Conjunctive Reduction Revisited: Evidence from Mayrinax Atayal and Southern Paiwan
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Conjunctive reduction is a phenomenon resulted from a two-way grammaticalization of coordinate structures: One direction involves adverbialization where a conjunction or linker evolves into a modifier marker; the other direction has to do with complementation where a conjunction/linker is grammaticalized as a complementizer introducing a subordinate clause, as schematized in the diagram below (MM: modifier marker):

\[ \text{Adv} \ V \leftarrow [\text{Adv-MM}] \ V \leftarrow \text{V Conj} \ V \Rightarrow \text{V [Comp V]} \Rightarrow \text{V V} \]

Among the Formosan languages examined in Tsai (2007), Squliq Atayal is ranked farthest at the end of adverbialization, since there is no trace of a linker left in-between adverbials and main verbs. This analysis thus begs the question whether there is evidence for a transition stage of the proposed historical development of this language. Curiously enough, our study reveals that a closely related dialect, i.e., Mayrinax Atayal, indeed makes extensive use of linkers in a variety of adjunct and complement constructions (cf. Huang 1995, 1997; Wu 2008). From our point of view, Squliq is fully developed in terms of conjunctive reduction, whereas Mayrinax is on the relatively conservative side. In a similar light, we also find Southern Paiwan (Sinvaudjan) with some of the conjunctive reduction construals, while blocking some. The language is closely related to Amis, and hence provides an ideal testing ground for our hypothesis.

Starting from the left-hand side of conjunctive reduction schema (1), we find a linker 'i' situated in-between a manner adverbial and the main predicate in Mayrinax, which is completely absent in Squliq, as evidenced by (2).

(2) ma-uhum=ci' 'i' x<um>ab cu' bauwak.
   AV-brave=1S.Nom Lnk stab<AV> Nom wild.pig
   'I stab the wild pig bravely.' (adverbial construal)

On the right-hand side of the reduction schema, 'i' arguably serves as a complementizer introducing either a control complement, as in (3), or a middle/tough complement, as in (4) (cf. Wu 1998):

(3) siwal-an=mi' ['i' m-aniq cku' qulih 'i' Watan].
   allow-LV=1S.Gen Lnk AV-eat Acc fish Nom Watan
   'Watan was allowed by me to eat the fish.' (control complement)

(4) aqih [‘i’ niq-un ku’ qulih].
   bad Lnk eat-PV Nom fish
   'The fish tastes bad.' (middle complement)

Higher-order predicates also employ the same linker to create a potential raising configuration. This is best seen in modal and evaluative sentences such as (5) and (6):

(5) ki [‘i’ baq [‘i’ k<um>aal cu’ kai na’ matu'uwal]].
   possible Lnk can Lnk speak<AV> Obl word Gen Mayrinax
   'It is possible that he can speak Mayrinax.' (modal construction)

(6) nahalij[‘i’ ini=mu’ niq-i ku’ qulih].
   pitiful Lnk Neg=1S.Gen eat-PV.AT Nom fish
   'It is a pity that I did not eat up the fish.' (evaluative construction)

As a matter of fact, after the complementation process is complete, the subordinate clause can be even detached as an adjunct through topicalization, as in (7), where ‘i’ functions as a complementizer introducing a conditional/temporal clause instead, very much like its counterpart ho in Tsou (cf. Tsai 2007). Similar "reverse" adverbialization also seems to happen in associating locative or temporal predicates, as illustrated in (8):

(7) [‘i’ niq-un=su’ku’ qulih ga], pa-inuqil=su’.
   Lnk eat-PV=2S.Gen Nom fish Top Irr-die.AV=2S.Gen
   'If you eat this fish, you will die.' (conditional clause)
In comparison, Southern Paiwan is a curious case along our line of research, where conjunctive reduction is associated with a linker a. In particular, we may swap the word order of some sentential adverbials with the main predicate, which construal is impossible for modal and manner adverbials, as exemplified by the frequency adverbial below:

\[(9)\]
\[\begin{align*}
\text{a.} & \quad \text{palayulayu=}=\text{a}\text{'en} \quad \text{c}<\text{em}>\text{aqis} \quad \text{ta} \quad \text{itung.} \\
& \quad \text{often.AV}=\text{1s.Nom} \quad \text{Lnk sew}<\text{AV}> \quad \text{Obl} \quad \text{clothes} \\
& \quad \text{'I sew clothes often.'} \\
\text{b.} & \quad \text{c}<\text{em}>\text{aqis}=\text{a}'\text{en} \quad \text{palayulayu} \quad \text{ta} \quad \text{itung.} \\
& \quad \text{sew}<\text{AV}>=\text{1s.Nom} \quad \text{Lnk often.AV} \quad \text{Obl} \quad \text{clothes} \\
& \quad \text{'I sew clothes often.'}
\end{align*}\]

This indicates that, quite different from 'i' in Mayrinax, the linker a in Paiwan retains more conjunctive characteristics on the inflectional layer in Rizzi's (1997) sense. Namely, the permutation is allowed only for IP-level adverbials, while the same construal is prohibited from CP-level and VP-level adverbials. It may well be the case that in the latter cases, a has evolved into a true complementizer, losing its conjunctive nature as a result.

It is therefore possible to sketch a picture of how conjunctive reduction works to shape the "topography" of all sorts of adverbials in Mayrinax Atayal and Southern Paiwan (cf. Rizzi1997; Cinque 1999), as visualized in the following diagram:

\[(10)\]

To sum up, we have shown that conjunctive reduction is indeed quite pervasive in Formosan languages. By looking into the two-way grammaticalization process behind the relevant phenomenon, the syntax of modification and subordination from an evolutionary perspective. Furthermore, our analysis fits well into the Neo-Davidsonian semantics of adjunct/complement association in both synchronic and diachronic terms (cf. Tsai & Chang 2003), which in turn provides a feasible account of the genesis of complex and compound sentences.