USE OF THESES

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EVOLUTION OF VERBAL MORPHOLOGY IN BALINESE

Ni Luh Sutjiati Beratha

Thesis submitted for the degree of Doctor of Philosophy
at the Australian National University

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ABSTRACT

This thesis is a comparative historical study of the Old Balinese language, (the language known from Balinese inscriptions, no longer spoken), and Modern Balinese, including Modern Standard Balinese and Modern Mountain Balinese. The evolution of verbal morphology in Balinese is the major concern of this study.

A version of 'Role and Reference Grammar' (Foley and van Valin, 1984) is developed to describe Balinese morpho-syntactic relations. This thesis illustrates the potential value of that theory for diachronic analysis. Some modifications are suggested for the Balinese case, e.g. two pragmatic functions are distinguished for nominals, TOPIC and FOCUS. These interact with the theory's two semantic macro-roles, ACTOR and UNDERGOER.

Modern Standard Balinese is described in both its form and social functions. Historically, Old Balinese has been influenced by Sanskrit and Old Javanese, borrowings from Sanskrit and Old Javanese are discussed. Most of the Sanskrit words which occur in Modern Balinese are used in high level ('Basa Alus'). However, Old Javanese lexical items which still exist in Modern Standard Balinese, belong to both low level ('Basa Kasar') and high level ('Basa Alus').

The Old and Modern Balinese phonological systems are discussed in order to explain morphological changes. A comprehensive quantitative analysis of Modern and old Balinese syllabic types is presented. Data show that 90% of Modern Balinese and 84% of Old Balinese root morphemes are bisyllabic. The maximal monosyllabic canonic syllable pattern is C₁ (C₂) V (V) (C₃). The correspondences between Old Balinese graphemes and the Modern Balinese phoneme system are analysed, to assist in determining the Old Balinese phoneme system. Old Balinese spelling variation is also considered.

The morphological processes of Old Balinese are compared with Modern Balinese, to understand the morphological changes that have occurred in Balinese. Evidence from the Old Balinese and Modern Balinese shows that for some affixes few changes of function and meaning have taken place. Sometimes multiple Old Balinese affixes merge into a single affix in Modern Balinese. Certain other affixes in Old Balinese have shifted functions and meanings, as compared with the Modern Balinese. These affixes have been replaced by other affixes which have similar functions and meanings. Quantitative morpho-syntactic comparison is presented. Old and Modern Balinese data show three patterns: (i) verb–initial constructions, (ii) ACTOR–initial constructions, and (iii)
UNDERGOER-initial constructions. It appears that the [A \( V_{\text{TRANS}} \) U] construction is more frequent than the \( V_{\text{TRANS}} \) A U] construction both in Old and Modern Balinese; and that ACTOR-initial constructions have increased in frequency over the past thousand years.
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<td>actor/agent</td>
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<td>ABS</td>
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<td>valence decreasing</td>
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<td>valence increasing</td>
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VP verb phrase
VOC vocative

Some general phonological conventions:

C consonant
V vowel
N nasal

Pronouns are glossed as:

1ST first person
2ND second person
3RD third person
PL plural

Symbols used:

*... 1. for Pro-Austronesian phonemes
2. ungrammatical constructions
[...] indicates the phonetic realization of a sound or a word
'...' indicates the meaning of a word
< 'originated from'
> 'became'
~ 'is a variant of'
1.../ grapheme transcription, orthographic form
/.../ phonemic transcription
# 1. indicates a phoneme boundary
2. indicate a syllable boundary
- 1. indicates a morpheme boundary, or with phonemes, indicates whether
   this phoneme occurs initially (---), medially (--), or finally (---)
2. not occur
3. cannot be
+ can be
x occur

Austronesian languages referred to in this study, with abbreviations

AKL Aklan
AMI Ami
AMIS Amis
BKL Bikol
BM Bolaang Mongondow
BON Bontok
BURU Buru
CEB Cebuano
Mountain Balinese dialect, with abbreviations

T    Tigawasa
P    Pédawa
C    Cēmpaga
B    Bēlantih
S    Sukawana

Manuscripts from the Hooykaas-Ketut Sangka Collection of the Department of Indonesian and Malayan Studies, University of Sydney, is abbreviated as HKS.
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CHAPTER I
INTRODUCTION

1.1 Background of the study

Balinese, which is categorized as Austronesian among the Eastern Indonesian languages, is related closely to all the languages of Indonesia. Most of the 2.5 million inhabitants of Bali and those of Nusa Penida in the Lombok straits speak Balinese. This language is closely related to the languages of Bali’s closest island neighbours, Lombok to the east and Java to the west. Balinese, Sasak of Lombok and Sumbawanese of western Sumbawa form a sub-group of Eastern Indonesia (Esser, 1938). Dyen (1982) also agrees in the grouping of Balinese, Sasak and Sumbawanese because, in structure and syntax, Balinese is more closely related to those languages than to other languages, such as Javanese and Sundanese. However, in the course of its history Balinese vocabulary was greatly influenced by Old Javanese, which is the language known from Old Javanese inscriptions and literary works dating from the early ninth century AD (Zoetmulder, 1974:1). This language is still used as a literary language in Bali, its influence being in terms of cultural elements borrowed, as well as everyday terms.

The Old Balinese language, which is known only from the inscriptions, is now considered a dead language. The term Old Balinese is used in this study in a wide sense to mean culture including language, and refers to the language known from inscriptions dating from 882 to 1050 AD. This language, which was used by the Balinese in the ninth century and probably earlier, gradually evolved into modern Balinese. Old Balinese was eventually replaced by Old Javanese as the language of inscriptions. The ninth and the tenth centuries were periods of strong Javanization of Bali, when Old Javanese became more prestigious. Many literary works found in Bali are written in Old Javanese and borrowing of words from one language to the other took place. This occurrence was due to increased contact between Bali and Java, particularly through royal marriages and political relations.

Presently, Balinese is divided into two dialects, those of the lowland and mountain areas. In this study, the Balinese dialect spoken in the lowland areas will be called Standard Balinese, and that of the mountain areas will be called Mountain Balinese. Criteria used to identify both the dialect of the lowland area as Standard Balinese and mountain area as Mountain Balinese, are outlined in Chapter 2.
Very little work has been done on Old Balinese, as will be seen in the review of literature to follow. Again as will be shown, no study of the evolution of verbal morphology in Balinese has been completed yet; most studies concentrate on the phonology rather than morphology. It would appear that it is easier to study historically the changes which have taken place at the level of phonology (sound system) than at the level of morphology. The term "verbal morphology" in this study refers both to verbal affixes which can be attached to nouns and verbs, and to other affixes which can be attached to verbs (as well as to nouns). As an historical study such as this has never been done, results of this investigation should be useful for the study of historical linguistics, cultural history and Balinese philology.

1.2 Aims of the study

This study aims to explore the relationship between the Old Balinese language and Modern Balinese, both Standard and Mountain varieties, so as to propose the basis for the historical development of the Balinese language. More specifically the aims are:

(i) To extend and apply the linguistic theory developed by Foley and Van Valin (1984) to a diachronic analysis of the morpho-syntactic relations of the Balinese language. This theory is modified by distinguishing two pragmatic roles: TOPIC and FOCUS.

(ii) To contribute to an understanding of the main qualitative and quantitative changes that have taken place in the Balinese language, from Old to Modern Balinese, with emphasis on morpho-syntactic change.

(iii) To assess whether these changes which have taken place have been caused by internal changes or outside influences, and how they relate to sociolinguistic factors, such as speech level variation. Contact with Old Javanese and Sanskrit is of particular importance.

(iv) To analyse and formulate how these changes are reflected in phonology, lexicon and verbal morphology, though the thesis places more emphasis on the evolution of the latter.

In addition, this thesis undertakes a brief comparative study of Balinese dialects, based on new field investigations, in which the Old Balinese language is compared with the Modern, consisting of certain dialects of Mountain Balinese and Standard Balinese. Mountain Balinese is found to link Standard Balinese with the Old Balinese because some Old Balinese features still exist in Mountain Balinese dialect but not in Standard Balinese. It should be pointed out, however, there are few major differences between Standard and Mountain Balinese, other than as regards speech level. Both Mountain and Standard Balinese are still spoken in Bali, so they are very useful as tools for the comparative-
historical analysis of Old Balinese. Moreover, because data from the Old Balinese inscriptions are very limited, and are sometimes difficult to analyze, very little can be concluded without looking at the correspondences between Old and Modern Balinese. The following figure is designed to show the relationships among the linguistic varieties studied in this thesis. It indicates how Old Balinese is analyzed and reconstructed on the basis of Modern Balinese although Old Balinese is the ancestor of Modern Balinese. The broken and unbroken lines signify comparative similarities. The unbroken lines indicate that the relationship between those dialects is closer than those of broken lines.

Figure 1

![Figure 1 Diagram]

1.3 Methodology

The approach used in this study is somewhat eclectic, but is mainly synchronic comparative, based on comparing inscriptive Old Balinese with Modern Balinese varieties. By way of this comparison the diachronic changes which have taken place in Balinese can be assessed. Some attention is given to other types of evidence, such as spelling variation and morphological alternation in the Old Balinese inscriptive corpus.

Data for the study being undertaken are analysed in several ways:

(i) In order to propose a reconstruction of the Old Balinese phoneme system, the Old Balinese graphemes are compared with Modern Balinese phoneme systems. Spelling patterns are analyzed. The inventory that results is the necessary background for the understanding of the evolution of verbal morphology of Balinese.
(ii) Forms and functions of Old Balinese affixes are also compared with Modern Balinese affixes, using a uniform method of analysis based on semantic-pragmatic synthesis. This comparison is used to propose a model of the historical development of affixes, especially the evolution of verbal morphology or the diachronic changes of certain affixes. For instance, the loss of function and meaning of certain Old Balinese affixes in Modern Balinese indicates that Old Balinese affixes might have been replaced by different affixes which have similar functions and meanings. This analysis is the core of the thesis.

(iii) The Old Balinese word-list compiled by Goris (1954) in Prasasti Bali II is used to confirm Old Balinese words which still occur in Standard and Mountain Balinese. This word-list is also used to account for borrowings from Sanskrit and Old Javanese. The result is an etymological picture of how the Modern Balinese lexicon has evolved.

(iv) Austronesian comparisons are used to assist understanding the pre-Balinese phoneme system and affixes which occur only once or twice in the data collected. Austronesian comparisons are only tentative and are not the main focus of this study.

(v) Quantitative analysis of data is employed in two areas: to determine basic syllabic structures and to determine diachronic trends in morpho-syntactic evolution. (This thesis represents the first time these quantitative analyses have been made for Balinese.)

1.4 Sources and scope of study

Data in this thesis are based on:

1. Old Balinese data
2. Modern Balinese data:
   a. Recorded data
   b. Written data

1.4.1 Old Balinese data

The scope of this enquiry is governed, to a large extent, by the availability of source material on the Old Balinese inscriptions. The main sources of Old Balinese data date from the ninth to eleventh centuries AD and consist of royal edicts in the form of inscriptions on stone or bronze. This study analyzes the transliteration of Old Balinese inscriptions published by Goris (1954) in Prasasti Bali I which is the most important source for a study of such inscriptions as it is the most comprehensive compilation. Some transliterations of Old Balinese inscriptions are also taken from van Stein Callenfels' Epigraphica Balica published in 1926, especially those not appearing in Prasasti Bali I. These transliterations of Old Balinese inscriptions are used, because the original source
texts of the Old Balinese inscriptions are inaccessible. Where available, photographs of the original inscriptions which are still available in Bali are also used.¹

Old Balinese inscriptions were found in several villages in Bali, both in the northern and southern parts of the island. Some of these inscriptions have been preserved in those villages up until now. Map 1 below illustrates their locations.

Goris (1954) names the Old Balinese inscriptions according to the place where they were found.² Thirty-seven of the inscriptions listed in Prasasti Bali I (1954) and Epigraphica Balica (1926) are in Old Balinese, and these date from AD 882 - AD 1050. The inscriptions which are used in this study are listed in Appendix A. The existence of these inscriptions is important as early evidence of a multiple cultural aspect in Bali. From the inscriptions it is possible to determine the chronology of the Balinese rulers of the period as well as the early history of contacts between Bali and Java. The Old Balinese inscriptions elaborate on matters such as the rulers' subjects, taxation, public administration and feudal loyalties (see 2.7).

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¹ Based on my investigation, there are very only few inaccurate transcriptions from the original inscriptions in Goris' works; generally, Goris' transliteration of the Prasasti Bali I is accurate, although this conclusion is based on only six out of thirty-seven photographs of the original Old Balinese inscriptions.

² Damais (1952) names them according to the place (village) mentioned in the inscriptions. For example, Goris (1954) names an inscription Sêmbiran because it is found in the village of Sêmbiran; Damais (1954) names this inscription Julah because the village of Julah is mentioned in it. In this thesis, Goris' terms and code will be followed.
The locations of the Old Ballineen Insectpione

Map 1
The Old Balinese corpus is also compared with published data from other Austronesian languages such as Old Javanese, Toba Batak, Old Malay, and Tagalog. Not only does this increase the scope of the enquiry, it is particularly important for the analysis of the Old Balinese phoneme system undertaken in Chapter 4. The Austronesian data are used only as preliminary comparisons in this study. Questionnaires were also used to confirm the Old Balinese words which are still used in everyday conversation in Modern Balinese.

1.4.2 Modern Balinese data

Modern Balinese sources are taken from contemporary recorded and written data.

a. Recorded data

Recorded data from both Mountain Balinese and Standard Balinese were also used. Twenty-five hours of speech were tape-recorded in Mountain Balinese villages, namely the villages of Tigaosawa, Pédawa and Cémpaga in the north-west of Bali and the villages of Sukawana and Bélantih in the Eastern part of Bali. Speech samples recorded included narratives, songs and games. Other sources are spoken examples from my own recorded corpus, mainly examples of colloquial conversations and narratives in Standard Balinese, from the regency of Badung in the southern part of Bali.

b. Written data

Standard Balinese written data are taken from some stories written in manuscripts from the Hooykaas' collection kept in the Department of Indonesian and Malay Studies, Sydney University and from Gedong Kirtya, Singaraja, Bali. They are: Dang Hyang Nirartha, Géria Gde Sigaran Jémbrana I (HK 4105), Raden Galuh Gde (this text is without code), and Rare Angon (K.VIb.1521/4). The texts represent the period approximately 1900 to 1950s.³ These manuscripts were selected because of the many examples of high level speech ('Basa Alus') which are found in them. Data taken from literary works are important because they can be considered as a standard of comparison for spoken Balinese. Other data are taken from two books of stories written by Bagus (1971; 1977), Kesusastraan Bali ('Balinese literature') published by Balai Penelitian Bahasa ('Language Research Centre') in Bali. This work consists of 'Satua Bawak Mabasa Bali' and 'Satua-satua sane Bajuol'. These stories were selected because they contain examples of conversational speech. Although other materials are available to work on, these selections provide a representative corpus for written Modern Balinese.

³ Based on those texts, there is no significant change between 1900 to 1950s.
A Balinese-Indonesian dictionary (Kamus Bali-Indonesia) published by Dinas Pendidikan Dasar, Propinsi Daerah Tingkat I Bali in 1990, is used as a source for analysing the structure of Modern Balinese root morphemes. This dictionary was chosen because it is the most complete dictionary besides being the most recent one.

1.5 Process of collecting data

In August 1989 library research was undertaken at the Department of Indonesian and Malay Studies of Sydney University, which has the Hooykaas collection of manuscripts. From November 1989 to early January 1990 further library research was done in Bali at Gedong Kirtya Singaraja, Language Research Centre in Bali (Balai Penelitian Bahasa), The Centre for Documentation of Balinese Culture (Pusat Dokumentasi Kebudayan Bali) and at the Faculty of Letters, Udayana University. The purpose of this research was to look for Old Balinese inscriptions and literary works which would prove useful for this study.

During August 1990, surveys were carried out in certain mountain villages. Using the information given by the head of the villages about the social background of each village in the region, five villages, were selected, including Tigawasa, Pêdawa, Cêmpaga, Bêlantih and Sukawana (see Map 2 below). These villages are ancient sites as evidenced from the fact that, for example, an Old Javanese inscription was found in the village of Bêlantih issued by the king Anak Wungsu dated AD 1058. Generally, there are many similarities in terms of social and cultural traditions among those five villages and the dialects share a number of conservative features.

On a second more extended field trip, from September to November 1990, extensive data were collected in the mountain villages as well as in the regency of Badung, southern Bali. These data of various speech samples were tape recorded with the emphasis on spontaneous natural conversation. Rough field transcriptions using standardized spelling were also made at this time. Topics of the conversations included everyday activities such

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4 These mountain villages are considered by scholars to have been less influenced by Javanese culture and tradition. Some Balinese people categorized them as the villages 'of the Bali Aga' which probably means 'Balinese in the mountain villages' (Bawa, 1984/1985:51). Scholars like Swellengrebel (1960:31), Danandjaja (1977:4) and Zoetmulder (1965:312) suggest that Balinese people in the Bali Aga villages are less influenced by the Hindu-Java tradition. According to Covarrubias (1972:17), 'Bali Aga' is the same as 'Bali mula' which means 'original Bali'. This term may be misleading though, because it might give the impression that the Balinese of Bali Aga villages is free from Hindu influences. This is not the case. In AD 882 Old Balinese inscriptions were found in mountain villages such as Sëmbiran, Bebetin and Trufan. This indicates that those villages were influenced by Hindu-Balinese traditions. In this study, I use the term Mountain Balinese to refer to the Balinese people who live in the mountain areas in which the Javanese-Balinese influences were weaker than they were in the lowland areas of Bali. Old Balinese cultural traditions may still exist in these villages. Mountain villages also appear to be the primary sites of inscriptions. The oldest inscription dated AD 882 which was found in the village of Sukawana is in Old Balinese.
as hunting, fishing, gardening. I also asked the villagers to sing local songs if they were willing to do so. During the recording sessions notes about speakers which give relevant information pertaining to the interpretation of the data were made.

Drawings were also used for collecting data; these were shown to the villagers who were asked to tell stories based on them. Besides this, a conversational control technique was used which consisted of the introduction of a specific topic that I wished to emphasize. For example, in testing the function and meaning of the prefix ma- in Mountain Balinese, the category of word to which this prefix can be attached is a variable, and conversation was channeled so as to elicit relevant sample. The interviews were all carried out in Modern Balinese, my native language.

Fifty subjects, consisting of twenty five women and twenty five men, were chosen in each village. Four criteria were used to select these subjects:

a. They had to be Balinese, and originally from the villages cited above
b. Their native language had to be Balinese and used in everyday conversation
c. Their ages were to be between 40 to 75
d. They were to have had little contact with other people outside their villages

In addition to conversation interviews, lexical items were collected. Goris' Old Balinese corpus of 3076 items was checked for cognate in all Mountain Balinese dialects.
Map 2
The locations of the field work in the Mountain Villages
1.6 Previous studies in Balinese

No prior study to my knowledge has attempted to trace the evolution of Balinese verbal morphology. A number of scholars have carried out research on various aspects of the Balinese language, though the majority of studies have analyzed modern Balinese. Findings of the scholars who have completed work on Balinese, including both Old and Modern Balinese will be reviewed below. This sub-section is divided into: Old Balinese works (6.1.1) and Modern Balinese works (6.1.2).

1.6.1 Old Balinese

Brandes (1884) was the first scholar to work on Old Balinese, completing a thesis entitled Bijdrage tot de Vergelijkende Klankleer der Westersche Afdeeling van de Maleisch-Polynesische Taal Familie (Contribution to the Comparative Phonetics of the Western Part of the Malay-Polynesian Language Family). This thesis is based on comparative studies of Malayo-Polynesian languages. In his thesis he also analyzes briefly some Old Balinese affixes such as -um -, -in -, and -y -. According to Brandes (1884:165), the infix -um - is very common in all Formosan languages. This infix mostly occurs with a verb of movement which is used to form an active sentence. He gives little information on the infixes -in - and -y -. He observes that the relationship of the infix -in - among languages such as Tagalog, Old Balinese and Madurese is the same and that the infix is no longer used. The difference between the infixes -in - and -y - will be analyzed in this thesis (see Chapter 7), although Brandes did not acknowledge any difference between these two infixes.

Five years after his thesis, Brandes (1889) wrote an article 'De koperen Platen van Sëmbiran (Boeleleng, Bali) Oorkonden in het Oud- Javaansch en het oud Balinesech' ('The Copper Plate Inscriptions from Sëmbiran (Buleleng, Bali) in Old Javanese and Old Balinese'). In this article he analyses four inscriptions written in Old Balinese. While his discussion covers some affixes and the phonology of Old Balinese, it provides little information about the function and meaning of Old Balinese affixes. In phonology, he claims that the softening of the phoneme /t/ sound in Bali has existed since the eighteenth century AD, e.g. përahу > pëdahu 'canoe', diri > didi 'alone' etc; but he does not explain what his evidence is based on when he concludes that the softening of /t/ occurred in the eighteenth century. Evidence from Standard Balinese only shows that përau < përahу in Old Balinese. In this present study, sound changes that have taken place in Balinese language are also analyzed. This study shows that lrl > /l/ > Ø (for detail see section 4.8), but that lrl did not become /d/ as stated by Brandes.
The first dictionary on Kawi-Balinese was published by van der Tuuk (1897-1912), entitled *Kawi Balineesch-Nederlands Woordenboek* (Kawi Balinese–Dutch Dictionary).

As mentioned before, valuable work was produced by Goris in 1954 in *Prasasti Bali I* and *II*. In the *Prasasti Bali II*, he lists all known Old Balinese lexical items as well as their translations in Dutch, which implies a form-class analysis as well. The second volume contain the the summary of the inscriptions, both in Old Balinese or Old Javanese.

Another useful article is 'Old Balinese and Comparative Indonesian Linguistics' by Teeuw (1965). In this article he discusses the equivalence of Old Balinese and Old Javanese verb affixes. Some parts of this article are very clear, for example, in his explanations that the Old Balinese suffixes *-in* and *-ang* correspond functionally to Old Javanese suffixes *-i* and *-akèn*; and that Old Balinese infix *-y-* corresponds to Old Javanese infix *-in-*, because these affixes can be combined with actor suffixes (1965:283). However, other parts of this article are less clear in their explanations. For instance, Teeuw in the discussion of the correspondences between the Old Javanese verbal system and Old Balinese verbal system, Teeuw states: 'The relationship with *ma-* seems much closer than in Old Javanese, perhaps because *ma-* functions as an *-um-* form to *pa-*' (1965:282-283). This statement is confusing. It is not clear whether he means that the Old Balinese prefix *ma-* is closer to Old Malay *ber*, or Old Balinese *ma-* is similar to Old Balinese infix *-um-*, or whether verbs which can take the prefix *ma-* can also occur with the prefix *pa-*.

Teeuw does not explain whether the prefix *ma-* which has the same function as *-um-* is *ma-* that can occur with transitive or intransitive verbs. In this thesis, I argue that the prefix *ma2-* (which can occur only with transitive verbs) has a similar function to the infix *-um-*. However, *ma1-* (which usually occurs with intransitive verbs and nouns) does not appear to have a similar function to the infix *-um-* (see section 8.6). Teeuw does not seem to differentiate between *ma1-* and *ma2-.*

Further work on Old Balinese has been done more recently by a Balinese scholar, Semadi Astra (1969) who discusses the prefix *pir-* and the prefix *pi-* . As common to the theoretical framework at that time, he does not distinguish whether affixes should be treated as prefixes or as conﬁxes. In the present study, prefixes, suffixes and conﬁxes are distinguished clearly. Also, the examples given by Semadi Astra in support of his analysis are sometimes incorrect. Other affixes are also included, but he does not explain them. Although there are only two words occurring with the prefix *pir-*, Semadi Astra (1969:31) concludes that *pir-* or *pi-* conveys a causative meaning.
A later dictionary, entitled *Kamus Bahasa Bali Kuno–Indonesia (Old Balinese-Indonesian dictionary)* was compiled by Granoka et al. in 1985. This dictionary has glosses for various bound morphemes. In general, however, the authors have only given an Indonesian translation of Goris' work (1954) and provide no additional information or analysis. This dictionary begins with a discussion of the Old Balinese sound system as well as Old Balinese morphology. However, the analysis of the Old Balinese phoneme system in Granoka et al. only provides the distribution of Old Balinese graphemes. The authors infer that the Old Balinese phoneme system is similar to the Modern. In the discussion of morphology, they seem to distinguish allomorphs as separate affixes. Thus, for example, the suffixes *-an*, *-yan* and *-en* are treated as different suffixes because they have different forms, although, as I argue in Chapter 7 *-an*, *-yan* and *-en* have the same distribution, function and meaning. Besides this, all bound morphemes which are attached to verbs or nouns are considered as affixes, e.g. *babini, diamahen*. They categorize *ba*- and *di*- as prefixes. Neither of them are prefixes. *Di* is a preposition, while *ba*- is a reduplicated form, which has the function of making the noun *bini* plural.

1.6.2 Modern Balinese

The first modern dictionary entitled *Eerste Proeve van een Balineesch-Hollandsch Woordenboek (First draft of a Balinese Dutch dictionary)* was compiled by van Eck's in 1876.

A key grammar of Modern Balinese was produced by Kersten in 1948 and entitled *Balische Grammatika*. While this particular grammar was in Dutch, Kersten later published in 1970 and 1984 a Balinese grammar in the Indonesian language. In general, Kersten follows categories from traditional Western grammar, such as 'subject', 'passive', etc. In the present study, the more comprehensive semantic macrorole theory from Foley and van Valin (1984) will be applied. In treating 'passive' constructions in Balinese, Kersten divides them into 'first', 'second', and 'third passive'. He also introduces the basic usage of Balinese speech levels. However, as section 5.9 in this thesis shows, Kersten's first passive, actually is not a real passive. Kersten's 'first' and 'second' passives will be treated differently in this study.

Ward's thesis (1973), entitled *Phonology, Morphophonemics and The Dimensions of Variation in Spoken Balinese*, analyses the modern spoken Balinese dialect of the subdistrict of the village of Ubud, Gianyar in south Bali. He concentrates on the phonology of modern Balinese, and the syllable structures of Balinese words. He also mentions the 'sound shifts' which have taken place from Old Balinese to modern
Balinese. His thesis provides a complete list of terms illustrating the speech level variation within one area of Bali. He distinguishes structural variation and lexical variation. However, he confuses the morphemic with the phonetic structure of modern Balinese, and does not provide a quantitative analysis of syllabic types (see section 3.2 below).

A later modern Balinese grammar was published by Barbar in 1977. Parts of this are confusing and it is no improvement over Kersten's grammar, limited as that is. He reconstructs the modern Balinese phoneme system according to the Balinese alphabet (Hanacaraka); for instance, the phoneme /a/ is always given initial grapheme ɻhl, although the phoneme /h/ is never realized as /h/ when it occurs in the initial or medial position in Balinese of the lowland areas. Barbar (1979) has also published a Balinese-English dictionary. He states that this work is a rearrangement and translation of van Eck's dictionary (1876).

In 1979, Bagus completed a thesis on sociolinguistics of the Balinese language, entitled Perubahan Pemakaian Bentuk Hormat Dalam Masyarakat Bali: Sebuah Pendekatan Etimografi Berbahasa (The Shift of the Polite Form in the Balinese Society: An Ethnographic Approach). Here he uses an ethnographic approach to analyze the shift of the polite form in the context of the sociocultural change. He describes how polite form usage is changing to override traditional social categories and to highlight newer distinctions and definitions of the elite. In his thesis, he analyses the vocabulary used for high, medium and low levels. He concludes that most of the vocabulary found in modern Balinese belongs to the neutral words. Bagus' thesis provides useful information on the lexicon used for speech levels in Balinese.

A specialist study is the thesis completed by Bawa in 1980, entitled Bahasa Bali di Daerah Propinsi Bali: Sebuah Pemerian Geografi Dialek (Balinese in the Province of Bali: A Dialect Geographical Description). This thesis analyzes the dialect variations of twenty-five villages in Bali, among them the Mountain Balinese village of Pêdawa which is also represented in the present study. The variations discussed by Bawa occur on the levels of phonology, morphology, syntax and lexicography. At the phonological level, his analysis shows that the phoneme /a/ is still retained in the final position in some villages including the village of Pêdawa, while in other villages /a/ is realized as [ə], when it occurs in this position. This evidence supports the analysis of the present study (see Chapters 3 and 4 respectively). On the morphological level, there is a variation of the suffix [-a] and the possessive suffix [-ne]. On the level of syntax, he mentions that some villagers tend to use passive constructions while others prefer to use active constructions. There are also some discussions of variations in the meaning of words, based on
Ayatrohaedi's compilation of one hundred words (1978:359-364). The linguistic analysis of Bawa's thesis, however, does not provide much of the finer detail needed for understanding of phonology, morphology, syntax or semantics.

Warna et al. (1983) have also written a grammar of the modern Balinese language which differs from the above two grammars, Kersten (1948) and Barbar (1977), in its focus on the phonology, morphology, syntax, the modern Balinese writing system, and punctuation marks. However, the evidence set out in the present study does not support some of their conclusions. For example, in the discussion of morphology the authors state that \( ma + N \) will form a verb (1983:29). However, in Standard Balinese, it appears that the prefix \( ma \)- never occurs with the prefix \( N \)-; these two prefixes can occur with either transitive or intransitive verbs (see section 5.11.1). It seems that the morphology section of this book gives more emphasis to the form rather than the function and meaning of some affixes. This grammar is very basic.

The Modern Balinese grammar, Tata Bahasa Bali, written in Indonesian by Granoka et al. (1984-1985) is more comprehensive than the grammar of Warna and Rai Tjakra. It covers all grammatical levels including phonology, morphology and syntax. In this book modern Balinese letters ("aksara Bali") are mentioned in a brief discussion on the history of Balinese script. The analysis of some points is sketchy and it does not include the typology of the modern Balinese language. Traditional grammatical categories are assumed.

A recent specialist study is the thesis completed by Hunter in 1988, entitled Balinese language: Historical background and contemporary state. He compares Old Javanese, Old Malay and Old Balinese. Emphasis is given to comparative Austronesian morphology and syntax. Hunter seems to follow Teeuw's classification on the similarities of the Old Balinese with the Old Javanese affixes. The categories actor focus and goal focus used for Old Javanese are compared to Old Malay and Old Balinese in an analysis based on Schachter and Otanes (1972). Hunter claims that Old Javanese possessed a verbal marker system whose morphology closely resembles the 'focus' morphology of Philippine languages such as Tagalog (1988:57). However, the evidence is not convincing and it appears that Old Javanese is closer to what this thesis proposes for Old Balinese than to Tagalog. Hunter's method for analyzing Old Javanese, Old Malay, Old Balinese and Modern Balinese is open to question, since he concentrates on examples that tend to prove his point, while ignoring other examples. The discussion of the first, second, and third passive developed by Kersten (1984) is the major concern of his thesis. It should be noted that the materials Hunter uses to analyze the morphology focus of Old Balinese are taken from only five of inscriptions in Goris' Prasasti Bali I:
inscriptions 001, 002, 003, 004, and 102. He appears to follow Teeuw's (1965) classification of the equivalence of Old Balinese and Old Javanese verb affixes. In addition, he also discusses the basic structures and paradigms of modern Balinese, including the structure of noun phrases and equational sentences, the deictic, pronominal, and prepositional paradigms and paradigms for other 'function words' including modals, adverbs, conjunctions, interrogatives and negatives, etc. The present thesis differs from Hunter's in five crucial ways: (i) a different theory of pragmatic-semantic relations is developed; (ii) Austronesian comparisons are not used directly as main evidence for interpreting Old Balinese morphology (rather, internal Balinese analysis is emphasised); (iii) the entire corpus of Old Balinese inscriptions is considered; (iv) field research data relating to Mountain Balinese dialects is considered; (v) the aim is to explain the development of verbal morphology, thus it is more concentrated than Hunter's broader study. Not surprisingly then the conclusions are different.

A valuable study on speech levels has been produced by Adrian Clynes (1989) in a thesis entitled A Speech Style in Javanese and Balinese: A comparative study. In this work, Clynes compares Javanese with Balinese speech styles. He clarifies aspects of the synchronic description of modern Javanese and modern Balinese as well as the earlier historical stages of both languages. The present thesis differs in scope from Clynes, but some of his proposals on Javanese influence are not substantiated in the present work. While Clynes, 1989:66 (footnote 3) proposes that the Balinese script is a borrowing from Java, in this present study, I will argue that the Balinese script derives independently from Pallava/Vengi (for details see Chapter 2). Clynes states that the prefix ka- used in low level Balinese (Basa Kasar), which he marks as ka1-, can only have the first and second person agent. This seems to be true. On the other hand, his conclusion that the prefix ka- which he marks as ka2- and which can have the first, second and third person agent used in high level Balinese (Basa Alus) is borrowed from Javanese (1989:170) is not convincing. The prefix ka- first appears in the Old Balinese inscription (004) Truñan B, dated AD 911. In the OB data, the prefix ka- always has the third person agent (understood from the context), although it is not clear yet whether speech levels were consistently distinguished at that time (see section 7.2.1.1). It appears that ka- used in high level in Standard Balinese, can be traced back to the Old Balinese ka-.

