oblique the noun phrase in the subordinate clause, the less likely it is

to be raised (that is, the more difficult it is to find a context in which a raised sentence is felicitous); (2) the more oblique the noun phrase in the subordinate clause, the more obliquely marked it will be once raised to the superordinate clause. A correlate of these two principles is the fact that the more oblique positions in the superordinate clause are rarer than the less oblique ones, as will be illustrated in the next section.

4. Textual distribution of raising constructions

The arguments presented in the previous section were all based on data that were either elicited or gleaned from texts. If the analysis presented above is correct, it should be reflected in the quantitative distribution of raising constructions in texts. In this section, I present the results of such a quantitative analysis.

Text-based analyses of phenomena such as raising are commonly hampered by the rarity of the relevant constructions in natural discourse, necessitating that enormous bodies of data be combed for significant counts to be obtained. An answer to this problem is provided by large computerized corpora of texts and computational tools. The text data base used here is a large corpus of Tuvaluan spoken and written texts recorded in a representative range of linguistic contexts, which was gathered in the contexts of a large-scale analysis of stylistic variation in one dialect of Tuvaluan, Nukulaelae. A brief summary of the composition of this corpus is presented in Table 2 (for further information about this corpus, see Besnier 1986b).

The corpus was scanned mechanically by a computer program which retrieves all raising contexts, identifies raised noun phrases, and outputs a

Table 2. *Composition of the textual corpus*

Text type	Number of words	Number of texts
Conversations	23,452	12
Radio broadcast	8,833	1
Private-setting speeches	13,749	22
Public speeches	22,118	34
Political meetings	17,272	1
Personal letters	31,867	70
Written religious sermons	32,106	47
Total	149,397	187

listing of both, as well as counts according to a number of variables (the listing was then checked manually and minor adjustments were made). In all, 1059 raising constructions were identified in the corpus of nearly 150,000 words, 306 (20% of the total) of which had undergone raising. This number only includes raised noun phrases in postverbal position in the superordinate clause, because raised noun phrases that are subsequently moved to preverbal position are indistinguishable from noun phrases that are topicalized directly out of the subordinate clause.

As evidenced in Table 3, the overwhelming majority of raised noun phrases are subjects of transitive or intransitive subordinate clauses. These results confirm the conclusion drawn in the last section to the effect that subject is the grammatical category that raising targets most readily, since subjects are most likely to denote the most responsible entity in the discourse. Direct objects of subordinate clauses, which make up 4% of the total number of raised noun phrases, are considerably rarer than subjects, although they are significantly more frequent than obliques, of which only one case was found in the corpus. These statistics confirm the predictions made in the previous section. What these counts indicate is that, by far, the most likely targets of raising are subject noun phrases. Despite the fact that other grammatical categories can be raised, they are rarely raised in natural discourse.

In the last section, it was claimed that the case marker assigned to raised noun phrases in the superordinate clause depends in part on the grammatical role of the noun phrase in the subordinate clause. Table 4 displays correlations between the grammatical role of raised noun phrases in the subordinate clause and case marking assigned to them in the superior clause. This table indicates that 81% of raised transitive subjects are marked ergatively in the superordinate clause, 56% of raised intransitive subjects are marked for the absolutive case, and 60% of raised direct objects are marked for the absolutive case. These correlations between underlying grammatical role and surface case marking thus confirm the predicted patterns, at least for subjects and direct objects. The fact that

Table 3. *Grammatical role of raised noun phrases in the subordinate clause*

Grammatical role	Number	(%)
Intransitive subjects	161	(53)
Transitive subjects	129	(42)
Direct objects	15	(4)
Obliques	1	(>1)
Total	306	(100)

Table 4. *Correspondence between the grammatical role of the raised noun phrase in the subordinate clause (vertical axis) and its case marking in the superordinate clause (horizontal axis)*

	Ergative		Absolutive		Locative		Directional		Comitative		Focus		Total %
	no.	(%)	no.	(%)	no.	(%)	no.	(%)	no.	(%)	no.	(%)	
Transitive subjects	105	(81)	10	(8)	1	(>1)	0		13	(10)	0		100
Intransitive subjects	51	(32)	90	(56)	4	(2)	0		14	(9)	2	(1)	100
Direct objects	1	(7)	9	(60)	1	(7)	4	(27)	0		0		100
Obliques	0		1	(100)	0		0		0		0		100
Total	157		110		6		4		27		2		100

