

ERGATIVITY AND BALINESE SYNTAX
PART III

NUSA

Linguistic Studies of Indonesian
and Other Languages in Indonesia

Volume 44, 1998

EDITORS:

Soenjono Dardjowidjojo, Jakarta
Anton M. Moeliono, Jakarta
Soepomo Poedjosoedarmo, Yogyakarta
Bambang Kaswanti Purwo, Jakarta
John W.M. Verhaar, The Hague, The Netherlands

ASSISTANT EDITOR:

Yassir Nasanius

ADDRESS:

NUSA
Pusat Kajian Bahasa dan Budaya
Jalan Jenderal Sudirman 51
Jakarta 12930, Indonesia
Fax: (021) 571-9560
E-mail : pkbb@atmajaya.ac.id

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ISSN 0126 – 2874

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Series *NUSA* volume 1 (1975) through volume 11 (1981) appeared nonperiodically, but from volume 12 (1982) to volume 29 (1987) *NUSA* was issued three times a year at a fixed rate per year. Beginning volume 30 (1988) *NUSA* has been published nonperiodically and subscribers are charged in advance for every three volumes. Beginning with Vol. 45, individuals residing in Indonesia are to make a three-volume-prepayment of Rp 50.000,00; those residing abroad are to pay US\$ 45.00 (inclusive seamail postage).

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ERGATIVITY AND BALINESE SYNTAX PART III

Dear Subscribers,

NUSA, Vol. 42, 43, 44

We very much regret that the title page and the table of contents have been put on the wrong pages. They should have been page-numbered *v* and *vi* respectively.

The Editors

**I Ketut Artawa
Udayana University**

**1998
Badan Penyelenggara Seri *NUSA*
Universitas Katolik Indonesia Atma Jaya
Jakarta**

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NOUN PHRASE STRUCTURES

Chapter Seven

7.1 Introduction

This chapter looks at noun phrases and nominalisation. In regard to noun phrase structures, the notion of the 'bondedness hierarchy' proposed by Foley (1980) will be applied to Balinese data. This chapter will focus on how a 'verbal' clause in Balinese can be nominalised as well as the syntactic functions of such a nominalised clause. Turning a clause into a noun has not been discussed in Balinese grammar books ¹

7.2 Noun Phrase Structures in Balinese

A noun phrase is a phrase that has a noun as its head. Consider the following examples:

- (1) a. baju 'shirt'
b. baju barak 'red shirt'
c. baju ane barak 'red shirt' [lit: shirt that is red']

(1b) and (c) show that the head noun (*baju*) precedes the modifier (*barak* or *ane barak*). Note (1c) is different from (1b). In (1c) the head noun and the modifier is linked by a linker morpheme, *ane*. However, the linker *ane* cannot be used between the noun (the head) and the adjective (modifier) if this construction is followed by a possessor, examples:

- (2) a. panak nakal tiang-e
child naughty 1SG-POSS
'my naughty child'
- b. *panak ane nakal tiang-e
child linker naughty 1SG-POSS
'my naughty child'
- c. panak tiang-e ane nakal
child 1SG-POSS linker naughty
'my naughty child'

(2b) is not acceptable because *ane* cannot be used within a possessive construction. The alternative way of expressing the proposition in (2a) is provided in (2c). Thus the relation between the possessee and possessor is syntactically bound.

To capture the distribution of the linking morpheme which is found in many other Austronesian languages in various forms, Foley (1980) proposes a hierarchy, which he calls 'bondedness':

- a. articles + noun
b. deictics + noun
c. interrogatives + noun

¹ See for examples, Bawa and Jendra (1981), Kersten (1970/1984), Granoka et al. 1985.

- d. quantifiers/indefinites + noun
- e. adjectives + noun
- f. participles + noun
- g. relative clauses + noun

The strongest bond between the head and modifier is the top of the hierarchy, that is, between the head and the article. Foley (1980) suggests the bondedness hierarchy captures the distribution of the linking morpheme or ligature (LIG) in those Austronesian languages that have it: if the ligature is used with a modifier in the bondedness hierarchy, then it is used with all modifiers below it in the hierarchy.

Foley's sample comprises the following Austronesian languages: Tagalog (Tag), Palauan (Pal), Ilokano (Ilo), Toba Batak (TB), Tolai (Tol), Wolio (Wol), and Malagasy (Mal). The table below shows the use of ligatures in those languages, indicating that the bondedness hierarchy is valid for them.

	Tag	Pal	Ilo	TB	Tol	Wol	Mal
Articles	X	-	-	-	-	-	-
Deictics	X	x	-	-	-	-	-
Interrogatives	X	x	x	-	-	-	-
Quantifier	X	x	x	x	-	-	-
Adjectives	X	x	x	x	x	-	-
Participles	-	x	-	-	-	-	
rel. clauses	X	x	x	x	x	x	

Only one of the languages in Foley's sample has a participle in its verbal system. This language is Palauan. Malagasy may have a ligature for relative clause plus noun construction, but it appears to be optional since it is not ticked off in the table. Tagalog, Ilokano, Toba Batak, and Tolai have a gap in the use of the ligature, as these languages seem to lack a participle form in their verbal system. In Wolio there is no gap as the ligature is used only when the adjunct is a relative clause construction.

Looking at the distribution of the ligature in Foley's sample, Balinese is very close to Palauan. It appears that Foley's hypothesis checks out almost perfectly for Balinese. Consider the following examples

- | | | |
|-----|---|------------------------|
| (3) | cicinge 'the dog' | (Noun + article) |
| | umah (ane) ento 'that house | (Noun + deictic) |
| | anak (ane) encen 'which child' | (Noun + Interrogative) |
| | siap (ane) liu 'many chickens' | (Noun + quantifier) |
| | montor (ane) anyar 'a new car' | (Noun + adjective) |
| | be (ane) magoreng 'fried meat' | (Noun + participle) |
| | baju ane beli tiang 'the shirt that I bought' | (Noun + rel. clause) |

It seems that the use of the ligature in Palauan is obligatory, while in Balinese is optional, except for the relative clause adjunct. To call it optional, it is not to say that the use or non-use of the ligature is merely in free variation. In general it can be said that the use of the ligature *ane* in

Balinese indicates that the adjunct is emphasised. Foley (1980) points out that in Ilokano the use of the ligature that links deictic adjuncts to nouns is optional. When it is used, it indicates more formal or elegant speech. It seems that the use or the non-use of the particle *ane* in Balinese relates to the semantics or pragmatics of that expression. Let us take a noun deictic adjunct construction for illustration.

- (4) a. umah-e ento
 house-DEF that
 ‘that house’
- b. umah-e ane ento
 house-DEF LIG that
 ‘that house’

The particle *ane* is present in (4a), but this particle is not used in (4b). The expression in (4b) can only be used ‘exophorically’, referring to an entity outside a text, while the expression without the particle *ane* can be used either endophorically or exophorically. Pragmatically the expression in (4b) always implies a choice between two (or more) houses, while the expression in (4a) does not necessarily have this implication.

It has been shown previously that the use and non-use of the linker *ane* can be conditioned syntactically or pragmatically. The question arises of how many linkers a noun phrase in Balinese can have. Theoretically it can have more than one linking morpheme depending on the type of the modifiers. If the modifier is a relative clause, the ligature must be used. Note that a noun phrase in Balinese can be ‘closed’ with a demonstrative. Consider the following example:

- (5) buku ((ane) barak)1 (ane beli cai)2 (ane silih tiang
 book (LIG red) (LIGbuy 2SG) (LIG borrow 1SG
- ibi)3 (ane baang tiang I bapa)4 (ento)5
 yesterday) (LIG give 1SG ART father) (that)

‘The red book, which you bought, which I borrowed yesterday,
 which I gave it to father’

Although theoretically the noun phrase in (5) is possible, practically nobody uses more than one relative clause as a modifier. In this example there are five modifiers, two of them relative clauses. The first modifier is an adjective. The use of the linking morpheme *ane* is optional.

7.3 Classification and Possessive Constructions

The term ‘classification’ used here refers to the phenomenon whereby the dependent nominal in a noun phrase indicates the type of entity that is being referred to by the head noun. This type of NP structure in Balinese does not require the particle/ligature *ane*, examples:

- (6) a. ikut bojog
 tail monkey
 'monkey's tail'
- b. umah bata
 house brick
 'brick house'

In the above examples, there is only one referential noun, the head noun. The other acts as its dependent, specifying the class or type to which the head noun belongs, and is thus not referential. The examples above show that classification is zero marked.

Although inalienable and alienable possessive constructions are treated differently in many languages, they are marked in the same way in Balinese. We begin with the description of alienability. Consider the following examples.

- (7) a. umah I Karta-ne
 house ART Karta-POSS
 'Karta's house'
- b. timpal I Karta-ne
 friend ART Karta-POSS
 'Karta's friend'

The possessive marker *-e* is attached to the possessor NP (*I Karta*) in (7a). This morpheme has the allomorph *-ne* when the word it attaches to ends in a vowel. This system of marking is also applicable to inalienable possession, examples.

- (8) a. ebok I Ketut-e
 hair ART Ketut-POSS
 'Ketut's hair'
- b. batis I Ketut-e
 leg ART Ketut-POSS
 'Ketut's leg'

The examples in (7) and (8) show that both inalienability and alienability are marked in the same way.

In addition to the system of marking shown above, there is a third person possessor which can be used to mark possession. Examples:

- (9) umah-ne I Wayan
 house-3SGPOSS ART Wayan
 'Wayan's house'

- (10) *cunguh-ne* I Wayan
 nose-3SGPOSS ART Wayan
 'Wayan's nose'

These examples show that the morpheme *-ne* can be used to mark both alienable and inalienable possession. The possessive marker *-ne* is attached to the possessee. Note that the morpheme *-ne* used in (9) and (10) is different from *-ne* used in (7). The *-ne* form in (7) is the allomorph of the possessive marker *-e*.

The syntactic constraint of this system of marking as shown in (9) and (10) is that it only allows a specific (definite) NP as a possessor. If the possessor is not definite, the construction becomes unacceptable. Let us consider the following examples.

- (11) a. **kuping-ne* celeng
 pig-POSS pig
 'the pig's ears'
- b. *kuping-ne* celeng-e
 ear-POSS pig-DEF
 'the pig's ears'

The possessee in both (11a) and (11b) is marked by *-ne*. The phrase in (11a) is not acceptable because the possessor is not definite. The possessor NP in (11b) is definite. From these examples it can be deduced that the third person possessor *-ne* can be used when the possessor is a definite noun. The possessive marker *-ne* can be regarded as a kind of 'a third person cross-referencing morpheme' since it is used for a third person possessor, which can be omitted if it is contextually recoverable, example:

- (12) *embok-ne*²
 elder sister-3SG-POSS
 'his/her elder sister'

7. 4 Nominalisation

The term 'nominalisation' is used to refer to a process of turning other categories into a noun. This section will be concerned with nominalisation in Balinese which includes: 'lexical' and 'non-lexical' nominalisation. The framework for describing Balinese nominalisation is based on Comrie and Thompson (1985). Lexical nominalisation is treated first then clausal nominalisation.

7. 4. 1 Lexical Nominalisation

By lexical nominalisation is meant deriving a noun from other classes of word. In Balinese the base forms can be a verb, a precatatorial, an adjective or a noun.

² The morpheme *-ne* used in (12) is similar to the form *-nya* in Indonesian, which can be used in the same way: *kakak-nya* 'his/her elder brother or sister'.

a) 'Result' Nominalisation

This nominal is derived from verb bases using the suffix *-an*, e.g.

tendang 'to kick'	tendangan 'a kick'
tulis 'to write'	tulisan 'writing'
aduk 'to mix'	adukan 'mixture'
etc	

The meaning of the derived noun is to indicate the result of the activity indicated by the base verb.

b) 'Locative' Nominalisation

This nominal is derived by using the confix *pa(N)-an*, examples.

jemuh 'to dry'	panyemuhan 'place for drying something'
paro 'to divide'	pamaroan 'place for dividing something'
urit 'to sow'	panguritan 'place for sowing seed'
engsut	pangengsutan 'place for hanging something'
etc.	

c) 'Instrumental' Nominalisation

The instrumental nominal is also derived from verb bases by using the confix *pa(N)-an*, examples:

kikih 'to grate'	pangikihan	'a grater'
ukir 'to carve'	pangukiran	'a tool for carving'
sangih 'to sharpen'	panyangihan	'a sharpener'
etc		

d) 'Agentive' Nominalisation

There are only a few agentive nominals in Balinese which are formed morphologically (the prefix *paN-* + roots), examples:

ijeng	pangijeng	'a guard'
ayah	pangayah	'a servant'
etc.		

The agentive nominal is expressed by the use of the word *tukang/juru* 'skilled/expert' followed by a basic verb form or a noun. This syntactic formation is productive, examples

juru kidung	'a singer'
tukang kayu	'a carpenter'
etc.	

c) 'Toy' Nominalisation

This nominal is derived from a noun base by using the suffix *-an*. Note that the noun base must be reduplicated, examples

motor 'car'	motor-motoran 'toy car'
umah 'house'	umah-umahan 'toy house'
jaran 'horse'	jaran-jaranan 'toy horse'
etc	

7. 4. 2 Clausal Nominalisation

Comrie and Thompson (1985:358) define action nominal as a noun phrase which contains, in addition to a noun derived from a verb, one or more reflexes of a proposition or a predicate. The English example in (13) below illustrates the notion of action nominal.

- (13) a The enemy's destruction of the city
b The enemy destroyed the city

The action nominal in (13a) is derived from the verbal clause (sentence) in (13b). Comrie and Thompson (1985:371) note that the prenominal genitive corresponds to the subject of the sentence in (13b), while the postnominal genitive corresponds to the direct object of the sentence in (13b).

