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EXISTENTIAL, POSSESSIVE, AND LOCATIVE CONSTRUCTIONS IN FORMOSAN LANGUAGES¹

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The present paper deals with existential, possessive, and locative constructions in 10 Formosan languages: Amis, Atayal, Bunun, Kavalan, Paiwan, Puyuma, Rukai, Saisiyat, Seediq, and Tsou. Our aim is twofold: to provide an overview of these constructions in each language, while also trying to determine whether the syntactic and semantic interrelationships and variation postulated in earlier studies hold true in these languages. This is achieved by examining (i) the structural variation found among the languages, (ii) the morphological properties and the syntactic behavior of the existential/locative verb, (iii) the syntactic and semantic characteristics of the arguments appearing in these three constructions, and (iv) word order.

1. INTRODUCTION. Existential, possessive, and locative constructions have been investigated in various languages from different perspectives (syntactic, semantic, cognitive, etc.), but if we look at the literature concerning the Formosan languages, we are forced to recognize that except for Tan's (1997) and Tsukida's (1997) respective studies on Puyuma (Nanwang) and Seediq (Truku), which must

^{1.} We would like to acknowledge the financial support of the National Science Council for the on-going project, "A Typological Study of Grammatical Relations in Some Formosan languages, I-III," which started in December 1993 and has been supervised since then by Lillian M. Huang. Unless mentioned otherwise, data on Tsou, Rukai, Bunun, Atayal, Saisiyat, and Paiwan come from our own field notes. We are indebted to Joy J. Wu, Cindy Tan, and Dorinda T. Liu for providing data and information on Amis, Puyuma, and Kavalan, respectively. We are, of course, alone responsible for errors we may have made in reanalyzing the material at hand. Earlier versions of this paper were presented to the Sixth International Conference on Chinese Languages (Leiden, June 19-21, 1997), and to the monthly seminar at the Institute of Linguistics, Academia Sinica (Taiwan, November 3, 1997). We wish to thank the audience at the latter presentation—and most especially Stanley Starosta, Mei-zhi Tsai, Paul Jen-kuei Li, Jackson Sun, Jane C. Tang, and Dah-an Ho—for comments and criticisms.

be singled out for their large amount of data and exhaustive analyses, the reports that have been made on these constructions are rather superficial. While the similarity between these three types of sentences is usually pointed out, the case marking of nominal arguments is commented upon casually, if at all, and affirmative and negative examples are often given in illustration without further discussion.

The aim of the present paper—which is part of on-going research on a typological study of grammatical relations in the Formosan languages—is two-fold. It intends (i) to fill a gap in Formosan linguistics by providing a comparative corpus on nearly all the languages still spoken in Taiwan—Amis (Central), Atayal (Mayinax), Bunun (Isbukun), Kavalan (Hsinshe), Saisiyat (Tungho), Seediq (Paran and Truku), Paiwan (Northern), Puyuma (Nanwang), Rukai (Mantauran and Labuan), and Tsou (Tfuya)—and (ii) to determine whether the following claims—which have been made concerning cross-linguistic variation—hold true in these languages.

It has been demonstrated that locative and existential constructions differ semantically in that locative sentences typically establish the location of a definite participant/element previously established in the discourse, while existential sentences introduce an indefinite entity by asserting its existence (see for instance Clark 1978). The notion of definiteness has been advanced to account for change in (i) sentential structure (see for example Clark 1978), (ii) grammatical relations—yielding in some languages either locative alternation or locative inversion (see Bresnan and Kanerva 1989, and Ackerman 1990), and (iii) word order (see Clark 1978 and Freeze 1991, 1992). Though linguists disagree on the verbal nature of the constituent heading existential clauses, it has been shown that, in Chamorro, a Western Austronesian language, it should be treated as a verbal predicate (see Chung 1987). Finally, it has been argued that a locative argument marked as ± human may yield the use of a different verb in possessive constructions (see Freeze 1992:582–585).

In the following sections, we will try to account for the structural variation found across languages (section 2), examine the morphological properties and syntactic behavior of the existential/locative verb (section 3), the syntactic and semantic characteristics of the nominal arguments appearing in these three constructions (section 4), and word order variation (section 5). This study is conducted in a typological perspective.

2. STRUCTURAL VARIATION. It has been shown that even though existential and possessive constructions may differ from locative constructions syntactically or semantically, they are locative in nature. Freeze (1992:554), for instance, states that formal differences among the three kinds of locative predications, cross-linguistically, are quite restricted and highly predictable. This predictability

^{2.} See Lyons 1967, Kuno 1971, Clark 1978, Bresnan and Kanverva 1989, Aniya 1992, and Huumo 1996, among others.

^{3.} See Li 1973; Huang 1993, 1995; Zeitoun 1995; Chang 1997a,b; Lin 1996.

is best explained by the hypothesis that they share the same underlying structure, a hypothesis that accounts naturally for languages in which all members of the locative paradigm are identical in structure, as well as languages in which the existential and 'have' forms (as in *There is a book on the bench* and *Lupe has a book*) are alike, but contrast with the predicate locative (as in *The book is on the bench*).

What we find in the Formosan languages confirms this statement: existential and possessive constructions are structurally identical but may differ from locative constructions. It is our intention in this section to show that, besides languages of these two types (see sections 2.1 and 2.2), at least two languages (Mantauran Rukai and Northern Paiwan) exhibit a third, mixed system, with existential, possessive, and locative constructions being characterized by the occurrence of the same verb in affirmative sentences, while their negative counterparts divide into two: existential and possessive constructions are headed by one negator, while locative constructions may be introduced by another (section 2.3). We demonstrate that syntactic and/or semantic factors other than the notion of definiteness account for this cross-linguistic variation (section 2.4).

For the sake of clarity, table I—which summarizes partially the discussion conducted in this section—is provided at this point to show this tripartite classification of the languages.

2.1 SAME VERB/NEGATOR IN THE EXISTENTIAL, POSSESSIVE, AND LOCATIVE CONSTRUCTIONS. In Amis, Kavalan, Atayal, Puyuma, and Bunun, the same verb/negator occurs in existential, possessive, and locative constructions. In Central Amis, these three constructions are headed by the verb *ira* in the affirmative and by ?awa? in the negative, as shown in (1) and (2).

- (1) Central Amis
 - a. ira ku wawa i pa-putal exist NOM child PREP RED-outside 'There is/are a child/children outside.'
 - b. ira ku paysu nira exist nom money 3s.GEN 'He has money.'
 - c. ira ci panay i luma? exist NOM Panay PREP house 'Panay is at home.'

^{4.} The abbreviations used in the glosses include: ACT, Active; AF, Agent Focus; ASP, Aspect; BND, bound; GEN, Genitive; IMP, Imperative; LIN, Linker, LOC, Locative; NEG, Negation; NOM, Nominative; NAF, Non-Agent Focus; OBL, Oblique; PERS, Personal Article; PREP, Preposition; REAL, Realis; RED, Reduplication; REL, Relativizer; S. Singular, TOP, Topicalizer. Clitics are indicated by an equals sign (=); bound morphemes by a hyphen (-); and infixes by angle brackets: <>.

TABLE 1. TRIPARTITE CLASSIFICATION OF FORMOSAN LANGUAGES

		EXISTENT	ÏAL	POSSESSIVE		LOCATIVE	
		AFFIRM	NEG	AFFIRM	NEG	AFFIRM	NEG
AMIS		ira	?awa?	ira	?awa?	іга	?awa?
KAVALAN		yau	mai	yau į	mai	yau	mai
ATAYAL		kia?	ukas	kia?	ukas	kia?, hani?an	ukas
PUYUMA		ulaya	unian	ulaya	unian	ulaya	unian
RUKAI	LAB	yakai	kadoa	yakai	kadoa	yakai	kadoa
BUNUN		?aiða?	?uka?	?aida(-an)	?uka(-an)	?aida?	?uka?
SAISIYAT		hayðæh	?oka?	hayðæh	?oka?	Ø	?okik
TSOU		pan	uk?a	pan	uk?a	con	o?a eon
SEEDIQ	PAR	niqan	uka	niqan	uka	menaq gaga/nii	iní enaq uxe gaga/nii
	TRU	niqan —	uŋat	niqan	uŋat	meniq ga/ni	ini eniq aji ga/ni
RUKAI	MT	omiki	okaoðo	omiki	okaoðo	omiki	omiki-ka okaoðo
PAIWAN		izua	nəka	izua	пэка	izua	ini-ka nəka

(2) Central Amis

- a. ?awa? ku wawa i pa-putal NEG NOM child PREP RED-outside 'There is no child outside.'
- b. ?awa? ku paysu nira

 NEG NOM money 3s.GEN

 'He has no money.'
- c. ?awa? ci panay i luma? NEG NOM Panay PREP house 'Aki is not at home.'

In Kavalan, the three constructions are introduced by the verb yau in the affirmative and by mai in the negative.

- (3) Hsinshe Kavalan (adapted from Chang 1997b:45-46)s
 - a. yau siis ta rima-an-su exist mosquito LOC hand-LOC-2S.GEN 'There is a mosquito on your hand.'
 - b. yau sunis-ku exist child-Is.GEN 'I have a child.'
 - c. yau ta rəpaw-an sunis-ku exist LOC house-LOC child-IS.GEN 'My child is at home.'
- (4) Hsinshe Kavalan
 - a. mai siis ta rima-an-su

 NEG mosquito LOC hand-LOC-2S.GEN

 "There is no mosquito on your hand.' (adapted from Chang 1997b:48)
 - b. mai-ti sunis-ku

 NEG-ASP child-IS.GEN

 'I have no child (now).' (from Lee 1997:127)
 - c. mai ta rəpaw-an sunis-ku
 NEG LOC house-LOC child-1s.GEN
 'My child is not at home.' (adapted from Li 1996:91)

Atayal has two existential verbs, kia? and hanilan, which differ in terms of spatial (and temporal) remoteness (kia?) vs. immediacy (hanilan) (see Huang 1995:156ff).

