Proceedings of AFLA 7

The Seventh Meeting of the Austronesian Formal Linguistics Association

Edited by
Marian Klamer

Vrije Universiteit Amsterdam
Department of Linguistics
2000

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Preface

This volume consists of papers presented at the seventh meeting of AFLA (Austronesian Formal Linguistics Association), held at the Vrije Universiteit on May 11-13, 2000.

For the first time in the history of AFLA, this meeting was held outside the North-American continent, and contained contributions by speakers from eleven different countries: New Zealand, Australia, Indonesia, Brunei Darussalam, Taiwan, the USA including Hawaii, Canada, the UK, France, Germany, and The Netherlands.

Apart from the languages that are traditionally well-represented at Austronesian conferences, we were happy to see that the program also contained work on relatively small or lesser described languages, such as the minority languages of Taiwan, North-West Borneo, Eastern Indonesia, Papua and Oceania.

Special themes of this conference were Iconicity and Argument marking. The papers in this volume show that the program covered a broad range of subdisciplines -- from discourse grammar, phonology, morphology, syntax, to semantics -- and that the authors are working within various theoretical frameworks. But despite the obvious differences in expertise, interest and background, the atmosphere on the conference was typically AFLA: lively and constructive, with an average rate of attendance of about 80%. The papers in this volume deserve the same rate of attention.

This meeting has again furthered the unwritten mandate of AFLA to encourage the formal study of Austronesian languages, especially work by speaker linguists and junior scholars. Six scholars presented analyses of their native language, and more than half of the 45 participants subscribed as 'student'. This suggests that the future of Austronesian linguistics looks very bright indeed.

The eight edition of Afla will be held in the spring of 2001 at the Massachussetts Institute of Technology (MIT) in Boston, USA. The principal organiser will be Ileana Paul.

Marian Klamer, Vrije Universiteit Amsterdam

Proceedings of previous AFLA meetings:

A Selection of the papers of AFLA 2, in 1995 is published as:
Paul, Ileana, Vivianne Phillips, and Lisa Travis (eds.). 2000. *Formal Issues in Austronesian Linguistics*. Dordrecht, Kluwer.

The proceedings of AFLA 3 and AFLA 4 in 1996/1997 are published as:
Pearson, Mathew (ed.). 1998. *Recent papers in Austronesian Linguistics*. UCLA Working Papers in Linguistics 21.

The proceedings of AFLA 6 in 1999 are published as:
Smallwood, Carolyn and Catherine Kitto (eds.). 2000. *Proceedings of AFLA VI*. Toronto Working Papers in Linguistics.

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Nominalization in Rukai and Amis*

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1. Introduction

In this paper my primary purpose is to examine the nominalization process in two Formosan languages in Taiwan, Rukai (Budai)[1] and Amis (Changpin, Central Amis)[2]. I will argue that in both languages, special nominalizing elements, similar to *–ing* in English, are employed to make a verbal element into a nominal one. The nominalized phrase as a whole behaves externally as a noun phrase because it occupies the typical NP position and it can take a nominal case marker, but internally it behaves as a VP because the verb may take a direct object, assigning accusative case to it.

2. A Sketch of Rukai and Amis Grammar

Before discussing the nominalization process in details, I will consider some general properties of Rukai and Amis, with particular reference to those that are relevant to the discussion in this paper. Both Rukai and Amis are predicate-initial languages and the basic word order is VOS or VSO. This is illustrated in (1) and (2).

(1) Nouns as Predicates[3]
Rukai
a. [$_{NP}$ngoDaDekai] [$_{NP}$ka saLabo]
Rukai Nom SaLabo
"SaLabo is a Rukai."
Amis
b. [$_{NP}$u wawa nira] [$_{NP}$ kaku]
Neu child his I
"I am his child."
(2) Verbs as Predicates (verb-initial)
Rukai
a. ma-dalame ki LaiLai ka saLabo,

---

* I would like to thank Zeitoun Elizabeth and Shuan-fan Huang for their comments and suggestions. Thanks are also due to my Rukai informants saLabo kaDesengane, LaiLai kaDesengane, Walialane kaDesengane and Amis informants 'ofad kacaw, lakaw piyaw, panay kacaw, for providing the data on which this paper is based. If not otherwise mentioned, the data used in this paper come from my own field notes.

[1] Rukai, according to Li (1973), includes six major dialects, Tanan, Budai, Labuan, Maga, Tona, and Mantauran.

[2] Amis, according to Tsuchida (1982), includes five major dialects, Sakizaya, Northern Amis, Tavalong-Vataan, Central Amis and Southern Amis.

