

18 *Analogy and grammatical change: A case study of the verb of ‘saying’ in Mantauran Rukai*

ELIZABETH ZEITOUN

1 Introduction

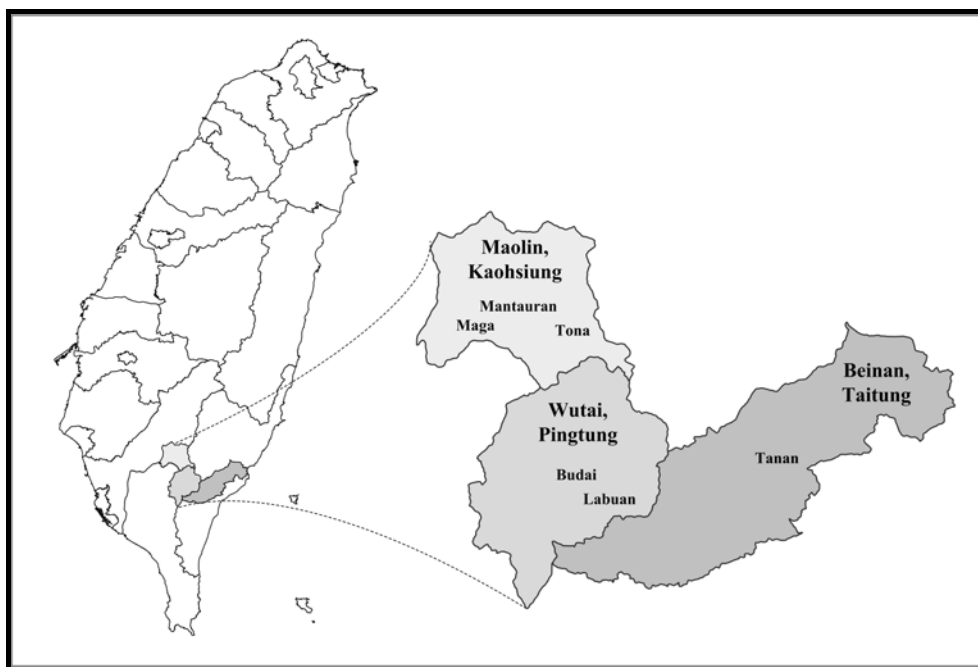
Among the fifteen Austronesian languages still spoken in Taiwan,¹ Rukai, which stretches across the south of Taiwan (Map 1), consists of six dialects (Tanan, Labuan, Budai, Maga, Tona, and Mantauran). The whole Rukai population (excluding here the repartition by village) is estimated at 12,861 as of December 2014 according to the census of the Council of Indigenous Peoples, Executive Yuan (<http://www.apec.gov.tw>).

The internal relationships of Rukai have, to date, not been completely clarified. Based on Li's (1977) reconstruction of Proto Rukai (PR),² it is generally acknowledged that there are two distinct subgroups: Tanan, Labuan, and Budai on the one hand, and Maga and Tona on the other.³ Three hypotheses have been advanced regarding the position of Mantauran: (i) It subgroups immediately with Maga and Tona (Li 1977); (ii) it is the first offshoot of the Rukai family (Tu & Cheng 1991; Tu 1994; Starosta 1994, 1995; Li 1995, 1996); and (iii) it forms a subgroup with the Tanan-Labuan-Budai cluster (Zeitoun 2003). It is this last hypothesis that I consider valid here. The position of Mantauran within the Rukai language family is difficult to assess because it has undergone many phonological and morpho-syntactic changes.

¹ I refer here to a linguistic (rather than governmental) classification, which recognises Amis, Atayal, Saisiyat, Bunun, Kanakanavu, Kavalan, Kaxabu, Rukai, Paiwan, Puyuma, Saaroa, Seediq, Thao, Tsou and Yami as distinct languages. Among these, it is unclear whether Kaxabu, a plain-tribe language, is still actively spoken. Yami is a Philippine language, belonging to the Batanic group, and thus differs drastically from the other Formosan languages.

² Abbreviations for languages include: Mt, Mantauran; PR, Proto Rukai; To, Tona. Abbreviations used in the examples follow those of the Leipzig Glossing Rules. Additional abbreviations include the following: ACT, active; CNTRFT, counterfactual; DYN, dynamic; FILL, filler; FIN, finite; NFIN, non-finite; NP, Noun phrase; REAL, realis; RED, reduplication; S, sentence; STAT, stative; SUBJ, subjunctive; VP, Verb Phrase.

³ Because of population movement, the present geographical distribution of the Rukai dialects does not reflect their subgrouping.



Map 1: Geographical distribution of the Rukai dialects

The goals of the present paper are threefold. It will provide a discussion regarding the use of the conjunction *la* ‘then’ in the formation of the quotative verb ‘say’ in Tona (section 3) in order to highlight a number of morpho-syntactic changes that have occurred in Mantaauran (section 4). This synchronic study will further serve as a basis for the reconstruction of coordinative and conjunctive markers as well as the quotative verb at the PR level (section 5). Before delving into these complexities, I first provide an overview of the sound changes undergone by Mantaauran, in order to let the reader reach a better understanding of the comparative data proposed below.

2 Major sound changes in Mantaauran

Mantaauran has undergone a number of sound changes, and I deal in this section only with those relevant to the present study. The reader is referred to Li (1977), Zeitoun (2007), and Wolff (2010) for more details. Throughout the paper, I take Tona⁴ as a representative dialect of the Rukai language family and compare it to Mantaauran as shown in (1)–(5).

All the PR voiced stops have been spirantised: PR *b > Mt *v*, PR *d/*ḑ > Mt *dh*, PR *g > Mt *h*.⁵

⁴ The choice of this dialect as a representative is based on two factors: (i) It is not as close to Mantaauran as Labuan, Tanan and Budai but (ii) it exhibits the same characteristics as these dialects. Unless mentioned otherwise, all the examples given in Tona are extracted from the Formosan Language Archive. Data on Mantaauran is drawn mostly from Zeitoun & Lin (2003), Zeitoun (2007), and unpublished folktales.

⁵ For the modern languages, I use the now more conventional Romanised orthography, whereby *th* stands for *θ*, *dh* for *ð*, *lr* for *l*, *ng* for *ŋ*, *ʻ* for *ʔ*, and *e* for *ə*.

| | | | | | |
|-----|-------------|-----------|-----------------|-------------------|----------------|
| (1) | Proto Rukai | Tona | Mantauran | Gloss | |
| | *b- | *bələbələ | <i>belebele</i> | <i>velevele</i> | ‘banana’ |
| | *-b- | *bələbələ | <i>balebale</i> | <i>valevale</i> | ‘bamboo’ |
| | *d- | *davacə | <i>davace</i> | <i>dhaace</i> | ‘leave’ |
| | *-d- | *idai | <i>iday</i> | <i>idhai</i> | ‘hundred’ |
| | *d- | *dākəralə | <i>dhakeale</i> | <i>dhakerale</i> | ‘river’ |
| | *-d- | *talodɔ | <i>talodro</i> | <i>talodho</i> | ‘bridge’ |
| | *g- | *gəməgəmə | <i>gemegeme</i> | <i>hemeheme</i> | ‘hold in hand’ |
| | *-g- | *[əgə]əgə | <i>egeege</i> | <i>lrehelrehe</i> | ‘mountain’ |

Among the PR fricatives, PR *v has become Mt Ø, PR *θ is reflected as Mt s and PR *s as Mt ’ (further triggering the merger of PR *s and PR *ʔ as Mt ’).