In this section the possibilities of turning a clause or proposition into a nominal will be examined. As noted previously, the suffix *-an* is used to derive a noun from verbal bases. In addition to the use *-an*, the confix *ka-an* can also be used to form a noun from a limited class of adjectives (those that express human property concepts). These affixes can also be used to nominalise a clause or proposition. This nominalisation is illustrated in the following examples.

- (14) a I Tika sedih
ART Tika sad
'Tika is sad'
- b. Ka-sedih-an I Tika-ne
sad-NOM ART Tika-POSS
'Tika's sadness'
- (15) a I Belog sugih
ART Belog rich
'Belog is rich'
- b. Ka-sugih-an I Belog-e
rich-NOM ART Belog-POSS
'Belog's richness'

The predicate of the sentences in (14a) and (15a) above is filled by an adjective. The expressions in (14b) and (15b) are their corresponding nominal expressions. These nominals show that when nominalisation is applied, the predicate is marked by the nominaliser *ka-an* and the subject is

marked by the possessive marker *-e*. In this case the subject becomes the possessor NP and the nominalised predicate becomes the possessee.

The (a) sentences below are intransitive verbal clauses and the (b) sentences are their nominalised form.

- (16) a. Anak cenik ulung
 person small fall
 'The child fell'
- b. ulung-an anak-e cenik
 fall-NOM person-POSS small
 'The child's falling'
- (17) a. I Kerti teka
 ART Kerti come
 'Kerti is coming'
- b. Teka-an I Kerti-ne
 come-NOM ART Kerti-POSS
 'Kerti's coming'

The examples in (16a) and (17a) are intransitive sentences and the expressions in (16b) and (17b) are their corresponding nominals which are derived by using the suffix *-an* and the subject becomes a possessor which is marked by the possessive marker *-e*.

The (a) sentences below are transitive and their corresponding nominals are in the (b) constructions

- (18) a. Padang abas tiang
 grass cut 1SG
 'I cut the grass'
- b. Abas-an padang tiang-e
 cut-NOM grass 1SG-POSS
 'My cutting of the grass'
- (19) a. Bojog gambar tiang
 monkey draw 1SG
 'I draw a monkey'
- b. Gambar-an bojog tiang-e
 draw-NOM monkey 1SG-POSS
 'My drawing of the monkey'

The formation of nominals as shown in (18) and (19) is not productive, that is, not all transitive constructions can be nominalised in this way. It depends on the type of the patient,. Normally

there is no ambiguity if the patient of the verbal clause is a non-human patient. If it is a human patient, there will be another interpretation.

The (a) sentences in (20) and (21) are \emptyset -constructions and the (b) and (c) expressions are their nominalised counterparts. The nominalisation in (20b) is marked by an asterisk. This marking is used to show that the nominal expression in (20b) does not have a 'compatible' meaning with its base clause. Only the nominal expression in (20c) is acceptable because it has a compatible meaning with its base clause, that is, only this construction expresses that the agent in the base clause does the activity indicated by the verb. The nominal expression '*jaguran Ketut tiange*' in (20b) means that it is the possessee (*Ketut*) who punched someone, other than the possessor (*tiang*). Note that the suffix used is still the same, but the patient argument of the clause is expressed by a prepositional phrase.

- (20) a. Ketut jagur tiang
Ketut punch 1SG
'I punched Ketut'
- b. *Jagur-an Ketut tiang-e
punch-NOM Ketut 1SG-POSS
'My punching of Ketut'
- c. Jagur-an tiang-e ka Ketut
punch-NOM 1SG-POSS to Ketut
'My punching of Ketut'
- (21) a. Celeng-e tembak cai
pig-DEF shoot 2SG
'You shot the pig'
- b. Tembak-an celeng cai-ne
shoot-NOM pig 2SG-POSS
'Your shooting of the pig'
- c. Tembak-an cai-ne ka celeng-e
shoot-NOM 2SG to pig-DEF
'Your shooting of the pig'

The nominal expression in (21b) is acceptable. It can have a compatible meaning with the base clause in that it is the agent of the base clause that does the action, not the referent of the noun possessed by the agent. This is a pragmatic reason because naturally a pig cannot shoot.

The use of prepositional phrase to express the patient of the verbal when it is nominalised to resolve ambiguity in Balinese may be compared with Latin. Blake (1994:113) points out a feature of nominalisation is that it typically involves a reduction of in the range of possibilities found with verbs. However, Blake (1994) notes that there are extra prepositional possibilities used in Latin to resolve ambiguities because two genitives are used. For instance, the phrase *amor domini dominae* could mean 'the love of the master for the mistress' or 'the love of the mistress for the

master'.³ The ambiguity can be resolved by giving a prepositional alternative for the objective genitive *amor domini erga dominam* means 'the love of the master towards the mistress'.

Now we turn to N-constructions. The strategy that is used to nominalise a N-construction is somewhat different. The subject of the clause is expressed as a possessor but the verb form remains the same. Consider the following examples.

- (22) a. Tiang meli baju ditu
 1SG ACT. buy shirt there
 'I bought a shirt there'
- b. Meli tiang-e baju ditu
 buy 1SG-POSS shirt there
 'My buying of a shirt there'
- (23) a. Cai ngaba jaja mai
 2SG ACT. bring cake here
 'You brought cakes here'
- b. Ngaba cai-ne jaja mai
 bring 2SG-POSS cake here
 'You bringing of cakes here'
- (24) a. Ketut ngeling
 Ketut cry
 'Ketut cried'
- b. Ngeling Ketut-e
 cry Ketut-POSS
 'Ketut's crying'

The (b) expressions above are the corresponding nominals of the verbal sentences in (a). The agent of the verbal clause is expressed as a possessor, which is marked by the possessive marker *-e*. Note that the predicate of sentence in (24a) is a nasal intransitive verb. This verb is derived by a nasal prefix (*N-*) from a precatégorial (*eling*). So in addition to the nominalised clause in (24b), Balinese also has the following nominal expression: *Elingan Ketute* 'Ketut's crying' in which the noun *elingan* is derived from the precatégorial (*eling*) by the suffix *-an*. The nominal expression *Elingan Ketute* is not derived from the clause in (24a).

Another possible way of forming stative or action nominals in Balinese is by using the morpheme *-ne*. This morpheme is used exclusively for a third person. Consider the following examples.

³ The unmarked interpretation in the absent of context would probably to take the first genitive to be subjective and the second to be objective.

- (25) a. I Wayan gelem.
 ART Wayan sick
 ‘Wayan is sick’
- b. Gelem-ne I Wayan
 sick-POSS ART Wayan
 ‘Wayan’s sickness’
- (26) a. I Nyoman meli nasi magoreng.
 ART Nyoman buy rice fried
 ‘Nyoman bought fried rice’
- b. Melin-ne I Nyoman nasi magoreng
 buy-POSS ART Nyoman rice fried
 ‘Nyoman’s buying of fried rice’

Note that this nominaliser can also be used with nasalised verb as shown in (26). From the previous description of clause nominalisation, we can say that nominalisation in Balinese works on SA basis, that is, the agent (A) of a two-place predicate is treated in the same way as the sole argument (S) of a one-place predicate.

7. 5 The Syntactic Functions of Nominalisations

In this section the syntactic functions of the derived nominals described previously will be discussed. As expected they would function like a non-derived noun phrase. Consider the following examples.

- (28) **Ulung-an** I **Made-ne** dingeh tiang
 fall-NOM ART Made-POSS hear 1SG
 ‘I heard Made’s falling’
- (29) Tiang nawang **tekan** I **Waya-ne**
 1SG know come-NOM ART Wayan-POSS
 ‘I knew Wayan’s coming’
- (30) Tiang demen taken **igelan** I **Ketut-e**
 1SG like with dance-NOM art Ketut-POSS
 ‘I liked Ketut’s dancing’

The action nominal *ulungan I Madene* in (28) functions as a grammatical subject, *tekan I Wayane* in (29) is a patient complement, and the nominal *igelan I Ketute* in (30) is the complement of a preposition.

The syntactic function of the derived nominals in which the ‘deverbal’ noun is marked by *-ne* is shown in the following examples.

- (31) **Tekan-ne** **ia** **mai** ngai tiang demen [N-gai]
 come-NOM 3SG here make 1SG happy
 'His coming here made me happy'
- (32) Cai pedih taken **magedi-ne** **ia** **uli** **dini.**
 2SG angry with go-NOM 3SG from here
 'You were angry with her/his going away from here'

The derived nominal *tekanne ia mai* in (31) functions as the subject of the sentence, while the nominal *magedinne icang uli dini* in (32) is the complement of a preposition.

Another point which needs to be mentioned here is the possibility of deriving action nominals by zero marking as in the following examples.

- (33) **Ngroko** **bes** **liu** tusing luung [N-roko]
 smoke too much neg good
 'Smoking two much is not good'
- (34) **Pules** **bes** **peteng-peteng** ngai cai gelem
 sleep too night make 2SG sick
 'Staying up late every night makes you sick'
- (35) **Nginem** **kopi** **bes** **sai-sai** tusing luung [N-inem]
 drink coffee too often not good
 'Drinking coffee too often is good'

7. 6. Headless NP

The term headless NP is used to refer to a noun phrase that may occur without its noun head. As in other Austronesian languages it is possible to have a headless NP in Balinese. This is illustrated in the following examples.

- (36) **Jemak** **ane** **ento!**
 take LIG that
 'Take that one!'
- (37) Ia meli **ane** **anyar**
 3SG ACT. buy LIG new
 'S/he bought the new one'
- (38) **Tiang** **demen** **ane** **magoreng**
 1SG like LIG fried
 'I like the fried one'

The highlighted NP in sentences above is a headless NP. This is possible due to a discourse context. For example, the sentence in (36) may be used when a speaker wants to ask someone to

take one of the available objects around them. This request is commonly accompanied by a ‘non-linguistic device’, such as pointing to the object that the speaker wants.

The headless NP, particularly a headless relative clause, is commonly used in ‘focus sentences’. These sentences are equational and normally establish an identity between ‘known’ or ‘presupposed’ entity and a ‘focused’ entity which represents new information. In terms of grammatical relations, the new information is contained in the predicate, and the presupposed information in the subject. This subject position in Balinese is filled by a headless relative clause. It seems that semantically the unexpressed head noun is a ‘neutral’ entity such as ‘the one’, ‘the person’, ‘the thing’, examples.

- (39) a. **Ane** **teka** **mai** **ibi** timpal tiang-e
 lig come here yesterday friend 1SG-POSS
 ‘The one who came yesterday is my friend’

The head noun in (39a) can be expressed as in (39b) below.

- b. **Anak** **ane** **teka** **ibi** timpal tiang-e
 person LIG come yesterday friend 1SG-POSS

The word order of this sentences can be subject-predicate or predicate subject. Thus sentences in (39) have the following alternatives.

- (40) a. Timpal tiange ane teka ibi
 b. Timpal tiange anak ane teka ibi

In Balinese a noun phrase can be used as a predicate of the sentence. This NP commonly indicates profession, consider the following examples.

- (41) a. Ia guru
 3SG teacher
 ‘S/he is a teacher’
 b. Ia dokter
 3SG doctor
 ‘S/he is a doctor’

The NP *guru* in (40a) and the NP *dokter* in(40b) functions as the predicate of the sentence.

7. 7 Summary

In this chapter the Foley's bondedness hierarchy is applied to Balinese. It is evident that the use of the ligature in Balinese is determined by two factors: syntactic and pragmatic. Syntactically a ligature cannot be used when the modifier is a possessor, but the ligature must be used when the modifier is a relative clause. With the other modifiers, the use of the ligature is optional. However, the optionality of the ligature is not simply a matter of free variation. It is determined by a pragmatic factor. For instance, when the modifier is an adjective, the ligature can be used or not.

If it is used it always implies a choice of the referent of the head noun. It is not necessarily so when it is not used.

In addition to describing nominal structure, a number of lexical nominalisations are also described such as ‘result’ and ‘agentive’ nominalisation. Another nominalisation is also described, namely turning a clause into a noun, which can be done in two different ways: by using the suffix *-an* and the possessive suffix *-e* (with its allomorph *-ne*) or by using a third person possessor *-ne*. Syntactically the nominalised clauses can function like non-derived noun phrases. They function as subject, patient complement or as the complement of a preposition.

SYNTACTIC TYPOLOGY

Chapter Eight

8.1 Introduction

Comrie (1988b) suggests that the overall aim of linguistic typology is to classify languages in terms of their structural properties, that is, in general to answer the question: what is language X like? It is also suggested that the enterprise of linguistic typology has two important presuppositions:

- (i) It is assumed that languages can be compared with one another in terms of their structures.
- (ii) Linguistic typology presupposes that there are differences among languages.

The first presupposition implies that there are universal properties of language, which can be used as the basis for comparison. Comrie (1988b) notes that the study of linguistic typology goes hand in hand with the study of language universals. The second presupposition implies that if there are no differences among languages, then all languages belong to the same type.

In principle, any structural property of any language could be chosen as the basis of linguistic typology. However, in carrying out linguistic typology the aim is to look for significant properties, in particular those from which one can predict others.

This chapter will look at Balinese in terms of syntactic typology. A range of syntactic constructions will be examined to determine whether they display accusative or ergative characteristics. A brief comparison will be made to an Australian Aboriginal language, Dyirbal, a language noted for having morphological and syntactic ergativity. In order to make a significant comparison, some concepts relevant to syntactic typology will be explained in the following section.

8.2 Ergativity and Accusativity

In the 'typological linguistics' literature, one finds the terms 'ergativity' and 'accusativity'. Ergativity or accusativity may be recognised at three distinct levels: morphology, syntax and discourse.

