Squib

Dynamic vs. Stative Verbs in Mantauran (Rukai)[1]

Elizabeth Zeitoun

ACADEMIA SINICA

1. INTRODUCTION. In articles appearing in this same issue (Zeitoun and Huang 2000, Huang 2000),[2] Lillian Huang and I show that in many Formosan languages, dynamic and stative verbs exhibit different morphological alternations. In their finite forms (AF constructions), dynamic verbs can be marked by different focus/voice affixes (*-um-, -əm-, m-, Ø,* etc.), while stative verbs are marked by *ma-* or *Ø*. In their nonfinite forms,[3] dynamic verbs are unmarked, whereas stative verbs are marked by *ka-*. Though Mantauran Rukai differs from the other Formosan languages in a number of respects (see Zeitoun 1995, 1997a–b),[4] (most) verbs can also be categorized as either dynamic or stative, based on their conjugation patterns (finite, nonfinite, and subjunctive forms).[5]

The aim of the present paper is twofold. First, to list all the constructions that induce a nonfinite verb form to further support the idea—as an addemdum to Zeitoun and Huang (2000)—that in many Formosan languages and in Mantauran Rukai in particular, *ka-* must be singled out as a distinct morpheme and be treated as the counterpart of the stem-forming affix *ma-*: *ka-* occurs in nonfinite stative verbs, and *ma-* in finite stative verbs. Second, to examine dynamic/stative verbs marked as subjunctive and determine the paradigms that frame such marking.

2. "FINITE" VS. "NONFINITE." In the active voice, dynamic verbs are usually marked by *o-* (few are marked by *om-*, even fewer by *m-*) and stative verbs by *ma-*.[6]

---

1. The present paper provides partial results on a project that was carried out from 1997 to 1999 on "Verb classification in Rukai" with the support of a two-year National Science Council grant (NSC87-2411-H-001-042 and NSC 88-2411-H001-035).
2. Yeh (2000) presents different views on the *ka* morpheme.
3. The notions of "finite"/"nonfinite" are traditionally attributed to tensed/tenseless verbs. In this paper, I use (for want of better terms) the term "finite" to refer to verbs marked as "active/realis" and "nonfinite" to designate verbs that are made dependent (usually through an affixation process) and as such have lost their (active) voice marking.
4. Mantauran is one of the six dialects that form the Rukai linguistic group. It is spoken in Kaohsiung county in the district of Maolin in Wanshan. With a population estimated of about 200 people, Mantauran stands as the most endangered Rukai dialect.
5. This paper is only concerned with the morphological alternations of verbs in the active voice.
6. To my knowledge, *m-* is prefixed to only one verb base, *maava?i*—in which *m-* alternates with *k-*, cf. *kaava?i*—and *om-* to five bases: *om-iki* 'exist, have', *om-ia* '(say) so', *om-oa* 'go', *om-iʔa* '(a)like', and *om-aɭa* 'take'; *om-* alternates with *Ø-*, just as verbs marked by *o-* usually do.

Oceanic Linguistics, Volume 39, no. 2 (December 2000)

(1) Dynamic verbs in their finite forms

o-akamə	'roast'	o-poɭavo	'plant (millet)'
o-coroko	'jump'	o-riŋiriŋi	'fry'
o-ðapələ	'fish'	o-sialaɭa	'hear'
o-əcəvə	'cross a river'	o-tipitipi	'beat'
o-həcəɭə	'pinch'	o-vaʔai	'give'
o-kəʔətə	'cut'	o-ʔoŋolo	'drink'
o-laŋai	'buy'	om-iki	'exist'
o-ɭihoʔo	'know'	om-oa	'go'
o-ŋəɭəcə	'frown'	m-aavaʔi	'come'

(2) Stative verbs in their finite forms

ma-ðalamə	'love'	ma-ravəravərə	'happy'
ma-haʔaoco	'scold'	ma-taaðiʔi	'good'
ma-ɭakasə	'lazy'	ma-takoɭa	'bad'
ma-pacai	'dried'	ma-ʔamaðə	'dislike'

As in other Formosan languages, in their nonfinite forms, dynamic verbs are unmarked for voice—the absence of marking will be represented in the subsequent examples as *Ø*—and stative verbs are marked by *ka-*. The occurrence of a nonfinite verb form usually accompanies the prefixation to the stem of a verbal affix (see 2.1–2.5), but it might also be triggered by the occurrence of a coordinator (such as *la* 'and', see 2.6) or a conjunction (e.g., *mani* 'then', see 2.7).

2.1 IRREALIS MOOD. We showed in Zeitoun et al. (1996) and Zeitoun and Huang (1997) that (i) most Formosan languages exhibit a realis/irrealis dichotomy, and (ii) temporal/aspectual and modal distinctions can be marked morphologically (through affixation and/or reduplication) or lexically (through the occurrence of an auxiliary verb or temporal adjuncts). Rukai is one language where the irrealis is marked on the morphological level, with the prefixation of *amo-* to the verb stem.