| | | | | | |
|-----|------|-------------|-----------------|-----------------|----------|
| (2) | | Proto Rukai | Tona | Mantauran | Gloss |
| | *v- | *valo | <i>valo</i> | <i>alo</i> | ‘bee’ |
| | *-v- | *abo | <i>abo</i> | <i>avo</i> | ‘ashes’ |
| | *θ- | *θiabə | <i>thiabe</i> | <i>siave</i> | ‘chop’ |
| | *-θ- | *θuθu | <i>thotho</i> | <i>soso</i> | ‘breast’ |
| | *s- | *sipi | <i>sipi</i> | <i>’ipi</i> | ‘dream’ |
| | *-s- | *mabosoko | <i>mabosoko</i> | <i>mavo’oko</i> | ‘drunk’ |

The sound change PR *k > Mt ’ has only taken place in few affixes—compare (3a) and (4)—and loan words (3b):

| | | | | | |
|-----|-----|-------------|--------------|---------------|----------------|
| (3) | a. | Proto Rukai | Tona | Mantauran | Gloss |
| | | *k- | *ki- | <i>ki</i> | <i>'i-</i> |
| | | | | | i. 'gather' |
| | | | | | ii. 'passive' |
| | | | | | 'topic marker' |
| | but | *ka- | <i>ka</i> | <i>'a</i> | |
| | | *ka | <i>ka</i> | <i>ka</i> | 'ligature' |
| | b. | — | Tona | Mantauran | Gloss |
| | | | <i>kaomo</i> | <i>'aomo</i> | 'Japanese' |
| (4) | | Proto Rukai | Tona | Mantauran | Gloss |
| | | *k- | *kaɔa | <i>kadroa</i> | <i>kaodho</i> |
| | | | | | 'not exist' |
| | | *-k- | *taka | <i>taka</i> | <i>taka</i> |

The PR vocalic sequence *oa has merged as Mt o:

| | | | | | |
|-----|-------------|---------|---------------|--------------|--------------|
| (5) | Proto Rukai | Tona | Mantauran | Gloss | |
| | *oa- | *oakanə | <i>wakane</i> | <i>okane</i> | ‘eat (FIN)’ |
| | *-oa- | *koanə | <i>kwane</i> | <i>kone</i> | ‘eat (SUBJ)’ |

3 The use of the conjunction *la* ‘then’ in the formation of the quotative verb ‘say’ in Tona Rukai

In all the Rukai dialects except Mantauran, the conjunction *la* ‘then’ is used in the formation of the quotative construction, *la ya*, which literally translates as ‘then so’. Before dealing with the morpho-syntactic characteristics of phrasal and sentential coordination (section 3.2) and showing how the morpheme *la* ‘then’ is involved in the

formation of the above-mentioned quotative construction (section 3.3), it is important to start with a brief overview of the verbal morphology of Rukai in Tona (section 3.1).

3.1 A bird's eye view of the verbal morphology of Tona Rukai

Tona exhibits an active/passive voice system. In the active voice (realis), dynamic verbs are usually marked by *o-* (6a);⁶ stative verbs are marked by *ma-*. Dynamic and stative transitive verbs can undergo agentive passivisation through the prefixation of *ki-* (6b). Non-agentive passivisation is marked by *'i-* (6c). Note that the vowels of these affixes undergo gliding in co-occurrence with the morpheme *a-* marking realis thus resulting in the bi-morphemic sequences *w-a-*, *ky-a-*, and *'y-a-*.

(6) Tona Rukai

- a. *a-nakay* *soa'a* *ka* *w-a-ka'ace* *na* *atho*.
 TOP-this snake TOP ACT-REAL-bite OBL dog
 'As for this snake, it bit a dog.'
- b. *a-nakay* *atho* *ka* *ky-a-ka'ace* *na* *soa'a*.
 TOP-this dog TOP PASS-REAL-bite OBL snake
 'As for this dog, it was bitten by a snake.'
- c. *'y-a-ka'ace-nga* *nakay* *atho*.
 PASS-REAL-bite-already this dog
 'The dog was bitten.'
- c'. * *'y-a-ka'ace-nga* *na* *soa'a* *nakay* *atho*.
 PASS-REAL-bite-already OBL snake this dog

Tense is not grammaticalised in Tona, which exhibits, rather, a basic mood distinction between realis and irrealis. Mood closely interacts with voice and aspect. Realis is usually encoded through the prefixation of *a-*. There are different classes of verbs, so realis marking is not always overtly marked. The temporal frame (past or present) of a clause depends on the occurrence of additional aspectual morphemes, e.g. *maka-...(-nga)* 'had...(already)' (< *maka-* 'finish') as shown in (7a), *-nga* 'already', *-la* 'still' or temporal adjuncts. Irrealis, on the other hand, is overtly marked by *no-...mi-* 'IRR', which marks a projection in the future as in (7b) and *ni-* 'CNTRFCT', which encodes counterfactuality as in (7c).

(7) Tona Rukai

- a. *a-ko* *maka-kan-ili-nga* *na* *do'o ka*
 TOP-when.REAL SUBJ:finish-eat-1SG.GEN-already OBL rice TOP
'abee *kake*.
 leave 1SG.NOM
 'When I had finished eating, I left.'

⁶ Dynamic verbs can be classified into different verb classes. Most verbs are marked by *o-*. Some verbs are marked *mu-* as in *mw-a-baithi* (~ *baithi*) 'exchange' or *m* as in *mativii* (~ *pativii*) 'make a request before leaving'. Others are completely unmarked, e.g., *'aokay* 'come'. Verbs starting with a vowel are marked by *am-* as in *am-wa* (~ *wa*) 'go'.

- b. *a-no* *maka-kan-ili-nga* *na do'o ka*
 TOP-when.IRR SUBJ:finish-eat-1SG.GEN-already OBL rice TOP
no-'abee *mi-kake.*
 IRR-leave IRR-1SG.NOM
 'When I had finished eating, I left.'
- c. *ni-doo* *koso* *'angi-da~do'o.*
 CNTRFCT-can 2SG.NOM REFL-RED~cook
 'You should be able to cook by yourself.'

Progressive, iterative, and habitual aspects are encoded through reduplication. This is illustrated in (8).

- (8) Tona Rukai
w-a-do'o~do'o *'ikay* *balate.*
 ACT-REAL-RED~cook exist outside
 '(S/he) is cooking outside.'