- (5) Mayrinax Atayal
 - a. kia? ku? njiyaw ka? rahuwa! exist NOM cat LIN big 'There is a big cat (here).'
 - b. kia? ku? qutux imuwaay=mu exist NOM one house=IS.GEN 'I have a house (there).'
 - c. hani?an cku? ?ulaqi?=mu ku? ?ulaqi?=su? exist ACC child=1s.GEN NOM child=2s.GEN 'Your child is in my child's place.'
 - d. kia? cku? ?ulaqi?=mu ku? ?ulaqi?=su?
 exist ACC child=IS.GEN NOM child=2S.GEN
 'Your child is in my child's place.' (I am not in my child's place
 now. I am now on the street talking to you.)

These three types of constructions are negated with ukas.

^{5.} The term "adapted" refers to the fact that the example has been translated from Chinese.

- (6) Mayrinax Atayal
 - a. ukas ?a niyaw ka? rahuwal NEG NOM cat LIN big 'There is no big cat.'
 - b. ukas ?a imuwaay=nia? NEG NOM house=3s.GEN 'He has no house.'
 - c. ukas ku? ?ulaqi?=su? i? imuwaay NEG NOM child=2s.GEN PREP house 'Your child is not in the house.'

In Puyuma, existential, possessive, and locative constructions are introduced by *ulaya* and negated by *unian*.

- (7) Nanwang Puyuma
 - a. ulaya a kuraw i kali exist NOM fish LOC river 'There is a fish/there are fish in the river.' (from Tan 1997:81)
 - b. ulaya ku-paisu exist IS.GEN-money 'I have money.' (from Tan 1997:86)
 - c. ulaya na kuraw i kali exist NOM fish LOC river 'The fish is/are in the river.' (from Tan 1997:79)
- (8) Nanwang Puyuma
 - a. unian da kuraw i kali NEG OBL fish Loc river 'There is no fish in the river.' (from Tan 1997:82)
 - b. unian ku-paisu

 NEG IS.GEN-money

 'I do not have money.' (from Tan 1997:86)
 - c. unian na kuraw i kali NEG NOM fish LOC river 'The fish is/are not in the river.' (from Tan 1997:79)

In Isbukun Bunun, existential, possessive, and locative constructions are introduced by ?aiða? in affirmative sentences, and negated by ?uka?.

- (9) Isbukun Bunun
 - a. ?aiða? puah sia? huma?
 exist flower at field
 'There are flowers in the field.'
 - b. ?aiða? ?inak tasa? madain tu lumah exist IS.GEN one big · LIN house 'I have a big house.'

- c. ?aiða? ?alaŋ sia? lumah exist Alang at home 'Alang is at home.'
- (10) Isbukun Bunun
 - a. **?uka?** puah sia? huma? NEG flower at field 'There are no flowers in the field.'
 - b. ?uka? ?inak tasa? madain tu lumah NEG IS.GEN one big LIN house 'I do not have a big house.'
 - c. ?uka? ?alaŋ sia? lumah exist Alang at home 'Alang is not at home.'

2.2 SAME VERB/NEGATOR IN EXISTENTIAL AND POSSESSIVE CONSTRUCTIONS ONLY. In three languages, Saisiyat, Tsou, and Seediq, existential and possessive constructions are marked by the same morpheme but differ from locative (affirmative and negative) constructions. In Saisiyat, both existential and possessive constructions include the verb hayðæh, which translates as 'have'.

- (II) Saisiyat
 - a. (ray) kawaf hayðæh ka ?ilaf (LOC) sky have ACC star 'There are stars in the sky.'
 - b. yako hayðæh ka rayhil is.nom have ACC money 'I have money.'

Both constructions are negated by 20ka?.

- (12) Saisiyat
 - a. (ray) kawaf ?oka? ka ?ilaf (LOC) sky NEG ACC star 'There are no stars in the sky.'
 - b. yako **?oka?** ka rayhil is.NOM NEG ACC money 'I do not have money.'

In contrast with existential and possessive constructions, locative constructions are characterized by the absence of a verb in affirmative sentences and the occurrence of *20kik* in negative sentences, as the following pair of examples illustrate.

- (13) Saisiyat
 - a. tatini? ray taw?an old.man Loc house 'The old man is at home.'

b. tatini? ?okik ray taw?an old man NEG LOC house "The old man is not at home."

In Tsou, both existential and possessive constructions are headed by pan and negated by ukla.

(14) Tsou

- a. pan to oko ne emoo exist OBL child OBL house 'There is a child in the house.'
- b. pan to peisu-si exist OBL money-3s.GEN 'He has money.'
- (15) Tsou (Tfuya)
 - a. uk?a ci oko ne emoo NEG REL child OBL house 'There is no child in the house.'
 - b. uk?a ci peisu-si NEG REL money-3s.GEN 'He has no money.'

Locative constructions differ from existential and possessive sentences in that they are introduced by the auxiliary verb *mo*, which is followed by the lexical verb *eon* 'be at' in (16a-b). They are negated by *ola*, which occurs in sentence-initial position in (16b).

- (16) Tsou
 - a. mo eon to emoo ?o av?u

 AF be.at OBL house NOM dog

 'The dog is in the house.'
 - b. o?a mo eon to emoo ?o av?u NEG AF be.at OBL house NOM dog 'The dog is not in the house.'

Seediq is divided into three main dialects, Paran, Truku, and Tyuda. Examples from the first two dialects are included in this section, because they show some interesting dialectal variation that is discussed in the following sections. Our sources are mainly Chang (1997a) for the former and Tsukida (1997) for the latter. In Paran Seediq, both existential and possessive sentences are introduced by *niqan* in affirmative sentences, and by *uka* in negative sentences.

(17) Paran Seediq (adapted from Chang 1997a:34)

a. niqan kinan seediq sapah-su
exist one man home-2s.gen
'There is a man in your home.'

- b. niqan-ku kiŋan laqi exist-1s.NOM one child 'I have a child.'
- (18) Seediq (Paran) (adapted from Chang 1997a:34)
 - a. uka seediq sapah-su NEG man home-2s.GEN 'There is no one in your home.'
 - b. uka-ku laqi NEG-1S.NOM child 'I have no child.'

Locative constructions are headed by *menaq* in affirmative sentences, as in (19a). In negative sentences, *menaq* being negated by *ini* occurs as the root form *enaq* in (19b).

- (19) Paran Seediq (adapted from Chang 1997a: 35)
 - a. menaq sapah laqi-mu be.at home child-IS.GEN 'My child is at home.'
 - b. ini enaq sapah laqi-mu NEG be.at home child-IS.GEN 'My child is not at home.'

In Truku Seediq, the same dichotomy is found. Existential and possessive sentences are headed by *niqan* in the affirmative and *unat* in the negative, while locative sentences are introduced by *menaq*, which occurs as the root form *eniq* when negated by *ini*.

- (20) Truku Seediq (adapted from Tsukida 1997:3, 14)
 - a. niqan patas ka ruwan sapah exist book NOM inside house 'There is a book in the house.'
 - b. niqan laqi-mu
 exist child-1s.gen
 'I have a child.'
 - c. menaq sapah ka laqi-su be.at house NOM child-2s.GEN 'Your child is at home.'
- (21) Truku Seediq (adapted from Tsukida, 1997:18, 14)
 - a. unat patas ka ruwan sapah NEG book NOM inside house 'There is no book in the house.'
 - b. unat laqi=mu

 NEG child-IS.GEN

 'I have no child.'

c. ini eniq sapah ka laqi=su

NEG exist house NOM child=2s.GEN

'Your child is not at home.'

2.3 DIFFERENT NEGATOR IN LOCATIVE CONSTRUCTIONS. Both Mantauran Rukai and Paiwan exhibit a mixed system, with existential, possessive, and locative constructions being characterized by the occurrence of the same verb in affirmative sentences, while their negative counterparts fall into two groups: (i) existential, possessive, and locative constructions may be headed by the same negator; (ii) existential and possessive constructions are headed by one negator and locative constructions by another. In this last construction, the substitution of the two negators yields the same semantic variation in both Rukai and Paiwan.

Rukai is divided into six main dialects (Mantauran, Maga, Tona, Budai, Labuan, and Tanan), which differ from one another on both the phonological and syntactic levels. Mantauran and Labuan are both included as representatives in this study because they exhibit striking differences.

Mantauran is characterized by the fact that while the same verb *omiki* occurs in affirmative existential, possessive, and locative constructions, there is a contrast in their negative counterparts, with negative existentials and possessives having the verb *okaoðo*, while in locative sentences *ka* may be used to negate *omiki*. This contrast is illustrated in (22–23).

- (22) Mantauran Rukai
 - a. omiki vila?a ða?anə ?aŋato exist beside house tree 'There is a tree beside the house.'
 - b. omik-iaa paiso exist-IS.OBL money 'I have money.'
 - c. omiki lataõe titina exist outside mother 'Mother is outside.'
- (23) Mantauran Rukai
 - a. okaoðo vila?a ða?anə ?aŋato
 NEG beside house tree
 'There is no tree beside the house.'
 - b. okaoð-iaə paiso
 NEG-IS.OBL money
 'I have no money.'
 - c. omiki-ka-i ka lataðə titina exist-NEG-3S.GEN KA outside mother 'Mother is not outside.'

