Tongan Nominalizations:
Complexity in a “Deficient” Clause Type

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1. Background

Tongan makes extensive use of nominalized predicates. These can be structurally similar to finite clauses: They maintain ergative-absolutive case marking and VSO word order. On the other hand, an ergative or absolutive argument in a nominalization may be realized with genitive case or as a pre-nominal genitive pronoun, and pronouns are not permitted in the argument positions of a nominalized clause. In other languages, nominalized clauses are often somewhat defective (Grimshaw 1990; Koptjevskaja-Tamm 1993, Alexiadou 2001), lacking a theta-role or structural case found in tensed clauses. This is often attributed to the fact that D lacks the nominative case feature of T. Tongan nominalizations, however, exhibit more complexity than such a model predicts: As well as the cases (absolutive and ergative) available in finite clauses, two genitive cases are available for the arguments of nominalizations.

1.1 Tongan Grammar

Tongan is a predicate-initial language. In transitive sentences, the canonical word order is VSO, but VOS is common. It is an isolating language. Transitive subjects are marked with an ergative case particle ‘e; intransitive subjects and transitive objects with an absolutive case particle ‘a. A canonical tensed clause consists of a free-standing tense-aspect marker (henceforth, TAM) followed by the core predicate, which is followed in turn by its argument(s) and, finally, any extension to the predicate (usually a prepositional phrase). The order of elements in a verbal clause with full DP arguments is schematized in (1). Transitive and intransitive examples are given in (2):

(1) TAM – V – (Erg DP) – Abs DP – (PP)

(2) a. Na’e tūtu ‘e he tangata ‘ae fu’u’akau
   PAST burn Erg Def man ABS+Def tree
   “The man burned the tree.”

b. Na’e vela ‘ae fu’u’akau
   PAST burn ABS+Def tree
   “The tree burned.”

The picture becomes more complicated when arguments are pronominal.
Tongan has two series of canonical (i.e. non-possessor) pronouns: full (postverbal) and reduced (preverbal). A full pronoun can encode any verbal argument or the object of a preposition, and – like a noun – it takes a case-marking particle. A reduced pronoun is nominative in its distribution: It realizes an ergative A or an absolutive S – essentially the highest argument in a clause. Reduced pronouns are often enclitic on the TAM\(^1\) and are not preceded by any case marker. TAMs and reduced pronouns display some allomorphy with respect to one another, suggesting that the pronoun is in fact incorporated into the node where the TAM resides (Dukes 1997; Otsuka, 2000). The schemata for tensed verbal clauses with pronominal arguments are presented in (3). Transitive examples are given in (4).

(3) a. TAM – V – (Erg Prn) – Abs Prn – (PP)  
   b. TAM+prn – V – (Abs Prn) – (PP)

(4) a. Na’e taki ‘e ia ‘a kinautolu  
   PAST lead Erg 3SG ABS+DEF 3PL  
   “He led them.”

b. Na’a ne taki ‘a kinautolu  
   PAST 3SG lead ABS 3SG  
   “He led them.”

The schema in (3a), in which there is no reduced pronoun, is the same as that in (1). The single argument of an intransitive clause is absolutive, and the additional argument in a transitive clause is ergative. In (3b) the single argument of an intransitive or the external argument of a transitive is realized as a pre-verbal weak pronoun, and only the internal argument of a transitive clause is absolutive.

1.2 Theoretical Assumption: Structure of Tongan Finite Clauses

I propose the following derivation for VSO and VOS in finite clauses: Ergative and absolutive in Tongan are assigned/checked in [Spec, vP] (cf. Massam 2001 (et al.) for Niuean – neither case associated with T), giving SO order. A focus projection (FocP) optionally dominates vP; either argument may move into [Spec, FocP] if it has a FOCUS feature to check. OS word order results when it the absolutive argument which does this (if ergative A or intransitive-absolutive S moves here, the

