

第二屆台灣語言國際研討會

# 論文選集

Selected Papers from  
the Second International Symposium on  
Languages in Taiwan

抽印本

ISBN 957-8378-47-5

中華民國八十七年八月

## A Preliminary Study on Negative Constructions in Some Formosan Languages

Marie M. Yeh, Lien-ho College of Technology and Commerce  
Lillian M. Huang, National Taiwan Normal University  
Elizabeth Zeitoun, Academia Sinica  
Anna H. Chang, Ta Jen Junior College of Pharmacy  
Joy J. Wu, National Taiwan Normal University

### Abstract

This paper is a preliminary report on negative constructions in some Formosan languages. The languages under investigation include Amis, Atayal (Mayrinax and Wulai), Paiwan, Rukai (Budai, Mantauren and Tona), Saisiyat and Tsou. These languages possess various forms of negators. In terms of semantic function and syntactic behavior, these negators are classified into three types that occur in three different constructions. In the first section, negative imperative constructions are introduced. Section two deals with negation of existential, possessive and locative constructions. Section three is a discussion of negative declarative constructions. For each construction, the similarities as well as the differences among the languages will be examined. Moreover, two typological issues—(a) word order universals concerning negation and (b) ways to express negation as pointed out by Dahl (1979) will also be examined.

### 0. Introduction

This paper is a preliminary report on the negative constructions in Amis, Atayal (Mayrinax and Wulai), Paiwan, Rukai (Budai, Mantauren and Tona), Saisiyat, and Tsou.<sup>1</sup> Below is a description of the geographic distribution and the dialects of the languages under study:

1. Amis, spoken by about 130,000 people inhabiting in the Eastern part of the island, includes five dialects (Li 1995:3): Sakizaya, Northern (or Nanshi Amis), Tavalong-Vata?an, Central (Haian Amis and Hsiukulan Amis excluding Tavalong and Vata?an), and Southern (the so-called Peinan and Hengchun Amis). The dialect discussed in this paper is the Central dialect spoken in Changpin, Taitung County. This dialect, according to Li (1994), is the one that is the most widely used.
2. Atayal, spoken by the 80,000 inhabitants in the Northern, North-western, Central and Eastern mountain area, is the most wide-spread one among the Formosan languages. It has two dialects: Suliq and C?uli?. According to Li (1982a, 1985b), Suliq is more innovative while C?uli? is more conservative. In this paper, the Suliq dialect spoken in Wulai, Taipei County and the C?uli? dialect, Mayrinax, spoken in Chinshui Village, Taian Hsiang, Miaoli County are chosen.<sup>2</sup>
3. Paiwan, with speakers estimated to be 60,000, occupies the eleven Sandi Villages in Pingtung and Taitung County. Geographically, it can be divided into four dialects, the Eastern, Northern, Middle and Southern Paiwan. Syntactically, there are no

obvious differences among the Northern, Middle and Southern Paiwan. Northern Paiwan spoken in Saijia Village, Sandimen is the one examined in this paper.

4. Rukai, with the population around 8,000, includes six dialects stretching across the South: the Tanan dialect is spoken in Taitung County; the Budai and the Labuan dialects are both found in Pingtung county; the Maga, Mantauran and Tona dialects are spoken in Kaohsiung County. The six, being dialects of the same language, are--to some extent--mutually unintelligible, according to Li (1977) and Zeitoun (1993). In this paper, we will focus our discussion on Mantauran because of its idiosyncrasy. Two other dialects, Budai and Tona, will also be examined to give a comparison. According to Zeitoun (1995, p.c.), Mantauran is closer (though not similar) to Maga and Tona (the so-called Northern dialects) in syntax. With respect to morphology, it is more like the so-called South-eastern dialects (Budai, Labuan and Tanan).

5. Saisiyat is spoken in the mountain areas of Hsinchu and Miaoli County by a small population about 4,000. It is divided into two dialects, Tungho and Taai, according to geographic distribution. Syntactically, the two dialects do not have significant difference; the difference between the two dialects lies mainly in phonology and lexicon.<sup>3</sup> Discussion in this paper is based on data from both dialects.

6. Tsou, spoken by around 6,000 people living in Mt. Ali, is made up of three dialects: Tapangu, Tfuya and Duthu. The three do not have significant difference. In this paper, the Tfuya dialect is discussed.

The six languages under study all possess more than one negators. To give a full and clear picture of them, we will list the negators of different languages in the table below. In terms of syntactic distribution and semantic function, these negators are classified into three types. The negators belonging to the first type occur in the imperative constructions, so the feature [+imperative] is used to separate these negators from the other negators. The second type are negators that mark existential, possessive and/or locative constructions; the feature [+exist] is used to mark them. The third type are negators used in declarative constructions.<sup>4</sup>

Table 1 Negators in Amis, Atayal, Paiwan, Rukai, Saisiyat and Tsou

	+imperative	-imperative	
		+exist	-exist
Amis	aka	awa(-ay)	ca?ay <sup>5</sup>
Mayrinax Atayal	kaa, laxi	ukas	ini?, yakaat
Wulai Atayal	laxi	ɲat	ini?, yat
Paiwan	maya	nəka	inika
Budai Rukai	ara	kaɬoa	kai-
Mantauran Rukai	-- <sup>6</sup>	akoado	-ka(i)
Tona Rukai	aɬi	kaɬoa	i-
Saisiyat	?izi?	?oka?	?okay, ?okik
Tsou	?o-, -av?a	uk?a	o?a

This paper is organized as follows: section 1 introduces the negators that are used in imperative constructions. Section 2 deals with negative existential, possessive and locative constructions. Section 3 is a discussion on the negation of declarative constructions. In each section, languages that share the same or similar behavior will be discussed under the same subsection. Two typological issues will be discussed in section 4.

## 1. Negation of Imperative Constructions

Except Mantauran Rukai, each of the languages under discussion has a negator to negate imperative constructions. In some languages, the negative imperatives are formed simply by adding the negator of type I to the affirmative imperatives without changing the verbal forms (see Section 1.1.). In other languages, verbs occurring in affirmative and negative imperatives are different (Section 1.2-1.4).

### 1.1. Negative Imperative in Saisiyat, Atayal and Amis

In general, negative Agent Focus (AF) imperative constructions in Saisiyat, Amis and Atayal are formed by adding a negator to AF affirmative imperatives:<sup>7</sup>

#### (1) Saisiyat

a. ʃaβət , ka korkorɪŋ  
[beat Acc child]  
'Beat the child!'

b. ?izi? ʃaβət ka korkorɪŋ  
[Neg beat Acc child]  
'Don't beat the child!'

(2) Mayrinax Atayal (Huang 1995a)

- a. aras cu? qusia?  
[bring Acc.Nrf water]  
'Bring the water!'

- b. kaa aras cu? qusia?  
[Neg bring Acc.Nrf water]  
'Don't bring water!'

(3) Wulai Atayal

- a. usa?  
[go]  
'Go!'