Based on the following alternations, *waka'ace* 'bite/bit', (*i*)*ka'ace* '(does/did not) bit', and *koa'ace* 'bite', I assume that there is a morphological distinction between verbs marked as finite, non-finite, and subjunctive. I consider that a verb marked as realis occurs in its finite form, i.e., it heads an independent clause, which can stand on its own as a complete sentence. Finite verbs occur in sentence-initial position as in (8) though they may be preceded by a topic NP as in (6a–b) or a topic clause as in (7b); they do not take any prefixes, e.g. *no-* 'IRR', *ni-* 'CNTRFCT', *i-* 'NEG', and they do not follow any conjunction, for instance *la* 'then'. I use the term 'non-finite' to designate the verb root/stem.⁷ Dynamic verbs marked by *w-a-* are unmarked in their non-finite form, cf. *w-a-ka'ace* ~ *ka'ace* 'bite'. Most stative verbs are marked by *ka-* in their non-finite form, e.g. *ma-dalame* ~ *ka-dalame* 'like, love'. A verb occurs in its non-finite form when it is preceded by a verbal prefix, e.g. *no-* 'IRR' (7b), *ni-* 'CNTRFCT' (7c) even if it occurs in sentence-initial position or if it follows a conjunction such as *la* 'then'. In a non-finite form, such verbs can be followed by pronouns marked as nominative and head independent clauses, e.g. (7b). Active (dynamic) *w-a-*marked verbs in which the first vowel of the base is *i* as in *w-a-sititi* 'beat', *o* as in *w-a-do'o* 'cook', and *e* as in *w-a-thenay* 'sing', occur as unmarked in their subjunctive form, e.g., *sititi* 'beat', *do'o* 'cook', and *thenay* 'sing'. Verbs in which the first vowel of the base is *a*, e.g. *w-a-kane* 'eat', are infixed with *-o-* (gliding to *w* in front of *a*), e.g. *k-w-ane* 'eat (SUBJ)'. Stative verbs are marked by *ma-* in their subjunctive form. A verb occurs in its subjunctive form when it appears in embedded position as V₂, as in *m-wa k-w-ane!* 'Go eating!', imperative sentences, e.g. *k-w-an-a!* 'Eat!' or in temporal/conditional/hypothetical clauses introduced by *ko* 'when.Real' or *no* 'when.Irr', as in (7a–b).

A summary of the verb classes and the verb alternations of Tona Rukai in Table 1.

⁷ In the case of dynamic verbs, the stem is identical to the root, cf. *ka'ace* 'bite'. The root of stative verbs, e.g., [*dalame*] 'like, love' is bound, thus when affixed by *ka-*, what is referred to is the verb stem.

Table 1: Finite, non-finite and subjunctive verb forms in Tona Rukai

| Verb class | Verb type | Finite | Non-finite | Subjunctive |
|------------|---------------------|--------------|------------|-----------------|
| Dynamic | 1a. <i>w-a-CVCV</i> | <i>w-a-</i> | Ø- | Ø |
| | 1b. <i>w-a-CaCV</i> | <i>w-a-</i> | Ø- | Ø-C <i>waCV</i> |
| | 2. <i>am-VCV</i> | <i>am-</i> | Ø- | <i>m-</i> |
| | 3. <i>mw-a-</i> | <i>mw-a-</i> | Ø | <i>mu-</i> |
| | 4. <i>m</i> | <i>m</i> | <i>p</i> | <i>m</i> |
| Stative | 5. Ø- | Ø- | Ø- | Ø- |
| | <i>ma-</i> | <i>ma-</i> | <i>ka-</i> | <i>ma-</i> |

3.2 A brief survey of coordination in Tona Rukai

In all the Rukai dialects, except Mantauran, both NP and VP coordination are marked by *si* ‘and’, schematised as follows: NP *si* NP and VP *si* VP and further illustrated in (9)–(10). Note that in VP coordination the second verb needs to occur in its non-finite form, as shown by the (un)grammaticality of (10a–b).

- (9) Tona
takanaw si legeai
 Takanaw and Legeay
 ‘Takanaw and Legeay’

- (10) Tona
 a. *w-a-kane si 'ongolo*
 ACT-REAL-eat and NFIN.drink
 ‘eat and drink’
 b. * *w-a-kane si w-a-'ongolo*
 ACT-REAL-eat and ACT-REAL-drink

Clauses are coordinated by (*si*) *la* ‘(and) then’ as in (11). The verb that occurs after *la* ‘then’ needs also to occur in its non-finite form. The morpheme *si* is the coordinator introduced above. I treat *la* ‘then’ as a conjunction.

- (11) Tona
 a. *si la davace si la wa-nga 'angi-talodro.*
 and then NFIN.leave and then NFIN.go-already cross-bridge
 ‘(They) left and crossed the bridge.’
 b. * *si la w-a-davace si la am-wa-nga 'angi-talodro.*
 and then ACT-REAL-leave and then ACT-go-already cross-bridge

3.3 The verb *ya* ‘(be) so, (be) like’ and the quotative construction *la ya* (lit.) ‘then so’ in Tona Rukai

In all the Rukai dialects, the verb *ya* ‘(be) so’ functions mainly as a quotative verb,⁸ though, as will be shown below, it also bears another meaning, ‘(be) like’. Like any other full-fledged verb, it exhibits the three morphological alternations mentioned above. It can occur in its finite form as *am-ya* (12a), in its subjunctive form as *m-ya* (12b), and its non-finite as *ya* (12c). The verb *ya* ‘so’ occurs in its non-finite form mostly when it is preceded by the conjunction *la* ‘then’.

(12) Tona

- a. *la* *'ikay* *aogane,* *i-ota'* *alebe* *"i-kibaka*
 then NFIN.exist on.roof NEG-NFIN.go:below NEG-NFIN.agree
mota' *alebe"* *am-ya* *si....*
 SUBJ:go:below ACT-so and
 Lit.: ‘He stayed on the roof and (he) said “(I) refuse to go down.”’
 (Formosan Language Archive, Text 3)
- b. *i-okono* *ebel-ini* *si* *la* *'aokay* *la* *'abee.*
 NEG-NFIN.find jacket-3SG.GEN and then NFIN.come then NFIN.return
"ko-'abee *kicibane"* *m-ya* *si* *la*
 1SG.NOM-NFIN.return forget it SUBJ-so and then
'aokay *'abee.*
 NFIN.come SUBJ.return
 ‘(As) he could not find his jacket, (he) said: “Forget it, I am going back home”
 and he went back home.’ (Formosan Language Archive, Text 2)
- c. *"si* *adroo,* *sy-a-ebele* *koso"* *la* *ya*
 and that wear-REAL-jacket 2SG.NOM then NFIN.so
niane *si...*
 3SG.OBL and
 ‘(But) you have your jacket on” (they) said to him...’
 (Formosan Language Archive, Text 2)

The sequence *la ya* usually follows the direct quote complement (13a), though it may occur in sentence-initial position (13b).

(13) Tona

- a. *"'aokay-a* *wamece* *na* *beke'e* *nosi'a* *la* *paowa*
 SUBJ.come-IMP SUBJ.bring OBL pig tomorrow then NFIN.put
po-'adringi, *ni-doo* *ki* *pangetedre* *'aboale"*
 put-inside CNTRFCT-NFIN.can Nom Pangetedre SUBJ.come.out
la *ya.*
 then NFIN.so
 “‘Bring me a pig tomorrow” (s/he said) and “put it inside. Then Pangetedre will
 come out.”” (Formosan Language Archive, Text 1)

⁸ Note that in narrated texts, it is sometimes difficult to determine whether *ya* (and its morphological variants) refers to a direct quotation or to a thought, all the more if it refers to a first person participant.

- b. *la ya nakay kodray baobao m-ya*
 then NFIN.so this that young.woman SUBJ-so
niane “*ko-’angi-ka~kamani* *’angi-dese~desele adri*
 3SG.OBL 1SG.NOM-REFL-RED~STAT.be REFL-NFIN.RED~wipe NEG.IMP
pa-ti-koa~koa” *la ya kodray baobao.*
 CAUS-make-RED~thing then NFIN.so that young.woman
 ‘Then the young woman said: “No need (to help). I will rub myself alone. Don’t do anything!”’ (Formosan Language Archive, Text 7)

Note also that *la ya* ‘then so’ occurring at the end of a sentence can be followed immediately by *la* ‘then’ introducing the next sentence, as in (14a–b).