Another recent specialist study is Meko Mbete's thesis of 1990. Mbete's Rekonstruksi Protobahasa Bali-Sasak-Sumbawa (The Reconstruction of Proto Balinese-Sasak-Sumbawanese) sets out to reconstruct proto Balinese, Sasak and Sumbawanese. This is an historical-comparative study which concentrates on reconstruction based on modern comparative evidence. He seems to follow Esser's (1938) hypothesis, and groups Bali with the languages of Sasak and Sumbawa which are
considered to have a close genetic relationship. He uses a quantitative and qualitative approach to reconstruct the phoneme system of the ancestor of these languages. The result of his study, which was based on the Swadesh 200 word list, shows that 50% of the words in these three languages are similar and 50% are not. From this he concluded that Bali, Sasak and Sumbawa belong to one group, and that they are closely genetically related. Meko Mbete's data is cited in the preliminary Austronesian comparisons (in section 4.6), in particular his suggestion that the vowel phonemes /e/, /o/, and semivowels /w/ and /y/, existed in the protolanguage finds support in the present study.

The latest dictionary published by Dinas Pendidikan Dasar Propinsi Dati Bali (1990), is Kamus Bali-Indonesia (Balinese-Indonesian Dictionary). This dictionary provides quite comprehensive information on modern Balinese, and it is arranged in Roman alphabetical order. It also includes a brief discussion of phonology, morphophonemic processes of modern Balinese as well as affixes in modern Balinese. The words are listed in their root or base form and followed by their derived forms. The dictionary is used as a corpus in the present study to analyse the root and syllable structures of Balinese root-morphemes.

1.7 Organization of this thesis

This thesis is organized as follows: Chapter 1 is the introduction. Chapter 2 deals with historical and social backgrounds. The purpose of this chapter is to show a brief overview of the Old Balinese inscriptions and their tradition of study. This chapter also discusses the function and usage of Standard Balinese speech level, in order to get a better understanding on the linguistic form of the speech levels which will be discussed in Chapter 5.

Chapter 3 discusses the Modern Balinese phoneme systems, including Modern Standard Balinese as well as Modern Mountain Balinese. Chapter 4 shows the evidence for the Old Balinese phoneme system. By comparing the Modern Balinese phoneme system with Old Balinese graphemes, the Old Balinese phoneme system is determined. Both of these chapters form the necessary background to the understanding of the evolution of verbal morphology in Balinese.
Chapter 5 analyzes lexicon and morphological processes in Standard Balinese. Chapter 6 discusses lexicon and morphological processes in Mountain Balinese, and Chapter 7 analyses morphological processes in Old Balinese. These chapters are the major concern of this study and will explain the diachronic changes analyzed in chapter 8.

Chapter 8, built up on the basis of Chapter 5, 6, and 7, shows the diachronic changes from the Old Balinese to Modern Balinese affixes. Finally, Chapter 9 is the conclusion of this study. The following figure is designed in order to show how chapters in this thesis relate one to the other.

Figure 2

Chapter 8

Chapter 3 and 4

Chapter 5

Chapter 6

Chapter 7
CHAPTER II
HISTORICAL AND SOCIAL BACKGROUND

The existence of Old Balinese inscriptions relates to Hindu/Buddhist culture particularly the introduction of Sanskrit and Pallava script. In this chapter, the Indic precursor scripts in Bali and the development of Old and Modern Balinese script are discussed. In addition, the inscriptive corpus is described and the political contacts and relevant social issues known from the Old Balinese inscriptions are summarized so as to situate the analysis which will be undertaken in Chapter 7.

Modern Balinese varieties are also described, with emphasis on the social contexts of Modern Standard Balinese and Modern Mountain Balinese. Included is a discussion of the social function of Standard Balinese speech levels because it will give important background for understanding the linguistic forms of Standard Balinese speech levels which will be explained in Chapter 5.

2.1. The use of Indic scripts in Bali

According to Ardika and Bellwood (1991), contact between Bali and India might have existed since the first century AD. The evidence consists of Indian potteries, e.g. roulled wares and beads.

The earliest examples of writing found in Bali are probably several undated short stone inscriptions which are written in Sanskrit. The condition of these inscriptions is very poor and illegible, so that it is impossible to identify the script which is used. Besides stone inscriptions, thousands of undated clay stupikas (miniature stupas made of clay) which begin with the words Yete Mantras ('Buddhist formulae') have also been found at Pura Pénataran Sasih Pejeng, Gianyar. The script used in the Yete Mantras is considered to be Siddhamårkā or Pre-nāgarī script (Ginarsa, 1980:2). It should be noted that the same script is also found in Central Java, namely in the Kalasan inscription dated AD 778. This may suggest that the Balinese clay stupikas date from the same period as that from Candi Kalasan. The Pre-nāgarī script is also used in one pillar-stone inscription: the Blanjong Sanur inscription from South Bali. The pillar-stone inscription of Blanjong Sanur dated AD 914. It is written in two different languages and two different scripts: the text which is in Sanskrit is written in Pre-nāgarī script, while the text which is in Old Balinese is in Early Kawi script (de Casparis, 1975:37). However, although two different scripts and different languages are used in this pillar-stone inscription, the content of the texts are the same. The Siddhamårkā gradually becomes Nāgarī script but such development apparently does not take place in Bali.
Old Balinese script, however, has another direct precursor. According to Gonda (1973:84), before 760 AD all the ancient Indonesian inscriptions are engraved on stone in Sanskrit and most of them are undated. They all use the Pallava script from Southern India, which spread in ancient times to most of the Southeast Asian countries through Ceylon, mainland, peninsular, and insular Southeast Asia. The oldest inscriptions found in Indonesia belong to a large group of inscriptions including inscriptions of mainland of Southeast Asia, such as the Malay Peninsula, Southern Thailand, Cambodia and Southern Vietnam. As early as 1918, Vogel had already concluded that the origin of the early Southeast Asia script was the Pallava script (de Casparis, 1975:13).1

The form of Old Balinese script generally derives from Pallava/ Vengi (Ginarsa, 1980:4). Vengi script can be considered a development of earlier Pallava. It appears that Balinese script developed independently from Pallava/ Vengi until the eleventh century. It should be noted that de Casparis (1975) does not conclude that the Balinese script derives directly from Pallava. Based on my investigation it appears that the Old Balinese script is closer to Vengi script (see Appendix E) than to earlier Pallava. It seems that Old Javanese script also originated from Pallava/ Vengi. Bernet Kempers (1977:43) states that there is no good evidence to prove that the script which was used in ancient times in Bali and Java developed separately from Pallava script. The Old Balinese inscriptions which are written in Pallava/ Vengi script are the inscriptions of Pura Kêhêhêin, in Bangli (005)2, Srokodan (101) as well as Sëmbiran (104).3

The script which was used in Java between (750-1250 AD) is called 'Kawi', which is further divided into 'Early Kawi' and 'Later Kawi' (de Casparis, 1975:28-46). De Casparis (1975:28) appears to agree with Kern's idea that 'Kawi' script did not develop directly from the Pallava. However, according to Krom, the development of Pallava script in AD 760 should rightly be called 'Kawi'. Actually, Stuart, Holle, Brandes and Kern all call this script 'Kawi', a name given to this script by the Javanese (de Casparis, 1975:28). There is a difference in style between Pallava and Kawi script. De Casparis, (1975:28) describes 'the Pallava script as found in various parts of the Indonesian archipelago is clearly a lithic script used for monumental purposes. Its most striking feature is the presence of long "sculptured" verticals with distinct head marks, elaborate and elegant curves, rounded of angles and often notched horizontals'. On the other hand, the early Kawi script is 'a script used for writing on palm leaf (lontar) and thus shows a cursive hand, but "translated" into shapes appropriate to the stone' (de Casparis, 1975:28).

1 According to Gupta, Pallava script of South India dates from the first century BC to the third century AD, and the Vengi script appeared in the fourth century AD (Burnell, 1968, Pl.I).
2 Numbers in parenthesis refer to Goris numbering system, (see Table 1).
3 Based on my observation, the Old Balinese script is quite similar to the Old Mon script.
By AD 1011 Old Balinese writers were using the so-called Quadrade script of the Kaḍiri period, which is widely used in East Java. The Old Balinese inscription of Gunung Panulisan (306), found at the temple of Tégêh Koriban, Pejeng, Bêdulu, is written in Kaḍiri Quadrade script. The inscription may have been written when Air Langga became king of East Java in the eleventh century (Ginarsa, 1984-1985:24). According to de Casparis, the Kaḍiri script has the characteristic of: 'the vertical elongation of the letters, most noticeable in those with several vertical strokes', while the Kaḍiri Quadrade script is almost similar to Kaḍiri script except for 'the use of large, sculptured letters usually protruding in relief and in many cases, fashioned into a square or oblong box' (de Casparis, 1975:41-42).

According to Ginarsa, during the reign of the king Astásura Ratna Bumi Banten in 1338 AD, the Balinese script was the same as the script of the Majapahit period in the fourteenth century, which is found on the statue of the king Astásura kept at Tégêh Koriban temple, at Mount Panulisan (Ginarsa, 1980:8).

This is the last extant example of Old Balinese script, and with some changes the script develops into the Hanacaraka alphabet in modern Balinese (Ginarsa, 1980: 11; 1984;1985). This alphabet is also known as Wrestra aksara. (Cf. 2.3 below.)

Before paper was introduced into the island of Bali, the Balinese used palm leaves (which is in Balinese called dauon lontar) and a special knife which has a pointed tip called pangërupak to write literary works. According to de Casparis, this technique has been used since around 750 AD, which is evident from the shape of the characters of the Early Kawi script (de Casparis, 1975:28). This tradition continues in Bali, especially among the older generation and those who belong to the Balinese priesthood whether péndanda or pêmangku who are interested in writing manuscripts ('lontar') or mantras. My grandfather, for instance, until his death in the 1960s, used to write his own diary on bamboo or on very thin wood although paper had been introduced. This may be due to the Balinese attitude towards the script. The Balinese are very proud of the Balinese script which they believe has sacred properties.

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4 This consists of eighteen aksara characters: ha, na, ca, ra, ka, da, sa, wa, la, ma, ga, ba, nga, pa, ja, ya, na.
5 In Bali, aksara means 'letter or character'. Quoting Hooykaas, (1978:76), Zurbuchen (1980:83) states that "aksara is a term which in Sankrit meant 'indestructible', represents the eternal quality of language recognized in cultures under the influence of technological processing of speech, which perpetuates verbal acts through time".
6 According to Rubinstein (1988:63-64), the Balinese believes that: "...letters have a divine origin and are invested with ambiguous, supernatural power that can be manipulated to influence the course of events. It is only as a consequence of their belief in the divine origin of letters that Balinese might regard letters as imperishable, for the divine has an eternal quality".
2.2 Modern Balinese script

Old Balinese script appears to be used only in Old Balinese inscriptions. There are no literary works which are written in Old Balinese script found in Bali. It is clear, however, that Modern Balinese script developed from Old Balinese script; there are only few differences between the two. It seems that the Modern Balinese script is more curved and rounded than the Old Balinese script. Traditionally, the Modern Balinese script is written on palm-leaves. However, after the introduction of paper, it becomes more common to use paper to write literary works in Balinese script.

Conferences were held in 1957, 1963, 1972 to deregulate the Balinese writing system and to romanize the Balinese alphabet. Since 1957 Balinese has started to be written in Roman alphabet and most recent books in Balinese are written in this alphabet (Simpson, 1973).

2.3 The usage of Modern Balinese script

Nevertheless, the Balinese aksara still occupies very important position in present day Bali. It is taught at school (primary and secondary schools) and it is still used to write Balinese literary works. According to Tuur Aji Saraswati, the Balinese aksara can be categorized as: Wrestra, Swalalita and Modre. In the traditional account, each category of aksara was created by deities. Wrestra aksara was created by Hyang Kawiśvara. It is used for writing Balinese words, it can be modified by adding a vowel symbol, vocalic merging and shortening which occur when letters are conjoined. Swalalita aksara was used for writing Old Javanese manuscripts or other things. It may or may not have magic symbolism and it was the creation of Hyang Guru Rekha. Modre aksara is used to write something which has a relationship to religion, medicine and philosophy. Even today it is still widely used to write white and black magics. Modre aksara is more like Swalalita than Wrestra. It consists of ten letters and is known as Daśaksara (cf. Rubinstein, 1988). This aksara was created by Hyang Saraswati. To learn Modre one has to use krah , i.e. a manuscript which is used to guide someone in reading Modre. The sacredness of Modre is emphasized by the fact that before learning to read this aksara, there should be a ceremony for that person so as to avoid a disaster (Bagus, 1980:16). This ceremony is called mawinten. Modre aksara is found chiseled on a big statue at Pēgulingan Temple at Pejeng, Gianyar.

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7 Sugriwa (1978:14-15) states that Swalalita aksara is the combination of Swarawyahjana and Wrestra that is usually abbreviated to make another symbol which may or may not have magic property.
2.4 Old Balinese inscriptions: the tradition of study

When Balinese scholars treat the stages of their language, they make the following division:

1. Basa Bali Kuno (‘Old Balinese’)
2. Basa Bali Baru (‘Modern Balinese’)

As mentioned before Old Balinese is only known from inscriptions. The language of the Old Balinese inscriptions is a court language. The Old Balinese inscriptions are written in prose. Around two hundred inscriptions have been found in Bali, but most are written in Sanskrit or Old Javanes. Goris (1954) published about one hundred and fifty inscriptions, of which, thirty-seven are in Old Balinese. Thirty-four of these are known as bronze or copper plate inscriptions and three are pillar stone inscriptions. The dimensions of the bronze or copper Balinese inscriptions are mostly around forty cm in length, seven to nine cm in width and one and half to two mm thick. The length of the Balinese inscriptions varies. Some are very short, for instance, the inscriptions of Blanjong Sanur (103), Goblek Pura Batur A (110), Kintamani B (207) and Kintamani C (208) which consist of only one plate (from three up to six lines) and the inscriptions of Bangli Pura Kêhèn (005), Angsari A (007), and Manukaya (205) which also consist of one plate, and each plate consists of thirteen up to eighteen lines. Most of the inscriptions, however, consist of up to six plates and of five or six lines: e.g. Trunjan A and B (003, 004), Sêmbiran A, B and C, (104, 201, 351) and Sêrai (302). (For details see Table 1).

The number of lines may suggest that those inscriptions used to be written on palm leaves then copied to bronze or copper plates. This is evident from the following text of inscription Sêmbiran C (409 8a 2-3) dated AD 1065, in the Old Javanes language:

...sambandhani panambah nikanang karamani julah sadhikara i lbuni paduka haji, anghyang amintanugraha titisanamr tahyun tumambrukna pangraksayanya, anugrahaniritita prabhuh makanimitta tan subaddha paripurna kahidapanya ta molihing ripta tka ring dlaha ning dlaha...

'...that was the reason why the representatives of the village of Julah came to the king (paduka haji) asking for a favour. They wanted their inscriptions, which were granted by the previous king (prabu), to be written on bronze plates. They thought that the inscription would not be permanent for future generations, because it was written on palm leaves...' [LIT.]
Research on Balinese inscriptions, both those in Old Balinese and in Old Javanese, has been done by a few Dutch scholars since the nineteenth century and by some Indonesian scholars in recent years. In 1885, van der Tuuk and Brandes published an article 'Transcripties van vier Oorkonden in Koper, Gevonden op het Eiland Bali' (Transcriptions of Four Copper Plate Inscriptions Found in the Island of Bali). Four inscriptions were analyzed, three from Bêlantih and one from Klandis village. Brandes (1889) published five other inscriptions from the village of Julah in his article 'De Koperen Platen van Sêmbiran' (The Copper Plates from Sêmbiran), (cf. 1.6). These inscriptions remain in the village of Sêmbiran. In 1926 van Stein Callenfels published 25 inscriptions in his Epigraphia Balica. According to Soekarto Kartadinoto (1977:3), in 1928 the Resident Caron asked a Chinese photographer to take photographs of all the known Balinese inscriptions. None of those photographs, however, can be found in Bali today.

In 1928 Stutterheim found a short inscription chiseled on the back of a stone statue at the Sibi Agung temple. In 1929 and 1930 he published a book Oudheden van Bali (Antiquities of Bali ). This book consists of inscriptions which are found in Pejeng temple, Bêdulu, Gunung Kawi, Tampak Siring and Gunung Panulisan. In 1934 Stutterheim published another article 'A Newly Discovered Pre-nâgarî Inscription on Bali'. In this article he analyses the pillar-stone inscription of Blanjong Sanur.

Goris in 1929 published an article 'Eenige Nieuwe Koperplaten op Bali Gevonden' (Some New Copper Plates Found in Bali ). In this article he discusses inscriptions from the villages of Mantring and Pêngotan. In 1936 he also published an article on 'Enkele Mededeelingen Nopens de Oorkonden Gesteld in het Oudbalisch' (Some Notes on Inscriptions Written in Old Balinese ). Another article was published by Goris in 1941: 'Enkele Historische en Sociologische Gegevens uit de Balische Oorkonden' (Some Historical and Sociological Data from Old Balinese Inscriptions ). In 1954 he published two volumes of Balinese inscriptions in the Prasasti Bali I and Prasasti Bali II. These books are also known as Inscriptions voor Anak Wungsu (The Inscriptions before the Reign of Anak Wungsu ). In 1957 Goris published another article under the title 'Dinasti Warmadewa dan Dharmawangsa di Pulau Bali' (Warmadewa and Dharmawangsa Dynasty in the Island of Bali), and in 1967 he published Ancient History of Bali.

Goris also made photographs of these inscriptions. After his death in 1965, all these photographs were kept at the library of the Faculty of Letters, Udayana University. When I visited the library in 1990, the photographs of the following inscriptions still existed: 002 Bebetin, 004 Trunyan B, 005 Bangli, Pura Kêhêh, 006 Gobleg, Pura Desa, 101 Srokodan and 210 Gobleg, Pura Desa. Their condition, however, is deteriorating
rapidly. Some lines are missing because of torn paper so that it is not easy to read them. There is no doubt that with all these works Goris has made a great contribution to our understanding of the Old Balinese inscriptions, which he has compiled and transliterated in two volumes, *Prasasti Bali I* and *Prasasti Bali II* published in 1954. The analysis of the Old Balinese language in the present study is in the main based on Goris' works. Goris's work is so important because the original of the Old Balinese inscriptions are unaccessible.

Another epigraphist who has done some studies on Old Balinese inscriptions is Damais. In his article 'Étude Balinais' (*Balinese Study*), he discusses the Blanjong Sanur stone pillar inscription. Two important articles written by Damais in 1955 and in 1959 also discuss the Balinese inscriptions. These articles are: 'Études d'Épigraphie Indonésienne' (*Studies on Indonesian Epigraphy*) and 'Notices Bibliographiques-ouvrages d'études l'Indonésienne' (*Bibliographical Notes of Indonesian Studies*).

In the 1960's Balinese students from the Udayana University in Bali commenced study of Balinese inscriptions under Goris' supervision, among them were Nyoman Puger (1964) who wrote *Pemerintahan jaman raja Jayaśakti* (*The Reign of Jayaśakti*), Ida Bagus Santosa (1965) *Prasasti-prasasti raja Anak Wungcu di Bali* (*The Inscriptions of Anak Wungcu in Bali*), and Budiastra (1969) *Jaman Pemerintahan Marakata* (*The Reign of Marakata*).

More recently, Sukarto Kartoatmodjo, the former head of the Archaeological Service in Bali, has published several important articles on Balinese inscriptions. These include 'Preliminary report on the copper-plate inscription of Asahan' in 1970. In 1972 he published an article on 'The Charter of Dayangkayu'. In 1973 Soekarto Kartoatmodjo published an article on 'Prasasti Pura Sibi'. This inscription was found in a village near Késihan. In a congress organized by the International Association of Historians of Asia in 1974, Sukarto Kartoatmodjo presented a paper on 'The Charter of Kapal'. In assembling a corpus for the present study all of the above works have been consulted.

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8 The dean of the Faculty has now laminated these photographs in order to make them last longer.
2.5 Notes on dating of Old Balinese inscriptions

Dating used in the dated Old Balinese inscriptions is based on the Śaka-year, (Śaka-year 1 equals 78 AD. These inscriptions also use a unit called a wuku, equal to one week. A cycle of 30 wuku is equivalent to 210 days.

Besides wuku, however, saptawāra, sadwāra, pancewāra, triwāra and the age of the moon usually also occur in the inscriptions. The saptawāra consists of two words; sapta 'seven', and wāra 'day'. This means seven day week, namely: Aditya (Redite) 'Sunday', Soma 'Monday', Anggāra 'Tuesday', Budha 'Wednesday', V traspati 'Thursday', Sukra 'Friday', Śaṅkara 'Saturday'.

The sadwāra consists of two words; sad 'six' and wara. The sadwāra means six day week: Tungle, Ariang, Wurukung, Paniron, Was, Maulu.

The pancewāra, consists of two words; panca 'five' and wara. The pancewāra means the five day week: Umanis, Pahing, Pwan, Wage, Kaliwon.

The triwāra, consists of two words; tri 'three' and wara. The triwāra means three day week: Wijayakrānta, Wijayamanggala, Wijayapura.

The cyclical changes in the moon are used to indicate monthly time spans: Śravaji 'July-August', Bhādrapada 'August-September', Asuji 'September-October', Kārtika 'October-November', Mārgaśira 'November-December', Pauṣa 'December-January', Māgha 'January-February', Phālguna 'February-March', Čaitra 'March-April', Vaishākhā 'April-May', Jayāstha 'May-June', Āśādha 'June-July'.

There is, however, one inscription which does not use the numerals, but instead uses chronogram (‘candra sengkala’) as a means of dating. According to Korn (1922:667), the word sengkala indicates a date, the figures of which have been replaced by words which possess specific meanings. For instance, in the first line of the text of the pillar stone of the Blanjong Sanur inscription (103), the text has the following phrases: śaka 'bde śara-wahni-mūrtiganite māse tatha phalgune... These phrases contain the

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9 As in Modern Balinese, there are thirty wuku found in the Old Balinese inscriptions. They are: Sinta, Landep, Wukir, Kuraniti, Tolu, Gumbry, Wariga, Warigadyan, Julung wangi, Sungkang, Dungulan, Kunungan, Langki, Madangsaha, Pujut, Pakang, Kuruwut, Maraki, Tambir, Madangkungan, Mahatal, Uye, Manahil, Prangkakat, Bala, Ugu, Wayang-wayang, Kulawu, Dukat, Watu gunung.
10 According to Goris (1954:337), wuku originally consisted of six days. One cycle of 30 wuku is equivalent to six months in the Julian Calendar.
11 The five-day-week cycle, the six-day-cycle, the seven-day-week cycle and nine-day-week cycle also occur in Java. As stated by Becker (1979:198), 'In Java, time is represented as cyclical. Furthermore, time in Java is not represented as a single recurrent cycle, but several concurrent cycles running simultaneously. The five-day-week cycle and the seven-day-week cycle are the two calendrical systems most used in Java for daily affairs'.
chronogram: शार 'arrow', वाहन 'fire', मूर्ति 'embodiment' with the numerical value of 5, 3 and 8 respectively,¹² which then could be interpreted as the शाका year of 835. भागुन 'the eighth month' corresponds to January-February. Thus, according to Damais (1955:239) this chronogram corresponds to 29 January to 27 February 914 AD.¹³ It is clear from the foregoing discussion how he arrived at an approximate month and year (835+78), but this is not so with his days.

Many inscriptions, however, not dated, neither in the शाका year nor in chronograms, for instance: Bangli, Pura Kēhēn A (005), Angsari A (007), Gobleg, Pura Batur (110). (See Table 1 for details).

2.6 Balinese attitudes toward Old Balinese inscriptions

Inscriptions only occur in certain places in Bali and only those Balinese who live in the Mountain Balinese villages and who actually have inscriptions in their villages know what an inscription is. The Balinese believe that inscriptions are archaeological artefacts that have magic power and are very sacred, so some epigraphists have difficulties when wanting to work on the inscriptions. As stated by Soekarto Kartoatmodjo (1977:2):

"Penelitian epigrafi di Bali lebih banyak dukanya dari pada sukanya...Hal ini sangat berlainan dengan keadaan di Java dan daerah-daerah lain dimana prasasti dapat diambil, dipotret dan dibikin abklatschnya setiap saat, tanpa kesukaran yang berarti".

'Epigraphical research in Bali is very difficult. The case in Bali is different from the case in Java and other islands, where inscriptions can be taken out,

¹² Anandakusuma (1986:231-232) list the Balinese chronogram as follows:
Number:
0 : ambara, ang, atma, bhoma, ilang, lango, lumah, minger, na, ngumbara, peteng, sirna, sudha, sunia, tawang, tuneng, warah.
1 : aji, angkus, ati, bali, dewa, ira, jala, jana, kikuk, klinic, lemah, manah, medi, muti, nabi, nayaka, nira, prabhu, sang, Sangkara, sasi, Sri, surya, tanah, tanu, wak, Yama.
2 : angpit, aksi, bau, karo, locana, mata, nerra, paksi, rengo, tingal.
3 : agni, guna, moksa, pawaka, Rudra, singa, wahi.
4 : cakra, dadi, jala, kawahan, kerta, segara, sripti, wangsa, warna, wedu, Wisnu, juga.
5 : bhaja, bhata, indra, isu, Isvara, nu, pandawa, panca, panah, sara, sayaka, tatwa.
6 : darsana, Ghana, harimau, kembang, kumbang, paza, Sambhu, Trisula.
7 : brahmana, giri, kuda, Mahadeva, mana, maianda, naga, parwara, resi, swara, wiku.
8 : asit, dapa, gajah, manggala, Siwa, wasu, yuyu.
9 : astara, Brahma, gada, graham, kecara, tawang, teng, nawa, nishit, sang, wadana.

¹³ Sten Konow (1934) gives different interpretation. He reads this year chronogram: sake khecara wahnī murtīgānitē, and that for khecara 'planet'= 9, wahnī 'fire'= 3 and murti ganite 'the body of Śiva' = 8, i.e. the Śaka year of 839 (Sluterheim, 1934:124).
photographed, and a rubbing of the inscriptions made at any time without having any difficulties.

This may be due to the Balinese attitude toward the inscriptions. Old Balinese as well as Old Javanese inscriptions have been preserved in some village temples in Bali until now. These inscriptions are not allowed to be taken out from their place except on certain occasions, e.g. during the anniversary of the village temple or if the temple priest receives words from the God. The villagers must hold a ceremony for the inscriptions which cost millions of rupiah. The temple priest must choose an auspicious day if he wants to read the inscriptions. For example, in the village of Cempaga, Bangli an inscription was found and kept at the temple of Pénataran Cempaga. According to the temple attendant (Jéro Kebayan), this inscription is sometimes cleaned during the anniversary but only its duplicate is read on this occasion. It is thus very difficult to check the original of the inscriptions. Balinese believe that reading inscriptions may cause disaster. The temple attendant further said that in some places in Bali the inscriptions will be taken out and purified every twenty-five years because the village must have enough money to hold a ceremony.

According to Sukarto Kartoatmojo (1977:3), the impact of tourism in Bali causes some problems. Some inscriptions were stolen from villagetemples and sold to foreigners. For instance, the inscriptions of Dépaa, Sunantaya and Sastra are no longer found in Bali.

2.7 Summary of the content of Old Balinese inscriptions

The content of the Old Balinese inscriptions tends to follow similar patterns. The differences among them are mainly who issues the inscription and where. Most of the Old Balinese inscriptions tell of a Balinese king ordering the monks or functionaries to build a hermitage. The villagers are exempted from various taxes. If a monk or a merchant dies his property reverts to the king, and some of it is allocated to the temple of the Fire God. It is mentioned in every inscription that the border area of a village is determined, and in some inscriptions such as the inscriptions of Pëngotan AI (105), and Kintamani A (206), the villagers are subjected to corvee (labour).

Some inscriptions, such as the pillar-stone inscriptions of Blanjong sanur (Goris, 1954), Panémpan and Malat Gède (Sukarto, 1976), have the same content, i.e. the Queen Kesari Warmadewa’s defeat of her enemies. The same story is also found in the inscriptions Manik Liu Al (202), Manik Liu BI (203) and Manik Liu C (204). Besides this some inscriptions are not complete and according to Goris, the texts are illegible. These include the inscriptions Angsari A (007), Blanjong Sanur (103), Panémpanahan,
Malat Gêde, Manukaja (205). Goris (1954:186) further mentions that there appear to be later copies of earlier inscriptions such as inscriptions Dausa, Pura Bukit Indrakila B1 (109), and Sêmbiran B (201).

The summary of the Old Balinese inscriptions is divided into:

1. Inscriptions which classified as *Yumu Pakatahu* type (with no mention of reigning kings)
2. Inscriptions which belong to the Warmadewa Dynasty\(^\text{14}\)

This classification is made chronologically according to types of the inscriptions as well as the dynasty who issued them. It should be noted that the Old Balinese inscriptions summarized below are dated from AD 882-AD 1050. The later Balinese inscriptions, written in Old Javanese, are beyond the scope of this thesis.

### 2.7.1 Inscriptions of the *yumu pakatahu* type (with no mention of reigning kings)

The oldest inscription that is written in the Old Balinese language is the Sukawana Al inscription dated AD 882. There are seven inscriptions dating from AD 882-914. These inscriptions do not mention the Balinese king’s name, but the *Panglapwan*, which probably means 'court of justice' of Singhamandawa, is mentioned in the inscriptions. Goris classified these inscriptions (001-007) as the *yumu pakatahu* type, because all the inscriptions except Angsari A (007), begin with the words *yumu pakatahu* ('you should know').\(^\text{15}\) The content of the Old Balinese inscriptions of 001 to 006 is summarized as follows:

A monk is asked to build a hermitage and a rest house in the royal hunting ground in the Bukit Cintamanî garden (001). Monks and villagers are exempted from various taxes. The Nîyakan Pradhâna ('a functionary') and the monk are asked to build a temple for the Fire God (hyang api) at Banua Bharu village. If villagers die while the village is being

\(^{14}\) As mentioned before, thousands of clay stupikas with *Yete Mantras* have also been found in Bali, particularly in Pejeng and adjacent areas. The content of the *Yete Mantras* is as follows:

\begin{quote}
Ye dharmâ hetu prabhawā
Hetunteśan tathāgato hyawadat
TeXāt ca yo nirodhā
Warjwādī mahāśrāmanāh
\end{quote}

According to Ginarsa (1980:3), in this mantra, the Buddha God describes the result of actions (*karma phala*) and the elimination of punishment.

\(^{15}\) According to Goris (1954:62), the beginning of (007) inscription is illegible, thus it is difficult to determine whether the inscription number (007) began with the word *yumu pakatahu* or not.
plundered, their inheritance reverts to the king. If a merchant arrives in a village and then
dies his property should be taken to the Fire God and his broken ship will be used as a
fence to fortify the settlement (002). The villagers at Truñan are asked to build a temple
of God Da Tonta (Bhatāra Da Tonta). Although the villagers are exempted from taxes,
they have to pay some contribution towards the building of the temple (003). Some
problems about the villagers of Air Rawang who live at the village of Truñan are also
discussed (004). Monks and the villagers at Simpat Bunut under the supervision of the
forester (hulu kayu) built a temple to the God Karimana which was attached to the
temple of the Fire God. If people from outside the village want to worship at the temple
they have to pay an entrance fee (pamuka lawang) to the village (005). Indrapura is in the
area of the village of Air Tabar. The boundary of the village is fixed and the villagers of
Air Tabar are exempted from various taxes (006).

2.7.2 Inscriptions of the Warmadewa dynasty

The first Balinese Queen named in the Balinese inscriptions is Šri Kesari Warmadewa
whose name is written in the pillar stone inscription of Blanjong sanur (103). The
inscription tells that Šri Kesari Warmadesa defeated her enemies from Gurun and Suwal.
Goris has identified Gurun mentioned in this inscription as probably the island of
Lombok and Suwal is identified as Kétewel beach in the Sukawati district of Gianyar
(Goris, 1954: 243). The date of the Blanjong Sanur inscription is written in the form of a
chronogram which according to Damais (1955:239), is the equivalent of 914 AD (see
section 2.5 above).

The inscription of Malat Gède is on a pillar-stone in the regency of Bangli. This
inscription is written in Old Balinese and in the Early Kawi scripts, but the inscription is
almost unreadable. It is dated AD 914, in the month of Phalguna (the eight month), the
dark part of the month. The name of Šri Kesari Warmadewa also appears in this
inscription (Sukarto Kartoatmodjo, 1977:151).

The pillar inscription of Paněmpahan is found in the district of Tampak Siring.
Although the year of this inscription is illegible, it has the words phalguna krṣṇapakṣa
which mean 'in the month of Phalguna (the eight month), in the dark part of the month'.
Sukarto Kartoatmodjo (1977:124) also notes that the name of the king Šri Kesari
Warmadewa is mentioned in the inscription. Because of this, the inscription may be
dated AD 914.

In addition, all the inscriptions stated that Šri Kesari Warmadewa has defeated her
enemies in, and possibly outside, Bali.
After the reign of Śri Kesari Warmadewa in AD 915, nine inscriptions were issued by Ugrasena (inscriptions 101-109). These inscriptions are in the Old Balinese language. All of these inscriptions mention the name of the king Śri Ugrasena, except the inscription of Gobleg, Pura Batur A (110). In addition, seven of them begin with the words yumu pakatahu. The other two inscriptions, namely Babahan I (102), dated AD 917 and Dauwa Pura Bukit Indrakila AII (107), AD 935, do not begin with this phrase (Goris, 1954:64). Other inscriptions which are issued by king Ugrasena other than those are: Sokokodan (101), Sëmbiran A (104), Pëngotan A (105), (106) Batunya A (106), Sërai A (108), Dauwa Pura Bukit Indrakila BII (109).