- b. laxi usa?  
[Neg go]  
'Don't go!'

Also note that in the above AF imperatives, whether affirmative or negative, Saisiyat and Atayal both use verb roots. As for PF imperatives, Saisiyat uses verb roots no matter they are affirmative or negative (e.g. [4a-b]). In Mayrinax Atayal, affirmative imperative constructions use verb root while verbs in negative imperatives are suffixed with *-i* ([5a] vs. [5b]).<sup>8</sup>

(4) Saisiyat

- a. pazay ?amat  
[rice finish]  
'Finish the rice!'

- b. pazay ?izi? ?amat  
[rice Neg finish]  
'Don't finish the rice!'

(5) Mayrinax Atayal

- a. aras ku? qusia?  
[bring Nom.Rf water]  
'Bring the water!'

- b. kaa ras-i ku? qusia?  
[Neg bring-PF Nom.Rf water]  
'Don't bring the water!'

In Mayrinax Atayal, there is another negator *laxi* that is found in imperative constructions. Different from *kaa*, which is followed by a root/imperative forms in

AF constructions and the suffix *-i* in PF constructions, the verbs occur after *laxi* are AF verbs. Compare:

(6) Mayrinax Atayal

- a. laxi ku? m-usa? i? uray  
[Neg Nom AF-go Loc Wulai]  
'Don't go to Wulai!'

- b. kaa usa? i? uray  
[Neg go Loc Wulai]  
'Don't go to Wulai!'

(7) Mayrinax Atayal

- a. laxi ku? m-nubuwar cu? quwaw  
[Neg Nom AF-drink Acc wine]  
'Don't drink wine!'

- b. kaa nubuwar cu? quwaw  
[Neg drink Acc wine]  
'Don't drink wine!'

The following sentences show that *laxi* is derived from a NAF verb meaning "not want" or "give up", and *ku?* is a nominative case marker. Comparing the *laxi* in Mayrinax Atayal with that in Wulai Atayal, we will find that *laxi* in Mayrinax Atayal is a verb while in Wulai Atayal, it is grammaticalized to a negator.<sup>9</sup>

(8) Mayrinax Atayal

- a. laxi ku? quwaw  
[Neg Nom wine]  
'Don't want the wine!'  
(Give up the wine!)

- b. ma-lax=ci? cu? quwan  
[AF-not:want=1S.BN Acc wine]  
'I don't want wine.'

Amis is more complicated with respect to verbal morphology--verbs in Amis AF imperatives are prefixed with *pi-* or *ka-*,<sup>10</sup> and in PF, affixed with *-an* or *ka-* ~ *-an*. Nevertheless, like Saisiyat, both affirmative and negative imperative constructions use the same verb forms:

(9)Amis

a. ka-tavra i taypak  
[KA-go Loc Taipei]  
'Go to Taipei!'

b. aka ka-tavra i taypak  
[Neg KA-go Loc Taipei]  
'Don't go to Taipei!'

(10)Amis

a. palu?-ən ta ci aki  
[beat-EN 1PL.FG Nom Aki]  
'Let's beat Aki!'

b. aka palu?-ən kaku  
[Neg beat-EN 1S.FN]  
'Don't beat me!'

## 1.2. Negative Imperative in Paiwan

In Paiwan, verbs in both AF and PF imperative constructions are marked with the suffix *-u*. However, verbs occur after the imperative negator can only be marked with *-əm-*, the agent focus marker, no matter in AF (11) or PF (12) imperatives:

(11)Paiwan

a. kə[əm-u] tjav palan  
[beat-imp Acc Palan]  
'Beat Palan!'

b. maya k[əm]>ə[əm] tjav palan  
[Neg beat<AF> Acc Palan]  
'Don't beat Palan!'

(12)Paiwan

a. kə[əm-u] ti palan  
[beat-PF Nom palan]  
'Beat Palan!'

b. maya k[əm]>ə[əm] ti palan  
[Neg beat<AF> Nom Palan]  
'Don't beat Palan!'

From the above sentences we see that in both affirmative and negative

imperatives, there is no indication which focus construction the sentence belongs to. Instead, it is the case realization of the argument that tells us whether it is an AF or a PF construction.<sup>12</sup> As the patient argument *palan* is realized in nominative case, (12b) should be a PF construction. But it is puzzling that verbs in PF negative constructions, being marked with AF marker *-əm-*, are incompatible with the PF marker *-in-* (13a) or *-in* (13b).

(13)Paiwan

a. \*maya t[in]>əkə[ a vava  
[Neg drink<Prf/PF> Nom wine]

b. \*maya kə[əm-in] ti palan  
[Neg beat-PF Nom Palan]

Huang (1995a) points out that in Mayrinax Atayal, when two verbs occur serially, the second one must be an AF verb, and according to Chang (1995, p.c.), it is also the case in Paiwan. So, it is speculated that negative imperative in Paiwan may be a serial verb construction. In Mayrinax Atayal, negative imperatives formed by *laxi* are identical to one kind of serial construction as shown by the following sentences:

(14)Mayrinax Atayal

a. *lax-i* ku? ma-tutin  
[Neg Nom AF-beat]  
'Don't fight against each other!'

b. *puŋ-i* ku? ma-quwas  
[hear-LF Nom AF-sing]  
'Listen to him singing!'

Negative imperative constructions in Paiwan and the negative imperatives formed by *laxi* in Mayrinax Atayal are similar in the following two aspects. First, they are followed by AF verbs. Second, they seem to bear some resemblance to serial verb constructions. We will discuss this issue in more details when carrying out our project on complex sentences.

## 1.3. Negative imperative in Tsou

In Tsou, affirmative imperatives are expressed by the auxiliary *te*,<sup>13</sup> and focus marking of the verbs in imperative constructions is the same as that of declarative constructions. To negate AF imperatives, the prefix *ʔə-* is added before the auxiliary (e.g. [15b]), while in NAF imperatives, the suffix *-avʔa* is added after *te* (e.g. [16b]), [16b]):

(15) Tsou

a. te m-imo  
[Aux AF-drink]  
'Drink!'

b. ʔo-te m-imo  
[Neg-Aux AF-drink]  
'Don't drink!'

(16) Tsou

a. te pei-eni naveu aʔo  
[Aux cook-BF rice 1S.Neu]  
'Cook rice for me!'

b. te-avʔa pei-eni to naveu  
[Aux-Neg cook-BF Obl rice]  
'Don't cook rice for him!'

(17) Tsou

a. te eobak-a si moʔo  
[Aux beat-PF Nom Moʔo]  
'Beat Moʔo!'

b. te-avʔa eobak-a ʔe moʔo  
[Aux-Neg beat-PF Nom moʔo]  
'Don't beat Moʔo!'