[3] In this paper I employ the following abbreviations in glosses:

AF	agent focus	Neg	negative marker	1	first person
PF	patient focus	Past	past tense	2	second person
LF	locative focus	Fut	future tense	3	third person
IF	instrument foucs	NonFut	nonfuture tense	Sg	singular
Nom	Nominative	Present	Present tense	Pl	plural
Acc	Accusative	Perf	Perfective	Stat	stative verb marker
Gen	Genitive	Rel	relative marker	Act	active marker
Obl	Oblique	Neu	neutral case marker	Pass	passive marker
Fin	finite marker	NonFin	nonfinite marker		

Stat.Fin-like Acc LaiLai Nom SaLabo
"SaLabo likes LaiLai."

Amis

b. ma-olah ci panay ci mayaw-an.
AF-like Nom Panay Acc Mayaw
"Panay likes Mayaw."

Sentences in (1) are the so-called equational sentences in *NP-(be)-NP* pattern and the copular verb, *be*, is not overtly lexicalized on the surface. In Rukai and Amis, nominal case markers precede the case-marked noun phrase and in most cases they are obligatory. As Table 1 shows, in Rukai *ko* or *ka* can be used as nominative, accusative and even locative case markers. While two arguments in a sentence are both marked by the same case markers, word order would be crucial in distinguishing objects from subjects. That is, the word order would be strictly VOS.

Table 1: Nominal Case System in Rukai

Nominative	Accusative	Locative	Genitive
ko (-visible, +distance ± human)	ko (-visible, +distance -human)	ko (generic)	
ka (+visible, -distance ± human)	ka (+visible, -distance + human)	ka (place name)	
	ki (+specific, +human)		ki (+specific, + human)

Table 2 lists Amis nominal case marking system. Compared to Rukai, because of Amis' rich case markings, the word order is relatively free in Amis.

Table 2: Case Markers in Amis (Huang 1995:226)

cases / nouns / numbers		Neutral[4]	Nominative	Locative/ Accusative	Genitive
Common		u	ku	tu	nu
Proper	Singular	ci	ci	ci..an	ni
	Plural	ca	ca	ca..an	na

Like most of the Formosan languages, pronouns in Rukai can be roughly divided into two sets, namely, bound pronouns and free pronouns, as shown in Table 3. Bound

[4] In some Formosan languages, the noun predicate in the pseudo-cleft construction need to be preceded with a "neutral case marker" in languages like Amis as argued by Huang (1994, 1995), or preceded with a "noun classifier" in languages like Paiwan and Kavalan as argued by Tang, Chang and Ho (1998) and Chang, Tang and Ho (1998). Following the line of Chang et al.'s analysis, Liu (1999) re-examines the traditional case marking system in Amis and argues that the so-called "case markers" should be analyzed as morphological complexes, composed of a case marker and a noun classifier.

(i) Paiwan (Tang, Chang and Ho, 1998: p. 337)
*(ti) kai a aicu
TI Kai Nom this.
"This is Kai."

(ii) Amis (Huang 1994)
ci ufad kura mi-namun-ay a tamdaw.
Neu Ufad that-Nom AF-drink-water-AY Lin man
"That man that is drinking the water is Ufad."

pronouns are further divided into nominative and genitive forms. A bound pronoun, if represents the subject, has to be suffixed to the verb and form one unit, rather than remains sentence-finally.

Table 3: Pronominal System of Rukai (Budai) (adapted from Chen, 1999: p. 10)

Person	Plurality	Visible/Inclusive	Free	Bound	
			Accusative	Nominative	Genitive
1	Singular		nakoane	-(C)ako, -naw	-li
	Plural	+ Inclusive	mitaane	-ta	-(i)ta
		+ Exculsive	nayane	-nay	-nay
2	Singular		mosoane	-so	-so
	Plural		nomiane	-nomi	-nomi
3	Singular	+ Visible	iniane		-ini
		+ Invisible			
	Plural	+ Visible	liniane		-lini
		+ Invisible			

Table 4 summarizes Amis personal pronouns. There are four sets of personal pronouns, indicating nominative, accusative, genitive and possessive. All of them are free forms.