Śri Ugrasena never used the title Warmadewa in his name, although the previous king and his successors did. It is not clear, therefore, whether Śri Ugrasena was also a descendant of Warmadewa.

Between AD 955-967 Tabanendra Warmadewa and his wife Subhadrika Dharmadewi ruled in Bali. The name of this couple is known from four inscriptions which are in the Old Balinese language: Manikliu A (202), Manikliu BII (203), Manikliu C (204), Kintamani A (206). These inscriptions mention that people from the village of Pakuwon and Talun are exempted for various taxes, except for the tax of rot, and all villagers are responsible for their own debts.

Only one inscription, Manukaya (205) has been found when Candrabhayasinga Warmadewa was the king in Bali in AD 960 (Goris, 1954:12; Damais, 1960:224-225). This king built a pond in a village called Manuk Raya, now known as Manukaya. The place is named Tirta Empul in the district of Kintamani. This inscription is dated AD 960 when Tabanendra Warmadewa was the king of Bali (Goris, 1967:18). It is still not clear what the relationship was between Tabanendra Warmadewa and Candrabhayasinga Warmadewa.

In AD 957 Janasådhhu Warmadewa became king in Bali (Goris, 1954:13, 77-78). There is only one inscription issued in his name: Sëmbiran AII (209) dated in AD 957. Like the inscription Sëmbiran B (201), this inscription also deals with the village of Julah. A hermitage at Dharmakuta is plundered, and the villagers of Julah have to help.

Bali was ruled by a queen in AD 983. Her name is Śri Mahârâja Śri WijayaMahâdewi which is mentioned in the only inscription (210) written during her reign. According to van Stein Callenfels (1924:30), Śri Mahârâja Śri Wijaya Mahâdewi came from Śriwijaya, Sumatra, but Damais (1955:643) argued that she was a daughter of king Mpu Sindok from East Java. There is only one inscription, Gobleg Pura Desa II (210),
written during the reign of Śri Mahārāja Śri Wijaya Mahādewi (Goris, 1954:79-80; 146-147; 1967:21).

Between AD 989-1011 Bali was ruled by Śri Gunapriya Dharmapatni and Śri Dharmmodayana Warmadewa. The king Dharmmodayana Warmadewa (also known as Udayana) could be a descendant of the Warmadewa dynasty in Bali. According to Moens (1950:136), there were two rulers named Udayana between the tenth and the eleventh centuries. Udayana I reigned in East Java, while Udayana II was the son of Udayana I and became a king in Bali. However, Bosch's interpretation is different. According to Bosch (1961:92), Udayana I was a son of a princess who fled from Cambodia to East Java while she was pregnant and gave a birth to Udayana in East Java. He also mentions that Udayana's wife, Śri Gunapriya Dharmapatni was a great-granddaughter of Mpu Sindok. She was the only daughter of Makutawangsa Wardana who was Sindok's grandson. This seems to indicate a strong relationship between the rulers of Bali and those of Java. It is significant in this respect that Śri Gunapriya Dharmapatni is always mentioned before Udayana's name in the inscriptions. This may indicate that Śri Gunapriya Dharmapatni was considered to have had higher position than her husband Udayana. There are four inscriptions issued under Śri Gunapriya Dharmapatni and Śri Dharmmodayana Warmadewa. Three of these inscriptions are in Old Balinese: Bebetin (301), Sērai AII (302), and Sading A (304), and one inscription significantly, is in Old Javanese: Buahan A (303) (Goris, 1954: 13-14; 157-165).

Another Old Javanese inscription dated AD 1011, Abang Pura Batur A (305), does not mention the name of Śri Gunapriya Dharmapatni (Goris, 1954: 88-94; 157-165), but it is very likely that this inscription was also issued during her reign. Under the reign of king Śri Dharmmodayana Warmadewa and the queen Śri Gunapriya Dharmapatni, the Old Javanese language (Kawi) starts to be used formally in the Balinese inscriptions, although before that Old Javanese words and Sanskrit words did occur (Goris, 1948:6). The relationship between Bali and East Java became very close. There are five other inscriptions that are also found in this period. One of them is the inscription Besakih Pura Batu Madēg which contains another inscription older than Besakih Pura Batu Madēg. It has a chronogram: nawa sanga api tur lawang which indicates the Śaka year 929 or AD 1007. During this period the Balinese language was greatly influenced by Old Javanese.

Evidence of the influence of Javanese culture on Bali can be seen very clearly from the inscriptions dating from AD 1011 to the early eleventh century AD. The influence is mainly through marriage and political contact. It is assumed that Śri Gunapriya Dharmapatni developed Javanese culture in Bali in AD 989-1011, when her husband, Śri
Dharmmodayana Warmadewa reigned. From that period on the Old Javanese language was regularly used and gradually replaced the Old Balinese language as the language of the inscriptions. Political contact between Bali and East Java continued until at least the Majapahit period in the fourteenth century.

According to Goris (1948:7), king Śrī Dharmmodayana Warmadewa and his queen Śrī Gunapriya Dharmapatni had 3 three children, one of them was born in AD 991 and was named Erlangga. He married his cousin from East Java and in AD 992 became a king of East Java. This indicates that the relationship between Bali and East Java had become very close. In these circumstances it can be understood that Javanese culture, including Javanese language, influenced Balinese.

In AD 1016 Śrī Ajñadewi appeared. Her name is mentioned in inscription Sēmbiran A III (351), which is in Old Balinese. This inscription indicates social disturbance in the village of Julah. The villagers are captured and killed by enemies. There used to be 300 families in the village of Julah which were reduced to 50 families. The villagers ask for the reduction of some taxes and their request is granted. The relationship between Udayana Warmadewa and Ajñadewi is still unclear. It is unknown whether she is also from the Warmadewa dynasty.

Dharmawangśawardhana Marakata Pangkajasthāna Uttunggadewa is the successor of king Udayana and Gunapriya Dharmapatni. He is the second son of Gunapriya Dharmapatni and Udayana. In the inscription Tungkulak A Marakata describes himself as the son of the king and queen who buried at Air Wēka (Wēka haji Dewatā sang lumāh ring Air wēka sajatu sri). According to Goris, Dharmawangśa Wardana reminds us of the name of Dharmawangśa Tēguh who was Sindok’s successor from East Java. Uttunggadewa is Sindok’s name. It can be assumed that his mother's ancestor is higher than his father’s. He claimed himself to be a descendant of King Sindok from East Java.

Based on the inscriptions that have been found up to the present time, Anak Wungsu may have reigned in Bali for 28 years from AD 1050-1078 (Goris, 1957:27). In the inscription Truñan A II (402), which is in Old Javanese, he states that he is the youngest son of Gunapriya Dharmapatni and Udayana. According to Callenfels (1926:22), his name is mentioned as the youngest son of the princess interred at Burwan, and the prince interred at Bañu Wka (pāduka haji anak wungsu nira kalih bhaṭāri sang lumah i burwan, mwang bhaṭāra dewata sang lumah ri buṅu wka.). Many inscriptions have been found in South Bali, Central Bali and North Bali dated in the period of Anak Wungsu’s reign (Kartodirdjo et al., 1977:148). The inscriptions of Anak Wungsu are mostly in Old Javanese and only one in Old Balinese, i.e. Truñan C (401). After Anak Wungsu all the inscriptions are written in the Old Javanese language.
The Length and Chronology of the Old Inscriptions

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>1200</td>
<td>C1200</td>
<td>Note</td>
</tr>
<tr>
<td>1100</td>
<td>C1100</td>
<td>Note</td>
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<tr>
<td>1000</td>
<td>C1000</td>
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<tr>
<td>900</td>
<td>C0900</td>
<td>Note</td>
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<tr>
<td>800</td>
<td>C0800</td>
<td>Note</td>
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<td>700</td>
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<td>C0600</td>
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<tr>
<td>300</td>
<td>C0300</td>
<td>Note</td>
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<tr>
<td>200</td>
<td>C0200</td>
<td>Note</td>
</tr>
<tr>
<td>100</td>
<td>C0100</td>
<td>Note</td>
</tr>
</tbody>
</table>

Note: Additional notes and comments may be found in the margins or at the bottom of the page.
2.8 Written Modern Balinese

Balinese writing system was revived at some point in the past, but just when is problematic. Obviously people continued to speak Balinese even if it became normal to write in Old Balinese and Old Javanese, for a period of several hundred years.

It appears that there is no written Modern Balinese before the eighteenth century. However, according to Ginarsa (1959:141, 143), the earliest Modern Balinese written language has existed since 1753 AD. His hypothesis is based on a text called Gēguritan Linggapētak. The Gēguritan is the earliest text which is in the Standard Balinese. In the first verse of this Gēguritan we read a phrase ...Arjuna manunggang jaran kumbang ngaras matanahi, which according to Ginarsa contains the chronogram: the Arjuna jaran kumbang matanahi. Ginarsa interprets this chronogram as the śaka year of 1675 (Arjuna=5, jaran=7, kumbang=6 and matanahi=1) or AD 1753. This indicates that modern Balinese might have existed since the middle of the eighteenth century.16

2.9 Balinese dialects and Standard Balinese

According to Sukrata (1932:81-84, 105-110; 1933: 153-155), Modern Balinese dialects are classified into: (a) the dialect of north Bali and (b) the dialect of south Bali. Standard Balinese is based on the South Balinese. On the other hand, Bawa and Jendra (1981:2) categorize Balinese dialects into mountain Balinese and lowland Balinese. In the present study, Modern Balinese refers to (i) Modern Standard Balinese (Standard Balinese) and (ii) Modern Mountain Balinese (Mountain Balinese).

In 1974 a congress was held in Bali to discuss language standardization (Masalah Pembakuan Bahasa Bali). At this conference it was decided that Standard Balinese is the language which is to be used as a medium of communication at school, meetings, in literature, on radio and television (Ginarsa et al., 1974:32). It is not clear, however, what was decided as Standard Balinese in this conference.

2.9.1 Sociolinguistic variation in Standard Balinese

Standard Balinese is characterized by 'speech levels' ('masor singgih basa'). In this section the social function of Standard Balinese speech levels will be discussed, while their linguistic forms will be discussed in 5.1. For convenience, L, M, H will be used to designate speech levels (i.e. Low, Medium and High respectively) in this section.

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16 According to Vickers (1989:72), the Gēguritan text has existed in the eighteenth century.
Speech level difference occurs mainly in the lowland areas in Bali such as the regencies of Badung, Klungkung, Gianyar, etc. (see Map 3 below) which used to be the centres of traditional kingdoms in Bali.

Every sentence which is said by Balinese in the lowland areas will contain speech levels indications.  

The speech levels in Standard Balinese are generally divided into:

1. Low level ('Basa Kasar')
2. Medium level ('Basa Madia')
3. High level ('Basa Alus Midēr'):
   a. Honorific ('Basa Alus Singgif')
   b. Deprecatory ('Basa Alus Sor')

The low level is used between intimates and to those of lower status (cf. Kersten, 1984). The high level ('Basa Alus Midēr') is used to address people whom one does not know well (non-intimate) or to whom one feels respect because of their status (cf. Bagus 1979; Clynes 1989). It should be noted that the high level ('Basa Alus Midēr') does not refer to honorific or deprecatory items so that it can occur with the first, second, third human and non-human referents. The high level is further divided into honorific ('Basa Alus Singgif') and deprecatory ('Basa Alus sor').

The difference between Basa Alus Singgif and Basa Alus Sor is: the Basa Alus Singgif is used to address people of higher status with whom one is not on familiar terms. It is normally used for honorific second, and third person reference, but never with the first person (Bagus, 1979; Zurbuchen, 1987:69). The Basa Alus Sor is used to refer to any person's activities toward a highly respected person. It can also be used when the speaker (lower status than the addressee) wants to refer to himself or the people of the same status or lower than himself.

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17 Speech levels also exist in Javanese (Poedjosodoarmo (1968), Uhlenbeck (1978) and Errington (1983; 1985; 1986)), Madurese (Stevens, 1965) and Sudanese (Satjadirata, 1956). There are many similarities between Javanese and Balinese speech levels. For instance, every Javanese sentence indicates a particular speech level or degree of politeness. The Javanese speech levels are also formed by the selection of vocabulary and affixes. There is not much difference in the level of syntax. (A detailed analysis of the comparison between Balinese and Javanese speech levels is beyond the scope of this present study; see Clynes (1989) for further analysis of the comparison between Balinese and Javanese speech levels.)

18 Low level ('Basa Kasar') is similar to Ngoko in Javanese. It is used to address someone to whom the speaker familiar with (Poedjosodoarmo, 1968:57). Basa Ngoko is a familiar or ordinary speech (Errington, 1985:8).

19 High level ('Basa Alus') is similar to Kromo in Javanese. The Basa Kromo is further divided into Kromo Inggil which is similar to Basa Alus Singgif in Standard Balinese, and Basa Kromo Andhap which is similar to Basa Alus Sor in Standard Balinese. Basa Kromo is polite and formal. It is used to address someone to whom the speaker must be distant and formal (see Poedjosodoarmo, (1968:57) and Errington (1985:8)).
The medium level is used to address someone toward whom one must express a formality of intermediate degree (cf. Kersten, 1970, 1984; Bagus, 1984, 1987; Zurbuchen, 1987).

An expression such as 'ritiang nunasang antuk linggih' which means 'may I know your status', is normally used by the speaker to address people before starting a conversation if the speaker does not know the status of the addressee. The use of right levels is very important although it is also realized that it is very complex. For instance, if low level is used to address people of high status, it is considered rude; on the other hand, if high level is used to address ordinary people (if the status of the people is obvious) it is said to be too polite. It is also considered incorrect and sounds awkward.

In Standard Balinese, there are two dimensions of sociolinguistic variation: speech level and level of formality. These two dimensions which interact in a complex way to be discussed below. In the discussion of 'The Pronouns of Power and Solidarity', Brown and Gilman (1972) have distinguished power and solidarity as separate sociolinguistic factors. Power is a relationship between at least two persons and it is non-reciprocal in the sense that both cannot have power in the same area of behaviour. Solidarity is the general relationship and it is symmetrical (Brown and Gilman 1972:258). Power may refer to people of higher status, while solidarity refers to the closeness of the relationship between the speaker and the addressee. These categories do apply directly in the Balinese case. In this thesis I propose that the Standard Balinese speech level is determined by status and familiarity which I will discuss in more detail below. In Standard Balinese, as a first approximation, people of higher status will normally be addressed with high level forms while lower status persons will be addressed with low level. This is to show that the issue is more complex. The high level language is an expression of reverence, while low level language expresses condescension or intimacy.
Status in Balinese is determined by caste, wealth, kinship and age, as well as occupation. There are three factors which are used in determining status in Balinese. They are:

1. Descent: Balinese society is divided under the caste system, which consists of Catur wangsa ('four descent groups, lineages'). They are Brahmana ('priest'), Ksatriya ('soldier or king'), Wesia ('trader') and Sudra ('commoner'). The first three are usually called Triwangsas ('aristocrat'), and Sudra is similar to Jaba ('commoner'). This latter subdivision has little effect on speech level determination.20

2. Occupation refers to the position of the speaker and the addressee in the society, e.g. a bank manager versus bank officer, teacher versus student etc.

3. Kinship and age also determine the status and the usage of speech levels in Balinese. Elder siblings will have higher status than the younger ones. However, these relationships are of relatively little importance compared to descent and occupation.

Familiarity (intimacy) refers to the relationship between the speaker and the addressee, whether they are close or not close. The reciprocal use of low level only occurs between people who are intimate although they may be different in status (see diagram below).

The following diagrams will illustrate the typical speech level selections among two persons of differing status or familiarity.

```
     I

Triwangsas people

     L  M  H

Sudra people
```

Diagram I shows that when the Triwangsas people talk to Sudra people, the Triwangsas usually speak low level, sometimes medium level and the Sudra will speak high level. This rule outranks all others.

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20 A detailed analysis of the Balinese Caste system is outside the scope of this thesis; for further analysis see, for instance, Geertz (1966), Boon (1973), Bagus (1979).
Among two Sudra people, a Bank manager and client will speak medium or high level to one another if they do not know each other very well. However, they may speak low level reciprocally if they are very good friends.

A teacher of Sudra caste normally speaks medium or low level to Sudra students outside school, but high level is often used when the situation is formal. The student, however, will always answer in high level.
Diagram IV shows that parents of Sudra speak medium or high level when they are talking to their son/daughter outside the house. However, they will speak low level at home. The son/daughter will answer in high or medium level to the parents whether at home or outside the house.

V (a) (newly arrived)  
Master  
L M H  
Servant

V (b) (after many years)  
Master  
L M H  
Servant

A master of Sudra caste will speak in low level to a faithful servant. The servant will speak high level to the master when she/he is newly arrived. However, if the servant has been with the family for many years and is considered part of the family, she/he will speak medium or low level to the master.

VI (a) (not close friend)  
Friend₁  
L M H  
Friend₂

VI (b) (close friend)  
Friend₁  
L M H  
Friend₂

Friends of the same status (Sudra or Triwangsa) will use low level to one another if they are very close. However, if they are not intimate they will use medium or high level reciprocally.

On many occasions, level of formality can be a very complex matter. Low, medium and high levels can all be used in a very formal situation, for instance, when one proposes to a woman. In this occasion, high level is used when a member of the man's family talks to woman's family, but if he or she wants to discuss something with his/her own family, low level will be used.
2.9.2 Conflict and change in speech level selection

There are also cases of raising or lowering of speech registers where someone may select a different speech register than that normally used. High level is used when the speaker wants to involve the prestige of the speaker. For instance, a woman normally uses medium level to address her uncle, but when a stranger is present, she will use high level to indicate that he is respected by his family. On the other hand, lowering register is often found in kinship relations between speaker and addressee. For instance, when a Triwangsa woman marries a Sudra man, before getting married the man would address the woman in high level; but after the marriage they would use medium or low level.

Great changes that have taken place in Balinese society since the twentieth century have had an impact on the language, particularly on the speech levels. The change here is in the usage of levels especially in high level. Formerly, words of high level were used to address members of the Triwangsa people. But nowadays, it is very common in Bali that Sudras of a high status use high level among their families. This may indicate that educational achievement and wealth normally bring high social status. On the other hand the Triwangsa people whom are normally addressed in high level by Sudra people are addressed in Indonesian. Indonesian is chosen to avoid the complex usage of speech levels, because Indonesian does not have lexical speech levels.

The following examples are from a conversation of the Sudra people, a mother and her son, entirely in high level.

(2-1) Gde:  *Ring dija jinahe bu?* (H)
where money DEF mother

'Where is the money, mother?'

Mother:  *Ambil ring dompete* (H)
take PREP purse DEF

'Take (the money) from the purse'.

Changes of status also causes the change of speech levels. For instance, if a Sudra woman married a Triwangsa man, before she was married her sisters or brother would use medium or low level to address her; afterwards, as the wife of an aristocratic man, she would be addressed by her family in high level.
Examples:

(2-2) Nyoman: Sampun tuni Jéro rauh? (H)
PERF long title arrive

'Have you been here for long?'

Jéro Raga: Sing iyang mara sajan tēka (L)
no 1ST just INTEN arrive

'No, I have just arrived'

Nyoman: Aliit-alite nentēn wenēn sarēng (H)
children NEG exist join

'The children do not come with you?'

Jéro Raga: Sing, Ida lunga masiram ka sēgara (H)
no hon go bath PREP beach

No (L), they went swimming at the beach'

The conversation between Jéro Raga and Nyoman shows that, in Balinese, after a Sudra woman becomes a member of the Triwangsa family, she will be given the title jéro 'house of aristocrat' and her original given name is also changed into a name which is given by the Triwangsa family. As a member of the Triwangsa people, she will then be addressed in high level. When the mother refers to her children, she will use high level. This passage also illustrates a further complication – the fact that status of discourse referent can affect speech level selection.

As mentioned before speech levels in Standard Balinese are mainly determined by status and solidarity. However, factors internal in a sentence can also affect speech levels. These include semantic characteristics of actor and undergoer NPs. The following example illustrates this.
(2-3) Agung Gde:  
*Tut, dija kuluke ?* (L)

Pn, where dog DEF

'Tut, where is the dog ?'

Kēnut:  
*Asune kantun ngamah* (H)
dog DEF still eat

'The dog(H) is still(H) eating(L)'.

The above is a conversation between *Triwangsa* with *Sudra*. The *Triwangsa* man uses low level when he speaks to his servant, and the servant will reply in high level. However, when the servant wants to refer to the dog (undergoer) he will choose the lexical item which belongs to high level, and the activities which are done by the dog (or parts of the body of the animal) will be expressed in low level.

It should be noted, however, that Old Balinese did not have speech level determinations as that of Standard Balinese. (See section 8.1 for further discussion).
Map 3

The Island of Bali
2.10 Mountain Balinese: evidence for conservative traditions

2.10.1 General features

Mountain Balinese dialects, like Old Balinese, do not have speech levels. They address all the people (whether they have high or low status) with a single lexicon. The vocabulary which is used by the people of mountain villages is cognate to low level ('Basa Kasar') in Standard Balinese. This dialect is spoken by Balinese who live in the mountain villages. There are no *Triwangsas* living in the Mountain Balinese villages. The Mountain Balinese villagers consider themselves are all equal as to descent or caste. Balinese from Mountain villages are considered still to keep Old Balinese cultural traditions. Those people are called by some scholars such as Swellengberel (1960), Danandjaja (1977) and Covarrubias (1972) as 'wong Bali Aga', which probably means 'the Balinese from the mountain villages'. The Mountain villages which are going to be described below are Tigawasa, Pêdawa and Cêmpaga in northwest Bali; Bêlantih and Sukawana in east Bali. All these villages are very isolated and the villagers have little contact with the people outside these areas. (See Map 2).

The sections below will argue that the Mountain villages are socially, and sometimes linguistically, conservative and thus of potential value in interpreting Old Balinese inscriptional passages and in tracing linguistic changes.

2.10.2 Functionaries

To begin, all Mountain villages have a hierarchical system of functionaries, although the actual terms differ from village to village. The Old Balinese term *Kèbayan* 'certain village functionary' has the cognate *Kubayan* in the villages of Bêlantih and Sukawana, Probably, the terms *Kèbahèn* (in Tigawasa), *Baan* (in Pêdawa) and *Kèbaan* (in Cêmpaga) are also cognate. Significantly, this term does not occur in Standard Balinese.
The full set of hierarchical functionaries for each village is as follows (ranked in order):

<table>
<thead>
<tr>
<th>Tigawasa</th>
<th>Pêdawa</th>
<th>Cêmpaga</th>
<th>Bêlantih</th>
<th>Sukawana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kêbahên</td>
<td>Nawen</td>
<td>Tugu</td>
<td>Kubayan</td>
<td>Kubayan</td>
</tr>
<tr>
<td>Pasêk</td>
<td>Manis</td>
<td>Kêhauan</td>
<td>Bau</td>
<td>Kubau</td>
</tr>
<tr>
<td>Takin</td>
<td>Paing</td>
<td>Takin</td>
<td>Singgukan</td>
<td>Singgukan</td>
</tr>
<tr>
<td>Pêngurakan</td>
<td>Pon</td>
<td>Pêngêluduan</td>
<td>Pênakêhan</td>
<td>Pênakêhan</td>
</tr>
<tr>
<td>Prêbêkêl</td>
<td>Wage</td>
<td>Pêrbêkêl</td>
<td>Pêngêlanang</td>
<td>Pênadah</td>
</tr>
<tr>
<td></td>
<td>Baan</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These hierarchies are locally referred to as desa adat ('village organization'), and are based on a notion of susud woton or ulud apad ('seniority'). If, say, in the village of Sukawana, the Kubayan dies, the former Kubau becomes the new Kubayan. Similarly, the former Singgukan becomes the new Kubau, and so on down the line. A new Pênadah, the lowest functionary, will be appointed from the villagers with necessary qualifications. All of this is confirmed in a ceremony attended by the entire village.

2.10.3 Market day systems

In Mountain Balinese villages, a market day is held every three days in accordance with Triwara, three day market cycle: Pasah, Bêâng, Kajêng. This is illustrated below.

Mountain Balinese three-day market cycle

![Diagram of market day cycle]

This system might have been taken from the Old Balinese tradition, as the three day market system is mentioned in Old Balinese: Wijayakrânta is similar to Pasah, Wijayamanggala is similar to Bêâng, and Wijâyapura is similar to Kajêng (Goris, 1954). On the other hand, market is held everyday in the lowland areas, because people of the lowland areas do not follow this system.
2.10.4 Notes on individual villages

The Mountain villages are influenced to some extent by Hindu culture, but the people here hold ceremonies less frequently than Balinese in the lowland areas. The following sub-sections will illustrate the Mountain Balinese social background and local historical traditions.

a. Tigawasa

The Mountain Balinese village of Tigawasa consists of three villages, namely Kuwun Munggah, Pangus and Wani. According to a legend told by the head of the village, the village of Pangus was once stricken by a plague. After this disaster, these three villages were united into one village and since then known as Tigawasa, which, according to village headman, means 'three villages become one'.

Tigawasa is located in the hills of the district of Banjar, regency of Buleleng. This village is very dry and dusty during the dry season and water is scarce. Public transport is not available yet, may be due to the condition of the road which is winding and steep. Their livelihood is earned as farmers in dry rice cultivation as well as through basketry. Significantly, the villagers know all the names of the bamboos mentioned in the Old Balinese inscriptions.

People from Tigawasa believe that they choose an auspicious day for their own death. There are also some ceremonies held, such as tooth-filing and cremation ceremonies. According to the head of the village, the cremation ceremony was introduced recently. In 1978 a preliminary to the purification ceremony called Eka Dasa Rudra was held. At that time the council of Hindu religion (Parisada Hindu Darma) announced that the cemetery had to be cleaned before the ceremony was held. Shrines for the mountain and for the sea are found in every house, but they do not have shrines for their ancestors. Everyone who wants to become a member of Tigawasa village has to hold a ceremony called marêbu to be witnessed by the temple priest, the head of the village as well as all the family members.

A sarcophagus was found by chance in a garden in the village of Wani in 1975 and two others were found in the village of Kuwun Munggah in 1979 and 1982. The sarcophagus from Wani and one from Kuwun Munggah were damaged, but the other one from Kuwun Munggah, was undamaged. These sarcophagi might be the burial places of the heads of a village ('kepala suku') because there are complete costumes inside the sarcophagus. These findings were reported by the head of the village to the government
of Bali, after which they were analyzed and were said to date from around 2000 BP.\textsuperscript{21} This indicates that the village of Tigawasa has existed since the 2000 BP or probably prior to this period.

b. Pēdawa

The village of Pēdawa is located to one side of the village of Tigawasa and is surrounded by palm trees. The occupation of the villagers is farming. They work in their own gardens (dry cultivation) such as planting coffee, palm trees and cloves. Most Pēdawa woman make palm sugar and palm wine at home and the men work in the garden (mēl). The dialect of this village is very similar to that of Tigawasa.

Pēdawa is characterized by a statue which is named Gunanti. According to a legend told by Minik (a temple priest), in ancient time God came down into the village of Pēdawa and asked someone to make a statue. If the statue was able to talk, it would be given a name Gunanti, and it would be placed at Gunungsari. The statue was then made to talk, and was given palm seed and wine. Since that time the village has become more and more prosperous and even now a lot of palm trees are found in the village of Pēdawa.

There was an inscription called Prasasti Bincangah found in Pēdawa, using modern Balinese script. However, this inscription is no longer in the village and, according to Minik, nobody knows where it is now. He further mentions that he still remembers some words appearing on the inscription: "lutung magēlut" meaning 'a monkey cuddling'.\textsuperscript{22}

c. Cēmpaga

The village of Cēmpaga is located next to the village of Pēdawa. As with the villagers of Tigawasa and Pēdawa, the villagers of Cēmpaga are also farmers in dry land. According to the temple attendant (Jēro Kēbaan) of the village of Cēmpaga, the original inhabitants of the village of Cēmpaga took refuge in the regencies of Klungkung and Bedahulu, probably from plague. The Cēmpaga people who live there now consider themselves as having ancestors from Blambangan East Java. The Cēmpaga dialect is somewhat different from that of Pēdawa, e.g. vowel /a/ when it occurs in final position is always realized as [ɔ] (for detail see 3.3.1). No inscriptions were found in this village.\textsuperscript{23}

\textsuperscript{21} (Muliawan, personal communication, 1990)
\textsuperscript{22} (Minik, personal communication, 1990).
\textsuperscript{23} (Dira, personal communication, 1990)
d. Sukawana

Sukawana village actually consists of two villages. One is called Kuta Dalém, which used to be the capital of Balingkang, and the other, Pakitan. The villages have a scattered form. According to the temple attendant, many people of Sukawana do not regularly live in their houses, but stay in widely dispersed gardens (kèbon), quite far from their places. They go into their houses only if there is an anniversary in the village temple. The village temple is called Bale Agung. The villagers of Sukawana raise poultry and do gardening. 24

An inscription was found in this village, which Goris named the Sukawana inscription (001) dated AD 882.

e. Bëlantih

The villagers of Bëlantih are farmers. Almost all of them own dry-rice fields where they can plant rice ('padi gaga').

According to the head of the village, there is a story about how Bëlantih was named. Once upon a time, a warrior came to this village. His name was I Ratu Bagus Manca Badung and he brought with him a weapon, a kind of knife, called blantik. This weapon was said to have divine power and could defeat all enemies who came into this village, which was subsequently called Bëlantih. The village of Bëlantih consists of three units of territories: Bunut, Tangwan and Pujung/Padang linggah. 25

Bëlantih villagers are divided into three groups:

- a. Krama pidèr: for the people between 7 to 12 years old
- b. Krama truna: for people from 13 up until marriage
- c. Krama juragan: for married people

There are two inscriptions found in this village, namely Sangsit A= Bëlantih A (406) dated AD 1058 and the inscription Sawan B= Bëlantih B (408) dated AD 1065 (Goris, 1954). They have been kept in a village temple until now and both are in Old Javanese.

24 (Jëro Baan Jumu, personal communication, 1990)
25 (Mudiar, personal communication, 1990)
CHAPTER III
MODERN BALINESE PHONEME SYSTEM

In this chapter, the Modern Balinese (hereafter MB) phoneme system, which consists of the Standard Balinese (hereafter SB) and the Mountain Balinese (hereafter MtB) phoneme systems, including their distributions and phonotactics are analyzed. This chapter lays the groundwork for the morphosyntactic analysis in the following chapters.

3.1 Modern Balinese phonemes

Many scholars such as Ward (1973), Barber (1977), Karna (1983), and Bawa & Jendra (1981) have already discussed the phoneme inventory of SB, and it appears that they are in basic agreement. In this section, what can be called the 'Standard Analysis' of SB will be reviewed. However, so far there is no work completed on the phonology of MtB. Based on data taken from fieldwork carried out in the MtB villages, it appears that the phoneme inventory of the MtB is similar to that of SB, so that the discussion presented here is basically focused on SB. However, when there are some differences in the realization and distribution of SB and MtB phonemes, those will be stated.

3.1.1 The phoneme inventory of Modern Balinese

MB has a six vowel system: three front vowels, one central one, and two back ones. It should be noted that the phonemes /i/ and /u/ are realized as slightly higher vowels in the MtB villages of Tigawasa and Bélantiäh. However, in other villages they are similar to that of SB. There are eighteen consonants in MB.

Vowel phonemes

i  u
č
ě
ě  o
a
Consonant phonemes

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>dental/ alveolar</th>
<th>palatal</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiceless stops</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>Voiced stops</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>ñ</td>
<td>ng</td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td>h</td>
</tr>
<tr>
<td>Liquids</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td>r</td>
</tr>
<tr>
<td>Semivowels</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td>y</td>
</tr>
</tbody>
</table>

3.2 Syllable and root structure of Modern Balinese

No previous quantitative study of Balinese syllable and root structure has been published, i.e. no study similar to that of Uhlenbeck (1978) for Javanese. Data used for analysing the syllable and root structure of the MB root morphemes below are taken from Kamus Bali–Indonesia (‘Balinese–Indonesian Dictionary’) published by Dinas Pendidikan Dasar Propinsi Bali, in 1990. Entries of the dictionary consist of more than 15,000 words. The structure of the MB root morpheme consists of one, two and three syllables.

MB root morphemes were found to occur in the following proportion:

1. Root morphemes with one vowel: 3%
2. Root morphemes with two vowels: 90%
3. Root morphemes with three vowels: 7%

Based on my investigation the majority (90%) of the root morphemes of MB are bisyllabic with the structure CVCV(C), CVCCV(C) or (C)VV(C). The maximal monosyllabic canonic syllable pattern in SB is C₁ (C₂) V (V) (C₃).

---

1 This is comparable to the root morpheme of Javanese language. According to Uhlenbeck (1978:26-27), 85% of Javanese root-morphemes consists of two vowels. CVC is considered as the ideal type of the
The MB data show that root morphemes with one vowel are mostly:

1. Morphemes of an expressive-affective character
2. Abbreviations of morphemes with two vowels, familiar speech, and abbreviations of proper names
3. Loan words

The root morphemes with three vowels are mainly:

1. Morphemes of an expressive-affective character
2. Names of plants and animals
3. Loan words

The following graphs will illustrate the phonotactic distributions of the MB root morphemes in more detail.