#### 1.4. Negative Imperative in Rukai

In all the Rukai dialects, the verb in affirmative imperative constructions is suffixed with *-a*. In Tona and Budai Rukai, there is a negator for imperative constructions. In Tona Rukai, the imperative negator is followed by the verb root while in Budai Rukai, the verb in a negative imperative construction is reduplicated. Compare:

(18) Tona Rukai

a. kwan-a<sup>15</sup>  
[eat-imp]  
'Eat!'

b. adi-kanə  
[Neg-eat]  
'Don't eat!'

(19) Budai Rukai

a. kanə-a  
[eat-imp]  
'Eat!'

b. ara kanə-kanə  
[Neg Red-eat]  
'Don't eat!'

In Mantauran Rukai, there is no overt negative morpheme, and the negative imperatives are morphologically the same as a nominalized construction (compare [20b] and [22a]). The difference lies in stress--stress in Mantauran Rukai normally falls on the first syllable, but in negative imperatives, stress falls on *-aə*. According to Zeitoun (1995, p.c.), *-aə* comes from *-ana*, a locative marker. Why Mantauran Rukai employs a nominalized construction to express negation of imperative deserves further investigation. Sentences in (20) and (21) are examples for imperative constructions and sentences in (22) are examples for nominalization:

(20) Mantauran Rukai

a. kon-a  
[eat-imp]  
'Eat!'

b. a-kan-aə-ʔo<sup>16</sup>  
[Real-eat-NOM-2S.BG]  
'Don't eat!'

(21) Mantauran Rukai

a. tipitip-a lalakə-li  
[beat-imp child-1S.BG]  
'Beat my child!'

b. a-tipitip-aə-ʔo lalakə -li  
[Real-beat -NOM-2S.BG child-1S.BG]  
'Don't beat my child!'

(22) Mantauran Rukai

a. kani a-kan-aə-ʔo<sup>17</sup>  
[what Real-eat-NOM-2S.BG]  
'What did you eat?'

b. a-ʔoŋol-aə-ʔo mataaʔiʔi ʔoŋolo  
[Real-drink-NOM-2S.BG good drink]  
'What you drank tastes good.'

## 1.5. Summary

Here let us briefly sum up what has been discussed above. Negative imperative constructions in Amis, Atayal, Saisiyat and Tsou are all formed by adding a negative morpheme to affirmative imperatives, but in Tsou, the imperative negators for AF and NAF not only differ in form but also in structural position. Paiwan and Rukai both form their imperatives by adding a suffix to verb roots. But negative imperatives in Paiwan are formed by adding the negator *maya* to an AF construction while in Tona Rukai, negative imperatives are formed by adding a negator to verb root. In Budai Rukai, the verbs in negative imperatives are reduplicated. Mantauran Rukai differs from the other languages in that the negative imperative construction does not seem to have any overt negative morpheme; instead, it seems to be isomorphic with nominalized constructions. Below is a table summarizing the affirmative and negative imperative constructions of the languages under discussion:

Table 2 Affirmative and negative imperatives

Imperatives	affirmative	negative
Amis Atayal Saisiyat	imperative verb	negator + imperative verb
Tona Rukai	imperative verb	negator + verb root
Budai Rukai	imperative verb	negator + reduplicated verb root
Mantauran Rukai	imperative verb	a-V-aə-ʔo(nominalization)
Paiwan	imperative verb	negator + V<əm>
Tsou	(te) + V	ʔo-te + V(AF) te-avʔa + V(NAF)

## 2. Negation of Existential, Possessive and Locative Constructions

In this section, we will examine the negation of existential, possessive and locative constructions of the six languages under study. Existential and possessive constructions are examined together because in all the languages under discussion, the two constructions are expressed by the same marker.

### 2.1. Affirmative Existential and Possessive Construction

All the languages investigated have verbs to express existential and possessive, but these languages behave differently with respect to the case realization of nominals. Below are two tables summarizing the case realization of nominals in affirmative existential and possessive constructions:<sup>18</sup>

Table 3 Case realization of nominals in possessive constructions

	possessed	possessor
Amis Atayal Paiwan Budai Rukai	Nom	Gen
Tsou	Obl	Gen
Mantauran Rukai Tona Rukai	Nom	Obl
Saisiyat	Acc	Nom

Table 4 Case realization of nominals in existential constructions

	theme	location
Amis Atayal Paiwan Rukai	Nom	Loc
Tsou	Obl	Nom
Saisiyat	Acc	Loc/Nom

A negative existential/possessive verb is used to negate existential and possessive constructions. In Amis, Atayal, Mantauran and Saisiyat, the constructions are the same as affirmative ones; in Paiwan and Tsou, the structure is different--another morpheme (*nu* in Paiwan and *ci* in Tsou) appears in negative constructions. The function of *nu* and *ci* are unknown for the time being.

#### 2.1.1. Atayal, Amis, Saisiyat and Rukai

As shown in the following Atayal and Amis examples, the possessor nominal in a possessive construction is realized in genitive case and the possessed nominal, nominative case. So, the sentence 'I have money' seems to be expressed as 'My money exists.' In an existential construction, the location (locative argument) is realized in locative case while the nominal of which the existence is being claimed (which will be referred to as theme argument in this paper) is realized in nominative case.

- (23) Mayrinax Atayal  
a. kia? a? pila?=mu  
[Ext Nom money=1S.BG]  
'I have money.'

- b. ukas a? ?ulaqi?nia?  
[Neg Nom child=3S.BG]  
'He has no child.'

- (25) Mayrinax Atayal  
a. kia? ku? niyaw ka? rahuwal  
[Ext Nom cat Lin big]  
'There is a big cat.'

- b. ukas a? pila?  
[Neg Nom money]  
'There's no money.'

- (26) Wulai Atayal  
a. uŋat laqi?nia?  
Neg child=3S.BG  
'He has no child.'

- b. uŋat pila?  
Neg money  
'There's no money.'

- (27) Amis  
a. ira ku paysu aku  
[Ext Nom money 1S.FG]  
'I have money.'

- b. awa ku paysu aku  
[Neg Nom money 1S.FG]  
'I have no money.'

- (28) Amis  
a. ira ku wacu i la-luma?  
[Ext Nom dog Prep Red-house]  
'There is a dog inside the house.'

- b. awa ku wacu i la-luma?  
[Neg Nom dog Prep Red-house]  
'There is no dog inside the house.'

In Saisiyat, the possessor in a possessive construction and the location in an existential construction are realized in nominative case; the possessed nominal in a possessive construction and the theme argument in an existential construction are realized in accusative case. So the existential/possessive verb in Saisiyat behaves

more like a transitive verb, and the existential/possessive construction seems to be expressed as "X(locative/possessor) has Y(theme/possessed)".<sup>19</sup>

- (29) Saisiyat  
a. yako hayzæh ka rayhil  
[1S.FN Ext Acc money]  
'I have money.'

- b. yako ?oka? ka rayhil  
[1S.FN Neg Acc money]  
'I don't have money.'

- (30) Saisiyat  
a. (ray) kawaf βaβa[o? hayzæh ka ?ila?  
[Loc sky above Ext Acc star]  
'There are stars up in the sky.'

