Circumnominal relative clauses in Chamorro

Overview • Chamorro (flexible VSOX; Austronesian; spoken in the Mariana Islands) has circumnominal relative clauses (RCs) (1) in addition to the cross-linguistically more familiar postnominal (2) and prenominal (3) types. Circumnominal RCs are unreported in the literature on Chamorro, but a similar array of RC types has been shown to exist in related languages, including Tagalog and Seediq (Aldridge 2004). \square = head NP; $[\cdot]$ = RC.

(1) i [dinanchi na primu-hu] ni råmas trongku nigap] the PASS:hit LK cousin-1SG.POSS OBL branch tree yesterday 'the cousin of mine who was hit by a tree branch yesterday'

(2)

- 'the cousin of mine who was hit by a tree branch yesterday' 294, EDR i primu-hu [ni dinanchi ni råmas trongku nigap] 269, EDR
- (3) i [d*in*anchi ni råmas trongku nigap] na primu-hu 292, EDR

Here, I argue that circumnominal RCs in Chamorro are derived via phonological lowering of the head NP. I consider but ultimately dismiss two other hypotheses: (a) circumnominal RCs are derived via a combination of scrambling & remnant movement (Aldridge's 2004 proposal for Tagalog), and (b) the head NP surfaces in (or near) a position where it is base-generated in the RC. Four arguments help us restrict the hypothesis space.

Background • The existence of both post- and prenominal RCs is predicted by the possibility for both right- and left-adjunction in Chamorro nominal structures, observed for APs in addition to RCs. (2) and (3), then, might receive the following respective analyses.

- (4) $[_{DP} \text{ i } [_{NP} \text{ primu-hu}] [_{CP} \text{ ni dinanchi ni råmas trongku nigap}]]]$
- (5) [DP i [NP [CP dinanchi ni råmas trongku nigap] [NP na primu-hu]]]

This sort of analysis seems wholly incompatible with Chamorro's circumnominal RCs, since in that construction, the modified NP surfaces within its modifier. Clearly, an explantion is needed. At least superficially, the circumnominal type seems to pattern with the prenominal type, since in both types, the head NP is inflected with the linker particle na, which separates a lexical head from its modifier in the vast majority of its distribution. Lowering • The head NP is lowered from a RC-external position, attaching to any phonological constituent which has an edge inside the RC. This hypothesis is somewhat reminiscent of Chung's (1998) subject lowering hypothesis for Chamorro. The analysis as formulated predicts significant possible word order variation in circumnominal RCs, and predicts that certain syntactic constraints might appear to be disregarded.

Scrambling & remnant movement • As proposed by Aldridge (2004) for Tagalog circumnominal RCs, the head NP is base-generated inside the RC but raises to Spec, CP. A subconstituent from the RC scrambles to a position below the head NP but outside TP, and the remnant TP moves to a position above the head NP. This analysis predicts that the constituent(s) following the head NP could only be those that could be scrambled.

Base-generation • The head NP is base-generated inside the RC and surfaces in or near its base position. Assuming other mechanisms are still at play that derive some of Chamorro's word-order flexibility (including subject lowering), this analysis doesn't rule out word-order flexibility in the RC, but certain types of flexibility might be unexpected.

Arguments • (a) Ordering flexiblity in conjoined VPs. Significant word order flexibility is found in RCs with conjoined VPs. The head NP can surface in either VP conjunct:

- (6) i [[ma-fåhan na [kareta] gi Sabalu] **yan** ma-såkki gi Damenggu]. the PASS-buy LK car LOC Saturday and PASS-steal LOC Sunday 'the car that was bought on Saturday and stolen on Sunday'
- (7) i [[ma-fåhan gi Sabalu na kareta] yan ma-såkki gi Damenggu]. 138, EDR

137, EDR

(8) i [ma-fåhan gi Sabalu yan [ma-såkki na kareta] gi Damenggu]]. 155, EDR

This flexibility poses a problem for all but the lowering hypothesis. In (6), the material following the head NP is not a constituent and couldn't have gotten there via scrambling. In (7), the head NP is not in an object position, and therefore not in a position where it could have been base-generated. The base-generation hypothesis doesn't disallow e.g. the head NP anteceding a null pronoun in the other conjunct, but (8), in this case, would violate Chamorro's constraints on anaphora, since the antecedent would neither precede nor c-command its antecedent (Chung 1998:136).

- (b) The linker. As mentioned, Chamorro's linker generally occurs between lexical heads and their modifiers, making its presence in circumnominal RCs puzzling. Assuming with Chung (1998) that the linker is inserted post-syntactically in modification environments, only the lowering hypothesis is viable, since circumnominal RCs are derived from structures with the requisite modification environment.
- (c) Islands. Evidence from island effects suggests that circumnominal RCs still contain a movement dependency (Chomsky 1977). If the head noun were in a base-generated position within an island, there would be no movement dependency across the island boundary, and we would predict not to see island violation effects, yet we do:
- (9) *Hu li'i' i [ha tungu' si Juan [hayi mu-na'-malångu na tåotao]].

 AGR see the AGR know Juan who PASS-CAUS-be.ill LK man.

 ('I saw the man who Juan knows who got (the man) sick.') 218, EDR
- (*d*) Constituents that can follow the head NP. A handful of constituent types in Chamorro cannot undergo A' movement; among them, realis passive agents, and objects of antipassive verbs. These constituents should not be able to follow the internal head NP if the scrambling & remnant movement analysis is correct, but such sentences are judged to be grammatical by speakers. (1) shows a realis passive agent following a head NP, and (10) shows an antipassive object following a head NP.
- (10) i [mam-bendi na biha kanåstra gi metkåo] the AP-sell LK old.lady OBL.basket LOC market 'the old lady who sold baskets at the market' 364, EDR

Implications • If the analysis I argue for here is correct, circumnominal RCs in Chamorro will be added to the list of word-order phenomena that are not directly attributable to the underlying syntax of an expression (Bennett et al. 2016, Sabbagh 2014, Chung 2003). Though it is very unlikely that all syntactic analyses of circumnominal RCs should be replaced with phonological movement analyses, it might be worth evaluating languages with circumnominal RCs to see whether such analyses would be tenable.

References: Aldridge, E. (2004). *Language and Linguistics* 5(1), 99–129. • Bennett, R. et al. (2016). *Linguistic Inquiry* 47(2), 169–234. • Chomsky, N. (1997). In *Formal syntax*, 71–132. New York: Academic Press. • Chung, S. (1998). University of Chicago Press. • Chung, S. (2003). *Linguistic Inquiry* 34(4), 547–599. • Sabbagh, J. (2014). *Syntax* 17(1), 40–89.