**One syllable with one vowel**

---

*types with one vowel, CVCVC as ideal for all types with two vowels and CVCVCVC as ideal for the types with three vowels. Finally he concludes that type CVCVC is the ideal type of all.*
Two syllables with two vowels
Three syllables with three vowels
3.3 The distribution of Modern Balinese phonemes

3.3.1 Vowels

All vowels except /a/ can occur in initial medial and final position. Vowel /a/ never occurs in final position in SB. However, in MtB all vowels can occur in any position.

<table>
<thead>
<tr>
<th>Initial</th>
<th>Medial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iba</td>
<td>'you'</td>
<td>biut</td>
</tr>
<tr>
<td>ibi</td>
<td>'yesterday'</td>
<td>cicing</td>
</tr>
<tr>
<td>iwas</td>
<td>'to see'</td>
<td>gimbēl</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/e/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>embon</td>
<td>'shelter'</td>
<td>begal</td>
</tr>
<tr>
<td>eme</td>
<td>'mother'</td>
<td>gesges</td>
</tr>
<tr>
<td>encol</td>
<td>'so quick'</td>
<td>geso</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MtB (cf. SB)

|    |       |       |       |       |       |
|----|--------|-------|-------|-------|
| aci | 'ceremony' | carik | 'wet rice field' | ada | 'exist' |
| ambu | 'palm leaves' | kangin | 'east' | bapa | 'father' |
| anu  | 'hit'  | kasub | 'famous' | mata | 'eyes' |

SB

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ade</td>
<td></td>
</tr>
<tr>
<td>bapē</td>
<td></td>
</tr>
<tr>
<td>matē</td>
<td></td>
</tr>
</tbody>
</table>

In SB, the final /a/ is always realized as shwa [a]. However, the final /a/ is still retained in MtB, except for the MtB village of Cēmpaga, where /a/ is realized as [o].

/e/

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ēmbus</td>
<td>'to take sth off'</td>
</tr>
<tr>
<td>ēndus</td>
<td>'to smell'</td>
</tr>
<tr>
<td>ēngkēb</td>
<td>'to hide'</td>
</tr>
<tr>
<td>ēnêkik</td>
<td>'little/small'</td>
</tr>
<tr>
<td>gēcē</td>
<td>'to disturb'</td>
</tr>
<tr>
<td>jēmak</td>
<td>'to take'</td>
</tr>
</tbody>
</table>

(see above item)

Shwa /ē/ never occurs in the final position in the MtB villages. This differs from SB.

/a/

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>uβēr</td>
<td>'chase'</td>
</tr>
<tr>
<td>ulat</td>
<td>'weave'</td>
</tr>
<tr>
<td>ajung</td>
<td>'father'</td>
</tr>
<tr>
<td>bungkul</td>
<td>'a classifier'</td>
</tr>
<tr>
<td>guyu</td>
<td>'joke'</td>
</tr>
<tr>
<td>lēmu</td>
<td>'quiet road'</td>
</tr>
</tbody>
</table>
3.3.2 Consonants

The consonant palatals /ɻ/, /ʃ/, /h/, and semivowels /j/ and /w/ never occur in final position in MB. From the data investigated it appears that hl as a grapheme can occur initially, medially and finally. However, based on my observation in the field, /h/ as a phoneme can occur in all positions in MtB, while in SB /h/ never occurs in initial and medial position.² Consonants other than those can occur in initial, medial and final positions both in SB and MtB.

<table>
<thead>
<tr>
<th>/p/</th>
<th>/b/</th>
<th>/m/</th>
<th>/l/</th>
<th>/d/</th>
</tr>
</thead>
<tbody>
<tr>
<td>paék</td>
<td>'close/ near'</td>
<td>apik</td>
<td>'neat/ tidy'</td>
<td>apap</td>
</tr>
<tr>
<td>pakêh</td>
<td>'salty'</td>
<td>capîl</td>
<td>'hat'</td>
<td>cakup</td>
</tr>
<tr>
<td>pamor</td>
<td>'limestone'</td>
<td>epot</td>
<td>'busy'</td>
<td>gêtap</td>
</tr>
<tr>
<td>bađêng</td>
<td>'black'</td>
<td>aba</td>
<td>'to bring'</td>
<td>cêlêb</td>
</tr>
<tr>
<td>bagêd</td>
<td>'slow'</td>
<td>bibih</td>
<td>'lips'</td>
<td>dabdêb</td>
</tr>
<tr>
<td>bêlog</td>
<td>'stupid'</td>
<td>dibî</td>
<td>'yesterday'</td>
<td>ênêb</td>
</tr>
<tr>
<td>maël</td>
<td>'expensive'</td>
<td>dêmêk</td>
<td>'moist'</td>
<td>amam</td>
</tr>
<tr>
<td>milu</td>
<td>'to joint'</td>
<td>ēnêk</td>
<td>'to take'</td>
<td>dum</td>
</tr>
<tr>
<td>mêñi</td>
<td>'dirty'</td>
<td>ēnêt</td>
<td>'weak'</td>
<td>mêm</td>
</tr>
<tr>
<td>tagih</td>
<td>'ask'</td>
<td>patêh</td>
<td>'same'</td>
<td>baât</td>
</tr>
<tr>
<td>tampih</td>
<td>'to fold'</td>
<td>sitiêng</td>
<td>'strong'</td>
<td>patpat</td>
</tr>
<tr>
<td>tasak</td>
<td>'ripe'</td>
<td>tatah</td>
<td>'to curve'</td>
<td>stêêt</td>
</tr>
<tr>
<td>daar</td>
<td>'eat'</td>
<td>bading</td>
<td>'to turn'</td>
<td>eed</td>
</tr>
<tr>
<td>daldał</td>
<td>'cause'</td>
<td>bêdak</td>
<td>'thirsty'</td>
<td>irid</td>
</tr>
<tr>
<td>dêmih</td>
<td>'tasteless'</td>
<td>dadong</td>
<td>'grandmother'</td>
<td>kisid</td>
</tr>
</tbody>
</table>

---
² This can cause confusion, see, for instance, Jendra and Bawa (1981:17); Barber (1977:13) who state that /h/ can occur initially, medially and finally, and Ward (1973:42) who says that 'almost any given /h/ + vowel symbol could be pronounced medial or final. It would be pronounced by most Balinese only if it were medial or final.'
| /n/ | 'try' | bënhëh | 'correct' | dëmnëh | 'like' |
| napi | 'pardon' | nanang | 'father' | diman | 'kiss' |
| nëm | 'six' | nani | 'you' | dundun | 'wake up' |
| /s/ | 'everyday' | basang | 'stomach' | këdis | 'birds' |
| salin | 'to change' | bësëth | 'swollen' | mis | 'rubbish' |
| sëduk | 'hungry' | kasil | 'spoiled' | pipis | 'money' |
| /ç/ never occurs in final position | cëgut | 'to bite' | ica | 'laugh' |
| cicing | 'dog' | këcog | 'to jump' |
| congah | 'feel shy' | lacur | 'poor' |
| /ʃ/ never occurs in final position | jadig | 'rude' | kaja | 'north' |
| jakan | 'to cook' | këjëp | 'a while' |
| jangkuak | 'to catch' | sajëng | 'palm wine' |
| /ñ/ never occurs in final position | ñai | 'you for' | ñëne | 'talkative' |
| female' | | | | |
| ñama | relative' | bañol | 'funny' |
| ñëb | 'sick' | dañuh | 'dried coconut leaves' |
| /k/, as [k] when it occurs in initial and medial positions, and in a root consists of reduplicated CVk sequence. However, /k/ is realized as [?] when it occurs in final position. | kimud | 'shy' | lëkig | 'lazy' | lunak | 'tamarind' |
| kisi | 'whisper' | mëka | 'mirror' | menak | 'aristocrat' |
| kucir | 'piggy' | raka | 'older brother or sister' | muluk | 'fat' |
| /g/ | galëng | 'pillow' | agu | 'proud' | sedeg | 'to lean' |
| gisi | 'hold' | bogbog | 'lie' | siag | 'crack' |
| gëlem | 'ill' | lëga | 'happy' | togog | 'statue' |
| /ŋ/ | nguci | 'warble' | anggo | 'use' | bangkiang | 'waist' |
| nglatir | 'naughty' | bangkes | 'to sneeze' | carang | 'branch' |
| ngon | 'amazed' | bangkid | 'thin' | jinang | 'granary' |
| /y/ never occurs in final position | yakti | 'yes' | daya | 'tactics' |
| yapi | 'although' | kayëh | 'take a bath' |
| yeh | 'water' | luyu | 'tired' |
/r/
rauh 'arrive'
rare 'child'
bingar 'happy'
rai 'younger sibling'
reňeh 'look for'
blabar 'flood'
rungu 'care'
sare 'sleep'
pincěr 'to turn'

/l/
lali 'forget'
kolĕm 'sleep'
bantal 'pillow'
lėga 'happy'
kĕlod 'south'
kual 'naughty'
luwung 'good'
ňalĕg 'oily'
punggal 'to cut'

/w/ never occurs in final position.

wayah 'old'
dawa 'long'
weh 'give'
tawang 'know'
wikan 'clever'
tiwas 'poor'

/h/

As mentioned above, in SB, /h/ only occurs in final position, phonetically, it never occurs in initial and medial position. However, in MtB, /h/ can occurs in all positions: initial, medial or final.

<table>
<thead>
<tr>
<th>Orthography</th>
<th>Pronunciation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hyang</td>
<td>[yaŋ]</td>
<td>[hyaŋ]</td>
</tr>
<tr>
<td>ha</td>
<td>[a]</td>
<td>[ha]</td>
</tr>
<tr>
<td>Kahyangan</td>
<td>[kayaŋan]</td>
<td>[kahaŋan]</td>
</tr>
<tr>
<td>Pahang</td>
<td>[paŋ]</td>
<td>[paŋ]</td>
</tr>
<tr>
<td>damuh</td>
<td>[damuŋ]</td>
<td>[damuŋ]</td>
</tr>
<tr>
<td>děkah</td>
<td>[dɔkəŋ]</td>
<td>[dɔkəŋ]</td>
</tr>
</tbody>
</table>

In MB, the phonemes /r/ and /l/ occur in clusters. They can be combined with any consonant except /h/, /y/, /f/, and /t/. Clusters in MB can only occur in initial or medial positions. The consonant cluster of MB can be formulated as follows:

\[ C_1, C_2 \]

C₁= any consonants
C₂= consonants /l/ and /r/.

Examples:

krana 'member'       cangkling 'to tie'
plaspas 'purify'      cambra 'dog'
CHAPTER IV
EVIDENCE FOR THE OLD BALINESE PHONEMES

In this chapter, an attempt is made to trace the correspondences between the MB phoneme system with the Old Balinese (hereafter OB) graphemes. Influences from Sanskrit and Old Javanese are traced. This chapter will begin with a consideration of the units of the OB writing system. Also the spelling variations which occur in the transliteration of OB inscriptions published by Goris (1954) and those which occur in the photographic of the original inscriptions will be discussed. Spelling variations and comparative evidence of modern Balinese dialects will assist in determining the OB phoneme system. This is the main purpose of this chapter. Besides this, Proto Austronesian data are used in preliminary comparisons, providing further indications of how OB graphemes are to be interpreted phonemically.

4.1 Units of the writing systems

In its graphemes, OB may have applied the principle of a phonemic or alphabetic writing system. However, we do not know how closely the OB writing systems actually reflected the OB phoneme systems, i.e. to what extent there was a one-to-one correspondence between the phonetic values and signs. An ideal consistent alphabetic script uses one grapheme for one phoneme. In a phonemic representation, however, it is often the case that one grapheme corresponds to two or more different phonemes (Hoeningwald, 1960:4). Thus, in English, the compound grapheme th represents [θ] and [ð] and the single grapheme x represents a sequence [k+s] of 2 phonemes.

The extent to which the writing system of OB was phonemic is still problematic. Sounds change all the time in almost all languages in the world. A language may take a writing system from another language which has a different phonemic system. In the case of OB the original Sanskrit phonemic system as represented in Pallava scripts surely differs from how OB was actually pronounced.

The sound system of any language often changes through time whereas writing systems tend to remain fixed. However, spelling fluctuation sometimes provides an important clue as to sound change (see section 4.8). Units of the OB writing system precedes this discussion.
4.1.1. Units of the Old Balinese writing system

Units of the OB writing system are close to Indic prototypes but appear to be only partially parallel to the Sanskrit inventory. OB includes two additional vowel symbols, while not using some others. The OB writing system distinguishes two non-Sanskrit units interpreted here as ē (short schwa) and ō (long schwa). As in Sanskrit in OB all the consonant symbols are syllabic and inherently vowel /a/ is assumed in the absence of another vowel (except in the final position). ¹

Gantungan (‘a conjunct consonant’) occurs in the OB writing system. Gantungan in OB may be similar to Sanskrit samyogapara. This term consists of two compound Sanskrit words: samyoga and para. Samyoga means: ‘a conjunct consonant; a combination of two or more consonants’, while para means ‘a following letter or sound’ (Monier Williams, 1976:s.v.). Samyogapara means ‘the consonant or consonants that follow the initial consonant of a group of conjunct consonants’.

The OB writing system has a set of special symbols referred to as sandangan těngēnān. This is a Balinese term which is used to refer to the category of consonants from which the vowel phoneme /a/ inherent in consonants is absent, at least according to the Standard interpretation of the traditional orthography. The sandangan těngēnān comprises the wisarga (\(\text{\`a}\) = ll\(\text{h}\)\), surang (\(\text{\`a}\) = lr\), the cēcēk (\(\text{\`a}\) = lgl\) and the adēgadēg (\(\text{\`a}\)). These symbols suppress the inherent vowel /a/. It should be noted that the Modern Balinese writing system is similar to, but not identical with the OB system.

Vowel graphemes:

<table>
<thead>
<tr>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{`a})</td>
<td>(\text{`a})</td>
</tr>
<tr>
<td>(\text{`i})</td>
<td>(\text{`i})</td>
</tr>
<tr>
<td>(\text{`u})</td>
<td>(\text{`u})</td>
</tr>
<tr>
<td>(\text{`e})</td>
<td>(\text{`e})</td>
</tr>
<tr>
<td>(\text{`æ})</td>
<td>(\text{`æ})</td>
</tr>
<tr>
<td>(\text{`ai})</td>
<td>(\text{`ai})</td>
</tr>
</tbody>
</table>

¹ The OB writing system can be compared to the Modern Balinese writing system. The main writing system of Modern Balinese is called kanaفارکا . The consonant symbols: ha, na, ca, ra, ka, da, sa, wa, la, ma, ga, ba, nga, pa, ja, ya nya. For the vowel symbols: i, u, e, o, ē. The consonants represent syllabic, i.e. consist of a single consonant and followed by the vowel a (the vowel /a/ is inherent to every consonant). This vowel is changed to another by adding a diacritic: above, beneath, beside the symbols or dropped by the addition of the mute symbol (\(\text{\`a}\)) This case is similar to OB.
Consonant graphemes:

\[
\begin{align*}
&\text{a} \ k\text{a} \\ &\text{b} \ c\text{a} \\ &\text{c} \ j\text{a} \\ &\text{d} \ j\text{h}a \\ &\text{e} \ j\text{h}a \\ &\text{f} \ t\text{h}a \\ &\text{g} \ d\text{a} \\ &\text{h} \ d\text{h}a \\ &\text{i} \ p\text{a} \\ &\text{j} \ p\text{h}a \\ &\text{k} \ b\text{a} \\ &\text{l} \ b\text{h}a \\ &\text{m} \ y\text{a} \\ &\text{n} \ r\text{a} \\ &\text{o} \ l\text{a} \\ &\text{p} \ w\text{a} \\ &\text{q} \ s\text{a} \\ &\text{r} \ s\text{a} \\ &\text{s} \ s\text{a} \\ &\text{t} \ h\text{a} \\
\end{align*}
\]

4.1.2 The distribution of Old Balinese graphemes

Below are given examples of the different OB graphemes in syllable initial, medial and terminal positions. Certain items in the OB writing system have not been found in some positions.² It should be noted that all the examples below are root morphemes taken from the OB inscriptions.

---

² OB script which is presented in this thesis based on the photographs of the original inscriptions which still exist. Note that certain symbols are not found from these photographs.
Vowel graphemes

<table>
<thead>
<tr>
<th>Syllable initial</th>
<th>Medial</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɨɨ</td>
<td>ɨɨ</td>
<td>ɨɨ</td>
</tr>
</tbody>
</table>

ɨɨ is written ɨ when it occurs syllable initially and ɨ, when it occurs non-syllable-initially.

ɨɨ ɨɨ ɨɨ 'noisy' ɨɨ ɨɨ ɨɨ 'little' ɨɨ ɨɨ ɨɨ 'here'
ɨɨ ɨɨ ɨɨ ɨɨ 'ask/beg' ɨɨ ɨɨ ɨɨ 'guard' ɨɨ ɨɨ ɨɨ 'death'
ɨɨ ɨɨ ɨɨ ɨɨ 'drink' ɨɨ ɨɨ ɨɨ ɨɨ 'silver' ɨɨ ɨɨ ɨɨ ɨɨ 'wife'

ɨɨ is written ɨ only occurs with Sanskrit words and is not found in syllable initial.

ɨɨ ɨɨ ɨɨ ɨɨ 'blue' ɨɨ ɨɨ ɨɨ ɨɨ 'the ninth of the half moon'
ɨɨ ɨɨ ɨɨ ɨɨ 'witness'

lɨɨ is written ɨ when it occurs syllable initially, and ɨ, when it occurs non-syllable-initially.

ɨɨ ɨɨ ɨɨ ɨɨ 'water' ɨɨ ɨɨ ɨɨ ɨɨ 'climb' ɨɨ ɨɨ ɨɨ ɨɨ 'fish'
ɨɨ ɨɨ ɨɨ 'food cooked' ɨɨ ɨɨ ɨɨ 'and'
ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'chief' ɨɨ ɨɨ 'smith'

lɨɨ is written ɨ when it occurs syllable initially. However, as mentioned before, all consonant graphemes are interpreted as syllabic with the vowel /a/ inherent in them so that lɨɨ never occurs in the medial or terminal position.

ɨɨ ɨɨ ɨɨ ɨɨ 'exist' ɨɨ ɨɨ ɨɨ ɨɨ 'heavy' ɨɨ ɨɨ ɨɨ ɨɨ 'father'
ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'forest' ɨɨ ɨɨ ɨɨ ɨɨ 'pay' ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'length'

lɨɨ is written ɨ

ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'because' ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'buffalo' ɨɨ ɨɨ ɨɨ ɨɨ ɨɨ 'two'

3 Pes means food which is cooked and broiled in leaves.
\textbf{\textit{ũga}} 'battle' \textbf{\textit{šsā}} 'all'

\textbf{\textit{niḥ}} 'blood'

ĕl is written \(\ddot{e}\) is not found in syllable terminal position.

\textbf{\textit{ēluk}} 'bend' \textbf{\textit{dēngēr}} 'hear'

\textbf{\textit{ēnah}} 'establish' \textbf{\textit{hasēp}} 'incense'

lōl is written \(\ddot{l}\) is not found in syllable initial and terminal positions.

\textbf{\textit{tōgēr}} 'high'

\textbf{\textit{ubuh}} 'breed' \textbf{\textit{pulu}} 'rice container' \textbf{\textit{batu}} 'stone'

\textbf{\textit{ucap}} 'talk' \textbf{\textit{suruh}} 'ask' \textbf{\textit{tahu}} 'know'

\textbf{\textit{ult}} 'knead'

lōl rarely occurs in OB; it only occurs in Sanskrit words.

\textbf{būma} 'earth'
\textbf{bhūta} 'creature'
\textbf{pūma} 'perfect'

loł is written \(\ddot{l}\) when it occurs syllable initially, and \(\ddot{j}\) when it occurs non-syllable-initially.

\textbf{\textit{hoka}} 'child' \textbf{\textit{hano}} 'palm tree'

\textbf{\textit{lod}} 'sea' \textbf{\textit{5ēpī}}

kārambo 'buffalo'

lail is written \(\ddot{l}\)

\textbf{\textit{āir}} 'river'
laut is only found in a Sanskrit word.

saugota 'Buddhist'

Consonant graphemes

lpl is written ल when it occurs syllable initially, medially and terminally. However, it is written ळ when it occurs as a conjunct consonant.

\[ \text{लल} \text{पहेन 'to pay'} \quad \text{लल} \text{दपत 'can'} \quad \text{लल} \text{हरुप 'change'} \]
\[ \text{लपली 'to act'} \quad \text{लपा आपि 'fire'} \quad \text{रस्तार्गेप 'the head of the family'} \]

lbl is written ळ when it occurs syllable initially, medially and terminally. However, it is written ल when it occurs as a conjunct consonant.

\[ \text{बली बिरस 'sand'} \quad \text{बली इंबें 'noisy'} \quad \text{सलर्स 'music instrument'} \]
\[ \text{बलली बुलान 'moon/month'} \quad \text{बललिकाबोन 'garden'} \quad \text{कल्का 'downstream'} \]

lbhl is written ळ. It is not found in syllable terminal position.

\[ \text{बलबर्ली भारु 'new'} \quad \text{लबर्ली हाबब 'to cut'} \]

lml is written ळ when it occurs syllable initially, medially and terminally. However, it is written ल when it occurs as a conjunct consonant.

\[ \text{मलमा वाए 'eyes'} \quad \text{मलक्मित 'guard'} \quad \text{ललिनम 'drink'} \]
\[ \text{मललम्सुह 'enemy'} \quad \text{मलसाम्पी 'cow'} \quad \text{ललपदाम 'dead'} \]

ltl is written ळ when it occurs syllable initially, medially and terminally. However, it is written ल when it occurs as a conjunct consonant.

\[ \text{लतलतीम 'sharp'} \quad \text{लतलतलान्ताग 'long'} \quad \text{लतलिवहापित 'in between the two'} \]
\[ \text{लतलतातनाह 'land'} \quad \text{लतलिपारी 'a functionary'} \quad \text{ललित्ताग 'weave'} \]
\[\text{lthl} \text{ is written } \delta \text{ mostly occurs in Sanskrit words, and it never occurs syllable terminally.}\]

\[\delta \text{ thani 'village' } \delta \text{ athawa 'or'}\]

\[\delta \text{ atithi 'guest'}\]

\[\text{ldl is written } \zeta \text{ when it occurs in syllable initially, medially and terminally. However, it is written } \gamma \text{ when it occurs as a conjunct consonant.}\]

\[\gamma \text{ dala} \text{ 'road' } \gamma \text{ ider 'walk around' } \gamma \text{ lod 'toward the sea'}\]

\[\delta \text{ dwa 'two' } \delta \text{ kduk 'a title' } \delta \text{ rukud 'a classifier'}\]

\[\text{lthl is written } \delta \text{ only found in syllable medial and final positions.}\]

\[\gamma \text{ dihi 'ask' } \delta \text{ addhi 'younger siblings'}\]

\[\text{lnl is written } \zeta \text{ when it occurs syllable initially, medially and terminally. However, it is written } \gamma \text{ when it occurs as a conjunct consonant.}\]

\[\gamma \text{ nek 'climb' } \gamma \text{ san 'water scale' } \gamma \text{ lulu} \text{ 'roll'}\]

\[\zeta \text{ nibab 'lie' } \zeta \text{ tanduk 'horn' } \gamma \text{ Truvan 'name of a village}\]

\[\text{lcl is written } \delta \text{ never occurs syllable terminally. However, it is written } \delta \text{ when it occurs as a conjunct consonant.}\]

\[\delta \text{ cadar 'a dog' } \delta \text{ ancap 'bouquet'}\]

\[\zeta \text{ cakcak 'break'}\]

\[\gamma \text{ culung 'pig'}\]

\[\text{lchl only occurs in Sanskrit words and never occurs syllable terminally.}\]

\[\text{cheda 'handicap' } \text{ iccha 'wish or desire'}\]
ljl is written ḍ. It never occurs syllable terminally. However, it is written ḍ when it occurs as a conjunct consonant.

Egyptian: jahit ‘sew’  ajēng ‘in front’

Lesser Asiatic: jaja ‘cake’  haji ‘king’

Śār: juang ‘take’  ṭajēm ‘sharp’

ljhl is written ḟ and it occurs in only one word.

Egyptian: Ḩāng ‘all’

ljl is written ḍ never occurs syllable terminally. However, it is written ḍ when it occurs as a conjunct consonant.

Egyptian: ṇak ‘willing’  ṇinka ‘oil’

Lesser Asiatic: ṇalyan ‘a sp.fish’  pānji ‘flag’

Śār: laṅcang ‘canoe’

lkj is written ḋ when it occurs syllable initially, medially and terminally. However, it is written ḋ when it occurs as a conjunct consonant.

Egyptian: kabon ‘garden’  jukung ‘canoe’  ṇak ‘willing’

Lesser Asiatic: kayu ‘wood’  ikap ‘to perform’  paryuk ‘earthen-cooking pot’

Śār: kiha ‘old’  pakaya ‘job’  ṭajuk ‘plant’

lkhl is written ḍ only occurs in Sanskrit words.

Egyptian: sukha ‘happiness’

Lesser Asiatic: dukha ‘sadness’

Śār: lekha ‘line’
|gl| is written when it occurs syllable initially, medially and terminally. However, it is written when it occurs as a conjunct consonant.

\[\text{gëndang } '\text{drum}' \]
\[\text{lagi } '\text{in the past up to the present}' \]
\[\text{glar } '\text{a tax}' \]
\[\text{pagar } '\text{fence}' \]
\[\text{urug } '\text{bury}' \]

|gl| is written

\[\text{ghya } '\text{that is}' \]
\[\text{ghyâni } '\text{now}' \]

|gl| is written when it occurs syllable initially and medially. However, it is written when it occurs syllable terminally.

\[\text{pinguniwah } '\text{if}' \]
\[\text{pangan } '\text{food}' \]
\[\text{hyang } '\text{God}' \]
\[\text{sanga } '\text{shrine}' \]
\[\text{tring } '\text{bamboo}' \]

|l| is written

|l| is not found in syllable medial position.

\[\text{tida } '\text{vague}' \]
\[\text{suketi } '\text{wild growth of weeds or shrubs}' \]

|l| is written when it occurs as a conjunct consonant.

\[\text{dang } '\text{honorable}' \]
\[\text{kati } '\text{hermaphrodite}' \]
\[\text{dapumia } '\text{title}' \]
\[\text{taqah } '\text{food}' \]

|l| is written

|l| is not found in syllable initial and terminal positions.

\[\text{danu } '\text{lake}' \]
\[\text{indit } '\text{bring}' \]
Isi is written 🍺 when it occurs syllabically, medially and terminally. However, it is written 🎅 when it occurs as a conjunct consonant.

🍺 🎆 samah 'complete' 🎆 🎆 hasar 'a name of a village'
🍺 🎆 🎆 ingis 'oil'

🍺 🎄 sudang 'dried fish' 🎆 🎆 pasar 'market'
🍺 🎆 🎆 ipas 'free'

Isi is written 🎆. It is only found in syllable initial position.

🍺 🎆 srah 'handed over'
🍺 🎆 🎆 s'rangsisik 'a type of tax'

Isi is written 🎆. It is not found in syllable initial and syllable terminal positions.

🍺 🎆 dakya 'inscription'

Iṣḷ is written 🎆. It never occurs in syllable terminal. However, it is written 🎆 when it occurs as a conjunct consonant.

▆ 🎆 ya '3RD person' 🇱 🇲 bayar 'pay'
▆ 🇳 🇱 yumu '2ND person' 🇱 🇳 halya 'ginger'

Iṣḷ is written 🇲 when it occurs syllabically. However, it is written 🇲 when it occurs syllabically and 🇲 when it occurs as a conjunct consonant.

▆ 🇳 rgaas 'when' → 🇴 🇳 ari 'sun'
▆ 🇳 🇳 rukud 'classifier' 🇲 🇳 prih 'effort'

Iṣḷ is written 🇲 when it occurs syllabically, medially and terminally. However, it is written 🇲 when it occurs as a conjunct consonant.

isContained "imar 'noon' 
isContained "lulun 'roll'
isContained "buntitl 'a kind of food'

Isi 🇲 Inga 'sesame' 🇲 🇲 pali 'to act'
Isi 🇲 pihal 'but'
lw1 is written ꤐ. It never occurs syllable terminally. However, it is written ꤐ when it occurs as a conjunct consonant.

\[ ꤐ ꤐ ꤐ \text{ `bone' } \quad ꤐ ꤐ \text{ `bring'} \]
\[ ꤐ ꤐ ꤐ \text{ `rising'} \quad ꤐ ꤐ ꤐ ꤐ \text{ `come and go'} \]
\[ ꤐ ꤐ \text{ `cause'} \quad ꤐ ꤐ ꤐ ꤐ \text{ `respect'} \]

lh1 is written ꤐ when it occurs syllable initially or medially. However, it is written ꤐ when it occurs syllable terminally.

\[ ꤐ ꤐ ꤐ ꤐ \text{ `defeated'} \quad ꤐ ꤐ ꤐ ꤐ \text{ `old'} \quad ꤐ ꤐ \text{ `boiled'} \]
\[ ꤐ ꤐ ꤐ ꤐ \text{ `child'} \quad ꤐ ꤐ ꤐ ꤐ \text{ `name of the 16th calendrical term'} \quad ꤐ ꤐ ꤐ ꤐ ꤐ \text{ `firmness'} \quad ꤐ ꤐ \text{ `pageh'} \]

Cluster graphemes

It appears that many cluster graphemes occur in the OB inscriptions. The following table illustrates the OB cluster inventory.

<table>
<thead>
<tr>
<th>1st</th>
<th>2nd cons.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cons.</td>
<td></td>
</tr>
<tr>
<td>p b m t d n l r s j k g ng</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>x x x x</td>
</tr>
<tr>
<td>b</td>
<td>x x x x x</td>
</tr>
<tr>
<td>w</td>
<td>x x x x</td>
</tr>
<tr>
<td>t</td>
<td>x x x x</td>
</tr>
<tr>
<td>d</td>
<td>x x x x x</td>
</tr>
<tr>
<td>l</td>
<td>x x x x</td>
</tr>
<tr>
<td>r</td>
<td>x x x x</td>
</tr>
<tr>
<td>s</td>
<td>x x x x x x x</td>
</tr>
<tr>
<td>k</td>
<td>x x x x x x</td>
</tr>
<tr>
<td>g</td>
<td>x x x x</td>
</tr>
<tr>
<td>h</td>
<td>x x x</td>
</tr>
</tbody>
</table>

\[ ^4 \text{ According to Goris (1954), the meaning of } \text{ `boiled'} \text{ is uncertain. However, in MB, it means `overboiled'.} \]
In the photograph of the original inscriptions, it appears that the words *bras* (ㄆ), *dmak* (ㄉ), *kdī* (ㄑ), *pgat* (ㄍ) etc. always appears as clusters.

4.1.3 Spelling variation in Old Balinese inscriptions

a. Published sources

The spelling of items occurring in the OB inscriptions is not consistent. An examination of the entire published corpus of OB inscriptions reveals considerable variation. It even occurs within the same inscription.

This spelling variation is an important clue to understanding the OB phoneme system. It is clear, for instance, that OB seems not to distinguish phonemically the long vowel ā and the short a, and that there seems to be no phonemic distinction between th and t, bh and b, kh and k, s and š, nor dental t or d and retroflex ō or ō. This variation is analyzed below.

Vowel variation in Old Balinese words

There are a number of cases where words, both OB and Sanskrit, vary as to how vowel length is written.

Vowel length variation in Old Balinese words

*apan* 'because' (in 209 5a 5, 110 1b 4, 202 2a 4) varies with *āpan* (in 003 2a 3).

*atar* 'group of people' (001 1b 2, 001 2b 5, 106 1b 2, 106 1b 5, 107 2a 6, 107 1b 4, 207 2a 1) varies with *ādr* (107 1b 4).

*bulan* 'moon' (205 A 1, 302 3a 5) varies with *bulān* (204 1b 1, 202 1b 1, 204 1b 1).

*dān* 'and' (003 3a 1) varies with *dan* (003 3b 5).

*kambing* 'goat' (001 2a 2, 002 2a 1, 002 2a 4, 002 3a 1, 003 1b 5, 104 2a 6, 104 2b 1, 107 3a 2), varies with *kāmbing* (004 1b 4).

*karambo* 'buffalo' (001 2a 1, 001 2b 2, 002 2a 4, 002 3a 1, 002 3a 4, 003 3b 2, 005 13, 104 3a 4, 108 2a 2, 108 2a 4, 302 3b 5, 302 4a 5) varies with *karāmbo* (006 2a 2, 101 2 2, 107 2b 3, 107 3a 1, 002 2a 1).

*krangan* 'child less married couple' (002 3a 2, 002 3a 4, 002 3b 1, 005 18, 006 2a 1, 006 2a 5, 101 1 12, 101 2 1, 101 2 10, 104 3a 1, 302 4a 4, 302 4a 6, 302 5a 1, 304 5 3) varies with *krāngan* (001 2b 1, 001 2b 5, 003 3a 5, 005 11; 12, 104 3a 2, 108 2a 3).
lagi 'the past up to the present' (003 4a 3) varies with lägi (004 3b 4, 104 1b 4).

man 'demonstrative' (002 1b 1, 005 2, 006.1b 2, 101.1 2, 105 1b 2, 106 1b 1, 107 1b 1) varies with män (001 1b 1).

mas 'gold' (104 3a 3) varies with mäs (001 2a 5).

ram 'talk' (002 1b 1, 301 3b 4, 302 2b 6) varies with räm (005 2, 006 1b 2, 101 1 1, 101 1 2, 106 1b 2, 210 2b 4).

sampi 'cow' (001 2a 1, 001 2b 2, 002 2a 2; 4, 002 3a 1; 5, 003 1b 5, 003 3b 2, 005 13, 006 2a 2, 104 2b 1, 104 3a 4, 107 2b 4, 107 3a 2, 108 2a 1; 4, 302 3b 5) varies with sāmpi (004 1b 4, 101 2 2).