- b. (ray) kawaf βaβa[o? ?oka? ka ?ila?  
[Loc sky above Neg Acc star]  
'There are no stars up in the sky.'

The Rukai dialects fall into two groups with respect to the expression of possessive and existential constructions. The South-eastern dialects behave more like Amis and Atayal in the expression of existential and possessive constructions. Consider the following Budai sentences:

- (31) Budai Rukai  
a. y-a-kai ku paisu-li  
[Real-Exist Nom money-1S.BG]  
'I have money.'

- b. kaqua ku paisu-li  
[Neg Nom money-1S.BG]  
'I have no money.'

- (32) Budai Rukai  
a. y-a-kai ipiŋi ka/ku aŋatu  
[Real-Exist beside:the:house Nom tree]  
'There is a tree beside the house.'

- b. kaqua ku aŋatu ipiŋi  
[Neg Nom tree beside:the:house]  
'There is no tree beside the house.'

In Mantauran and the Northern Rukai dialects, the possessor in the possessive



construction is realized in oblique case as shown in (33) - (36).

(33)Mantauran Rukai

a. omik-iaə      paiso  
[exist-1S.BO    money]  
'I have money.'

b. okaoð-iaə      paiso  
[Neg-1S.BO    money]  
'I have no money.'

(34)Mantauran Rukai

a. omiki    vilaʔa    ðaʔanə    ʔaʔato  
[Ext    beside    house    tree]  
'There is a tree beside the house.'

b. okaoðo    vilaʔa    ðaʔanə    ʔaʔato  
[Neg    beside    house    tree]  
'There is no tree beside the house.'

(35)Tona Rukai

a. y-a-kai      nakoa      paiso  
[Real-Exist    1S.FO    money]  
'I have money.'

b. kaɖoa    nakoa      paiso  
[Neg    1S.FO    money]  
'I have no money.'

(36)Tona Rukai

a. y-a-kai      cigianə    daʔanə    na    ʔaʔato  
[Real-Exist    beside    house    Nom    tree]  
'There is a tree beside the house.'

b. cigianə    daʔanə    ka    kaɖoa    ka    ʔaʔato  
[beside    house    Top    Neg    Nom    tree]  
'There is no tree beside the house.'

According to Zeitoun (1993:15), in Mantauran Rukai, the transitivity of a clause is increased by adding an accusative (called oblique in this paper and in Zeitoun 1995) bound pronoun to the verb. So, it seems that the existential/possessive verb in Mantauran Rukai, like that in Saisiyat, is a transitive verb. But the case realization of possessor and the possessed NP in Mantauran Rukai is somewhat different from that in Saisiyat. In Saisiyat, the possessor is realized in nominative case, and the

possessed NP, accusative case, so the possessor is the subject, and, the possessed NP, the object. In Mantauran Rukai, the possessor nominal is realized in oblique case, and thus seems to be the grammatical object.<sup>20</sup>

## 2.1.2. Paiwan and Tsou

In Paiwan, the case marking of possessor and the possessed nominals is the same as that in Amis and Atayal. But in a negative existential/possessive construction, there exists a morpheme *nu*, of which the function is still unknown for the time being. Sentences (37a') and (37b') show that, *nu*, being obligatory in negative existential/possessive constructions, is not allowed in affirmative existential/possessive constructions.

(37)Paiwan

a. izua    paisu      nimadju  
[Ext    money    3S.FG]  
'He has money.'

a'. \*izua    nu      paisu      nimadju  
[Ext    NU    money    3S.FG]

b. naka    nu      paisu      nimadju  
[Neg    NU    money    3S.FG]  
'He has no money.'

b'. \*naka    paisu      nimadju  
[Neg    money    3S.FG]

(38)Paiwan

a. izua    snati    i      vavau    tua    cəkui  
[Ext    book    Prep    on    Acc    desk]  
'There is a book on a desk.'

b. naka    nu      snati    i      vavau    tua    cəkui  
[Neg    NU    book    Prep    on    Acc    desk]  
'There is no book on a desk.'

In Tsou, as in Amis, Atayal and Paiwan, the possessor is realized in genitive case, but the possessed NP is marked with oblique case. In negative possessive constructions, the morpheme *ci*, a marker to link verbal modifier and nominal (cf. Zeitoun 1992), appears after the negator. Consider:

(39)Tsou

a. pan      to      peisu-si  
[Ext    Obl    money-3S.BG]  
'He has money.'

- b. ukʔa ci peisu-ʔu  
[Neg Rel money-1S.BG]  
'I have no money.'

(40) Tsou

- a. pan to vozomi ci mo eon ta paŋka  
[Ext Obl-Nid fly Rel AF be:at Obl table]  
'There's a fly on the table.'

- b. ukʔa ci vozomi ʔe paŋka  
[Neg Rel fly Nom table]  
'There is no fly on the table.'

## 2.2. Negation of Locative Constructions

Among the languages, locative constructions in Amis and Mayrinax Atayal are also expressed by the existential/possessive verb and thus are negated by the existential/possessive negator, as illustrated below:

(41) Amis

- a. ira ci panay i luma  
[Ext Nom Panay Prep house]  
'Panay is at home.'

- b. awa ci panay i luma  
[Neg Nom Panay Prep house]  
'Panay is not at home.'

(42) Mayrinax Atayal

- a. kia? cku? ʔulaqiʔ=cu ku? ʔulaqiʔ=mu  
[Exist Acc.Rf child=1S.BG Nom.Rf child=2S.BG]  
'Your child is in my child's place.'

- b. ukas ku? tawqi? ʔi? imuwan  
[Neg Nom.rf chief Prep house]  
'The chief is not in.'

In Paiwan, Saisiyat and Tsou, locative constructions are not expressed by the existential/possessive verb but by the negator that is used in declarative constructions. Sentences (43) are examples from Paiwan.<sup>21</sup>

(43) Paiwan

- a. i uma? ti kama  
[Prep house Nom father]  
'Father is home.'

- b. inika i uma? ti kama  
[Neg Prep house Nom father]  
'Father is not home.'

In Saisiyat, locative constructions are equational in nature and thus are negated by the negator *ʔokik*, which is used to negate equational constructions. Examples follow:

(44) Saisiyat

- a. ʔobay ray tawʔan  
[ʔobay Loc house]  
'ʔobay is at home.'

- b. ʔobay ʔokik ray tawʔan  
[ʔobay Neg Loc house]  
'ʔobay is not at home.'

In Tsou, locative construction is expressed by *eoni*, and to negate locative construction, negative morpheme *oʔa* that is used in declarative sentences is used.

(45) Tsou

- a. mo eon to emoo ʔo avʔu  
[AF be:at Obl house Nom dog]  
'The dog is in the house.'

- b. oʔa mo eon to emoo ʔo avʔu  
[Neg AF be:at Obl house Nom dog]  
'The dog is not in the house.'

