

YAMI VERBAL CLASSIFICATION AND THE COOCCURRENCES OF CASES

Heng-hsiung Jeng
National Taiwan University

1. INTRODUCTION

The classification of the verbs of a language is an important basis for the formulation of the phrase-structure rule specifying the cooccurrences of cases. A phrase-structure rule specifying the cooccurrences of cases, if formulated on the basis of verbal classification, will be more relevant and economical than one without such a basis, for the former will not generate many strings which are impossible to occur in a language as the latter often does. This paper is intended to formulate such a phrase-structure rule for the Yami language on the basis of its verbal classification and to discuss the inadequacy of such a rule formulated by Fillmore (1966, 1968) and his followers without the basis of thorough verbal classification.

The Yami language, one of the Austronesian languages of Taiwan, is spoken by approximately 2,000 Yami people living on the Island of Lanyu, or Botel Tobago Island, which is located in the Pacific ocean about 49 miles from Taitung, a city on the south-east coast of Taiwan. The present study is based upon the data of about 450 Yami verbs collected by me during my field trips to the island between 1977 and 1978.¹ These field trips were made under the Project on the Austronesian Languages of Taiwan, which was jointly sponsored by Academia Sinica and National Science Council, Republic of China.

2. CRITERIA FOR VERBAL CLASSIFICATION

The criteria for classifying Yami verbs are mainly based upon Jeng (1977). On page 213 of Jeng (1977), it is stated that in keeping with Fillmore's principle for distinguishing verbs (1968:28),² 'Bunun verbs will be first classified into three major classes by their capacity to undergo the transformational processes of inchoativization, causativization, and nominalization, and then these three major classes will be further broken down into subclasses by the case frames of verbs.' The one difference between the criteria adopted in this study and those in Jeng (1977) is that the transformational process of nominalization is found no longer necessary.³

Thus Yami verbs are classified into three major categories according to the above-mentioned criteria: class I verbs cannot undergo the transformational processes of inchoativization and causativization; class II verbs may undergo inchoativization and causativization; class III verbs may undergo causativization but not inchoativization. These three major classes of verbs are then broken down into subclasses according to their case frames.

The Yami inchoative prefix is *mipa-* and the causative prefix is *p-*. If a Yami verb root may be prefixed by *mipa-*, it is considered a stative verb and accordingly belongs

¹The Yami dialect under study is that of Imurud. My informants are Siamin Dia'iut, aged 33, and Siamin Mala'us, aged 30 in 1979.

²Fillmore (1968:28) states: 'Verbs are distinguished from each other not only by specification of the case frames into which they can be inserted, but also by their transformational properties'.

³It has been found out by me recently that all Bunun and Yami verbs may appear in question-word sentences in the position of subject in the nominalized forms, while question words appear in the position of predicate. A Bunun or Yami question-word sentence is always an equational sentence. Therefore, the process of nominalization no longer serves as a criterion for classifying verbs in these two languages.

no class II. The inchoativized verb may be further causativized by the causative prefix *p-*. For example, the verb *matava* 'fat' may be inchoativized as *mipatava* 'become fat', which may be further causativized as *pipatava* 'cause to become fat'. The prefix *pipa-* 'cause to become' may be simplified as *ka-*, therefore *pipatava* may also take the form of *katava*.

If a Yami verb may not be inchoativized by *mipa-* but may be causativized by *p-*, it is considered an action verb and accordingly belongs to class III. For example, *manaRan* 'buy'⁴ may not be inchoativized as **mipanaRan* 'become buy', but may be causativized as *panaRan* 'cause to buy'.

If a Yami verb can neither be inchoativized by *mipa-* nor causativized by *p-*, it is considered a manner verb and accordingly belongs to class I. For example, *t-i* 'very' cannot be inchoativized as **mipat-i* 'become very', nor can it be causativized as **pat-i* 'cause to very'.

3.1. YAMI CASE RELATIONS

Twelve case relations are postulated for the Yami language as follows:⁵

- A: 'the case of the typically animate perceived instigator of the action identified by the verb' (Fillmore 1968:24)
- I: 'the case of the inanimate force or object causally involved in the action or state identified by the verb' (Fillmore 1968:24)
- B: the case of the animate or inanimate being for whose benefit or for whose sake the action identified by the verb is carried out or the state identified by the verb exists
- Ds: the case of the animate being regarded as the source of a certain state identified by the predicate
- Dg: 'the case of the animate being affected by the state or action identified by the verb' (Fillmore 1968:24)
- Os: the case of the inanimate being regarded as the source of the state or action identified by the predicate
- Og: the case of the inanimate being or the event affected by the state or action identified by the predicate
- Ls: the case of the location regarded as the source of the state or action identified by the predicate
- Lg: the case of the location affected by the action or state identified by the verb
- Lnd: the case of the location where the action identified by the verb is carried out or the state identified by the verb exists
- Tg: the case of the time affected by the action or state identified by the verb
- Tnd: the case of the time when the action identified by the verb is carried out or the state identified by the verb exists

3.2. JUSTIFICATION OF YAMI CASE RELATIONS

Jeng (1977:61) suggests that the case relations of an Austronesian language of

⁴*N* in Yami stands for a velar nasal sound. The other consonants of Yami are: *p* (voiceless bilabial stop), *t* (voiceless alveolar stop), *k* (voiceless velar stop), *b* (voiced bilabial stop), *d* (voiced alveolar stop), *g* (voiced velar stop), *v* (voiced labiodental fricative), *s* (voiceless retroflex fricative), *m* (bilabial nasal), *n* (alveolar nasal), *l* (lateral), *r* (retroflex liquid), and *R* (trill). Yami has four vowels: *i*, *ɛ*, *u*, and *a*.

⁵The definitions of A, I, and Dg, which is Dative in Fillmore (1968), are based upon Fillmore (1968). All the other cases except Tg are based upon the definitions given in Jeng (1977:62-63). Tg is postulated particularly for Yami.

Taiwan such as Bunun may be justified on the grounds of the various syntactic and semantic clues from the focus constructions within question-word sentences in connection with case-marking affixes and particles. Similarly, Yami case relations may be justified on such grounds. The following Yami question-word sentences will provide evidence for the twelve Yami case relations postulated above.

- (1) sinu ia-ni-k-um-an su susuli ?⁶
 who TNS ASP AF eat of taro
 A prsnt perf Og
 'Who has eaten taros?'
- (2) ikuN kan-tn nu kanakan ia ?
 what eat OgF by child this
 Og A
 'What has been eaten by this child?'
- (3) ikuN ia-mu-i-kan sia ?
 what you IF it
 I A Og
 'What do you eat it with?'
- (4) duandinu ia-mu-kan-an ?
 where you eat LndF
 Lnd A
 'Where do you eat?'
- (5) timanNu ia-ka-k-um-an ?
 when you AF eat
 Tnd A
 'When do you eat?'
- (6) sinu ia-mu-i-panutuN ?
 for whom you BF cook
 B A
 'For whom do you cook?'
- (7) ikuN ia-ni-ma-sd+b du tukun ?
 what ASP OsF burn in mountain
 Os Lnd
 'What (is) burning in the mountain?'
- (8) sinu ia-ma-gulaN ?
 who DsF thin
 Ds

⁶The abbreviations used in this paper are explained as follows: TNS (tense), ASP (aspect), prsnt (present), perf (perfective), NM (nominative marker), AF (focussing affix for A), IF (focussing affix for I), BF (focussing affix for B), D_sF (focussing affix for D_s), D_gF (focussing affix for D_g), O_sF (focussing affix for O_s), O_gF (focussing affix for O_g), L_sF (focussing affix for L_s), L_gF (focussing affix for L_g), and L_{nd}F (focussing affix for L_{nd}). In some English translations of the Yami sentences, 'is' is placed between parentheses; this means that it does not exist in the Yami language even though a verb 'to be' is necessary in these English translations.