Other vowel variations in Old Balinese words

There are also some words that vary greatly in their spelling:

jhang 'all' (in 002 2a 1, 104 3a 1, 108 1b 3, 301 3b 4, 302 3b 6, 301 3b 3, 302 4a 3, 302 4b 2) varies with jāng (in 101 1 6, 101 1 9, 101 2 2, 101 2 5, 105 2b 1, 106 3a 3) varying with jāng (104 3a 5, 304 4a 3).

pottagin 'curse' (003 4a 3) varies with putthagi (001 3a 2, 002 3b 2), potagin (006 2a 6) and pontagin (101 2 12).

sēnhi 'artistic' (001 1b 4) varies with sni (003 1b 4, 004 1b 4, 101 1 3, 202 1b 3; 6, 202 2a 2, 203 1b 4, 203 1b 6, 203 1b 1, 202 1b 3 5), sanhi (005 7, 107 2a 3), snih (006 1b 4) as well as sanni (302 4a 3).

Consonant variation in Old Balinese words

Some retroflex and aspirate consonants vary, as shown below.

The retroflex Ɂ such as in the word tanda 'sign' (108 2a 6) varies with dental d as in tanda (001 2b 4, 005 14, 007 10, 105 1b 4, 105 2 6, 107 2b 6).

نفذ becomes ɗ, e.g. danu 'lake' (004 2b 1) varies with danu (003 4a 2), karundang (104 2a 1 and 2, 304 5a 1) and karundang (003 3b 5).

The word bharu 'near' (001 2a 4, 104 2b 5) varies with baru in (004 3a 3).

da 'honorific' (201 2 2 4 5, 201 3 2 3, 205 5 12, 209 5b 2, 209 5b 3, 210 2b 2, 210 2b 5 6 210 3a 1 2, 210 3a 3, 301 5a 1, 301 5a 2 3 4, 302 3a 3, 302 4b 6, 302 5a 1, 304 1b 2, 304 1b 4) varies with ɗha (201 1b 1).
Labial variations do occur in OB words. These are /wl~lw/.

\textit{wangun} 'to build' (005 4) varies with \textit{bangun} (005 16, 302 4b 2); \textit{wawini} 'female' (101 2 1, 107 2b 4) varies with \textit{babini} (002 3a 4, 104 3a 4); \textit{wanuwa} 'village' (005 9, 201 1b 2) varies with \textit{banuwa} (002 2a 1, 210 2b 2); \textit{wulan} 'moon/month' (104 4a 1, 304 1b 1) varies with \textit{bulan} (001 3a 1, 302 2b 2).

Thus spelling variations in OB words indicate that no distinction appears to have been made to distinguish between short and long \textit{l}, retroflex \textit{d} with \textit{l}, \textit{n} with \textit{l} and aspirate \textit{lb} with \textit{lb} phonemically. On the other hand, it appears that \textit{lw} and \textit{lb} represents a more complicated case. Seven items show free variation, but for the majority of items \textit{lw} is regularly distinguished from \textit{lb}. (See OB examples in (4-10) below). From the data investigated I feel certain that \textit{lw} varying with \textit{lb} is not due to dialectal variation nor to chronology (where one form is older than the other).

\textbf{Variation in vowel length in Sanksrit words}

Besides the OB words which are inconsistently spelt using the Sanskrit derived writing system, there are also some Sanskrit-derived words not spelt in accordance with the rules of the language (i.e. they are etymologically incorrect). It is found that in some cases Sanskrit words lose the vowel length such as in the following words:

\begin{itemize}
  \item \textit{ājña} 'order' (001 1b 1, 003 1b 1, 003 4a 2, 004 1b 1, 004 3b 4, 004 3b 4, 005 1, 006 1b 1, 101 2 12, 104 1b 1, 104 1b 1, 106 3b 1, 108 2b 2, 110 1b 1) varies with \textit{ajña} (002 3b 1, 002 3b 2, 106 1b 1, 107 1b 1) as well as \textit{ajjā} (101 1 1, 108 1b 1, 210 2b 6, 210 3a 1, 301 5a 2, 302 2b 4, 302 5a 2).
  \item \textit{cintā} 'anxiety' varies with \textit{cinta} (001 1b 2, 002 1b 2, 003 1b 2, 004 1b 2, 005 2, 006 1b 2, 101 1 2, 105 1b 2, 106 1b 1, 107 1b 1).
  \item \textit{grāma} 'married people' (005 10, 107 2a 6) varies with \textit{grama} (001 1b 4, 001 2a 5, 003 3a 2, 003 3a 4, 107 1b 6, 201 1a 4, 207 1a 1).
  \item \textit{nāyaka} 'leader' (001 1b 1, 001 2a 1, 002 3b 1, 003 1b 1, 003 2a 3, 004 1b 1, 004 2a 2, 006 1b 1, 006 2a 5, 101 2 9, 104 2a 3, 104 2b 1, 104 3b 5, 105 2b 2, 106 1b 1, 106 3a 1, 106 3a 4 5, 107 1b 1, 108 1b 2, 108 1b 4, 108 1b 5 6, 108 1b 5 6, 108 2a 1 3, 108 2a 5, 110 1b 2, 209 5b 2, 210 2b 5, 301 5a 1, 302 3a 3, 302 3b 1 2, 302 3a 6, 302 3b 6, 302 4b 5, 302 5a 2, 304 1b 2, 304 1b 5, 304 4b 4 5, 304 5a 1, 304 5b 1) varies with \textit{nayaka} (002 1b 2, 201 2 6, 302 3a 3, 304 5a 2).
  \item \textit{prasādā} 'temple' varies with \textit{prasada} (209 5a 3).
  \item \textit{senāpati} 'functionary' (001 1b 2, 106 3a 1, 205 12 13, 209 5b 1, 210 2b 2, 210 2b 5, 302 4b 5, 302 4b 6, 302 5a 1, 304 1b 2, 304 1b 4, 304 4b 4) varies with \textit{senapati} (201 1b 1, 201 1b 2, 201 1b 5, 201 2 2, 201 2 5, 205 5, 302 3a 3).
\end{itemize}
śambra 'copper' (003 3b 1, 006 2a 2) varies with śambra (001 2b 2, 002 3a 4, 005 12, 101 2 2, 104 3a 3, 108 2a 3, 302 4a 5).

yathā 'according to' (001 1b 4, 007 4, 101 1 3, 107 2a 3) varies with yatha (204 1b 3).

Sibilant variation in Sanskrit words

sesa 'rest' (001 2b 3, 002 3a 4, 003 3b 2, 006 2a 3, 104 3a 4, 108 2a 4) varies with sēsa (005 13), sēsa (007 9) sēsa (101 2 3) and saisān (107 2b 4).

simā 'boundary' (002 1b 2, 006 1b 3, 005 4, 101 1 4, 104 1 4, 104 1b 4, 106 3a 5, 107 1b 5, 206 1a 5) varies with simā (001 1b 3, 206 1a 3).

śuddha 'pure' (005 10, 005 18) varies with suddha (003 3a 2).

Variation in aspiration in Sanskrit words

Aspirated and unaspirated consonants in Sanskrit words sometimes vary: bhagī 'part of' (001 2b 1, 002 3a 3, 003 3a 5, 007 7, 101 2 1, 107 2b 2, 302 4a 6 varies with bagī (007 7).

dukkha 'sad' (006 1b 5, 106 3a 2, 203 2a 3 4) varies with dukkha (002 2b 2) and dukkha (101 1 6).

sattra 'rest' (001 1b 3, 001 2b 4, 106 1b 1, 106 3a 2) varies with sattra (107 1b 2 4, 107 2a 1, 107 1b 6, 107 2b 1, 107 2b 6).

sukha 'happy' (106 3a 2, 203 2a 3) varies with suka (202 2a 3).

Another Sanskrit word wangṣī 'flute', apparently through bangsi varies with hbangṣī (002 2b 5, 004 1b 5) and hbangsi (003 2a 1).

b. Spelling variation in unpublished photographic sources

Unpublished photographs of the inscriptions kept at the Faculty of Letters Udayana University were analysed for spelling variation. The following variations were observed.5

5 The photographic sources also indicate that the role of the OB writing system (pasang sastra aksara Bali) seems different from that of MB. (i) In MB cē̄ek (c) indicating velar nasal is not allowed to occur in the medial position such as in the word hangga. In all photographs of the inscriptions the word hangga is written as ʌ.[ʌ]. This word is written meganungan (as conjunct consonant). However, this word will be written as in MB. Cē̄ek is used as the symbol of the [ŋ] sound in the medial position in the inscription 002. (ii) There is another example: in the word marhanwang in the inscription 005 12, ʌ is written with the symbol (ɔ) instead of (ʌ). In MB, this word will be written as ʌ but it is written as ʌ in OB. This word derives from the stem (hantu) with the prefix mar.33
1. lāl is written as lal

Example: karāmbo > karambo (002)

2. lbhl is written as lbh

Example: bhangśi > bangsi (004 1b 4)

3. lchh is written as lch

Example: cheda > ceda (002 2a 1)

4. lsl is written as lsl

Example: śimayangña > simayangña (002 1b 2)

These variations confirm the analysis above, based on published materials.

4.2 Syllable and root structure

The root morpheme patterns discussed below are based on the OB word list compiled by Goris in *Prasasti Bali II*. These are categorized as below:

For root morphemes with one vowel: CVC is most frequent; also CCVC and CV occur.

For root morphemes with two vowels, the types CVCVC, CVCV, CVCCVC, CVVC, VCVC, CCVVC, CCVVC, CCVCVC, CVCVVC, CCVCVC, CCVCVC, CCVVCV, CCVCCV, CCVCCV, CCVCVC, CCVCCV, CCVCVC, CCVCVC, CCVCVC occur.

For root morphemes with four vowels the type CVCVCVCVC is the most frequent.

The majority of OB roots are bisyllabic. The maximal monosyllabic canonic syllable pattern in OB is C1 (C2) V (V) (C3).

Based on my investigation, the percentage of the OB root morphemes is as follows:

a. One syllable : 6.3%
b. Two syllables : 84%
c. Three syllables : 9.6%
d. Four syllables : 0.1%

The OB data show that root morphemes with one vowel are mostly:

1. Honorifics or titles
2. Function words such as conjunctions, prepositions
The root morphemes with three and four vowels are mainly:

1. Names of functionaries, names of calendrical terms, names of plants and animal
2. Loan words, especially from Sanskrit

4.3 Comparative evidence

As discussed above, the spelling variations are good indications for understanding the OB phoneme system. Besides this, comparing the OB writing system with the MB phoneme systems is helpful in determining the OB phoneme system. The discussion will be divided into: vowel and consonant phonemes.

4.3.1 Vowels

There are six vowel phonemes occurring in MB. From the distribution of the vowel graphemes of OB, and from spelling variation, it appears that OB also had six vowel phonemes.

OB |i|

OB penultimate |i| > MB /i/. (In the MtB villages of Tigawasa and Belantih /i/ is realized higher than in other villages.)

Examples:
(4-1)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilat</td>
<td>kilap</td>
<td>lightning</td>
</tr>
<tr>
<td>kinsan</td>
<td>kinsan</td>
<td>to stay (over night)</td>
</tr>
<tr>
<td>pitu</td>
<td>pitu</td>
<td>seven</td>
</tr>
<tr>
<td>rimpi</td>
<td>rimpi</td>
<td>wooden case</td>
</tr>
<tr>
<td>sigi</td>
<td>sigi</td>
<td>lamp-wick</td>
</tr>
</tbody>
</table>

There are irregular changes: OB |i| is sometimes realized as /e/ and /i/ in MB, as in pirak > perak 'silver'; rinyuh > rënyuh 'crush'.

OB |e|

OB final syllable lel > MB /el/.
Examples:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>be</td>
<td>be</td>
<td>fish</td>
</tr>
<tr>
<td>panek</td>
<td>pêne</td>
<td>to climb</td>
</tr>
<tr>
<td>pande</td>
<td>pande</td>
<td>smith</td>
</tr>
</tbody>
</table>

**OB penultimate [e]**

Examples:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lêl</td>
<td>MB /ê/</td>
<td></td>
</tr>
</tbody>
</table>

Irregular change:

Penultimate lêl > MB /ê/.

Example:

<table>
<thead>
<tr>
<th>OB</th>
<th>SBY</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dêngêr</td>
<td>dingêh</td>
<td>to hear</td>
</tr>
</tbody>
</table>

**OB [u]**

OB penultimate lul > MB /u/.

In the MtB villages of Tigawasa and Bêlantih /u/ is higher than in other villages.

Examples:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bulan</td>
<td>bulan</td>
<td>moon, month</td>
</tr>
<tr>
<td>bubuh</td>
<td>bubuh</td>
<td>porridge</td>
</tr>
<tr>
<td>kurên</td>
<td>kurên</td>
<td>household</td>
</tr>
<tr>
<td>pujung</td>
<td>pujung</td>
<td>offering for the dead-people</td>
</tr>
<tr>
<td>wuri</td>
<td>duri</td>
<td>behind</td>
</tr>
</tbody>
</table>
Irregular changes:

\[ u > \text{MB} /o/ \]

Examples:

(4-6)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hantus</td>
<td>antos</td>
<td>to wait</td>
</tr>
<tr>
<td>pancuran</td>
<td>pancoran</td>
<td>water spring</td>
</tr>
</tbody>
</table>

**OB |o|**

OB final syllable |o| > MB /o/.

Examples:

(4-7)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kārambo</td>
<td>kēbo</td>
<td>buffalo</td>
</tr>
<tr>
<td>lod</td>
<td>kēlod</td>
<td>south, toward the sea</td>
</tr>
</tbody>
</table>

**OB "inherent vowel -a-"**

OB penultimate |al| > MB /a/.

Examples:

(4-8)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>amah</td>
<td>amah</td>
<td>eat</td>
</tr>
<tr>
<td>bajah</td>
<td>bayah</td>
<td>pay</td>
</tr>
<tr>
<td>bakat</td>
<td>bakat</td>
<td>get</td>
</tr>
<tr>
<td>darat</td>
<td>darat</td>
<td>land</td>
</tr>
<tr>
<td>jakan</td>
<td>jakan</td>
<td>cook</td>
</tr>
<tr>
<td>kayu</td>
<td>kayu</td>
<td>tree</td>
</tr>
</tbody>
</table>

Irregular change:

OB penultimate |al| correspondences to MB /ɛ/ in *bantuk* >bëntuk* 'form'; *tandas* > *tëndas* 'head'.


OB ultimate a

OB ultimate /a/ is retained as /a/ in modern written SB, but realized as [ə] in its pronunciation. However, it remains as [a] in MtB, except in the village of Cèmpaga where /a/ is realized as [ə].

Examples:
(4-9)

<table>
<thead>
<tr>
<th>Orthography</th>
<th>SB</th>
<th>Pronunciation SB</th>
<th>MtB Cèmpaga</th>
</tr>
</thead>
<tbody>
<tr>
<td>aba</td>
<td>&gt;aba</td>
<td>[aba]</td>
<td>[aba] [abo] 'to bring'</td>
</tr>
<tr>
<td>bapa</td>
<td>&gt;bapa</td>
<td>[bapa]</td>
<td>[bapa] [bapo] 'father'</td>
</tr>
<tr>
<td>dua</td>
<td>&gt;dua</td>
<td>[duə]</td>
<td>[dua] [duo] 'two'</td>
</tr>
<tr>
<td>kna</td>
<td>&gt;kèna</td>
<td>[kəna]</td>
<td>[kəna] [kano] 'have to pay'</td>
</tr>
</tbody>
</table>

4.3.2 Consonants

MB has eighteen consonant phonemes. The majority of consonant phonemes in MB can occur initially, medially and finally. When the consonants occur in medial position, they can occur intervocally or preceding an homorganic stop. OB has more than eighteen corresponding consonant graphemes but as we saw above, there is some variation in spelling. Also, certain OB graphemes are not found in syllable terminal position.

(i) OB semivowels

Semivowels /w/ and /y/ occur initially or medially in MB. Both /w/ and /y/ never occur in the final position. In the medial position /w/ occurs in the environment (/a/ - /a/) and (/a/ - /i/); while, /y/ can occur with any vowel except /i/.

OB /w/

OB /wl > MB /w/.

Examples:
(4-10)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>awak</td>
<td>awak</td>
<td>body</td>
</tr>
<tr>
<td>awur</td>
<td>awur</td>
<td>mix up</td>
</tr>
<tr>
<td>wage</td>
<td>wage</td>
<td>the 4th day in Pancawara</td>
</tr>
<tr>
<td>wayang</td>
<td>wayang</td>
<td>puppet</td>
</tr>
</tbody>
</table>
Irregular change:

Seven items show OB lwI > /b/ in MB.

Examples:
(4-11)

<table>
<thead>
<tr>
<th>OB</th>
<th>SB</th>
<th>MtB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wangun</td>
<td>bangun</td>
<td>bangun</td>
<td>rising</td>
</tr>
<tr>
<td>awa</td>
<td>aba</td>
<td>aba [aba]</td>
<td>bring</td>
</tr>
<tr>
<td>wanua</td>
<td>banua [banua]</td>
<td>banua [banua]</td>
<td>villages</td>
</tr>
</tbody>
</table>

OB |y|

OB lyI > MB /y/.

Examples:
(4-12)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ayu</td>
<td>ayu</td>
<td>beautiful</td>
</tr>
<tr>
<td>bayar</td>
<td>bayah</td>
<td>pay</td>
</tr>
<tr>
<td>ye</td>
<td>yeh</td>
<td>water</td>
</tr>
</tbody>
</table>

(ii) OB Voiceless stops

Voiceless stops /p/, /t/, /c/, /k/ are found in MB. They can occur in all positions, except /c/ which cannot occur finally. OB shows an equivalent distribution.

OB non-final |p|, |t|, |c| and |k|

OB non-final lpl, ltl, lcl, lkl > MB /pl/, /tl/, /cl/, /kl/.

|pl|

Examples:
(4-13)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>api</td>
<td>api</td>
<td>fire</td>
</tr>
<tr>
<td>lplah</td>
<td>lēpah</td>
<td>overboiled</td>
</tr>
<tr>
<td>papan</td>
<td>papan</td>
<td>board</td>
</tr>
<tr>
<td>punduk</td>
<td>punduk</td>
<td>terrace</td>
</tr>
<tr>
<td>rapēt</td>
<td>rapēt</td>
<td>close</td>
</tr>
</tbody>
</table>
Examples:
(4-14)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hutang</td>
<td>utang</td>
<td>debt</td>
</tr>
<tr>
<td>lantang</td>
<td>lantang</td>
<td>long</td>
</tr>
<tr>
<td>tajem</td>
<td>tajem</td>
<td>sharp</td>
</tr>
<tr>
<td>tanah</td>
<td>tanah</td>
<td>earth, soil</td>
</tr>
</tbody>
</table>

Examples:
(4-15)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>cakacak</td>
<td>cakacak</td>
<td>break into pieces</td>
</tr>
<tr>
<td>cincin</td>
<td>cincin</td>
<td>ring</td>
</tr>
<tr>
<td>guci</td>
<td>guci</td>
<td>jar</td>
</tr>
</tbody>
</table>

Examples:
(4-16)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>jakan</td>
<td>jakan</td>
<td>to cook</td>
</tr>
<tr>
<td>jukung</td>
<td>jukung</td>
<td>canoe</td>
</tr>
<tr>
<td>kayu</td>
<td>kayu</td>
<td>wood</td>
</tr>
<tr>
<td>kuning</td>
<td>kuning</td>
<td>yellow</td>
</tr>
<tr>
<td>kunit</td>
<td>kunit</td>
<td>tumeric</td>
</tr>
</tbody>
</table>

**OB final |p|, |t|, and |k|

OB /p/, /t/, and /k/ corresponds to /p/, /t/, and /k/ in the final position for MB. OB shows an equivalent distribution.
Examples:
(4-17)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>alap</td>
<td>alap</td>
<td>to take</td>
</tr>
<tr>
<td>gnēp</td>
<td>gënēp</td>
<td>complete</td>
</tr>
<tr>
<td>hurup</td>
<td>urup</td>
<td>to change</td>
</tr>
<tr>
<td>syap</td>
<td>siap</td>
<td>chicken</td>
</tr>
</tbody>
</table>

Examples:
(4-18)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kulit</td>
<td>kulit</td>
<td>skin, bark</td>
</tr>
<tr>
<td>rapēt</td>
<td>rapēt</td>
<td>close together</td>
</tr>
</tbody>
</table>

Irregular change:

ḷtḷ > MB /p/.  

Example:
(4-19)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilat</td>
<td>kilap</td>
<td>lightning</td>
</tr>
</tbody>
</table>

Ik

In MB /k/ is realized as [ʔ] finally. When a definite article /e/ is attached to the final /k/ and a root consists of reduplicated CVK sequence, /k/ is realized as [k].

Examples:
(4-20)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>balik</td>
<td>balik [baliʔ]</td>
<td>reverse</td>
</tr>
<tr>
<td>dadak</td>
<td>dadak [dadaʔ]</td>
<td>suddenly</td>
</tr>
<tr>
<td>hduk</td>
<td>duk   [duʔ]</td>
<td>black fibre</td>
</tr>
<tr>
<td>tajuk</td>
<td>tajuk [tadʒuʔ]</td>
<td>to plant</td>
</tr>
</tbody>
</table>
(iii) OB voiced stops

The voiced stops /b/, /d/, /f/, and /g/ are found in MB. They can occur in all positions: initially, medially (intervocally) and finally. /f/ cannot occur in the final position. OB shows an equivalent distribution.

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/MtB (P, C)</th>
<th>MtB (T, B, S)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bras</td>
<td>baas</td>
<td>bēhas</td>
<td>rice</td>
</tr>
<tr>
<td>biras</td>
<td>bias</td>
<td>bihas</td>
<td>sand</td>
</tr>
<tr>
<td>kaban</td>
<td>kēbun</td>
<td>kēbun</td>
<td>garden</td>
</tr>
<tr>
<td>lārib</td>
<td>laib</td>
<td>lahīb</td>
<td>to run</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dāgin</td>
<td>dāgin</td>
<td>east</td>
</tr>
<tr>
<td>duduk</td>
<td>duduk</td>
<td>to collect</td>
</tr>
<tr>
<td>ider</td>
<td>idēr</td>
<td>to walk around</td>
</tr>
<tr>
<td>kālod</td>
<td>kēlod</td>
<td>south, toward the sea</td>
</tr>
<tr>
<td>tukad</td>
<td>tukad</td>
<td>river</td>
</tr>
</tbody>
</table>

Irregular change:

<table>
<thead>
<tr>
<th>/dl</th>
<th>MB /f/</th>
</tr>
</thead>
</table>

Example:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dēmak</td>
<td>jēmak</td>
<td>to take</td>
</tr>
</tbody>
</table>
Examples:
(4-24)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>jahit</td>
<td>jait</td>
<td>sew</td>
</tr>
<tr>
<td>jinang</td>
<td>jinêng</td>
<td>granary</td>
</tr>
<tr>
<td>juang</td>
<td>juang</td>
<td>to take</td>
</tr>
<tr>
<td>kajang</td>
<td>kajang</td>
<td>white cloth to wrap the dead body</td>
</tr>
<tr>
<td>tajêm</td>
<td>tajêm</td>
<td>sharp</td>
</tr>
</tbody>
</table>

Examples:
(4-25)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gnêp</td>
<td>gênêp</td>
<td>complete</td>
</tr>
<tr>
<td>pagar</td>
<td>pagêh</td>
<td>fence</td>
</tr>
<tr>
<td>urug</td>
<td>urug</td>
<td>to bury</td>
</tr>
</tbody>
</table>

Irregular change:

| lgl | MB /k/ |

Example:
(4-26)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gênêng</td>
<td>kêndang</td>
<td>drum</td>
</tr>
</tbody>
</table>

(iv) OB nasals

In initial and intervocalic positions three nasals agree in MB. These are: /m/, /n/, /ŋ/. The phoneme /ng/ in MB never occurs in the initial position. Nasals other that /ã/ can occur finally. OB shows an equivalent distribution.
Initial and intervocalic OB nasals

Initial and intervocalic OB lnl > /m/ in MB

Examples:
(4-27)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lamak</td>
<td>lamak</td>
<td>an ornament of a shrine</td>
</tr>
<tr>
<td>musuh</td>
<td>musuh</td>
<td>enemy</td>
</tr>
</tbody>
</table>

Initial and medial (intervocalic) OB lnl > /n/ in MB

Examples:
(4-28)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuning</td>
<td>kuning</td>
<td>yellow</td>
</tr>
<tr>
<td>lunak</td>
<td>lunak</td>
<td>tamarind</td>
</tr>
<tr>
<td>manuk</td>
<td>manuk</td>
<td>bird</td>
</tr>
<tr>
<td>tanam</td>
<td>tanem</td>
<td>to plant</td>
</tr>
</tbody>
</table>

Initial and intervocalic OB lnl > MB /n/

Examples:
(4-29)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuñit</td>
<td>kuñit</td>
<td>tumeric</td>
</tr>
<tr>
<td>ēak</td>
<td>ēak</td>
<td>willing</td>
</tr>
</tbody>
</table>

Intervocalic OB lngl > MB /ng/

Examples:
(4-30)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>langit</td>
<td>langit</td>
<td>sky</td>
</tr>
<tr>
<td>pangan</td>
<td>pangan</td>
<td>food</td>
</tr>
</tbody>
</table>

There are also some words in MB where homorganic nasal sounds precede voiceless stops or voiced stops intervocally. OB shows an equivalent distribution.
Examples:
(4-31)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bañjar</td>
<td>bañjar</td>
<td>form</td>
</tr>
<tr>
<td>buntíl</td>
<td>buntíl</td>
<td>wrap something</td>
</tr>
<tr>
<td>lantang</td>
<td>lantang</td>
<td>long</td>
</tr>
<tr>
<td>kampíl</td>
<td>kampíl</td>
<td>sack, bag</td>
</tr>
<tr>
<td>rampás</td>
<td>rampás</td>
<td>plunder</td>
</tr>
<tr>
<td>sambung</td>
<td>sambung</td>
<td>to joint</td>
</tr>
<tr>
<td>sumbah</td>
<td>sumbah</td>
<td>honour</td>
</tr>
<tr>
<td>tanda</td>
<td>tanda</td>
<td>sign</td>
</tr>
<tr>
<td>tanduk</td>
<td>tanduk</td>
<td>horn</td>
</tr>
<tr>
<td>tanggèp</td>
<td>tanggèp</td>
<td>receive</td>
</tr>
<tr>
<td>tangkalik</td>
<td></td>
<td>horse breeder</td>
</tr>
</tbody>
</table>

**OB final nasals**

Final nasals /m/, /n/, /ng/ occur but /ŋ/ does not occur in MB. OB shows an equivalent distribution.

/lm/ > MB /m/.

Examples:
(4-32)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>inum</td>
<td>inum</td>
<td>drink</td>
</tr>
<tr>
<td>ūnām (ūnom)</td>
<td>ūnom</td>
<td>young</td>
</tr>
<tr>
<td>padam</td>
<td>pēdēm</td>
<td>sleep</td>
</tr>
</tbody>
</table>

/lnl > MB /n/

Examples:
(4-33)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lulun</td>
<td>lulun</td>
<td>to roll</td>
</tr>
<tr>
<td>papan</td>
<td>papan</td>
<td>board</td>
</tr>
</tbody>
</table>
\[ \text{mbng} > \text{mb/ng} \]

Examples:
(4-34)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>balung</td>
<td>balung</td>
<td>bone</td>
</tr>
<tr>
<td>juang</td>
<td>juang</td>
<td>to take</td>
</tr>
<tr>
<td>tulung</td>
<td>tulung</td>
<td>help</td>
</tr>
</tbody>
</table>

(v) OB liquids

Two liquids /l/ and /r/ occur in MB. Both /l/ and /r/ can occur initially, medially (intervocically) or finally. OB shows an equivalent distribution.

OB \[|l|\]

\[\text{l}l > \text{mb} /l/\]

Examples:
(4-35)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>alah</td>
<td>kalah</td>
<td>lose</td>
</tr>
<tr>
<td>alap</td>
<td>alap</td>
<td>to pick up, take</td>
</tr>
<tr>
<td>andël</td>
<td>andël</td>
<td>to trust</td>
</tr>
<tr>
<td>buntil</td>
<td>buntil</td>
<td>to wrap something</td>
</tr>
<tr>
<td>lulun</td>
<td>lulun</td>
<td>to roll</td>
</tr>
<tr>
<td>lmar</td>
<td>lēmah</td>
<td>day</td>
</tr>
<tr>
<td>singhal</td>
<td>singal</td>
<td>to carry</td>
</tr>
<tr>
<td>tali</td>
<td>tali</td>
<td>rope</td>
</tr>
</tbody>
</table>

OB \[|r|\]

OB initial \[l\r] > /r/ in MB.

Examples:
(4-36)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ramu</td>
<td>ramu</td>
<td>ingredient</td>
</tr>
<tr>
<td>rapët</td>
<td>rapët</td>
<td>close together</td>
</tr>
<tr>
<td>rimpi</td>
<td>rimpi</td>
<td>wooden case</td>
</tr>
</tbody>
</table>
OB initial /l/ is sometimes > MB Ǿ.

Examples:
(4-37)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rapuŋ</td>
<td>apuh</td>
<td>limestone</td>
</tr>
<tr>
<td>ñbaŋ</td>
<td>bah</td>
<td>fall down</td>
</tr>
<tr>
<td>rukud</td>
<td>ukud</td>
<td>a classifier</td>
</tr>
<tr>
<td>rumalh</td>
<td>umaeh</td>
<td>house</td>
</tr>
<tr>
<td>ruyung</td>
<td>uyung</td>
<td>palm bark</td>
</tr>
</tbody>
</table>

In other cases, /l/ is represented in MB by /d/ or /ɾ/.

a. /l/ > /d/ in MB

Examples:
(4-38)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rggas</td>
<td>dugas</td>
<td>when</td>
</tr>
<tr>
<td>ruri</td>
<td>duri</td>
<td>at the back</td>
</tr>
</tbody>
</table>

b. /l/ > /ɾ/ in MB

Examples:
(4-39)

<table>
<thead>
<tr>
<th>OB</th>
<th>SB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rumbas</td>
<td>tumbas</td>
<td>-</td>
<td>to buy (?)</td>
</tr>
</tbody>
</table>

OB intervocalic /l/ > SB Ǿ, but MtB at Tigawasa, Bēlantih and Sukawana /h/. MtB at Pēdawa and Cēmpaga conforms SB (cf. example (4-47)).

Examples:
(4-40)

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/ MtB (P, C)</th>
<th>MtB (T, B, S)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>biras</td>
<td>bias</td>
<td>bihas</td>
<td>sand</td>
</tr>
<tr>
<td>burung</td>
<td>buung</td>
<td>buhung</td>
<td>falling to become</td>
</tr>
<tr>
<td>diri</td>
<td>dīi</td>
<td>dihi</td>
<td>alone</td>
</tr>
<tr>
<td>karung</td>
<td>kaung</td>
<td>kahung</td>
<td>boar</td>
</tr>
<tr>
<td>larib</td>
<td>laib</td>
<td>lahīb</td>
<td>to run</td>
</tr>
<tr>
<td>paryuk</td>
<td>payuk</td>
<td>pahyuk</td>
<td>earthen cooking pot</td>
</tr>
</tbody>
</table>
OB final /ɾ/ > /h/ in MB

Examples:
(4-41)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pasar</td>
<td>pasar</td>
<td>market</td>
</tr>
</tbody>
</table>

OB final /ɾ/ > MB /h/.

Examples:
(4-42)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dęngęř &gt; dęngęh</td>
<td>hear</td>
<td></td>
</tr>
<tr>
<td>l Narrative &gt; lęmah</td>
<td>day time</td>
<td></td>
</tr>
<tr>
<td>tikęř</td>
<td>tikęh</td>
<td>mat</td>
</tr>
<tr>
<td>talųř</td>
<td>talųh</td>
<td>egg</td>
</tr>
</tbody>
</table>

Irregular change:

Final /ɾ/ > Ø in MB.

Example:
(4-43)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ungsir &gt; ungsi</td>
<td>to take refuge</td>
<td></td>
</tr>
</tbody>
</table>

(vi) OB sibilant

/s/ in MB can occur initially, medially (intervocally) or finally. OB shows an equivalent distribution.

Non-final OB /s/  

Non-final OB /ɾ/ > MB /s/  

Examples:
(4-44)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>basa</td>
<td>basâ</td>
<td>spice</td>
</tr>
</tbody>
</table>

---

6 This word is realized as [basa] in SB.
sampi > sampi  
sudang > sudang  
suling > suling

cow

dried fish

flute

Irregular change:

Initial OB |s| > MB /j/.