In locative constructions, okaooo can be substituted for by omiki-ka, as shown in (24). This substitution is, however, highly restricted: it is mostly allowed in statements that

are answers given to questions concerning the location of a referent. If okaodo appears in other contexts, it must be interpreted differently, as for example in (25).

- (24) Mantauran Rukai
 - a. omiki-ka-i ana tamatama? exist-NEG-3s.GEN there father 'Is father there?'
 - b. okaoðo NEG

'No.'

- c. ka omiki-ka-i (ana)

 KA exist-NEG-3S.GEN (that)

 'He is not there.' (implied: he is elsewhere)
- (25) Mantauran Rukai

 okaooo ana tamatama

 NEG that father

 'Father (has) passed away.' (lit. 'Father does not exist.')

In Labuan, on the other hand, ka doa occurs in the three types of negative constructions. Labuan thus patterns just like Amis, Atayal, Puyuma, and Bunun in that the same verb/negator occurs in existential, possessive, and locative constructions. The reason why it differs from Mantauran is accounted for more specifically in section 2.4.

- (26) Labuan Rukai
 - a. yakai bələnə ki cokoi ko sonatə exist on OBL table NOM book "There is a book on the table."
 - b. yakai ko paiso-li exist NOM money-IS.GEN 'I have money.'
 - c. yakai latadə ko ina exist outside nom mother 'Mother is outside.'
- (27) Labuan Rukai
 - a. kadoa ka yakai bələŋə ki cokoi ko sonatə NEG KA exist on OBL table NOM book 'There is no book on the desk.'
 - b. kadoa ko paiso-li NEG NOM money-IS.GEN 'I have no money.'
 - c. kadoa latadə ko ina NEG outside NOM mother 'Mother is not cooking outside.'

Northern Paiwan exhibits the same ambivalence as Mantauran Rukai. Existential, locative, and possessive constructions are all introduced by the verb *izua*.

(28) Northern Paiwan

- a. izua kasiv i laviavin tua uma? exist tree PREP side OBL house 'There is a tree by the house.'
- b. izua paysu nimadu exist money 3s.GEN 'He has money.'
- c. uri izua i uma? ti palan nutiaw will exist PREP house NOM Palang tomorrow 'Palang will be home tomorrow.'

The negative counterparts of these three constructions can all contain $n\partial ka(c)$ instead, as shown in (29).

(29) Northern Paiwan

- a. nəka(c) nu kasiv i laviavin tua uma?

 NEG NOM tree PREP side OBL house

 'There is no tree by the house.'
- b. nəka(c) nu paysu nimadu
 NEG NOM money 3s.GEN
 'He has no money.'
- c. uri nəka(c) i uma? ti palan nutiaw will NEG PREP house NOM Palang tomorrow 'Palang will not be home tomorrow.'

In locative constructions, another negator, ini-ka, can be used instead of naka(c), as shown in (30).

(30) Northern Paiwan

- a. ini-ka (*nu) kasiv i laviavin tua uma?

 NEG tree PREP side OBL house
 'It is not the tree (that is) by the house.'
- b. ini-ka i uma? ti palaŋ

 NEG PREP house NOM Palang

 'Palang is not at home.' (implied: he is elsewhere)

2.4 WHY SUCH STRUCTURAL VARIATION? The structural variation found between existential/possessive and locative constructions has been accounted for in other languages in terms of definiteness vs. indefiniteness (see Clark 1978, for instance). A careful comparative look at the data at hand shows, however, that in the languages surveyed here, it should rather be explained in terms of syntactic and/or other semantic differences.

Below, we reconsider the data provided on Saisiyat, Rukai, Paiwan, and Tsou. The variation found in Seediq is accounted for in section 3.

- 2.4.1 Syntactic factors: Saisiyat. In Saisiyat, the occurrence of a different verb/negator in affirmative and negative locative sentences is determined by syntactic factors. As mentioned by Yeh et al. (1998), existential and possessive constructions are verbal: hay ðæh occurs in the affirmative, and loka?—also used to negate dynamic/stative verbs—is found in the negative.
 - (31) Saisiyat (from Yeh 1991)
 - a. latar hayðæh ka ma?ilah outside have ACC people 'There are people outside.'
 - b. yako ?am ʃoməßət ka korkorin is.nom will beat ACC child 'I will beat a/the child.'
 - c. latar **?oka?** ka ma'ilah outside NEG ACC people 'There is no one outside.'
 - d. yako ?am ?oka?=ila ?i ∫əβət ka korkorin Is.nom will neg=ila Lin beat ACC child 'I will not beat the child anymore.'

Locative constructions are, on the other hand, nominal/equational.⁶ As a consequence, no verb occurs in the affirmative, while 20kik is found in the negative.

- (32) Saisiyat
 - a. tatini? ray taw?an
 old man Loc house
 'The old man is at home.'
 - b. tatini? faisiyat
 old.man Saisiyat
 'The old man is Saisiyat.'
 - c. tatini? **?okik** ray taw?an old.man NEG LOC house "The old man is not at home."
 - d. tatini? **20kik** ∫aisiyat old.man NEG Saisiyat 'The old man is not Saisiyat.'
- 2.4.2 Semantic factors: Rukai (Mantauran and Budai) and Paiwan. In Mantauran Rukai, the use of a different negative verb is determined by semantic factors.

^{6.} For details on the treatment of ray as a locative case marker, refer to Yeh (1991:47ff).

That is, okaooo negates the existence of an element, while omiki-ka negates the occurrence of an event (cf. [23a] and [23c]). Labuan Rukai, on the other hand, does not make this distinction. The negator is therefore the same in both kinds of sentences.

- (33) Labuan Rukai
 - a. kadoa ka onolo- ko bava ko ina

 NEG drink OBL wine NOM mother

 'Mother did not drink wine.'
 - kadoa ka yakai latadə ko ina NEG exist outside nom mother 'Mother is not outside.'

In Paiwan, the distinction between $n\partial ka(c)$ on the one hand and ini-ka on the other hand is also founded on semantic factors: while $n\partial ka(c)$ negates the existence of an element, ini-ka negates a fact (i.e., it is not true that . . .). Although $n\partial ka(c)$ and ini-ka can permute with one another in examples such as (34a-b), (35) and (36) show that they do not bear the same semantic function.

- (34) Northern Paiwan
 - a. nəka(c) i uma? ti palaŋ NEG PREP house NOM Palang 'Palang is not home.'
 - b. ini-ka i uma? ti palaŋ

 NEG PREP house NOM Palang

 'Palang is not home.' (implied: he is elsewhere)
- (35) Northern Paiwan
 - a. nəka(c)-aŋa ti palaŋ
 NEG-already NOM Palang
 'Palang has gone already (i.e., he is dead).'
 - b. *ini-ka-aŋa ti palaŋ
 NEG-already NOM Palang
- (36) Northern Paiwan
 - a. ini-ka i uma? ti palan a kəməsakəsa NEG PREP house NOM Palang LIN cook 'Palang is not cooking at home (implied: he is cooking elsewhere).'
 - b. *nəka(c)i uma? ti palan a kəməsakəsa NEG PREP house NOM Palang LIN cook

2.4.3 Syntactic and semantic factors: Tsou. In Tsou, both syntactic and semantic factors govern the sentential patterns of existential/possessive vs. locative constructions. The situation is somewhat confusing, however, because existential and possessive sentences do not correspond to any other syntactic pattern found in this language.

Based on the rigid order of nominal constituents and the fact that the theme is marked as oblique, existential and possessive affirmative constructions can be tentatively treated as verbal sentences, despite the nonoccurrence of the initial auxiliary verb, otherwise obligatory in any verbal sentence in Tsou. Existential and possessive negative constructions, on the other hand, can be treated as nominal/equational, because they are modified by the relativizer ci, which usually occurs between a predicative modifier and a noun.

(37) Tsou

- a. uk?a ci paisu-?o

 NEG REL money-IS.GEN
 'I do not have money.'
- b. (?o/to) monsi ci oko (NOM/OBL) cry REL child '(a) crying child'
- c. os-20 tadii co mo monsi ci oko NAF-18.GEN hear NOM AF cry REL child 'I heard a child that was crying.'

Unlike other nominal/equational sentences, however, existential and possessive sentences are negated by uk?a and not o?a. The reason that can be advanced lies in the fact that uk?a negates the existence of an element, while o?a negates a fact.

(38) Tsou

- a. uk?a ci oko ne emoo exist REL child OBL house "There is no child outside."
- b. ola molo na alo neg Molo nom is 'I am not Molo.'

Locative constructions are verbal in nature and pattern like any other declarative (affirmative and negative) sentences. Consider (39) and (40).

(39) Tsou .

- a. mo eon to emoo ?o oko AF be.at OBL house Nom child 'The child is in the house.'
- b. mo eobako to amo ?o oko AF beat OBL father NOM child 'Father beat the child.'

(40) Tsou

- a. o?a mo eon to emoo ?o oko NEG AF be.at OBL house NOM child 'The child is not in the house.'
- b. o?a mo eo6ako to amo ?o oko NEG AF beat OBL father NOM child 'Father does not beat the child.'