'Who (is) thin?'

- (9) sinu ia-mu-ni-ituru-an ipivatvat+k ?
to whom you ASP give DgF pen
Dg A Og

'To whom have you given the pen?'

- (10) duandinu ia-pia ?
where good
Ls

'Which place (is) good?'

- (11) sinu ia-pia ?
who good
Ds

'Who (is) good?'

- (12) sinu u mu-rak+p-i_n?
who NM you catch DgF
Dg

'Who has been caught by you?'

- (13) ikuN u ia-ma-kdit ?
what NM OsF dry
Os

'What (is) dry?'

- (14) duandinu u ia-ma-kdit ?
where NM LsF dry
Ls

'Which place (is) dry?'

- (15) duandinu Nai-an-ta S[mia 'ua' uat] S ?
where go LgF us swim
Lg A

'Where do we go swimming?'

- (16) sinu ia-ma-k⁺Rak nu kanakan ia
who DsF fond of child this
Ds Dg

'Who (is) fond of this child?'

- (17) sinu ia-ma-k⁺Rak nu ipivatvat+k ia ?
who DsF fond of pen this
Ds Og

'Who (is) fond of this pen?'

- (18) sinu ia-ma-k⁺Rak nu tukun uri ?
who DsF fond of mountain that
Ds Lg

'Who (is) fond of the mountain there?'

- (19) duandinu na-karu-an nu ta'u ?
 where many LndF of people
 Lnd Ds

'Which (is) the place where people (are) many?'

- (20) duandinu na-ka-par+k-an nu ranum ?
 where muddy LndF of water
 Lnd Os

'Where has the water been caused to become muddy?'

- (21) duandinu na-ka-rap'+s-an nu rara'an ?
 where slippery Lnd F of road
 Lnd Ls

'Where has the road been made slippery?'

- (22) ikuN ia-mu-rutuN-an nu kanakan ia ?
 what you cook OgF for child this
 Og B

'What will be cooked by you for this child?'

- (23) sinu ia-ma-pap+n su mavakis ia ?
 who AF marry of woman this
 A Dg

'Who will marry this woman?'

- (24) sinu ia-s-um-u'u su rara'an nu apui ?
 who AF light up of road with fire
 A Lg I

'Who (is) lighting up the road with fire?'

- (25) sinu ia-um-ian du kanakan-aN ?
 who AF take care of child that
 A Dg

'Who takes care of that child?'

- (26) sinu man-t'sa'+ du ua'ua ?
 who AF throw stones at sea
 A Lg

'Who (is) throwing stones at the sea?'

- (27) sinu um-nana'u su kanakan su suansu S[ia-pu du
 who AF teach of student of arithmetic start from
 A Dg Og
 p+n+Rak]S S[katuda ku'iabandia]S sitiua'ia ?
 morning arrive afternoon today
 Tg Tg Tnd

'Who taught the student arithmetic from morning till afternoon today?'

(28) *sinu ia-ma-Nai du ila'ud sitiataua'ia ?*
 who AF go to Taiwan today
 A Lg Tnd

'Who (is) going to Taiwan today?'

(29) *ikuN u ia-pia ?*
 what NM good
 Os

'What (is) good?'

(30) *duandinu u mu-upas-in ?*
 where NM you erase LgF
 Lg

'Where will you wipe?'

The twelve cases as defined above may be justified on the basis of the evidence presented in the above examples. All of the twelve cases except Tnd and Tg may be focussed by verbs with various case-marking affixes. And all the twelve cases may appear in non-focussed constructions marked by various case-marking particles. In the following, Table 1 shows in which examples the focussed cases and non-focussed cases occur. Figure 1 shows the overlapping relationships between the focussed cases and the case-marking affixes, and Figure 2 shows the overlapping relationships between the non-focussed cases and the case-marking particles.

Table 1
 Focussed and non-focussed cases
 in the above examples⁷

Cases	Focussed	Non-focussed
A	1, 23, 24, 25, 26, 27, 28	2, 3, 4, 5, 6, 9, 15, 22, 30
I	3	24
B	6	22
Ds	8, 11, 16, 17, 18	19
Dg	9, 12	16, 23, 25, 27
Os	7, 13, 29	20
Og	2, 22	3, 9, 17, 27
Ls	10, 12, 14	21
Lg	15, 30	18, 24, 26, 28
Lnd	4, 19, 20, 21	7
Tg		27
Tnd		5, 28

⁷The numbers in Table 1, Figure 1 and Figure 2 refer to the examples in section 3.2.

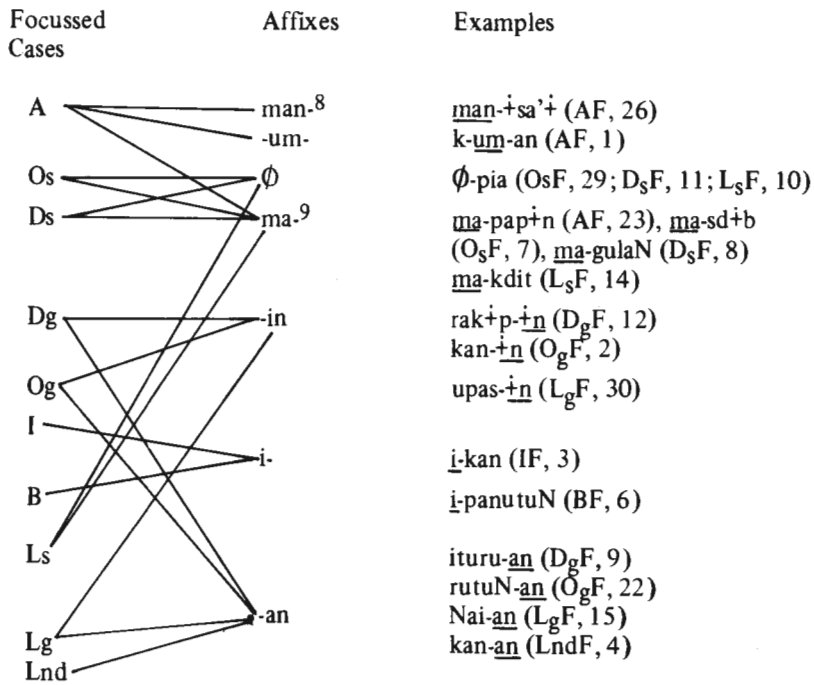


Fig. 1. Overlapping relationships between the focussed cases and the case-marking affixes

⁸The prefix *man-* becomes *maN-* when it is followed immediately by a velar consonant.

⁹*ma-* becomes *m-* when it is followed immediately by a vowel.