Examples:
(4-45)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>surang</td>
<td>jurang</td>
<td>mountain ridge (?)</td>
</tr>
</tbody>
</table>

Final OB |s|

Final OB |s| > MB /s/.

Examples:
(4-46)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>palas</td>
<td>palas</td>
<td>separate</td>
</tr>
<tr>
<td>lngis</td>
<td>lěngis</td>
<td>oil</td>
</tr>
</tbody>
</table>

(vii) OB glottal spirant

Non-final OB |h|

Non-final OB |h| > Ø in SB and in MtB villages of Pédawa and Cémpaga. However, initial and intervocalic /h/ occurs in the MtB villages of Tigawasa, Bělantih and Sukawana (cf. examples (4-40)).

Examples:
(4-47)

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/MtB (P, C)</th>
<th>MtB (T, B, S)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hatus</td>
<td>antos</td>
<td>hantos</td>
<td>wait</td>
</tr>
<tr>
<td>hatur</td>
<td>aahr</td>
<td>hatur</td>
<td>give</td>
</tr>
<tr>
<td>husir</td>
<td>usir</td>
<td>husir</td>
<td>to take refuge</td>
</tr>
<tr>
<td>hutang</td>
<td>utang</td>
<td>hutang</td>
<td>debt</td>
</tr>
<tr>
<td>jahit</td>
<td>jait</td>
<td>jahit</td>
<td>sew</td>
</tr>
<tr>
<td>tahu</td>
<td>tau</td>
<td>tahu</td>
<td>know</td>
</tr>
</tbody>
</table>
Final OB h

Final /hl > MB /h/.

Examples:
(4-48)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>alah</td>
<td>kalah</td>
<td>lose</td>
</tr>
<tr>
<td>idih</td>
<td>idih</td>
<td>ask, beg</td>
</tr>
<tr>
<td>joh</td>
<td>joh</td>
<td>far</td>
</tr>
<tr>
<td>labuh</td>
<td>labuh</td>
<td>falling down</td>
</tr>
<tr>
<td>rumah</td>
<td>unah</td>
<td>house</td>
</tr>
<tr>
<td>tanah</td>
<td>tanah</td>
<td>land, earth</td>
</tr>
</tbody>
</table>

The following diagram illustrates the position of /h/ in SB and in MtB.

<table>
<thead>
<tr>
<th></th>
<th>OB</th>
<th>SB</th>
<th>MtB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T</td>
<td>C</td>
</tr>
<tr>
<td>Initially</td>
<td>/hl</td>
<td>-</td>
<td>/h/</td>
</tr>
<tr>
<td>Intervocally</td>
<td>/hl</td>
<td>/h/</td>
<td>/h/</td>
</tr>
<tr>
<td>Finally</td>
<td>/hl</td>
<td>/h/</td>
<td>/h/</td>
</tr>
</tbody>
</table>

4.4. The Old Balinese phoneme systems

Based on the evidence presented above, the OB phoneme system probably was as follows.

4.4.1 Old Balinese vowel phoneme inventory

```
i   u
  ě
 e   o
  a
```
4.4.2 Old Balinese consonant phoneme inventory

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Dental/ alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop Vl</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>Stop Vd</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>ñ</td>
<td>ng</td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td>h</td>
</tr>
<tr>
<td>Liquids</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td>r</td>
</tr>
<tr>
<td>Semi vowels</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td>y</td>
</tr>
</tbody>
</table>

4.5 Discussion

Several scholars have already reconstructed the OB phonemes, such as Goris (1953), Ward (1973) and Clynes (1989). According to Goris OB phonemes are the same as the OB writing system7 (1953:22-23). In his reconstruction, he does not differentiate Sanskrit and Austronesian which occur in OB inscriptions. It seems that he confuses the graphemes and phonemes. Ward (1977:47), follows Goris' analysis, in not distinguishing the graphemic and phonemic systems of OB.

The Balinese scholars, Granoka et al. (1985:x-xi) in Kamus Bahasa Bali Kuno-Indonesia (Old Balinese-Indonesian Dictionary), mention that the OB phoneme system is similar to the MB phoneme system.8 It should be noted, that they do not provide

---

7 The OB phonemes following Goris (1953: 22-23)
Vowels: a, ā, ē, o, i, u, û, r, l, e, ai, o, au.
Semi vowels: y, w
Liquids: r, l
Consonants: k kh g gh c ch (tj) j (dj) jh t th d dh s š s s h m n n ng

8 OB phonemes following Granoka et al. (1985:x-xi)
Vowel:
  i  u
  e  ē  o
  a
Consonants
  p (t) t (th) k(kh)
  b (bh) (d) d (dh) dh (k)  g
  s š k (c) (h)/h  c
evidence for their analysis. In this dictionary they seem only to translate the OB word list compiled by Goris (1954) into Indonesian.

Clyne's study is based on written data besides the spoken one. He considers that the phonemes /e/ and /o/ as well as semi vowels /w/ and /y/ were borrowings from Sanskrit (1989:149). He states that OB has four vowel phonemes⁹, and that the occurrence of /e/ and /o/ are only in Sanskrit words or the result of extending Sanskrit sandhi rules.

Data in section 4.3.1 indicates that /e/ and /o/ do occur in Austronesian vocabulary in the OB inscriptions. Some OB words such 

<table>
<thead>
<tr>
<th>OB phonemes following Clynes (1989:149)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowels:</td>
</tr>
<tr>
<td>Consonants:</td>
</tr>
<tr>
<td>Stops:</td>
</tr>
<tr>
<td>Nasals:</td>
</tr>
<tr>
<td>Fricatives:</td>
</tr>
<tr>
<td>Liquids:</td>
</tr>
</tbody>
</table>
Blust categorizes Balinese as Western Malayo-Polynesian and the subgrouping of the Austronesian languages in the following diagram is from him (1980:11).

\[
\text{AN} \quad \begin{array}{c}
\text{AT} \\
\text{TS} \\
\text{PW} \\
\text{MP} \\
\text{WMP} \\
\text{CEMP} \\
\text{OB, OJ, OM, PHIL, VIET} \\
\text{CMP} \\
\text{EMP} \\
\text{SHWNG} \\
\text{OC}
\end{array}
\]

AN= Austronesian
AT= Atayalic (Formosa)
TS= Tsouic (Formosa)
PW= Paiwanic (Formosa)
MP= Malayo-Polynesian (all languages outside Formosa)
WMP= Western Malayo-Polynesian (the MP languages of the Philippines and Western Indonesia, including Chamorro, Palauan, Chamic and Malagasy. Western Indonesia includes Bali, Lombok, the western half of Sumbawa and Sulawesi together with the Banggai archipelago in the east and Muna-Buron and the Tukangbesi Archipelago in the Southeast).
CEMP= Central-Eastern Malayo-Polynesian. The languages of the CMP and EMP groups
CMP= Central Malayo-Polynesian. The MP languages of the Lesser Sunda islands beginning with Bimanese of Eastern Sumbawa and of the southern and central Moluccas, including the Aru islands and the Sula archipelago (but not Obi, Misool or parts north)
EMP= the languages of the SHWNG and OC groups
SHWNG= South Halmahera-West New Guinea. The MP languages of Halmahera, Cendrawasih (= Geelvink) bay as far as the Memberamo river, and of the Raja Ampat islands (Waigeo, Salawati, Batanta, Misool), together with their satellites (Gebe, etc). There is some evidence that the AN languages of the Bomberai Peninsula are members (probably in a first-order subgroup of the SHWNG group).
OC= Oceanic. The MP languages of Melanesia, Micronesia and Polynesia, except as stated elsewhere.
OB= Old Balinese
OJ= Old Javanese
OM= Old Malay
PHIL= Philippine branch
VIET= Vietnam branch

The following reconstructions are from Blust (1980; 1984; 1986). The PAN reconstructions will be preceded by an asterisk. The OB words for which PAN cognates have been found will be stated below the dotted line for each entry. The OB phonemic system developed above is used. For completeness, MB items are shown where no OB cognates are available. (Probably OB forms existed but were not recorded).
Blust (1980:14) uses  for shwa and  for the mid front vowel. In order to be consistent with the orthography which is used in this thesis,  is used for shwa and  for the mid front vowel so that Blust's  and his  =  .

4.6.1 Vowels

PAN penultimate *i

Examples:
(4-49)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*sitsit</th>
<th>'tear, rip'</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAN</td>
<td>sitsit</td>
<td>'torn, rent, ragged, tattered, worn out'</td>
</tr>
<tr>
<td>BON</td>
<td>sitsit</td>
<td>'cut a woven container'</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>MB</td>
<td>sitsit</td>
<td>'tear, break; tear to pieces'</td>
</tr>
</tbody>
</table>

PAN final *i

Examples:
(4-50)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*siji</th>
<th>'separate the chaff from the grain'</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILK</td>
<td>sigi</td>
<td>'to sieve, sift screen'</td>
</tr>
<tr>
<td>DGT</td>
<td>sidi</td>
<td>'sift rice in a rice winnowing tray'</td>
</tr>
<tr>
<td>TAG</td>
<td>sili</td>
<td>'sift; sieve'</td>
</tr>
<tr>
<td>KB</td>
<td>sigi</td>
<td>'winnow rice for the second time'</td>
</tr>
<tr>
<td>PSS</td>
<td>sidi</td>
<td>'to separate the grain'</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>MB</td>
<td>sidi</td>
<td>'kind of sift; put through a sift'</td>
</tr>
</tbody>
</table>

Irregular correspondence:

PAN *i > e in MB. For discussion of /e/ in MB or OBI see section 4.3.1

Examples:
(4-51)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*ci(ng)kuk or *si(ng)kuk</th>
<th>'have a stiff or bent arm'</th>
</tr>
</thead>
<tbody>
<tr>
<td>NgD</td>
<td>sikok</td>
<td>'stiff and bent (of the arm through arthritis, etc)'</td>
</tr>
<tr>
<td>OJ</td>
<td>cengkok</td>
<td>'concave'</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>MB</td>
<td>sengkok</td>
<td>'have a stiff arm'</td>
</tr>
</tbody>
</table>
PAN *e (?)

Blust does not reconstruct *e for PAN. However, there is good comparative evidence for this phoneme being present in a form of Austronesian preceding OB.

According to Meko Mbete who has completed a thesis on Rekonstruksi Proto Bahasa Bali-Sasak-Sumbawa (The Reconstruction of Proto Balinese-Sasak-Sumbawanese), phonemes /e/ and /o/ occur in Proto Sasak and Sumbawa (Meko Mbete, 1990:167; 173).

Examples:
(4-52)

<table>
<thead>
<tr>
<th>PSas</th>
<th>bale</th>
<th>'house'</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSum</td>
<td>bale</td>
<td>'house'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MB</td>
<td>bale</td>
<td>'house'</td>
</tr>
<tr>
<td>PSas</td>
<td>pane</td>
<td>'earthen tray'</td>
</tr>
<tr>
<td>PSum</td>
<td>pane</td>
<td>'earthen tray'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MB</td>
<td>pane</td>
<td>'earthen tray'</td>
</tr>
</tbody>
</table>

PAN penultimate *a

Examples:
(4-53)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*lamak</th>
<th>'mat'</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAV</td>
<td>lamak</td>
<td>'protective pad'</td>
</tr>
<tr>
<td>SAS</td>
<td>lamak</td>
<td>'mat'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OB</td>
<td>lamak</td>
<td>'a mat which is used as ornamentation for a shrine'</td>
</tr>
</tbody>
</table>

PAN final *a

Examples:
(4-54)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*qara?</th>
<th>'a tree'</th>
</tr>
</thead>
<tbody>
<tr>
<td>OJ</td>
<td>(h) ara</td>
<td>'a particular kind of tree (of the ficus family)'</td>
</tr>
<tr>
<td>DPB</td>
<td>ara</td>
<td>'generic for banyans: Ficus benjamina &amp; Fretusa'</td>
</tr>
<tr>
<td>SAS</td>
<td>ara</td>
<td>'kind of fig tree'</td>
</tr>
<tr>
<td>SAN</td>
<td>ara</td>
<td>'kind of wild fig tree'</td>
</tr>
<tr>
<td>MGG</td>
<td>ara</td>
<td>'various trees'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MB</td>
<td>a</td>
<td>'fig'</td>
</tr>
</tbody>
</table>
PAN penultimate *ê

Examples:
(4-55)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*kêdi</td>
<td>'small in size or amount'</td>
</tr>
<tr>
<td>PAI</td>
<td>kêdi</td>
<td>'be small, little, few'</td>
</tr>
<tr>
<td>UMA</td>
<td>kêdi?</td>
<td>'small'</td>
</tr>
<tr>
<td>KB</td>
<td>kêdit</td>
<td>'trifty, economical'</td>
</tr>
<tr>
<td>OJ</td>
<td>kêdik</td>
<td>'small number, mesure of degree; short time'</td>
</tr>
<tr>
<td></td>
<td>bêdik</td>
<td>'little'</td>
</tr>
</tbody>
</table>

PAN final syllable *ê

Examples:
(4-56)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*pêkpêk</td>
<td>'swarm together'</td>
</tr>
<tr>
<td>MAL</td>
<td>pêpek</td>
<td>'full, fully, attended'</td>
</tr>
<tr>
<td>SAS</td>
<td>pêpek</td>
<td>'swarm together'</td>
</tr>
<tr>
<td>JAV</td>
<td>pêpek</td>
<td>'completely assembled'</td>
</tr>
<tr>
<td></td>
<td>pêpek</td>
<td>'all together, complete'</td>
</tr>
</tbody>
</table>

PAN non-final *u

Examples:
(4-57)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*bulan</td>
<td>'eye of cateye shell'</td>
</tr>
<tr>
<td>CEB</td>
<td>bulan</td>
<td>'kind of moon shell with edible flesh'</td>
</tr>
<tr>
<td>CHM</td>
<td>pulan</td>
<td>'moon, eye of cateye shell'</td>
</tr>
<tr>
<td></td>
<td>bulan</td>
<td>'moon, month'</td>
</tr>
</tbody>
</table>

PAN final syllable *u

Examples:
(4-58)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*pitung</td>
<td>'bamboo'</td>
</tr>
<tr>
<td>MAL</td>
<td>biuung</td>
<td>'large bamboo'</td>
</tr>
<tr>
<td>FIJ</td>
<td>biu</td>
<td>'bamboo'</td>
</tr>
<tr>
<td></td>
<td>pêtung</td>
<td>'a sp bamboo'</td>
</tr>
</tbody>
</table>

PAN *u > o in MB. For discussion of /o/ in MB or OB see 3.3.1 and 4.1.2 respectively.
Examples:

(4-59)

PAN  *piuk  'dent, dimple'
PAN  piuk  'dimple, dent in something soft'
KAN  peok  'small dale, depression'
KB   piuk  'dented'
JAV  piuk  'dented'

---------------------------------------------------------------
MB   peok, piok  'sunken (of eyes, cheeks)'

PAN  *bacuk  'to hoe, shop up soil'
MAR  basak  'farm or till the soil'
WBM  basuk  'till the soil'
MAL  bacok  'chop, cut up, cleave'
SND  bacok  'hack (with a knife, etc)
JAV  bacok  'to hoe'

---------------------------------------------------------------
MB   bacok  'stab, pierce'

PAN *u > o in the items above strongly indicates that o has existed since the stage of
WMP. Compare also the following items (Meko Mbete, 1990, cf.*e).

Examples:

(4-60)

PSas  olas  'eleven'
PSum  olas  'eleven'

---------------------------------------------------------------
MB   olas  'eleven'

PSas  kebot  'left hand'
PSum  kebot  'left hand'

---------------------------------------------------------------
MB   kebot  'left hand'

PSas  kado  'useless'
PSum  kado  'useless'

---------------------------------------------------------------
MB   kado  'useless'

4.6.2 Consonants

(i) Semivowels

Mbete (1990) has proposed that semivowels w and y may have occurred in WMP.
They only existed intervocalically.
PAN *w (?)

Examples:
(4-61)

<table>
<thead>
<tr>
<th>Sas</th>
<th>lawang</th>
<th>'gate'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>lawang</td>
<td>'gate'</td>
</tr>
<tr>
<td>OJ</td>
<td>lawang</td>
<td>'gate'</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>MB</td>
<td>lawang</td>
<td>'gate'</td>
</tr>
</tbody>
</table>

PAN *y

Examples:
(4-62)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*Suyang</th>
<th>'shake, sway, rock'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKL</td>
<td>huyang</td>
<td>'shake, rattle'</td>
</tr>
<tr>
<td>OJ</td>
<td>(h)uyang</td>
<td>'heat, being heated, feeling hot'</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td>MB</td>
<td>uyang</td>
<td>'restless'</td>
</tr>
</tbody>
</table>

(ii) PAN unvoiced stops

*p

Examples:
(4-63)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*puyuq</th>
<th>'a bird, the quail'</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIS</td>
<td>puluq</td>
<td>'quail, partridge'</td>
</tr>
<tr>
<td>TAG</td>
<td>pugo</td>
<td>'quail (ornith)'</td>
</tr>
<tr>
<td>HAN</td>
<td>pugu ?</td>
<td>'quail (probably the barred button quail)'</td>
</tr>
<tr>
<td>MAL</td>
<td>puyoh</td>
<td>'bustard quail'</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>---------------------</td>
</tr>
<tr>
<td>MB</td>
<td>puuh</td>
<td>'quail bird'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAN</th>
<th>*képuk</th>
<th>'beat, crunch, break'</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGG</td>
<td>képuk</td>
<td>'sound of breaking, cracking'</td>
</tr>
<tr>
<td>SAS</td>
<td>képuk</td>
<td>'pound dough (preparatory to cooking)'</td>
</tr>
<tr>
<td>OJ</td>
<td>képuk</td>
<td>'onomatopoetic particle (blow)'</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>MB</td>
<td>képuk</td>
<td>'break off, break the point of something'</td>
</tr>
</tbody>
</table>
PAN  *dērēp  'communal help'
TM   dogop    'communal help (in harvesting, planting, house building, etc)
SND  dērēp    'offer one's service at the rice harvest'
JAV  dērēp    'offer one's service at the rice harvest'

MB  dērēp    'help with the rice harvest in return for a share of the crop'

*t

Examples:
(4-64)

PAN  *ta(ng)kēb  'cover, overlapping part'
MAR  takēb     'eyelid'
SND  tangkēban 'moveable corner of smoke-vent in roof'
JAV  tangkēb   'overlapping portion of a double-breasted jacket'

MB  tangkēb   'cover up (with a basket, etc)'

PAN  *ampēt    'staunch, stop the flow, check, staunch'
TAG  ampat     'checked, stopped (as of bleeding)'
BKL  ampat     'stop, put a stop to, quell, suppress'
JAV  ampēt     'to check, restrain'

MB  ēmpēt     'staunch, stop the flow'

*c

Examples:
(4-65)

PAN  *cēlēp    'dip in water'
BON  sēlēp    'drenched; soaked of animals or people'
MAL  cēlēp    'steep, soak, dye'

MB  cēlēb     'dip in water, baptize'

PAN  *pacēk    'drive in, as a post, nail or wedge'
MGG  pacēk    'pile, stake, drive in a pile or stake'
MAL  pacak    'splitting, transfixed'
OJ   pacēk    'spike, pin'

MB  pacēk    'peg, nail; stick into, make a hole; plant (seedings etc.)'
*k

Examples:
(4-66)

<table>
<thead>
<tr>
<th>Language</th>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*kamuning</td>
<td>'a tree'</td>
</tr>
<tr>
<td>CEB</td>
<td>kamuning</td>
<td>'small tree of the secondary forest'</td>
</tr>
<tr>
<td>OJ</td>
<td>kamuning</td>
<td>'kind of tree with yellow wood'</td>
</tr>
<tr>
<td>OB</td>
<td>kamuning</td>
<td>'kind of tree with yellow wood'</td>
</tr>
<tr>
<td>PAN</td>
<td>*sikēp</td>
<td>'a hawk, kite'</td>
</tr>
<tr>
<td>BKL</td>
<td>sikop</td>
<td>'bird'</td>
</tr>
<tr>
<td>CEB</td>
<td>sikup</td>
<td>'bird of prey'</td>
</tr>
<tr>
<td>MAR</td>
<td>sikēp</td>
<td>'grey bird of prey'</td>
</tr>
<tr>
<td>MAL</td>
<td>lang sikap</td>
<td>'hawk'</td>
</tr>
<tr>
<td>MB</td>
<td>sikēp</td>
<td>'a hawk'</td>
</tr>
<tr>
<td>PAN</td>
<td>*tēkuk</td>
<td>'bend or pull down'</td>
</tr>
<tr>
<td>SND</td>
<td>tēkuk</td>
<td>'take a man animal firmly by the neck and bend the head down'</td>
</tr>
<tr>
<td>MGG</td>
<td>tēkuk</td>
<td>'bent over (as when carrying a heavy burden)'</td>
</tr>
<tr>
<td>BURU</td>
<td>tēkuk</td>
<td>'cause to lean or bow; pull down'</td>
</tr>
<tr>
<td>MAL</td>
<td>tēkok</td>
<td>'bent down roughly, creased, rumpled'</td>
</tr>
<tr>
<td>MB</td>
<td>tēkuk</td>
<td>'bent, crumpled'</td>
</tr>
</tbody>
</table>

(iii) PAN voiced stops

*b

Examples:
(4-67)

<table>
<thead>
<tr>
<th>Language</th>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*bang(ë)qës</td>
<td>'unpleasant smell'</td>
</tr>
<tr>
<td>BON</td>
<td>bang?ës</td>
<td>'to have spoiled, as cooked rice, vegetables or cooked meat'</td>
</tr>
<tr>
<td>MGG</td>
<td>bangës</td>
<td>'beginning to smell badly, mawkish, foul smell'</td>
</tr>
<tr>
<td>MB</td>
<td>bangës</td>
<td>'noxious, unpleasant in smell or taste'</td>
</tr>
<tr>
<td>PAN</td>
<td>*lë(m)bëng</td>
<td>'valley, watercourse between hill'</td>
</tr>
<tr>
<td>IBAN</td>
<td>lëmbang</td>
<td>'valley, stream between two hills'</td>
</tr>
<tr>
<td>BM</td>
<td>lobong</td>
<td>'valley, low-lying area'</td>
</tr>
<tr>
<td>MAL</td>
<td>lëmbah</td>
<td>'meadow-land; low-lying land'</td>
</tr>
<tr>
<td>JAV</td>
<td>lëmbah</td>
<td>'low-lying ground, valley'</td>
</tr>
<tr>
<td>MB</td>
<td>lëbah</td>
<td>'decline (ground), slope'</td>
</tr>
</tbody>
</table>
PAN  *ßëg(b)ëb  'forfeited (a pledge)'
MAR  ëëb  'lose property pawned due to failure to pay'
MAL  ëlëp  'forfeit (a pledge)'
OJ  ëëb  'expired, lapsed, forfeited'

MB  ëlëbëb  'be forfeited (a pledge)'

*d*

Examples:
(4-68)

PAN  *dingër  'hear'
KEL  dingër  'hear'
WBM  dinëg  'hear'

OB  ënëgër  'to hear'

PAN  *që(n)dëm  'to brood, of a hen'
DPB  (h)ëndëm  'sulk, brood'
MAL  (h)ëram  'hatch, brood'

MB  ëdëm  'to brood, be at rest in BK'

*z*

Examples:
(4-69)

PAN  *zë(m)pit  'pinch, take up with the finger'
MAL  jëpit  'nip, catch between fingers'
JAV  jëpit  'pinched tightly'

SB  jëpit  'pinched tightly'

*g*

Examples
(4-70)

PAN  *së(ng)gër  'feel fit, healthy'
MGG  cëngër  'feel fit, be full of life'
MAL  sëgar  'to feel fit'
OJ  sëgër  'fresh, healthy, buoyant'

MB  sëgër  'healthy, hale and hearty
PAN  *sagsag    'break, crack'
ILK  sagsag    'go to ruin, be destroyed'
TAG  sagsag    'broken lengthwise (said of canes, wood, tubes, etc)
       without being entirely so'

MB  sagsag    'break, crack'

(iv) PAN nasals

Penultimate *m

Examples:
(4-71)

PAN  *gêmêl    'take in the hand, clasp, grasp'
ILK  gëmal    grip, grasp, clasp with the hand or fingers'
MAL  gêmal    'taking in the hand or fingers'

MB  gêmêl    'fish with the hands'

Final *m

Examples:
(4-72)

PAN  *kizêm    'shut the eyes'
ILK  kidêm    'close the eyes'
PGS  kirêm    'close the eyes'
MAL  kirêm    'close the eyes'

MB  kidêm    'shut the eyes tightly'

*n

Examples:
(4-73)

PAN  *inêm    'drink'
TIR  inêm    'drink'
KB  inêm    'drink'
SAS  inêm    'drink'

OB  inum    'drink'

PAN  *suqun    'carry on the head'
PAI  tuqut    'carry on the head'
MUK  su?un    'carry'

OB  suhun    'carry on the head'
*ñi

Examples:
(4-74)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*qañud</th>
<th>'be afloat'</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUK</td>
<td>mu-ululuDu</td>
<td>'be adrift'</td>
</tr>
<tr>
<td>PAI</td>
<td>se-qalud</td>
<td>'be adrift'</td>
</tr>
<tr>
<td>AMI</td>
<td>ma-qulul</td>
<td>'be adrift'</td>
</tr>
<tr>
<td>NgD</td>
<td>hañut</td>
<td>'be afloat'</td>
</tr>
<tr>
<td>MAL</td>
<td>añut</td>
<td>'be afloat'</td>
</tr>
</tbody>
</table>

-----------------------------------------------

| MB   | añud         | 'be afloat' |

Penultimate *ng

Examples:
(4-75)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*bêngêr</th>
<th>'deafened'</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEB</td>
<td>bungug</td>
<td>'deafened'</td>
</tr>
<tr>
<td>MIN</td>
<td>bangar</td>
<td>'temporary dullness of hearing'</td>
</tr>
</tbody>
</table>

-----------------------------------------------

| MB   | bongol       | 'deafened'  |

Final *ng

Examples:
(4-76)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*nêngnêng</th>
<th>'look, see'</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAI</td>
<td>ëng</td>
<td>'look at'</td>
</tr>
<tr>
<td>MAR</td>
<td>nêngnêng</td>
<td>'discern with the eye, see'</td>
</tr>
<tr>
<td>DGT</td>
<td>nêngnêng</td>
<td>'to stare'</td>
</tr>
</tbody>
</table>

-----------------------------------------------

| MB   | nêngnêng     | 'gaze, look at' |
(v) PAN liquids

*1

Examples:

(4-77)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*silēm</td>
<td>'fade from sight'</td>
</tr>
<tr>
<td>KB</td>
<td>silēm-silēm</td>
<td>'do something in a secretive way'</td>
</tr>
<tr>
<td>MAL</td>
<td>silam</td>
<td>'gloom, obscurity; the shades of evening'</td>
</tr>
<tr>
<td>JAV</td>
<td>silēm</td>
<td>'duck under water, vanish in the distance'</td>
</tr>
<tr>
<td>MB</td>
<td>silēm</td>
<td>'dive, go under water, sink; disappear (of the moon at the end of the month)'</td>
</tr>
<tr>
<td>PAN</td>
<td>*talatal</td>
<td>'hit, pound, crush'</td>
</tr>
<tr>
<td>ISG</td>
<td>talatal</td>
<td>'to crush'</td>
</tr>
<tr>
<td>ILK</td>
<td>talatal</td>
<td>'to crush'</td>
</tr>
<tr>
<td>TB</td>
<td>talatal</td>
<td>'hit, beat, hack'</td>
</tr>
<tr>
<td>MB</td>
<td>talatal</td>
<td>'hit repeatedly'</td>
</tr>
</tbody>
</table>

*r*

PAN *r > *r or *R. *r is an apical trill, however *R is probably a velar. According to Collins (1981:12-14), PMP *R was probably a velar fricative, but Sneddon (1984:39-40) considers that PAN *R is a fricative uvular because *R can change easily into /r/ or /h/. In OB, it appears that these phonemes have merged and PAN *R > h or Ø in MB (see section 4.3.2 (v), example (4-40)).

Examples:

(4-78)

<table>
<thead>
<tr>
<th>Language</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAN</td>
<td>*rèngkēg</td>
<td>'keep quiet'</td>
</tr>
<tr>
<td>MAR</td>
<td>rèngkēg</td>
<td>'pensive'</td>
</tr>
<tr>
<td>MB</td>
<td>rèngkēg</td>
<td>'keep quiet because of sickness'</td>
</tr>
<tr>
<td>PAN</td>
<td>*gērit</td>
<td>'sound of ripping, gnawing'</td>
</tr>
<tr>
<td>MAL</td>
<td>gērit</td>
<td>'scraping sound'</td>
</tr>
<tr>
<td>MGG</td>
<td>gērit</td>
<td>'scatch, claw; scream'</td>
</tr>
<tr>
<td>MB</td>
<td>gērit</td>
<td>'scour, scrub'</td>
</tr>
</tbody>
</table>
Irregular correspondence:

PAN *r sometimes becomes h, weakening to Ø in MB.

Examples:
(4-79)

*puruq 'a bird, the quail' > MtB puhuh > SB puuh 'quail (bird)'
*rēbuk 'dry rot in wood > MtB hēbuk > SB ēbuk 'dust, powder'
*linur 'earthquake' > MB linuh 'earthquake'

(vi) PAN *s

Penultimate *s

Examples:
(4-80)

<table>
<thead>
<tr>
<th>PAN</th>
<th>*saga</th>
<th>'a vine and the seeds of its fruit'</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAN</td>
<td>saga</td>
<td>'small vine'</td>
</tr>
<tr>
<td>JAV</td>
<td>saga</td>
<td>'trailing shrub having small round aromatic leaves'</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>OB</td>
<td>saga</td>
<td>'a vine and the seeds of its fruit'</td>
</tr>
<tr>
<td>PAN</td>
<td>*gugas</td>
<td>'scratch'</td>
</tr>
<tr>
<td>CEB</td>
<td>gugas</td>
<td>'damage something by scratching it'</td>
</tr>
<tr>
<td>MAL</td>
<td>g-er-gas</td>
<td>'clawing, pawing; passing the fingers, roughly through the hair'</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>MB</td>
<td>gasgas</td>
<td>'itch, itching; to scratch (cat, etc)'</td>
</tr>
<tr>
<td>PAN</td>
<td>*kēlas</td>
<td>'to peel, skin off'</td>
</tr>
<tr>
<td>BON</td>
<td>kēlas</td>
<td>'pull off, as clothes'</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>MB</td>
<td>kēlas</td>
<td>'lay bare, peel, skin'</td>
</tr>
</tbody>
</table>

Irregular correspondence:

Both Dahl (1976) and Zorc (1981) have suggested that PAN *s > *h in a language ancestral to non Formosan AN languages. However, according to Blust (1980:23), PAN *s > *h only in final position, but remained a sibilant elsewhere. The OB and SB data support Blust’s proposal that *s weakening to h > Ø is a natural sequence in Austronesian languages.
Examples:

(4-81)

*syuang 'shake, sway, rock' > MB  uyang 'restless in sleep, uneasy; turn from oneside on a bed, be unable to sleep'
*saguk 'deep throuty sound' > MB  aguk 'shout'
*sa(m)beng 'block, obstruct' > MB ambeng 'keep watch to prevent people from passing; close a road'
*su(n)tuk 'bend, flex' > MB  untuk 'make a deep bow, hang the head'

(vii) PAN spirant *q

Penultimate *q

Examples:

(4-82)

PAN *syu?un 'carry on the head'
LgA su?un 'carry on the shoulder'

-----------------------------------------------

OB suhun 'carry on the head'

Final *q

Examples:

(4-83)

PAN **panaq 'shoot with bow'
RUK pana 'shoot with bow'
AMI panaq 'shoot with bow'
TAG pana? 'shoot with bow'
MAL panah 'shoot with bow'
JAV panah 'shoot with bow'

-----------------------------------------------

MB panah 'shoot with bow'

4.7 Pre-OB phonemes systems

Based on the previous examples, pre-OB phonemes at the stage long before the eighth century AD could be hypothesized on the basis of the correspondences between PAN phonemes and OB or MB phonemes. It appears that PAN phoneme *z > j, *q> h apparently took place by the time of pre-OB. These changes also occur in Malay and OJ.
4.7.1 Vowels

\[
\begin{array}{cccc}
& i & u & \\
& e & o & \\
& ē & a & \\
\end{array}
\]

4.7.2 Consonants:

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Dental</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops Voiceless</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>Stops Voiced.</td>
<td>b</td>
<td>d</td>
<td>j</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>ĕ</td>
<td>ng</td>
<td>h</td>
</tr>
<tr>
<td>Pricative</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquids</td>
<td>l</td>
<td></td>
<td></td>
<td>r</td>
<td></td>
</tr>
<tr>
<td>Semi vowels</td>
<td>w</td>
<td></td>
<td></td>
<td>y</td>
<td></td>
</tr>
</tbody>
</table>

4.7.3 Discussion

In Dempwolff’s (1924) sound system for PAN, there are four vowel phonemes: /i/, /u/, /a/, /ė/ observed. Brandstetter states that at first he thought that there were six vowels. However, as he has only one occurrence of each of the vowels /e/ and /o/, he omitted these two vowels and kept only four (Dahl, 1973:14).