Table 4: Personal Pronouns in Amis (Liu, 1999: p.18)

	Nominative	Accusative/Locative	Genitive	Possessive
1S	kaku	takuwanan	aku	maku
2S	kisu	tisuwanan	isu	misu
3S	ciNra	ciNranan ciNraan	nira niNra	niNra nira
1PI	kita	kitanan titanan kitaanan titaanan	ita	mita
1PE	kami	Tamiyanan	niyam	niyam
2P	kamu	Tamuanan Tamuwanan	namu	namu
3P	caNra	CaNranan CaNraan	naNra	naNra

As was discussed by Li (1973), Kuo (1979), Zeitoun (1997a, b), Zeitoun et al. (1996, 1997) and Chen (1999), Rukai, unlike most Formosan languages which have focus marking system, exhibits an active/passive dichotomy, similar to English. This is illustrated in (3-4). In an active construction such as (3), an agent is marked as the subject, while in a passive construction such as (4), the patient or the theme is marked as the subject. The prefixes *w-* and *ki-* indicate active and passive voices respectively. As argued in Zeitoun et al. (1996, 1997), Rukai exhibits a bipartite tense system in which future is distinguished from nonfuture[5], rather than a tripartite one in which past contrasts with present and future as in English.

[5] As pointed out by Zeitoun et al. (1996, 1997), the past and present interpretation in Rukai usually depends on the occurrence of aspectual affixes (*-nga*, verbal reduplication) or temporal adjuncts.

(3) Active Construction in Rukai
w-a-Lomai ki LaiLai ka/ko saLabo.
Act-Fin-beat Acc LaiLai Nom SaLabo
"SaLabo beat LaiLai."
(4) Passive Construction[6] in Rukai
ki-a-Lomai ki saLabo ko LaiLai.
Pass-Fin-beat Acc SaLabo Nom LaiLai.
"LaiLai is beaten by SaLabo."

Amis, different from Rukai, employs so-called verbal "focus" markings to indicate the voice, as was discussed in Wu (1994, 1995), Huang (1994), Lin (1995) and Liu (1999) and many others. The traditional term "focus" here refers to the semantic relationship (agreement) established between a verb (the focus affix) and the subject NP, which is termed as theta-agreement by Mei (1994) and Holmer (1996). In other words, in Amis the verb has to agree with the theta role of the subject noun phrase, which could be an Agent, a Patient/Theme, a Location, a Beneficiary or an Instrument. This is illustrated in (5-8):

(5) Agent Focus in Amis
mi-la'op kura wawa ci panay-an. (Liu 1999: p. 19)
AF-chase that.Nom child Acc Panay
'The child is chasing Panay."
(6) Patient Focus in Amis
mi-futiq-**an** nura wawa kuni kafutiqan (Liu 1999: p. 21)
PF-sleep-PF that.Gen child this. Nom bed
"That child has slept on this bed."
(lit. "This bed has been slept by that child.")
(7) Locative Focus in Amis
pi- cirah-**an** isu tu kuwa ku kureN (Liu 1999: p. 23)
PI-pickle-LF 2Sg.Gen Acc papaya Nom urn
"You pickled the papayas in the urn."
(lit. "The urn is the place where you picked the papayas.")
(8) Instrument Focus in Amis
sapi-tiwas ni arik ku acam tuya qedo. (Liu 1999: p. 25)
IF-hook Gen Arik Nom bamboo that.Acc. mouse
"Arik hooked that mouse by a bamboo stick."
(lit. "The bamboo stick is the tool that Arik used to hook that mouse."

3. Nominalization
3.1 Rukai

I shall now turn to discuss the process of nominalization. I will first examine Rukai.

---

[6] Comparing the passive of Rukai (i) to that of English in (ii), the agent phrase in the passive is not "suppressed" as an adjunct as it is in English argued by Bresnan (1982), Shibatani (1988), Baker et al (1989) and many others.

(i) ki-a-Lomai ki saLabo ko LaiLai.
Pass-Fin-beat Acc SaLabo Nom LaiLai.
"LaiLai is beaten by SaLabo."
(ii) Mary was beaten by John.

3.1.1. Pseudo-cleft Construction
3.1.1.1. the nominalizer -ø

In Rukai, only some pseudo-clefts and complement clauses optionally undergo nominalization. Here I will first discuss the pseudo-clefts. The so-called pseudo-cleft sentences[7] as shown in (9) employ the equational construction discussed earlier.

(9) Pseudo Cleft Construction in Rukai
a. [$_{NP}$ moni] [$_{NP}$ ko w-a-Lomai ki LaiLai]
Moni Nom Act-Fin-beat Acc LaiLai
"The one who beat LaiLai is Moni."
b. [$_{NP}$ moni] [$_{NP}$ ko ki-a-Lomai ki LaiLai]
Moni Nom Pass-Fin-beat Acc LaiLai.
"The one who is beaten by LaiLai is Moni."