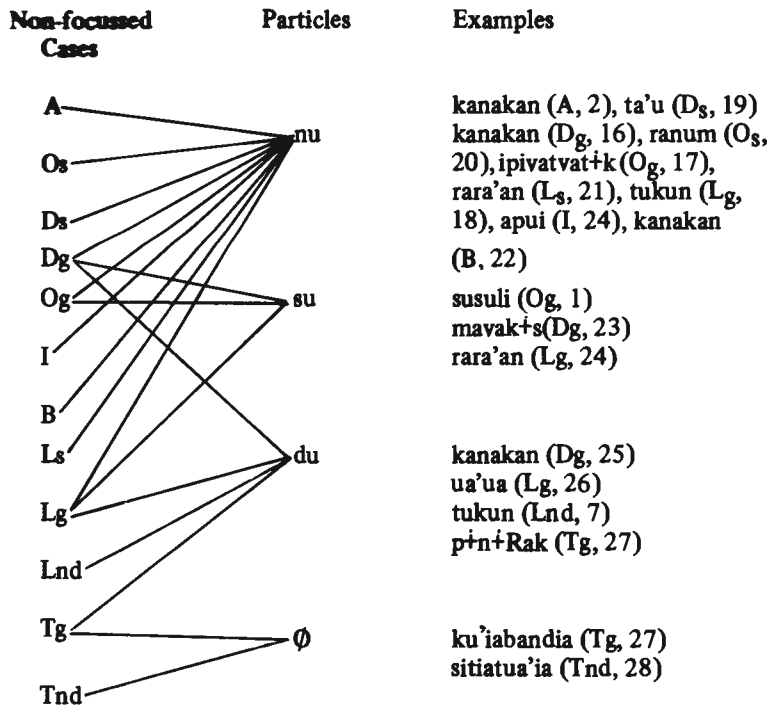


Fig. 2. Overlapping relationships between the non-focussed cases and the case-marking particles¹⁰

The twelve cases as defined above may all be found in the examples. Question-word sentences are chosen to provide evidence for these twelve cases for the reason that in the Yami language, the question word in such a sentence normally triggers the verb in the following sentence¹¹ to focus on the case of the question-word, thereby revealing the existence of such a case in Yami. The case-marking affixes and particles together with the meanings of these sentences all serve to reinforce the existence of these twelve cases.

Fillmore (1977:70) concedes that 'nobody working within the various versions of grammars with "cases" has come up with a principled way of defining the cases, or principled procedures for determining how many cases there are, or for determining when you are faced with two cases that happen to have something in common as opposed to one case that has two variants'. However, careful investigations of individual languages coupled with his principle of one instance of each case per clause as stated in Fillmore (1968:22) may help to determine the number of cases which are universal and the number of cases which are language-particular. In Yami, twelve cases are postulated because all of them are contrastive as cooccurring cases in one sentence or another. For example, in (1), A and Og cooccur as contrastive cases; in (3), A, Og, and I cooccur as contrastive cases; in (9), A, Dg, and Og cooccur as contrastive cases; in (16), Ds and Dg cooccur as contrastive cases; and so on and so forth. If two elements can never cooccur in contrast, then they are

¹⁰When *nu*, *su*, and *du* occur before proper nouns, they become *ni*, *si*, and *di* respectively. Another particle *u* is a nominative marker for nouns other than the names of persons. Before the name of a person, no nominative marker is necessary.

¹¹As explained in note 3, a question-word sentence in Bunun or Yami is always an equational sentence. The nominalized sentence which serves as the subject of such an equational sentence may be optionally preceded by the nominative marker *u*.

probably not distinct cases.

3.3. CASE FRAMES

The case frames used for subclassifying Yami verbs are based upon the twelve cases postulated above. Among these twelve cases, I, B, Lnd, and Tnd can optionally cooccur with any verb, hence are considered non-essential in the subclassification of verbs and are not listed in the case frames of Yami verbs. The other eight cases have an important bearing on the subclassification of verbs and are accordingly listed in the case frames of those verbs which cooccur with them. The following case frame for the verb *mivaRai* 'work' is an example: [_____ A].

4. VERB CLASSES

4.1. CLASS I VERBS

Yami has only a small number of class I verbs, which roughly correspond to English adverbs, for both Yami class I verbs and English adverbs have the similar function of indicating manner. A Yami class I verb cannot undergo either inchoativization or causativization, but generally can inflect for the cases I, B, and Lnd and requires a sentence embedded in the matrix sentence as a complement. Class I verbs may be further broken down into two subclasses according to the case frames [_____ {Ds} + S] and [_____ Ds + S],

where S stands for the embedded sentence. The verbs with the former case frame is designated as 'class IA' and the verbs with the latter case frame, 'class IB'. The following are the examples:

Class IA: [_____ {Ds} S]
 (1a) *ia*kut+i S[*ia*pia su katautau] S
 me very good at body
 Ds

'I (am) very healthy.'

(1b) *ia*t+i u kasi S[*ia*pia] S
 very NM candy good
 Os

'The candy (is) very good.'

(2a) *ia*kanima'aj S[maNai du gaku] S
 you slow go to school
 Ds

'You are going to school slowly.'

(2b) *ia*nima'aj u tatala S[maNai du puNsu] S.
 slow NM boat go to Lanyu
 Os

'The boat is going to Lanyu slowly'

Other Class IA Verbs:

1) (ka) tu (so), 2) ipisa (once more), 3) minara (later on)

Class 1B: [_____ Ds + S]

(3a) sinu iaumguN'iud S[napanb**ak**bak su ta'u]S ?
 who DsF purposely he hit people
 D_s

'Who hit people purposely?'

(3b) ikuN iamuguN'iudan S[kapanb**ak**bak su ta'u]S ?
 for what you BF you people
 D_s NM

'What did you hit people for?'

guN'iud 'purposely' in (3a) inflects for D_s, namely D_s-focussed, with the prefix *um-* and in (3b) inflects for B with the suffix *-an*.

Other Class 1B verbs are (1) *makaikai* 'hurriedly', (2) *mapiRafRaf*t*iR* 'without observing manners', (3) *mi*t*Ra* 'two together'.

4.2. CLASS II VERBS

Yami Class II Verbs may undergo both inchoativization and causativization. They may also inflect for all the cases except Tg and Tnd. They are broken down into different subclasses according to their case frames as follows:

Class IIA1: [————]
 (D_s)
 (O_s)
 (L_s)

(4a) iapia u ta'u uri
 good NM person that
 D_s

'That person (is) good'

(4b) iapia u vin*t*v*t*
 banana
 O_s

'The bananas (are) good'

(4c) iapia u poNsu
 Lanyu
 L_s

'Lanyu (is) good'

(4d) ikuN u iamipapaia ?
 what become good
 O_s

'What has become good?'

(4e) ikuN nanikapia ?
 what it cause to become
 I

'What has the caused it to become good?'

(4f) dudinu ianakapia'an ?
 where it LndF
 Lnd

‘Which place has caused it to become good?’

- (4g) ikuN iamukapia'an ?
 for what you BF
 B

‘Why have you been caused to become good?’

A verb of this class may have D_s, O_s, or L_s as its subject as illustrated by (4a), (4b) and (4c). It may be inchoativized as illustrated by (4d) and further causativized as illustrated by (4e), (4f) and (4g). It may also focus on any of the cases cooccurring with it except Tg and Tnd. With the I-focussed, B-focussed and Lnd-focussed constructions, the verb normally must undergo both inchoativization and causativization.

