Apparent Raising in Tongan^{*}

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SUMMARY

In apparent raising (AR) constructions in Tongan, what appears to be the matrix subject is thematically interpreted as an argument of the embedded verb. Because they exhibit properties of A-bar movement, AR constructions have been analysed as an instance of null operator (OP) movement, in a way analogous to *tough* constructions. This study re-examines the OP movement analysis of Tongan AR and proposes that the DP that appears to be in the matrix subject position in fact originates and remains in the embedded clause, contrary to previous analyses. The relevant DP is argued to be generated as the complement of OP, as part of a complex DP headed by D with a topic feature. This complex DP undergoes topic movement to [Spec, C], "smuggling" the lower DP, which subsequently φ -agrees with a matrix Case assigner in this position. The proposed analysis not only successfully reconciles the conflicting facts about Case-marking and thematic interpretation of the "raised" DP in AR, but also explains other language-specific issues, e.g., why clitic pronouns cannot undergo AR and why the postulated topic movement is not available in matrix clauses.

Résumé

Dans les constructions apparemment montantes en tongan, ce qui paraît être le sujet matriciel est interprété de manière thématique comme un argument du verbe intégré. Puisqu'elles possèdent des propriétés de mouvement A-barre, les constructions apparemment montantes sont analysées comme un exemple de mouvement d'opérateur nul (OP), de façon analogue aux constructions *tough*. Cette étude réexamine l'analyse de l'apparente montée (AM) en togan comme mouvement OP et propose que le SD (syntagme déterminant) qui semble être en position du sujet matriciel provienne en réalité de la proposition subordonnée, et qu'il y reste; cette suggestion va à l'encontre des analyses précédentes. On soutient que le SD pertinent est généré comme le complément de l'OP, faisant partie du complexe SD dont un déterminant avec un trait thématique est la tête. Ce complexe effectue un déplacement thématique vers [Spéc, C], introduisant « clandestinement » le SD inférieur, lequel s'accorde- φ avec un distributeur de Cas matriciel dans cette position. L'analyse proposée ne réussit pas seulement à concilier les faits contradictoires sur le marquage de Cas et l'interprétation thématique du SD « monté » dans les AM, mais il explique aussi d'autres problèmes particuliers, comme pourquoi les pronoms clitiques ne peuvent pas subir l'AM et pourquoi le mouvement thématique postulé n'est pas possible dans les propositions matricielles.

^{*} This squib is dedicated to Lisa Travis, whose work has inspired many, especially those working on Austronesian languages. She is a role model I look up to, as a linguist and as a person.

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1 INTRODUCTION

Raising is a syntactic phenomenon in which an argument of an embedded clause moves to a position in a matrix clause. It is a Case-driven operation, whereby the raised DP moves out of a non-Case position (typically, the subject of an infinitival clause) to a matrix Case position in order to avoid violating the Case Filter. In compliance with the Theta Criterion, the target of raising must also be a non-theta position. For example, in (1a), the expletive subject indicates that the matrix subject position is not a theta position; that is, the verb *seem* does not take an external argument. In (1b), the matrix subject position is occupied by a DP, *John*, which is assumed to have been base generated as the subject of the verb *win* of the embedded infinitival clause. In contrast, (1c) shows that moving the subject out of a tensed clause results in ungrammaticality.

- (1) a. It seems $[_{CP}$ that John is winning the race].
 - b. John_i seems [$_{CP}$ t_i to be winning the race].
 - c. *John_i seems [$_{CP}$ that t_i is winning the race]

Constructions that appear to involve raising, but deviate from this standard definition are found in many languages, including some Austronesian languages such as Niuean (Massam 1985), Madurese (Davies and Dubinsky 2004), Tagalog (Nakamura 2001), Tongan (Otsuka 2000, Polinsky 2016), Amis, Puyuma, and Seediq (Chen and Fukuda 2016). This phenomenon of apparent raising (henceforth AR), however, has not received a consistent analysis in the literature. In this squib, I revisit AR in Tongan and propose an alternative analysis, addressing some of the issues that have not received a satisfactory account in the previous approaches.

2 APPARENT RAISING (AR) IN TONGAN

Tongan is a Polynesian language spoken in the Kingdom of Tonga. The basic word order is VSO, with a tense/aspect marker preceding the verb. Case alignment is ergative, with the particle 'a marking absolutive (ABS) and 'e, ergative (ERG).