(3) Dynamic verbs in the irrealis

FINITE		IRREALIS	
o-ləkatə	'measure'	**amo**-*Ø*-ləkatə	'will measure'
o-coroko	'jump'	**amo**-*Ø*-coroko	'will jump'
o-ðapələ	'fish'	**amo**-*Ø*-ðapələ	'will fish'
om-oa	'go'	**amo**-*Ø*-oa	'will go'
m-aavaʔi	'come'	**amo**-*Ø*-kaavaʔi	'will come'

(4) a. **o**-ləkatələkat-inamə kapaða?anəŋa[7]
ACT/REAL-RED.measure-1PL.EXCL.OBL all.houses
'They drew the plan for us for all the houses.'

b. mani patoʔ-inamə atalialai pakisa: "**amo-Ø**-ləkaləkatə-ŋa-
then tell-1PL.EXCL.OBL chiefs plain will-Ø-RED.measure-already-
-mita ʔina takasaə-ni ooma" ia-ŋ-inamə.
-1PL.INCL.NOM that share-3SG.GEN field so-already-1PL.EXCL.OBL
'Then the local government told us (they) would measure our fields (to see) how big they were.'

(5) Stative verbs in the irrealis

FINITE		IRREALIS	
ma-ravəravərə	'happy'	**amo**-*ka*-ravəravərə	'will be happy'
ma-taaðiʔi	'good'	**amo**-*ka*-taaðiʔi	'will be good'
ma-oɭo	'extinct, lost'	**amo**-*ka*-oɭo	'will be extinct, lost'
ma-əsəŋə	'soaked'	**amo**-*ka*-əsəŋə	'will be soaked'

(6) a. **ma**-əsəŋə kipiŋi-li
STAT-soaked clothes-1SG.GEN
'My clothes are soaked.'

b. lo ðomanaə toʔaraki kalici-ni ʔaloŋaə tosiatə
if sometimes use fur-3SG.GEN deer make.powder.box
ðonaʔi aʔolalai tapoapoaə toloŋo ʔi savoʔoə
that men LOC.NOM.RED.put little bamboo box gun powder
amo-ka-oɭ-iaə, **amo**-*ka*-əsəŋ-iaə mia.
IRR-STAT-lose-1SG.OBL IRR-STAT-soaked-1SG.OBL so
'Sometimes, men would use the skin of deer to make powder boxes to store gun powder (thinking:) it will not (get) lost or soaked.'

2.2 NEGATIVE SENTENCES. Among the different negators of Mantauran, only the prefix *ki-* 'not' induces a nonfinite verb form.

(7) Dynamic verbs negated by *ki-*

FINITE		NEGATIVE	
o-laŋai	'buy'	**ki-Ø**-laŋai	'not buy'
o-cəŋələ	'see'	**ki-Ø**-cəŋələ	'not see'
o-patoʔo	'tell'	**ki-Ø**-patoʔo	'not tell'
om-oa	'go'	**ki-Ø**-oa	'not go'
m-aavaʔi	'come'	**ki-Ø**-kaavaʔi	'not come'

(8) a. **o**-cəŋələ-ɭa-imiaʔə lo ɭoɭamə
ACT/REAL-see-1SG.NOM-2SG.OBL when run
'I saw you when (I) was running.'

7. Most of the examples provided in this paper are extracted from stories that have been recorded from 1992 to 2000 with a Mantauran informant named Lu Yu-zhi (aged 76 in 2000). Abbreviations are as follows: 1, first person; 2, second person; 3, third person; ACT, active voice; ADV.NOM, adverbial nominalization; AGT.NOM, agentive nominalization; CA-RED, Ca-reduplication; CAUS, causative; EXCL, exclusive; GEN, genitive; INCL, inclusive; IMP, imperative; IMPERS, impersonal; IRR, irrealis; LIG, ligature; LOC, locative; NEG, negative; NOM, nominative; OBL, oblique; PASS, passive; PL, plural; REAL, realis; RED, reduplication; SG, singular; STAT, stative; TOP, topic.

b. lo ʔipaiso-ni laalakə-nai,
if make.money-3SG.GEN children-1PL.EXCL.GEN
ki-Ø-cəŋəcəŋələ-ŋa-nai ka ʔopili laalakə-nai [...]
NEG-RED.see-already-1PL.EXCL.NOM many times children-1PL.EXCL.GEN
'When our children (go to the plain to) make money, we can't see them frequently [...]'