Other Class IIA1 Verbs are (1) *maNaNia* ‘i’ ‘terrible’, (2) *mian* ‘exist’, (3) *iNid* ‘short’, (4) *mavuvu* ‘low/short’, (5) *mara’it* ‘bad’, (6) *raku* ‘big’, (7) *manamid* ‘good/ admirable’, (8) *ru* ‘in large number’, (9) *malu’it* ‘dirty’, (10) *manilu* ‘noisy’.

Class IIA2: [— { D_s } { D_g }
 { O_s } { O_g }
 { L_s } { L_g }

- (5a) iakma u vatu du ta’u
 resemble stone man
 Os Dg

‘The stone resembles a man’

- (5b) iakma u vatu du tatala
 stone boat
 Os Og

‘The stone resembles a boat’

- (5c) iakma u vatu du dimaga’ud
 Os little Lanyu
 Lg

‘The stone resembles the little Lanyu’

- (5d) iakma si kabutia dimu
 person’s name you
 Ds Dg

‘Kabutia resembles you’

- (5e) iakma si kabutia du ka’iu
 Ds tree
 Og

‘Kabutia resembles a tree’

- (5f) iakma si kabutia du tukun
 Ds mountain
 Lg

‘Kabutia resembles a mountain’

- (5g) iakma u tukun du ta'u
 Ls Dg
 'The mountain resembles a man'
- (5h) iakma u tukun du vulaNat
 silver helmet
 Og
 'The mountain resembles a silver helmet'
- (5i) iakma u tukun du gaku
 Ls Lg
 'The mountain resembles a school'

iakma may be inchoativized and causativized too. The only other verb that has been found to belong to this subclass is *mi'aNai*, which also means 'resemble'.

Class IIB: [_____ {Ds}]
 {Os}

- (6a) iamavasa u vakuN
 wet NM book
 Os

'The book (is) wet'

- (6b) iamavasa u kakanan
 child
 Ds

'The child (is) wet'

Other Class IIB Verbs: are (1) *magRa* 'quick', (2) *adan* 'old', (3) *lavuN* 'many', (4) *mimaNmaNnu* 'strong', (5) *mata'im* 'soaked in water', (6) *mavia'i* 'alive', (7) *marimēt* 'heavy', (8) *mapau* 'light', (9) *ma'iatā'iatāu* 'afloat', (10) *magiRa* 'fast', (11) *ma'uakuak* 'dead', (12) *maRakat* 'dead', (13) *maluvut* 'all', (14) *makdēN* 'serious', (15) *manu'iuN* 'correct'.

Class IIC1: [_____ Ds]

- (7a) iamagulaN u ta'u uri
 DsF thin NM man that
 Ds

'That man (is) thin'

- (7b) ikuN iamunikagulaN ?
 what you cause to become thin
 I

'What has caused you to become thin?'

- (7c) duduN iamukagulaNan ?
 where LndF
 Lnd

'Which place has caused you to become thin?'

(7d) ikuN iamukagulaNan ?
B BF

'Why have you been caused to become thin?'

A verb of this class may inflect for the subjectivalized D_s, I, Lnd, or B. A large number of verbs belong to this class.

Other Class IIC1 Verbs are (1) *mia'uaR* 'pregnant', (2) *mamiN* 'laughing', (3) *milamrau* 'crazy', (4) *mi'ui'ualam* 'obedient', (5) *mialapu* 'just become pregnant', (6) *mika'usuN* 'married', (7) *mabsui* 'full of food', (8) *mami'tsukanin* 'pregnant', (9) *mapala* 'cough', (10) *miRaRa* 'injured', (11) *Rimiak* 'drunk/neurotic', (12) *maRuaRua'in* 'proud', (13) *malas* 'mistaken', (14) *masaki* 'drunk', (15) *masuRi* 'fierce', (16) *maiNin* 'sick', (17) *ma'iuikai* 'awake', (18) *ma'umis* 'weak/neurotic', (19) *ma'iaNu* 'seasick', (20) *maka'ia* 'sleepy', (21) *mapatak* 'skilled at', (22) *maba'iu* 'stingy', (23) *maRamus* 'sick', (24) *maNanianik* 'polite', (25) *masnik* 'polite', (26) *mi'ua'lu* 'generous', (27) *ma'ugtu* 'surprised', (28) *anNit* 'sweaty', (29) *ma'u'ia* 'sorrowful', (30) *ma'uau* 'thirsty', (31) *matafa* 'fat', (32) *masarai* 'happy', (33) *matihū* 'deaf', (34) *ma'a* 'gluttonous', (35) *makapia* 'careful', (36) *maktin* 'hungry', (37) *matiniN* 'clever', (38) *marakan* 'sorrowful', (39) *maRikna* 'tired', (40) *masnik* 'shy', (41) *malma* 'lazy', (42) *mafuru* 'lost', (43) *rarakū* 'old', (44) *malava'iu* 'young', (45) *milita* 'young', (46) *makanmunmu* 'noisy', (47) *makalirau* 'miserable', (48) *makasi* 'miserable', (49) *magaga* 'happy', (50) *marinu* 'sorrowful', (51) *maRiak* 'talkative'.

Class IIC2a: [——— D_s { D_g
O_g
L_g }]

(8a) iamania'ti si kabutia nu inu
afraid person's name dog
D_s D_g

'Kabutia (is) afraid of dogs'

(8b) iamania'ti si kabutia nu timui
rain
D_s O_g

'Kabutia (is) afraid of rain'

(8c) iamania'ti si kabutia nu tukun
mountain
D_s L_g

'Kabutia (is) afraid of the mountain'

The only other class IIC2a verb that has been found is *mat+n+N* 'know'. The case-marking particles before D_g should be *nu*.

Class IIC2b: [——— D_s + D_g]

(9a) iak'inana'it si kabutia ni dia'iu'd
jealous person's name
D_s D_g

'Kabutia (is) jealous of Dia'iu'd'

(9b) *iak+inana'it si kabutia nu vakuN uri
 book that
 D_s Og

'Kabutia (is) jealous of that book'

(9c) *iak+inana'it si kabutia nu tukun
 D_s Lg

'Kabutia (is) jealous of the mountain'

For a verb of this class, only D_g is acceptable. An Og or a L_g will make a sentence ungrammatical. The case-marking particle before a common noun should be *ni* and before a proper noun, *ni*. Another verb of this class that has been found is *ma'u'ia* 'angry'.

Class IID: [_____ { O_s }
 { L_s }]

(10a) iamataRin+N u ka'iu
 straight tree
 O_s

'The tree (is) straight'

(10b) iamataRin+N u rara'an
 road
 L_s

'The road (is) straight'

(10c) *iamataRin+N si kabutia
 D_s

'Kabutia (is) straight'

Only O_s and L_s can be the subjects of this verb. D_s as the subject will make a sentence ungrammatical.

Other Class IID Verbs are (1) *makiðip* 'dark', (2) *makatiu* 'itchy', (3) *mkufuN* 'wide', (4) *maRidaNdaN* 'hot', (5) *mapnu* 'full to the brim'.

Class IIE: [_____ O_s]

(11a) iamaNli u tam+k ia
 poisonous grass this
 O_s

'This grass (is) poisonous'

(11b) *iamaNli u tukun uri
 mountain that
 L_s

'That mountain (is) poisonous'

(11c) *iamaNli si kabutia
 D_s

'Kabutia (is) poisonous'

Only O_s is acceptable as the subject of a verb of this class. This class has a large number of verbs.