- 3. MORPHOLOGICAL AND SYNTACTIC CHARACTERISTICS OF THE VERB EXIST/HAVE. Beside the fact that in some languages a different pattern is found in the locative construction, another striking difference can be observed. In a few languages—only three to our knowledge (Seedig, Bunun, and Tsou)—the existential/locative verb is marked for focus/voice; in most others it is left unmarked. The discussion in this section revolves around two main issues. (i) In the languages that allow the existential/locative verb to be marked for focus. why is there a dichotomy AF-NAF (Non-Agent Focus)? (ii) Why is the constituent heading existential, possessive, and locative constructions unmarked for focus/ voice in most other languages? Should it still be treated as a verb? In section 3.1, we examine the common characteristics of the verbs marked for focus/voice in Bunun, Seediq, and Tsou. In sections 3.2 and 3.3, we provide a number of morphological and syntactic arguments that may account for the nonoccurrence of focus markers on the verb. Based on a series of syntactic tests, we support the claim that the constituent heading existential, possessive, and locative constructions should be treated as a verb. In section 3.4, we point out remaining problems.
- 3.1 EXISTENTIAL VERBS MARKED FOR FOCUS. One of the questions to be considered here is whether those existential verbs apparently marked for focus have already been lexicalized as such. The three Formosan languages in which verbs of existence/possession and location are marked for focus—Bunun, Seediq, and Tsou—exhibit two striking characteristics: (i) Only the verb occurring in existential and possessive constructions can be marked as L(ocative) F(ocus). Such a pattern is found in Seediq and (less extensively) in Bunun. (ii) Only the verb occurring in locative constructions can be marked as A(gent) F(ocus), as data from Seediq and Tsou illustrate.
- 3.1.1 Verbs marked as LF: Examples from Bunun and Seediq. In Bunun, the verbs 2ai 6a? and 2uka? can be suffixed by -an in possessive constructions. Note that they are unmarked in existential and locative constructions. In this construction, the subject is the locative phrase (i.e., the possessor), which is marked as nominative.
 - (41) Isbukun Bunun (from Lin 1996:30)
 - a. ?aiða-an-ik tasa? tu patasan exist-LF-1s.nom one LIN book 'I have one book.' (lit. 'I am the place where the book exists.')
 - b. ?uka-an saikin nisnis
 NEG-LF is.Nom beard
 'I do not have a beard.'
 (lit. 'I am not the place where the beard exists.')

In Seediq (both Paran and Truku dialects), both existential and possessive (but not locative) constructions are headed by *niqan*.

- (42) Paran Seedig (adapted from Chang 1997a:34)
 - a. niqan kinan seediq sapah-su exist one man home-2s.gen 'There is a man in your home.'
 - b. **niqan-ku** kiŋan laqi exist-IS.NOM one child 'I have a child.'
- (43) Truku Seediq (adapted from Tsukida 1997)
 - a. niqan patas ka ruwan sapah
 exist book KA inside house
 'There is a book in the house.'
 - b. niqan laqi-mu exist child-IS.GEN 'I have a child.'

Chang (1997:35) and Tsukida (1997:23-24) argue that in both Paran and Truku Seediq, *niqan* does not represent the combination of *niq-+-an* as postulated here, but has become a lexical form meaning 'there is/are' as a result of grammaticalization. We show below that while Tsukida is certainly right, Chang's claim may have been premature.

Chang supports his analysis by showing that: (i) the occurrence of the nominative case marker ka before kinan seediq in (44a) yields an ungrammatical sentence.

- (44) Paran Seediq
 - a. *niqan ka kiŋan seediq sapah-su exist NOM one man home-2s.gen
- (ii) if *niqan* were really a verb marked as LF, the following pronoun should be in the genitive case in possessive constructions. However, it always occurs in the nominative case.
 - (44) Paran Seediq
 - b. *niqan-mu kiŋan laqi exist-IS.GEN one child

Interestingly enough, these two syntactic tests are founded on the belief that in existential and possessive constructions, the theme should be the subject of the sentence. A number of tests show, however, that this assumption is ill-founded. For one thing, in Seediq, the subject must appear clause-finally, so that if the theme (e.g., kiŋan seediq 'one man') were the subject, it would be expected to occur in sentence-final position. It does not, however.

Second, only a nominative NP can be preceded by ka, and while Chang (1997:35) has shown that the theme cannot be case-marked by ka, the locative phrase (sapah-su 'your house'), on the other hand, can.

(45) Paran Seediq

c. niqan kinan seediq ka sapah-su exist one man nom home-2s.gen 'Therè is a man in your house.'

Third, it is clear that in possessive sentences, it is the possessor (that is, the locative phrase and not the possessed entity/theme) that is marked as nominative and is thus the subject. As first pointed out by Lin (1996:30), these Seediq examples are like those found in Bunun Isbukun. In other words, in Paran Seediq, niqan should be analyzed as niq + -an, and the locative phrase is the subject of the sentence.

- (46) Paran Seediq
 - a. niq-an-ku kiŋan laqi exist-LF-1s.nom one child 'I have a child.' (adapted from Chang 1997a:34)
 - b. **niq-an**-ku pila? yaku exist-LF-1s.nom money 1s.nom 'I have money.'

In Truku possessive constructions, on the other hand, the bound pronoun does not usually appear on the verb. That is, the locative phrase cannot be treated as the subject of the sentence, and the verb can be treated as having been grammaticalized.

(47) Truku Seediq *niqan-ku patas exist-1s.nom book

- 3.1.2 Verbs marked as AF: Examples from Tsou and Seediq. We have shown above that in Tsou, locative sentences, being verbal in nature, must be introduced by an auxiliary marked as AF (e.g., mo, moso, etc.) that is followed by the verb eon, itself unmarked for focus, as other Tsou verbs are (e.g., eobako 'beat', etamaku 'smoke', etc.).
 - (48) Tsou

mo eon ta emoo ?e amo AF be.at OBL house NOM father 'Father is at home."

In Seediq Paran and Truku, locative constructions are introduced by menaq (menaq) / meniq (meniq).

- (49) Paran Seedig
 - a. m-enaq sapah baqi AF-be.at house old.man 'The old man is at home.'
 - b. Truku Seediq
 m-eniq sapah laqi-mu
 AF-be.at house child-1s.gen
 'My child is at home.'

3.1.3 Partial conclusions. These data show that in the languages where verbs of existence/possession and location are marked for focus, (i) the -an suffix indicates the location of the newly introduced entity or possessed argument (X exists at Y's place), and (ii) the m- prefix indicates the location of the putative agent (X is [cooking, singing, sleeping, etc.] in Y).7

We will show below that in languages where verbs of existence/possession and location are unmarked for focus, the use of nominal case marking may carry over these distinctions.

3.2 EXISTENTIAL VERBS NOT OVERTLY MARKED FOR FOCUS: MORPHOLOGICAL CHARACTERISTICS. In this section, we present morphological evidence that may account for the nonoccurrence of focus/voice on the existential verb in most of the languages investigated. We first argue that in at least four languages, Rukai, Paiwan, Amis, and Atayal, the existential verb is made up of a demonstrative pronoun ('this' or 'that'), to which is prefixed or suffixed the locational affix/preposition i or an. We then show that in languages where two locative patterns coexist (e.g., Puyuma and Seediq), the locative verb—which usually translates as 'live'—is derived from a demonstrative pronoun. Finally, we demonstrate that verbs formed with a deictic do not usually carry voice/focus affixes.

3.2.1 *ilan* + a demonstrative pronoun. In Labuan Rukai, the verb *yakai* may be analyzed morphologically as follows: *i*- is a locational prefix that transforms a noun into a verb, as shown in (50a), -a- is a temporal/aspectual infix indicating that an event is on-going or has already taken place at speech time (see Zeitoun et al. 1996), and *kai* means 'this'. This deictic is found in Labuan, but not Mantauran, however, as (50b–c) show.

(50) a. Labuan Rukai

baliw ⇒ y-a-baliw

village \implies at-real-village

'village' \Rightarrow 'be in the village' = 'rest'

^{7.} This analysis is indirectly confirmed by a statement made by Tsukida (1997) regarding the fact that in Truku Seediq, *meniq* can only be followed by animate NPs, while ga can be followed by both animate and inanimate NPs.

(i)	Truku	Seediq (fro	m Tsukida 1997)		•
	a.	ga	sapah=mu	ka	patas≔su
		exist	house=18.GEN	MOM	book=28.GEN
		'Your boo	k is in my house.'		
	ь.	ga	sapah=mu	ka	laqi=su`
		exist	house=1s.GEN	MOM	child=28.GEN
		'Your chil	d is in my house.'		
(ii)	Truku	Seediq (fro	m Tsukida 1997)		•
	a.	meniq	sapah=mu	ka	laqi=su
		exist	house=13.GEN	NOM	child=28.GEN
		'Your chil	ld is in my house.'		
	ъ.	*meniq	sapah=mu	ka	patas=su
		exist	house=18.GEN	NOM	book=2s.GEN

- b. Labuan Rukai

 kai lacəŋə lədəkə ki takanaw

 this vegetable plant OBL Takanaw

 'These vegetables, (it is) Takanaw (who) planted (them).'
- c. Mantauran Rukai

 ana lacənə ?a ləðəkə-ni taotao
 this vegetable TOP plant-3s.GEN.BND Taotao
 "These vegetables, (it is) Taotao (who) planted (them)."

In Northern Paiwan and Central Amis, izua and ira can be analyzed, as in Rukai, as i followed by zua and ra, which both translate as 'that'. In both languages, i is not used as a verbalizer but as a preposition, as (51a-b) show.

- (51) a. Northern Paiwan

 uri vaik-akən a səma i tay paian

 will go-18.NOM LIN to PREP OBL Palang
 'I will go to Palang's place.'
 - b. Central Amis mafuti? ci aki i ci panay-an sleep NOM Aki PREP LOC₁ Panay-LOC₂ 'Aki sleeps at Panay's place.'