(9) Stative verbs negated by *ki-*

FINITE		NEGATIVE	
ma-oɭo	'extinct, lost'	**ki**-*ka*-oɭo	'not extinct, lost'
ma-ʔino	'embarrassed'	**ki**-*ka*-ʔino	'not embarrassed'
ma-takoɭa	'bad'	**ki**-*ka*-takoɭa	'not bad'
ma-ðao	'plenty'	**ki**-*ka*-ðao	'not plenty'

(10) a. mani poa-ŋa-mao ʔoiɭi, ka **ma**-oɭo-ka-i.
then put-already-IMPERS.NOM return STAT-lose-NEG-3SG.GEN
'(One) would put it back (and) would not lose it.'

b. mani ʔatoloro-ɭa-ilinə piʔa ʔinaʔi [...]
then because-1SG.NOM-3PL.OBL do this
la-ni **ki**-*ka*-oɭo vaha-nai ʔoponoho.[8]
and-3SG.GEN NEG-STAT-lose language-1PL.EXCL.GEN Mantauran
'I am therefore doing this [..] so that our language does not (become) extinct.'

2.3 THE CAUSATIVE PA-. Causative verbs are usually prefixed by *pa-*:

(11) Dynamic verbs causativized by *pa-*

FINITE		CAUSATIVE	
o-tipitipi	'beat'	**pa**-Ø-tipitipi	'let ... beat'
o-ɭihoʔo	'know'	**pa**-Ø-ɭihoʔo	'let ... know'
o-sialaɭa	'hear'	**pa**-Ø-sialaɭa	'let ... hear'
om-oa	'go'	**pa**-Ø-oa	'let ... go'
m-aavaʔi	'come'	**pa**-Ø-kaavaʔi	'let ... come'

(12) a. o-sialaɭa-ɭa-imiaʔə
ACT/REAL-hear-1SG.NOM-2SG.OBL
'I heard you.'

b. opoa koaŋə **pa**-Ø-sialaɭa ðonaʔi ʔoponoho posao [...]
make gun CAUS-Ø-hear that Mantauran shot
'They (would) fire out to let the Mantauran hear the shot ...'

(13) Stative verbs causativized by *pa-*

FINITE		CAUSATIVE	
ma-ðalamə	'love'	**pa**-*ka*-ðalamə	'make ... love'
ma-taaðiʔi	'good'	**pa**-*ka*-taaðiʔi	'make ... good'
ma-takoɭa	'bad'	**pa**-*ka*-takoɭa	'make ... bad'

8. Self-reference. The term "Mantauran" was attributed by the Japanese to this linguistic community.

(14) a. **ma**-taaði?i ana va⌊ova⌊o
STAT-beautiful that young.woman
'That young woman is beautiful.'

b. **pa**-*ka*-taaði?i-⌊a-inə pa-?i-mo⌊amo⌊aə
CAUS-STAT-good-1SG.NOM-3SG.OBL CAUS-wear-RED.clothes
'I made him/her dress beautifully.'

2.4 OTHER VERBAL AFFIXES. Different verbal affixes may attach to a verb base, as for example *?ini-Ca-* '(one)self',[9] *mati-* 'well', *k-in-a ... aə* '... more', *?ako-* 'barely, just', *ka-* 'in fact', *mata ... aə* 'certainly':

(15) a. **?ini-ca**-Ø-colo 'kill a pig oneself'
a′. **?ini-ka**-*ka*-ðalamə 'like, love by oneself'
b. **mati**-Ø-⌊iho?o 'know well'
b′. **mati**-*ka*-taaði?i 'better' (recovering from illness)
c. **k-in-a**-Ø-tipitip-**aə** 'beat more'
c′. **k-in-a**-*ka*-⌊akas-**aə** 'more lazy'
d. **?ako**-Ø-siala⌊a 'barely hear'
d′. **?ako**-*ka*-ravəravərə 'barely happy'
e. **mata**-Ø-kan-**aə** 'eat certainly'
e′. **mata**-*ka*-?amað-**aə** 'dislike certainly'

2.5 NOMINALIZATION. Mantauran Rukai exhibits different kinds of nominalization (among others: agentive, objective [patient], locative, adverbial, and instrumental). Minimal pairs that illustrate the morphological marking of dynamic vs. stative verbs are exemplified in (16–23).

Agentive nominalization is rendered by the prefixation of *ta-* to the verb base.

(16) Nominalized dynamic verbs: agentive nominalization

FINITE		AGENTIVE NOMINALIZATION	
o-alopo	'hunt'	**ta**-Ø-alopo	'hunter'
o-?osario	'play'	**ta**-Ø-?osario	'player'
o-⌊iho?o	'know'	**ta**-Ø-⌊iho?o	'(who) knows'
om-oa	'go'	**ta**-Ø-oa	'(who) goes'
m-aava?i	'come'	**ta**-Ø-kaava?i	'(who) comes'

(17) Nominalized stative verbs: agentive nominalization

FINITE		AGENTIVE NOMINALIZATION	
ma-roðaŋə	'old'	**ta**-*ka*-roðaŋə	'old people (SG)'
ma-si?i	'small'	**ta**-*ka*-si?i	'(who has) small ...'
ma-⌊ihili	'clever'	**ta**-*ka*-⌊ihili	'(who is) clever'

9. Following Blust (1998), Ca-reduplication refers to the process by which the first syllable of the verb base/stem is reduplicated and followed by a fixed vowel.