Table 5. *Distribution of raised noun phrases and of case-marking patterns by raising verb*

Raising verb	Case-marking of raised NPs	Raised NPs no.	no.	(%)	Raising clauses	Raised NPs/raising clauses (%)
kkafi 'capable'		3			3	(100)
	ergative case		3	(100)		
maua 'able'		11			16	(69)
	ergative case		11	(100)		
kaamata 'begin'		2			3	(67)
	absolutive case		2	(100)		
iloa 'know how to'		13			20	(65)
	ergative case		12	(92)		
	absolutive case		1	(8)		
mafai 'possible'		147			289	(51)
	ergative case		131	(89)		
	absolutive case		14	(10)		
	locative case		1	(>1)		
	comitative case		1	(>1)		
koi tuai 'not yet'		7			20	(35)
	absolutive case		7	(100)		
ttau 'must'		73			234	(31)
	absolutive case		47	(64)		
	locative case		1	(1)		
	comitative case		25	(35)		
taumafai 'try'		13			43	(30)
	absolutive case		12	(92)		
	directional case		1	(8)		
palele 'finished'		3			15	(20)
	absolutive case		3	(100)		
see tioa 'no wonder'		1			4	(25)
	absolutive case		1	(100)		

faigataa 'difficult'		3			16	(19)
	absolutive case		2	(67)		
	comitative case		1	(33)		
talia 'allow'		2			13	(15)
	locative case		2	(100)		
maasani 'used to'		2			16	(13)
	absolutive case		2	(100)		
manako 'desire'		5			40	(12)
	locative case		1	(20)		
	directional case		3	(60)		
	focus		1	(20)		
pili 'close to'		1			11	(9)
	absolutive case		1	(100)		
oti 'finished'		17			249	(8)
	absolutive case		16	(94)		
	locative case		1	(6)		
leva 'a long time ago'		2			28	(7)
	absolutive case		2	(100)		
loto 'desire'		1			30	(>1)
	focus		1	(100)		
iku 'end up'		0			6	(0)
malie 'agree'		0			2	(0)
gaasolo 'become'		0			1	(0)
faigoofie 'easy'		0			0	(0)
Total			306		1059	(29)
Ergative case			157	(51)		
Absolutive case			110	(36)		
Locative case			6	(2)		
Directional case			4	(1)		
Comitative case			27	(9)		
Focus			2	(1)		

the single raised oblique noun phrase is not case-marked obliquely as predicted has little effect on the discussion. The only important skewing is the unusually large number of raised noun phrases marked for comitative case (13 transitive subjects and 14 intransitive subjects). All these noun phrases were raised by the verb *ttau* 'must', which appears to favor comitatively marked raised noun phrases more than other raising verbs. Table 5, which gives a breakdown of case marking on raised noun phrases by raising verbs, shows that *ttau* marks 35% of all raised noun phrases with the comitative case marker *mo*. There are only two other cases of raised noun phrases marked with *mo* in the entire corpus. I have no explanation as to why such case-marking patterns would be favored with *ttau*. (However, it is suggestive to note that, cross-linguistically, the comitative case often has subjectlike characteristics.)

Another remark that can be made from Table 5 is that raising verbs differ in terms of the frequency with which they trigger raising. Of the raising verbs which are represented by more than ten tokens in the corpus, the deontic modal verbs *maua*, *iloa*, and *mafai* stand out as the verbs that trigger raising most frequently (69%, 65%, and 51% of their respective occurrences have triggered raising). A possible explanation for the greater propensity of deontic modals to trigger raising is that a sentence denoting someone's capability of doing something necessarily involves one highly responsible participant, namely the participant whose capability is being commented upon. Since raising targets such responsible participants, as shown in the previous section, agents of deontic verbs are very likely to be targeted by the rule.

Finally, Table 6 shows that style, a factor which was ignored in this discussion, has some impact on raising. Raised noun phrases are indeed more frequent in some contexts than in others, a fact that has also been reported for English (although not carefully documented). In English, however, it appears that raising is more common in informal and spoken styles than in formal and written styles. Tuvaluan presents a different picture: in only 17% of contexts to which raising can apply does the rule apply in informal conversations; at the other end of the spectrum, public speeches exhibit raising in 31% of raising contexts. In contrast, private-setting speeches, which are semiformal speech events (Besnier 1986b), exhibit the highest percentage of raised noun phrases (50%). Thus no simple pattern is discernible, and the distribution of raising follows neither a spoken–written distinction nor a formality–informality distinction.