In (9a), the focussed element *Moni* is a caseless noun predicate and the presupposed clause *w-a-Lomai ki LaiLai* is in subject position, preceded with a nominative case marker *ko*. Examining carefully, the presupposed clause in the pseudo-cleft construction is a complex NP that contains a null head. This is well-known as the headless relative clause. We indicate the head by the symbol *e* in the head position. The empty head and the gap in the relativized clause *t* are coindexed. Example (9a) can be partially represented as:

(10) [$_{NP}$ ko [$_{CP}$ [$_{IP}$ [$_{INFL}$ wa-] [$_{VP}$ [$_{SpecVP}$ t_i] Lomai ki LaiLai]]] [$_{N'}$ [$_{N}$ e_i]]]

Consider another pseudo-cleft sentence (11), which is different from (9a).

(11)
a. [$_{NP}$ LaiLai] [$_{NP}$ ko Lomai ki/*ka/*ko saLabo]
LaiLai Nom NonFin-beat Gen/*Nom (Acc)/*Nom (Acc)
'The one who SaLabo beat is LaiLai.'
b. [$_{NP}$ LaiLai] [$_{NP}$ ko Lomai-ini/-li/*-ðako]
LaiLai Nom NonFin-beat-3.Sg.Gen/-1.Sg.Gen/*-1.Sg.Nom
'The one who he/I beat is LaiLai.'

The presupposed clause in the pseudo-cleft (11) contains a non-finite verb *Lomai*, followed either with a case-marked personal proper noun *ki saLabo* in (11a) or a genitive/possessive bound pronoun *–ini* in (11b). In (11a), *saLabo* cannot take *ka* or *ko* and it can only take *ki*. If the agent is represented by a genitive bound pronoun as in (11b), the genitive has a subject-like role, different from the modifier-like interpretation in (12). That is, (11b) indicates an expression that the event of beating has occurred.

(12) a. laimai ki saLabo
'SaLabo' clothes'
b. laimai-ini
'his clothes'

As is well known from gerundive constructions in English and infinitival NPs in Italian, examples shown in (13) have been argued to be predicates of event-like entities. Both cases have been argued to undergo nominalization of verbs. Gerundives in English and infinitival NPs in Italian are analyzed as nominal IPs, head by *–ing* and infinitival morphemes *–ere/-are*, which take VP as its complement.

---

[7] Ya-yin Chang (1998) is the first one who claims that the so-called cleft in Tsou is in fact a pseudo-cleft. And this perhaps is true for all Formosan languages. Also see Chung-lian Chang (1996) and Yung-li Chang (1997) for the discussion of cleft constructions in Seediq and Kavalan.

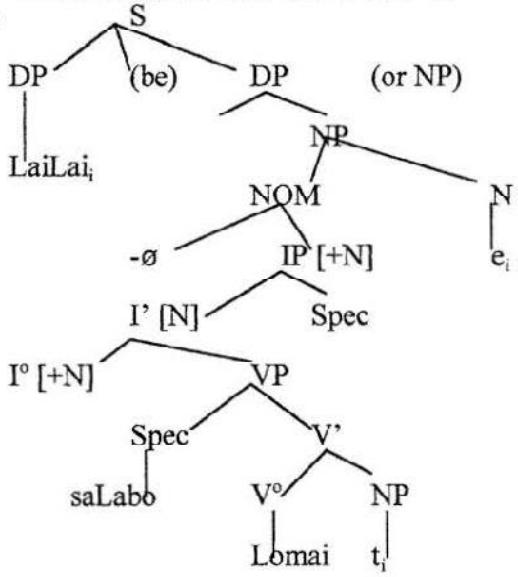
(13)
English
a. his sing**ing** the song
b. his sing**ing** of song
Italian
c. il suo scriv**ere** quella lettera improvvisamente (Zucchi (1993: p. 54))
his write (inf) that letter suddenly
d. lo scrivere di Sibilla (Zucchi (1993: p. 152))
the write (inf) of Sibilla
e. *lo scrivere della lettera (Zucchi (1993: p. 152))
the write (inf) of the letter

There is, however, an important difference between Italian and English. While with English nouns in the of-phrase in (13b) may correspond to the object of the related verb, with Italian, nouns in the of-phrase in (13d-e) can never correspond to the object of the related verb, but only to the subject.

The structure of the examples of Rukai in (11) is pretty similar to that of infinitival NPs of Italian. The verb in (11) is non-finite and the noun in the presupposed clause can only correspond to the subject of the verb. Following this line, I propose that (11a) has the underlying structure (14), no matter whether one adopts the traditional NP hypothesis or Abney (1987) kind of DP hypothesis. Which of the NP hypothesis or DP hypothesis should be adopted is not my main purpose in this paper.

(11) (repeated)
a. [$_{NP}$ LaiLai] [$_{NP}$ ko Lomai ki/*ka/*ko saLabo]
LaiLai Nom NonFin-beat Gen/*Nom (Acc)/*Nom (Acc)
'The one who SaLabo beat is LaiLai.'