As for the deictic glossed as 'that', Huang (1995:240–241) argues that in Amis ra may occur as a free demonstrative, as in (52a). It may also occur with case markers to form nominative, locative, and genitive demonstratives, as in (52b–d). In Paiwan, zua patterns like ra in that it may cooccur with nominative and oblique case markers to form demonstratives, as shown in (53).

- (52) Central Amis
 - a. ra wawa aku ci aki that child Is.GEN.FREE NOM Aki 'That child of mine, Aki . . .'
 - b. minanum ku-ra
 drink NOM-that
 'That (person) is drinking water.'
 - c. maulah kuni tu-ra-an love this-NOM LOC₁-that-LOC₂ 'This (person) loves that (one).'
 - d. mananum nu-ra ku sayta drink GEN-that NOM cider 'That (person) already drank the cider.'
- (53) Northern Paiwan
 - a. pavay-an a-zua taimadu give-IMP NOM-that 3S.OBL 'Give that to him!'

b. pavay-u t(u)a-zua timadu give-IMP OBL-that 35.NOM 'Give that to him!'

In Mayrinax Atayal, it is not the preposition *i* that is used in the verbal compound, but the suffix -an: hani?an is composed of hani(?) 'this' and -an. Huang (1995:131–133) shows that the demonstrative hani(?) behaves like other common nouns and does not, in itself, indicate any case relationship.

- (54) Mayrinax Atayal
 - a. kumitaal cu? xuil ku? hani
 see ACC dog NOM this
 'This (person) is looking at a dog.'
 - b. kuminitaal cku? hani ?i? yumin see ACC this NOM Yumin 'Yumin saw this (person/thing).'
- 3.2.2 Puyuma and Seediq: Another locative form. Puyuma Nanwang, Seediq Paran, and Truku exhibit the same characteristic: besides *ulaya* (in Nanwang Puyuma) and *menaq-meniq* (in Seediq), these two languages make use of another verb that translates as 'live' (cf. *ka du* in Puyuma and *ga-gaga* in Seediq). Though the distribution of this predicate is quite restricted—it can only occur in locative constructions—it is worth pointing out that it is derived from a demonstrative pronoun.
 - (55) Nanwang Puyuma (from Tan 1997)
 - a. amanay kəma-mu kadu? what call-2P.NOM there 'What are you called there?'
 - b. ka-a-du-ku i balanaw be.at/live-RED-IS.NOM LOC Taitung 'I am in Taitung.'
 'I live in Taitung.'
 - c. adi-ku ka-a-du i balaŋaw NEG-IS.NOM be.at/live-RED LOC Taitung 'I am not in Taitung.'
 'I do not live in Taitung.'
 - (56) Paran Seedig (adapted from Chang 1997a)
 - a. substan na laqi gaga butakan (ka) ricah beat GEN child that stick (NOM) plum 'That child beat the plum with that stick.' (p.13)
 - b. gaga sapah laqi-mu be.at house child-IS.GEN 'My child is at home.' (p.35)

- c. uxe gaga sapah laqi-mu NEG be.at house child-18.GEN 'My child is not at home.' (p.35)
- 3.2.3 Morphological characteristics of other verbs formed with a demonstrative pronoun. We have shown above that in Rukai, Central Amis, Northern Paiwan, and Mayrinax Atayal, the verbal constituent glossed as 'exist' is made of a deictic and an affix or preposition indicating location. In Rukai, Amis, and Paiwan, this deictic (kai in Rukai, ra in Amis, and zua in Paiwan) may combine with various morphemes to form other verbs. In the first two languages, such verbs never carry voice/focus affixes, as (57–58) show.
 - (57) Labuan Rukai
 - a. aha-kai/*w-a-ahakaiku takanaw ku alabulu cwabu ku kaaŋə use NOM Takanaw obl leaf wrap obl fish 'Takanaw uses/used a leaf to wrap a fish.'
 - b. pasia-kay-aku/*w-a-pasiakay-aku ki ina wakamaku butulu for-Is.Nom OBL mother roast OBL meat 'I roast/roasted meat for Mother.'
 - (58) Central Amis
 - a. tay-ra/*mi-tayra i taypak miaca kaku tu cułał go prep Taipei buy IS.NOM LOC book 'I will go to Taipei to buy a book.'
 - b. na tahira/*mi-tahira/*t<um>hira kaku i siyataw when arrive/*AF-arrive Is.NOM PREP station milaliw tu ku cilamalay AF-run.away ASP NOM train 'When I arrived at the station, the train was leaving.'
- 3.3 MAIN SYNTACTIC CHARACTERISTICS. Though it is unmarked for focus/voice, the constituent heading existential, possessive, and locative constructions should still be treated as a verb⁸ because: (i) it can occur in imperative constructions:
 - (59) a. Central Amis

 ka-ira i luma? kisu anułafak!

 KA-exist PREP home 2S.NOM tomorrow

 'You must be home tomorrow!'
 - b. Labuan Rukai
 ikay-a latadə kivaəvaŋə
 exist-IMP outside play
 'Play outside!'
- (ii) it can cooccur with temporal/aspectual markers:

^{8.} In this sense, our study parallels that of Chung 1987.

(60) a. Central Amis

ira ho ku cutat i togroh nu catata exist still nom book PREP surface GEN shelf "There are still books on the shelf."

b. Northern Paiwan

<u>uri</u> **izua** i uma? ti palaŋ nutiaw will exist PREP house NOM Palang tomorrow 'Palang will be home tomorrow.'

c. Labuan Rukai

y-a-kai-na-naku daanə waga-aga exist-real-exist-already-1s.nom home red-cook 'I was at home cooking.'

d. Puyuma (Nanwang) (from Cindy Tan, pers. comm.)
anadaman i <u>ka-ulaya</u> la ku-paisu
tomorrow Top maybe-exist still Is.GEN-money
'I may have money tomorrow.'

(iii) it can attract pronominal clitics/suffixes:

(61) a. Mayrinax Atayal

kia?=si? inu?? kia?=ci?/hani?an=ci? taypak exist=2s.nom where? exist=1s.nom/exist=1s.nom Taipei 'Where do you live?' 'I live in Taipei.'

b. Northern Paiwan

izua-(a)kən i uma? exist-1s.nom prep home 'I am at home.'

c. Nanwang Puyuma
ulaya-yu isua?
exist-2s.Nom where
'Where are you?'

d. Labuan Rukai

y-a-kai-su inu waga? exist-real-exist-is.nom where cook 'Where are/were you cooking?'

e. Hsinshe Kavalan (adapted from Chang 1997b:46)
yau-isu tanian lamu?
exist-2s.nom where village
'Where do you live?'

(iv) the reduplication of its stem yields a future, progressive, or iterative reading:

(62) a. Central Amis9

a-ira i luma? ci aki anułafak RED-exist PREP house NOM Aki tomorrow 'Aki will be home tomorrow.'

- b. Northern Paiwan

 izua-zua timadu a kəmsakəsa

 RED-exist 3S.NOM LIN cook

 'He is cooking (there).'
- c. Labuan Rukai
 y-a-kai-kai baliw ku ina
 exist-real-red-exist village nom mother
 'Mother does often rest.'
- 3.4 TWO REMAINING PROBLEMS. We are left with two unresolved problems. The first has to do with the fact that Bunun is the only language in which the negator ?aiða? can take the LF -an suffix. The second concerns the fact that, in Mayrinax Atayal, the existential verb is marked for focus/voice in nonexistential contexts. Thus while kia? is unmarked in (63a), it is marked as AF in (63b-c).
 - (63) Mayrinax Atayal
 - a. kia? ku? pila?=mu
 exist NOM money=Is.GEN
 'I have money.'
 - b. na? 7i? m<in>akia? pila?=mu cu?pilaay ya?
 AFPRF>exist money=1s.GEN last.year TOP

na? ki?=ci? m<in>βanay cu? imuwaaγ
IS.NOM AF<PRF>buy ACC house
'If I had had money last year, I would have bought a house.'

c. m<in>akia? i? βali? cu?луа? ?i? βaicu? AFAFAFom Baicu
'Baicu used to live in Miaoli.'

4. SYNTACTIC CHARACTERISTICS AND SEMANTIC PROPERTIES.

In this section, we turn our attention to syntactic characteristics and semantic properties of nominal arguments in existential, possessive, and locative constructions. We first examine the grammatical functions of the nominal arguments (section 4.1). In 4.2, we show that the Formosan languages may display either one or two 'have' structures. In section 4.3, we deal with the notion of definiteness and show its effects on the syntax of existential, possessive, and locative constructions.

4.1 GRAMMATICAL FUNCTIONS OF THE NOMINAL ARGUMENTS. It is usually assumed cross-linguistically that locative and existential differ only in

terms of subject selection. Freeze (1991:2), for instance, argues that PL and EX

^{9.} Amis ira can also undergo full reduplication as in the following sentence: ira-ira ku paysu nira, maosi? kaku RED-exist NOM money 3s.GEN dislike Is.NOM 'Although he has money, I do not like (the thing he did).'

4.1 GRAMMATICAL FUNCTIONS OF THE NOMINAL ARGUMENTS.

It is usually assumed cross-linguistically that locative and existential differ only in terms of subject selection. Freeze (1991:2), for instance, argues that PL and EX structures contain the same constituents: a theme argument, a prepositional phrase, and a copula. They differ only in their order. When the theme is definite, it is the subject (yielding the PL), and when the theme is indefinite, the prepositional phrase (locative) is the subject (yielding the EX).

In order to test this axiom, we have tabulated the case realization of nominal arguments in existential and locative constructions, and have also included possessive constructions for comparative purposes. As table 2 clearly shows, in most Formosan languages, it is the theme and not the locative phrase that is the subject in existential, possessive, and locative sentences. Thus Freeze's (1991) statement is invalidated—at least partially—by this evidence.