In Rukai, locative constructions are expressed by existential/possessive verbs, but they are negated by the negator that is used in declarative constructions rather than by the existential/possessive negator. Consider the following examples from Tona (46), Mantauran (47) and Budai (48).

(46) Tona Rukai

- a. y-a-kai balato titina doʔodoʔo  
[Real-Exist outside mother cook]  
'Mother is cooking outside.'

- b. i-ikai      balatə      titina      do?odo?o  
[Neg-Exist outside mother cook]  
'Mother is not cooking outside.'

(47)Mantauran Rukai

- a. omiki      lataðə      oha?a      titina  
[Exist outside cook mother]  
'Mother is cooking outside.'
- b. omiki      kai ka      lataðə      oha?a      titina  
[Exist Neg outside cook mother]  
'Mother is not cooking outside.'

(48)Budai Rukai

- a. y-a-kai      lataqə      agaaga      ka      ina  
[Real-Exist outside cook Nom mother]  
'Mother is cooking outside.'
- b. kai      w-a-agaaga      ka      ina      i-lataqə  
[Neg Act-Real-cook Nom mother at-outside]  
'Mother is not cooking outside.'

### 2.3. Summary

From the above discussion, we find that among the six named languages, Amis and Atayal use the same verb to express existential, possessive and locative constructions. In Paiwan, Saisiyat and Tsou, existential and possessive constructions are expressed by the same verb while locative constructions seem to pattern with declarative constructions. In Rukai, the affirmative locative constructions, like those in Amis and Atayal, are expressed by the existential/possessive verb while the negative construction is expressed by the negator used in declarative constructions.

## 3. Negative Declarative Constructions

This section deals with the negation of declarative constructions. Atayal and Saisiyat are discussed first because they both have two negators that are used in declarative constructions. Section 3.2 deals with Amis, Paiwan and Tsou. The dialects of Rukai are examined and compared in section 3.3. Section 3.4 sums up the discussion.

### 3.1 Negation in Atayal and Saisiyat

Atayal and Saisiyat both have two negators to negate declarative sentences. In Mayrinax Atayal, they are *ini?* and *yakaat*, in Wulai Atayal, *ini?* and *yat*, and in

Saisiyat, *?okay* and *?okik*. According to Huang and Davis (1989) and Huang (1993 & 1995b), in Mayrinax Atayal and Wulai Atayal, the two negators are distinguished by their relation to the event. According to Yeh (1991), in Saisiyat the negator *?okay* is followed by action verbs, while *?okik* is followed by predicates that are stative in nature.

There is one thing common in Atayal and Saisiyat: while the negator *ini?* in Atayal and *?okay* in Saisiyat are followed by root/imperative verb, the verb after the other negator (i.e. *yakaat* in Mayrinax Atayal, *yat* in Wulai, and *?okik* in Saisiyat) can have aspect marker(s). Examples follow:

(49)Mayrinax Atayal

- a. ini?=cu      qaniq  
[Neg=1S.BN eat]  
'I did not eat.'
- b. yakaat=ku?      m<in>aniq      cku?      qulih      ka?      hani  
[Neg=1S.BN AF<Prf>eat Acc.Rf fish Lin this]  
'I have never eaten sich kind of fish.'

(50)Wulai Atayal

- a. ini?=ku?      qaniq      qulih  
[Neg=1S.BN eat fish]  
'I didn't eat fish.'
- b. yat=ku?      m<in>aniq      qulih  
[Neg=1S.BN AF<Prf>eat fish]  
'I have never eaten fish.'

(51)Saisiyat

- a. ?oya?      ?okay      faβat      ka      korkoriŋ  
[mother Neg beat Acc child]  
'Mother did not beat the child.'
- b. ?oya?      ?okik      man faβat      ka      korkoriŋ  
[mother- Neg Asp beat Acc child]  
'Mother is not beating the child.'

(52)Saisiyat

- a. yako      ?okay      kita?      hisia  
[1S.N Neg see 3S.FA]  
'I did not see him/her.'

- b. yako ?okik k<om><in>ita? hisia  
[1S.N Neg see<AF><Prf> 3S.FA  
'I have never seen him/her (before).'

But the two languages are different with respect to the position of tense marker. In Mayrinax and Wulai Atayal, the verb after *yakaat* and *yat* can also be marked for tense (53-54), but in Saisiyat, tense marker *?am* comes before the negator (55).

- (53) Mayrinax Atayal  
yakaat=ku? pa-qaniq cu? qulih  
[Neg=1S.BN Fut-eat Acc.Nrf fish]  
'I will not eat fish.'

- (54) Wulai Atayal  
yat=ku? p-qaniq qulih  
[Neg=1S.BN Fut-eat fish]  
'I will not eat fish.'

- (55) Saisiyat  
a. ?aki? ?am ?okay walj?  
[grandpa will Neg come  
'Grandpa will not come.'

- b. ?aki? rim?an ?am ?okik ray taw?an  
[grandpa tomorrow will Neg Loc house]  
'Grandpa will not be home tomorrow.'

In Wulai Atayal, tense and aspect can also be expressed by a set of auxiliaries (Huang 1993). If tense or aspect is expressed by an auxiliary (such as *wan*, *musa?* or *nyux*), the negator *ini?* is used and it comes after the auxiliary.

- (56) Wulai Atayal  
a. wan=ku? ini? qaniq qulih  
[Asp=1S.BN Neg eat fish]  
'I haven't eaten fish.'
- b. nyux=ku? ini? qaniq qulih  
[Asp=1S.BN Neg eat fish]  
'I am not eating fish.'
- c. musa?=ku? ini? qaniq qulih  
[Asp=1S.BN Neg eat fish]  
'I will not eat fish.'

### 3.2. Amis, Paiwan and Tsou

In Amis, Paiwan and Tsou, we find only one negator that is used in declarative constructions. The three are verb-initial languages, and all of them have the negator appearing in sentence initial position. Among the three, Paiwan and Tsou have bound pronouns,<sup>22</sup> but in Paiwan, the bound pronouns are attached to the negator while in Tsou they are attached to the auxiliary that comes after the negator.

In Amis, the verb after the negator *ca?ay* changes its form. It appears in the same form as the verbs in imperative constructions.<sup>23</sup>

- (57) Amis  
a. mi-tantan kaku tu futij  
[AF-cook 1S.FN Acc fish]  
'I will cook fish.'
- b. ca?ay pi-tantan kaku tu futij  
[Neg PI-cook 1S.FN Acc fish]  
'I did not cook fish.'

- (58) Amis  
a. ma-fana? kaku ci?raan  
[AF-know 1S.FN 3S.FA]  
'I know him.'
- b. ca?ay ka-fana? kaku ci?raan  
[Neg KA-know 1S.FN 3S.FA]  
'I do not know him.'

In Paiwan, the negator *inika* occurs in sentence initial position. Sentences (59) and (60) show that, unlike the verb after Amis *ca?ay*, Atayal *ini?* and Saisiyat *?okay*, the focus marking of the verb does not change, but is the same as in affirmative sentences.