(14) Tona

- a. “*’ii, am-ya nia-ni nakay ki gili,*
 EXCL FIN-so Q-3SG.GEN this younger.sibling
pa-ti-adraw ami ko ’angimalelean-ini” *la ya.*
 CAUS-make-big like.that too.much-3SG.GEN then NFIN.so
 “‘Oh, little sister, here you are, this is so serious” he said to her.’ (Formosan Language Archive, Text 7)
- b. *la wa “ko-(w)a cekele” m-ya*
 then NFIN.go 1SG.NOM-go SUBJ.get.up SUBJ-so
driane baobao.
 3SG.OBL young.woman
 ‘Then he said to the young woman “I am going to (help) you get up.”’
 (Formosan Language Archive, Text 7)

The sequence *la ya* (lit.) ‘then so’ as a quotative verb is particularly unusual in the Formosan languages (Hsieh 2011, 2012). Cross-linguistically, however, *like* is found as a quotative verb, sometimes as a new innovated form, as in English *like*, cf. Kohn & Franz (2009); Buchstaller & Van Alphen (2012); Vandelanotte (2012), among others.

What is interesting to note here is that in all the Rukai dialects, *ya* and its morphological variant forms do not only mean ‘(be) so’ but also ‘(be) like’. Illustrative examples with *am-ya* ‘(be) like (FIN)’, *m-ya* ‘(be) like (SUBJ)’, and *ya* ‘(be) like (NFIN)’ are given in (15a–c).

(15) Tona

- a. *a-nakay maolay ka am-ya nakay.*
 TOP-this story TOP ACT-like this
 ‘As for this story, it goes on like this.’ (Formosan Language Archive, Text 7)
- b. *i-igo’o kake mani ka kaga’aoco-ini*
 NEG-NFIN.know 1SG.NOM why LIG STAT:NFIN.angry-3SG.GEN
gil-ili m-ya.
 younger.sibling-1SG.GEN SUBJ-like
 ‘I do not know why my younger brother/sister is angry.’

- c. “*n(o)-ya-mi-(i)ta-nga* *pangetedr-ane?*
IRR-NFIN.like-IRR.Q-1PL.INCL.GEN-already Pangetedre-OBL
i-doo-nga ‘*aboale!*’ *la ya.*
NEG-NFIN.can-already SUBJ.come.out then NFIN.so
“‘What shall we do about Pangetedre? He can’t get out!’ they said.”
(Formosan Language Archive, Text 1)

4 The use of the conjunction *mani* ‘then’ in the formation of the quotative verb ‘say’ in Mantauran Rukai

In this section, I discuss the use of the conjunction *mani* ‘then’ in the formation of the quotative verb ‘say’ in Mantaauran by comparing this dialect with Tona and highlighting a number of morphosyntactic discrepancies. For comparison’s sake, I follow the same presentation and provide, whenever possible, the same sets of examples.

4.1 Some basic comparative data

The Mantauran active/passive voice system, the interaction between voice, mood, and aspect, as well as the verbal alternations finite/non-finite/subjunctive are very similar to those of Tona Rukai, so that basic information will not be repeated in this section. What needs to be highlighted here is that Mantauran has undergone a number of phonological and morpho-syntactic changes: The active voice *o-* has fused with the realis marker *a-* yielding *o-*,⁹ which marks most dynamic verbs (16a).¹⁰ As pointed out by Zeitoun (2007:132), “the prefix *o-* is [thus] multifunctional in that it includes a combination of different verbal categories: Verb classification, verbal conjugation, mood and voice, i.e., it indicates that a verb is dynamic, finite, in the realis mood and in the active voice.” The (agentive) passive form is ‘*i-*’ (16b). The non-agentive passive has not been reported in Mantauran (Zeitoun 2007). Different verb classes are found. Most dynamic verbs are marked by *o-*, but other verbs are marked by *om-* (rather than *am-* in the other Rukai dialects) as in *om-oa* (~ *oa*) ‘go’, *m-* as in *m-olekate* (~ *olekate*) ‘be enough’, *m* as in *maineke* (~ *paineke*) ‘breathe’ or are unmarked, e.g., *irovo* ‘pile up’. Dynamic *o*-marked verbs in which the first vowel of the base is *i*, *o*, or *e* occur as unmarked in their subjunctive form, cf. *vilivili* ‘pull’, *coroko* ‘jump’, and *ke’ete* ‘cut’. Most of the *o*-marked verbs in which the first vowel is *a* exhibit a vocalic *a*~*o* alternation:

⁹ Note that there is no glide in Manta_{uran}.

¹⁰ One of the reviewers suggests that “Mantauran *o-* and Maga *u-* do not reflect Proto Rukai **u-*a- but simply Proto Rukai **u-*, [i.e.,] that Proto Rukai probably had an alternation between **u-* ‘actor voice’ and **u-*a- ‘actor voice + realis’, and Mantauran and Maga have selected the former as the basic finite actor voice, and the other dialects the latter. This is then consistent with the fact that the Mantauran form before a vowel is **om-* (< **um-*), Maga is either *m-* or *a-m-*, the other dialects *a-m-*.” He seems to have reached a better solution, but having not yet finished my comparative study of the Rukai dialects (Zeitoun in preparation), I prefer to keep it as a possibility for further research.

(16) Mantauran

- a. 'olra 'a 'a o-ka'ace ta 'olro.
 snake TOP ACT.REAL-bite dog
 'As for the snake, (it) bit the dog.'
- b. ta 'olro 'a 'i-ka'ace 'olra 'a.
 dog TOP PASS.REAL-bite snake
 'As for the dog, (it) was bitten by the snake.'

Table 2: Finite, non-finite and subjunctive verb forms in Mantauran Rukai
 (Zeitoun 2007:140)

| Verb class | Verb type | Finite | Non-finite | Subjunctive |
|------------|--------------------|------------|------------|-------------|
| Dynamic | 1a. <i>o-CV</i> CV | <i>o-</i> | Ø- | Ø- |
| | 1b. <i>o-Ca</i> CV | <i>o-</i> | Ø- | Ø-CoCV |
| | 2. <i>om-</i> | <i>om-</i> | Ø- | <i>m-</i> |
| | 3a. <i>m-</i> | <i>m-</i> | <i>k-</i> | <i>m-</i> |
| | 3b. <i>m-</i> | <i>m-</i> | <i>p-</i> | <i>m-</i> |
| | 3c. <i>m-</i> | <i>m-</i> | Ø- | <i>m-</i> |
| | 4. Ø- | Ø- | Ø- | Ø- |
| Stative | <i>ma-</i> | <i>ma-</i> | <i>ka-</i> | <i>ma-</i> |

4.2 A brief survey on coordination in Mantauran Rukai

Examples (17)–(19) represent the Mantauran counterparts of the Tona examples given in (9)–(11). Mantauran has innovated in at least two respects:

(i) NP and VP coordination is encoded through *la*, which means 'and' (and not 'then'), rather than by *si* as in the other Rukai dialects, thus yielding NP *la* NP and VP *la* VP.

(ii) It has innovated a new grammatical morpheme for 'then', viz. *mani* 'then', which has replaced the sequence *si la* 'and then'. As shown in Zeitoun (2007:430), *mani* 'then' is used to express consecutive temporal relations, while *la* 'and' coordinates verbs that represent simultaneous actions. It is easy to witness, based on these examples, that the same (non-finite) constraint on verbs preceded by *la* 'and' and *mani* 'then'. Compare the grammaticality of (18a–b) and (19a–b).