According to Dyen (1971:24), in reconstructing the four vowel phonemes Dempwolff followed the presentation of correspondences that is employed in his 'The pépét law in the Philippine language' (1913). Proto phoneme *ė first appears in Brandes (1884:19f). He inferred the quality to be the same as that of the Javanese mid-central vowel which is called the pépét and then gave the reconstructed vowel the same name. Brandes is followed by almost all subsequent authors including Dempwolff, and Brandstetter (1908:52).

The pre-OB phoneme system may have been quite similar to the Proto West Malayo-Polynesia one. The status of e and o in open syllables (as distinct from i and u) in Malay as well as in other languages, and of the Javanese e [e], ĕ [ě], o in open syllables and of o in close syllables (where not from *a) is not yet clear (Dyen, 1971: 24). The phonemes e and o may be attributed to secondary developments including dialectal or inter-linguistic borrowing. According to Brandstetter (1911a:10), the additional vowel *e and *o are
common in Indonesian languages. But, it seems that the occurrence of *e and *o are
doubtful at the PAN stage, since there is no evidence for them in cognates outside the
languages of Indonesia.

4.8. Sound changes in Balinese

The main sound changes which took place from OB to MB are summarized in this
section. A few changes can be characterized as regular, while others are sporadic and
affected only particular lexical items.\(^10\)

4.8.1 /a/ > /e/

SB /a/ > [ə] is regular when it occurs in the final position in SB. This change does
not occur in MtB Villages. In the villages of Tigawasa, Bélantih and Sukawana final [a]
is preserved. But in the MtB village of Cempaga /a/ > [ə] finally. In the
morphophonemic process, if an enclitic or suffix is added the realization is [ə] in SB,
while in Cempaga the realization is [ə]. Thus, for instance, in SB bapa [bapə] + the third
person pronoun ne becomes bapane [bapanə], but Cempaga bapa [bapə] + ne >
bapone [bapone]. The change of final lal > [ə] at Cempaga may be in some way
connected with the history of the village. According to the temple attendant (Jéro
Kebayan), the ancestors of this villagers came from Blambangan in East Java. The
original Balinese inhabitants of Cempaga were said to have taken refuge to Klungkung
and Bedahulu.

<table>
<thead>
<tr>
<th>OB</th>
<th>SB</th>
<th>C</th>
<th>P, T, B, S</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ada</td>
<td>[adə]</td>
<td>[adə]</td>
<td>[ada]</td>
<td>'exist'</td>
</tr>
<tr>
<td>bapa</td>
<td>[bapə]</td>
<td>[bapə]</td>
<td>[bapa]</td>
<td>'father'</td>
</tr>
<tr>
<td>katba</td>
<td>[katəbo]</td>
<td>[katəbo]</td>
<td>[katəba]</td>
<td>'down stream'</td>
</tr>
</tbody>
</table>

Some exceptional cases of /a/ > /e/ in non-final contexts.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bantas</td>
<td>batəs</td>
<td>boundary</td>
</tr>
<tr>
<td>ikat</td>
<td>ikət</td>
<td>weave</td>
</tr>
<tr>
<td>pagar</td>
<td>pagər</td>
<td>fence</td>
</tr>
<tr>
<td>tanam</td>
<td>tanəm</td>
<td>to plant</td>
</tr>
<tr>
<td>tikar</td>
<td>tikəh</td>
<td>mat</td>
</tr>
</tbody>
</table>

(The change of a > e in the above examples may have been due in some way to a
pattern of syllable stress, but treatment of this is beyond the scope of this thesis).

\(^{10}\) For the complete list of OB words which still exist in SB see Appendix D
4.8.2 Schwa insertion with OB clusters

Based on Table 3, it appears that there are several cluster graphemes in OB. However, we are not sure whether those can also be categorized as cluster phonemes. In comparison with MB, it seems that there are more cluster graphemes in OB than cluster phonemes in MB, because in MB schwa can be inserted in all OB cluster graphemes.

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/MtB (C, P)</th>
<th>MtB (T, B, S)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bli</td>
<td>bèli</td>
<td>bèli</td>
<td>buy</td>
</tr>
<tr>
<td>brat</td>
<td>baat</td>
<td>bèhat</td>
<td>heavy</td>
</tr>
<tr>
<td>bsar</td>
<td>bèsar</td>
<td>bèsar</td>
<td>big</td>
</tr>
<tr>
<td>gnèp</td>
<td>gènèp</td>
<td>gènèp</td>
<td>complete</td>
</tr>
<tr>
<td>kdi</td>
<td>kèdi</td>
<td>kèdi</td>
<td>hermaphrodite</td>
</tr>
<tr>
<td>lpah</td>
<td>lèpah</td>
<td>lèpah</td>
<td>cook</td>
</tr>
<tr>
<td>slat</td>
<td>sèlat</td>
<td>sèlat</td>
<td>a boundary</td>
</tr>
<tr>
<td>skar</td>
<td>sèkar</td>
<td>sèkar</td>
<td>flower</td>
</tr>
<tr>
<td>tka</td>
<td>téka</td>
<td>téka</td>
<td>come</td>
</tr>
<tr>
<td>trmu</td>
<td>tëmu</td>
<td>tëmu</td>
<td>come</td>
</tr>
<tr>
<td>tring</td>
<td>tiing</td>
<td>tëhing</td>
<td>bamboo</td>
</tr>
</tbody>
</table>

4.8.3 i > e/C-C

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pirak</td>
<td>perak</td>
<td>silver</td>
</tr>
</tbody>
</table>

4.8.4 i > è/ C-C

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>riñuh</td>
<td>rèñuh</td>
<td>crush</td>
</tr>
</tbody>
</table>

4.8.5 w > b/#- or w > b/ V-V

There are some examples found in the OB inscriptions where the consonant /w/ > /b/ in MB when it occurs in the initial position and medial position (intervocally).  

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>awa</td>
<td>aba</td>
<td>bring</td>
</tr>
<tr>
<td>walung</td>
<td>balung</td>
<td>bone</td>
</tr>
<tr>
<td>wangu</td>
<td>bangun</td>
<td>build</td>
</tr>
<tr>
<td>watès</td>
<td>batès</td>
<td>boundary</td>
</tr>
<tr>
<td>wungbung</td>
<td>bungbung</td>
<td>bamboo container</td>
</tr>
</tbody>
</table>
wungkuk  bungkuk  bend

4.8.6 \( r > \emptyset / \# - \)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rapuh</td>
<td>apuh</td>
<td>limestone</td>
</tr>
<tr>
<td>ṭbah</td>
<td>bah</td>
<td>fall down</td>
</tr>
<tr>
<td>rukud</td>
<td>ukud</td>
<td>a classifier</td>
</tr>
</tbody>
</table>

Occasionally OB /r/ is lost when it occurs in the final position. For example:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ungsir</td>
<td>ungsi</td>
<td>to take refuge</td>
</tr>
</tbody>
</table>

4.8.7 \( r > d / \# - \)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rggas</td>
<td>dugas</td>
<td>when</td>
</tr>
<tr>
<td>ruri</td>
<td>duri</td>
<td>behind</td>
</tr>
</tbody>
</table>

According to Brandes, many OB /r/ sounds appear not to have survived in MB. The softening of /r/ occurred in the eighteen century AD and /r/ no longer appears in MB in numerous cases (1889:34)\(^{11}\), e.g. pĕrahu. > pĕdahu 'canoe', diri > didi 'alone', karambo > kĕbo 'buffalo'. In addition, he also mentions that many important changes occurred recently (1889:34).

4.8.8 \( r > h / \# - \)

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dafur</td>
<td>daňuh</td>
<td>dried coconut leaves</td>
</tr>
<tr>
<td>talur</td>
<td>taluh</td>
<td>egg</td>
</tr>
<tr>
<td>ṭegeh</td>
<td>ṭegeh</td>
<td>high</td>
</tr>
<tr>
<td>tikēr</td>
<td>tikēh</td>
<td>mat</td>
</tr>
<tr>
<td>tingkir</td>
<td>tingkih</td>
<td>candlenut</td>
</tr>
</tbody>
</table>

There is another case of OB /r/ > /h/ intervocalically in MtB at the villages of Tigawasa, Bĕlantih and Sukawana; however it becomes \( \emptyset \) in SB, Pĕdawa and Cĕmpaga.

---

\(^{11}\) Brandes in his article does not mention what data he used to conclude that the softening of /r/ had been completed by the eighteenth century.
Some examples are found where the sequence of the phoneme /h/ is totally dropped in MB. In one case lar > Ø

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>luhur</td>
<td>luh</td>
<td>female</td>
</tr>
<tr>
<td>maruhani</td>
<td>muani</td>
<td>male</td>
</tr>
<tr>
<td>tuhur</td>
<td>tuh</td>
<td>dry</td>
</tr>
</tbody>
</table>

4.8.9 h > Ø/-V

In SB and in MtB at Pėdawa and Ėmpaga h > Ø/-V. However, /h/ is sounded in MtB at the villages of Tigawasa, Bėlantih and Sukawana.

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/MtB (C, P)</th>
<th>MtB (T, B, S)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hadan</td>
<td>adan</td>
<td>hadan</td>
<td>name</td>
</tr>
<tr>
<td>hajēng</td>
<td>ajēng</td>
<td>hajēng</td>
<td>to eat</td>
</tr>
<tr>
<td>hantu</td>
<td>antu</td>
<td>hantu</td>
<td>ghost</td>
</tr>
<tr>
<td>hantus</td>
<td>antos</td>
<td>hantus</td>
<td>to wait</td>
</tr>
<tr>
<td>hapit</td>
<td>apit</td>
<td>hapit</td>
<td>in between two</td>
</tr>
<tr>
<td>husir</td>
<td>usir</td>
<td>husir</td>
<td>to take refuge</td>
</tr>
<tr>
<td>hutang</td>
<td>utang</td>
<td>hutang</td>
<td>debt</td>
</tr>
</tbody>
</table>

In SB, the laryngeal phoneme /h/ rarely occurs phonemically in the initial position. This is also true for MtB at Pėdawa and Ėmpaga. The /h/ sound is still very clear initially in MtB at the villages of Tigawasa, Bėlantih and Sukawana.

4.8.10 t > p/-#

There is only one example found in which t > p.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilat</td>
<td>kilap</td>
<td>lightning</td>
</tr>
</tbody>
</table>
4.8.11  b > Ø/-w

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rbwang</td>
<td>roang</td>
<td>friend</td>
</tr>
</tbody>
</table>

4.8.12  b > Ø/m-

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tambaga</td>
<td>təmaga</td>
<td>copper</td>
</tr>
</tbody>
</table>

4.8.13  j > y/ V-V

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bajah</td>
<td>bayah</td>
<td>pay</td>
</tr>
</tbody>
</table>

4.8.14 Insertion of the nasal /n/

Occasionally nн is inserted between the first and the second syllable: CVnCVC.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pujung</td>
<td>punjung</td>
<td>offering for the dead people</td>
</tr>
<tr>
<td>tdhas</td>
<td>tendas</td>
<td>head</td>
</tr>
</tbody>
</table>

4.8.15  s > j/ #-

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>surang</td>
<td>jurang</td>
<td>mountain ridge (?)</td>
</tr>
</tbody>
</table>

4.8.16  g > k/ #-

There is only one example found in the OB inscriptions.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gəndang</td>
<td>kəndang</td>
<td>drum</td>
</tr>
</tbody>
</table>
4.8.17 Discussion

The evidence above shows that few regular sound changes have occurred from OB to MB (both SB and MtB). The cause of those changes may be partly due to syllable stress, for instance, OB final /a/ > [a] in SB, or OB /a/ > /e/ in non-final context. According to Clynes, OB final /a/ > [a] is due to borrowing from Javanese in the late fifteen century (1989:162). This seems improbable as there is no evidence that final /a/ is realized as [a] in Java. On the other hand, according to Nothofer (personal communication, March, 1991), final /a/ still retains as /a/ in the district of Tengger, in Java. This may be similar to the dialect of MtB. OB or MtB initial /h/ > SB Ø, may be due to there being no vocabulary distinguished by whether a vowel occurs with or without /h/.

Motivations for other changes are unknown, because it is very difficult to identify or to verify. According to Martinet (1978:123), the problem of the causes of sound change would remain one of the central problems of linguistic science.
CHAPTER V
LEXICON AND MORPHOLOGICAL PROCESSES IN STANDARD BALINESE

In this chapter, the word-classes which undergo affixation in SB examples are discussed, namely verbs, nouns, and occasionally adjectives. Syntactical definitions of verbs, nouns and adjectives in OB are given as follows. In SB, verbs are lexical entities which function as predicates of sentences and they can be modified by a negator. The SB verbs are not marked for tense, aspect, mood, or number, but they are categorized as transitive and intransitive verbs.

Nouns are lexical entities which potentially function as arguments of verbs in sentences. Nouns can occur following prepositions and they can be modified by demonstrative pronouns, numerals or relative clauses. Adjectives are lexical entities which usually modify nouns. There are some cross-over phenomena involving verbs and nouns. Verbs in SB can occur in the position reserved for a noun (nominalized verbal). When nouns occur in the position reserved for verbs they can be considered verbalized nominals. Note that nouns, adjectives and adverbs can also function as verbs.

This section will analyze the morphology, function and meaning of SB affixes. In an introductory section (5.1), the speech levels which characterize SB are also discussed, emphasizing the linguistic components. (See section 2.9.1 for a summary of sociolinguistic usage).

5.1 Lexical speech level

The main functions and social contexts of SB speech levels have been described in Chapter 2. How speech levels are differentiated in terms of linguistic content, will be discussed below. Morphologically and syntactically there are only a few differences between sentences on various levels. Speech level phenomena are far more sensitive to lexical selection than to morphology and syntax. The levels are determined principally by the selection of vocabulary. ¹

¹ Scholars such as Kersten (1970:13-25; 1984-16-29), Ward (1972:88), Bagus (1975:81), Clynes (1989:91) and the authors of Kamus Bali-Indonesia, propose attitudinal classes in the SB speech levels as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>alus</td>
<td>alus</td>
<td>alus mider</td>
<td>alus mider</td>
<td>alus mider</td>
</tr>
<tr>
<td>singgih</td>
<td>singgih</td>
<td>alussinggih</td>
<td>alus singgih</td>
<td>alus singgih</td>
</tr>
<tr>
<td>sor</td>
<td>deprecatig</td>
<td>alus sor</td>
<td>alus sor</td>
<td>alus sor</td>
</tr>
</tbody>
</table>
The following table shows that the speech levels in Balinese are formed by lexical choices. The sentence which is selected as an example is equivalent to the English *I will buy knife and sickle.*

<table>
<thead>
<tr>
<th>Level</th>
<th>She/he is</th>
<th>still</th>
<th>eating</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>ia</td>
<td>ēnu</td>
<td>ngamah</td>
</tr>
<tr>
<td>M</td>
<td>dare</td>
<td>kantun</td>
<td>ngajèng</td>
</tr>
<tr>
<td>H</td>
<td>ida</td>
<td>kantun</td>
<td>ngajèng</td>
</tr>
<tr>
<td></td>
<td>ipun</td>
<td>kantun</td>
<td>nunas</td>
</tr>
</tbody>
</table>

Another example given below taken from (5-3b) shows briefly speech level differentiation.

<table>
<thead>
<tr>
<th>Level</th>
<th>will</th>
<th>buy</th>
<th>knife</th>
<th>and</th>
<th>sickle</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>icang</td>
<td>lakar</td>
<td>meli</td>
<td>tiuk</td>
<td>tèken</td>
</tr>
<tr>
<td>M</td>
<td>tiang</td>
<td>jagi</td>
<td>numbas</td>
<td>lemat</td>
<td>sarèng</td>
</tr>
<tr>
<td>H</td>
<td>ditiang</td>
<td>jagi</td>
<td>numbas</td>
<td>lemat</td>
<td>sarèng</td>
</tr>
</tbody>
</table>

The sample lexicon below, based on examples of conversation in this thesis illustrates speech level differentiation. This sample is classified into nouns, pronouns, verbs, adverbs and function words.

### a. Nouns

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Medium</th>
<th>High (honorific)</th>
<th>High (deprecatory)</th>
</tr>
</thead>
<tbody>
<tr>
<td>child</td>
<td>panak</td>
<td>-</td>
<td>oka</td>
<td>-</td>
</tr>
<tr>
<td>dog</td>
<td>kuluk</td>
<td>-</td>
<td>asu</td>
<td>asu</td>
</tr>
<tr>
<td>father</td>
<td>bapa</td>
<td>-</td>
<td>ajung/ aji</td>
<td>-</td>
</tr>
<tr>
<td>foot</td>
<td>batis</td>
<td>-</td>
<td>cokor</td>
<td>buntut</td>
</tr>
<tr>
<td>grandmother</td>
<td>dadong</td>
<td>-</td>
<td>nini</td>
<td>-</td>
</tr>
<tr>
<td>house</td>
<td>umah</td>
<td>-</td>
<td>puri/jèro</td>
<td>-</td>
</tr>
<tr>
<td>money</td>
<td>pipis</td>
<td>-</td>
<td>jìnah</td>
<td>-</td>
</tr>
<tr>
<td>mother</td>
<td>meme</td>
<td>-</td>
<td>ibu</td>
<td>biang</td>
</tr>
<tr>
<td>relative</td>
<td>ñama</td>
<td>-</td>
<td>sèmèton</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>kasar</th>
<th>kasar</th>
<th>kasar</th>
<th>kasar</th>
<th>kasar</th>
</tr>
</thead>
<tbody>
<tr>
<td>madia</td>
<td>-</td>
<td>alas madia</td>
<td>madia</td>
<td>-</td>
</tr>
<tr>
<td>neutral</td>
<td>neutral</td>
<td>neutral</td>
<td>neutral</td>
<td>-</td>
</tr>
</tbody>
</table>

There seems to be close agreement between authors in the number of attitudinal classes in the SB speech levels, with the exception that neither Ward nor the Kamus Bali-Indonesia recognise the madia classes.
<table>
<thead>
<tr>
<th>English</th>
<th>Papi</th>
<th>Tamil</th>
<th>English</th>
<th>Tamil</th>
</tr>
</thead>
<tbody>
<tr>
<td>sea</td>
<td>pasih</td>
<td>-</td>
<td>sēgara</td>
<td>sēgara</td>
</tr>
<tr>
<td>talk</td>
<td>raos</td>
<td>-</td>
<td>pangandika</td>
<td>-</td>
</tr>
<tr>
<td>knife</td>
<td>tiuk</td>
<td>-</td>
<td>lemat</td>
<td>-</td>
</tr>
</tbody>
</table>

b. Pronouns

<table>
<thead>
<tr>
<th>I</th>
<th>icang/raga</th>
<th>tiang</th>
<th>-</th>
<th>titiang</th>
</tr>
</thead>
<tbody>
<tr>
<td>she/he</td>
<td>ia</td>
<td>dane</td>
<td>ida</td>
<td>ipun</td>
</tr>
<tr>
<td>you</td>
<td>cai/fba</td>
<td>-</td>
<td>cokor ratu/</td>
<td>cokor dewa</td>
</tr>
</tbody>
</table>

c. Verbs

<table>
<thead>
<tr>
<th>ask</th>
<th>takon</th>
<th>-</th>
<th>taken</th>
<th>taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>bathe</td>
<td>panjus</td>
<td>-</td>
<td>siram</td>
<td>siram</td>
</tr>
<tr>
<td>become</td>
<td>dadi</td>
<td>-</td>
<td>dados</td>
<td>dados</td>
</tr>
<tr>
<td>come</td>
<td>tēka</td>
<td>-</td>
<td>rauh</td>
<td>rauh</td>
</tr>
<tr>
<td>eat</td>
<td>amah/sop</td>
<td>-</td>
<td>rayun/ajēng</td>
<td>tunas</td>
</tr>
<tr>
<td>exist</td>
<td>ada</td>
<td>-</td>
<td>wentēn</td>
<td>wentēn</td>
</tr>
<tr>
<td>give</td>
<td>baang</td>
<td>-</td>
<td>icen</td>
<td>weh</td>
</tr>
<tr>
<td>go</td>
<td>luas</td>
<td>-</td>
<td>lunga</td>
<td>lunga</td>
</tr>
<tr>
<td>hear</td>
<td>dingēh</td>
<td>-</td>
<td>piring</td>
<td>piragi</td>
</tr>
<tr>
<td>know</td>
<td>tawang</td>
<td>-</td>
<td>uning</td>
<td>uning</td>
</tr>
<tr>
<td>see</td>
<td>iling</td>
<td>tingal</td>
<td>cingak/aksi</td>
<td>-</td>
</tr>
<tr>
<td>sleep</td>
<td>pulēs</td>
<td>-</td>
<td>sirēp</td>
<td>sare</td>
</tr>
<tr>
<td>take</td>
<td>jērnak</td>
<td>-</td>
<td>ambil</td>
<td>ambil</td>
</tr>
</tbody>
</table>

d. Adverbs

<table>
<thead>
<tr>
<th>just</th>
<th>mara</th>
<th>-</th>
<th>wau</th>
<th>wau</th>
</tr>
</thead>
<tbody>
<tr>
<td>now</td>
<td>jani</td>
<td>-</td>
<td>mangkin</td>
<td>mangkin</td>
</tr>
<tr>
<td>still</td>
<td>ēnu/hu</td>
<td>-</td>
<td>kari/kantun</td>
<td>kari/kantun</td>
</tr>
<tr>
<td>there</td>
<td>ditu</td>
<td>drika/rika</td>
<td>irika</td>
<td>-</td>
</tr>
<tr>
<td>where</td>
<td>dija</td>
<td>-</td>
<td>ring dija</td>
<td>ring dija</td>
</tr>
</tbody>
</table>

e. Function words

<table>
<thead>
<tr>
<th>at/in/on/from</th>
<th>di</th>
<th>-</th>
<th>ring</th>
<th>ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>future</td>
<td>lakar</td>
<td>-</td>
<td>jagi/jaga</td>
<td>jagi/jaga</td>
</tr>
<tr>
<td>no</td>
<td>sing</td>
<td>tēn</td>
<td>nēntēn</td>
<td>nēntēn</td>
</tr>
<tr>
<td>not yet</td>
<td>tonden</td>
<td>-</td>
<td>durung/dereng</td>
<td>durung/dereng</td>
</tr>
<tr>
<td>perfect</td>
<td>suba/uba</td>
<td>ampun</td>
<td>sampun</td>
<td>sampun</td>
</tr>
<tr>
<td>this</td>
<td>ene/ne</td>
<td>niki</td>
<td>puniki</td>
<td>puniki</td>
</tr>
<tr>
<td>with</td>
<td>ajak</td>
<td>-</td>
<td>sarēng</td>
<td>sarēng</td>
</tr>
<tr>
<td>yes</td>
<td>nah</td>
<td>nggih</td>
<td>inggih</td>
<td>inggih</td>
</tr>
</tbody>
</table>
5.1.1 Low level ('Basa Kasar')

Lexically, *kasar* means 'rude, impolite and uncivilized' (low). According to Bagus (1975:80), each low level item has a corresponding to the high one. The examples below are a conversation between I Bèlog and Nang Bangsing in low level, who are on very familiar terms with one another.

(5-1) I Bèlog  : *ih bēli* 
Nang Bangsing uli *díja* busan bēli ? (L) 
EXC elder brother Pn from where just elder brother

'Eh, Nang Bangsing where have you been?'

N Bangsing : *Oh bēli* uli *jumah ja* bēli mai tēka nēkaning cai ²(L) 
oh elder from house PTC elder come see 2ND

'Oh, I have come from my house, I come here to see you'.

5.1.2 Medium level ('Basa Madia')

*Madia* means 'not too rude and not too polite' (intermediate). The examples below from a conversation between family members Putu (first born) and Kadek (second born) which are entirely in Medium level.

(5-2) Putu: *ibu ampun rash* Dek ? (M) 
mother PAST arrive Pn (2nd born)

'Has mother come, Dek?'

Kadek: *Ampun, Putu takenanga* (M) 
Yes Pn (1st born) ask

'Yes, (she) asked about you'

Putu: *Ring díja ibu mangkin* ? (M) 
where mother now

'Where is mother now?'

Kadek: *Drika* (M) 
there

'There she is'.

---

² Satua Nang Basing ëken I Bèlog, 1971:11
The above examples are from a conversation between Sudra people using medium level. Medium level is normally treated as middle speech level which occupies an intermediate position between high and low levels. It should be noted, however, that it is really difficult to draw a firm line between medium and high levels, because most of the high lexical items can be used for medium level. Specifically, the medium vocabulary is relatively limited, and some medium lexical items are short forms of high vocabulary. For instance, tiitang (H) > tiang (M) T, sampun (H) > ampun (M) 'perfect marker' (see sample lexicon above). Balinese rarely use medium lexemes; they would rather choose between low or high level.

5.1.3 High level ('Basa Alus Midēr')

Alus means 'pure, polite, civilized or smooth' (high) and midēr means 'go around'. Alus Midēr means 'general polite or refined speech'. The following examples are from a conversation between an aristocratic person (king), using low level and an ordinary person (servant), using high level.

Examples:

(5-3) a. The King:  

\[ \text{ihi bapa Angklung Gadang gēlah jani lakar luas ka} \]
\[ \text{ECL father Pn 1ST now FUT go PREP} \]
\[ \text{gunung kēma iba ngētah-ngētahin jaranne ... (L)} \]
\[ \text{mountain go 2ND prepare horse DEF} \]

'Eh, father Angklung Gadang, I am going to the mountain now, please prepare the horse...'

Pan Angklung Gadang: \[ \text{Ingghih pangandikan Tjokor 1 Dewa tiitang} \]
\[ \text{yes order Tl 1ST} \]

\[ \text{sairing}^3 (H)^4 \]

follow

'Yes, what is your order, I will follow'.

---

3 Satua Pan Angklung Gadang, 1971:61
4 The high level which is used by Pan Angklung Gadang belongs to Basa Alus Singgih (honorific form).
The example (b) below is also from a conversation between an aristocratic person and an ordinary person.

b. Aristocratic person: *Dija lakuna panak memene?* (L)
   where go 3RD child mother 3RD

   'Where is your child?'

Ordinary person: *Ipun kantun nunas* (H)<sup>5</sup>
   3RD still eat

   'She/ he is still eating'.

The difference between examples (a) and (b) above is: in (a) Pan Angklung Gadang uses high level (honorific form) to reply the king's order, while (b) the ordinary person uses high level (deprecatory form), because she/he refers to her/his child toward a highly respected person.

5.1.4 Neutral

According to Kersten (1984:28), there are some words which can be used for both high and low levels. These are called *kanggen munggah tedun* ('the words can be used to address higher or lower people, to indicate high respect to the addressee'). The neutral lexical items can be used in any context, and they do not carry social function of other classes. According to Bagus (1979: 196), about half of the Balinese vocabulary consists of neutral words. Based on my investigation on the *Balinese-Indonesian dictionary* (1990) published by Dinas Pendidikan Dasar, Propinsi Bali, my count shows 5.5% (825 words) are high, and therefore have their low level counterparts (Bagus, 1975:80). The rest 89% (approximately 13,000 words) are neutral words. Among 825 words which belong to high level, 650 words belong to *Basa Alus Singgih* (honorific) and 75 words belongs *Basa Alus Sor* (deprecatory). Medium level vocabulary is relatively small: my count shows that only 35 words belong specifically to this level.

5.2 Mixed discourse

In Bali, a mixture of low, medium and high is used in many non-formal situations by *Triwarga* people as well as by *Sudra* people. This can be understood from the following conversation between two *Triwangsa* women, Dayu Putu and Dayu Dewi in which mixed levels are used.

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<sup>5</sup> The high level which is used by the ordinary person in this conversation belongs to *Basa Alus Sor* (deprecatory form).
(5-4) a. Dayu Putu: *Dewi, makenken ajin raga ajak ibunne Gus Oka ?*  
   Pn what father GEN REFPREP mother 3RD Pn  

'Dewi, what is the relationship(L) between our(L) father(H) and(L) Gus Oka's mother(H)'.

Dayu Dewi: *Nini masëmëton ajak ibunne Gus Oka*  
   Grand relative PREP mother 3RD Pn  

'Grandmother(H) is the younger/older sister(H) of Gus Oka's mother(A)'.

Dayu Putu: *Oh, mëñama raga masih ajak Gus Oka*  
   oh relative REF still PREP Pn  

'Oh, Gus Oka is still our(L) relative(L)'.

Dayu Dewi: *Mara Tu 6 nawang ?*  
   just now Pn (1st born) know  

'You (Tu) just(L) know(L) it?'.

The above dialogue is conducted in low level, but when Dayu Dewi refers to an older woman (*nini* 'grandmother') high level 'Nini masëmëton' is used. When she refers to herself low level: 'mëñama raga' is used. Both sëmëton and ñama mean 'relative', but the former is only used for high level, while the latter for low level.

The examples below illustrate mixed discourse between two Sudra people, husband and his wife.

b. Wife: *Dija bukun tìange*  
   where book GEN 1ST  

'Where(L) is my(M) book'.

Husband: *Drika di duur mejane, Luh ampun ngajëng ?*  
   there PREP table DEF Pn PERF eat  

'There(H), on(L) the table, Luh have(M) you eaten(H)?'.

Wife: *Durung, menjëpan*  
   not yet later on  

'Not yet(H), later on(L)'.

---

6 It is very common in Bali that if the name consists of two syllables, when someone is called, only the second syllable is used. Thus, Putu becomes Tu, Made becomes De etc.
The vocabulary which is chosen in this conversation is a mixture of high, *drika* 'there', *ajēng* 'eat', *durung* 'not yet', medium, *tiange* 'my' and low *dija* 'where', *di* 'on', *menjēpan* 'later on'.

For a description of how speech level is occasionally associated with morphology, see section 5.11.1, especially the prefix *ka*-.

5.3 Morphophonemic alternants in Standard Balinese

This section discusses the morphophonemic alternants of SB, namely nasal assimilation, vowel centering, vowel combination and nasal insertion. The functions of these affixes are discussed in section 5.11.

5.3.1 Nasal assimilation

The nasal sounds involved in morphophonemic processes are represented by capital *N*. *N*- is realized as /m, n, ň, ng/ depending on the stem consonant in SB. *N*- can be homorganic as in (a) and non-homorganic as in (b). *N*- on its own acts as a verbal prefix. Nasal assimilation also applies to the nominal prefix *paN*- varying with *pa*-. *N*- has the following realizations.

a. *N*- as homorganic nasal, replacing non-nasal consonant in root.

1. As /m/ before bilabials /b/ and /p/

Examples:

\[ N + \{bacok\} > macok \quad \text{to stab (L)} \]
\[ N + \{besbes\} > mesbes \quad \text{to tear (L)} \]
\[ N + \{panggih\} > manggih \quad \text{to find (H)} \]
\[ N + \{pantēg\} > manitēg \quad \text{to hit (L)} \]

2. As /n/ before apicals /č/ and /t/

Examples:

\[ N + \{daar\} > naar \quad \text{to eat (L)} \]
\[ N + \{dapēs\} > napēs \quad \text{to squeeze (L)} \]
\[ N + \{tēktēk\} > nēktēk \quad \text{to chop (L)} \]
\[ N + \{tēgul\} > nēgul \quad \text{to tie (L)} \]
3. As /u/ before laminals /c/, /j/, /s/

Examples:

\[ N + \{congcong\} > ŋongcong \]  'to dig' (L)
\[ N + \{ččuk\} > ŋččuk \]  'to hold' (L)
\[ N + \{jarah\} > ŋjarah \]  'to rob' (L)
\[ N + \{jēmak\} > ŋjēmak \]  'to take' (L)
\[ N + \{sabat\} > ŋsabat \]  'to throw' (L)
\[ N + \{saip\} > ŋsaip \]  'to sift' (L)

4. As /ng/ before dorsal /g/ and /k/

Examples:

\[ N + \{gasgas\} > ngasgas \]  'to scratch' (L)
\[ N + \{gēlah\} > ngēlah \]  'to own' (L)
\[ N + \{kambang\} > ngambang \]  'to float' (L and H)
\[ N + \{kaput\} > ngaput \]  'to wrap' (L)

b. \(N\) as non-homorganic, including prevocally.

1. As /ng/ before vowels, liquids and semi-vowels.

Examples:

\[ N + \{adēg\} > ngadēg \]  'to stand up' (H)
\[ N + \{čmbus\} > ngčmbus \]  'to take off' (L)
\[ N + \{obes\} > ngobēs \]  'to tear up' (L)
\[ N + \{ubēt\} > ngubēt \]  'to close' (L)
\[ N + \{laca\} > nglaca \]  'to plan' (H)
\[ N + \{rēreh\} > ngrēreh \]  'to look for' (H)
\[ N + \{wangun\} > ngwangun \]  'to build' (H)
\[ N + \{yasa\} + ang > ngyasang \]  'to act virtuously' (L and H)

2. As /ngē/ before all roots beginning with nasals, and before roots which consist of only one syllable.

Examples:

\[ N + \{maling\} > ngēmaling \]  'to steal' (L)
\[ N + \{mēm\} > ngēmēm \]  'to soak' (L)
\[ N + \{nēngnēng\} > ngēngnēng \]  'to stare' (L)
\[ N + \{not\} > ngēnot \]  'to see' (L)
\[ N + \{fahñah\} > ngēfahñah \]  'to stir fry' (L)
\[ N + \{nīt\} > ngēnīt \]  'to set fire' (L)
\[ N + \{joh\} > ngējoh \]  'to create distance between' (L)
\[ N + \{\text{dēng}\} > \text{ngēdēng} \quad \text{'to pull' (L)} \]

5.3.2 Vowel centering

If a SB word has an underlying form ending in /-a/ this is realized as the mid-central vowel shwa [ə].