A language is said to show ergative morphological characteristics if the patient complement of a transitive verb (P) is marked in the same manner as the subject of an intransitive verb (S), and differently from the agent complement of the transitive verb (A). If the agent complement of a transitive verb (A) is marked in the same manner as the subject of an intransitive verb (S), and differently from the patient complement of a transitive verb (P), a language is said to show accusative characteristics (Dixon (1979) uses the labels S, O, and A, which were originally introduced in Dixon 1972 (see section 8.5)).¹

In English, as in many other languages, case, agreement and word order identify A with S and the whole system is unequivocally accusative. The English examples below are used to show an accusative system of marking. In these examples the subject of the intransitive verb (S) is identified with the agent of the transitive verb (A) as opposed to the patient of the transitive verb (P). The A and S occur in the nominative case, while the P occurs in the accusative

¹ I prefer P to O, as in Comrie (1978)

case. The agreement marked by the suffix *-s* on the verb is controlled by A and S. If we look at the word order, both A and S precede the verb.

- (1) He (S) runs.
- (2) He (A) hits her (P).

In some languages, like Avar (Northeast Caucasian), case, and cross-referencing agreement identify P with S and such languages can be typed as ergative or as having an ergative-absolutive system. Although the ergative cross-referencing is not a common phenomenon, it can be found in the Northeast Caucasian languages and the Mayan languages. For instance, in Avar, S and P are not marked for case but are cross-referenced, while A is marked for case but not cross-referenced. The cross-referencing consists of a prefix on the verb that marks the class to which the noun belongs. In (3) and (4) the prefix *v-* is used for masculine rational. The following examples are adapted from Tchekhoff (1979:71).

- (3) ci v-ac?-ula
man he-come-pres
'The man comes'
- (4) ebel-alda ci v-at-ula
mother-erg man he-discover-PRES
'Mother discovers the man'

Cooreman et al. (1984) point out that the ergative typology in morphosyntax first attracted the attention of linguists as a morphological phenomenon, but since the 1970's, following Dixon's (1972) description of Dyirbal and Woodbury's (1975) description of Eskimo, interest in ergativity shifted from its purely morphological earlier focus towards a more comprehensive syntactic one.

A language is said to show ergative syntax, if it has syntactic rules that treat P and S alike, and differently from A. Many languages which have an ergative morphology do not have ergative syntax; instead, syntactic rules seem to operate on an accusative principle, treating A and S in the same way (Anderson, 1976). It appears that there are no languages that are fully ergative, at either the syntactic or morphological level. However, Dyirbal, an Australian language of Northeast Queensland is unusual in that all major syntactic operations - those of relativisation and complementation as well as coordination - treat S and P in the same way. One of the syntactic rules in Dyirbal illustrated here is the treatment of coordination. According to Dixon (1979), in Dyirbal two clauses can be coordinated if the 'common' NP is in S or P function in each clause. The occurrence of the common NP in the second clause is usually deleted, and the whole biclausal construction can comprise one intonation group (Dixon, 1979). The following example is taken from Dixon (1987).

- (5) Marri Jani-nggu bura-n nyina-nyu.
Mary-ABS(P) John-ERG(A) see-NONFUT sit down-NONFUT

The above example (5) can only mean 'John saw Mary and Mary sat down'. No S NP is expressed for the intransitive verb *nyina-nyu* 'sit down'. In Dyirbal the unspoken S is taken to be identical to the P NP, *Mary*, of the previous transitive clause. So Dyirbal allows the deletion of an NP in a coordinated clause if it is identical to an NP in a previous clause in the chain, and if the NPs are in S or P function in each clause. Thus a syntactically ergative language is different from a syntactically accusative language. For example, in English, the

deleted NP in the second clause in 'John saw Mary and sat down' is identified with the subject NP (A) of the previous clause.

In addition to morphological and syntactic ergativity, ergativity may also be found at a discourse level. For instance, Verhaar (1988) suggests that ergativity in Indonesian can be identified in the level of discourse. He further notes that informal Indonesian discourse tends to be 'ergatively' organised, while the formal discourse is more 'accusatively' organised (see Verhaar 1988 for details).

8.3 Passive and Ergative

The distinction between 'passive' and 'ergative' has caused some confusion among many writers. The identification of these constructions will be mainly based on Comrie (1988c). Comrie (1988c:9) points out that this confusion may result from the lack of clarity in the criteria for considering a construction to be passive or ergative. He suggests the following criteria, which may be used to differentiate between passive and ergative constructions.

- (i) passive and ergative are alike in that both involve assignment of at least some subject properties to the patient rather than the agent, although the extent of this assignment is typically greater for passive;
- (ii) passive and ergative differ in that the ergative typically involves greater integration of the agent phrase into the syntax of the clause;
- (iii) passive and ergative differ in terms of markedness - the passive is a marked construction, whereas the ergative is typically an unmarked construction.

It is clear that the main argument put forward by Comrie (1988c) for considering an ergative construction to be like a passive construction is due to the fact that in both constructions, it is the patient that behaves like a subject. This identification is based on a (morphosyntactic) comparison with the sole argument of an intransitive predicate. In general, it is uncontroversial that the single argument of an intransitive predicate is the subject of that predicate; it is the subject by default. Thus, according to Comrie (1988c), by saying that some argument of a transitive verb is the subject of its clause, we are effectively claiming that it shares properties with the S of intransitive clauses, properties that are moreover not shared by the other argument of the transitive verb. These properties are subject properties. In prototypical passives (not in impersonal passives), the patient shares properties with the subject of the intransitive clause. These properties are not shared by the agent of the passive construction. English gives an excellent illustration for this point (see Comrie 1988c for further details). Another important feature that differentiates an ergative construction from a passive one is markedness. The verb is unmarked in ergative constructions, while it is morphologically marked in passive. Sierwieska (1984) points out that a prototypical passive construction has the following characteristics:

- a) the subject of the passive clause is a direct object in the corresponding active clause;
- b) the subject of an active clause is expressed in the passive in the form of an adjunct phrase or is left unexpressed;
- c) the verb is marked passive.

In addition to the structural characteristics above, one could add that passive constructions tend not to favour first and second person agents or indeed any pronominal agent (see chapter two)

Now we turn to the ergative construction. As noted in chapter two of this thesis, the patient of the \emptyset -construction (which is an ergative construction) in Balinese shares subject properties with the subject of an intransitive clause. In this respect, an ergative construction is like a passive construction in that the patient is a grammatical subject. However there are a number of significant difference between the ergative and the passive construction. For instance, an ergative construction differs from a passive construction in terms of the syntactic behaviour of the agent (A). If the patient and the agent of a passive construction, say the English passive, are compared in terms of their syntactic behaviour, a number of syntactic rules will refer to the patient, a few will refer to the agent, if any is applicable. In an ergative construction, as noted by Comrie (1988c), it is quite common for syntactic rules to refer to the agent. Thus one difference between the passive and ergative construction is that the integration of the agent is greater in the ergative construction than the passive construction. One manifestation of this greater integration is shown by verb agreement, which is extremely common with the agent in the ergative construction. It is also possible for the agent of the ergative construction to 'control' reflexivisation. That the integration of the agent (which is an agent complement) of the ergative construction is higher than the agent (which is an adjunct) of the passive can be shown by the fact that the agent of the prototypical ergative construction is not always omissible, but it is omissible, and in fact is normally omitted from the prototypical passive construction.

Markedness is the third criterion that distinguishes between passive and ergative constructions. The passive is viewed typically as a marked voice, contrasting with an unmarked active voice. The ergative, by contrast, is typically a manifestation of the unmarked voice, while the marked voice is the antipassive, which is a derived construction. As a derived construction, an antipassive commonly has an extra morpheme on the verb. This is in contrast with an ergative construction, which is an unmarked construction. The unmarked choice of the ergative seems to be quite 'natural'.

The notion of markedness is also defined in terms of 'frequency', 'formal complexity', and 'degree of productivity'. The ergative construction in an ergative language is more frequently used than the antipassive construction. In terms of formal complexity, the verb form of the ergative construction is less complex morphologically than the antipassive. If we look at the degree of productivity, the ergative form may be more productive than the antipassive form in the sense that not all the ergative verbs can be turned into an antipassive form. In many ergative languages, certainly in Australian ones, the antipassive is usually lexically restricted (B. Blake, personal communication).²

8. 4 Active and Antipassive

Let us now turn to the notions of active and antipassive constructions. The active construction is considered as a basic construction in an accusative language, whereas the antipassive is a derived construction in an ergative language. The term 'antipassive' was originally coined by Silverstein for a derived intransitive construction in an ergative language. Silverstein took it to be the analogue of passive construction. In a passive construction it is the agent of a transitive verb which is expressed as an adjunct. This adjunct can be omitted. In an antipassive construction it is the patient of a transitive construction which can be omitted from

² Some ergative languages do not have antipassive constructions at all (see Blake 1987 for Australian Aboriginal languages).

the clause. Dixon (1994) defines the antipassive derivation as a syntactic mechanism which applies to:

- (a) an underlying transitive clause and forms a derived intransitive;
- (b) the underlying A NP becomes S of the antipassive;
- (c) the underlying P NP goes to peripheral function, being marked by an oblique case, preposition, etc.; this NP can be omitted, although there is always the option of including it;
- (d) there is some explicit formal marking of an antipassive construction.

The notion of antipassive is illustrated in the following Yalamnga examples (adapted from Mallinson and Blake 1981:75). The normal transitive (ergative) construction is shown in (6a) and the antipassive in (6b).

- (6) a. Matyumpa-yu kukapi taca-mu
 kangaroo-ERG grass eat-PAST
 'The kangaroo ate the grass'
- b. Matyumpa kukapi-u taca-li-ma
 kangaroo grass-DAT eat-AP-PRES
 'The kangaroo eats grass'

In the antipassive construction, the verb is marked by the presence of the affix *-li-* and the agent appears without marking but the patient is marked by a dative case.

In addition to the syntactic point of view, Dixon (1994) also points out that semantically an antipassive construction focuses on the fact that the underlying A is taking part in some activity involving the object. This is in contrast with a passive construction, which focuses on the state which the referent of the underlying P is in, as a result of some action.

In Relational Grammar the term 'antipassive' is not confined to ergative languages, but can be used for a detransitivised construction in any language. However, a distinction in derived intransitives is made according to the fate of the demoted patient. If the patient is demoted to indirect object, this is called direct-to-indirect object retreat. If the patient is not demoted to indirect object then it is considered to have been demoted to *chômeur* status and the construction is referred to as antipassive.³

As has been discussed in chapter two, Balinese has two transitive structures: the \emptyset -construction and the N-constructions. Based on the above characterisation, the nasal construction is not a suitable candidate for an antipassive construction simply because the patient is not 'obliquely' marked, nor is it omissible, i. e. it is not an adjunct. However, if we look at the syntactic/pragmatic functions of this construction, it will be clear that it behaves like the antipassive in Dyirbal (see section 8. 6).

In summary, in an ergative construction it is the patient, not the agent, which shares properties with the subject of an intransitive clause. This is also true for a passive construction. In an active (nonergative) construction, it is the agent, not the patient, which shares subject properties with the subject of an intransitive clause. In the antipassive, it is the agent which has subject properties. Thus active and antipassive are similar in that the agent has subject properties.

³ A *chômeur* lacks grammatical properties of the terms relations (subject, object, indirect object). See chapter nine of this thesis.

8. 5 Dixon's Universal Syntactic-semantic Primitives

Dixon (1979 and 1994) points out that the confusion concerning the identity of the subject in ergative languages may result simply from the fact that linguistic theory is developed from better known languages of Europe, which have a predominantly accusative character at every level. Dixon also notes that for languages of this type, certain semantic and grammatical properties coincide to give a two-sided definition of subject in the sense that the subject of the sentence is the argument NP whose referent could be the 'agent' that initiates and controls an activity; the subject NP is normally obligatory in a sentence; receives the unmarked case; may be cross-referenced in the verb, and is the pivot for operations of coordination and subordination.

As has been described in (8. 3), it is the patient of an ergative construction (in a syntactically ergative language), not the agent, which has subject properties. Thus for ergative languages, the semantic and grammatical properties for subject do not coincide.

Dixon (1972) developed a system of grammatical description which may be used to describe grammatical phenomena in every language, regardless of its type. Thus, instead of using the terms 'subject' and 'object', he proposed the following pre-theoretical syntactic primitives:

- S - intransitive subject
- A - transitive subject
- O - transitive object

Dixon (1979 & 1994) claims that A, S, and O are universal core categories and he then defines the notion of 'subject' as a universal category in terms of these syntactic primitives. In this system A and S are grouped together as 'subject'. This is in line with his argument that every attempt to establish true typological universals must be semantically based. Thus the notion of subject is most likely to be established as a universal category if it is viewed from a semantic angle. However, looking at the S, O, and A relations, it must be noted that S is not always semantically agent. Since intransitive verbs generally fall into two categories: those that require an agent-like S and those that require a patient-like S.

For the purposes of this study the symbol O will be replaced by P. It has been shown in this thesis that the patient complement, P (or O in Dixon's terms) of a transitive construction behaves like a grammatical subject, thus it is a bit misleading to call it object. It is also necessary to note that other writers, for instance, Comrie (1978) used P in the place of O. Comrie argued that in ergative languages it is the P which has subject properties, not the A. But the notion of subject proposed by Comrie for ergative languages is totally different from that of Dixon. Comrie's subject can be referred to as 'surface subject' in ergative languages (S/P - the absolutive), while Dixon's term is 'deep subject' (S/A), which is applicable only to an 'underlying' structure. The term surface subject is comparable to Dixon's term (syntactic) 'pivot'.

What is a pivot? It seems that the term 'pivot' was introduced by Heath (1975). In order to describe coreferential identification in complex sentences, Heath uses two terms: 'controller' and 'pivot'. The controller noun phrase is the one in the higher clause, while the pivot is the noun phrase in the lower clause. Although he does not define the pivot, he considers the noun phrase in nominative case in a language like English is the pivot. Foley and Van Valin (1985:305) define pivot as any type of noun phrase to which a particular grammatical process is sensitive, either as controller or as target. Foley and Van Valin note that the subject is the pivotal noun phrase in English while in Dyirbal the object (sic) is the pivot.