(17) Mantauran

- takanaw la leheai
 Takanaw and Leheai
 'Takanaw and Leheai'

(18) Mantauran

- a. *o-kane* la 'ongolo
 ACT.REAL-eat and NFIN.drink
 'eat and drink'
- b. * *o-kane* la *o-'ongolo*
 ACT. REAL-eat and ACT.REAL-drink

(19) Mantauran

- a. mani **dhaace** mani **oa-nga** 'ini-talodho.
 then NFIN.leave then NFIN.go-already cross-bridge
 '(They) left and crossed the bridge.'
- b. * mani **o-dhaace** mani **mo-oa-nga** 'ini-talodho.
 then ACT.REAL-leave then ACT.REAL-go-already cross-bridge

One may question the viability of my hypothesis regarding the replacement of the conjunction *la* 'then' by *mani* 'then' in Mantauran.¹¹ Such a claim is actually supported by the fact that *la* and *mani* are both found in the six texts (about a hundred sentences) recorded by Ogawa & Asai (1935) on Mantauran. In very few sentences (only five were spotted), *la* occurs alone (20a); in nine sentences, *la* occurs with *mani* (20b). In all the other sentences (twenty three sentences in all), it is *mani* that occurs alone (20c). In these three examples, the first line capture Ogawa & Asai's (1935) transcriptions; the following three lines (transcription, morpho-phonemic glosses and translation) are mine.

(20) Mantauran

- a. la *kaðalamu* *savaʔü.*
la *kadhalame* *savare.*
 then NFIN:like/love young man
 'Then the young man loved (her).' (Based on Ogawa & Asai 1935:391, Text 5, Sentence 4)
- b. la mani *atsakülaʔ-ü.*
la mani 'acakelae.
 then then NFIN.marry
 'Then they got married.' (Based on Ogawa & Asai 1935:391, Text 3, Sentence 14)
- c. mani *ðaʔtʃü* *anoðaðoʔa...*
mani *dha'ace* *anodhadho'a...*
 then NFIN.leave two
 'Then the two of them left.'
 (Based on Ogawa & Asai 1935:391, Text 2, Sentence 4)

It seems sensible to assume that at one point in the history of Mantauran (perhaps over a hundred years ago), *mani* was introduced in this language (its origin is unknown at this point) and started to replace *la* in its sentential conjunction function.

¹¹ Stacy F. Teng (pers. comm., March 2014) raises a different possibility that cannot be disregarded lightly: It may have been the case that both *la* and *mani* co-existed and that the sequence *la mani* meant 'then so' at the PR level. While Mantauran kept *mani*, the other dialects retained *la*. However, while we have written documents from the Japanese era that show that there was a period where *la* and *mani* occurred together in Mantauran, we have no trace of such co-occurrences in the other dialects.

4.3 The quotative construction *mani ia* in Mantauran

As a consequence of the replacement of *la* by *mani* in Mantauran, it is not surprising to find the quotative construction in this dialect made up of *mani* ‘then’ and *ia* ‘(be) so’ (thus *mani ia* ‘then so’) rather than *la ya*, found in the other Rukai dialect. Note that in Ogawa & Asai’s (1935:390–393) texts, *mani* is not only found in its function as a conjunction (19c) but also as part of the sequence *mani ia* (21). The verb *om-ia* ‘so’ (22) was also recorded at that time. On the other hand, *la ia* is not found.

(21) Mantauran

| | | |
|-------------------------------|-----------------------|--------------------------------|
| <i>ma:tülüküŋaða</i> | <u><i>mane</i></u> | <i>maütüŋa[ao...</i> |
| “ <i>ma-ateleke-nga-dha</i> ” | <u><i>mani ia</i></u> | “ <i>ma-’ete-nga-lrao</i> ”... |
| STAT.FIN-cold-already-3SG.GEN | then NFIN.so | STAT.FIN-die-already-1SG.NOM |

“...If it is cold” he said, “(then it means that) I am already dead.”
(Based on Ogawa & Asai 1935:393, Text 6, Sentence 6)

(22) Mantauran

| | | |
|----------------|--------------------|--|
| <i>naula</i> | <i>itovoro</i> | <u><i>umiðijaʔü</i></u> |
| “ <i>naola</i> | “ <i>itovoro</i> ” | <u><i>om-i-dh-ia</i></u> ‘ <i>e</i> .” |
| try | ask | ACT-so-3SG.GEN-1SG.OBL |

‘He said to me: “I will try to ask (you).”’
(Based on Ogawa & Asai 1935:393, Text 3, Sentence 6)

The following two examples provide an illustration of *mani ia* in texts recorded in the 1990s.

(23) Mantauran

- a. *mani* “*alopo-nai*” *mani ia* *dhona’i*
 then NFIN.hunt-1PL.EXCL.NOM then NFIN.so that
lalake-dha.
 child-3SG.GEN
 ‘Then their children said: “We are going to hunt.”’ (Recorded August 1992)
- b. *mani ia* *’ina’i:* “*’aliki-mita*” *’i*
 then NFIN.so this from-1PL.INCL.NOM
ta-teme *opalrae*” *mani i-iae*.
 SUBJ.NMLZ-obstruct grindstone then NFIN.so-1SG.OBL
 ‘(He) said this to me: “We come from a hole obstructed by a grindstone.”’
 (Recorded November 1998)

I assume that the morpheme *mani* is the sentential conjunction introduced above. The verb *ia* ‘(be) so’ is the non-finite form of *om-ia* ‘(be) so (FIN)’ (24a). As in the other Rukai dialects, the verb *ia* ‘(be) so (FIN)’ can occur without the conjunction *mani* ‘then’, as shown in (24a). It can also convey one’s/someone’s impression or (after-)thought. In (24b), *m-ia*, for instance, can be interpreted as ‘he said to himself’.

(24) Mantauran

- a. *mani* “*la ka-ia-’-iae*” *ana.”*
 then and in.fact-NFIN.so-2SG.GEN-1SG.OBL this

“*ia*’e, *om-ia-lrao* *ana*.”
 yes ACT-so-1SG.NOM that
 “‘In fact you said that to me.’ ‘Yes, I did.’”

- b. *mani* *oa* *m-alra* “*nao-amece*
 then NFIN.go SUBJ-take 1SG.NOM-NFIN.bring
lalake-li” *m-ia*.
 child-1SG.GEN SUBJ-so
 ‘He went to take [the flower] thinking: “I am to bring (it back) to my children.”’

Despite the similarities outlined above, the verb (*om-*)*ia* ‘(be) so’, Mantauran exhibits at least two discrepancies.