\(^1\)The reduced first-person singular exclusive pronoun has an allomorph that is used sentence-initially when no TAM is present; it is heavy enough to bear its own stress. All of the plural pronouns’ reduced forms are similarly heavy and likewise are not phonologically dependent on a preceding element.
movement is vacuous\(^2\). FocP (or vP if FocP is absent) is dominated by TP; the remnant of VP (i.e. what is left after the internal argument DP/Prn has vacated to spec-vP) moves to [Spec, TP] to derive V-initial order. Adopting the split CP hypothesis, Rizzi 1997, I propose that the TAM is above TP in Finite\(^0\), where the clitic pronoun is adjoined to it. This is illustrated in (5):

\[
\text{(5) Structure for Tongan finite clause (transitive)}
\]

\[
\text{\begin{align*}
\text{ForceP} & \quad \text{Force}^0 \\
\quad \text{FinP} & \quad \text{Fin}^0 \\
\quad \quad \text{TP} & \quad \text{TAM} \\
\quad \quad \quad \text{VP} & \quad \text{T} \\
\quad \quad \quad \quad \text{V} & \quad \text{t}_j \\
\quad \quad \quad \quad \quad \text{DP}^\text{Abs} & \quad \text{(FocP) vP} \\
\quad \quad \quad \quad \quad \quad \text{DP}_\text{Eng} & \quad \text{t}_j^\text{Abs} \\
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{t}_i \\
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{[Erg, Abs]}
\end{align*}}
\]

1.3 Nominalizations

Tongan nominalizations exhibit the same word orders as finite sentences; they are predicate-initial, VSO or VOS. Rather than a reduced number of available cases, there is a greater number: Both ergative and absolutive are available in nominalizations, but, additionally, one argument may be realized with one of two genitive cases or as a genitive pronoun.

Tongan nominalizations have some restrictions not found in finite clauses. In a finite clause, any number of arguments may be pronominal. In a nominalization, no more than one pronominal argument is allowed. Moreover, a

\(^2\)It is difficult to get judgements about meaning differences between VSO and VOS from consultants, but Otsuka (2000) notes that VOS is preferred as the answer to a question that inquires who or what is the object and VSO as the answer to a question that inquires who or what is the subject.
pronominal argument in a nominalization must be genitive – a strong pronoun preceded by a case-marker is disallowed.

2. Genitive Case and Possession in Tongan

Non-pronominal possessors in Tongan follow the possessum and are preceded by one of two genitive case-markers – ‘a (“subjective”) or ‘o (“objective”) as in (6). Pronominal possessors, exemplified in (7) precede the possessum and consist of a conflation of ‘a or ‘o with a determiner marking the definiteness and “emotional import” of the possessum, and a personal pronoun encoding the φ-features (4 persons x 3 numbers) of the possessor.

(6) a. e pa’anga ‘a Sione
   Det money Gen-Subj Sione
   “John’s money.”

   b. e fale ‘o Sione
   Det house Gen-Obj Sione
   “John’s house.”  [Churchward, 1953:111, gloss added]

(7) a. he’eku pa’anga
   poss.1sg.ex.def.subj money
   “My money.”

   b. hoku fale
   poss.1sg.ex.def.obj house
   “My house.”  [Churchward, 1953:16, gloss added]

The two genitive case markers in Tongan mark two types of possession. ‘A encodes what is usually called “subjective” possession – roughly, the possessor dominates the possessum. ‘O encodes what is usually called “objective” possession; roughly, the possessor is subordinate to the possessum or there is an inalienable (part-whole) relation between the two entities.

3. Subjective vs. Objective “possession” of events

The distribution of ‘a- and ‘o- marked arguments in nominalizations appears to be roughly nominative-accusative (A and S vs. O). Genitive-subjective case may be used instead of ergative in transitive nominalizations encoding as a “possessor” the argument which is agent/initiator (A) (even if O is null), as in (8a, 9a). It may also be used instead of the absolutive in intransitive nominalizations encoding as a
“possessor” the single argument (S), regardless of \( \Theta \)-role (as in 10). Genitive-objective case may be used instead of the absolutive in transitive nominalizations, encoding as a “possessor” the argument which is patient/theme/object (O) (even if A is null), as in (8b, 9b). It is never used for the single argument of a nominalized intransitive clause.

Only one argument in a nominalized clause can have genitive case (pronominal or non-pronominal), thus genitive-objective and genitive-subjective cannot co-occur. This suggests that they are not true nominative and accusative cases, and that they are possibly assigned by the same head.

