

## Revisiting T-to-C movement in Polynesian: an argument for a finer left periphery

**Summary:** There are several analyses for deriving the verb-initial syntax of Polynesian languages, which involve verb-raising and/or predicate-raising. Within these analyses, often T-C movement is proposed to derive the TAM(Tense/Aspect/Modal markers)-initial ordering of sentences, where TAM is suggested to move to C (e.g Otsuka 2005, Collins 2017). This paper presents novel data from Tokelauan, a Polynesian language, that suggests an empirical problem within existing analyses, namely that complementisers and TAM particles can co-occur, even with complex morphological material in-between. In addition to Tokelauan, it is also shown that (certain) complementizers can co-occur with TAM in Tongan and Samoan as well, a fact that has been overlooked in the proposals that claim T-C movement in Polynesian. In fact, one strong argument given in favour of the T-C movement in existing works has been that TAM is in complementary distribution with complementizers (Custis 2004:122; Collins 2017:30). In the light of this new data from Tokelauan, and the overlooked data from Tongan and Samoan, we suggest that the T-C movement in Polynesian needs to be revisited and refined. We argue that assuming a finer left-periphery (à la Rizzi 1997) for Tokelauan, Samoan, & Tongan (TST hereafter) can account for the patterns. More specifically, we propose that certain complementizers are in complementary distribution with TAM while certain others are not because the two types of complementizers occupy different syntactic slots in the expanded left-periphery: some complementizers occupy a higher slot (ForceP), while others occupy a lower position (FinP).

**Data** Current analyses of Tongan and Samoan assume T-to-C movement (e.g Otsuka 2005, Collins 2017). For **Tongan**, Otsuka (2005)'s analysis for the verb-initial order in the language is based on head-movement, where the verbal head undergoes V-to-T-to-C movement. In this analysis, before any verb movement, the subject or the object raises to SpecTP, due to an EPP feature on T. In order to derive the verb-initial word order, the verb must raise higher than this moved DP in SpecTP, which prompts Otsuka to argue that the verb first moves to T (to pick up TAM) and then further to C. This analysis predicts, under a standard head-movement analysis, that T and C could not co-occur with complex morphological content intervening, contra empirical evidence (see (2)-(4) below). In a different analysis of **Tongan**, Custis (2004) argues that there is no T-C movement and suggests that the TAM is base-generated in C instead, while the verb raises up. Such an analysis predicts that TAM and complementizers should not co-occur, since they are competing for the same slot, which is again contrary to empirical facts. In **Samoan**, Collins (2017) argues for T-to-C movement, as the complementiser *ona* is in complementary distribution with TAM particles. More specifically, when a verb takes the complementiser *ona*, the embedded verb may not be preceded by any TAM marker, leading Collins to argue that T and C are syntactically merged through T-C movement.

- (1) 'Ua siliga **ona** (\*sā/e/'ā) taunu'u mai le tama.  
 PRF too.late **COMP (PST/PRS/FUT)** arrive DIR DET man  
 'The man was overdue coming back.' (lit. it was too late that the man came back)  
*Samoan* (Collins 2017:30)

**New data: co-occurrence of T and C** In each analysis above, one critical consequence of T-to-C movement is that TAM particles and complementisers are in complementary distribution with one another, and as such will never co-occur (Custis 2004:122; Collins 2017:30). Below is novel data from **Tokelauan**, another verb-initial Polynesian language, which illustrates that TAM particles and complementisers can co-occur.

- (2) Ko John na lea mai **pe** ko te ika **na** tunu e Rangi  
*foc* John PST say DIR **COMP foc** DEF fish **PST** cook ERG Rangi  
 'John asked if/whether Rangi had cooked the fish.'

Furthermore, (2) demonstrates that C and T are not simply combined to form a complex head. If the TAM marker and complementiser are somehow adjoined, it should not be possible to split them with a phrase. In (2) the complementiser and TAM particle are separated by the *ko*-focused phrase, *ko te ika*. This is a maximal projection, which therefore cannot be argued to be a clitic attaching within a morphologically merged C and T.

Co-occurrence of T(AM) and C also exists in Tongan and Samoan, as shown below.

- (3) 'Oku 'ikai te u 'ilo **pe** 'oku lelei pe kovi.  
 PRS NEG FUT 1SG know **COMP** PRS good or bad  
 'I do not know whether it is good or bad' *Tongan* (Churchward 1953:50)
- (4) **ina** 'o alu 'o ia  
**COMP TAM** go ABS 3SG  
 'when he was going' *Samoan* (Churchward 1926:7)

There is evidence, similar to Tokelauan, that these co-occurrences of TAM and complementizers are not simply a complex head, formed via head-movement, as it is possible to split C and TAM markers with other morphological material (e.g the subject clitic in 5).

- (5) **Ka** nan **ka** fehu'i mai, te u tala kiate kinautolu.  
**COMP** 3PL **FUT** ask towards FUT 1SG tell DAT 3PL  
 'If they ask me, I will tell them.' *Tongan* (Churchward 1953:42)

**Analysis: a finer left periphery; landing site of TAM is in a lower position** Following Rizzi (1997), we suggest that the complementiser domain in TST is a series of functional heads: ForceP>FocP>FinP>T(AM)P (similar to the hierarchy suggested for Niuean in Massam (2020)). We suggest that certain complementizers (e.g *pe* in Tokelauan) are generated in Force<sup>0</sup>, while other complementizers (e.g *ke* in Tokelauan, *ona* in Samoan) are generated in lower Fin<sup>0</sup>. The movement of T(AM) is to the lower Fin<sup>0</sup> position, and thus TAM is in complementary distribution with *ona* and *ke*, but not with higher complementizers like *pe*. One prediction of this analysis is that when a *ko*-focused element (that occupies Spec,FocP) occurs with a complementizer, the *ko*-focused element must be to the right of the COMP in case of *pe*, and must be to the left of the COMP in case of *ke*. This prediction is borne out, as we see *ko te ika* to the right of COMP *pe* in (2), and *ko Jess* to the left of *ke* in (6).

- (6) Ko John nae fofou **ko** **Jess** ke ia tukia ia Rangī  
 Ko John T/A want **ko** **Jess** COMP 3SG hit ABS Rangī  
 'John wants Jess to hit Rangī.'

**Ruling out an alternative analysis where TAM does not move.** Another potential path to account for the reported facts is that TAM particles are base generated in T, and do not undergo any movement at all. This proposal would require the predicate/V in these languages to move to a position lower than the TAM particle, in order to obtain the TAM-initial word order. In all three languages (TST) discussed here, pronominal subjects must appear pre-verbally, and Collins (2017) has made a strong case that these are raised to SpecTP from their base-generated position in Spec,vP. However, if TAM is generated in T, we would expect the TAM particle to follow the subject pronoun, an order that is never attested in TST, as illustrated with an example from Tokelauan below (7). As such, we argue in favour of TAM-movement account, in combination with a finer left periphery.

- (7) Na **ia** velo-a te ika. / \*ia na velo-a te ika.  
 TAM **3SG** spear-cia DET fish / 3SG TAM spear-cia DET fish  
 'He speared the fish.' *Tokelauan* (Hooper 1997:62)

**References:** Ball, Douglas (2008); Churchward, Spencer (1926); Churchward, C. Maxwell (1953); Collins, James (2017); Custis, Tonya (2004); Hooper, R. Elizabeth (1994); Massam, Diane (2020); Otsuka, Yuko (2005); Rizzi, Luigi (1997).