- (2) Na'e kata 'a Sione.¹ PST laugh ABS John 'John laughed.'
- (3) Na'e fili 'e Sione 'a Mele. PST choose ERG John ABS Mary 'John chose Mary.'

AR in Tongan is illustrated in (4)-(5) below. In (4), a one-place predicate *totonu* 'be advisable' is followed by a CP complement containing a subjunctive marker *ke*. The embedded subject is marked as ABS, suggesting that Case can be assigned within the embedded clause. In contrast, the subject appears immediately after the matrix verb, *totonu* in (5). On the surface, it seems as though this DP has undergone raising out of the embedded subject position to the matrix subject

¹ Abbreviations: ABS = absolutive, DIR = directional, ERG = ergative, FUT = future, PL = plural, PRED = predicate, PRS = present, PST = past, REF = referential, S = singular, SBJV = subjunctive

position. The structure in (5) represents this presumed raising.

- (4) 'Oku totonu [_{CP} ke nofo 'a Sione].
 PRS advisable SBJV stay ABS John
 'It is advisable that John should stay' or 'John should go.'
- (5) 'Oku totonu 'a Sione_i [_{CP} ke nofo t_i]. PRS advisable ABS John SBJV stay 'John should stay.'

It should be noted, however, that the movement postulated in (5) differs from what is standardly understood as raising, in that it involves movement out of a Case position. Tongan AR further deviates from the standard definition of raising. Not only intransitive subjects, but direct objects can undergo AR, as seen in (7). This is not that surprising, given that AR of intransitive subjects also involve movement out of a Case position. What is unexpected is that transitive subjects cannot undergo AR, as shown in (8), whether it is marked as ABS or ERG.

- (6) 'Oku totonu [_{CP} ke langa 'e Sione 'a e fale] PRS advisable SBJV build ERG John ABS REF house 'John should build a house.'

Another intriguing twist is that pronominal subjects, if clitic, cannot undergo AR. Clitic pronouns in Tongan are limited to subjects and attach to T, thus preceding the verb, as seen in the embedded clause in (9). Raising of the clitic pronoun results in ungrammaticality, as shown in (10). On the other hand, if the independent form is used, AR is possible, as shown in (11).

- (9) 'Oku totonu [_{CP} ke ne nofo] PRS advisable SBJV 3S stay 'He should stay.
- (10) * 'Oku ne_i totonu [_{CP} ke t_i nofo] PRS 3S advisable SBJV stay
- (11) 'Oku totonu 'a ia [_{CP} ke t_i nofo] PRS advisable ABS 3S SBJV stay

To summarize, Tongan AR exhibits the following unorthodox properties.

- (12) a. AR from a Case position is permissible;
 - b. Transitive subjects cannot undergo AR; and
 - c. Clitic pronouns may not undergo AR.

3 NULL OPERATOR ANALYSIS: PROS AND CONS

That the "raised" DP is Case-marked inside the embedded clause clearly argues against the Amovement analysis of AR in Tongan. In fact, the prohibition of transitive subjects (i.e., ergatives) from undergoing AR can be interpreted as a manifestation of syntactic ergativity, which Tongan is known to exhibit in A-bar contexts (Chung 1978, Otsuka 2000). For example, only absolutive arguments, but not ergative ones can be relativized by the gap strategy, as illustrated in (13)-(15).

- (13) ki he fefine_i [_{CP} na'e kata t_i] to REF woman PST laugh 'to the woman who laughed'
- (14) ki he fefine_i [$_{CP}$ na'e fili 'e Sione t_i] to REF woman PST choose ERG John 'to the woman whom John chose'
- (15) *ki he fefine [_{CP} na'e fili t_i 'a Sione] to REF woman PST choose ABS John Intended: 'to the woman who chose John'

To further support the A-bar movement analysis, AR can be long distance (16). This is expected of an A-bar operation, which allows for cyclic movement, but not of raising (17).

- (16) 'oku totonu 'a Sione_i [_{CP} ke fakangofua'i 'e Pila 'a Mele_j [_{CP} ke 'ave PRO_j t_i]] PRS advisable ABS John SBJV allow ERG Bill ABS Mary SBJV take 'It is advisable that Bill should allow Mary to take John.'
- (17) *John_i seems [$_{CP}$ that Bill convinced Mary [$_{CP}$ PRO to take t_i]].