(18) a. lo pa-solatə-ð-inamə, **o**-⌊iho?o-ka-nai
when CAUS-read-3SG.GEN-1PL.EXCL.OBL ACT/REAL-know-NEG-1PL.EXCL.GEN
ka siala⌊a, **ma**-⌊ihili-ka-nai
LIG hear STAT-clever-NEG-1PL.EXCL.NOM
'When they [the Japanese] taught us, we did not understand (what they said), we were not clever (enough).'

b. ðona **ta**-*ka*-⌊ihili, ðona **ta**-Ø-⌊iho?o ?a mani
that AGT.NOM-STAT-clever that AGT.NOM-Ø-know TOP then
pa-ðaac-iliðə [...]
CAUS-leave-3PL.OBL
'Those (who were) clever, those (who) understood (would be) allowed to leave.'

The notion of "adverbial nominalization" (so-called because the structure can be glossed by "when X happened/happens") refers to a derived nominal formed through the prefixation of *a-* to the verb base.

(19) Nominalized dynamic verbs: adverbial nominalization

FINITE		ADVERBIAL NOMINALIZATION	
o-ðaacə	'leave'	**a**-Ø-ðaacə-(ŋa-ða)	'when (s/he) left'
o-tovi	'cry'	**a**-Ø-tovi-(liða)	'when (they) cried'
om-iki	'exist'	**a**-Ø-iki(-na-nai)	'when (we still) were'

(20) ona?i *a*-Ø-iki-na-nai ka?oponohaə,
that ADV.NOM-Ø-exist-still-1PL.EXCL.GEN genuine.place.name
om-iki-nomi tasə?əsə?ə koli?i omi-inamə
ACT/REAL-exist-1PL.EXCL rise sun SO-1PL.EXCL.OBL
lo cəŋələ-n-inamə va⌊əva⌊aə
if see-3SG.GEN-1PL.EXCL.OBL outsiders
'When we still were in the old village [Ka'oponohae], outsiders (would) tell us that we were located in the East, when they came to see us.'

(21) Nominalized stative verbs: adverbial nominalization

FINITE		ADVERBIAL NOMINALIZATION	
ma-⌊oolai	'young (child)'	**a**-*ka*-⌊oolai	'as a child'
ma-va⌊ova⌊o	'young (woman)'	**a**-*ka*-va⌊ova⌊o	'as a young woman'
ma-savarə	'young (man)'	**a**-*ka*-savarə	'as a young man'

(22) a. **ma**-⌊oolai-na lalakə-li
STAT-young-still child-1SG.GEN
'My child is still young.'

b. mani **a**-*ka*-⌊oolai-li o-⌊iho?o-ka-li
then ADV.NOM-STAT-young-1SG.GEN ACT/REAL-know-NEG-1SG.GEN
omiki va⌊inaə ða?anə mia
exist place.name house so
'When I was young, I did not know that there were houses in Valinae.'

Locative nominalization (which implies that "X is the place where Y did/does something") manifests itself through the circumfixation of *ta-* ... *-aə* to the verb base (note the cooccurrence of the causative *pa-* in the examples in [23]).

(23) Locative nominalization

FINITE		LOCATIVE NOMINALIZATION	
o-ʔənao	'wash'	**ta**-pa-Ø-ʔənaʔən-**aə**	'washing machine'[10]
ma-təətələkə	'cooler'	**ta**-pa-*ka*-təətələk-**aə**-ʔaðamaðamai-aʔoŋoloŋolaə	'fridge'[11]

2.6 COORDINATION. The conjunction *la* 'and' can coordinate two nouns, two verbs, or two clauses. The verb that follows *la* appears in its nonfinite form.

(24) a. o-⌊a⌊amə-ŋa ana ocao
ACT/REAL-run-already that man
'That man has run.'

b. ana ocao tako-kanəkanə **la** Ø-⌊a⌊amə
that man while-RED.eat and Ø-run
'That man is eating and running at the same time.'

(25) a. **ma**-⌊iʔəməðə ðona koapə
STAT-thick this sock
'This/these sock(s) is/are thick.'

b. ðonaʔi koapə ʔa ma-poli **la** *ka*-⌊iʔəməðə
that sock TOP STAT-white and STAT-thick
'Those socks, (they) were white and thick.'