Dixon (1979) argues that it is very important to distinguish between 'subject' and 'pivot'. For the two notions, Dixon (1979:121-122) writes:

'subject' is a universal category, defined on semantic-syntactic criteria.
'Pivot' is a language particular category that is entirely syntactic in nature and application. Subject is applicable only at the level of deep structure, pivot refers to derived functions

However, Dixon notes that if a language has a syntactic pivot, which is exclusively S/A, there is a temptation to use just one term, that is, either subject or pivot, but when a language has a significant S/P pivot, the two terms must be kept apart.

According to Dixon (1979, 1994), there are basically two varieties of pivot (some languages show just one type, other have a mixture of the two):

- (i) S/A pivot - the coreferential NP must be in derived S or A function in each or both clauses;
- (ii) S/P pivot - the coreferential NP must be in derived S or P function in each or both clause.

For the possibilities of combining clauses, English is noted as a language which works in terms of an S/A pivot, while Dyirbal in terms of an S/P pivot.

Assessing the typology of a language either in terms of morphology or syntax is not always a straightforward matter since it is common to find a mixture of ergative and accusative characteristics. At the syntactic level, making a decision as to whether a language shows ergative syntax (P is treated syntactically in the same way as S) or accusative syntax (A is treated syntactically like S) also involves considering several different types of syntactic construction.

8. 6 Syntactic Constructions

In relation to the problem mentioned towards the end of section 8. 5, a number of syntactic constructions, such as jussive complements, coordination, subordination, question formations. etc. will be discussed in order to see what are the specific characteristics of Balinese in terms of these syntactic processes.

8. 6. 1 'Want' and Similar Verbs

Non-finite verb forms usually lack an overt expression for one argument. This covert argument can be arbitrary as in 'To err is human' or it can be controlled, as in the following examples.

- (7) a. I want to leave
b. I want to see my family
- (8) I want to be arrested (by the police)

In (7a) the S of the dependent clause is taken to be coreferential with the S of the governing clause. In (7b) the A of the dependent clause is coreferential with the S of the governing clause. These examples show that S and A are treated in the same way. But when the underlying P of the dependent clause is coreferential with the S of the governing clause as in (8), the dependent clause must be passivised so that the coreferential argument noun phrase in

the dependent clause can be deleted.⁴

A different situation can be found in Balinese. This is illustrated by the following examples.

- (9) Tiang edot [] magedi
 1SG want leave
 'I want to leave'
- (10) Tiang edot [] tangkep polisi
 1SG want arrest police
 'I want the police to arrest me'

The example in (9) shows that the S of the dependent clause is coreferential with the S of the governing clause, while (10) shows that the P of the dependent clause is coreferential with the S of the governing clause. But when the S of the governing clause is coreferential with the underlying A of the dependent clause, a nasal construction (which is a derived construction) should be used. This is shown in the following example

- (11) Tiang edot [] nangkep polisi
 1SG want ACT. arrest police
 'I want to arrest the police'

In this respect, Balinese is quite different from English. When S and P are coreferential in Balinese, no syntactic derivation is needed as in (10), but when S and P are coreferential in English, a syntactic derivation is required as in (8). Thus it can be argued that Balinese works in terms of S/P pivot, while English works in terms of S/A pivot.

8. 6. 2 Jussive Complements

Semantically jussive complements can be regarded as indirect imperatives in that they have a main clause verb like 'tell' or 'order' as in 'I told him to come here' and 'I ordered him to do his work quickly'. Dixon (1979:114) states that the P of the main clause verb must be coreferential with the S or A of the complement clause. Since this clause describes an instruction that has been given to someone to do something, thus both S and A have the same possibilities of reference. This is a universal characteristic of jussive complements. However, in a syntactically ergative language (Dyirbal, Kalkatungu) the situation is different. The A becomes the S in the complement clause. The following are examples of jussive complements from Balinese.

- (12) Ia orahin tiang majalan enggal-enggal
 3SG tell 1SG go quickly
 'I told him/her to walk quickly'
- (13) Ia orahin tiang meli kopi
 3SG tell 1SG buy coffee
 'I told him/her to buy coffee'

The S of the jussive complement clause, *majalan enggal-enggal*, in (12) is coreferential with

⁴ When I use the term 'underlying', I do not imply some form of deep structure as in some model of Chomskian grammar (e. g. Chomsky 1965). All that is meant is basic versus derived. The underlying P of a passive verb is simply the P of the active.

the P of the main clause, and the underlying A of the complement clause, *meli kopi*, in (13) is coreferential with the P of the main clause. (13) shows that the underlying A in the complement clause is coreferential with the P of the main clause and the complement clause is nasalised. In Kalkatungu an antipassive construction would be used if the underlying A of the complement clause is coreferential with the P of the higher clause. Although one expects underlying S and A to be treated alike in jussive complements, there can still be syntactic ergativity as Balinese illustrates. In this language A is treated differently from S.

8. 6. 3 Coordination

Before discussing the possibilities of combining clauses in Balinese, I would like to review briefly what happens in Dyirbal when two clauses are linked together. Dyirbal is an Australian aboriginal language and is a celebrated example of a syntactically ergative language. The comparison between Balinese and Dyirbal is presented in order to show the similarities and differences between Dyirbal and Balinese. The following basic framework for pivot investigation, proposed by Dixon (1994), will be used as the basis for comparison to investigate the treatment of a common NP in two syntactically linked clauses in both languages.

(14) Both Clauses Intransitive

- (a) S1 = S2
first clause intransitive, second transitive
- (b) S1 = P2
- (c) S1 = A2
first clause transitive, second intransitive
- (d) P1 = S2
- (e) A1 = S2
both clauses transitive, one common NP
- (f) P1 = P2
- (g) A1 = A2
- (h) P1 = A2
- (i) A1 = P2
both clauses transitive, two common NPs
- (j) P1 = P2 and A1 = A2
- (k) P1 = A2 and A1 = P2

Dixon (1972, 1979, and 1994) claims that Dyirbal has ergative syntax. That is, two clauses in this language can be coordinated if they involve a common NP which is in S or P function in each clause. Thus Dyirbal works in terms of S/P pivot in which S and P are treated alike, and differently from A.

With respect to the 11 possibilities listed above, the coordination of two clauses in (a), (b), (d), (f) and (j) are straightforward, no syntactic derivation is needed. But when the common NP is in S or P function in the first clause but in A for the second - as in (c), (h) and (k) - the second clause must be antipassivised. The following examples, which are adapted from (Dixon (1972 and 1994), illustrate some of these possibilities.

(b) S1=P2

- (15) Nguma banaga-nyu yabu-nggu bura-n
 father return-NONFUT mother-ERG see-NONFUT
 'Father returned and mother saw father'

(d)) P1=S2

- (16) Nguma yabu-nggu bura-n banaga-nyu
 father mother-ERG see-NONFUT return-NONFUT
 'Mother saw father and father returned'

In (15) there is no P NP stated for the verb *buran* 'look' in the second clause. It is taken to be identical to the S NP of the preceding clause. But in (16) the S NP for the verb *banaga-nyu* in the second clause is deleted. It is taken to be identical with the P of the first clause.

(f) P1=P2

- (17) bayi yara banggul gubi-nggu munda-n
 the man the-ERG doctor-ERG bring-NONFUT
 (bayi yara) banggun djugumbiru balga-n
 the man the-ERG woman-ERG hit-NONFUT
 'The man was brought here by the doctor and he was hit by the woman'

When the common NP is P function in both clauses in Dyirbal, these two clauses can be coordinated simply by juxtaposition and the coreferential NP can be deleted from the second clause. This is shown in (17) in which the P NP *bayi yara* 'the man' can be deleted from the second clause. But when the P in the first clause is coreferential with the A in the second

clause, the the second clause should be antipassivised.⁵ This is shown in the following example.

(h) P1=A2

- (18) bayi yara banggul gubinggu mundan
 the man the-ERG doctor-ERG bring-NONFUT
 (bayi yara) banggun djugumbiru balgal-nga-nyu
 the man the-DAT woman-DAT hit-AP-NONFUT
 'The man was brought here by the doctor and he hit the woman'

The following example shows the S in the first clause is coreferential with the underlying A in the second clause, and the the second clause is antipassivised.

(c) S1=A2

⁵ The term 'antipassive' is used here as in Dixon 1979 and the typological literature generally. Since the underlying P is encoded in the dative, it may be that this is what is called direct-indirect object in Relational Grammar. See section 8. 4.

- (19) Ngama banaga-nyu bural-nga-nyu nyurra-ngu
 we return-NONFUT see-AP-NONFUT you-DAT
 'We returned and saw you'

The conclusion that can be drawn from the examples in (14) through (19) is that two clauses in Dyirbal can be coordinated to form a complex sentence construction if they have a common NP and the pivot condition is satisfied and this pivot works in terms of S/P pivot. But when the common NP is in S or P function in the first clause, but underlying A in the second clause, the second clause must be antipassivised because the pivot condition on coordination is not met.

Let us now turn to Balinese examples. The following examples will show that Balinese also works in terms of an S/P pivot.

(a) S1=S2

- (20) Ia teka mai lantas Ø magedi enggal-enggal.
 3rd come here then go quickly
 'S/he came here and then went out quickly'

(b) S1=P2

- (21) Ia teka mai lantas Ø tundung tiang
 3SG come here then chase away 1SG
 'S/he came here and then I chased her away'

(d) P1=S2

- (22) Ia opak tiang lantas Ø ngeling
 3SG scold 1SG then cry
 'I scolded her/him and then s/he cried'

(f) P1=P2

- (23) Ia aba tiang mai lantas Ø lempag cai
 3SG bring 1SG here then hit 2SG
 'I brought her/him here and then you hit her/him'

(j) P1=P2 and A1=A2

- (24) Umah-e ento beli cai lantas Ø adep cai buin⁶
 house-DEF that buy 2SG then sell 2SG again
 'You bought the house and then you sold it again'

These examples show that there is no syntactic derivation needed. Both clauses in (20) are intransitive. In (21) the S is coreferential with the P of the second clause and this P can be deleted. The opposite situation can be found in (22) in that the P of the first clause is coreferential with the S in the second clause, and this S is deletable. In (23), the P is coreferential with the P in the second clause, and this P is omitted. The example in (24) shows

⁶ The pronoun *cai* in the first clause is coreferential with *cai* in the second clause.

that both P and A in the first clause are coreferential with the P and A in second clause. However, only the P can be deleted in the second clause. The A in the second clause is not deletable. According to Dixon (1994), in Dyirbal if P1=P2 and A1=A2, both P2 and A2 may be omitted from the second clause.

The following examples show what happens if S is not coreferential with P, but with the underlying A.

(c) S1=A2

- (25) **Ia** teka mai lantas Ø nundung tiang
 3SG come here then ACT. chase away 1SG
 'S/he came here and then chased me away'

(e) A1=S2

- (26) **Ia** ngaba ene mai lantas Ø mulih
 3SG ACT. bring this here then go home
 'S/he brought this here and then went home'

In (25) the S of the first clause is coreferential with A in the second clause. The second clause should be turned into a nasal construction so that the agent (or a derived S in Dixon's term) can be omitted. Thus the nasal construction in this example behaves syntactically like the antipassive in Dyirbal. In (26) the agent in the first clause is coreferential with the S in the second clause, so the first clause should be nasalised.

(g) A1=A2

- (27) **Cai** ngematiang radio malu lantas O ngidupang TV
 2SG ACT. turn off radio first then Ø ACT. turn on TV
 'You turned the radio off first and then watched TV'

h) P1=A2

- (28) **Anake** **ento** aban=a taken dokter-e lantas
 person that bring=3SG by doktor-DEF then

(Anake ento) nglempag anake eluh ento
 person that ACT. hit person female that
 'The doctor brought the man and then (the man) hit the woman'

In (27) where A1=A2, both clauses in Balinese must be nasalised so that the common NP can be omitted from the second clause. In Dyirbal, as noted by Dixon (1994), when A1=A1, both clauses must be antipassivised to feed S/P pivot. When P1=A2, the second clause should be nasalised as in (28).

(k) P1=A2 and A1=P2

To express this possibility both clauses can be coded by a Ø-construction as in (29) or by a nasal construction in (31) or either of the two can be expressed in a nasal construction or Ø-construction in (30) and (31). Each of these possibilities is illustrated by the following

examples.

- (29) **Tiang** **telpun** **cai** **malu** **lantas** **cai** **telpun** **tiang**
 1SG ring 2SG first then 2SG ring 1SG
 'You rang me first and then I rang you'
- (30) **Tiang** **telpun** **cai** **malu** **lantas** **tiang** **nelpun** **cai**
 1SG ring 2SG first then 1SG ring 2SG
 'You rang me first and then I rang you'
- (31) **Cai** **nelpun** **tiang** **malu** **lantas** **tiang** **nelpun** **cai**
 2SG ring 1SG first then 1SG ring 2SG
 'You rang me first and then I rang you'

It is clear from these examples that the common NP cannot be omitted from the second clause. However, in addition to the possibilities described above, in Balinese there are other possibilities of combining two clauses which are semantically/pragmatically determined. This can be seen from the following illustrative examples.