\(\text{(8)}\) a. e ‘ui ‘a e tangatá
\(\text{DET call GEN-SUBJ DET man}\)
“The call made by the man.”

b. e ui ‘o e tangatá
\(\text{DET call GEN-OBJ DET man}\)
“The call received by the man” [Tchekhoff 1981:48]

\(\text{(9)}\) a. hono ‘ui
\(3\text{SG.POSS.DEF.OBJ call}\)
“His call” (the one he receives)

b. he’ene ‘ui
\(3\text{SG.POSS.DEF.SUBJ call}\)
“His call” (the one he is sending out) [Tchekhoff 1981:50; gloss added]

\(\text{(10)}\) e lavea ‘a Sione
\(\text{Det hurt Gen-Subj John}\)
“John’s being wounded.” [Tchekhoff 1981: 52, 56; gloss added]

4. Case Marking in Nominalized Clauses

In a transitive finite clause, ergative and absolutive arguments are marked with the case particles ‘e and ‘a, respectively. In a transitive nominalization, the arguments

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\(\text{Tchekhoff (1981) presents this datum as an example of a nominalization with a Genitive-Subjective possessor, although the particle ‘a homophonously encodes Absolutive and Genitive-Subjective Cases.}\)

\(\text{In this datum, it is clear that this is a transitive nominalization with a null A (not an intransitive nominalization), because S of an intransitive nominalization is obligatorily realized as a subjective possessor.}\)
may ergative/absolutive (compare 11a,b) or one may be genitive and the other 
egative or absolutive. There is a limit of one pronominal argument, which must be 
egative. This yields the following options (Churchward 1953:98)

In a nominalization with two DPs, one may be ‘e-marked and the other ‘a 
marked (ergative–absolutive), as in (10); or one may be ‘e-marked and the other 
‘o-marked (ergative–genitive-objective), as in (11). The other logical possibility, 
two ‘a-marked DPs (genitive-subjective–absolutive) is not permitted.

(11) a. Na’e ma’u ‘e Siale ‘a e me’a’ofa. 
Past receive Erg Charlie Abs Det gift 
“Charlie received the gift.”

b. ‘I he ma’u ‘e Siale ‘a e me’a ‘ofa... 
Loc Det receive Erg Charlie Abs Det gift 
“At Charlie’s receiving of the gift...”

[Churchward, 1953:96; gloss added]

(12) a. Na’e fa’u ‘a e onga ‘api ‘e he tu’i 
PAST found ABS DET two institution ERG DET king 
pē ‘e taha 
precisely one 
“One and the same king founded the two institutions.”

b. Ko’e’uhi ko e fa’u ‘o e onga ‘api ‘e he 
Because DET found GEN-OBJ DET two institution ERG DET 
tu’i pē ‘e taha 
king just one 
“Because of the founding of the two institutions by one and the 
same king...”

[Churchward, 1953:98; gloss added]

Churchward (1953) notes that a in nominalization, non-pronominal O tends 
to have absolutive case when word order is VSO and genitive-objective case when 
word order is VOS (cf. (11) and (12)). VOS (and, by extension, genitive-objective 
in nominalizations) results from a [Focus] feature on O.

In a transitive nominalization with one DP and one pronominal argument, the 
pronoun must be genitive and the other argument must be ergative or absolutive. 
Thus there will either be a subjective-possessor pronoun and an ‘a-marked DP 
genitive-subjective–absolutive) (13), or an objective-possessor pronoun and an ‘e-
marked DP (genitive-objective–ergative) (14).

(13) a. Na’a ne ma’u ‘a e me’a’ofā 
Past 3sg receive Abs Det gift 
“He received the gift.”
b. ...'i he'eene ma’u ‘a e me’a’ofā  
   Loc 3sg.poss.def.subj receive Abs Det gift  
   “...at his receiving the gift.” [Dukes, 1997:88; gloss modified]

(14) a. Na’e ui au ‘e he ‘eikí.  
   PAST call 1sg  Erg  Def chief  
   “The chief called me.”

b. ... ‘i hoku ‘ui ‘e he ‘eikí.  
   Loc 1sg.poss.def.obj call Erg Det chief  
   “…when the chief called me.”
   [Churchward, 1953:99; gloss added]

In an intransitive nominalization whose single argument is a DP, that argument may be absolutive or genitive-subjective. Both are marked with ‘a, so they are formally identical. This is exemplified in (15)

(15) a. ‘oku ‘alu ‘ae tangatá  
   PAST go Abs+Det man  
   “the man goes”

b. ko ‘e ‘alu ‘ae tangatá  
   PRED Def go Abs+Det/Gen+Det man  
   “it is the departure of the man”
   [Tchekhoff 1981:48; gloss added]

If S is a pronoun, it must be genitive-subjective. Recall that in a finite clause, the pronominal argument may be encoded as a pre-verbal “nominative” pronoun or as a full, postverbal absolutive pronoun. This is illustrated in (16).