(14)



In (14), the IP is embedded under the scope of the nominalizer *-ø*. Given the nominal nature of $IP_{[+N]}$, the verbal complex head $[I_{[+N]} + V]$ after V° moving to INFL cannot assign nominative case to the Spec of IP, where the agent phrase *saLabo* was supposed to move to. Instead, genitive case marking applies, and we have the output (11a). Note that we have mentioned earlier the presupposed clause *ko Lomai ki saLabo* is in fact a headless relative clause, in which the original object t_i is relativized. The infinitival phrase *Lomai ki*

saLabo as a whole behaves externally as a noun phrase taking a case-marker *ko* because it occupies the typical NP position, but internally it behaves as a VP because the verb may take a direct object, assigning accusative case to it.

A similar process of nominalization occurs optionally in the existential construction with the verb *kaDua* 'does not exist' in (15).

(15) Existential Construction in Rukai
kaDua ko ka-dalame-li kai ki lamaliali
don't exist Nom NonFin-like-my these Acc women
'That I like these women does not exist.' (Lit: I don't like these women.)

Following the DP analysis of Abney (1987), Szabolcsi (1987, 1989), Stowell (1989, 1991) and Longobardi (1994), Siloni (1997) argues that DP is important not only as a functional projection of nominal expressions, but also its unique selection of non-tensed nominal complements, making D as the equivalent of C which must be associated with a tense operator. All the cases of English gerundives, Italian nominalized infinitives, French reduced relatives and Hebrew semi-relatives are all treated similarly in Siloni (1997), by assuming that these relevant verbal forms do not bear tense features. This line of analysis seems to account for the nominalized infinitives in Rukai. I will show, however, in the following section, that Siloni's proposal is arguably too strong for the nominalization involving the other nominalizing morpheme *–ane* in Rukai.

3.1.1.2. the nominalizer *-ane*

In addition to the nominalizer -ø, Rukai has another nominalized pseudo-cleft employing the nominalizer *–ane*, as examplified in (16). While *–ane* is used, in most cases, it is used for the theme or the location, but not the agent.

(16) bava ka ta-ongolo-**ane**-li
wineNom NonFut-drink-**ane**-1.Sg.Gen
'The one that I drank is the wine.'

In addition to the prefix *ta-* in (16) there are other prefixes *a-*, *Li-* as shown in (17-18), which are used together with the nominalier *–ane*. All these prefixes, as discussed by Kuo (1979) and Chen (1999), indicate an event which happens at any time other than the future, or in the immediate future or in the distant future. Then Siloni's claim of DP's selection of non-tensed operator is too strong for the case of the nominalizer *–ane*. A similar case is also found in Amis. This will be discussed when we proceed to the Amis data in section 3.2.

(17) bava ka a-ongolo-**ane**-li
wineNom Fut-drink-**ane**-1.Sg.Gen
'The one that I will drink is the wine.'
(18) bava ka Li-ongolo-**ane**-li
wineNom Fut-drink-**ane**-1.Sg.Gen
'The one that I will drink is the wine.'

In a serial verb construction as shown in (19), the matrix verb (not the embedded verb), placed immediately under the scope of the NOM, moves up to nominal IP to take up the nominalizer *–ane*.

(19) ngoDaDeaDeka-ane ko a-paθagil-ane kiθiaθingale ki vavalake.
Rukai Nom Fut-begin learn Gen child
"The language that the child will begin to learn is Rukai."

3.1.2. Complement Clauses
3.1.2.1 the nominalizers -ø and *-ane*

In addition to the nominalized pseudo-cleft, some of the clausal complments in Rukai undergo the nominalization optionally. This is illustrated in (20). Verbs like *waDeDeDele* 'watch' in (20a) take a nominalized infinitive head by the nominalier -ø morpheme. Other verbs like *kyasease* 'grateful', *masamali* 'surprised' can either take a finite clausal complement lead by a complementizer *alaka* 'that' as in (20b), or take a nominalized IP head by *–ane* as in (20c-d). Example (20a) has the underlying structure (21a) and example (20d) has (21a):

(20)

a. w-a-DeDeDele ka saLabo ko sina-sinaw-li ko laimai
Act-Fin-watch SaLabo Acc Act-Fin-Red.wash Acc clothes
"SaLabo is watching me washing the clothes."