TABLE 2. CASE REALIZATION OF NOMINALS IN EXISTENTIAL AND LOCATIVE CONSTRUCTIONS

		EXISTEN	TIAL	POSSESSIVE		LOCATIVE	
		THEME	LOCATION	THEME	LOCATION	THEME	LOCATION
SEEDIQ	PARAN	Acc	Nom	Acc	Nom	Nom	Acc
	TRUKU	Acc	Nom	Nom	(Gen)	Nom	Acc
SAISIYAT	TUNGHO	Acc	Loc/Nom	Acc	Nom	Nom	Loc
AMIS	CENTRAL	Nom	Loc	Nom	Gen	Nom	Loc
ATAYAL	MAYRINAX	Nom	Loc	Nom	Gen	Nom	Loc
PAIWAN	NORTHERN	Nom	Loc	Nom	Gen	Nom	Loc .
RUKAI	LABUAN	Nom	ОЫ	Nom	Gen	Nom	ОЫ
	MANTAURAN	Nom	Obl	Nom	ОЫ	Nom	ОЫ
KAVALAN	HSINSHE	Nom	Loc	Nom	Gen	Nom	Loc
PUYUMA	NANWANG	Nom	Loc	Nom Obl	Gen or Obl Nom	Nom	Loc
BUNUN	ISBUKUN	Nom	Loc	Nom Obi	Gen Nom	Nom	Loc
TSOU	TFUYA	Obl	Obi	ОЫ	Gen	Nom	Obl

Two remarks should be made by way of further clarification. The first concerns how the theme can be identified as the subject of the sentence, and the second is to account for the fact that in some languages, it is the locative phrase that functions as subject in existential/possessive sentences.

With regard to these Formosan languages, nominal case marking is one of the main criteria that may help us determine which of the two arguments is the subject. In

Amis, Atayal, and Puyuma (64–66), the theme is marked as nominative. It is unmarked in Bunun, Mantauran Rukai, and Kavalan (67–69), as nominative NPs usually are. We can thus ascertain for all these languages that the theme is the subject.

- (64) Central Amis (Joy Wu, pers. comm.)
 - a minamum ku wawa drink NOM child 'The child is drinking [water].'
 - b. ira ku wawa i pa-putal exist NOM child PREP RED-outside 'There is/are a child/children outside.'
- (65) Mayrinax Atayal
 - a. masiaq ku? naβakis
 laugh NOM old.man
 'The old man is laughing.'
 - b. kia? ku? njiyaw ka? rahuwal exist nom cat LIN big 'There is a big cat.'
- (66) Nanwang Puyuma
 - a. aməli a tiaw idi
 NEG NOM cup this
 'This is not a cup.'
 - b. ulaya a karaw i kali exist nom fish Loc river 'There is a fish in the river.'
- (67) Isbukun Bunun
 - a. minsuma? Ø ?alaŋ takna? come Ø Alang yesterday 'Alang came yesterday.'
 - b. ?aiða? Ø puah sia? huma? exist Ø flower at field 'There are flowers in the field.'
- (68) Mantauran Rukai
 - a. naa-tovi Ø lalake-li continuously-cry Ø child-1s.GEN 'My child does not stop crying.'
 - b. omiki vila?a ða?anə Ø ?aŋato exist beside house Ø tree "There is a tree beside the house."
- (69) Hsinshe Kavalan
 - a. metawa Ø ti tuyaw laugh Ø PERS Tuyaw 'Tuyaw is laughing.'

b. yau Ø kiis ta rima-an-su exist Ø mosquito Loc hand-Loc-2s.GEN 'There is a mosquito on your hand.'

In Paiwan, while case markers are obligatory, none seems to occur in affirmative existential and possessive constructions. Examples (70a-b) contrast with their negative counterparts, where *nu* is obligatory.

(70) Northern Paiwan

- a. izua kasiv i laviavin tua uma? exist tree PREP side OBL house 'There is a tree by the house.'
- b. izua su-paysu?exist 2s.GEN-money'Do you still have money?'
- c. nəka(c) *(nu) kasiv i laviavin tua uma? NEG (NOM) tree PREP side OBL house "There is no tree beside the house."
- d. nəka(c) *(nu) paysu nimadu NEG (NOM) money 3s.GEN 'He has no money.'

In fact, this apparent nonoccurrence of a case marker is due to the fact that Paiwan commonly deletes identical vowels. The nominative case marker a appears if *izua* is followed by an affix ending with a consonant, as shown in (71a-b). The theme argument can therefore be assigned the nominative case in the three types of constructions; it is thus the subject of the sentence.

(71) Northern Paiwan

- a. izua-(a)nan a kasiv i laviavin tua uma? exist-still NOM tree PREP side OBL house 'There is still a tree by the house.'
- b. izua-(a)nan a su-paysu?
 exist-still NOM 2s.GEN-money
 'Do you still have money?'

Three languages, Saisiyat, Seediq, and Tsou, seem to fit into Freeze's (1991) analysis. While we are unable to account for the Tsou data, we will show below that the definiteness effect does not explain convincingly why the locative phrase is the subject in existential sentences in Seediq and Saisiyat.

We have shown above that in Seediq, and most specifically in Paran, the verb should be analyzed as LF. The occurrence of a locative phrase as subject can only be accounted for in these terms: a verb marked as LF always subcategorizes for a locative subject. In Saisiyat, two patterns are allowed in existential sentences: in the first, the locative phrase is marked by the preposition ray; in the second, the locative phrase occurs as such, and should be analyzed as nominative, based on (i) the non-marking of the nominal argument, and (ii) its initial position in the sentence.

- (72) Saisiyat
 - a. ray kawaf hayðæh ka ?ilaf LOC sky have ACC star 'There are stars in the sky.'
 - b. kawas hayðæh ka ?ilas sky have ACC star 'There are stars in the sky.' (lit. 'The sky has stars.')

There are, in fact, some semantic differences between these two examples. In the first case, the speaker simply states that there are stars in the sky; in the second, the speaker is looking up at the sky while uttering the sentence. What is implied is that the sky has stars. This second example could be a priori treated as a case of locative inversion. We believe that it should not, however, because (i) there is no syntactic alternation of the theme argument: it is and remains marked as accusative, (ii) there must be a semantic agreement between the theme and the locative phrase, and in some respects; the locative phrase can be said to behave the same as a possessor, as shown by the comparison between (73a) and (73b).

- (73) Saisiyat
 - a. kawaf hayðæh ka ?ilaf sky have acc star 'There are stars in the sky.' (lit. 'The sky has stars.')
 - b. yako hayðæh ka rayhil is.nom have acc money 'I have money.'

The last remark that can be drawn from table 2 is the fact that in most languages, existential and possessive sentences are structurally alike. That is, the theme is marked as nominative, and possessive sentences can be treated as a subtype of existential sentences. This has been demonstrated in Freeze (1991, 1992). In the following section, we turn to this issue and discuss the structure of possessive constructions in the Formosan languages in more detail.

- 4.2 TWO 'HAVE' STRUCTURES. Freeze (1991, 1992) points out that cross-linguistically, two 'have' structures are found. He defines the first as locative in nature, with the locative phrase (i.e., the possessor) as subject. The second consists only of a locative copula and a theme subject that is formally possessed. This possessor has no syntactic role in the 'have' predication (Freeze 1991:8). We will show below that Formosan languages exhibit one or both constructions (henceforth schematized as Y has X vs. Y's X exists) by reexamining the data given in section 2, in the light of Freeze's (1991 and 1992) analysis. For the sake of clarity, the case realization of the nominals occurring in possessive constructions is provided in table 3.
- **4.2.1** Y has X. In Saisiyat and (Paran) Seediq, only the first structure (Y has X) is found. In these two languages, the existential/locative verb behaves as a two-place

TABLE 3. PARAMETRIC FEATURES OF NOMINAL ARGUMENTS IN EXISTENTIAL, POSSESSIVE, AND LOCATIVE CONSTRUCTIONS

		POSSESSED (THEME)	POSSESSOR (LOCATION)
SAISIYAT		Acc	Nom
SEEDIQ	PARAN	Acc (LF)	Nom
	TRUKU	Nom	Gen
AMIS	CENTRAL	Nom	Gen
ATAYAL	MAYRINAX	Nom	Gen
PAIWAN	NORTHERN	Nom	Gen
RUKAI	LABUAN	Nom	Gen
TSOU	TFUYA	ОЫ	Gen .
RUKAI	MANTAURAN	Nom	Gen or Obl
KAVALAN ·	HSINSHE	a. Nom b. Acc	Gen <i>or</i> Obl Nom
PUYUMA	NANWANG	a. Nom b. Obi	Gen Nom
винин	ISBUKUN	a. Nom b. Obl (LF)	Gen Nom

^{*}Adapted from Yeh et al. 1998 and Lin 1996:31.

predicate, with the theme/possessed entity marked as accusative and the locative phrase/possessor as nominative. Structural differences can be observed between these two languages. Most notably, the verb in Saisiyat is unmarked for focus. In Seediq, on the other hand, it is marked as LF.

(74) a. Saisiyat

yako hayðæh ka rayhil Is.NOM have ACC money 'I have money.'

b. Paran Seediq

niqan-ku kiŋan laqi exist-1s.NOM one child 'I haye a child.'