(16) a. ‘oku ‘alu ia  
   PRES go 3sg  
   “he/she is going”

   ‘oku ne ‘alu  
   PRES 3sg go  
   “he/she is going”

b. ko he’eene ‘alu  
   PRES poss-DEF-3sg go  
   “it is his/her departure”
5. Towards an Analysis

5.1 Nominalized Clauses as Events under D

Intuitively, a nominalization seems to be an eventive structure dominated by some nominalizing projection, whereas in a finite clause it would be dominated by Tense. Alexiadou (2001), Koptjevskaja-Tamm (1993), Siloni (1997), and Massam (2000) present various versions of this proposal.

I propose that the structure of nominalizations parallels that of finite clauses in Tongan. Word order is derived in the same way. Arguments move to [Spec, vP] to check ergative and absolutive cases. vP is optionally dominated by FocP; an argument with a FOCUS feature moves to [Spec, FocP] to check it. This projection (or vP if FocP is absent) is dominated by some XP, the non-finite counterpart of TP. The VP remnant moves to [Spec, XP] to derive predicate-initial order. This XP, in turn, is dominated by DP, the counterpart of FiniteP. Possessive pronouns realizing arguments are in D05 – thus they are the counterparts of clitic pronouns in finite clauses. This is illustrated in (17).

(17) Structure for Tongan Nominalization, transitive

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1If a possessive pronoun is present, it realizes an argument but also encodes the in/definiteness of the nominalization. If there is no pronominal argument – and thus no possessive pronoun – the in/definiteness of the nominalization is encoded by a determiner.
5.2 Case Assignment

In Tongan, the Case- and theta-deficiency of nominalizations seen in other languages seems to be absent. This is consistent with D heading vP, where vP is the locus of ergative and absolutive Case-checking.

In nominalizations, movement of a focused argument from [Spec, vP] to [Spec, FocP] has a consequence for Case. If the moved element is absolutive S or O, it loses this case-marking and is instead marked with genitive case. Non-pronominal A remains ergative because of the “markedness” of ergative Case: Either it cannot be supplanted by another Case (e.g. genitive) (Diane Massam, p.c.), or when Cases are “stacked,” ergative “wins” over genitive (which, in turn, “wins” over absolutive) for expression at PF (Kenji Oda, p.c.).

Genitive case assignment to a non-pronominal argument in a nominalization is thus: D\(^0\) has a genitive Case feature which probes downward for an argument. Because the left edge of vP is a phase, this probe cannot extend below FocP. If an argument is found in [Spec, FocP], it is assigned genitive case, even though it has previously been assigned ergative or absolutive case. When an argument is thus assigned two Cases (genitive + absolutive or genitive + ergative), these are “stacked,” at PF, the more marked of the two is realized. The hierarchy of markedness is ergative > genitive > absolutive; thus an argument in [Spec, FocP] which has checked ergative + genitive is realized with an ergative Case-marker, and one which has checked absolutive + genitive is realized with a genitive Case-marker.\(^6\) The equal availability of ergative and absolutive in nominalized and finite clauses is due to the fact that these are associated v\(^0\) (and neither with T\(^0\)), whereas the availability of genitive case in nominalized clauses alone is due to the fact that D\(^0\) has a Case feature, but T\(^0\) has none.

Since absolutive and genitive-subjective Cases are both marked with ‘a’, it is difficult to discern whether the single argument in an intransitive nominalization has absolutive (indicating that it has remained in [Spec, vP]) or genitive-subjective

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\(^6\) Following Massam (2001), Bowers (2002), and others.

\(^7\) This seems to violate the Case Filter. In Bejar and Massam’s (1999) Multiple Case Checking analysis, an argument which moves from one Case position to another in order to satisfy the Case-assigning property of a head “loses” its first Case marking and is marked with the second. In the current analysis the genitive argument in a nominalization moves to FocP not to satisfy a Case feature of Foc\(^0\) but to check a [Foc] feature. Genitive Case is checked by D\(^0\), but the genitive argument does not move to [Spec, DP].