Other Class IIE Verbs are (1) *misakap* 'suitable', (2) *maturu* 'leaky', (3) *talamtam* 'tasty', (4) *munai* 'old', (5) *mīta* 'rotten', (6) *ma'it'it* 'full (moon)', (7) *mabaRaNbaN* 'red', (8) *mandap* 'rotten (sweet potato)', (9) *mala'it* 'rotten (taro)', (10) *malam* 'fast (boat)', (11) *magsaR* 'thick', (12) *masiNat* 'expensive', (13) *masirīm* 'black', (14) *malavaN* 'white', (15) *mava'N* 'black', (16) *migapiga* 'brown', (17) *maparik* 'muddy', (18) *mapna'ai* 'numb', (19) *ma'aNnu* 'fragrant', (20) *umulipāt* 'swollen', (21) *mu'uas* 'smooth', (22) *matarīm* 'sharp', (23) *mat'ib* 'shabby (house)', (24) *mandikik* 'sticky', (25) *maganinam* 'sweet', (26) *mīma* 'soft', (27) *mapa'it* 'salty', (28) *mapuas* 'collapsed', (29) *va'iu* 'new', (30) *ma'ugiuk* 'rotten (dead body/wood)', (31) *minui* 'ripe (fruit)', (32) *mataripis* 'thin', (33) *mīni* 'tight', (34) *mava'ug* 'rotten (water taro)', (35) *maRduN* 'hot', (36) *maRidaNdaN* 'emanating heat', (37) *ma'a'us* 'loose', (38) *mata* 'raw', (39) *matimaNnu* 'impeccable', (40) *mugarau* 'green', (41) *maksil* 'fast', (42) *makupad* 'bitter', (43) *makuralai* 'yellow', (44) *makuat* 'hot (water/rice/taro)', (45) *matikRaN* 'hard', (46) *manugit* 'hot to taste', (47) *maRdai* 'collapsed', (48) *magilu* 'not straight', (49) *madiNdiN* 'cooked', (50) *marikimū* 'cold', (51) *maRamit* 'worn out', (52) *maNūt* 'stinking', (53) *maluran* 'smooth', (54) *malaN'it* 'sour'.

Class IIF: [——— L_s]

(12a) *iamarap'is* u *rara'an*
 alippery road
 L_s

'The road (is) slippery'

(12b) **iamarap'is* si *kabutia*
 D_s

'Kabutia (is) slippery'

(12c) **iamarap'is* u *vakuN*
 book
 O_s

'The book (is) slippery'

A verb of this class accepts only L_s as its subject. Meteorological verbs may also be considered as verbs of this class because they presuppose the locations where meteorological phenomena occur.

Other Class IIF Verbs are (1) *masari* 'dark', (2) *mavuvu* 'shallow', (3) *mara'i* 'far', (4) *mara'im* 'deep', (5) *mitiataRataRak* 'drizzle', (6) *mabRa* '(northwind) blow', (7) *mapagpag* '(wind) blow', (8) *masaRusau* 'breezy', (9) *matimui* 'rainy', (10) *ta'a'asu* 'foggy', (11) *mikaNin* '(typhoon) blow'.

4.3. CLASS III VERBS

Yami class III verbs may undergo causativization only. They may inflect for all the cases except T_g and T_{nd} . They are broken down into subclasses as follows:

Class IIIA: [——— O_s]

(13a) *ianamnida* u *vu'uN* nu *ka'iu*
 appear NM leaves of tree
 O_s

'The leaves of the tree have appeared'

- (13b) *ianamnida si kabutia
A

'Kabutia has appeared'

- (13c) *ianamnida u tukun
mountain
L_s

'The mountain has appeared'

A verb of this class accepts only O_s as the subject. A or L_s will make a sentence with a verb of this class ungrammatical.

Other Class IIIA Verbs are (1) *maga'iu* 'wither', (2) *um'iatik* 'swell', (3) *ma'ata'atau* 'float', (4) *miu'iu* 'flow', (5) *itiN* 'drip', (6) *miRitiRitik* 'crack slowly', (7) *kumbaR* 'boil', (8) *makas* 'drop', (9) *masiasia'i* 'disperse', (10) *matigisgis* 'rub', (11) *milalin* 'connect', (12) *masidib* 'burn', (13) *manib* 'close'.

Class IIIB: [_____ { O_s }
A]

- (14a) iamivuak u kada'i
disperse millet
O_s

'The millet has dispersed'

- (14b) iamivuak u ta'u
people
A

'The people have dispersed'

- (14c) *iamivuak u tukun
mountain
L_s

'The mountains have dispersed'

A verb of this class allows O_s or A to be its subject, but not L_s.

Other Class IIIB Verbs are (1) *mavaRi'us'us* 'turn', (2) *misapa* 'converge', (3) *mamnu* 'grow', (4) *mauahuluk* 'roll', (5) *matarik* 'turn direction'.

Class IIIC1: [_____ A]

- (15a) iamisuli si kabutia
plant taro A

'Kabutia is planting taros'

- (15b) *iamisuli u tukun
L_s

'The mountain is planting taros'

- (15c) *iamisuli u ka'iu
O_s

'The tree is planting taros'

A verb of this class accepts only A as its subject. Neither L_S nor O_S may be its subject.

Other Class IIIC1 Verbs are (1) *maskaru* 'part', (2) *mi'a'arag* 'lie', (3) *tumaRukukuk* '(rooster) crow', (4) *masgitiin* 'divorce', (5) *sumalap* 'fly', (6) *sumaRuk* 'run away', (7) *sumdusdu* 'belch', (8) *minina'ua* 'breathe', (9) *tumutu* 'pop up head from water', (10) *mibabatiN* 'yawn', (11) *mi'iu'uab* 'yawn', (12) *mianak* 'give birth to babies or cubs', (13) *mi'ualam* 'rest', (14) *mipalupalu* 'fight with sticks', (15) *miNanaNana* 'have festival in the season of flying fish', (16) *miku'ikud* 'have a discussion', (17) *muksu* 'jump', (18) *tumati* 'urinate', (19) *matipapa'ub* 'fight', (20) *MaNRugaRugaN* 'growl', (21) *mavanau* 'wash hands', (22) *iRsad* 'sit down', (23) *iRiN* 'snort', (24) *matid* 'soon to give birth', (25) *lisna* 'sit', (26) *lavi* 'cry', (27) *mapapunau* 'bathe after recovering from sickness', (28) *marius* 'bathe', (29) *ta'iu* 'hide', (30) *tumanik* 'stand up', (31) *milalaktat* 'force out mucus', (32) *miliman* 'fight', (33) *mitipRas* 'bathe', (34) *miatuti* 'break wind', (35) *mialalam* 'play', (36) *mi'iu'iu* 'play', (37) *mialilima* 'fool around', (38) *misiai* 'depart', (39) *minu'uab* 'sigh deeply as a sign of exhaustion', (40) *misirisiriN* 'talk', (41) *a'i* 'breathe heavily', (42) *mivilaN* 'study', (43) *mi'ili* 'live', (44) *mikagat* 'swim ashore', (45) *muNtu* 'startle', (46) *mika'u'u* 'shed tears', (47) *mivaRai* 'work', (48) *mititipa* 'spit', (49) *mitik* 'sleep', (50) *miriliat* 'speak', (51) *mianuanu'ud* 'sing', (52) *mia'ua'uat* 'swim', (53) *mililitud* 'squat/kneel', (54) *maika* 'come', (55) *makubut* 'appear', (56) *muli* 'go home', (57) *maNka'iu* 'gather firewood', (58) *maNai* 'go', (59) *umRikRik* 'shudder', (60) *tuma'iu* 'run away', (61) *umlulus* 'shout', (62) *maganam* 'dance', (63) *mubut* 'have bowel movement', (64) *sumdip* 'enter', (65) *mitamaNna* 'angle', (66) *manRavuk* 'weed in the dry field', (67) *mala'iu* 'run', (68) *mapakavuskavus* 'work in the field in the mountain', (69) *mututa* 'vomit', (70) *miliNa'iuNai* 'look around', (71) *umalam* 'walk', (72) *misurud* 'comb', (73) *mananap* 'crawl', (74) *livunin* 'circle', (75) *matbik* 'thrust forward', (76) *mala'ik* 'weed at home', (77) *maNilu* 'wipe anus', (78) *man'isig* 'prepare a trap', (79) *milulai* 'swing', (80) *mitiaNatu* 'rise up', (81) *mapiluvluvit* 'assemble', (82) *mivuvu* 'hunt for foxes at night', (83) *mivavanan* 'sneeze', (84) *mitigami* 'letter-write', (85) *matukas* 'sustain injuries on the head'.