- (32) **Nyai** **ngaba** **buku-ne** **mai** **lantas** **Ø** **ejang** **tiang** **ditu**
 2SG ACT. bring book-DEF here then put 1SG there
 'You brought the book here and then I put it there'
- (33) **Buku-ne** **aba** **nyai** **mai** **lantas** **Ø** **ejang** **tiang** **ditu**
 book-DEF bring 2SG here then put 1SG there
 'You brought the book here and then I put it there'
- (34) **Nyai** **ngaba** **buku-ne** **mai** **lantas** **Ø** **tunden** **tiang** **kema**
 2SG ACT. bring book-DEF here then ask 1SG there
 'You brought the book and then I asked you to go there'

In (32) and (33) the P1 and P2 are coreferential. The first clause in (32) has a nasal verb, while the first clause in (33) has basic verb. The deleted NP in the second clause in (33) is coreferential with the P of the first clause. Syntactically the Ø NP in the second clause in (32) is expected to be the agent (*nyai*) of the first clause, as is shown in (34) in which the Ø NP in the second clause is coreferential with the agent (*nyai*) in the first clause. But this possibility is blocked pragmatically in (32) in that the syntactic constraint is overridden by a pragmatic factor. What seems to be important here is the meaning of the verb. In (32) the action performed by the agent in the second clause can only refer to the activity of putting the book, not putting the person (*nyai*). A similar explanation can be applied to (35) and (36) below. Syntactically it is expected that the missing constituent in the second clause is coreferential with the subject of the first clause in (35). However, pragmatically this is not possible since naturally it is only the fish, not the person who brought it, that can be fried. A similar situation is also found in (36). It is natural to ask the person who brought the fish to go, not the other way around.

- (35) **Cai** **ngaba** **be** **lantas** **Ø** **goreng** **tiang**
 2SG ACT. bring fish then fry 1SG
 'You brought some fish then I fried them'

- (36) **Cai** ngaba be lantas Ø tunden tiang magedi
 2SG ACT. bring fish then ask 1SG go
 'You brought some fish then I asked you to go'

The description of coreferential deletion in coordination in Balinese shows that the function of the N-construction in this language is similar to the antipassive construction in Dyirbal. Balinese has an S/P pivot but the principle can be overridden pragmatically as in (32).

8. 6. 4 Subordination

Two kinds of subordinate clause will be provided in this section: purposive clauses and adverbial clauses. Purposive clauses have been discussed in chapter five. In this section the purposive clause and the adverbial clause are described in order to find out whether Balinese works in terms of an S/P pivot or not.

The combination of the possibilities in (a), (b), (d), (f) and (j) is straightforward in that no syntactic derivation is needed. Note that the (b) sentences present the alternative order in which the subordinate clause is placed at the beginning of the sentence.

(a) S1=S2

- (37) a. **Ia** teka mai apang Ø bisa ngorta
 3S come here so that can chat
 'S/he came here so that s/he could chat'

b. *Apang Ø bisa ngorta, ia teka mai*

(b) S1=P2

- (38) a. **Ia** teka mai apang Ø bisa tulungin tiang
 3SG come here so that can help 1SG
 'S/he came here so that I could help her/him'

b. *Apang Ø bisa tulungin tiang, ia teka mai.*

(d) P1=S2

- (39) a. **Ia** alusin tiang apang Ø pules dini
 3SG persuade 1SG so that sleep here
 'I persuaded her/him so that s/he could sleep here'

b. *Apang Ø nyak malajah, ia alusin tiang*

(f) P1=P2

- (40) a. **Ia** aba tiang mai apang Ø bisa ajahin cai
 3SG bring 1SG here so that can teach 2SG
 'I brought her/him here so that you could teach her/him'

b. *Apang Ø bisa ajahin cai, ia aba tiang mai*

(j) P1=P2 and A1=A2

- (41) a. **Ia** **aba** *tiang* **mai** **apang** **Ø** **bisa** **ajahin** *tiang*
 3SG bring 1SG here so that can teach 1SG
 ‘I brought her/him here so that I could teach her/him’
 b. *Apang Ø bisa ajahin tiang, ia aba tiang mai*

A different situation can be found if the S is not coreferential with the P, but with the underlying A function. This is shown in the following examples

(c) S1=A2

- (42) a. **Ia** **mulih** **apang** **Ø** **bisa** **nepukin** **cai**
 3SG go home so that can ACT. see 2SG
 ‘S/he went home so that s/he could see you’
 b. *Apang Ø bisa nepukin memenne, ia mulih*

(e) A1=S2

- (43) a. **Ia** **ngaba** **jaja** **apang** **Ø** **bisa** **teka** **mai**
 3SG ACT. bring cake so that can come here
 ‘S/he brought some cakes so that s/he could come here’
 b. *Apang Ø bisa teka mai, ia ngaba ene mai*

(g) A1=A2

- (44) a. **Ia** **nyewa** **montor** **apang** **Ø** **bisa** **ngajak** **cai**
 3SG ACT. hire car so that can ACT. bring 2SG
 ‘S/he hired a car so that s/he could bring you’
 b. *Apang Ø bisa ngajak cai, ia nyewa montor*

(h) P1=A2

- (45) a. **Ia** **aba** **tiang** **mai** **apang** **Ø** **bisa** **ngajahin** **cai**
 3SG bring 1SG here so that can ACT. teach 2SG
 ‘I brought her/him here so that s/he could teach you’
 b. *Apang Ø bisa ngajahin cai, ia aba tiang mai*

(k) P1=A2 and A1=P2

- (46) a. **Ia** **aba** *tiang* **mai** **apang** **Ø** **bisa** **nulungin** *tiang*
 3SG bring SG here so that can ACT. help 2SG
 ‘I brought her/him here so that s/he could help me’
 b. *Apang Ø bisa nulungin tiang, ia aba tiang mai.*

When S1=A2 and P1 =A2, the verb in the subordinate clause should be nasalised as shown in

(42) and (45). When A1=A2, both clauses should be nasalised so that the occurrence of the common NP in the subordinate clause can be deleted. This is shown in (44). Note that it is always possible to have an overt NP in the place of Ø in (43) to (46).

In addition to purposive clauses given above, adverbial clauses in Balinese also show a similar characteristics. Consider the following examples

P1=S2

- (47) a. **Lelipi-ne** lempag tiang sedekan Ø majalan
 snake-DEF hit 1SG when walk
 'I hit the snake when it was moving'
- b. *Sedekan Ø majalan, lelipine lempag tiang*

P1=A2

- (48) a. **Tiang** tepukin cai dugas Ø meli buku ditu
 1SG see 2SG when ACT. buy book there
 'You saw me when I bought a book there'
- b. *Dugas Ø meli buku ditu, tiang tepukin cai*

In (47) where S1=P2, no syntactic derivation is necessary in order to delete the common NP in the subordinate clause, but when the P1=A2, the verb in the subordinate clause should be nasalised as in (48).

8. 7 Question Formation

It seems that S and P functions are the unmarked choice in terms of forming an 'information question' in that they can be questioned. This is illustrated by the following examples.

- (49) a. Ia teka mai ibi
 3SG come here yesterday
 'S/he came here yesterday'
- b. **Nyen** teka mai ibi?
 who come here yesterday
 'Who came here yesterday?'
- (50) a. Ia tunden cai teka mai
 3SG ask 2SG come here
 'You asked her/him to come here'
- b. **Nyen** tunden cai teka mai?
 who ask 2SG come here
 'Who did you ask to come here?'

- c. *Ia tunden nyen teka mai?
 3SG ask who come here
 'Who asked her/him to come here?'

The sentence in (49) is an intransitive sentence and the S can be questioned as shown in (49b). The example in (50) is a transitive sentence. The P in this sentence can be questioned as shown in (50b), but the A is not accessible for questioning as (50c) shows. In order to make the A in (50) to be accessible for question formation, this sentence should be turned into a nasal construction as shown in (51a) below.

- (51) a. Cai nunden ia teka mai
 2SG ACT. ask 3SG come here
 'You asked her/him to come here'

Then the agent, which is now the subject, can be questioned as shown in (51b) below.

- (51) b. Nyen nunden ia teka mai
 who ACT. ask 3SG come here
 'Who asked her/him to come here?'

Based on the above examples, it can be said that Balinese works in terms of an S/P pivot in the formation of information questions.

8.8 The Emphatic Markers *ene* and *ento*

Personal pronouns in Balinese can be modified by morphemes *ene* 'this' and *ento* 'that'. These morphemes can be considered to function as an emphatic marker of the preceding pronoun or to indicate that the preceding pronoun is stressed. However, the use of this demonstrative is restricted to the grammatical subject (S/P). Consider the following examples.

- (52) a. Ia suba kema.
 3SG ASP there
 'S/he has gone there'

- b. Ia ento suba kema
 2SG that ASP there
 'S/he (stressed) has gone there'

- (53) a. Ia suba tepukin tiang.
 3SG ASP meet 1SG
 'I have met her/him'

- b. Ia ento suba tepukin tiang.
 3SG that ASP meet 1SG
 'I have met her/him (stressed)'

- c. *Ia suba tepukin tiang ene
 3SG ASP meet 1SG this
 '*I (stressed) have met her/him'

d.	Tiang	ene	suba	nepukin	ia
	1SG	this	ASP	ACT. meet	3SG
	'I (stressed) have met her/him'				

The sentence in (52) is an intransitive sentence and the S is followed by *ento* in (52b). The sentence in (53) is a transitive one. When the P is marked by *ento* the sentence is acceptable. But when the A is modified by *ene*, as shown in (53c) the sentence is not acceptable. However, the agent can be modified if the sentence is changed from a \emptyset -construction into a nasal one as shown in (53d). In this way, the agent is turned into a grammatical subject.

8.9 Summary

A syntactic comparison between Dyirbal and Balinese has been made. Dyirbal is noted as an ergative language although it is not fully ergative because first and second person pronouns in Dyirbal are marked nominative-accusative. However, Dyirbal is claimed to have an entirely ergative syntax in that major syntactic constructions in this language work in terms of S/P pivot. Balinese also works in terms of S/P pivot. However, Balinese differs from Dyirbal in that Dyirbal shows a strict syntactic constraint in terms of coreferential deletion. The syntactic constraint in Balinese can sometimes be overridden by a pragmatic factor. In this case, it is possible to have 'pragmatic' coreferential deletion in this language.

Given this fact, the question that can be raised is whether classifying languages into accusative or ergative is an insightful practice or not, since it is often reported in the literature that there are no languages which are fully accusative or ergative. If we speak in terms of discreteness, I believe nothing is clearly discrete in language. If speak in terms of degree, we can then say that a given language is ergative or accusative to a lesser or greater extent.

However, based on the fact discussed in this chapter, it can be argued that Balinese is an analytic ergative language. This means that the patient argument (P) of the unmarked transitive verb is treated in the same way as the sole argument (S) of a one-place predicate in terms of word order. It is only P and S that can be relativised, questioned, or modified by an emphatic marker. Moreover, it is P and S that serve as the unmarked pivot for coreferential deletion in coordination and subordination.

Note that the distinction between nasal and non-nasal intransitive verbs in Balinese is not relevant syntactically. The split within the subject of intransitive verbs does not show up elsewhere in the grammar. In general all intransitive subjects are treated alike in terms of syntactic rules. In the unmarked order the subject of an intransitive predicate precedes the verb irrespective of whether the subject belongs to the agent group or the patient group. We do not have the situation found in Italian where the unmarked position for agent subjects is before the verb and the unmarked position for patient subjects is after the verb.

BALINESE AND SYNTACTIC THEORIES

Chapter Nine

9.1 Introduction

In the previous chapter it was argued that Balinese is a syntactically ergative language. Most linguistic theories have been developed on the basis of accusative languages, principally English, and syntactic ergativity can be problematic for such theories. In this chapter, two well known theories will be confronted with Balinese. The first is Relational Grammar, a theory developed by Perlmutter and Postal in which grammatical relations are taken to be primitive.¹ The second is Chomsky's Government and Binding Theory in which grammatical relations are treated configurationally.

9.2 Relational Grammar

In Relational Grammar (RG) grammatical relations are treated as primitives rather than being defined in terms of configuration as in Chomskian grammar (see section 9.3 below). Three purely syntactic relations are recognised (subject, direct object and indirect object) plus a number of semantic relations such as locative, benefactive and instrumental, collectively known as obliques. The syntactic relations are considered to form a hierarchy of the form shown in (1) and the numbers 1, 2 and 3 are commonly used to designate the corresponding relations,

- (1) subject direct object indirect object obliques
 1 2 3

In early RG it was considered that there was a universal alignment of semantic role and initial grammatical relation. Subsequently it was realised that the alignment is not universal (Rosen 1984), but it remains true that an agent is taken to be an initial 1, a patient an initial 2 and usually a recipient is taken to be an initial 3. The theory is multistratal. Between the initial stratum and final stratum there can be any number of intermediate strata. The dependents of the predicate (P) can undergo revaluation between one stratum and the following one, either advancement (revaluation up the hierarchy) or demotion (revaluation down the hierarchy).

Applying the theory to the banana planting sentences in (2a) and (2b) below we find the following alternatives. First of all we will apply the type of analysis found in Bell's treatment of Cebuano where the patient-subject construction is taken to be passive (Bell 1983). The N-construction would be taken to be a unistratal active clause,

- (2) a. Tiang mula biyu di tegal-e
 I N-plant banana at garden-DEF
 1 P 2 LOC

¹ Two theories that could be said to have an ergative bias are John Anderson's Localist Grammar (1971) and Starosta's Lexibase (1988).

The Ø-construction on the other hand would be treated as a passive. In the RG version of passive the direct object (2) advances to subject (1) and displaces the initial stratum subject which is described as being pushed into chômage. A chômeur (CHO) lacks the grammatical properties of the term relations (subject, direct object, indirect object). The Ø-construction corresponding to (2a) above would be allotted the following analysis,

(2)	b.	Biyu	pula	tiang	di	tegal-e
		banana	plant	1SG	at	garden-DEF
		2	1			LOC
		1	CHO			LOC

This analysis is open to the objections raised in section 2. 3 in chapter two. The agent is certainly a complement in the Ø-construction not an adjunct and it has certain properties normally associated with an agent complement namely that it can be the addressee of an imperative and the controller of a reflexive.² In other words the agent would appear to be a term. The worst aspect of this analysis is that the unmarked construction is treated as involving a revaluation and the marked construction as being unistratal.