2.7 MANI 'THEN'. The adverb *mani* 'then' is always followed by a nonfinite verb.

(26) a. inamə aʔivivai o-ðo⌊o-ka-nai ka moa
IPL.EXCL.TOP girls REAL/ACT-can-NEG-IPL.EXCL.NOM LIG go
ðona sakovo
that men's.house
'As for us, the girls, we could not go to the men's house.'

b. lo iki-ða ta-ka-caʔəmə ta-toalakə **mani**
if exist-3SG.GEN AGT.NOM-STAT-ill AGT.NOM-give birth then
Ø-ðo⌊o-ŋa-nai ʔini-ka-ka-kamamai posavoʔoə
Ø-can-already-IPL.EXCL.NOM self-CA-RED.STAT-self cure
'If there was someone ill or if someone had a baby, we could look to (that person) by ourselves.'

(27) a. onaʔi ava⌊ova⌊o lo ki-ʔi-cikiciki-ða
that young.women if NEG-PASS-tattoed-3SG.GEN
ka **ma**-taaðiʔi-ka-i omia
LIG STAT-good-NEG-3SG.GEN so
'(Our parents used to) say that if girls did not get tattoed, they were not beautiful.'

b. ʔinaʔi mənəŋa mani poa-ŋ-inamə apoi mani
this nowadays then make-already-IPL.EXCL.OBL fire then
ka-taaðiʔi-ŋa [...]
STAT-good-already
'Nowadays, we have electricity and (life is) better.'

10. Lit. 'place to wash (clothes)'
11. Lit. 'place to keep dishes and drinks cooler'

2.8 SUMMARY. I have tried to show that the distinction between finite/nonfinite dynamic/stative verbs is a process that recurs in numerous constructions (see table 1). Dynamic verbs exhibit a *o-* (*m-*/*om-*) ~ *Ø-* alternation and contrast with stative verbs that display a *ma-* ~ *ka-* alternation.

3. "SUBJUNCTIVE." Mantauran Rukai differs from other Formosan languages (e.g., Atayal, Pazeh, or Seediq—see Zeitoun and Huang 2000) in that the imperative does not employ a nonfinite verb form. The verb that occurs in an (affirmative) imperative sentence is instead its "subjunctive" form.

3.1 IMPERATIVE DYNAMIC VERBS. Most dynamic verbs appear unmarked in their imperative form. The first vowel of the verb base is *i, o,* or *ə,* and they are marked by *o-* in their finite form.

(28) Imperative dynamic verbs (marked by *o-* in their finite form, and in which the first vowel of the verb base is *i, o,* or *ə*)

FINITE		IMPERATIVE	
o-t*i*pitipi	'beat'	*Ø*-t*i*pitip-a	'beat!'
o-kə⌊akə⌊aŋə	'kick'	*Ø*-kə⌊akə⌊aŋ-a	'kick!'
o-ʔ*o*ŋolo	'drink'	*Ø*-ʔ*o*ŋol-a	'drink!'

(29) a. **o**-ʔoŋoʔoŋolo-ka-ða ka vavaa asavasavarə
ACT/REAL-RED.drink-NEG-3SG.GEN LIG wine young.men
'Young men did not drink wine.'

b. *Ø*-ʔoŋol-a!
Ø-drink-IMP
'Drink!'

The form of the verb might be incorrectly analyzed as a "nonfinite" verb form, because it is apparently unmarked. Note, however, that the first vowel of the verb

TABLE 1. CONSTRUCTIONS WITH NONFINITE VERB FORMS SHOWING THE DYNAMIC / STATIVE ALTERNATION

	DYNAMIC VERB	STATIVE VERB
amo-	**amo**-*Ø*-ləkaləkatə 'will measure'	**amo**-*ka*-əsəŋə 'will be soaked'
pa-	**pa**-*Ø*-siala⌊a 'make ... hear'	**pa**-*ka*-taaði'i 'make s.o beautiful'
ʔini-Ca-	**ʔini-ca**-*Ø*-colo 'kill (a pig) onself'	**ʔini-ka**-*ka*-ðalamə 'love oneself'
mati-	**mati**-*Ø*-⌊iho?o 'know well'	**mati**-*ka*-taaðiʔi 'better'
k-in-a ... -aə	**k-in-a**-*Ø*-tipitip-**aə** 'beat more'	**k-in-a**-*ka*-⌊akas-**aə** 'more lazy'
ʔako-	**ʔako**-*Ø*-siala⌊a 'barely hear'	**ʔako**-*ka*-ravəravərə 'barely happy'
mata- ... -aə	**mata**-*Ø*-kan-**aə** 'eat certainly'	**mata**-*ka*-'amað-**aə** 'certainly dislike'
ta-	**ta**-*Ø*-alopo 'hunter'	**ta**-*ka*-roðaŋə 'old person'
la	**la** *Ø*-⌊a⌊amə 'and run'	**la** *ka*-⌊iʔəmədə 'and thick'
mani	**mani** *Ø*-ðo⌊o 'then can..'	**mani** kataaðiʔi 'then good..'
a-	**a**-*Ø*-iki(-na-nai) 'when (we still) were'	**a**-*ka*-⌊oolai 'as a child'
ta- ... -aə	**ta**-pa-*Ø*-ʔəna?ən-**aə** 'washing machine'	**ta**-pa-*ka*-təətələk-**aə**-ʔaðamaðamai-aʔoŋoloŋolaə 'fridge'