(i) First, the verbal prefix that attaches to *ia* ‘so’ is *om-* rather than *am-* as in the other Rukai dialects. Three hypotheses can be advanced to account for this discrepancy, though none seems really satisfactory. The first consists in supposing that the prefix *o-* ‘ACT.DYN.FIN’ blended with the prefix *am-*. This seems, however, somehow improbable, as the prefix *o-* represents in itself the monophthongisation of the PR bimorphemic prefix **o-a-* ‘ACT.DYN.FIN-REAL’ and PR **am-* could eventually be decomposed as *a-* ‘REAL’ and *m-* ‘ACT.DYN’. It is difficult to imagine why these prefixes would occur together (as in ***o-a-am*) since they basically carry the same function. The second hypothesis, which is not strongly supported either, is to assume that the occurrence of *om-* rather than *am-* is due to language contact with Saaroa. Among all the Rukai dialects, Mantauran is known to have been in close contact with Saaroa (Ferrell 1969). In Saaroa, verbs starting with a vowel generally take the *av* marker *um-*, e.g. *um-a-aala* ‘take (AV)’, *um-arace* ‘bite (AV)’, *um-usalhe* ‘rain (AV)’, *um-u* ‘eat (AV)’ (Pan 2012). In Mantauran, only five verbs have been collected that start with a vowel. These five verbs take the prefix *om-* ‘DYN.FIN’, cf. *om-alra* ‘take (DYN.FIN)’, *om-oa* ‘go (DYN.FIN)’, *om-iki* ‘exist, be at (DYN.FIN)’, *om-ia* ‘(be) so (DYN.FIN)’, *om-i’a* ‘(be) like (DYN.FIN)’. The verbs, with the exception of *om-alra*, are not identical to those in Saaroa and it seems somehow improbable that only the prefix *om-* was borrowed. The third hypothesis was suggested by one of the reviewers: It may happen that *om-* was replaced in all the Rukai dialects but Mantauran by *am-*, but the reason for such a change seems as improbable as the first two hypotheses. As pointed out above, *am-*, occurring only with vowel-initial verb stems, is analysed as a bimorphemic affix consisting of *a-* ‘real’ and *m-* ‘DYN.FIN’, the same way we have *o-a-* [w-a-] with most dynamic verbs. It may have been used as such in order to avoid homonymy with the stative prefix *ma-*.

(ii) Second, while it was shown above that in the Rukai dialects (*am-*)*ya* means either ‘(be) so’ or ‘(be) like’, in Mantauran, these two meanings are manifested by two distinct verbs, *om-ia* ‘(be) so’ as opposed to *om-i’a* ‘(be) like’.¹² Compare (25a–b):

¹² I am not aware of the existence of a verb corresponding to *om-i’a* in other Rukai dialects. Such a discrepancy raises yet another question regarding whether Mantauran has preserved or innovated what was originally found in PR. Were there originally two distinct verbs, as in Mantauran, at the PR level and due to the fact that most dialects (except Tona) do not have a glottal stop, the two forms merged? Or is it Mantauran which has innovated a new form, distinct from the one that was earlier found in PR?

(25) Mantauran

- a. *kasa-ta* “’*oponoho vaha-ta*”
 only-1PL.INCL.GEN Mantauran language-1PL.INCL.GEN
om-ia-nai.
 ACT-so-1PL.EXCL.NOM
 ‘We just knew (lit. said) that our language was Mantauran.’
- b. *om-i’a-ka-i-imate* *vaha-ni*
 ACT-like-NEG-3SG.GEN-1PL.INCL.OBL language-3SG.GEN
tali-lrao~lraodho.
 belong.to-RED~down(wards)
 ‘The language spoken by the people from Pingtung county (i.e., Budai dialect) is not like ours.’

The verb *om-i’a* exhibits the same verbal alternations as *om-ia*, cf. *m-i’a* ‘(be) like (SUBJ)’ (26a), and *i’a* ‘(be) like (NFIN)’ (26b).

(26) Mantauran

- a. *lo m-ore-lehe’e-lidha taka-palra m-i’a-nga dhona*
 if SUBJ-hold-ritual-3PL.GEN with-companion SUBJ-like-already that
aitina, ta-ka-oca-(a)e-dha.
 PL.middle-aged.woman LOCNMLZ-STAT.NFIN-person-LOCNMLZ-3SG.GEN
 ‘If (we) recited the right prayers, then (s/he) could become a real person like her/his parent.’
- b. *mani lriho’o-nai* *’ina ’oponoho*
 then NFIN.know-1PL.EXCL.NOM this Mantauran
“ka-i’a-ta aanaï” (o)m-ia-nai.
 in fact-NFIN.like-1PL.INCL.GEN that ACT-so-1PL.EXCL.NOM
 ‘That’s how we, Mantauran, learnt that we actually are Rukai.’
 (Lit. ‘Then we knew that we, Mantauran, “we are actually like that.”’)

Besides, *(om-)ia* ‘so’ and *(om-)i’a* ‘(be) like’ cannot be replaced one by the other. Consider the (un)grammaticality of (26b) and (27).

(27) Mantauran

- * *mani lriho’o-nai* *’ina ’oponoho*
 then NFIN.know-1PL.EXCL.NOM this Mantauran
“ka-ia-ta aanaï” (o)m-i’a-nai.
 in fact-NFIN.so-1PL.INCL.GEN that ACT-like-1PL.EXCL.NOM

4.4 The ongoing replacement of *mani* ‘then’ and *mani ia* ‘then so’ by *omi* ‘like that’ in Mantauran

Mantauran is undergoing another major syntactic change, i.e., the rise of *omi*, tentatively glossed as ‘like that’, which is replacing *mani* ‘then’, as illustrated in (28). Note that *omi* is not found in Ogawa & Asai’s (1935:390–393) texts, nor was it found in the texts collected with my late (and major) informant, Lü Yu-zhi, who passed away in

2000 at the age of seventy-six. Example (28) is drawn from a text collected in 2004 from Ching-mei Tsai, born in 1935. Because of the resemblance established between *om-ia* and *omi*, it can be hypothesised that *omi* is derived from *om-ia* ‘so’ by analogy.

(28) Mantauran

a. *mani* *o-valrio* *omii* *m-oa* *lamengae-dha* *omi*.
 then NFIN.go-village FILL SUBJ-go spouse-3SG.GEN like.that
 ‘Then he went back home to his wife.’ (Recorded in 2004)

b. *mani* *o-valrio* *omii* *m-oa* *lamengae-dha* *mani*.
 then NFIN.go-village FILL SUBJ-go spouse-3SG.GEN like.that
 ‘Then he went back home to his wife.’

The morpheme *omi* ‘like that’ also tends to replace *mani ia* ‘then so’, as in (29). In its first occurrence, *omi* ‘like that’ replaces *mani ia* ‘then so’. At the end of the sentence, *omi* ‘like that’ replaces *mani* ‘then’.

(29) Mantauran

“*avase-ni* *o-’ange’ang-iae* *vahange-li*” ‘*a*
 a.pity-3SG.GEN ACT-hurt-1SG.OBL belly-1SG.GEN TOP
 ‘*ini-’ange’ang-ae* *omi-idhe* *omi*...
 pretend-NFIN.hurt-pretend like.that-3SG.OBL like.that
 “‘What a pity (that) my stomach is hurting” he said to him/her pretending to
 suffer.’

Note that *omi* cannot precede, as *mani* does, the verb *ia*. Compare the ungrammaticality of (30a) and (30b).

(30) Mantauran

a. * “*ia’e*, [*amo-]**lrange’e-mita*” *omi* *ia* *mani*...
 yes [IRR-]NFIN.cultivate-1PL.INCL.NOM like.that NFIN.so then
 b. “*ia’e*, [*amo-]**lrange’e-mita*” Ø *ia* *omi* *mani*...
 yes [IRR-]NFIN.cultivate-1PL.INCL.NOM Ø NFIN.so like.that then
 “‘All right, (let’s start) to cultivate” (she) said.’

It is difficult to exactly pin down the meaning and function of *omi*. Unlike *mani* ‘then’, *omi* does not have any lexical content. It is tentatively glossed as ‘like that’ for want of a better translation. While *mani* is a conjunction, *omi* can, a priori, be analysed as a (quotative) verb because (i) it can be followed by a pronoun (31a), usually in the oblique case, and *mani* cannot (31b) and (ii) it shares, at least superficially, the same marking as other verbs, cf. *mi* as shown in (32a) and *i* as in (32b). Note that in both examples, it is rather difficult to determine *mi* and *i* represent the alternant form of *om-ia* ‘(be) so (FIN)’ or whether it should be treated as deriving from *omi* ‘like that’.