Otsuka (2000) thus proposed that the structure in (18) for Tongan AR, in which a (base generated) matrix DP is coindexed with the null operator in the embedded [Spec, C], analogous to Chomsky's (1977) analysis of *tough*-constructions.²

(18) 'Oku totonu 'a Sione_i [$_{CP}$ OP_i [$_{C'}$ ke nofo t_i]

While this analysis accounts for the A-bar properties of Tongan AR, it is not free from problems. The first concerns theta role assignment. Given that the matrix subject position is not an argument

² Polinsky (2016) proposes a slightly modified version of the OP analysis for Tongan AR. Similar constructions in Tagalog have been analysed by Nakamura (2001) as involving OP movement as well, while Davies and Dubinsky (2004) treat similar phenomenon in Cebuano and Madurese as instances of prolepsis, where the matrix argument is coindexed with a zero pronoun in the embedded clause.

position, the DP base generated in that position fails to receive a theta-role in the standard manner. While some alternative means have been proposed in the literature, e.g., theta-role assignment through predication (Chomsky 1977, Rezac 2004) and theta-role transmission (Chomsky 1981), the exact mechanics of these operations are unclear (see Hicks 2009 for specific arguments against these analyses).

As a second problem, the OP analysis fails to explain why clitic pronouns cannot undergo AR. Otsuka (2002) argues this is due to the general constraint that prohibits coindexation of clitic pronouns and OP; clitics cannot serve as the head of a relative clause, for example.

(19) *Te nau [_{CP} OP_i [_{C'} na'e 'alu t_i]] foki mai. FUT 3PL PST go return DIR Intended: 'They who went will come back.'

However, the ungrammaticality of (19) is likely due to a more general constraint that clitics cannot be modified at all, as shown in (20) below. If that is the case, the ungrammaticality of (19) does not necessarily explain the impossibility of (10), repeated here as (21).

- * Na'a nau [PP mei Tonga]/[AP puke] nofo.
 PST 3PL from Tonga sick stay
 Intended: 'They (who were) from Tonga/sick stayed.'
- (21) * 'Oku ne_i totonu [_{CP} OP_i [_{C'} ke t_i nofo]] PRS 3S advisable SBJV stay Intended: 'He should stay.'

4 AN ALTERNATIVE ANALYSIS

A major theoretical problem with *tough*-constructions is how to explain the thematic link between the two Case positions. One way to explain the thematic interpretation of the DP in the matrix position in *tough* constructions is to link it to the embedded argument position via A-movement (Rosenbaum 1967, Postal 1971). However, this would create a chain containing two Case positions, violating the Chain Condition. In order to avoid this Case problem, the OP movement approach instead captures the link between the two positions as an instance of operator-variable relation. Yet, as mentioned above, this alternative fails to provide a satisfactory account for the thematic link between the two positions, as it assumes the thematic subject of the main verb to be base generated in the matrix position. Yet another possibility may be for the thematic subject to first move to [Spec, C], a non-case position, and then to move from that position to a matrix position. This technically circumvents the violation of the Chain Condition, but in turn it is an instance of improper movement. The conflicting facts about Case and theta-role pose a logical challenge, given the evidence that the thematic subject of the main verb is in a matrix position in *tough* constructions.

The OP analysis of AR is based on two assumptions: first, the "raised" DP is in the matrix subject position; and second, the matrix subject position is a non-theta position. The latter is in turn based on the assumption that the matrix subject position contains a null expletive in non-AR constructions with the *ke*-clause complement postposed. Absolutive case marking on the "raised" DP is also expected if it receives Case in the matrix subject position. However, these assumptions

are not necessarily founded. For example, there is no independent evidence to support the presence of the alleged null expletive in the subject position. Also, since absolutive can be assigned within the embedded clause, the "raised" DP's case does not necessarily serve as evidence for its matrix status. In other words, there is no convincing reason to assume that the "raised" DP in Tongan AR is in the matrix clause, as far as absolutive arguments are concerned.

In fact, the prohibition of clitic pronouns in the matrix clause of AR seems to suggest that the "raised" DP in Tongan AR may be located inside the embedded clause. Morphophonological evidence shows that clitic pronouns in Tongan attach to T (Otsuka 2000). If the clitic subject in AR were base generated in the matrix clause, no syntactic rules would prohibit it from attaching to its host, the matrix T. However, the resulting sentence is ungrammatical.