- (59) Paiwan  
a. na-k<om>ac a ?atuvi tua watu  
[Past-bite<AF> Nom snake Acc dog]  
'The snake bit a dog.'
- b. ini-ka na-k<om>ac tua ?iaw aza watu  
[Neg Past-bite<AF> Acc cat that dog]  
'The dog did not bite that cat.'

(60)Paiwan

a. k<in>ac a vatu nua ?atuvi  
[bite<PF> Nom dog Gen snake]  
'The dog was bitten by the snake.'

b. ini-ka k<in>ac aza ŋiaw nua vatu  
[Neg bite<PF> that cat Gen dog]  
'That cat was not bitten by the dog.'

Sentences (61) show that in Paiwan, bound pronouns are attached to the negator.<sup>24</sup>

(61)Paiwan

a. ini-ka-kən a madudududu  
[Neg-1S.BN Link angry]  
'I am not angry.'

b. ini-ka-kən a na-k<əm>ə[əm] katiaw  
[Neg-1S.BN Link Past-eat<AF> yesterday]  
'I did not eat yesterday.'

c. ini-ka-kən a k<in>ə[əm] ni kina  
[Neg-1S.BN Link beat<Prf/PP> Gen mother]  
'I was not beaten by Mother.'

In Tsou, the verbs in negative constructions do not change forms either.<sup>25</sup> Unlike Atayal and Paiwan, the bound pronouns in Tsou are attached to the auxiliary rather than to the negator.

(62)Tsou

a. mi-ta eoɓako ta oko (Zeitoun 1996:7)  
[AF-3S.BN beat-AF Obl child]  
'He is beating the child.'

b. o?a mi-ta (s?a) eoɓako ta oko  
[Neg AF-3S.BN beat-AF Obl child]  
'He is not beating the child.'

(63)Tsou

a. os-?o eoɓak-a ?e yaŋui ho mo?o  
[NAF-1S.BG beat-PF Nom Yaŋui and Mo?o]  
'I have (just) beaten Yaŋui and Mo?o.'

b. o?a os-?o (s?a) eoɓak-a ?e yaŋui ho mo?o  
[Neg NAF-1S.BG beat-PF Nom Yaŋui and Mo?o]  
'I have not (just) beaten Yaŋui and Mo?o.'

The following two sentences show that *o?a* seems to be the counterpart of the emphatic particle *?a*:

(64)Tsou

a. ?a ɕa-ta etamaku  
[?a Freq-3S.BN smoke]  
'(It is the case that) he (usually) smokes'

b. o?a ɕa-ta etamaku  
[Neg Freq-3S.BN smoke]  
'He does not smoke. (It is not the case that he smokes).'

3.3. Rukai

In the Rukai dialects, with the exception of Mantauran, in which the negator for declarative constructions is a suffix, the negative morpheme for declarative construction is prefixed to the verb. Compare the following examples from Tona, Budai and Mantauran. As can be seen in the following sentences, in Mantauran and Budai Rukai, verbs in negative constructions are the same as those appearing in affirmative sentences:

(65)Tona Rukai

a. w-a-kanə kakə na bələbələ  
[Act-Real-eat 1S.FN Obl banana]  
'I ate banana.'

b. i-kanə kakə na bələbələ  
[Neg-eat 1S.FN Obl banana]  
'I didn't eat banana.'

(66)Mantauran Rukai

a. apəcə ana [olai  
[sleep , that baby]  
'The child is sleeping/slept.'

b. apəcə-kai ana [olai  
[sleep-Neg that baby]  
'The child is not sleeping/did not sleep.'

(67) Budai Rukai

a. w-a-salað-aku ki lasu  
[Act-Real-chase-1S.BN Obl man]  
'I chased the man.'

b. kai w-a-salað-a ki la-avalakə ka tawpuŋu  
[Neg Act-Real-chase Obl Pl-child Nom dog]  
'The dog didn't chase the children.'

In Mantauran Rukai, when followed by a bound pronoun,<sup>26</sup> the negative morpheme is reduced to *ka*. The bound pronouns in negative sentences are in the genitive case;<sup>27</sup> in affirmative constructions they are in nominative case.

(68) Mantauran Rukai

a. ʔoponoho-moʔo  
[Wanshan-2S.BN]  
'You are Wanshanese.'

b. ka ʔoponoho-ka-ʔo  
[Neg Wanshan-Neg-2S.BG]  
'You are not Wanshanese.'

In sentence (68b), besides *ka*, there is another *ka* occurring before ʔoponoho. As (68c) shows, without this *ka*, the sentence will be a yes-no question. So, negation in (68b) is in fact conveyed by the *ka* preceding ʔoponoho.

(68) Mantauran Rukai

c. ʔoponoho ka-ʔo  
[Wanshan Neg-2S.BG]  
'Are you Wanshanese?'

What is the function of *ka*? Sentences in (68) and (69) seem to show that it occurs because the negator *ka(i)* is used to mark yes-no question:

(69) Mantauran Rukai

a. o-tipitipi tao[o]  
[Real-beat dog]  
'He beat the dog.'

b. o-tipitipi-*ka*i tao[o]  
[Real-beat-Neg dog]  
'Did he beat the dog?'

c. o-tipitipi-*ka*i *ka* tao[o]  
[Real-beat-Neg Neg dog]  
'He did not beat the dog.' (It was not the dog that he beat.)

The meaning of sentence (69c) along with the contrast between (70a) and (70b) seem to indicate that *ka* occurs before the nominal that is being negated. So it is speculated that the morpheme *ka* is a narrow scope negator that comes before the constituent that is being negated.<sup>28</sup>

(70) Mantauran Rukai

a. ʔiða o-kanə-ka-li  
[yesterday Act/Real-eat-Neg-1S.BG]  
'Yesterday, I did not eat.'

b. ʔiða o-kanə-ka-li *ka* toʔonai  
[yesterday Act/Real-eat-Neg-1S.BG Neg anything]  
'I did not eat anything yesterday.'

Sentence (71) shows that *ka* can negate verbal elements also. It seems that double negation as seen in French is common in Mantauran.

(71) Mantauran Rukai

opoʔo-lao la *ka* ʔopolo-ka-li vavaa  
[chew:betel nut-1S.BN but Neg drink-Neg-1S.BG wine]  
'I chew betel nut but do not drink wine.'<sup>29</sup>

### 3.4. Summary

To sum up what has been discussed in the preceding three subsections, we find three points worth mentioning: (a) the position of negative morpheme with respect to the verb; (b) the position of negators with respect to bound pronouns; (c) the effect the negator exerts on the verb that follows it.

(a) The position of negative morpheme:

Except Saisiyat, which displays an SVO word order, all the languages under discussion in this paper are reported to be verb-initial.<sup>30</sup> Among the verb-initial languages, only Mantauran Rukai has the negator following the verb;<sup>31</sup> in the other languages, the negator occurs preverbally in sentence initial position. In Saisiyat, the negator also occurs before the verb.