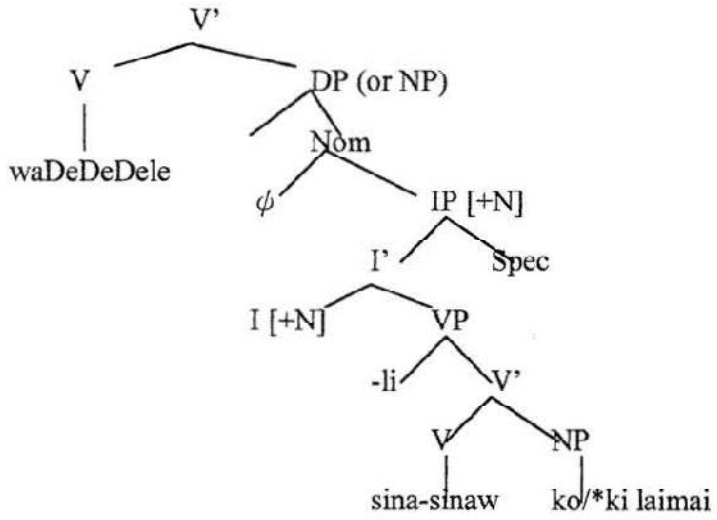
b. kyasease-nako alaka paralobo-so nakwan. (Kuo 1979: p. 56,)
grateful-I helped-your me
"I am grateful that you helped me."

c. kyasease-nako ko ta-paralob-**ane**-so nakwan. (Kuo 1979: p. 56,)
Helping-your
"I am grateful for your helping me."

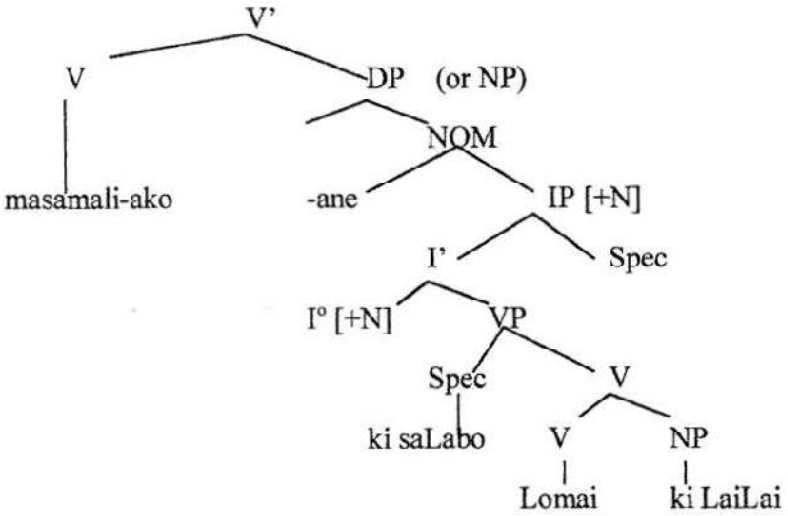
d. masamali-ako ko/ka ta-Lomað-**ane**-(ini) ki saLabo ki LaiLai
surprise-1.Sg.Nom Acc NonFut-beat-ane-3.Sg.Gen Gen SaLabo Acc LaiLai
" I am surprised by SaLabo's beating LaiLai."

(21)

a.



b.



Let's examine the structure (21b). The whole complement clause *ta-Lomað-ane-(ini) ki saLabo ki LaiLai* is nominalized and is case-marked by *ko/ka*. Similar to the case in (14), the agent subject, *saLabo*, due to the nominal nature of IP, takes a genitive case marker *ki*, rather than a nominative case marker *ka* or *ko*. The verb, *Lomai*, assigns an accusative case to the direct object *LaiLai*. The agent subject, *saLabo*, has to precede the object, *LaiLai*, which is strictly VSO order.

3.1.3. Lexical Nominalization

In Rukai, a large of number of verbs, involving the syntactic nominalization of the morpheme *–ane*, has been so widely used that they are lexicalized and become nouns. Some are listed in (22). They no longer show any verbal properties. They are referential and can therefore appear in argument positions. They can also be modified by relative clauses. Thus they should be analyzed lexically as nouns and they do not involve a syntactically verbal projection.

(22)

a.	bengeLai "flower"	babengeLað-**ane** "garden"
b.	ngoDaDekai "Rukai people"	ngoDaDekað-**ane** "Rukai language"
c.	boLo "teach"	ta-kiboLoboLo-**ane** "school"
d.	sinaw "wash"	ta-sina-sinav-**ane** (Chen 1999: p. 16) "a place where people wash clothes"
e.	mubanava "bathe"	ta-mubana-banav-**ane** (Chen 1999: p. 16) "a place where people take a bath"
f	Dipon "Janpanese people"	DiDipong-**ane** "Japanese language"

3.2. Amis

3.2.1. Relative Clauses and Pseudo-cleft Constructions

3.2.1.1. the nominalizers *–ay* and *–an* (*-ø*)