Table 6. *Stylistic distribution of raised noun phrases*

Text	Raised NPs	Raising clauses number	(percent)
Conversations	12	71	(17)
Radio broadcast	53	141	(38)
Private-setting speeches	57	114	(50)
Public speeches	30	96	(31)
Political meetings	28	136	(21)
Personal letters	47	234	(20)
Written religious sermons	79	267	(30)
Totals	306	1059	(29)

5. Conclusion and implications

This paper has shown that Tuvaluan raising has many of the features of raising rules in other languages of the world, with the exception that it can target noun phrases of any grammatical category in the subordinate clause and raise them to the superordinate clause, where they are marked for a wide variety of cases. The choice in case marking is determined partly by the raising verb, partly by the semantic role of the raised noun phrase in the subordinate clause.

A noun phrase can be raised out of a subordinate clause only if it denotes an entity that is actively involved in bringing about the situation denoted by the entire sentence. This restriction is loosest for subject noun phrases and is more stringently applied to more oblique grammatical categories. This pattern reflects the fact that more oblique categories are the least likely to denote highly involved noun phrases, and vice versa. As a result, nonsubject raised noun phrases are infrequent in natural discourse.

This study has several implications. First of all, raising can obviously target a greater variety of categories than is traditionally assumed. While Tuvaluan raising targets most frequently the categories that are traditionally associated with raising, namely subjects and direct objects, it can also target oblique categories. Thus we need to extend our typology of raising constructions to include raising rules that target a broad range of noun-phrase categories.

In fact, Tuvaluan is not the only language whose raising rule applies across the board. Rotuman, a close cousin of the Polynesian subgroup (but itself not a Polynesian language), has a rule of raising with the same range of targets:[7]

(33) a. Ŋou paʔes [la Jone lalaʔ].
I want Cmp Jone go
'I want Jone to go.'

b. Ŋou paʔes *ʔe Jone* [lalaʔ].
I want Obj Jone go
'I want Jone to go.'

c. Ŋou paʔes *ʔe Jone* [la ʔɛe lakel]
I want Obj Jone Cmp you see
'I want Jone to be seen by you.'

d. Ŋou paʔes *ʔe Jone* [la ʔɛe lafɛeaŋ se].
I want Obj Jone Cmp you speak to
'I want Jone to be spoken to by you.'

e. Ŋou paʔes *ʔe Jone* [la ʔɛe lalaʔ se].
I want Obj Jone Cmp you go to
'I want Jone to be gone to by you.'

Whether semantic and pragmatic constraints similar to those found in Tuvaluan are also at play in Rotuman must await further investigation.

The interesting thing is that the nonsyntactic constraints on Tuvaluan raising force it to apply primarily to subjects and direct objects. Thus Tuvaluan raising as commonly found in natural discourse is similar to English raising. Basing ourselves on this very limited cross-linguistic sample, we may tentatively posit that raising applies most naturally to the least oblique grammatical relations. In a language like English, this natural tendency is grammaticalized, in that English raising is only grammatical when it applies to subjects. In Tuvaluan, the tendency is not grammaticalized; rather, it is a textual tendency. Of course, more cross-linguistic data is needed to support this hypothesis.

Semantic and pragmatic factors play an important role in Tuvaluan raising. If we turn to other areas of Tuvaluan syntax and morphosyntax, we find that constraints similar to those described here are not uncommon. Causative agents, for example, are restricted to responsible entities in the same sense that raised noun phrases must denote a responsible entity. Thus sentence (34a) is grammatical because the agent of the causative verb denotes an entity that can assume the responsibility for the action denoted by the sentence; (34b), in contrast, is ungrammatical because the wind cannot be held accountable for initiating the action denoted by the sentence:

(34) a. Tamaliki ne fakamatakuttaku nee tamataene.
children Pst Pst + scared Erg young-men
'Some young men scared the children.'

b. *Tamaliki ne fakamatakuttaku nee te matagi.
children Pst Cst + scared Erg the wind
'The wind scared the children.'

Animacy and volition are not relevant here, as evidenced by the following causative sentence, which is grammatical despite the fact that the agent is inanimate and nonvolitional:

(35) Te mesiini e fakagaalue nee te penitiini.
the machine Nps Cst + work Erg the benzene
'The benzene makes the machine function.'