(31) Mantauran

- a. *mani ia ana omi-idhe "ina-li" m-ia*
 then so that like.that-3SG.OBL mother-1SG.GEN SUBJ-so
omi-idhe.
 like.that-3SG.OBL
 'Then he said: "my mother".'
- b. * *mani ia ana mani-idhe "ina-li" m-ia*
 then so that then-3SG.OBL mother-1SG.GEN SUBJ-so
mani-idhe.
 then-3SG.OBL

(32) Mantauran

- a. *"kani kapa-oa- 'iname 'akoela?"*
 why NFIN.continuously-go-2SG.GEN-1PL.EXCL.OBL SUBJ.laugh.at
mi-idhe.
 NFIN.so?/like.that?-3SG.OBL
 'They asked (again): "Why did you laugh at us?"'
- b. *"m-o-a dhoace!" Ø i-idhe mani...*
 SUBJ-go-IMP SUBJ.leave NFIN.so?/like.that?-3SG.OBL then
 "'Go and leave!" (they) said to her and then....'

The morpheme *omi* differs from other verbs and behaves like *mani* in that:

(1) It cannot be followed by any aspectual marker, cf. **omi-nga* intended for 'like that-already' and **mani-nga* intended for 'then-already'. Note that (*mani*) *ia*, on the other hand, can co-occur with *-nga* 'already', cf. *ia-nga omi* 'already said then...' vs *mani ia-nga* 'already said'.

(2) It must be followed by a non-finite verb. This is shown by the alternation between *kama-* 'continuously (FIN)', which occurs in sentence-initial position as the main verb and *kapa-* 'continuously (NFIN)' in (33a), which follows *omi* 'like that'. Note that *omi* in that position can be replaced by *mani* (33a'). If *omi* were a full-fledged verb, it would be followed by another verb marked as subjunctive, as shown in (33b-b').

(33) Mantauran

- a. *kama-kilakili omi-ilidhe*
 continuously-dance.the.valiant.soldiers'.dance like.that-3PL.OBL
omi. kapa-oa polidhao
 like.that NFIN.continuously-go SUBJ.watch
omi-idhe dhona'i titina omi. [...]
 like.that-3SG.OBL that middle-aged.woman like.that
 'They [=Monkeys] were dancing the dance of the valiant soldiers. The woman was watching (them). [...]'
- a'. *kama-kilakili omi-ilidhe*
 continuously-dance.the.valiant.soldiers'.dance like.that-3PL.OBL
mani. kapa-oa polidhao...
 like.that NFIN.continuously-go SUBJ.watch
 'They [=Monkeys] were dancing the dance of the valiant soldiers. (The woman) was watching (them). [...]'

- | | | |
|------|-------------|---------------------|
| b. | <i>moa</i> | <u><i>kone!</i></u> |
| | SUBJ:go:IMP | SUBJ:eat |
| | 'Go eat!' | |
| | | |
| b'.* | <i>moa</i> | <u><i>kane!</i></u> |
| | SUBJ:go:IMP | NFIN.eat |
| | 'Go eat!' | |

Based on the above data and analysis, it seems that in the speech of younger Mantauran speakers, (i) *mani* 'then' has been somehow re-installed in its conjunctive function though it is being replaced by *omi*, (ii) *mani ia* is being replaced by *omi*, and (iii) the two forms *mia* and *ia* (all the more when the latter is followed by a third person oblique pronoun) are analytically ambiguous: They may either be analysed as the verb (*om*)*ia* '(be) so' or (*om*)*i* 'like that'.

5 Reconstruction at the Proto Rukai (PR) level

The above discussion allows the reconstruction of a number of morphemes at the Proto Rukai level. The first morpheme which is reconstructible is the (phrasal) coordinator PR **si*. I assume that it has been replaced by *la* in Mantauran. Though the morpheme *la* is also found in Tsou, cf. *ho* 'and', and Saaroa, cf. *lha* 'and' and **la* is reconstructed as a Proto Rukai-Tsouic morpheme by Tsuchida (1976:11), it seems more plausible to assume that (i) it was downgraded from sentential conjunction to a NP/VP coordinator or that (ii) it was borrowed from Saaroa. I believe that either hypotheses is reasonable because PR **s* is reflected as ' in Mantauran and in grammatical words, PR **k* is also reflected as ' in Mantauran (cf. the passive form 'i-, reflex of PR **ki*-). If **si* 'and' had been reflected as **'i in Mantauran, it would have clashed with the 'i which comes from the (nominative) case marker *ki*. The adoption of *la* 'and' as a means of homonymy avoidance (Hopper & Traugott 2003:102–103) after Mantauran underwent these two phonological changes seems thus plausible.

The second morpheme that can be proposed for reconstruction is the conjunction PR **la*. For some reasons I cannot yet identify—after all, *la* could have been used both as a phrasal and sentential conjunction in earlier times—the conjunction **la* 'then' was replaced by *mani* 'then' in Mantauran. It was shown above that both *la* and *mani* were recorded in the early 1930s, when Ogawa and Asai undertook their fieldwork on Mantauran.

I schematise these reconstructions as follows:

- (34) Reconstruction of the phrasal coordinator *si* and the sentential conjunction *la* in PR
- | | | | |
|----------|-------------|-------------------------|-------------|
| | Proto Rukai | Tona | Mantauran |
| a. NP/VP | * <i>si</i> | <i>si</i> | <i>la</i> |
| b. S | * <i>la</i> | (<i>si</i>) <i>la</i> | <i>mani</i> |

The third bimorphemic sequence that can be reconstructed is **la ya* 'then so' along with the verbal forms **ya*, **m-ya* and **am-ya*. As demonstrated in section 4, we believe that Mantauran, after having undergone the replacement of *la* by *mani*, has also replaced the PR sequence **la ya* 'then so' by *mani ia*. Besides, while it has preserved the verbal

form **ia*, the meaning of this verb may have been narrowed down while a new verb *om-i'a* '(be) like' came in existence.

- | | | | | |
|------|-----------------|-----------------------------|--------------------------|---|
| (35) | Gloss | PR | Tona | Mantauran |
| a. | 'then so' | <i>*la ya</i> | <i>la ya</i> | <i>mani ia</i> |
| b. | 'so, (be) like' | <i>*am-ya ~ *m-ya ~ *ya</i> | <i>am-ya ~ m-ya ~ ya</i> | <i>om-ia ~ m-ia ~ ia</i> 'so' <i>om-i'a ~ m-i'a ~ i'a</i> '(be) like' |

The morphosyntactic changes that have taken place in Mantauran can be summarised in Figure 1.