I shall now turn to Amis. As I have mentioned earlier, Amis is different from Rukai in that Amis employs verbal focus markings to indicate the voice. It is a four-way focus marking system in Amis, compared to the active/passive dichotomy in Rukai. With respect to the nominalization in Amis, as was discussed in Liu (1999), only relative clauses (including headless relative clauses) and pseudo-clefts undergo nominalization and it is obligatory. In addition, the relative clauses in Amis (and in most Formosan languages)

are strictly subject to the so-called subject-sensitivity, which is firstly claimed by Keenan (1976). That is, only the grammatical subjects of relative clauses can be relativized. For example, it is possible to relativize the subject *wawa* 'child' (the agent), but not the object *panay* (the patient) in the Agent Focus Construction (5). On the other hand, in the Patient Focus construction (6), it is possible to relativize the subject *kafutiqan* 'bed' (the theme), but not the object *wawa* 'child' (the agent).

(5) Agent Focus in Amis (repeated)
mi-la'op kura wawa ci panay-an. (Liu 1999: p. 19)
AF-chase that.Nom child Acc Panay
'The child is chasing Panay."

(6) Patient Focus in Amis (repeated)
mi-futiq-**an** nura wawa kuni kafutiqan (Liu 1999: p. 21)
PF-sleep-PF that.Gen child this. Nom bed
"That child has slept on this bed."
(lit. "This bed has been slept by that child.")

In Amis, any relativized construction obligatorily undergoes a process of nominalization, as argued by Lin (1995) and Liu (1999). This is exemplified in (23-25). Similar to the case in Rukai, internally the verbal clause still keeps the verbal property of assigning accusative case to the direct object, but after V° moving to INFL, and then to the nominalization projection of *–ay* and *-ø/-an*, the whole IP phrase behaves externally as a noun phrase. The underlying structure of example (25b) can be roughly represented as (26). The verbal focus markings would be decisive in which of the nominalizers the verb should take. The verb in the agent focus construction has to take the morpheme *–ay*, while the verb in the patient focus, locative focus and instrument focus constructions will take the morpheme *-ø/-an*.

(23) Relative Clause in Amis
a. ma-'osi ku Nohah aku tura [[[ma-tawa'-**ay**
[AF-hate Nom boy:friend 1S.Gen. that-Acc AF-laugh-AY
takuwanan $_{IP}$] (a) $_{CP}$] migutiNay $_{NP}$] (Liu 1999: p. 71)
1Sg.Acc Link fisherman]
'My boy friend hates the fisherman who is laughing at me.'
b. ma-olah kura fa'inayan tuya [[[pi-kalaN-**an**
AF-ask Nom-that girl Acc-that LF_1-fetch:crabs-LF_2
aku ___$_i$ $_{IP}$] (a) $_{CP}$] riyar $_{i\ NP}$] (Liu 1999: p. 70)
1Sg. Link seashore
"The girl likes the seashore where I fetched crabs."

(24) Headless Relative Clause in Amis
a. ma-'osi ku Nohah aku tura [[[ma-tawa'-**ay**
[AF-hate Nom boy:friend 1S.Gen. that-Acc AF-laugh-AY
takuwanan $_{IP}$] $_{CP}$] ϕ_{NP}] (Liu 1999: p. 71)
1Sg.Acc]
'My boy friend hates the one who is laughing at me.'
b. ma-kalat nu [$_{NP}$[[mi-kilim-**an** isu $_{IP}$]$_{CP}$] ϕ_{NP}] kuni fafuy.
PF-bite Gen PF_1-seek-PF_2 2Sg. Nom-this pig
"The thing which was looked for by you bit this pig." (Liu 1999: p. 71)

(25) Pseudo-cleft Construction in Amis
a. [$_{Cleft\text{-}NP}$ uni wawa]$_i$ [$_{NP}$ ku mi-lamlam-**ay** tu matu'away____$_i$]
Neu-this child Nom AF-mingle-AY Acc old:man
"It is this child that is mingling with the old men." (Liu 1999: p. 99)
b. [$_{Cleft\text{-}NP}$ ura lutuk][$_{NP}$ ku pi-'eli-**an** ni rekar ___$_i$]
Nom-that mountain Nom LF-weed-LF Gen Rekar
"The place where Rekar weeded is that mountain." (Liu 1999: p. 104)

(26)
$[_{NP\ (or\ DP)}$ uni wawa] $[_{NP\ (or\ DP)}\ [_{NOM}$ **–ay (-ø/-*an*)** $[_{IP\ [+N]}[_{VP}[_{V}$ mi-lamlam$][_{NP}$ tu matu'away$]]]]$ $ø_{(N\ head)}]$

Remember that I have argued earlier that the claim of DP's selection of nontensed complement proposed by Siloni (1997) is too strong for the case of nominalization of *–ane* in Rukai. Here the Amis data provide another piece of argument against Siloni's proposal. As is widely discussed in the literature of Formosan languages, the verbal focus (voice) morphology also bears overtones of tense. Agent Focus in general suggests nonpast tense and Patient, Locative, or Instrument Focus suggests past tense. In the case of nominalization in Amis, the co-occurrence of verbal focus markings with *–ay* and *-ø/-an* suggests once again Siloni's claim is too strong.