Besides the primitive relations of subject and direct object RG also recognises two defined relations; namely ergative and absolutive. Ergative refers to the 1 of a transitive stratum, i.e. the 1 of a stratum in which there is also a 2. Absolutive covers the 2 of a transitive stratum and the nuclear term (1 or 2) of an intransitive stratum. Using these notions RG can provide the following analysis in which the Ø-construction is taken to be unistratal (an active, transitive) and the N-construction multistratal (a derived intransitive). The Ø-construction would be allotted the relations shown in (3a)

(3)	a.	Biyu	pula	tiang	di	tegale
		2	P	1		LOC

The N-construction would have the same initial stratum but there would be some form of detransitivisation either antipassive or direct-to-indirect object retreat. In the antipassive the 2 goes into chômage. Since RG does not allow spontaneous chômage, a revaluation has to be posited that involves a dependent being revalued to 2 and pushing the initial stratum 2 into chômage. It is posited that the initial 1 retreats to 2 and pushes the initial 2 into chômage. The new 2 then advances back to 1 to fulfil the demands of the Final 1 Law (there must be a subject in the final stratum) as in (3b).

b.	Tiang	mula	biyu	di	tegale
	1	P	2		LOC
	2	P	CHO		LOC
	1	P	CHO		LOC

It is not clear that the initial 2 is in fact a chômeur. If one decides that it still has the properties of a term, then one can analyse the N-construction as involving direct-to-indirect object retreat as in (3c)

² See examples (43) and (40) in chapter two.

c.	Tiang	mula	biyu	di	tegale
	1	P	2		LOC
	1	P	3		LOC

This analysis assumes that indirect objects are not marked differently from direct objects. Such an analysis was originally proposed for symmetric object languages like Kinyarwanda where two postverbal noun phrases exhibit object properties (Perlmutter and Postal 1983).

To show how the derived relations, ergative and absolutive, apply it is necessary to consider intransitive predicates. First of all let us consider that all one-place predicates simply have an initial and final 1 as in (4)

- (4) Tiang ngeling 'I cry'
 1 P

Generalisations covering the preverbal NP can be captured in terms of absolutive which covers the 2 of (3a), the 1 of the derived intransitive (3b), (3c) and the 1 of the one-place intransitive. Note that for the absolutive to be appropriate it is essential that the N-construction be intransitive. The ergative relation will cover the 1 in the \emptyset -construction. Generalisations about the addressee of imperatives and the controller of reflexives will be based on the 1 relation irrespective of level or stratum.

Besides figuring in rules of word order (the absolutive precedes the verb), the absolutive will figure in rules of relativisation (only the absolutive can be relativised), rules of raising (only the absolutive can be raised) and rules dealing with nonfinite verbs (the absolutive must be covert).

Since RG has two sets of nuclear relations available (subject and direct object on the one hand and ergative and absolutive on the other) there is no mixture of accusative and ergative systems that it cannot handle. This is not entirely a good thing. The RG model would work equally well for any mixture of accusative and ergative system. As far as the RG model is concerned it could be a coincidence that all the syntactic rules of Balinese, save those that are very much tied to semantic roles, operate in terms of the absolutive. I doubt if any linguist of any persuasion would think that this is a coincidence. Another related deficiency is that the RG model fails to bring out the fact that in Balinese the absolutive is at the top of the hierarchy of grammatical relations.

Now let us look further at intransitive predicates. In some languages one finds that the subject of some intransitive predicates is marked in the same way as the subject of a transitive verb while the subject of the other intransitive predicates is treated like the object of a transitive verb. RG has also found covert syntactic evidence of such a distinction in a large number of languages including English (see Perlmutter and Postal 1984). A single-argument predicate where the argument shows some form of alignment with a direct object is known as an unaccusative and is allotted an initial stratum 2. A single-argument predicate where the argument aligns with the subject of a transitive verb is called unergative and is assigned an initial 1. The distribution of the nasal prefix in Balinese divides intransitive predicates into two groups, which one might call an agent group and a patient group. On the bases of RG analyses of intransitive predicates in other languages one would naturally take the agent group to be unergatives and assign them an initial 1, and to take the patient group to be unaccusatives and assign them an initial 2. This initial 2 would advance to 1 in the final stratum as shown in (6).

(5) Tiang ngeling [N-eling] 'I cried'
 1 P

(6) Tiang ulung 'I fell'
 2 P
 1 P

The problem with this analysis is that the marked construction is given a unistratal analysis (5), while the unmarked construction is considered to reflect a revaluation. Ideally the marking on the verb (N-, -in, etc.) should reflect revaluations and there should be consistency in the relation between the marking and the revaluations; in particular, the nasal prefix should reflect the same revaluation with any verb. Informally, the nasal prefix marks agent subject as opposed to patient subject and it suggests that the agent is the marked choice for subject.

There are two revisions to standard RG that one could consider. The first comes from DeGuzman who applies it to Tagalog. Tagalog is analysed as an ergative language. DeGuzman (1988) notes that in Tagalog the term 2 plays a central role in a number of syntactic processes. This relation is comparable to the term 1 in accusative languages, which is the primary relation in these types of language. So in her RG analysis of Tagalog she dismisses the final 1 law. She finishes up her analysis with final 2. The agent of the antipassive is assigned a final 2 instead of final 1. The sole argument of a one-place predicate is also assigned final 2. This means that generalisations involving relativisation etc. are based on 2, e.g. only a 2 can be relativised.

The second possibility is to revise the normal alignment of role and nuclear relation and to posit that in syntactically ergative languages the patient is the initial 1 and the agent the initial 2. Let us see how this works out with the banana planting examples. The Ø-construction is given the following unistratal analysis,

(7) Biyu pula tiang di tegale
 1 P 2 LOC

The N-construction will involve the advancement of 2 to 1. There are various possibilities for the initial 1. It could simply be pushed into chômage by an operation analogous to the passive or it could go spontaneously to 3. In the latter case the initial 2 would advance to 1 to provide a Final 1. It is also possible for the initial 1, second stratum 3 to advance to 2 as shown in (10).

passive analogue

(8) Tiang mula biyu di tegale
 2 P 1 LOC
 1 P CHO LOC

1-3 demotion

(9) Tiang mula biyu di tegale
 2 P 1 LOC
 2 P 3 LOC
 1 P 3 LOC

1-3-2

(10)	Tiang	mula	biyu	di	tegale
	2	P	1		LOC
	2	P	3		LOC
	1	P	3		LOC
	1	P	2		LOC

The advancement of an oblique will be directly to 1,

(11)	Tegale	pulanin	tiang	biyu
	LOC	P	2	1
	1	P	2	CHO

And the choice of an agent subject in a clause with the advancement of an oblique will result in two advancements to 1 as in (12).

(12)	Tiang	mulanin	tegale	biyu
	2	P	LOC	1
	2	P	1	CHO
	1	P	CHO	CHO

This would be contrary to the 1 Advancement Exclusiveness Law which prohibits more than one advancement to 1 in a clause. This law has proved troublesome anyway (see, for instance, Gerdts 1980).

The sentence in (13a) has an instrumental oblique. This oblique is promoted as subject in (13b) and the former subject is expressed as a chômeur relation marked by the preposition ka. (13c) is the nasal alternative construction of (13b).

(13)	a.	Cicing-e	lempag	tiang	aji	sampat
		dog-DEF	hit	1SG	with	broom
		1	P	2	INST	
	b.	Sampat	lempagang	tiang	ka	cicinge
		INST	P	2	1	
		1	P	2	CHO	
	c.	Tiang	nlempagang	sampat	ka	cicinge
		2	P	INST	1	
		2	P	1	CHO	
		1	P	3	CHO	

If we apply the agent-2 patient-1 alignment to one-place verbs, then we find that unmarked verbs require no advancement as in (14) and nasal verbs reflect the advancement of 2 to 1 as in (15).

(14) Tiang ulung 'I fell.'
 1 P

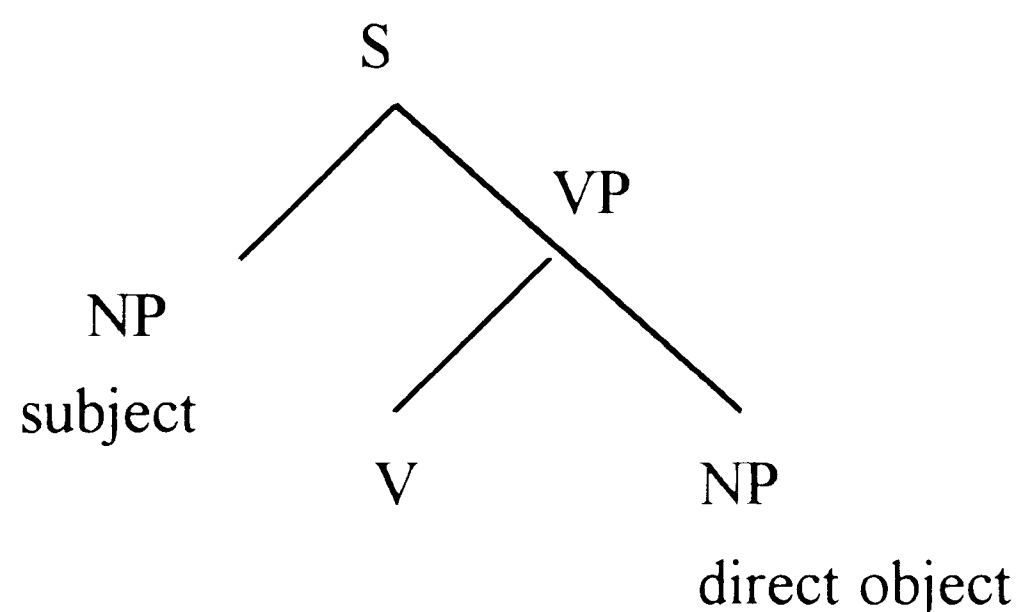
(15) Tiang ngeling [N-eling] 'I cried.'
 2 P
 1 P

This means that the marking reflects revaluation and the nasal consistently reflects 2-1 advancement.

9.3 The Configurational Approach

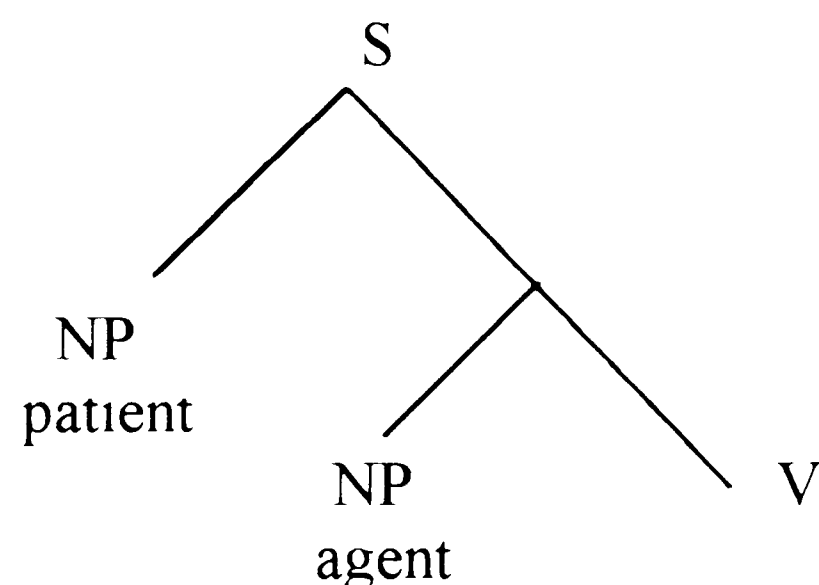
In Chomsky's versions of syntactic theory grammatical relations are treated configurationally, i.e. in terms of the position they occupy in the structure (Chomsky 1957, 1965, 1981). In the earlier models the subject was taken to be the NP immediately dominated by the sentence node (S) and the direct object to be NP immediately dominated by the verb phrase (VP),

(16)



Dixon applied the 1965 Aspects model to Dyirbal. Dyirbal is syntactically ergative so Dixon took the patient of a transitive verb to be the NP immediately dominated by S along with the sole argument of an intransitive verb. The agent of a transitive verb was taken to be the NP immediately dominated by VP. The structure of a transitive clause was as in (17)

(17)

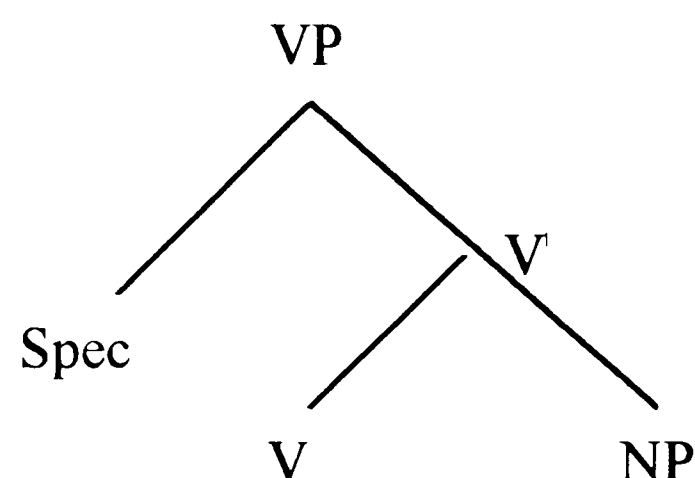


In the derived intransitive construction the agent raised to the subject position.