\(^8\) If there is no focused argument – and thus no DP in [Spec, FocP] (or no FocP projection at all) – the Case feature on D\(^0\) remains unsatisfied, but somehow the derivation does not crash. I’m not sure how this is possible. One idea is that the Case feature in D\(^0\) is somehow able to “self check” if not satisfied.
(indicating movement to [Spec, FocP]) case. With such verbs there can be no ergative argument, so the ambiguity is between genitive-subjective ‘a and absolutive ‘a, both of which marking S, so interpretation will not disambiguate.

The fact that there are two genitive Cases is problematic. The genitive Case-marker does not seem to be a spell-out of Case and 0-role, because genitive Case assigned to the argument of an intransitive nominalization is always spelled out as genitive-subjective, regardless of the situation. It seems that ‘a spells out in intransitive, unaccusative-type nominalizations exactly the same Case and 0 information as ‘o spells out in transitive nominalizations ([genitive + absolutive + patient]). It seems that Genitive case is sensitive to the “subjecthood” or “objecthood” of the argument in [Spec, FocP] – problematic in a language where there is little else that distinguishes A and S “subjects” from O “objects”. Otsuka (2000) argues that the encoding of the single arguments of intransitive nominalizations as genitive-subjective possessors is evidence that all intransitive subjects are external arguments, i.e. that no verbs in Tongan are unaccusative. Thus only transitive objects are generated in VP.

5.3 Pronominalization

Although a finite clause can have two pronominal arguments, a nominalization can have no more than one. Moreover, in a finite clause, pronominal arguments can be case-marked with ergative ‘e or absolutive ‘a like non-pronominal DPs, whereas in a nominalization they can only be encoded as “preposed” possessive pronouns. These pronouns encode not only genitive Case and the φ-features of the “possessor” argument, but also the definiteness of the nominalization itself. Thus, I propose that they are located in D°.

Why pronouns cannot remain in [Spec, vP] with ergative or absolutive case is unresolved. I propose that the mechanism by which they surface in D° is as follows: A null pronoun is merged into argument position and checks (null) ergative or absolutive case as well as being assigned a 0-role. A bundle of φ-features, co-indexed with the null pronoun, is fused with the determiner and a genitive Case marker in D°. The co-indexation between them allows the possessive pronoun to be interpreted as an argument with the correct 0-role.

A possessive pronoun and a non-pronominal genitive DP cannot co-exist in a single nominalization. When a pronoun is merged into D°, it is overtly Case-marked with ‘a or ‘o (genitive); thus the Case feature of D° is discharged locally and does not probe downward to [Spec, FocP].
7. Conclusions

Nominalizations and finite clauses have parallel structures in Tongan. In some ways, complexity in Tongan nominalizations seems to meet or exceed that in finite clauses: More cases are available for arguments, and the “preposed” (left-peripheral) position is available for A, S, and O pronominal arguments, whereas in finite clauses this position is available only for A and S. In other ways, however, nominalizations in Tongan are “deficient”: Unlike finite clauses, they exhibit a restriction against pronouns in A-positions and (because only one position is thus left available for pronouns), a limit of one pronoun.

The present analysis accounts for the fact that genitive Case is available for arguments in nominalizations but not in finite clauses and for the fact that ergative and absolutive Cases are available in both clause-types. It accounts for the parallel word orders of nominalizations and tensed clauses, the restriction against co-occurrence of genitive-subjective and genitive-objective, and the association of genitive-objective Case with VOS word order. By treating ergative and absolutive Cases as both being associated with v instead of T, it further explains why, unlike those of other languages, Tongan nominalizations in are not theta- or Case-defective: The nominalizing head in Tongan (D₀) is no less defective than T; under either head, Case- and theta-assignment is in the domain of v. In a sense, it is T which is defective by comparison, having no Case feature.

There are still questions unanswered: How does a derivation survive when the Case feature of D₀ goes unchecked? How is it determined whether to assign genitive-subjective or genitive-objective Case? What is the XP (the counterpart to TP) to whose specifier VP moves? Why are pronouns unable to be overtly realized in argument position in nominalizations? Despite the strengths of the current analysis, more needs to be done to refine it.

There are numerous avenues for further work. First, the problems noted above must be addressed if the analysis is to be maintained. Empirical evidence for or against the focusing of subjects (Ergative and Absolutive) needs to be found; for now, I have assumed that Genitive-Subjective case is, in fact, available for non-pronominal A and S, but homophony and the availability of null arguments render ambiguous the data available so far. More crucially, however, the choice between the two types of genitive Case and the restrictions on pronominalization must be resolved.

References