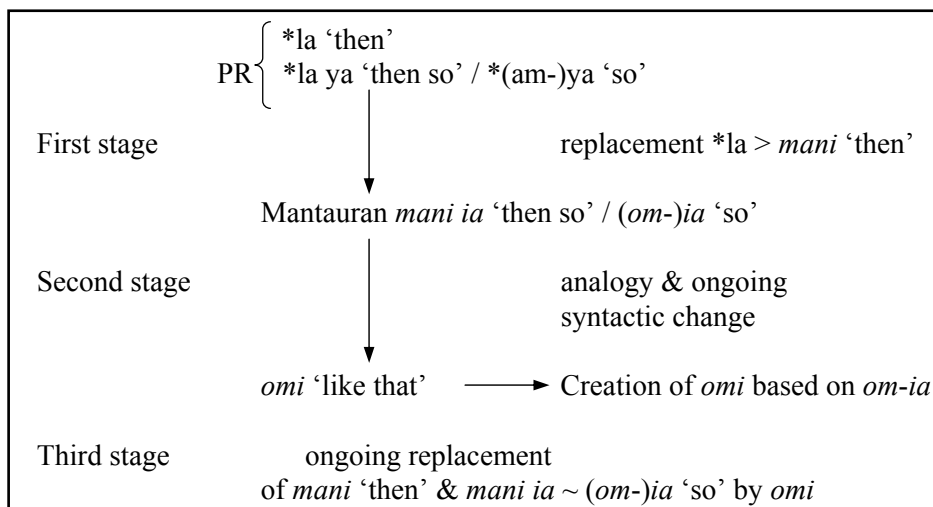


Figure 1: Evolution of the verb 'say' in Mantauran Rukai

Unlike other Rukai dialects, Mantauran has replaced the conjunction PR **la* 'then' by *mani* 'then'. It has had for consequence the replacement of PR **la* in the quotative construction, cf. PR **la ya* > Mantauran *mani ia*. Mantauran has also innovated in the use of the prefix preceding the verb *ia* 'so', cf. *om-* instead of **am-*. Following this first series of changes, Mantauran has further undergone the following innovations: (i) the creation of *omi* 'like that' based on *om-ia* 'so' (perhaps through analogy) and (ii) the ongoing replacement of *mani* 'then' by *omi* 'like that' and *mani ia* 'then so' ~ *om-ia* 'so' (verb of saying) by *omi*.

6 Conclusion

In this paper, I have tried to show the use of the conjunction in the formation of the verb of saying in Rukai. I have also highlighted a number of morpho-syntactic changes that have occurred in Mantauran Rukai and shown, through a reconstruction at the PR level, the chronology of these changes.

References

- Buchstaller, Isabelle and Ingrid Van Alphen. 2012. Preface: Introductory remarks on new and old quotatives. In *Quotatives: Cross-linguistic and cross-disciplinary perspectives*, ed. by Isabelle Buchstaller and Ingrid Van Alphen, xi-xxx. Amsterdam and Philadelphia: John Benjamins.
- Ferrell, Raleigh. 1969. *Taiwan aboriginal groups: Problems in cultural and linguistic classification*, Institute of Ethnology, Academia Sinica Monograph No.17. Taipei: Academia Sinica.
- Hopper, Paul J. and Elizabeth Closs Traugott. 2003. *Grammaticalization*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press. Second edition.
- Hsieh, Fuhui. 2011. On the development of SAY verbs as stance markers in some Formosan languages. Paper read at the workshop on Stance Marking Across Languages: Typological, Diachronic and Discourse Perspectives. 18–20 July. Hong Kong: The Hong Kong Polytechnic University.
- Hsieh, Fuhui. 2012. On the grammaticalization of the Kavalan SAY verb *zin*. *Oceanic Linguistics* 51.2:464–489.
- Kohn, Mary Elizabeth, and Hannah Askin Franz. 2009. Localized patterns for global variants: The case of quotative systems of African American and Latino speakers. *American Speech* 84.3: 259–297.
- Li, Paul Jen-kuei. 1977. The internal relationships of Rukai. *Bulletin of the Institute of History and Philology, Academia Sinica* 48.1:1–92.
- Li, Paul Jen-kuei. 1995. Distribution of the Formosan languages and migration of the tribes. In *Proceedings of the First International Symposium on Languages in Taiwan*, ed. by Feng-fu Tsao and Mei-hui Tsai, 1–16. Taipei: Crane Publishing Co., Ltd.
- Li, Paul Jen-kuei. 1996. The pronominal systems in Rukai. In *Reconstruction, classification, description: Festschrift in honor of Isidore Dyen*, ed. by Bernd Nothofer, 209–230. Hamburg: Abera Verlag.
- Ogawa, Naoyoshi and Erin Asai. 1935. *Gengo ni yoru Taiwan takasago-zoku densetsu-shu* [*The myths and traditions of the Formosan native tribes (texts and notes)*]. Taihoku [Taipei]: Taihoku Imperial University. [In Japanese]
- Pan, Chia-jung. 2012. A grammar of Lha'aula, an Austronesian language of Taiwan. PhD dissertation. Cairns: James Cook University.
- Starosta, Stanley. 1994. Proto Rukai-Tsouic: Subgroup or treetop? Paper presented at the Seventh International Conference on Austronesian Linguistics. 22–27 August. Leiden, the Netherlands.
- Starosta, Stanley. 1995. A grammatical subgrouping of Formosan languages. In *Austronesian studies relating to Taiwan*, ed. by Paul Jen-kuei Li, Cheng-hwa

- Tsang, Ying-kuei Huang, Dah-an Ho and Chiu-yu Tseng, 683–726. Symposium series of the Institute of History and Philology, Academia Sinica 3. Taipei: Academia Sinica. Reprinted in *Formosan linguistics: Stanley Starosta's contributions*, ed. by Elizabeth Zeitoun, 737–769. Language and Linguistics Monograph Series C6-2. Taipei: Academia Sinica, 2009.
- Tsuchida, Shigeru. 1976. *Reconstruction of Proto-Tsouic phonology*. Study of Languages and Cultures of Asia and Africa, Monograph Series No. 5. Tokyo: University of Tokyo.
- Tu, Wen-Chiu. 1994. A synchronic classification of Rukai dialects in Taiwan: A quantitative study of mutual intelligibility. PhD dissertation. Urbana: University of Illinois.
- Tu, Wen-chiu and Chin-chuan Cheng. 1991. A linguistic classification of Rukai Formosan. Paper presented at the Sixth International Conference on Austronesian Linguistics. 20–24 May. Honolulu: University of Hawai'i at Mānoa.
- Vandelanotte, Lieven. 2012. Quotative *go* and *be like*: Grammar and grammaticalization. In *Quotatives: Cross-linguistic and cross-disciplinary perspectives*, ed. by Isabelle Buchstaller and Ingrid Van Alphen, 173–202. Converging Evidence in Language and Communication Research 15. Amsterdam and Philadelphia: John Benjamins.
- Wolff, John U. 2010. *Proto-Austronesian phonology with glossary, Volume 1*. Ithaca, NY: Cornell University, Southeast Asia Program Publications.
- Zeitoun, Elizabeth. 1995. Issues on Formosan linguistics. PhD dissertation. Paris, France: Université Denis Diderot. [English version]
- Zeitoun, Elizabeth. 2000. Dynamic vs. stative verbs in Mantauran (Rukai). *Oceanic Linguistics* 39.2:415–427.
- Zeitoun, Elizabeth. 2003. Toward a reconstruction of Proto Rukai morpho-syntax. Keynote address at the Tenth Annual Meeting of the Austronesian Formal Linguistics Association. 28–30 March. Honolulu: University of Hawai'i at Mānoa.
- Zeitoun, Elizabeth. 2007. *A grammar of Mantauran (Rukai)*. Language and Linguistics Monograph Series, No. A4-2. Taipei: Academia Sinica.
- Zeitoun, Elizabeth. in preparation. A comparative study of the Rukai dialects. Ms.
- Zeitoun, Elizabeth and Lillian M. Huang. 2000. Concerning *ka-*, an overlooked marker of verbal derivation in the Formosan languages. *Oceanic Linguistics* 39.2:391–414.
- Zeitoun, Elizabeth and Hui-chuan Lin. 2003. *We should not forget the stories of the Mantauran: Memories of our past*. Language and Linguistics Monograph Series A4. Taipei: Academia Sinica.