Class IIIC2a: [_____ A + Og]

(16a) *iakukuman* u susuli
I eat taro
A Og

'I am eating taros'

(16b) *iakukan+n* u susuli
me OgF Og
A

'The taros were eaten by me'

(16c) *dudinu* *iamukanan* su susuli?
where you LndF Og
A

'Where do you eat taros?'

(16d) *ikuN* *iamuikan* su susuli?
for BF Og
what

Class IIIC2b: [— A + Dg]

(18a) iakumapatu'iun dimu
I AF invite you
A Dg

'I invite you'

(18b) sinu mupatu'iunin ?
who you DgF
Dg

'Who have you invited?'

(18c) ikuN iamupatu'iunan sia ?
what you BF Dg
for

'Why do you invite him?'

(19a) ia'um'ian si kabutia du kanakanaN
AF take A child that
care of Dg

'Kabutia takes care of that child'

(19b) sinu iamu'ianan ?
Dg you DgF

'Who is taken care of by you?'

(19c) dudinu mupaN'ianan su kanakanaN ?
L_{nd} you L_{nd}F child that
A

'Where do you take care of that child?'

(19d) ikuN iamuipaN'ian su kanakan ?
what you BF dg
for IF

'Why do you take care of the child?' or 'With what do you take care of the child?'

A verb of this class can inflect for any of the five cases, namely A, Dg, B, I, and Lnd, which is subjectivalized. In the above examples, A is focussed by *ma-* in (18a) and *um* in (19a), B by *-an* in (18c) and *i-* in (19d), I by *i-* in (19d) too, Dg by *-in* in (18b) and by *-an* in (19b).

Other Class IIIC2b Verbs are (1) *maNna* 'angle', (2) *umrara* 'invite', (3) *mapa-Ragpit* 'marry', (4) *misinmu* 'marry', (5) *manbakhak* 'beat (people)', (6) *pinanan* 'catch', (7) *manvu'iau* 'chase away', (8) *mapatupilis* 'repay', (9) *mapausuk* 'call somebody down', (10) *mivavatiN* 'lasso', (11) *matavaR* 'wound', (12) *manakip* 'catch', (13) *manau'aR* 'fish with net', (14) *malalas* 'boast/cheat', (15) *mapatuRak* 'reply', (16) *maNRakat* 'kill', (17) *kumaru* 'outstrip', (18) *mava'ud* 'tie up', (19) *umri* 'have somebody's hair cut', (20) *maNvava* 'carry on back', (21) *tumanu'ia* 'bully', (22) *umlugud* 'bow', (23) *um'aRa* 'chase away (people)', (24) *manti* 'call/ask', (25) *ta'uagan* 'call', (26) *mami-Nit* 'pull', (27) *sumiduN* 'help', (28) *mitukrus* 'fish with spear'.

Class IIIC2c: [— A $\left\{ \begin{array}{l} \text{Og} \\ \text{Dg} \end{array} \right\}]$

(20a) sinu u mavaN nimu?
 who AF carry you
 A Dg

‘Who will carry you?’

(20b) ikuN u mupavaN+n̄ ?
 what you Og
 A

‘What is carried by you?’

A verb of this class may have either Og or Dg to cooccur with A.

Other Class IIIC2c Verbs are (1) *umdundun* ‘push’, (2) *inara* ‘learn/imitate’, (3) *maNlulu* ‘pull’, (4) *manakau* ‘steal’, (5) *manukrus* ‘shoot’, (6) *mikaRaRap* ‘grope for’.

Class IIIC2d: [— A $\left\{ \begin{array}{l} \text{Og} \\ \text{Dg} \\ \text{Lg} \end{array} \right\}]$

(21a) sinu ianisumuNit su ta’u ?
 who AF bite people
 Dg

‘Who has bitten people?’

(21b) ianasuNit+n̄ nu inu u ka’iu
 OgF by dog NM wood
 A Og

‘The wood was bitten by the dog’

(21c) dudinu danisuNitan ?
 where them LgF
 A

‘Where did they bite?’

Other Class IIIC2d Verbs are (1) *maNinana* ‘pick out’, (2) *mamias* ‘touch’, (3) *sumpaN* ‘discover’, (4) *tumudu* ‘point to’, (5) *miparit* ‘exchange’, (6) *maminan* ‘touch’, (7) *mamili* ‘choose’, (8) *matita* ‘see’, (9) *kaNinNan* ‘hit the mark’, (10) *manakim* ‘think’, (11) *mikala* ‘look for’, (12) *sumu’u* ‘shine’, (13) *mangisa’i* ‘throw stones’.

Class IIIC2e Verbs: [— A $\left\{ \begin{array}{l} \text{Dg} \\ \text{Lg} \end{array} \right\}]$

(22a) sinu u iaNimlita dimu ?
 who NM ambush you
 A Dg

‘Who ambushed you?’

(22b) sinu u iaNimlita dia’iu ?
 place name
 Lg

'who ambushed the village of Ia'iu?'

- (22c) *sinu u iaNimlita su ka'iu ?
tree
Og

'Who ambushed the tree?'

The above examples show that a verb of this class may have A and Dg or Lg, but never Og. The other class IIIC2e verb that has been found is *maN#N#* 'raid'.

Class IIIC2f: [— A {Og}]
[— A {Lg}]

- (23a) ikuN u mu'upastn ?
what NM you erase-OgF
Og

'What was erased by you?'

- (23b) dudinu u mu'upastn ?
where NM you erase-LgF
Lg

'Which place was erased by you?'

- (24a) iak
ulinasan u pifatfatkan
me wipe OgF NM desk
Og

'The desk has been wiped by me'

- (24b) dudinu u mulinasan ?
where NM you LgF
Lg

'Which place has been wiped by you?'