4.2.2 Y's X exists. Most Formosan languages, namely (Truku) Seediq, Amis, Atayal, Paiwan, (Labuan) Rukai, and Tsou, display only the second structure: the existential verb is a one-place predicate with the theme/possessed entity marked as nominative and the possessor being realized by a genitive pronoun attached to the

theme argument. The structure is quite similar to existential constructions. Tsou remains the only language where we cannot account for the oblique case marking of the theme.

(75) a. Central Amis

ira <u>ku paysu nira</u>
exist nom money 3s.GEN
'He has money.' (lit. 'His money exists.')

b. Mayrinax Atayal

kia? <u>ku gutux imuwaay=mu</u>
exist NOM one house=Is.GEN
'I have a house.' (lit. 'My house exists.')

c. Northern Paiwan

izua <u>paysu nimadu</u> exist money 3s.GEN 'He has money.' (lit. 'His money exists.')

d. Labuan Rukai

yakai <u>ku</u> <u>paisu-li</u>
exist NOM money-1s.GEN
'I have money.' (lit. 'My money exists.')

e. Tsou

pan to peisu-?u
exist OBL money-IS.GEN
'I have money.' (lit. 'My money exists.')

4.2.3 Y has X vs. Y's X exists. Four languages/dialects, Bunun, Kavalan, Puyuma, and Mantauran Rukai, display both constructions. Structurally, these languages differ quite drastically from one another. In Bunun, these two constructions exhibit quite clear-cut syntactic variation: the first (Y's X exists) is characterized by (i) the verb being unmarked for focus and (ii) the theme being in the nominative case. The second (Y has X), on the other hand, has the verb marked with the LF form -an and (ii) the possessor manifesting itself by means of a nominative pronoun attached to the verb. The theme must thus be analyzed as something other than nominative, that is, oblique. In Puyuma, the pattern Y has X is—for reasons still ill-understood—disallowed in affirmative statements. Compare the grammaticality of (76c-77c). Lastly, note that Mantauran Rukai differs slightly from these languages in that (i) the theme is always the subject of the sentence, and (ii) the possessor may be in either the genitive case (Y's X exists) or in the oblique case—thus yielding a pattern X exists at Y's place, semantically identical to Y has X.

On the semantic level, the same variation is found cross-linguistically between these two 'have' structures: the first (Y has X) indicates an inalienable or inherent possession; the second (Y's X exists) refers to the existence of the possessed entity.

(76) Y's X exists

a. Isbukun Bunun

?aiða? <u>?inak ?uvað</u> exist 18.GEN child

'I have a child.' (lit. 'My child exists.')

b. Hsinshe Kavalan (adapted from Chang 1997b:46)

yau <u>sunis-ku</u>

exist child-1s.GEN

'I have children.' (lit. 'My children exist.')

c. Nanwang Puyuma

ulaya ku-paisu

exist is.gen-money

'I have money.' (lit. 'My money exists.')

d. Mantauran Rukai

omiki <u>paiso-li</u>

exist money-18.GEN

'I have money.' (lit. 'My money exists.' [implied: it is somewhere, in the bank or in my pocket])

(77) Y has X

a. Isbukun Bunun

?aiða-an-<u>ik</u> ?uvað exist-LF-1s.nom child 'T have a child.'

b. Hsinshe Kavalan

yau-iku tu sunis exist-IS.NOM ACC child 'I have a child.'

c. Nanwang Puyuma

*ulaya-<u>ku</u> da paisu exist-15.NOM OBL money

d. Mantauran Rukai

omik-<u>iaa</u> paiso exist-18.0BL money

'I have money.' (implied: here and now, in my pocket)

(78) a. Hsinshe Kavalan

mai-ti sunis-ku

NEG-ASP child-IS.GEN

'I do not have children.' (implied: they married and left home or they are already deceased)

b. Hsinshe Kavalan

mai-<u>iku</u> tu sunis NEG-IS.NOM ACC child

'I have no children.' (implied: of my own)

- c. Nanwang Puyuma
 unian <u>ku-paisu</u>
 NEG IS.GEN-money
 'I have no money.' (implied: it is lost or was stolen)
- d. Nanwang Puyuma
 unian-ku da paisu
 NEG-IS.NOM OBL money
 'I have no money,' (implied: of my own)

4.3 THE EFFECT OF DEFINITENESS ON SYNTAX. Among the ten Formosan languages investigated here, four (Tsou, Puyuma, Atayal, and Paiwan) have nominal case marking systems that include a common referential/nonreferential distinction. This distinction affects both the case markers that are permitted in such constructions and their interpretation.

Tsou has three oblique case markers, ta, to, and no, displaying various degrees of distributional restriction (for details, see Zeitoun 1993). In existential sentences, ta cannot substitute for to or no. The main reason for the impossibility of its occurrence here lies in the fact that it refers to an element that (i) must have been previously introduced in the discourse and (ii) must be located near the speaker and the addressee. As for no, it is not found in locative sentences because it can only occur in contexts where a scanning of a class of elements is allowed, as in existential or interrogative sentences.

- (79) Tsou
 - a. pan to oko ne emoo exist OBL child OBL house 'There is a child in the house.'
 - b. pan no oko ne emoo exist OBL child OBL house 'There is a child in the house.'
 - c. *pan ta oko ne emoo exist obl child obl house
- (80) Tsou
 - a. mo eon ta emoo ?e oko

 AF be.at OBL house NOM child

 'The child is in the house (I can see him inside).'
 - b. mo eon to emoo ?o oko

 AF be at OBL house NOM child

 'The child is in the house (I may have heard that he is in there).'
 - c. *mo eon no emoo ?o oko
 AF be.at OBL house NOM child

In Paiwan, this distinction yields the use of a different case marker in negative existential/possessive sentences (a vs. nu).

(81) Northern Paiwan

- a. izua (a/*nu) kasiv i laviavin tua uma? exist (NOM) tree PREP side OBL house 'There is a tree by the house.'
- b. nəkac (*a/nu) kasiv i laviavin tua uma? NEG (NOM) tree PREP side OBL house "There is no tree by the house."

In Atayal, the substitution of a? by ku? in negative possessive sentences produces clear semantic distinctions (for details, see Huang 1995;90ff).

(82) Mayrinax Atayal

- a. ukas a? ?ulaqi?=mu NEG NOM child=IS.GEN 'I have no child.'
- b. ukas ku? ?ulaqi?=mu NEG NOM child=IS.GEN 'My child is not in.'

Puyuma is the only language so far investigated where theme arguments have been found to refer to either generic elements or nonspecific elements (for further details, see Tan 1997). The semantic difference carried by such NPs yields the use of a different case marker^{to} in negative sentences and further produces semantic variation (in both affirmative and negative sentences), that is, existential vs. presentational/locative existential.

(83) Nanwang Puyuma

- a. ulaya a aliwanes exist nom rainbow 'Rainbows exist.' ('There is a thing called rainbow in the world.')
- b. ulaya a kuraw i kali exist nom fish Loc river 'There is a fish/there are fish in the river.'
- c. unian a aliwanes

 NEG NOM rainbow

 'Rainbows do not exist.'

 ('There is no such thing as rainbows in the world.')
- d. unian da kuraw i kali NEG OBL fish LOC river 'There are no fish in the river.'
- e. unian a kuraw i kali NEG NOM fish LOC river 'There is not a single fish in the river.'

^{10.} The occurrence of the oblique case marker da in negative sentences has yet to be accounted for.

5. WORD ORDER. In this section, we turn now to word order variation. It has been shown cross-linguistically (see Kuno 1971, Clark 1978, and Freeze 1991, 1994, among others) that existential and locative constructions differ in terms of word order. According to Freeze (1991:2), in verb-initial languages, the theme precedes the locative phrase if indefinite, but appears in sentence-final position if definite. He proposes the following schema to represent this complementary relationship (subject in boldface):

Clark (1978), on the other hand, observes that in most languages, the possessor usually precedes the possessed theme in possessive constructions. She accounts for this constraint in terms of animacy: in discourse, animate nominals (i.e., possessors) precede inanimate ones (i.e., possessed entities).

The results of our investigation are tabulated in table 4 and are developed in the following subsections. They do, in part, contradict the assumptions that are usually taken for granted across languages.

- 5.1 WORD ORDER IN EXISTENTIAL CONSTRUCTIONS. The first assumption is that if the theme is indefinite, then it must occur just after the predicate in existential sentences. This claim seems to be borne out in seven out of the ten languages, namely Atayal, Paiwan, Puyuma, Saisiyat, Bunun, Seedia, and Tsou.
 - (85) Mayrinax Atayal
 - a. kia? ruwas cku? naniqan
 exist book ACC table
 'There is a book on the table.' (existential interpretation)
 - b. kia? cku? naniqan ku? rawas
 exist ACC table NOM book
 'The book is on the table.' (locative interpretation)
 - (86) Northern Paiwan
 - a. izua kasiv i laviavin tua uma?
 exist tree PREP side OBL house
 'There is a tree by the house.' (existential interpretation)
 - b. izua i laviavin tua uma? a kasiv exist PREP side OBL house NOM tree 'The tree is beside the house.' (locative interpretation)
 - (87) Nanwang Puyuma (from Tan 1997:84)
 - a. ulaya a ayam i isa kana kawi exist .nom bird Loc up obl tree 'There is/are a bird/birds in the tree.'
 - b. *ulaya i isa kana kawi a ayam exist LOC on that tree NOM bird

TABLE 4. WORD ORDER
IN EXISTENTIAL, POSSESSIVE, AND LOCATIVE CONSTRUCTIONS*

LANGUAGE	EXISTENTIAL	POSSESSIVE	LOCATIVE
AMIS	VTL VLT	VΤ	VTL VLT
RUKAI	VTL VLT	VT	VLT VLT
KAVALAN .	VTL VLT	VТ	VTL VLT
ATAYAL	VTL VLT†	VT	V L T V T L
PAIWAN	VTL VLT [†]	VТ	VLT VTL
PUYUMA .	VTL VLT [†]	VT	VLT . VTL
SAISIYAT	LVT TVL [†]	LVT	TL
BUNUN	VTL / VLT [†]	V T V L T	VTL VLT [†]
SEEDIQ	VTL VLT [†]	VLT	VLT VTL [†]
TSOU	VTL VLT [†]	VT .	VLT VTL [†]

^{*}The symbols T and L are used to represent the theme and the locative phrase, respectively. †Yields a locative interpretation.