(b) The position of negative morpheme with respect to the bound pronouns (BP's):

Among the six languages, Atayal, Paiwan, Mantauran and Tsou have bound pronouns, and with the exception of Tsou, the bound pronouns in the other three languages are attached to the negator.

(c) The effect the negator exerts on the verb that follows:

Among the negators that are used in declarative constructions, *caʔay* in Amis, *iniʔ* in Atayal, *ʔokay* in Saisiyat have effects on the verb, so the verb forms are different from those in affirmative declarative sentences. For *yakaat* in Mayrinax Atayal, *yat* in Wulai Atayal, *ʔokik* in Saisiyat, *inika* in Paiwan, *-ka(i)* in Mantauran Rukai, *i-* in Tona Rukai and *kai-* in Budai Rukai, and *oʔa* in Tsou, the verbs after the negators are the same as those in affirmative sentences.

The following table sums up this section:

Table 5 Order and marking related to negation

Language	word order	Neg Position	BP position	focus marking
Amis	V- <sup>33</sup>	NegV	--	+ changed
Mayrinax Atayal	VOS	NegV	Neg+BP	± changed
Wulai Atayal	VOS	NegV	Neg+BP	± changed
Paiwan	V-	NegV	Neg+BP	-- changed
Tona Rukai	V-	NegV	Neg+BP	- changed
Mantauran	V-	V(Asp)Neg	Neg+BP	-- changed
Budai Rukai	V-	NegV	Neg+BP	- changed
Saisiyat	SVO	SNegV	--	± changed
Tsou	VOS	NegAux	NegAux+BP	- changed

#### 4. Concluding Remark

To conclude the present discussion, we will discuss two issues pointed out by Dahl (1979): the first one is about the word order universal; the second one concerns the ways to express negation. According to Dahl (1979) and Dryer (1988), the most natural or common position for a negative morpheme to appear in verb-initial language is the sentence-initial position; as for SVO language, the common position is before the verb. Table 5 shows that all the languages discussed in this paper, with the exception of Mantauran Rukai, follow the generalization obtained from their studies.

Why is Mantauran Rukai different from the other Formosan languages and the word order universals? Zeitoun (1993) points out that the following facts along with the position of negative morpheme show that Mantauran Rukai is turning into a head marking language, where syntactic relations are morphologically marked on the modifiee:

- (a) oblique (person/human) nouns are cross-referenced on the verb by means of a pronominal suffix;
- (b) there is an agreement between the modifier and the head noun.

According to Dahl (1979), there are many ways to express negation. Some languages use morphological devices such as prefixes or suffixes. In some languages the negator is an uninflected particle, but in other languages, the negator may be an inflected auxiliary. The six Formosan languages under study seem to exemplify different ways of expressing negation. For example, Mantauran Rukai manifests itself as a language that uses double negation. In Saisiyat, the negators can have tense or aspect marker and thus are more like an inflected auxiliary (cf. Dahl 1979). In Atayal, Paiwan, and Rukai, bound pronouns are attached to the negators and so can be treated as inflected for person. But the discussion here is not enough to help us draw any definite conclusion and we will leave this for further study.

## NOTES

1. This paper is part of the on-going research done by Lillian Huang (on Atayal), Elizabeth Zeitoun (on Rukai and Tsou), Marie Yeh (on Saisiyat), Anna Chang (on Paiwan), and Joy Wu (on Amis). We are grateful to the National Science Council for the generous financial support (NSC grant 83-031-H003-017 on the grammatical relationship of some Formosan Languages). We would also like to express our gratitude to the anonymous reviewers for their enlightening opinions.
2. For a comparison of the syntactic structure between Wulai and Mayrinax, we refer you to Huang (1995b).
3. For a comparison between these two dialects, we refer you to Li (1978).
4. The negators listed are by no means exhausted, for example, in Saisiyat, *kayni?* is used to express negation of volition. But under close examination, it is found that it seems more like a lexical verb with negative implication. Therefore it will not be included in the discussion here.
5. The negator *ca?ay* has two variants *ka* and *ca?ay-ay*.
6. As will be discussed below, in Mantauran Rukai, negative imperative constructions do not have an overt negator. The negative imperative constructions seem to be the same as nominalized constructions.
7. Abbreviations used in this paper include:  

1/2/3S: 1st/2nd/3rd person singular	1/2/3P: 1st/2nd/3rd person plural
<: infix	=: clitic
Acc: accusative	
Act: active	AF: Agent Focus
Aux: auxiliary	Asp: Aspect
BO: bound oblique	BG: bound genitive
BN: bound nominative	Ext: existential
FN: free nominative	FG: free genitive
Gen: genitive	Freq: frequency
IF: Instrumental Focus	Fut: future
LF: Locative Focus	Imp: imperative
Link: linker	Loc: locative
NAF: non-Agent Focus	Neg: negation
Neu: neutral	NOM: nominalization
Nid: nonidentified	Nom: nominative
Nrf: nonreferential	Obl: oblique
PF: Patient Focus	Prf: perfective
Real: realis	Red: reduplication
Tns: Tense	
8. Verbs in affirmative and negative IF imperatives are both marked by *-ani* in Atayal and Saisiyat.
9. For a thorough comparison, we refer you Huang (1995a & 1995b).
10. For *mi-* verbs, *pi-* is used; for the verbs marked with *ma-*, *φ*, and *-um-*, *ka-* is used. It is found that, in the negation of IF and LF constructions as well as some equational sentences, *ka-* is also used.
11. It is pointed out by the informant that this sentence is rarely used. It means 'Do not hit (upon) Palaq.' But such constructions with common nouns as objects are common.
12. In Saisiyat and in the affirmative imperatives in Atayal, it is also from the case realization that we know whether a certain construction is AF or PF.

13. The morpheme *te* is a modal auxiliary which expresses both epistemic and deontic modality. For a detail account of this, we refer you to Zeitoun (1996: 38-40).
14. Note that *te-av?a* is sometimes pronounced as *tav?a*.
15. According to Zeitoun (1995), the round vowel [o] results from the coalescence of the infix *-o-* and *a* (*k-o-ana* > *kona* 'Eat!'), to show embedding, i.e. the same form is serial verb constitutions.
16. Also note that in a negative imperative construction, the second person pronoun is obligatory.
17. The following two sentences show that *a-* is a marker for realis.