(23) * 'Oku ne_i totonu [_{CP} OP_i [_{C'} ke t_i nofo] (=10) PRS 3S advisable SBJV stay Intended: 'He should stay.'

On the other hand, if the clitic is base generated inside the embedded clause, it is expected to be confined to the embedded clause. It can attach to the embedded T, but it cannot get out of the embedded clause to attach to the matrix T. The ungrammaticality of sentences like (23) therefore suggests that the "raised" DP of AR constructions is located inside the embedded clause.³

With this new piece of evidence, an alternative analysis of Tongan AR becomes available: the "raised" DP originates in the embedded clause and undergoes A-bar movement to the embedded [Spec, C]. This possibility is illustrated in (24).

(24) 'Oku totonu [_{CP} 'a Sione_i [_{TP} ke nofo t_i]] PRS advisable ABS John SBJV stay 'John should stay.'

In this construction, the "raised" DP originates in an embedded argument position, where it receives a theta-role as well as Case. It then undergoes A-bar movement to [Spec, C], maintaining the Case that has been assigned in the base position. This is akin to Massam's (1985) analysis of AR in Bauan Fijian and Niuean, in which the relevant constructions are argued to involve an optional movement to the specifier of C.⁴

The proposed movement to [Spec, C] can be understood as an instance of A-bar scrambling induced by a topic feature. In support of the topic-like status of the raised "DP" in AR, Polinsky (2016) notes that AR is incompatible with generics and focus expressions. Moreover, independent evidence exists for phrasal movement induced by information structural features in Tongan. Tongan permits VOS to alternate with the regular constituent order, VSO. This alternation is governed by the new information focus feature, which determines whether the subject or the object moves to [Spec, T] to satisfy its EPP-feature; when the object bears the new information

³ Bruening (2001) proposes a similar analysis of AR in Passamaquoddy, citing similar kinds of evidence.

⁴ To be precise, Massam (1985) postulates a second specifier (Spec2) for this type of movement, reserving the regular specifier for wh-movement. Niuean freely permits transitive subjects to participate in AR and when they do, they appear in ABS. Thus, Massam (1985) also assumes that the DP in Spec2 can further undergo movement to a matrix position. Given this possibility, Massam (1985) suggests that Spec2 is ambiguous as to whether it is an A- or A-bar position.

focus, it raises to [Spec, T] and the subject remains in situ, yielding VOS (Otsuka 2005).⁵ This analysis is supported by the choice of VSO/VOS in the context of constituent questions. To answer object wh-questions, VOS must be used, with VSO rendered infelicitous. The reverse is true for subject wh-questions. Thus, it is not far-fetched to hypothesize movement to [Spec, C] induced by a topic feature, as part of the grammar of Tongan.

5 NULL OPERATOR AS A COMPLEX WH-PHRASE

The analysis laid out above encounters two problems. First is the fact that the presumed topic movement to the left periphery is not available in matrix clauses, as shown in (25). Case-marked DPs, be it absolutive or ergative, can never precede the tense marker, with or without a resumptive pronoun. Instead, fronted topics must be marked by a predicate marker ko, as in (26).

- $(25) \quad \begin{aligned} &\ast [_{CP} `a ~ Sione_i [_{C'} `oku (ne) poto ~ t_i] \\ & ABS ~ John ~ PRS (3S) ~ smart \\ & `John, (he) ~ is ~ smart.' \end{aligned}$
- (26) Ko Sione_i, 'oku poto t_i. PRED John PRS smart 'John, (he) is smart.'

In fact, movement of DPs to the left periphery seems to be generally prohibited in Tongan. Even interrogative phrases may not undergo so called wh-movement. Instead, wh-questions take the form of pseudo-cleft, involving a null operator, as seen in (27) and (28), respectively.

- (27) $*[_{CP}$ 'a hai_i $[_{C'}$ na'e ha'u t_i]]? ABS who PST come Intended: 'Who came?'
- (28) Ko hai_i [_{CP} OP_i [_{C'} na'e ha'u t_i]]? PRED who PST come 'Who came?' (lit. 'The one who came is who?')

Furthermore, phrasal movement to the left periphery is also impossible in tensed embedded clauses, as illustrated in (29). In other words, phrasal movement to the left periphery is prohibited except in AR subjunctive clauses.