With respect to the nominalizing morpheme -ø, one may suggest that it is *–an* morpheme and since the *–an* morpheme is the same as the patient or locative focus affixes *–an*, two *–ans* merge morphologically as one. Here I am not in a position arguing in flavor of either anlaysis.

In Amis serial verb construction as in (27), only the matrix verb takes the nominalizing element. This is similar to the case in Rukai.

(27) serial verb construction in Amis
ci mayaw ku ma-talaw-ay (a) mi-pacuk tu fafuy.
Nom Mayaw Nom AF-afraid-AY kill Acc pig
"The one who is afraid of killing pig is Mayaw."

Look at the Amis verbal negator *ca'ay* in (28). *ca'ay* can be optionally pronounced as *cai* in any declarative construction. But in the pseudo-cleft such as (28), *ca'ay* but not *cai* can be used. Obviously, *ca'ay*, as a verbal negator, has taken the nominalizing element *–ay*.

(28) ca'ay vs. cai
a. ci panay anuca ci mayaw ku mi-fanaw-ay tu kaisin.
Nom Panay or Nom Mayaw Nom AF-wash Acc dishes
"Is the one who washed the dishes Panay or Mayaw?"
b. ci panay anuca ci mayaw ku ca'ay/*ca' pi-fanaw tu kaisin.
Nom Panay or Nom Mayaw Nom Neg PF-wash Acc dishes
"Is the one who doesn't wash the dishes Panay or Mayaw?"

3.2.1.2. Lexical Nominalization

Similar to the case in Rukai, a group of fixed elements in Amis, derived from certain verbs, constitutes an instance of lexical nominalization. These are lexically analyzed as nouns.

(29) Amis (Liu 1999, p. 51)
a. mi-futiN 'to fish'; mifutiN**ay** 'fisherman'
b. mi-tilid 'to study'; mitili**day** 'student'
c. ma-sakero' 'to dance'; masakero'**ay** 'dancer'
d. ma-tayar 'to work'; matayar**ay** 'worker'
e. ma-liNad 'to till'; maliNad**ay** 'farmer'
f. r-um-adiw 'to sing'; maradiw**ay** 'singer'

(30) Amis
a. mi-cudad 'study' pi-cudad-**an** 'school'
b. mi-holol 'chat' pi-holol-**an** 'place where people get together';

(ta-holol-**an**) 'person who we chat with'
c. mi-ngingoy 'bathe' pi-nginguy-**an** 'bathroom'
d. mi-tangtang 'cook' pi-tangtang-**an** 'kitchen'
e. ma-futiq 'sleep' ka-futiq-**an** 'bed'

4. Conclusion

To summarize, in Table 5, I provide a brief summary comparing the nominalization process in Rukai and Amis. First, since Li (1973), Rukai has been argued to differ drastically from Amis and other Formosan languages in that Rukai does not display a four-way focus system. Instead, its voice system is based on an active/passive dichotomy. Second, nominalization is very productive in Rukai and it takes place optionally in syntactic constructions such as pseudo-clefts and clausal complements. Compared to Rukai, the nominlization in Amis is strictly limited to the relativized constructions. And it is obligatory. Third, Rukai is not that different from Amis with respect to the nominalization process. The nominalizer, -ø, of Rukai, is used in the case that the noun inside the nominalized phrase corresponds to the agent subject of the verb, parallel to the nominalizer *–ay* in Amis. The nominalizer *–ane* of Rukai is used in the case that the noun inside the nominalized phrase corresponds to the location or the theme of the verb, parallel to the nominalizer *–an* in Amis. The claim here further supports the conclusion argued by Zeitoun (1999) that Rukai shares a number of identical morphosyntactic processes with the other Formosan languages.

Table5: Characteristics of Nominalization

Rukai	Amis
Voice system Passive/active dichotomy	Focus sytem a four-way focus system
Optional nominalization in pseudo-clefts	Obligatory nominalization in relative clauses and pseudo-clefts
Optional nominalization in complement clauses	--
Two nominalizers -ø agent subject -ane location; theme; patient (very limited)	two nominalizers -ay agent focus -an (-ø) locative focus; patient focus; instrument focus

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