turns into *o* if it is *a*.[12] This shows that these two morphological alternations (i.e, the nonfinite form vs. the subjunctive form) constitute two different conjugation types of a verb.[13]

(30) Imperative dynamic verbs (marked by *o-* in their finite form, and in which the first vowel of the verb base is *a*)

FINITE		IMPERATIVE	
o-k*a*nə	'eat'	k*o*n-a	'eat!'
o-v*a*ʔai	'give'	v*o*ʔaɭ-a	'give!'
o-ð*a*pələ	'fish (by poisoning)'	ð*o*pəl-a	'fish!'

(31) a. o-kanə-ŋa-ka-li
ACT/REAL-eat-already-NEG-1SG.GEN
'I have not eaten yet.'

b. Ø-k*o*n-a!
Ø-eat-IMP
'Eat!'

I showed above that a few dynamic verbs are marked by *om-* (e.g., *om-oa* 'go') and one is marked by *m-* (cf. *m-aavaʔi* 'come'). While these verbs behave the same as other dynamic verbs marked by *o-* in their nonfinite forms (i.e., they are unmarked), they differ from the latter when they occur in the subjunctive form (e.g., in the imperative). As an illustration, compare (32) and (33).

(32) Dynamic verbs marked by *o-*

FINITE		NONFINITE	SUBJUNCTIVE
o-tipitipi	'beat'	Ø-tipitipi	Ø-tipitipi
o-kəɭakəɭaŋə	'kick'	Ø-kəɭakəɭaŋə	Ø-kəɭakəɭaŋə
o-ʔoŋolo	'drink'	Ø-ʔoŋolo	Ø-ʔoŋolo
o-kanə	'eat'	Ø-k*a*nə	Ø-k*o*nə

(33) Dynamic verbs marked by *om-* or *m-*

FINITE		NONFINITE	SUBJUNCTIVE
om-oa	'go'	Ø-oa	Ø-*m*oa (*Ø-oa)
om-iki	'exist, be at'	Ø-iki	Ø-*m*iki (but also Ø-iki)
om-aɭa	'take'	Ø-aɭa	Ø-*m*aɭa (*Ø-aɭa)
m-aavaʔi	'come'	Ø-kaavaʔi	*m*aavaʔi (*Ø-kaavaʔi)

Examples follow of a verb marked by *om-* (cf. *om-oa* 'go') and another marked by *m-* (cf. **m**-aavaʔi 'come') in the imperative:

(34) a. **m**o-aʔ *o-a!
go-IMP
'Go (/leave)!'

b. **m**aavaʔi-aʔ *kaavaʔi-a!
come-IMP
'Come!'

12. Mantauran is one of the two Rukai dialects having undergone the most important phonological changes (see Li 1977). The vowel *o* results from the monophthongization of */oa/*. If a verb begins with the vowel */a/*, *o* is added to the verb base in the subjunctive form, cf. *o-akamə* 'roast' (FINITE form) vs. *oakamə* 'roast' (NONFINITE form) and not **okamə; o-alopo* 'hunt' (FINITE form) vs. *oalopo* 'hunt' (NONFINITE FORM) and not *olopo.

13. In causative imperative sentences, on the other hand, (main) verbs appear in their nonfinite forms, thus *pa-Ø-kan-a!* 'Feed (him/her)!' (and not **pa-kon-a!*) vs. *pa-ka-ravəravər-a!* 'Make (him/her) happy!' (and not **pa-ma-ravəravər-a!*).

3.2 IMPERATIVE STATIVE VERBS. In (affirmative) imperative sentences, stative verbs do not undergo the *ma-~ka-* alternation (i.e., they do not occur in the nonfinite form) but preserve the *ma-* prefix:

(35) Imperative stative verbs

FINITE		IMPERATIVE	
ma-ravəravərə	'be happy'	ma-ravəravər-a	'Be happy!'
ma-ðalamə	'love'	ma-ðalam-a	'love!'
ma-ʔamaðə	'dislike'	ma-ʔamað-a	'dislike!'

(36) a. **ma**-ravəravərə ina-ni amo-ʔacakəlaə lalakə-ni
STAT-happy mother-3SG.GEN will-marry child-3SG.GEN
'His/her mother is happy (that) her child is going to marry'

b. **ma**-ravəravər-a!
STAT-happy-IMP
'Be happy!'