A verb of this class may have either Og or Lg to cooccur with A. In fact, Og and Lg for such a verb have the same referent. In (24a), *pifatfatkan* 'desk' is Og, but when it is the referent of *dudinu* in (24b), it becomes Lg. Perhaps that is why for (23a) and (23b), the Og-focussing suffix and the Lg-focussing suffix are identical, namely *-n*. Similarly, the Og-focussing suffix in (24a) and the Lg-focussing suffix in (24b) are identical, that is, *-an*.

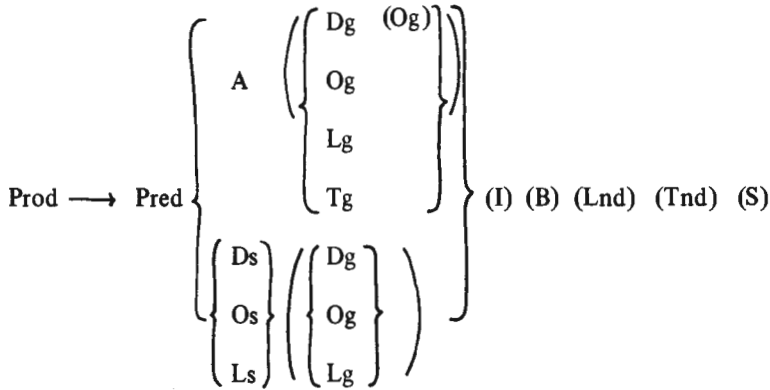
Other Class III2f Verbs are (1) *maNusus* 'drill a hole', (2) *maNali* 'dig', (3) *umRiNbui* 'cover up'.

Class III2g: [— A + Lg]

- (25a) iamjvias si kabutia su tana
AF sweep person's name ACC ground
A Lg

'Kabutia is sweeping the ground'

- (25b) dudinu iamupiviasan
where you LgF
Lg A



This rule states that Prop (Proposition) may be rewritten as Pred (Predicate) plus any of the possible combinations of those twelve cases and S (sentential complement) as specified by the parentheses and braces. Thus this rule will give us such combinations of cases as $\left\{ \begin{array}{l} D_s \\ O_s \end{array} \right\} S$ (Class IA),

$\left\{ \begin{array}{l} D_s \\ O_s \\ L_s \end{array} \right\}$ (Class IIA1), $\left\{ \begin{array}{l} D_s \\ O_s \end{array} \right\}$ (Class IIB), $D_s \left\{ \begin{array}{l} D_g \\ O_g \\ L_g \end{array} \right\}$ (Class IIC2a), A
 (Class IIIC1), A + O_g (Class IIIC2a), A $\left\{ \begin{array}{l} O_g \\ D_g \end{array} \right\}$ (Class IIIC2c), A $\left\{ \begin{array}{l} O_g \\ D_g \\ L_g \end{array} \right\}$

(Class IIIC2d), A + D_g + O_g (Class III2h), and so on and so forth. I, B, L_{nd}, and T_{nd} are peripheral cases and can cooccur with any of the above combinations of cases without restrictions. The sentential complement S may cooccur with any of the combinations of cases as specified by the rule, but it is obligatory for class I verbs and optional for other classes of verbs.

The above PS rule can generate all the combinations of cases as presented in 4.1. through 4.3. and will not generate any combinations of cases which do not actually occur in the Yami language; hence it has achieved the goal of grammar as established by Chomsky (1957:13), 'The grammar of L will thus be a device that generates all of the grammatical sequences of L and none of the ungrammatical ones'.

Moreover, this PS rule is also an explicit account of the possible configurations of the concepts of cases in the Yami language. It clearly shows that a proposition must have at least one case and at most seven cases. That most of the combinations of cases as shown here are probably language-universal may imply that human beings seem to organize the concepts of cases in very much the same way. But different languages may possibly differ in the maximum number of cases that can cooccur in an S. More detailed investigations of the classification of verbs and the cooccurrences of cases in different languages certainly will improve our knowledge with regard to the universality and particularity of case configuration.

5.2. OTHER FORMULATIONS OF THE COOCCURRENCES OF CASES

Charles J. Fillmore was the first one to formulate the PS rule for the cooccurrences of cases. Fillmore (1966:8) states that 'the rules for rewriting Proposition take it into an obligatory verb followed by the somewhat independently optional elements Ergative (Erg), Dative (Dat), Locative (Loc), Comitative (Com), Instrumental (Ins) and Agentive

(Ag)'. And Fillmore (1966:9) gives some possible expansions of Prop as follows:

- Prop \longrightarrow V Erg (Dat() Ag)
 Prop \longrightarrow V Erg Loc (Dat() Ag)
 Prop \longrightarrow V Erg (Ins() Ag)
 Prop \longrightarrow V Erg Com
 Prop \longrightarrow V S (Dat (Ag))
 Prop \longrightarrow V S Erg (Ag)

But his formulation of Prop was not based upon a thorough study of English verbal classification and hence is rather restricted in nature. Fillmore (1968:24) repeats more or less the same what Fillmore (1966:8) says about the expansion of Prop: 'The P constituent is "expanded" as verb and one or more categories . . . The expansion of P may be thought of as a list of formulas of the form seen in 29, where at least one case category must be chosen and where no case category appears more than once.' And 29 is given in the form 'P \longrightarrow V + C₁ + . . . + C_n'. And then Fillmore (1968:24) further states: 'Whether these formulas can be collapsed according to the familiar abbreviatory conventions is not at present clear.'

From the above discussion of Fillmore's formulation of Prop, perhaps we can conclude that Fillmore at best made some suggestions as to its formulation, but did not intend to give an explicit and full account of how it should be formulated and whether verbal classification should be linked to the formulation of an explicit and comprehensive rule of Prop.

So far as I know, most of the followers of Fillmore's case theory have not attempted to go beyond Fillmore's sketchy statement about the formulation of Prop. In the following, the formulations of Prop by some of the major followers of Fillmore's case theory will be discussed.

Stockwell et al. (1973:28) formulates Prop as follows:

- Prop \longrightarrow V (ESS) (NEUT) (DAT) (LOC) (INS) (AGT)

However, there are two weaknesses in this formulation. First of all, all of the six cases in this rule are optional, so it is possible for this rule to generate a proposition with a verb but with no case at all, thereby violating the principle postulated by Fillmore (1968:24) that 'at least one case category must be chosen and. . .no case category appears more than once'. Secondly, it allows all of these six cases to cooccur with a verb in a proposition, thus generating an impossible combination of cases in any language if Essive refers to the predicate noun phrase 'a good teacher' in their example 'That man is a good teacher'. How could such cases as Agt and Neut cooccur with Ess in this sentence? Such weaknesses are apparently due to their failure to link the formulation of Prop to the classification of verbs.