This analysis is analogous to the RG analysis sketched above in which a patient is taken to be an initial stratum 1 and the agent an initial stratum 2. It can readily be applied to Balinese and it provides a means of capturing the fact that all syntactic rules in Balinese operate in terms of the absolutive. In this analysis, however, reflexives where the controller is not the subject and the reflexive pronoun is are left as anomalies (see example (26)).

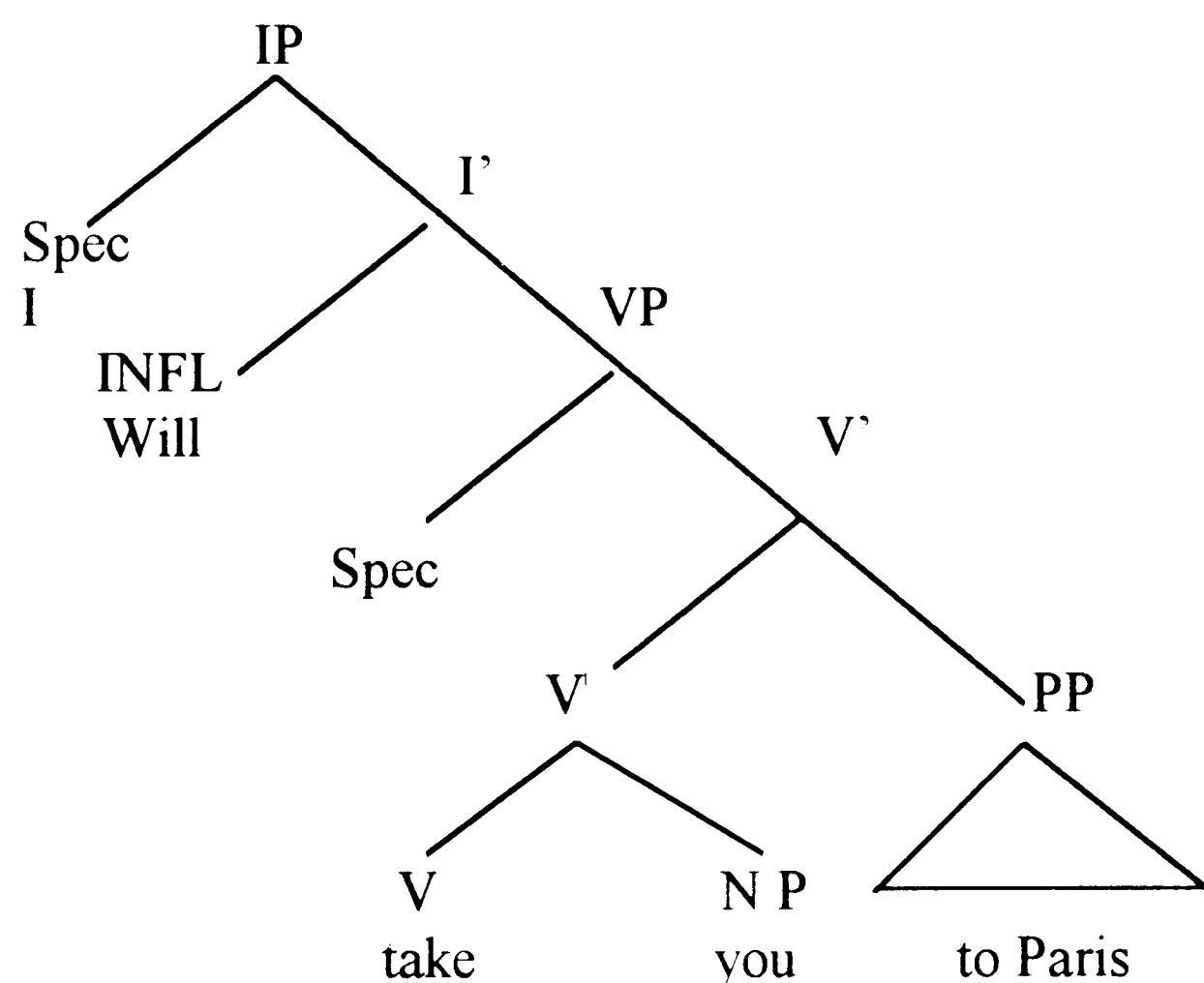
In the more recent Government and Binding Theory (Chomsky 1981) each phrasal category shows a binary split into a specifier and another constituent consisting of the head and its complement. The VP is illustrated in (18)

(18)



The V' (Vbar) level is iterative and it is at this level that adjuncts and other complements are introduced. The head of the sentence is taken to be an abstract element called INFlection. The INFL phrase splits into a specifier and I' which in turn splits into INFL and its complement which is the VP. The structure of the sentence *I will take you to Paris* is shown in (19). INFL consists of features for tense and agreement. In (19) this position in the structure is filled by the auxiliary. In a clause without an auxiliary the verb is raised to INFL.

(19)



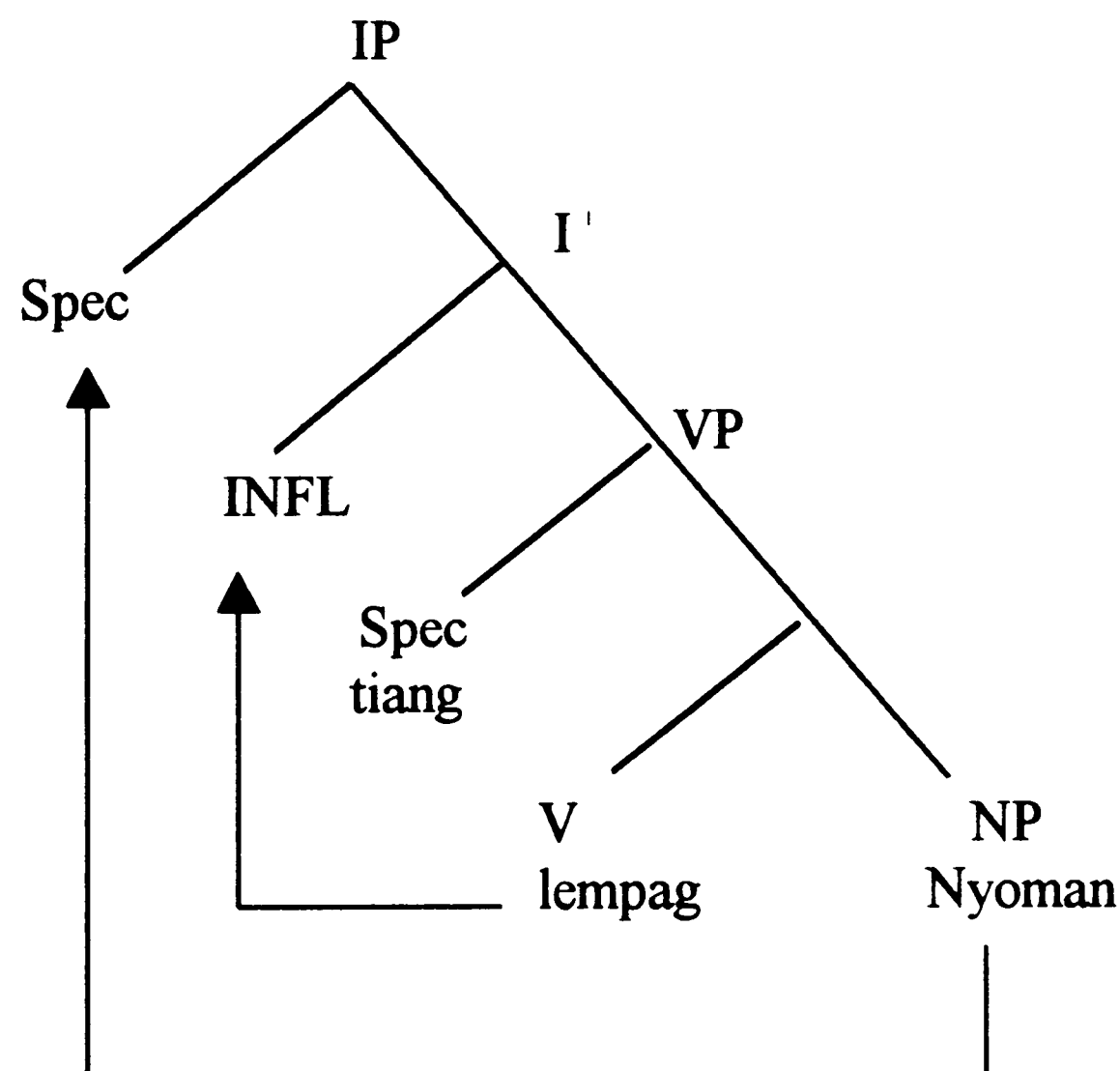
Obviously the configurational treatment of grammatical relations shown in (18) can be duplicated here, but there is a further possibility. Originally the specifier position in the VP was reserved for quantifiers that float from the subject as in *The girls will all pass*, but a number of scholars suggested that the subject originates as the specifier of VP and raises to specifier of IP (see, for

instance, Fukui and Speas 1986). Guilfoyle, Hung and Travis 1992 (GHT) exploit this analysis in an interesting treatment of four Austronesian languages: Malagasy, Tagalog, Cebuano and Indonesian/Malay, and it is this treatment that we would like to apply to Balinese here. Consider the following pair of sentences,

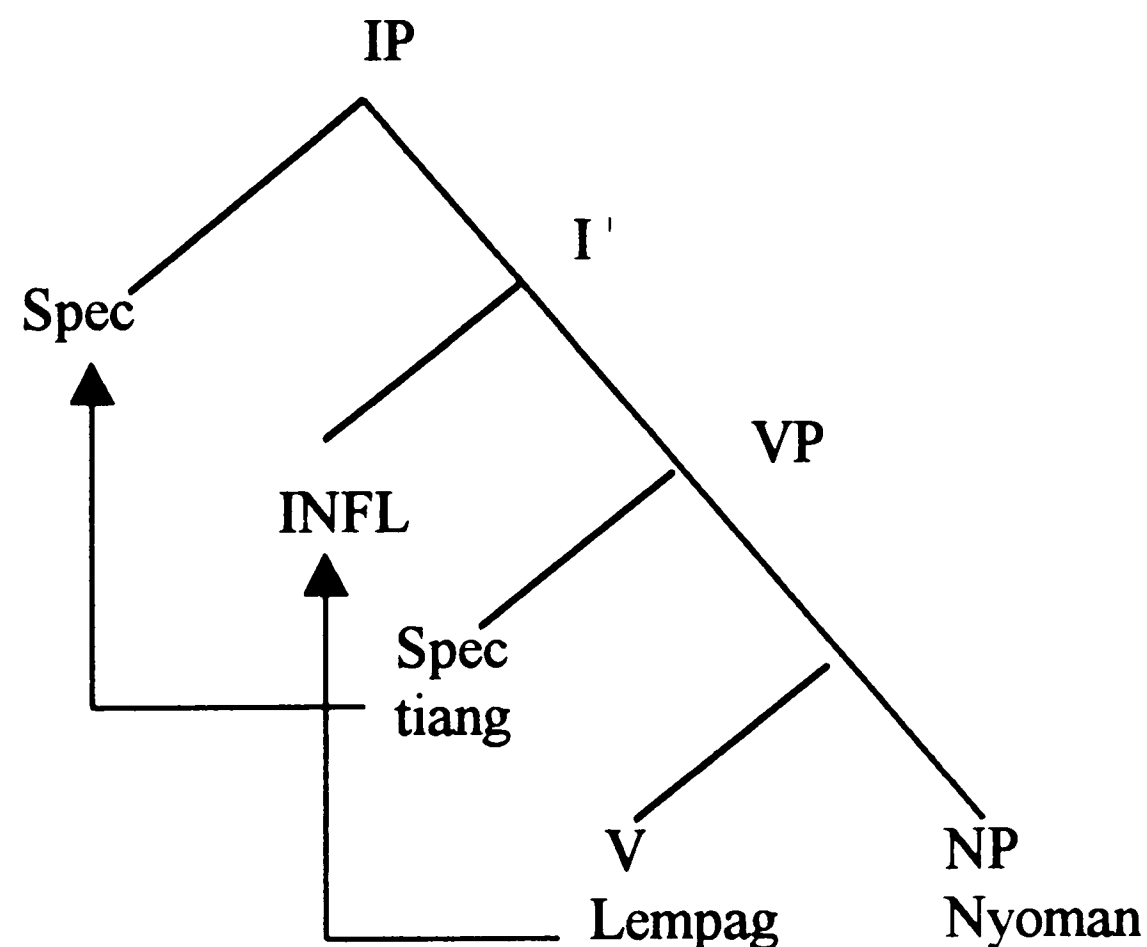
- (20) a. Nyoman lempag tiang 'I hit Nyoman.'
 b. Tiang nglempag Nyoman 'I hit Nyoman.'

At the level of underlying structure (D-structure) *tiang* will be the specifier of VP and *Nyoman* the complement (and sister) of V. In the \emptyset -construction *Nyoman* will move to the specifier of IP position. This is illustrated in (21a). In the nasal construction *tiang* raises to the specifier of IP position (21b). In both sentences the verb raises to INFL.

(21a)



(21b)



Note that the Ø-construction under this approach is treated like a passive but with a significant difference. The agent is in the specifier of VP position and is not treated as an adjunct. This obviates the objections to the passive analysis raised in chapter two. Note too that the nasal construction is treated as transitive with a direct object complement of the verb.

In GB the movement of an NP to the specifier of IP position is motivated by Case theory. All overt NPs must receive Case (Case with a capital C is abstract case). The verb assigns accusative case to its direct object and finite INFL assigns nominative case to the subject. A passive verb is said not to be able to assign Case to its object NP, so the object must move to the specifier of INFL position to receive nominative case. GHT consider that the derivational markers on the verb assign Case. In the examples they analyse, GHT show markers for agent-subject analogous to the nasal prefix in Balinese assigning Case to the patient which forces the agent to raise to specifier of INFL to receive case, and conversely they show markers for patient-subject assigning Case to the agent which forces the patient to raise to INFL to receive Case.