3.3 OTHER CONSTRUCTIONS. The same subjunctive pattern is found in temporal/conditional sentences introduced by *lo* 'when/if' (cf. (37)–(38)) or when a verb is embedded[14] (i.e., occurs immediately after another verb), as in (39)–(40).

(37) Dynamic verbs in conditional clauses

a. *lo* Ø-cəŋələ-ða ðona tapatoʔotoʔ-inamə omo-iðə pakəɬakəɬaŋə
if Ø-see-3SG.GEN that teach-1PL.EXCL.OBL go-3SG.OBL kick
'If the teacher saw him, he would go to him and beat him.'

b. *lo* Ø-lopo[15]-nai ovəʔəkə, o-laŋalaŋai-ŋa-nai
if raise-1PL.EXCL.GEN pig ACT/REAL-trade-already-1PL.EXCL.NOM
ʔi-paiso
get-money
'If we raised pigs, we (would) trade them against money.'

c. *lo* **m**oa-nai / *oa-nai aʔivivai, mahaʔaoc-inamə ...
if go-1PL.EXCL.GEN girls scold-1PL.EXCL.OBL
'If we, girls, went (there), we would be scolded ...'

d. *lo* **m**aavaʔi ʔoponoho, amo-vaʔai-ɬa-imiaʔə paiso
if come place.name will-give-1SG.NOM-2SG.OBL money
'If you come to Wanshan, I will give you money.'

---

14. Li (1973:225) notices that in Tanan Rukai an embedded verb "must be inflected by adding the infix *u* after the initial consonant if the following vowel is *a*" and concludes that "the infix *u* is an infinitive marker whenever the embedded verb begins with a consonant followed by the low vowel." Li identifies infinitives and imperatives as closely related, on the morphological level—both types of verbs undergo the *u* infixation if the first vowel verb base is *a*—and on the syntactic level—both types of verb never take an overt subject. Correct as this description might be, Li fails nonetheless to identify the relation between "finite" and "nonfinite" (understood traditionally as referring to "tensed/tenseless") and "subjunctive."

15. Cf. *olapo* 'raise'.

(38) Stative verbs in conditional clauses

lo poa⌊acə-nai apaʔapicoŋo-nai
if name-1PL.EXCL.GEN separate-1PL.EXCL.NOM

lo **ma**-o⌊olai-nai *lo* **ma**-oloho-ŋa-i
if STAT-PL.child-1PL.EXCL.GEN if STAT-grow-already-3SG.GEN
'When we gave a name (to our children), we (used to) distinguish (their) children's names and adults' names.'

(39) a. kasa-ða lo ʔi-ŋaʔaŋato-nai moa ðakəralə
only-3SG.GEN if get-brushwood-1PL.EXCL.GEN go river

Ø-ʔənaʔənao, ikaoðo ka ðiðapə-nai
Ø-wash NEG LIG work-1PL.EXCL.GEN
'We (would) just gather wood, go to the river to wash clothes. We did not have (any) work (to do).'

b. oðo⌊o-ka-nai ka loŋai ʔi-paiso
can-NEG-1PL.EXCL.GEN LIG buy get-money
'We could not trade (them) against money.'

c. imi-a **mo-a**[16] konə
come-IMPERS go-IMP eat
'Come and go eat!'

d. oðolo-ka-li **maava**ʔi
can-NEG-1SG.GEN come
'I cannot come.'

(40) oðo⌊o-ka-li **ma-ðalam**-inə taotao
can-NEG-1SG.GEN STAT-love-3SG.OBL Taotao
'I cannot love Taotao.'

4. CONCLUSION. The morphological alternations that Mantauran Rukai dynamic/stative verbs exhibit—captured in table 2 and further illustrated in tables 3 and 4—are not overtly complex. However, each must be examined in the light of the whole verbal paradigm and not be treated as independent linguistic facts.

TABLE 2. FINITE, NONFINITE, AND SUBJUNCTIVE VERB FORMS

	VERB TYPE	FINITE	NONFINITE	SUBJUNCTIVE
DYNAMIC				
1a.	O-CVCV	*o*-stem	Ø-stem	Ø-stem
1b.	O-CACV	*o*-stem	Ø-stem	Ø-C*o*CV
2.	OM-	*om*-stem	Ø-stem	*m*-stem*
3.	M- (*m* ~ *k*)	*m*-stem (*m* ~ *k*)	Ø-stem (*k-*)	*m*-stem (*m* ~ *k*)
STATIVE				
	MA-	*ma*-stem	*ka*-stem	*ma*-stem

* Except for *om-iki,* where Ø-stem is also allowed.