Ying-che Li (1970) presents quite detailed justification of case in Chinese together with his classification of Chinese verbs. But contrary to Fillmore's (1968:28) statement that 'verbs are distinguished from each other not only by specification of the case frames into which they can be inserted, but also by their transformational properties', Y.C. Li (1970:28-29) classifies Chinese verbs in terms of 'the fundamental division. . .between action and quality/status', and then employs his classification of Chinese verbs to justify the cases in Chinese.¹² Thus Y.C. Li (1970) does not make use of Fillmore's concept of

¹²Y.C. Li (1970:30) states: 'Basing my observations on these verb classes and looking for relations between the classes of verbs and the occurrence of individual cases, I find that all cases are determined by particular classes of verbs'.

case frame at all in classifying Chinese verbs. As a result, his classification of Chinese verbs is not very helpful to his formulation of Prop, which is merely a direct copy of Prop set forth in Fillmore (1966:9). While the primary purpose of Y.C. Li (1970) is to justify the existence of case in Chinese according to Fillmore's case theory, it could have been more significant if his classification of Chinese verbs had been based upon Fillmore's principle of case frames and transformational properties and had been utilized to improve the formulation of Prop.

Yang (1972:3) formulates Prop as follows:

$$P \longrightarrow (A \text{ \textasciitilde } E \text{ \textasciitilde } I \text{ \textasciitilde } O \text{ \textasciitilde } SO \text{ \textasciitilde } G \text{ \textasciitilde } L \text{ \textasciitilde } T \text{ \textasciitilde } CO) V$$

This formulation is certainly an improvement on the Prop formulated by Stockwell et al (1973) in that it avoids the weakness of having no case at all in the proposition. But the weakness of generating nine cases cooccurring in a proposition remains. Of course, it may be argued that such impossible combinations of cases will be automatically rejected when no verbs in the lexicon have the case frames to match them. However, such a powerful device is awfully uneconomical and falls far short of explanatory adequacy. Moreover, Yang's Prop is not supported by the classification of Korean verbs.

Taylor (1971:64), who develops the lexicase model based upon Fillmore's case theory but dispenses with transformational rules, has the following rule (simplified) which functions more or less as Fillmore's Prop.

$$S \longrightarrow (PP)^n \left\{ \begin{array}{c} V \\ \text{Pred} \end{array} \right\}$$

In this rule, PP represents a postpositional phrase in Japanese. According to Taylor (1971:71): 'Only PP's can function in case relationships with Pred's in this analysis. A given PP can function in only one case relationship at a time with the Pred in a given sentence. This does not mean that a given case relationship is limited to a single occurrence in a given S nor that a given PP may not be ambiguously interpreted in a given S'. This rule is very powerful in the sense that it may generate a lot of strings to be rejected by the lexicon, which, according to Taylor (1971:146), 'has the responsibility of not only listing each lexical entry (which by the application of redundancy rules will be more fully specified as one or more lexical items) with its phonological matrix and basic meaning, but also of specifying restrictions on the cooccurrences of various lexical items'. Since n (the number of PP's) is not restricted in any way, one can imagine that innumerable strings generated by this rule will be thrown away. On the other hand, because of the powerfulness of this rule and the lack of transformational rules, the lexicon of the lexicase model gets very complicated with a long list of redundancy rules (34 case-related redundancy rules for specifying the features of nouns and 7 case-frame redundancy rules for specifying the features of verbs). If the rule specifying the cooccurrences of cases could be made more specific on the basis of verbal classification, then a lot of such redundancy rules might be simplified to the point of being less redundant.

Paul Jen-kuei Li (1973) follows the lexicase model as initiated by Starosta (1971, 1972, 1973) and developed by Taylor (1971). The PS rule specifying the cooccurrences of cases given in P.J.K. Li (1973:69) is as follows:

$$S \longrightarrow \left\{ \begin{array}{l} (NP) (Adv) V (NP) (S) (NP)^n (PP)^n \\ \text{NP} \text{---} \text{NP} \end{array} \right\}$$

The expansion of S into NP---NP will be ignored here, for it represents an equational sentence, which has little to do with the cooccurrences of cases. The other expansion, (NP)ⁿ (PP)ⁿ, which represents different combinations of cases, will be the focus of the discussion here. P.J.K. Li (1973:69) states that 'the superscript n must be understood as representing 1, 2, 3 or 4, i.e. from one to the maximal number of probably 4 in Rukai'. So this rule may contain no NP or PP at all, for as P.J.K. Li (1973:69) puts it, 'the meteorological sentences... are subjectless'. And the maximum number of cases, according

to this rule, may be as many as eight. But altogether, P.J.K. Li (1973:110) postulates only seven case relations for Rukai: Agent, Object, Dative, Instrument, Time, Location, and Benefactive. It is apparent then that if eight cases are generated by the rule, it has to be rejected. Even if seven cases are generated by the rule, it remains a question whether all of them can cooccur. Therefore, this rule does not seem to be a satisfactory one as far as the cooccurrences of cases are concerned.

However, the lexicase model does pay special attention to verbal classification in terms of case frames in the lexicon. If such verbal classification can be geared to the formulation of the PS rule specifying the cooccurrences of cases, the lexicon and the PS rules may be more meaningfully related and, as a result, more significant generalizations may be achieved.

6. CONCLUSIONS

Current trends in the study of syntax and semantics seem to be mainly concerned with the subtle relationships between syntax and semantics in such areas as presupposition, new-old information, and grammatical relations, and comparatively little attention has been directed to the formulation of PS rules, for the present state of the art seems unable to provide any solid basis for a nonarbitrary formulation of PS rules. The present study on Yami verbal classification and the cooccurrences of cases has shown that it is possible to provide a solid basis for the formulation of the PS rule specifying the cooccurrences of cases if the verbs of a language are carefully examined and classified. It is of course impossible to examine all the verbs of a language, but the investigation of four or five hundred verbs of a language perhaps is sufficient to shed light on the classification of verbs in this language. If more languages are studied in the future with regard to the correlations between verbal classification and the formulation of the PS rule specifying the cooccurrences of cases, we shall certainly know more about the universality and particularity of the configurations of cases in the human mind.

REFERENCES

- CHOMSKY, NOAM. 1957. Syntactic structures. The Hague: Mouton.
- FILLMORE, CHARLES J. 1966. Toward a modern theory of case. *POLA* 13.1-24.
- _____. 1968. The case for case. In *Universals in linguistic theory*, ed. by Emmon Bach and Robert T. Harms, 1-90. New York: Holt, Rinehart and Winston.
- _____. 1977. The case for case reopened. In *Grammatical relations*, ed. by Peter Cole and Jerrold Sadock, 8. New York: Academic Press.
- JENG, HENG-HSIUNG. 1977. Topic and focus in Bunun. Special publication no. 72. Taipei: Institute of History and Philology, Academia Sinica.
- LI, PAUL J. K. 1973. Rukai structure. Special publication no. 64. Taipei: Institute of History and Philology, Academia Sinica.
- LI, YING-CHE. 1970. An investigation of case in Chinese grammar. New Jersey: Seton Hall University Press.
- STAROSTA, STANLEY. 1971. Some lexical redundancy rules for English nouns. *Glossa* 5.167-201.
- _____. 1972. Case in the lexicon. Paper presented at the Eleventh International Congress of Linguistics, Bologna, Italy.
- _____. 1973. The face of case. *Language Sciences* 25.1-4.
- STOCKWELL, ROBERT P., PAUL SCHACHTER, and BARBARA HALL PARTEE. 1973. *Major syntactic structures of English*. New York: Holt, Rinehart and Winston.

- TAYLOR, HARVEY M. 1971. *Case in Japanese*. New Jersey: Seton Hall University Press.
- YANG, IN-SEOK. 1972. *Korean syntax: Case markers, delimiters, complementation, and relativization*. Seoul: Paek Hap Sa.