There are some difficulties in applying this to Balinese. For a start there is no overt marker for patient-subject. More important is the fact that the distinction between nasal and non-nasal verbs applies to one-place predicates as well as to verbs that we might analyse as transitive. The presence versus absence of the nasal with one-place predicates would surely be treated in terms of an unergative/unaccusative distinction with unergative verbs being allotted an underlying subject and unaccusative verbs an underlying object. In the GHT model an agent-subject marker on the verb assigns Case to the patient thus forcing the agent to raise, but with an unergative verb there is no patient. Surely it would be preferable to treat the nasal as uniformly marking the raising of specifier of VP to specifier of INFL. Similarly in the GHT model the patient-subject marker on the verb assigns Case to the agent thus forcing the patient to raise. Apart from the fact that there is no overt form for patient subject, there is the fact that there is no agent with unaccusatives. Here too the preferably treatment would be to treat the absence of marking as uniformly marking the raising of the complement of V to specifier of INFL.

However, although the theory of Case assignment might be problematic, the configuration shown in (21a and 21b) has some merits. When the possibility of non-configurational languages is raised, proponents of GB claim that all languages are configurational at some level. One piece of evidence is idioms, which tend to involve verb phrases. For instance, Haegeman (1992:61) points out that "there exist 'object idioms' with the subject as a free argument while there are no subject idioms with a free object". This situation can be found in English. For instance, the idiom kick the bucket involves verb-object combination. Although the unmarked structure in Balinese has the form [patient [verb agent]], idiomatic expressions can be of the form [patient-verb] or [verb patient]. However, the patient-verb idiom is more common than the verb-patient combination. Note also that there is no agent-verb idiom in Balinese. Here are some examples:

- (22) a. *Lindung-e uyahin cai*
 eel-DEF put:salt 2SG
 'You put some salt on the eels'
- b. *Ia cara lungung-e uyahin*
 3SG like eel-DEF put:salt

- (23) a. Bojog-e toyain tiang
 monkey flick:water 1SG
 'I flick the monkey with water'
- b. Karta cara *bojog-e* *toyain*
 Karta like monkey-DEF flick:water
- (24) a. Siap-e sambehin tiang injin
 chicken-DEF feed 1SG black sticky rice
 'I feed the chicken with black sticky rice'
- b. Murid-e cara siap-e *sambehin* *injin*
 student-DEF like chicken-DEF feed black sticky rice

The expressions in (22b)-(24b) are used idiomatically. In order to understand the meaning of these idioms, the possible context in which each example above may be used will be given as follows: one possible context in which the expression in (22) may be used is when one wants to get something or someone but it is beyond his capability of getting the thing or the person that one wants. It is like someone who is thirsty who cannot get some water out of a well. (23) may be used to describe someone when she or he is in 'unstable' condition for a number of reasons. (24) may be used to describe someone who does not understand anything when somebody explain something to her/ him. The idiom in (25) may be used to refer to someone who knows very little about something but s/he tries to explain it to the expert.

Under the proposal illustrated in (21a) and (21b) these patient-plus-verb structures present no difficulty. They represent a configuration found in D-structure.

One of the features of Austronesian languages that prompts the GHT analysis is the phenomenon of split subject properties. In Austronesian languages it is common to find that an agent that does not have surface subject properties controls a reflexive that does have surface subject properties. This happens in Balinese with one type of reflexive. In (24) the postverbal agent controls a reflexive in preverbal position and, as we have shown, the preverbal NP is the surface subject.

- (25) Awak cai-ne pelihang cai
 self 2SG-POSS blame 2SG
 'You blamed yourself'

If we consider that the control of reflexives ('binding of anaphors' in GB terminology) is handled at D-structure, then the relation between controller and controllee will be normal with the controller dominating the controllee structurally. The anomalous character of a sentence like (26), which has parallels in numerous Austronesian languages, will be attributed to the raising that takes place between D-structure and S-structure.

In this model the surface subject is a position that is filled neither by the agent nor the patient at an underlying level, and it is this position that serves as the pivot. It is this position that can be relativised, raised into a higher clause, left unfilled in co-ordination or obligatorily unfilled in non-finite clauses. The covert subject will normally be interpreted as coreferential with a higher subject or preceding subject.

9. 4 Summary

In this chapter Balinese sentence structures are discussed in two syntactic theories: Relational Grammar and Government and Binding Theory. It is proposed to revise the normal alignment of roles and nuclear relations. This theory can reveal the fact that in a syntactically ergative language it is the patient which is the primary relation. This patient is assigned the initial 1 in an unmarked transitive construction and the agent the initial 2.

In the Aspects model syntactic ergativity is captured by taking the patient of a transitive verb to be the NP immediately dominated by the sentence node along with the sole argument of an intransitive verb. This model, which was applied to Dyirbal in Dixon 1972, could be applied to Balinese.

In the GB model as developed by Guilfoyle, Hung and Travis the ergative character of Balinese would be suppressed. In any language the ascription of the label ergative or accusative to a particular system or to the language as a whole depends on finding that the agent or patient of a transitive verb is treated exclusively the same as the sole argument of a one-place predicate. Of course the sole argument of a one-place predicate can be an agent or a patient. In Balinese the agent of a one-place verb requires a nasal prefix like the agent of a transitive verb. But since there is no opposition between agent and patient with one-place predicates, it is usually true that the difference between agent and patient is neutralised for most syntactic purposes, if indeed it can be discerned at all. In Balinese the agent of a nasal intransitive verb and the patient of an unmarked intransitive predicate both occur in preverbal position. The ascription of the label ergative rests on the fact that the patient of an unmarked transitive verb is treated like the sole argument of a one-place predicate. In the GHT model the analysis takes no cognisance of marking. The analysis would be the same if the pattern of marking were reversed, or if there was equal marking or no marking at all.

CONCLUSIONS

Chapter Ten

With respect to the typology of a number of western Malayo-Polynesian languages, Verhaar (1988) makes an interesting comment:

"... why it has taken so long for linguists to recognize ergativity in Malay/Indonesian, as well as in such related languages as Javanese, Acehnese, Tagalog (see Payne 1982). Some of Schachter's celebrated articles on Tagalog (and other Philippine languages), i.e. Schachter (1976) and (1977), have come rather close to recognizing ergativity without ever arriving at that recognition itself."

This suggests that an ergative analysis would be an alternative analysis for a number of western Malayo-Polynesian languages. Traditionally Balinese is analysed as an accusative language. In this thesis it is argued that Balinese is an ergative language. Essentially Balinese treats the Patient argument (P) of a morphologically unmarked transitive verb like the sole argument (S) of a one-place predicate in terms of word order in that these two arguments are placed before the verb. Since the identification of the Patient of a transitive verb with the sole argument of an intransitive predicate is in terms of word order, and since word order is a matter of syntax, then Balinese could be said to be a syntactically ergative language.

It has been discussed that the combination of P and S functions as subject. There is ample support for this. It is only P and S that can be relativised, questioned or modified by an emphatic marker. Moreover, it is P and S that serve as the unmarked pivot for coreferential deletion in coordination and subordination. A syntactic comparison between Balinese and Dyirbal with respect to the treatment of a common noun phrase in two syntactically linked clauses reveals that Balinese behaves syntactically like Dyirbal.

As has been described the nasal is used with one-place verbs that for the most part could be said to have agent subjects while no nasal is required for one-place verbs that have a patient subject. Of course this is the same distribution we find with two-place verbs where there is the choice between having an agent subject or having a patient subject. Overall the nasal has a distribution of the type that Klimov calls active (Klimov 1979); agents and patients are distinguished irrespective of transitivity.

The presence of the active pattern in Balinese might seem to argue against typing the language as ergative, and indeed Balinese cannot be considered to show an ergative-absolutive distinction in the distribution of the Ø-construction and N-construction. However, the split within the subject of intransitive verbs does not show up elsewhere in the grammar. In general all intransitive subjects are treated alike in terms of syntactic rules. In the unmarked order the subject of an intransitive predicate precedes the verb irrespective of whether the subject belongs to the agent group or the patient group. We do not have the situation found in Italian where the unmarked position for agent subjects is before the verb and the unmarked position for patient subjects after the verb.

In our view it does not matter whether the nasal construction is transitive or intransitive when it comes to determining the basic type. Either way the Ø-construction is the unmarked choice with lexically transitive verbs and therefore the one that should be compared with one-place predicates. We believe that the definition of an ergative system should be amended to include reference to the

unmarked transitive construction to take care of the possibility of more than one transitive construction: an ergative system is one in which the patient of the unmarked transitive construction is treated the same way as the sole argument of a one-place predicate and differently from the agent of the unmarked transitive construction.

A controversy over the typology of western Austronesian languages is well-known in the literature. Two languages known in the literature are Tagalog and Indonesian (*Bahasa Indonesia*). Indonesian has been described traditionally as an accusative language. The most quoted article on Indonesian passives was written by Chung (1976). Chung (1976) claims that there are two types of passive in Indonesian. These two passives are illustrated by the following sentences (my own examples):

- (1) Rumah itu di-beli oleh Nina.
 house that PASS-buy by Nina
 'That house was bought by Nina'
- (2) Rumah itu saya beli
 house that 1SG buy
 'I bought that house'

Chung (1976) has shown that the example (1) does behave like a 'true' passive construction in that the verb is marked passive by the presence of the prefix *di-* on the verb and the agent is expressed in an adjunct phrase, which can be omitted. But the example (2) does not behave like a 'true' passive. Although the example (2) has the appearance of an object preposing construction, Chung considers it as a passive sentence simply because the NP *rumah itu* in this example has been shown not to behave like a preposed object but it behaves like a grammatical subject.

Kana (1986) claims that the two passives should be considered as variant of a single construction. Kana's argument of treating the canonical and the object preposing passive is a single construction is based on the fact that the agent of this construction is obligatory. It can be represented as a free pronoun form or a proclitic, which can be the first person agent, second person, or a third person agent. In the case of the canonical passive, *di-* is regarded as a clitic showing a third person agent. The identity of the third person agent can be specified by a nominal following the verb and this agent can be attached to the verb or can be expressed as a prepositional phrase.

This type of passive might challenge our understanding of the notion passive. The example of interest here is the passive in (2). This construction is just like the \emptyset -construction in Balinese. If we look at this example in terms of on the criteria described in section (8.3), it is clear that this construction does not qualify as a passive construction. The verb is unmarked, the agent is not expressed as an adjunct and this type of construction commonly occurs with a first or second person pronoun. It can also occur with a kinterm agent.

Chung (1976) shows that it is the patient, not the agent in (2) which behaves like a grammatical subject. In this case this construction is like the \emptyset -construction in Balinese. According to Comrie (1988c), an ergative construction is like a passive construction. In both constructions it is the patient which has subject properties.

Recently many linguists suggest that Indonesian can be analysed a syntactically ergative language (see, for examples, Cartier 1979, Verhaar 1988). Like Balinese, Indonesian also has a \emptyset -construction and a nasal construction. Verhaar (1988) claims that Indonesian syntax has split

ergativity. The nature of the split, he argues, is sociolinguistic: the syntax of informal Indonesian tends to be ergatively organized, whereas the syntax of formal Indonesian is more likely to follow the accusative pattern. To illustrate this, Verhaar (1988:348) provides the following statement:

...when a government official makes a prepared speech, his style will be mostly accusative in clause organization; when he adlibs, however, or answers questions afterwards, he is likely to shift to ergative constructions. A teacher, especially at university level, may teach "accusatively", but make announcements, or tell jokes, "ergatively". In written language, official reports are largely accusative, narrative ergative.

Verhaar also points out that some constructions in Indonesian should be recognised as 'inherently ergative'. Verhaar (1988) proposes a 'dual' classification for the verbal construction in Indonesian. He claims that the *di*-verb form can be passive or ergative and the basic verb can be passive or ergative. The 'passiveness' or 'ergativeness' of certain construction is determined by a discourse context. This might be confusing for those who do not Indonesian (see Verhaar 1988 for details). It appears that Indonesian is a difficult language to describe because this language has a number of variations. It is the second language of most Indonesians (because most Indonesians speak their mother tongues) so that the intuitive grammatical judgement of certain constructions may vary depending on where the speakers come from and on their first language. For instance, when the agent of the sentence (1) is a first or person agent, speakers of Indonesian will be divided. I believe most speakers of Indonesian will say that with this particular example the agent cannot be a first or a second person agent. But some will say that it does not really matter. They will claim that regardless of the type of agent, the sentence in (1) is always acceptable.

The typing of Tagalog has long been the subject of debate. Some have taken the Agent-subject construction to be an active transitive one and the Patient-subject construction to be passive. Analyses along these lines include Bloomfield (1917) and F. Blake (1925), Wolfenden (1961) and Llamzon (1968). An analogous interpretation of Cebuano was advanced by Bell within the framework of Relational Grammar (Bell 1983). Under this analysis the language is accusative. However, this analysis is untenable and has lost favour. Clearly the Agent in the Patient-subject construction is a complement not an adjunct so the Patient-subject construction is not a passive. Recently it has become popular to analyse Tagalog as ergative. This means taking the Patient-subject construction to be a transitive, ergative construction and the Agent-subject construction to be an intransitive antipassive. Foley (1991) has argued against the ergative analysis by seeking to show that the Agent-subject construction cannot be an antipassive because the Patient remains an argument. It is true that the Patient remains an argument, but it does not follow from this that the Agent-subject construction is transitive. Whether the Agent subject construction is transitive or intransitive, a language can still be ergative if the Patient subject construction is unmarked.

It is not appropriate here to pronounce on whether Indonesian and Tagalog incorporate ergative systems, but I hope this study of Balinese will contribute to a better understanding of these two languages and other Austronesian languages.

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