### (1) Mantauran Rukai

- |                      |                     |
|----------------------|---------------------|
| a. kani              | a-kan-a-a-?o        |
| [what                | Real-eat-NOM-2S.BG] |
| 'What did you eat?'  |                     |
| b. kani              | φ-kan-a-a-?o        |
| [what                | eat-NOM-2S.BG]      |
| 'What will you eat?' |                     |

- As to why the morpheme *a*, a marker for realis occurs in imperative construction (eg [20b] and [21b]), which is irrealis in nature, is still ill-understood.
18. Examples will be given in the next subsection along with their negative counterparts for comparison. For a detail account on the three constructions, we refer you to Joy Wu et al. (1996).
  19. It seems that in Saisiyat, existential and possessive, expressed as "X has Y", are possessive in nature. When X is a possessor, it is interpreted as possessive; when X denotes a location, it is interpreted as existential. In this respect, Saisiyat is more like Mandarin. In Mandarin the verb *you 'have'* is used to express possession and existence. In Amis and Atayal, the two constructions, expressed as "X's Y exists", are existential in nature. So, "I have money" is expressed as "My money exists."
  20. It seems that in Mantauran Rukai, "X has Y" is expressed as "Y exists in X".
  21. Note that in Paiwan, the locative construction can also be expressed by the existential/possessive verb and thus negated by its negative counterpart *neka*. For example:  
 (2) Paiwan  

a. izua	i	uma?	ti	kama
[Exist	Prep	house	Nom	father]
'Father is home.'				
b. noka	i	uma?	ti	kama
[Neg	Prep	house	Nom	father]
'Father is not home.'				
  22. For a full account of the pronominal system in these languages, we refer you to Huang (1995c).
  23. But the PF verb is not marked by *-an*.
  24. It is found that the linker *a* always follows a bound pronoun.
  25. Note that in most of the Formosan languages, the focus markers of the verb vary



according to different constructions they occur in. But in Tsou, the focus markers remain the same no matter what constructions the verbs occur in. It is the auxiliary that changes.

26. According to Zeitoun (1996), there are only bound pronouns in Mantauran.  
27. We found that in Wh-questions, Yes-No questions and subordinate clauses, bound pronouns are also in the genitive case.  
28. In Labuan and Budai Rukai, a morpheme *ka* occurs after the negator also. Consider:

(4) Labuan Rukai  
kaŋoa-ako ka ðipolo  
[Neg-1S.BN ðipolo]  
'I am not ðipolo.'

(5) Budai Rukai  
kai-so ka tama nakuanə  
[Neg-2S.BG father 1S.FO]  
'Your are not my father.'

29. In the negation of volition, in addition to *ka(i)*, there is another negative morpheme *ʔini*. All these facts seem to indicate that double negation is common in Mantauran.

(6) Mantauran Rukai  
a. ʔini apəca-ka-inə ʔolai  
[Neg sleep-Neg-3S.BO child]  
'The child does not want to sleep.'  
b. ʔini ʔonolo-ka-inə tamatama  
[Neg drink-Neg-3S.BO father]  
'Father does not want to drink.'

30. The word order information resources are: Amis (Wu 1995), Atayal (Huang 1993, 1994), Paiwan (Chang 1992), Rukai (Zeitoun 1993), Saisiyat (Yeh 1991), and Tsou (Zeitoun 1992).  
31. In other dialects of Rukai, the negator appears in sentence initial position. In Mantauran, the existential/possessive negator also appears in sentence initial position.  
32. According to Wu (1994), agent argument precedes patient.

## REFERENCES

- Chang, Hsiou-chuan. 1992. *Causative Constructions in Paiwan*. MA Thesis, Hsinchu: Tsing Hua University.  
Dahl, Osten. 1979. Typology of Sentence Negation. *Linguistics* 17, 79-106.  
Dryer, Matthew S. 1988. Universals of Negative Position. *Studies in Syntactic Typology*, ed. by Michael Hammond, Edith A. Moravcsik and Jessica R. Wirth. John Benjamins Publishing Company.  
Ferrell, Raleigh. 1969. *Taiwan Aboriginal Groups: Problems in Cultural and Linguistic Classification*. Institute of Ethnology, Academia Sinica, Monograph 17. Taipei.  
Huang, Lillian M. 1993. *A Study of Atayal Syntax*. Taipei: The Crane Pub Co.  
----- 1995a. *A Study of Mayrinax Atayal*. Taipei: The Crane Pub Co.  
----- 1995b. A Syntactic Structure of Wulai and Mayrinax Atayal: A Comparison. *Bulletin of National Taiwan Normal University*, Vol. 40:261-294.  
----- 1995c. A Typological Study of Pronominal Systems in Some Formosan Languages. Paper presented to the 5th International Conference on Chinese Linguistics.  
Huang, L. and Philip W. Davis 1989. Negation in Mandarin and Atayal: A Comparison. Paper presented to the 22nd International Conference on Sino-Tibetan Linguistics and Languages. Honolulu: Hawaii, October, 1989.  
Li, Paul J.-K. 1977. The Internal Relationships of Rukai. *BIHP*, 48.1:1-92.  
----- 1978. A Comparative Vocabulary of Saisiyat Dialects. *BIHP*, 49.2:133-199.  
----- 1982a. Atayal Final Voiced Stops. In *Papers from the Third International Conference on Austronesian Linguistics*, ed. by Halim, Carrington and Wurm, 2.171-185.  
----- 1985b. The Position of Atayal in the Austronesian Family. *Pacific Linguistics* C-88, ed. by Pawley and Carrington, 257-280 Canberra: The Australian National University.  
----- 1994. A Syntactic Typology of Formosan Languages--Case Markers on Nouns and Pronouns. *Proceedings of the Fourth International Symposium on Chinese Languages and Linguistics*, 270-279.  
----- 1995. Formosan vs Non-Formosan Features in Some Austronesian Languages in Taiwan. In *Papers for International Symposium on Austronesian Studies Relating to Taiwan*, ed. by Paul J.-K. Li, et al. 651-681. Taipei: Institute of History and Philology, Academia Sinica.  
Starosta, Stanley. 1988. A Grammatical Typology of Formosan Languages. *BIHP*, 59.2: 541-576.  
Tsuchida, Shigeru. 1976. Reconstructions of Proto-Tsouic Phonology. *Study of Languages and Cultures of Asia and Africa*, Monograph Series No. 5, Tokyo.  
Wu, Joy J. 1994. The Pronominal System in Amis, ms.  
----- 1995. *Complex Sentences in Amis*. MA Thesis, Taipei: National Taiwan Normal University.

- et al. 1996. Existential, Locative and Possessive Constructions in Some Formosan Languages, ms.
- Yeh, Marie M. 1991. *Saisiyat Structure*. MA Thesis, Hsinchu: Tsing Hua University.
- Zeitoun, Elizabeth. 1992. *A Syntactic and Semantic Study of Tsou Focus System*. MA Thesis, Hsinchu: National Tsing Hua University.
- , 1993. A Note on the Pronominal System of Mantauran (Rukai): Synchronic and Diachronic Considerations, ms.
- , 1995. *Problèmes de linguistique dans les langues aborigènes de Taïwan* [English version: Issues on Formosan Linguistics], Doctorat de l'Université de Paris 7, UFR de Linguistique.
- , 1996. The Tsou Temporal, Aspectual and Modal System Revisited. *BIHP*, 67.3:503-532.