Similarly, I have discussed elsewhere (Besnier 1986a) constructions of the following type, which I called pseudoergative constructions:

(36) a. A papa ne mimi nee te puusi.
Cnt mats Pst urinate Erg the cat
'The cat urinated all over the mats.'
b. Koutou ne laauga nee te ulu o te fenua.
you-3 Pst make-speech Erg the head of the island
'The chief of the island made a [derogatory] speech about you.'
c. Koe koo kata nee toutou kaaiga i au aamioga
you Inc laugh Erg your-3 kin-group for your behavior
fai fakaaattea.
strange
'You are the object of ridicule in your kin group because of your weird behavior.'

In pseudoergative constructions, the subjects of certain intransitive verbs are marked for the ergative case, despite the intransitivity of the clause, if they denote highly responsible entities involved in an action that has a negative effect on some other entity referred to in the discourse.

Thus semantic factors appear to play an important role in Tuvaluan syntax, and Tuvaluan appears to be a language where semantics, rather than syntax, determines how sentential constituents are moved and marked.

This analysis may also apply to other languages of the area, which are traditionally described in purely syntactical terms (Chung 1978, for example). In particular, another Polynesian language, Niuean, has a raising rule that can apply to structures like (37a) and target subjects (sentence [37b]) and direct objects (sentence [37c]), but not obliques, as witnessed by the ungrammaticality of (37d):

(37) a. Kua kamata [ke hala he tama tāne e akau].
Prf begin Sbj cut Erg child male Abs tree
'The boy has begun to cut down the tree.'

b. Kua kamata *e* *tama tāne* [ke hala e akau].
Prf begin Erg child male Sbj cut Abs tree

c. Kua kamata *e* *akau* [ke hala he tama tāne].
Prf begin Abs tree Sbj cut Abs child male

d. *To kamata *a* *Sione* ke fakahū e Pita e tau tohi
Fut begin Abs Sione Sbj send Erg Pita Abs Plr letter
(ki ai).
to Anp
'Sione is going to begin being sent letters by Pita.'

The unusual behavior of this rule is explained by Seiter and Chung (1980) as the result of a basic confusion between subject and direct-object categories brought about by a diachronic change from a nominative–accusative to an ergative–absolutive case-marking system. But this theory of diachronic change in Polynesian has been shown to be problematic (Clark 1976; Pawley 1981). I suggest that the Niuean system could equally well have arisen as the result of the syntactization of semantic constraints on raising of the type found in Tuvaluan. Since, in Tuvaluan, subjects and direct objects are the only categories targeted by raising with any frequency, it is entirely possible that such a role could become grammatical only for these two categories.

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Appendix: Abbreviations

Abs absolutive case (Niuean)
Agr agreement
Anp anaphoric pronoun
Ben benefactive conjunction
Cmp complementizer
Cnt contrastive marker
Cst causative prefix
Dxs deictic adverb
Erg ergative case
Exc exclamation
Foc focus marker
Inc inchoative
Neg negative (ad)verb
Nps nonpast
Obj general object marker (Rotuman)
Plr plural (Niuean)
Prf perfective
Pst past
Sbj subjunctive conjunction
Trn transitivizing suffix
2 dual
3 plural
\+ morpheme boundary

Notes

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1. Throughout this paper, raised noun phrases are italicized.
2. The Tuvaluan examples used in this paper are all from the southern dialects, although the same analysis applies to the northern dialects. The orthography is phonemic and symbols have the approximate value of equivalent IPA symbols, except for *g*, which stands for a velar nasal. Phonemic gemination is represented by double graphemes.
3. Quantifiers can float from a subordinate clause to a superordinate clause, as discussed in Besnier (i.p.), but this process is not relevant to the present discussion. However, it does preclude quantifier float from being used to show that the Noun Phrase is a surface argument of the superordinate clause.
4. It is not the case, however, that advancement-to-possessive is clause-bound. A subject noun phrase can be advanced across certain subordinate boundaries but not others.
5. In this section, a question mark before an example indicates that it is difficult to find a context in which the sentence would be appropriate. A double question mark indicates that the sentence is semantically ill formed.
6. Newman (1981), in particular, develops a semantically based account of English raising and equi constructions that resembles my account of Tuvaluan raising. Newman further argues that raising cannot be construed as a rule of grammar because raised and nonraised equivalents have divergent meanings. My approach is more conservative; the fact that there are semantic constraints on raising does not necessarily mean that we should do away with raising in syntax.
7. I am grateful to my Rotuman consultant Amoe Teofilo for providing the data cited in (33).

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