(88) Saisiyat

- a. (ray) kawaf hayðæh ka ?ilaf (LOC) sky have ACC star 'There are stars in the sky.'
- b. *ka ?ilaf hayðæh (ray) kawaſ ACC star have (LOC) sky

(89) Isbukun Bunun

- a. ?aiða? puah sia? huma? exist flower at field 'There are flowers in the field.'
- b. *?aiða? sia? huma? *puah* exist at field flower

- (90) Paran Seediq (adapted from Chang 1997a:34)
 - a. niqan kinan seediq sapah-su exist one man home-2s.GEN 'There is a man in your home.'
 - b. *niqan sapah-su kiŋan seediq exist home-2s.gen one man
- (91) Tsou
 - a. pan to oko ne emoo exist OBL child OBL house 'There is a child in the house.'
 - b. *pan ne emoo to oko exist OBL house OBL child

It is true that in Atayal, Paiwan, and Puyuma, word order variation can be accounted for in terms of a definiteness effect. In Atayal or in Paiwan, for instance, change in constituent order yields a different interpretation, existential vs. locative. In the remaining four languages, however, another factor can be advanced to account for ungrammatical examples: Saisiyat, Bunun, Seediq, and Tsou all exhibit a rather rigid word order, and the constituent order displayed in existential constructions corresponds, in fact, to that found in other declarative sentences (see section 5.2 for further discussion).

In Amis, Kavalan, and Rukai, on the other hand, word order is quite free (either VLT or VTL):

- (92) Central Amis
 - a. ira ku wawa i pa-putal exist NOM child PREP RED-outside 'There is/are a child/children outside.'
 - b. ira i pa-putal ku- wawa exist PREP RED-outside NOM child 'There is/are a child/children outside.'
 - (93) Hsinshe Kavalan
 - a. yau *Biis* ta Rima-an-su exist mosquito LOC hand-LOC-2s.GEN 'There is a mosquito on your hand.'
 - b. yau ta Rima-an-su *siis*exist Loc hand-Loc-2s.GEN mosquito
 'There is a mosquito on your hand.'
 - (94) Mantauran Rukai
 - a. omiki vila?a ða?anə ?aŋato exist beside house tree 'There is a tree beside the house.'

b. omiki ?aŋato vila?a ða?anə exist tree beside house 'There is a tree beside the house.'

However, the choice between VLT and VTL word orders seems to depend on discourse factors. In Amis, for instance, (95b) but not (95c) may be uttered as an answer to (95a).

(95) Central Amis

- a. i cuwa ku ruma? a wawa PREP where NOM other LIN child 'Where are the other children?'
- b. ira *i paputal* ku lalima a wawa exist PREP RED-outside NOM RED-five LIN child "There are five children outside the house."
- c. *?ira ku lalima a wawa i paputal
 exist NOM RED-five LIN child PREP RED-outside
 'There are five children outside the house.' (not as an answer to [95a])

5.2 WORD ORDER IN THE LOCATIVE CONSTRUCTION. In locative constructions, a theme that is definite must appear after the verb. In most Formosan languages, both VTL and VLT word orders are found.

(96) Mayrinax Atayal

- a. kia? ?i imuwaay ku? qutux ka? matanah ka? qa fu fin exist Loc house Nom one Lin red Lin hat 'The red hat is in the house.'
- b. kia? ku? qutux ka? matanah ka? qa fu fin ?i imuwaay exist nom one Lin red Lin hat Loc house 'The red hat is in the house.'

(97) Central Amis

- a. ira ci panay i luma?
 exist NOM Panay PREP house
 'Panay is at home.'
- b. ira i luma? ci panay exist PREP house NOM Panay 'Panay is at home.'

(98) Hsinshe Kavalan

- a. yau ta rəpaw-an sunis-ku exist LOC house-LOC child-IS.GEN 'My child is at home.'
- b. yau sunis-ku ta rəpaw-an exist child-1s.GEN LOC house-LOC 'My child is at home.'

- (99) Nanwang Puyuma (from Tan 1997:79)
 - a. ulaya na ayam i isa kana kawi exist NOM bird LOC on that tree 'The bird is on the tree.'
 - b. ulaya i isa kana kawi na ayam exist LOC up OBL tree NOM bird 'The bird is on the tree.'

(100) Northern Paiwan

- a. uri izua i uma? ti palaŋ nutiaw will exist PREP house NOM Palang tomorrow 'Palang will be home tomorrow.'
- b. uri izua ti palan i uma? nutiaw will exist nom Palang prep house tomorrow 'Palang will be home tomorrow.'

(101) Mantauran Rukai

- a. omiki lataða titina exist outside mother 'Mother is outside.'
- b. omiki titina lataðə exist mother outside 'Mother is outside.'

This relative freedom seems also to be regulated by discourse factors. In Paiwan, for instance, the occurrence of the theme just after the verb is used as a mean of contrast:

(102) Northern Paiwan

uri izua <u>ti palan</u> i uma? nutiaw will exist nom Palang prep house tomorrow noka i uma?

NEG prep field
'Palang will be home tomorrow, not in the field.'

In Seediq, Tsou, and Bunun, only the VLT word order is permitted, and this may lead to the premature conclusion that these languages exhibit the word order constraint postulated in earlier studies. The following pairs of examples show, however, that this is not the case. Word order variation is disallowed because the subject must occur sentence-finally, as it does in any declarative sentence.

(103) Paran Seedig

- a. menaq sapah laqi-mu be.at house child-Is.GEN 'My child is at home.'
- b. *menaq <u>laqi-mu</u> sapah be.at child-Is.GEN house

- c. mekan *ido* <u>ka</u> <u>pawan</u> eat rice NOM Pawan 'Pawan eats rice.'
- d. *mekan <u>ka</u> <u>pawan</u> *ido* eat NOM Pawan rice

(104) Tsou

- a. mo eon to emoo ?o av?u

 AF be.at OBL house NOM dog

 'The dog is in the house.'
- b. *mo eon <u>?o av?u</u> to emoo AF be.at NOM dog OBL house
- c. mo 6oni to tacimi 20 amo
 AF eat OBL banana NOM father
 'Father is eating a banana.'
- d. ?*mo boni <u>?o</u> amo to tacimi AF eat NOM father OBL banana

(105) Bunun (Isbukun)

- a. ?aiða? ?alaŋ sia? lumah exist Alang at home 'Alang is at home.'
- b. maludah ?alaŋ tina? beat Alang mother 'Alang beat mother.'
- c.*?aiða? sia? lumah ?alaŋ exist at home Alang
- d. maludah tina? *?alaŋ* beat mother Alang
 'Mother beat Alang.' (≠ [105b])
- 5.3 WORD ORDER IN THE POSSESSIVE CONSTRUCTION. The last assumption formulated by Clark (1978) is that the possessor usually precedes the possessed theme. This is not true in most Formosan languages. The main reason lies in the fact that in most of these languages, genitive pronouns are bound and suffixed to the noun (except in Puyurna and Paiwan, where bound genitive pronouns are prefixed to the noun). In languages where the possessor is manifested by a nominative or an accusative/oblique pronoun, the pronoun tends to occur before the possessed entity because of internal constraints imposed by the languages in question (i.e., clitic-climbing).
- 6. CONCLUSION. The aim of this paper has been to provide an overview of existential, possessive, and locative constructions in ten Formosan languages in

order to verify the validity of a number of cross-linguistic assumptions made in the literature. In opposition to what is usually assumed cross-linguistically, it has been found that:

- (i) the "definiteness effect" does not account for most of the cross-linguistic variation observed.
- (ii) the constituent usually heading existential, possessive, and locative constructions should be treated as a verb. Though it does not share the morphological properties of most other lexical verbs, it exhibits the same syntactic behavior.
- (iii) the theme (and not the locative) argument found in existential and locative constructions usually functions as the subject of the sentence.
- (iv) the word order constraints that have been posited in earlier studies do not hold in most Formosan languages. While some languages show relative freedom with respect to the ordering of the nominal arguments in existential and locative constructions, others display the rigid word order found in declarative sentences.

In the course of the paper, we have also demonstrated that:

- (i) in some languages (Saisiyat, Rukai, Tsou, Paiwan, and Seediq), existential and possessive constructions may differ from locative constructions because of syntactic and/or semantic factors.
- (ii) in the languages where the existential/locative verb is marked for focus, there is a dichotomy between the existential/possessive verb marked as LF and the locative verb marked as AF.
- (iii) in most other languages, the existential/locative verb is unmarked for focus. One reason that may account for this is that such verbs represent the combination of the locative prefix/preposition i/an and a demonstrative 'this/that'. Verbs shaped in this way morphologically usually occur as bare forms.
- (iv) the Formosan languages behave like other Austronesian languages (see Freeze 1991) in exhibiting either one or two 'have' structures.

It is hoped that this paper has highlighted relevant problems concerning existential, possessive, and locative constructions in general by challenging views regarded as strongholds in typological studies, while also deepening our understanding of the Formosan languages.

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