(29) Na'e talamai 'e Sione $[_{CP}$ *'a Mele_i $[_{C'}$ 'oku sai'ia t_i 'ia Pila.]] PST tell.me ERG John ABS Mary PRS like in Bill Intended: 'John told me that Mary, (she) likes Bill.'

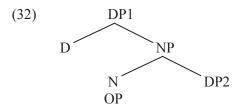
The second problem concerns AR of ergative arguments. Given the general constraint on ergative extraction in the language, it is not surprising that ergatives cannot undergo AR in the

⁵ See Custis 2004 for an alternative analysis of VOS in Tongan.

same way as absolutives (as shown in (8) above); ergative extraction requires a resumptive pronoun in lieu of a gap. Surprisingly, however, insertion of a resumptive pronoun does not improve the acceptability, if the "raised" DP is marked as ergative. Instead, the "raised" DP must be marked as absolutive, as shown in (30) and (31), respectively. This is unexpected if the "raised" DP is in [Spec, CP] as a result of topicalization. Rather, ABS marking suggests that this DP receives Case from a matrix functional head.

(30)	*'Oku totonu	$[_{CP}$ 'e Sione $[_{C'}]$	ke ne _i	U	'a e fale]
	PRS advisable	ERG John S	SBJV 3S	build	ABS REF house
	'John should build a house.'				
(31)			ke ne _i SBJV 3S	U	'a e fale] ⁶ ABS REF house

These two problems can be solved by adopting Hicks's (2009) analysis of *tough*-constructions. Hicks postulates a complex internal structure for a null operator. In this structure, illustrated in (32), OP is treated as a N head taking a DP complement. In *tough*-constructions, the thematic subject of the main verb is generated in the embedded argument position as part of this complex operator. The complex DP receives Case and a theta-role inside the embedded clause before undergoing movement to [Spec, CP], pied-piping the lower DP. Having been "smuggled" into this position, and having an unchecked Case feature, the lower DP can agree with the matrix T, thereby receiving a Case value and moving to [Spec, T] due to T's EPP-feature.⁷ This is how the thematic subject of the embedded verb in a *tough*-construction ends up in the matrix subject position and appears in the case assigned to that position.



Suppose what is base generated in the embedded argument position in Tongan AR is this complex OP, with the higher D bearing a topic feature. The whole complex DP undergoes topic movement to [Spec, C]. The lower DP with an unmarked Case feature φ -agrees with the matrix functional head and receives a Case value. In (33), the relevant functional head is assumed to be v, but it does not affect the analysis if it is T.

This structure captures two facts about the "raised" DP in AR constructions: first, it is base

⁶ % indicates that this sentence is somewhat degraded in that not all speakers accept it as grammatical (Otsuka 2000 and Polinsky 2016).

⁷ "Smuggling" is a term used by Collins (2005) in his analysis of passive constructions in English.

generated in the embedded clause (as suggested by the distribution of clitic pronouns); and second, it receives Case from the matrix (thereby accounting for the impossibility of ergative marking).

The idea of complex OP also explains the general ban on the proposed topic movement to [Spec, C] in other contexts. If the idea of complex OP is extended to all operator-variable constructions, applying this topic movement in a matrix clause would result in ungrammaticality, as the lower DP fails to be licensed without a functional head to check its Case feature in this position. Hence, sentences like (25) are ruled out. The impossibility of wh-movement, as exemplified in (27), can be explained if we assume that interrogative words in Tongan like *hai* 'who' and $h\bar{a}$ 'what' are not themselves operators. In fact, Tongan permits wh-in situ. A likely analysis for this is that the operator-variable structure is established in situ, with the interrogative word functioning as a variable and is bound by a null operator base generated in [Spec, C] (Cole and Hermon 1998; Otsuka 2016). Unlike topic phrases, interrogative phrases need not merge with a null operator and hence, they never get "smuggled" into [Spec, C].

6 CONCLUSION

AR in Tongan, though being a highly marked and limited operation, is a source of many theoretical questions. The data provided above suggest that the "raised" DP in AR is base-generated within the embedded clause and undergo A-bar movement to [Spec, C]. Adopting Hicks's proposal that OP is a nominal head taking a DP complement, the present analysis explains not only the A-bar properties of AR, but also the following facts that have not received a satisfactory account previously: (a) the thematic relation between the DP in a matrix position and an embedded argument position; and (b) impossibility for clitic pronouns to undergo AR.

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