16. Any verb following *imia* 'come!' (which does not occur in any other type of construction) must be in the imperative form. This is not true of (embedded) verbs following other imperative verbs, e.g., *moa konə!* 'Go eat!' and not **moa kona!* 'Go eat!'.

TABLE 3. MORPHOLOGICAL ALTERNATIONS OF DYNAMIC VERBS

VERB TYPE	FINITE	NONFINITE	SUBJUNCTIVE	
O-CACV	o-akamə	akamə	*o*akamə	'roast'
	o-ðapələ	ðapələ	ð*o*pələ	'fish'
	o-laŋai	laŋai	l*o*ŋai	'buy'
	o-vaʔai	vaʔai	v*o*ʔai	'give'
O-CVCV	o-əcəvə	əcəvə	əcəvə	'cross a river'
	o-həcələ	həcələ	həcələ	'pinch'
	o-kəʔətə	kəʔətə	kəʔətə	'cut'
	o-ŋələcə	ŋələcə	ŋələcə	'frown'
	o-lihoʔo	lihoʔo	lihoʔo	'know'
	o-riŋiriŋi	riŋiriŋi	riŋiriŋi	'fry'
	o-sialala	sialala	sialala	'hear'
	o-tipitipi	tipitipi	tipitipi	'beat'
	o-coroko	coroko	coroko	'jump'
	o-ʔonoro	ʔonoro	ʔonoro	'cut hair'
	o-polavo	polavo	polavo	'plant (millet)'
	o-ʔoŋolo	ʔoŋolo	ʔoŋolo	'drink'
OM-	om-iki	iki	m-iki, iki	'exist'
	om-ala	ala	m-ala	'take'
	om-oa	oa	m-oa	'go'
M-	maavaʔi	kaavaʔi	maavaʔi	'come'

TABLE 4. MORPHOLOGICAL ALTERNATIONS OF STATIVE VERBS

VERB TYPE	FINITE	NONFINITE	SUBJUNCTIVE	
MA-	ma-ravəravərə	ka-ravəravərə	ma-ravəravərə	'happy'
	ma-taaðiʔi	ka-taaðiʔi	ma-taaðiʔi	' good'
	ma-takola	ka-takola	ma-takola	'bad'
	ma-haʔaoco	ka-haʔaoco	ma-haʔaoco	'scold'
	ma-ðalamə	ka-ðalamə	ma-ðalamə	' love'
	ma-ʔamaðə	ka-ʔamaðə	ma-ʔamaðə	' dislike'
	ma-lakasə	ka-lakasə	ma-lakasə	'lazy'
	ma-pacai	ka-pacai	ma-pacai	' dry'

REFERENCES

Blust, Robert. 1998. Ca- reduplication and Proto-Austronesian grammar. *Oceanic Linguistics* 37:29–64.

———. 1999. Notes on Pazeh phonology and morphology. *Oceanic Linguistics* 38:321–365.

Huang, Lillian M. 2000. Verb classification in Mayrinax Atayal. *Oceanic Linguistics* 39:364–390.

Li, Paul Jen-kuei. 1973. *Rukai structure.* Institute of History and Philology, Special Publications No. 64. Taipei: Academia Sinica.

———. 1977. Morphonemic alternations in Formosan languages. *Bulletin of the Institute of History and Philology* 48.3:375–413.

Yeh, Mei-li. 2000. The use and function of *ka* in Formosan Languages. Paper presented at the Ninth International Conference on Chinese Linguistics, Singapore, June 25–27.

Zeitoun, Elizabeth. 1995. *Problèmes de linguistique dans les langues aborigènes de Taiwan.* Paris: Université Paris 7 René Diderot.

———. 1997a. Coding of grammatical relations in Mantauran. *Bulletin of the Institute of History and Philology* 68.1:249–281.

———. 1997b. The pronominal system of Mantauran (Rukai). *Oceanic Linguistics* 36:114–148.

Zeitoun, Elizabeth, Lillian M. Huang, Marie M. Yeh, Joy J. Wu, and Anna H. Chang. 1996. The temporal/aspectual and modal systems of the Formosan languages: A typological perspective. *Oceanic Linguistics* 35:21-56.

Zeitoun, Elizabeth, and Lillian M. Huang. 1997. Toward a typology of tense, aspect, and modality in the Formosan languages: A preliminary study. In *Chinese Languages and Linguistics, IV: Typological Studies of Languages in China,* ed. by Chiu-yu Tseng, 595–618. Symposium Series of the Institute of History and Philology, Academia Sinica, No. 2. Taipei: Academia Sinica.

———. 2000. Concerning *ka-*, an overlooked marker of verbal derivation in Formosan languages. *Oceanic Linguistics* 39:391–414.

Institute of Linguistics (Preparatory Office),
Academia Sinica
11529 Nankang, Taipei
Taiwan, ROC
hsez@ccvax.sinica.edu.tw