Examples:

\begin{itemize}
  \item ada [adə] \quad \text{'to exist' (L)}
  \item bapa [bapa] \quad \text{'father' (L)}
  \item dija [diʃə] \quad \text{'where' (L)}
  \item jaja [jajə] \quad \text{'cake' (L)}
  \item etc.
\end{itemize}

When the definite article -ne is suffixed, however, the vowel /-a/ is retained (cf. section 4.8.4).

Examples:

\begin{itemize}
  \item \{jaja\} + ne > jajane [jajane] (L) \quad \text{'the cake'}
  \item \{meja\} + ne > mejane [mejane] (L) \quad \text{'the table'}
  \item etc.
\end{itemize}

5.3.3 Vowel sandhi and elision

a. The following vowel combinations occur in SB.

\begin{itemize}
  \item a + u > ə
  \item u + a > ə
  \item a + i > e
  \item i + a > e
\end{itemize}

Examples:

\begin{itemize}
  \item ka + \{ucap\} > kocap \quad \text{'it is said' (H)}
  \item \{saji\} + an > sajen \quad \text{'offering' (H)}.
  \item \{těka\} + in > těken \quad \text{'to visit' (L)}
  \item \{tunu\} + an > tunon \quad \text{'to burn' (L)}
\end{itemize}

b. In the case of prefix ma-, the vowel /a/ is dropped when it is combined with other vowels, e.g. /a/, /i/, /u/, /ɛ/ , /ɔ/.

Examples:

\begin{itemize}
  \item ma + \{adan\} > mædan \quad \text{'named' (L)}
  \item ma + \{ikut\} > mɪkut \quad \text{'has a tail' (L)}
  \item ma + \{ujan\} > mɔjan \quad \text{'caught under the rain' (L)}
\end{itemize}
5.3.4 Nasal insertion

/n/ is inserted when suffixes beginning with vowels (such as suffixes: -a, -an, -in and -ang) are attached to the roots ending with vowels.

Examples:

aba + a > abana
gae + ang > gaenang
gêde + an > gêdenan
gisi + in > gisinin
gugu + a > guguna

'something is carried' (L)
'make' (L)
'make something bigger' (L)
'hold' (L)
'believe' (L)

5.4 Transitivity and Ergativity

5.4.1 Approach to transitivity

Transitivity is a salient feature of Balinese. Hopper and Thompson (1980: 251) note that 'transitivity is traditionally understood as a global property of an entire clause, such that an activity is 'carried over' or 'transferred' from an agent to a patient'. Hopper and Thompson also identify the parameters of transitivity, each of which suggests a scale according to which clauses can be ranked. The following parameters are from Hopper and Thompson (1980:252).

<table>
<thead>
<tr>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Participants</td>
<td>2 or more participants, A and O</td>
</tr>
<tr>
<td>b. Kinesis</td>
<td>action</td>
</tr>
<tr>
<td>c. Aspect</td>
<td>telic</td>
</tr>
<tr>
<td>d. Punctuality</td>
<td>punctual</td>
</tr>
<tr>
<td>e. Volitionality</td>
<td>volitional</td>
</tr>
<tr>
<td>f. Affirmative</td>
<td>affirmative</td>
</tr>
<tr>
<td>g. Mode</td>
<td>realis</td>
</tr>
<tr>
<td>h. Agency</td>
<td>A high in potency</td>
</tr>
<tr>
<td>i. Affectedness of O</td>
<td>O totally affected</td>
</tr>
<tr>
<td>j. Individuation of O</td>
<td>O highly individuated</td>
</tr>
</tbody>
</table>

Hopper and Thompson's 'transitivity' parameters apparently overlap with Tsunoda's 'effectiveness' parameters (Tsunoda, 1981:393). The 'effectiveness' parameters are illustrated below.
Effectiveness condition
is met: (ERG-ABS)
a. Action
b. Impingement on O
c. O attained
d. O totally affected
e. Completed
f. Punctual
g. Telic
h. Resultative
i. Specific or single activity/situation
j. O definite/ specific/ referential
k. Actual/ realized
l. Realis
m. Affirmative
is not met: (some other frame(s))
state
non-impingement on O
O not attained
O partially effected
uncompleted, or in progress
durative
atelic
non-resultative
customary/ general/ habitual
activity/ situation
O indefinite/ non-specific/ non-referential
potential/ unrealized
irrealis
negative

It appears that Tsunoda's parameters of 'effectiveness' are more complete than Hopper and Thompson's parameters of 'transitivity'. 'Effectiveness' parameters especially concern two-place verbs. For Tsunoda, the 'effectiveness condition' is particularly important in an ergative language.

Transitivity relations characteristic of Balinese verbs only partly support Hopper and Thompson's as well as Tsunoda's parameters. In this study, transitivity refers to a verb or clause which involves at least two core participants. (These will be referred to as ACTOR and UNDERGOER below; cf. 5.6.1 below).

5.4.2 Evidence for split ergativity in Standard Balinese

In one typology, languages are divided into ergative-absolutive and nominative-accusative. Languages such as Eskimo, Dyirbal (an Australian language of North Queensland), and Samoan belong to the former, while languages such as Latin, German, Russian belong to the latter group. Ergative-absolutive refers to a system of marking in which the subject/agent of an intransitive verb and the object/patient of a transitive verb are treated the same but different from the subject/agent of a transitive verb. The examples below from Dyirbal language, are taken from Dixon (1972:59).

(5-5) a. Balan dugumbil banggul yaranggu balgan
ABS woman ERG man hit

'(The) man is hitting (the) woman'.
b. Balan dugumbil banimu
   ABS woman come

'(The) woman is coming'.

If the example (a) is compared with (b), it is clear that the object/patient of the transitive verb in example (a) is marked the same as the subject of the intransitive verb as in example (b). They are marked with the absolute form of the person marker balan and no suffix.

In nominative-accusative languages, the transitive and intransitive subject are treated alike as opposed to the transitive object (van Valin, 1979:189). The following German examples are from van Valin (1979:189).

(5-6)  a. Der Knabe sah den Mann
       NOM boy saw ACC man

       'The boy saw the man'.

       b. Der Knabe schlafft
           NOM boy sleep

       'The boy is sleeping'.

The subjects of transitive and intransitive verbs are marked the same: e.g. with der ('definite article which marks nominative case), the object, however, is marked differently.

According to some authorities, many languages seem to be mixed (Comrie, 1976b; 1978; 1979a; Moravcsik, 1978a; Dixon, 1979). Thus, a language may have a 'split case marking' i.e. a language has both ergative and accusative patterns. This is called 'split ergativity' by Silverstein (1976) which later is developed by Delancey (1981), Durie (1987), and O'Dowd (1990). According to Delancey, 'split ergativity offers a unifying account of apparent incongruitities in case-marking patterns across languages' (1981).

Starosta et al. (1982:151) state that there are five points that indicate that Proto Austronesian was a split ergative language. For the analysis of SB, the following two points are particularly relevant.

(1) Within the lexicase framework an ergative language is defined as one in which the grammatical subject is always in the Patient case relation. A split ergative language is one in which the unmarked subject choice is Patient, but which has one or more classes of derived verbs which choose their grammatical subjects according to Fillmore's (accusative) Subject Choice
Hierarchy: Agent first, else Instrument or Correspondent, else Patient (using lexicase labels for the case relations)

(2) In split ergative languages, the ergative verb stems are often less marked than the accusative ones and the completely unmarked 'root-stems' (De Guzman, 1978:199) are always ergative in languages such as Tagalog, Kagayanen (Harmon, 1977:111, table 6) and Toba Batak (Van der Tuuk, 1971:83, 98) where the 'simple passives' consist of a bare stem, while 'active' transitives are derived (cf. Mulder and Schwarz, 1981:250 on Bilaan). That is Toba Batak's simple passive' is grammatically ergative, since the unmarked subject is the patient rather than the agent.\(^7\)

The second point above can be used as an indication that Balinese can also be characterized as a split ergative language. The following examples show that such a construction, called 'bare-stem' in this thesis, has ergative characteristics.

(5-7) a. \textit{Putu} \textit{tëka} \(^8\) (L)
    Pn (1st born) arrive

    'Putu arrives'.

b. \textit{Gde ulung uling puñan nangkane} \textit{ibi} (L)
    Pn fall PREP tree jack fruit DEF yesterday

    'Gde fell from the jackfruit tree yesterday'.

c. \textit{Putu} \textit{tìgëtìg icang} (L)
    Pn (1st born) beat 1ST

    'I beat Putu'.

d. \textit{Bapa} \textit{tëngkëp polisi} (L)
    father catch policeman

    'The policeman catches father'.

From the above examples, it is clear that (a) and (b) are intransitive constructions and (c) and (d) are transitive constructions. In ergative sentences the subject of the intransitive sentences are marked by preverbal syntactic position the same as the object (or semantic patient) of the transitive sentences (Dixon 1979; Blake 1976a). By extension, it appears that the examples above may be classified as ergative sentences with zero morphological marking. The ergative pattern in Balinese would then be signaled by the positions of the NP's and the fact that transitive verbs must appear as bare-stems.

Hopper and Thompson (1980) and Tsunoda (1981) show that in those ergative languages that have split case-marking, it is always the case that when O represents an

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\(^7\) As point (1) and (3) in Starosta \textit{et al.} (1982:151)

\(^8\) The word order of this sentence can be changed into \textit{Tka Putu}
entity that is totally affected, it is in the absolutive; i.e. the ergative pattern obtains. In the SB examples above the patients in (c) and (d) are totally affected. It is interesting to note that for perception verbs, and some other verbs with unaffected patients, the bare-stem construction cannot be used. Thus constraints on ergativity in SB seem to support the claims of Hopper and Thompson.

If Balinese is to be classified as a split ergative language, it should be noted that there are various characterizations of ergativity which are commonly accepted, depending on whether the ergative pattern is morphological, syntactic or discourse. According to Cumming (1987:273), a number of western Austronesian languages which are not morphologically ergative show some peculiarities in terms of the distribution of subject properties which are reminiscent of syntactic ergativity. These include patterns of coreferential deletion. SB shows similar patterns.

(5-8) a. *Putra têka lantas Ø jagura* (L)
   Pn arrive then Ø beat 3RD

   'Putra arrived then (he) got beaten'.

b. *Doble nêpukin Putra lantas Ø jagura* (L)
   Pn see Pn then Ø beat 3RD

   Doble saw Putra then (Putra) got beaten'.

The ergative pattern in the above examples is signalled by word order. The object/patient is omitted and the agent is indicated in the verb by the suffix -a.

5.5 Evidence of syntactic PIVOT in Standard Balinese

The term PIVOT used in this study will follow Dixon (1979; 1988). According to Dixon (1979:111), pivot is 'a language-particular category: in some languages it links (derived) S and A, in others S and O – and there are languages which employ both types'. Basically PIVOT can be categorised into two:

(i) S–A PIVOT: the coreferential NP must be in derived S or A function in one (or both) clauses.
(ii) S–O PIVOT: the coreferential NP must be in derived S or O function in one (or both) clauses (Dixon, 1979:121).

Some languages have only one PIVOT and others have a mixture of the two: S–A and S–O are mixed as syntactic PIVOT. Languages such as Yidiny, and Tongan belong to this category (Dixon, 1979: 129); as does Chukchee (Comrie; MS N); and probably Eskimo (Woodbury, 1975; 1977). It should be noted that not all languages in the world have
Languages such as English and Dyirbal have a PIVOT; on the other hand some languages such as Thai and Chinese may not have a syntactic PIVOT, while others are difficult to characterize as having syntactic PIVOT or not.

5.5.1 S–A PIVOT

In English, if two clauses have a common NP, each may function as agent or subject. These two clauses can be joined and the second NP is usually deleted. English can be categorized as a nominative and accusative language, and it has a subject-agent PIVOT. The examples below illustrate this.

Examples:

(5-9) a. The wicked stepmother beat the little girl and Ø ran crying to her father.
   b. The judge sentenced the criminal and Ø went to jail.

The missing subjects of the second clause in the examples above must be the agents of the first clause, i.e. The wicked stepmother in example (1) and The judge in (2). Although the meaning of the sentences sounds awkward or illogical, syntactically it is understood that the missing subject of the intransitive clause must be the agent of the transitive clause.

5.5.2 S–O PIVOT

According to Dixon (1979:127-9), Dyirbal has a subject-object PIVOT. The following example illustrates the subject-object PIVOT is taken from Dixon's description of Dyirbal (1979:127).

Examples:

(5-10) guma + gu  yabu+Ø   [dungara+gu+Ø]  bura + n
      father + ERG mother +ABS cry + REL + ABS see + PAST

'Father saw mother, who was crying'.

Dyirbal is an ergative language. The relative clause must have an NP in common with the main clause, and it must be in S or O function in the relative clause. The verb in the relative clause is marked by the suffix -gu, followed by a case inflection agreeing with the case of the common NP in the main clause.
5.5.3 Has Standard Balinese a mixed type PIVOT or none?

The notion of PIVOT in standard Balinese is determined by the verbal morphology, i.e. verbal affixes which normally trigger the number and type of arguments which can occur in a clause.

a. S–A type

Some evidence shows that S–A PIVOT occurs in SB. In this case the S/A NP of the first clause coreferences with the second one and it is usually deleted. The NP refers to the participant who controls the event.

Examples:

(5-11) a. Putu  N-jagur Nyoman lantas ma-laib (L)
Pn (1st born) hit Pn (3rd born) then run

'Putu hits Nyoman then (Putu) runs away'.

b. Siape putih N-cotot siap sêlêm lantas ma-kruyuk (L)
cock DEF white beat cock black then crow

'The white cock beats a black one then (the white one) crows'.

The examples above show that the prefix N- marks transitive verbs jagur 'hit' and cotot 'beat'. When N- occurs with transitive verbs it always has two arguments. The first argument is the agent (or transitive subject) and the second is the patient (or transitive object). The prefix ma- marks the intransitive verbs laib 'run' and kruyuk 'crow'. If ma- marks the intransitive verbs it usually has one argument: the subject argument. In this case it appears that the missing subject of the second clause must be coreferential with the agent NP of the first clause, giving a S/A PIVOT.

If the object of the first clause is also the subject of the second clause, it is never deleted in SB. The above examples become:

(5-12) a. Putu  N-jagur Nyoman lantas Nyoman ma-laib (L)

b. Siape putih N-cotot siap sêlêm lantas siape sêlêm ma-kruyuk (L)
b. S–O type

In S–O type PIVOT, the NP of the first clause coreferences with the second and the NP of the second clause is normally deleted (because it is understood).

Examples:

(5-13) a. Komang N-[tingal-in] toris are kepung polisi (L)
Pn (3rd born) see tourist REL chase police

'Komang sees a tourist who is chased by police'.

b. Kadek N-umbah baas lantas pulang-a ka payuke (L)
Pn (2nd born) wash rice then pour PREP cooking pot DEF

'Kadek washes rice then (rice) is poured into the cooking pot'.

The subject of the relative clause of example (a) is the tourist, the verb of the relative clause is in a bare-stem. However, example (b) shows that the missing subject of the second clause must be baas 'rice'.

c. Ambiguous PIVOT

It appears that the notion of syntactic PIVOT in SB is very weak if it is compared to languages such as English and Dyirbal. It is very difficult to determine clearly the syntactic PIVOT of SB because coreference in SB can be affected by non-syntactic factors.

The following examples show ambiguities, because the clauses in the following examples seem do not have syntactic principles determining PIVOT.

Examples:

(5-14) a. Siape sēlem ma-pruput ajak siape putih lantas Ø ma-kruyuk (L)
cock DEF black fight PREP cock white then crow

'The black cock was fighting with a white one then (the black cock/ the white one) crowed'.

b. Gde N-tulup sēmal lantas ulung ka jurange (L)
Pn shoot squirrel then fall PREP deep small river

'Gde shoots a squirrel and (Gde/ squirrel) falls into a deep small river'.

The examples above indicate that coreference across clauses may not always be determined by the syntax of the clauses, but also may be affected by the semantics and the
situation. For instance, in example (a), the missing subject of the second clause could be the *siape sëlém* 'the black cock' or the *siap putih* 'the white cock' or both. This sentence is ambiguous in SB. However, if we want to indicate which one of them is crowing, the NP of the second clause will not be deleted. The example below shows this.

(5-15) *Siape sëlém ma-pruput ajak siape putih lantas siape putih ma-kruyuk.*

or

*Siape sëlém ma-pruput ajak siape putih lantas siape sëlém ma-kruyuk.*

Example (b) is also ambiguous; it depends on the situation. If Gde can shoot the squirrel successfully, it will be the squirrel that falls into the river, otherwise it must be Gde who falls into the river (maybe because he does not realise that there is a deep small river near the place where he does the shooting), but not both. The sentence becomes unambiguous if the NP of the second clause is not deleted.

5.6 Types of arguments in the Standard Balinese clause

Since tests for syntactic PIVOT are inconclusive for SB and since there is no nominal morphology directly marking subject or object status, this thesis will not use the terms 'subject' or 'object' as normally used in traditional approach. Rather, a combination of semantic and pragmatic roles will be adopted as explained below.

5.6.1 The notions of ACTOR and UNDERGOER

The analysis presented below makes use of the semantic arguments or semantic macroroles ACTOR and UNDERGOER (Foley and Van Valin, 1984). ACTOR and UNDERGOER can be distinguished in some languages by the manner in which they are cross-referenced on the verb. In 'Role and Reference Grammar' (Foley and Van Valin, 1980:335) two different systems of case roles are distinguished; i.e. one is basic and the other derived. The basic system consists of an opposition between entities that perform, effect, instigate or control a situation denoted by the predicate, and participants that do not perform, initiate or control any situation but rather are affected by it in some way. The ACTOR performs, effects, instigates or controls the action of the verbs, while the UNDERGOER does none of these. The terms ACTOR and UNDERGOER which are used by Foley and Van Valin are not equivalent to the case roles of agent or patient. In 'Role and Reference Grammar', case roles such as agent, patient, and instrument are part of the derived system, as argued by Foley and Van Valin (1984:28-32). It should be noted that the notion of ACTOR and UNDERGOER (Foley and Van Valin, 1984) is similar to Proto-Agent and Proto-Patient (Dowty, 1991:547). It appears that Dowty's proto-role hypothesis agrees with Jackendoff (1976, 1987) and Foley and Van Valin (1984) in claiming that 'roles should be defined in terms of configurations of semantic
representations (which are made up of other primitives), not that role types are prototypical, "fuzzy" notions (Dowty, 1991:598).

In this thesis, I will follow Foley and Van Valin's general approach. The semantic roles consist of two macroroles:9 actor and undergoer. It should be noted that the prototypical actor is the agent and the prototypical undergoer is the patient. The effectors and experiencers can also be actors, while locative and theme can also be undergoers.10 The nature of the macroroles is derived from logical structures11 and the number of macroroles that a verb takes can be predicted from its logical structures as well (Van Valin, 1990:227). If a verb takes two macroroles, they are treated as actor and undergoer; these verbs are transitive verbs having two arguments. A verb which takes a single macrorole is intransitive, but the argument may be either actor or undergoer depending on the semantics of the verb.

5.6.2 The notions of topic and focus

To adapt the 'Role and Reference Grammar' analysis so that it can account for Balinese data, the above semantic roles will combine with the pragmatic roles topic and focus. According to Crystal (1985:311), 'The topic of a sentence is the person or thing about which something is said'. Blake (1983:153) uses the term topic as 'what is being talked about and 'comment' in the sense of what is said about the topic'. topic may be similar to given information, a term which is introduced by Halliday (1967). According to Halliday (1967:211), 'given information is specified as being treated by the speaker as "recoverable either anaphorically or situationally"'. This may be also similar to theme, a term which is used by Fowler to denote 'what is given or already known from the preceding utterance, or what can be taken to be the point of the departure (1987:93).12

Crystal (1985:123) defines focus as 'the centre ('focus') of communicative interest; 'focus' in this sense is opposed to presupposition'. Blake (1983:153) uses the term focus to refer to 'the most important part of the comment, the essential part, the part that

---

9 Macrorole means that each subsumes a number of specific thematic relations, and the relationship between the two tiers is captured in the actor-undergoer hierarchy as shown in the following figure (van Valin, 1990:226).

Agent Affecter Experiencer Locative Theme Patient

---

10 For instance: The verb love does not do any thing, that is, the actor of the verb as well as the undergoer of love does not undergo anything, unlike the undergoer of the verb hit. The specific semantic content of the macrorole with a particular verb is supplied by the thematic relation the argument makes (Van Valin, 1990:226).

11 Logical structure is characteristic of every verb class and is used in formal representations.

12 This pragmatic use of 'Theme' is entirely different from the semantic use of 'Theme' in footnote 8.
resists ellipsis'. Focus is similar to Halliday's *new information*. New information is said 'to be focal not in the sense that it cannot have been previously mentioned, although it is often the case that it has not been, but in the sense that the speaker presents it as not being recoverable from the preceding discourse' (1967:204). This may also be similar to *rheme*, a term which is used by Fowler (1987:93) i.e. 'what is new, carries the primary semantic load and is the basic goal of the communication'. The term focus has been used that of with a variety of meanings in linguistics. The notion of focus in this thesis is different from Schachter (1972) and Hunter (1988).\(^\text{13}\)

In this thesis, FOCUS is used in a special sense to refer to a particular kind of NP with special properties to be described below.

Scholars such as Blake (1983) and Kiss (1991) use both the terms TOPIC and FOCUS to identify different NP's in their analysis. In Kalkatungu, the TOPIC NP precedes the comment and the FOCUS NP is placed first although the focus is usually part of the comment and is coextensive with it if the comment consists of only one word. Blake formulates the pragmatic roles of Kalkatungu NP's as follows: (FOCUS)--TOPIC--(remainder) comment (Blake, 1983:153).

Kiss (1991) describes TOPIC and FOCUS NP's in the deep structure of the Hungarian sentence. According to Kiss (1991:113), the TOPIC and the verb phrase (VP), are dominated by sentence (S). The TOPIC slot is immediately dominated by the S node, while the FOCUS slot is inside the VP. This is formulated by Kiss as in the following diagram.

```
       S
          /\
         / \
        TOPOC VP
        /     \
       /      \
      FOCUS   V
```

In this thesis it will be generally assumed that the case of Hungarian may be similar to that of SB. It appears that the TOPIC slot is dominated by the S node, while the FOCUS slot is closer to the verb. In Hungarian, the FOCUS precedes the verb, while in SB the FOCUS follows the verb immediately. The diagram below shows this.

\(^{13}\) Schachter and Otanes (1972:6) define 'focus [as] the feature of a verbal predicate that determines the semantic relationship between the predicate verb and its topic. This feature of verbal predicates is associated with the verbal affixes'. Hunter (1988) follows Schachter and Otanes.
Criteria for determining whether a core NP is TOPIC or FOCUS in Balinese is illustrated in the following table.

Table 4

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The position of TOPIC is movable</td>
<td>a. The position of FOCUS is fixed, e.g. immediately after a transitive verb</td>
</tr>
<tr>
<td>b. Various phrases or adverbs can come between TOPIC and Verb</td>
<td>b. Nothing can intervene between verb –FOCUS</td>
</tr>
<tr>
<td>c. Can be deleted</td>
<td>c. Cannot be deleted</td>
</tr>
<tr>
<td>d. Can be the head of a relative clause</td>
<td>d. Cannot be the head of a relative clause</td>
</tr>
<tr>
<td>e. Is often marked with the definite article -e or -ne</td>
<td>e. Is rarely marked with the definite article -e or -ne</td>
</tr>
</tbody>
</table>

There are also some other criteria which are not very useful in determining the notion of TOPIC and FOCUS in Balinese. They are:

a. Pivot NP in cross-clausal anaphora. (See section 5.5.3)
b. New information (FOCUS) and old information (TOPIC).

As noted above, there is potential ambiguity with the notion of PIVOT NP in SB, because the syntactic PIVOT in SB is not always determined by the grammar but sometimes by 'common sense'.

Below we look briefly at each criterion for distinguishing TOPIC and FOCUS NP's. (A full treatment of this issue is beyond the scope of this thesis).
a. **TOPIC** is moveable

In SB, the position of a **TOPIC** can usually be changed, either before or after the [verb + **FOCUS**] constituent. However, **FOCUS** usually occurs in a fixed position directly after the verbs.

**TOPIC** in each of the following examples is marked by the definite marker, and the **FOCUS** comes immediately after the verbs. Notice that the **TOPIC** can occur either before or after the [verb + **FOCUS**] component.

Examples:

(5-16) a. *Jaja-ne* *daar* *cai* (L)  
  cake-DEF  eat  2ND

  'You eat the cake'.

b. *Daa* *cai* *jaja-ne* (L)  
  eat  2ND  cake-DEF

  'You eat the cake'.

c. *Daa* *jaja-ne* *cai* (L)  
  eat  cake-DEF  2ND

  'You eat the cake'.

d. *Siape* *mati* *ibi* (L)  
  chicken DEF  die  yesterday

  'The chicken died yesterday'.

e. *Mati* *ibi* *siape* (L)  
  die  yesterday  chicken DEF

f. *Ibi* *mati* *siape* (L)  
  yesterday  die  chicken DEF

b. Various phrases/ adverbs can intervene between **TOPIC** and verbs

Words such as adjectives, adverbs or relative clauses can intervene between the **TOPIC** NP and the verb, but nothing can come between the verb and the **FOCUS**.

Examples:

(5-17) a. *Motor-e* *ane* *sēlēm* *bēli* *icang* *ibi* (L)  
  car  -DEF REL  black  buy  1ST  yesterday

  'This is the black car that I bought yesterday'.
b. *Motor-e ane sêlêm ibi bêli icang (L)
car -DEF REL black yesterday buy 1ST

c. Motor-e ane sêlêm bêli ibi icang (L)
car -DEF REL black buy yesterday 1ST

Kêdis-e makêber kadiuur rab-e (L)
bird -DEF fly PREP roof-DEF

'The bird flies to the roof'.

c. Kêdis-e kadiuur rab-e makêber (L)
bird -DEF PREP roof-DEF fly

c. TOPIC can be deleted

TOPIC can be deleted if the context makes it understood from the previous discourse, while the FOCUS is never deleted in declarative sentences. (Though it may be deleted in imperatives.)

Example:

(5-18) a. Padang-e abasa, lantas Ø sunjêla (L)
grass -DEF cut then burn

'The grass was cut then Ø burnt'.

b. Polisi vêka (L)

Police come

'Police are coming'.

c. *Polisi ningêh anak nyêrit lantas Ø vêka (L)
police hear people shout then come

'The Police heard the people shouting then Ø came'.

In the example (a) above, the TOPIC padang-e is not mentioned again in the second clause: it is deleted. However, if the examples (b) and (c) are compared, it appears that (c) is not grammatical, because the FOCUS is never deleted. (Compare (5-18b) with (5-19c) below).
d. **TOPIC** can be the head of a relative clause

In SB, **TOPIC** is usually the head of a relative clause but not the **FOCUS**. The following examples illustrate this. Examples (a) and (b) show that a **TOPIC** can be relativized, while (c) shows that a **FOCUS** cannot be.

Examples:

(5-19) a. *Anake* cērik ane ngalap bunga adin tîange (M)
child DEF little REL pick up flower younger sibling 1ST DEF

'The little (girl) who picks up flowers is my sister'.

b. *Ngurah Manik* sane ngalap rabi saking Bēlaluan ngēntosang
Pn REL take wife PREP Pl name change
linggih ajin Ida (H)
place father GEN Hon

'Ngurah Manik who took a wife from Bēlaluan changed the place of his father'.

c. *Polisi* ane tēka nangkêp maling (L)
police REL come catch thief

'A police who came caught a thief'.

e. **-e / -ne** often mark the **TOPIC**

**TOPIC** is often definite in Balinese, whereas, **FOCUS** can be definite or indefinite.\(^{14}\) If **TOPICS** are common nouns, they are often marked with **-e** or **-ne**. On the other hand, **FOCUS** is rarely marked by the postclitic **-e** or **-ne**, so that it can be either definite or indefinite but it is seldom presupposed.

Examples:

(5-20) a. *Padang-e* ūktēk icang (L)
grass -DEF chop 1ST

'I chop the grass'.

\(^{14}\) According to Givón (1979: 161), "There is no full overlap between the dichotomies topic/focus, definite/indefinite and presupposed/asserted. Quite often a definite object can constitute the focus of new information in a particular communication".
b. *Puñanpohe bah* (L)
tree GEN mango-DEF fall

'The mango tree falls down'.

The noun *padang* in the example (a) is marked by the definite marker -e, indicating that *padang* is the TOPIC of the clause. Likewise is *puñanpohe* in (b).

For distinguishing TOPIC and FOCUS in Balinese the word order is very important. Foley and van Valin state that topics are commonly coded by position, either sentence initial or final (1984:128). This is generally true for SB. The unit [verb + FOCUS] functions as the core of the clause, while the TOPIC is more peripheral. In the present analysis, there is usually only one core TOPIC that can occur, either as an ACTOR-TOPIC or an UNDERGOER-TOPIC (see below). In a clause with two arguments, if the ACTOR is a TOPIC, the other argument is normally an UNDERGOER-FOCUS.

The diagram (a) below shows that SB codes the TOPIC by peripheral position of the NP in a transitive clause. A simple transitive clause can have two pragmatic roles, namely TOPIC and FOCUS. Normally, FOCUS occupies a core post-verbal position. In diagram (b) a simple intransitive clause may have either a TOPIC or FOCUS argument in initial position, or may have TOPIC in post-verbal position.

(a)

(b)
5.6.3 The union of semantic and pragmatic argument categories

The hypothesis in this thesis is that Balinese verbal morphology can be accounted for by two main types of verbal arguments: semantic (ACTOR and UNDERGOER) and pragmatic (TOPIC and FOCUS). These combine to cross-classify core NP's.

A substantial class of SB verbs require volitional status assigned to subjects by action verbs as opposed to stative verbs or verbs of undergoing. The labels A, U, S_A and S_U are used to refer to certain NP's. S_A means that the subject of the intransitive verb (S) receives the same morphosyntactic treatment as the subject of a transitive verb (A). S_U means that the subject of the intransitive verb receives the same morphosyntactic treatment as the object of a transitive verb (U). This denotes the class of ergative clauses. (When transitivity is not problematic, often A and U are used for convenience in these clauses as well.)

The labelling of semantic and pragmatic roles is as follows:

(i) Semantic roles
   Transitive clauses:
   A = ACTOR
   U = UNDERGOER
   Intransitive clauses:
   S_A = SUBJECT ACTOR OF INTRANSITIVE VERB
   S_U = SUBJECT UNDERGOER OF INTRANSITIVE VERB

(ii) Pragmatic roles
   T = TOPIC
   F = FOCUS

(iii) Combined categories
   AT = ACTOR-TOPIC
   UT = UNDERGOER-TOPIC
   AF = ACTOR-FOCUS
   UF = UNDERGOER-FOCUS
   S_AT = intransitive ACTOR-TOPIC
   S_U T = intransitive UNDERGOER-TOPIC
   S_AF = intransitive ACTOR-FOCUS
   S_UF = intransitive UNDERGOER-FOCUS
Formulae for combined semantic and pragmatic roles in a typical simple transitive clause are shown in (a) and for semantic and pragmatic roles in a typical simple intransitive clause is shown in (b).

a. \[ NP_1 \text{ AFFIX-}V_{\text{trans}} \text{ NP}_2 \]
   \[ AT_i \text{ AjUj} \text{ UF}_j \]

b. \[ NP \text{ AFFIX-}V_{\text{intrans}} \]
   \[ S_{AT} A \]
   \[ S_{UT} A \]

In transitive clauses, the AFFIX is analyzed as cross-referencing a particular set of semantic-pragmatic features for core NP's (shown through subscripts). Different affixes show different features (see 5.11).

For the NP which occupies the pre-verbal position, if it is a semantic ACTOR and it follows TOPIC criteria, it will be marked as ACTOR-TOPIC (AT). The NP which occupies post verbal position, if it is a semantic UNDERGOER and follows FOCUS criteria, it will be marked as UNDERGOER-FOCUS (UF). Following Durie (1987) and Van Valin (1990), for NP's of intransitive verbs in SB which have one argument, they will be marked as \( S_A \) or \( S_U \) depending on the semantics of the verbs. For instance, in a construction with intransitive verbs which has one argument, e.g. ACTOR-TOPIC or UNDERGOER-TOPIC, the NP's are marked by \( S_{AT} \) or \( S_{UT} \).

A construction which normally has a transitive verb will select two arguments: e.g. ACTOR-TOPIC and UNDERGOER-FOCUS. Affixes in such constructions appear to code the whole construction, including specifying ACTOR and UNDERGOER. The affixes which occur with transitive verbs will specify both semantic and pragmatic roles for that construction. This recalls certain proposal made by Fillmore et al. (1988:501) in 'Construction Grammar'.

5.7 Ditransitive constructions and non-core TOPIC

In Balinese, the ditransitive verbs are usually formed by adding suffixes \(-ang\) or \(-in\) to the transitive verbs to increase the valency of the verb (For details, see section 5.11.2), e.g. \( \text{takon} + \text{ang} > \text{takonang} \) (L) 'to ask', \( \text{atur} + \text{in.} > \text{aturin} \) (H) 'to give/ offer'. However, there are some verbs which belong to ditransitive verbs without having these suffixes. For instance, verbs \( \text{baang} \) (L), \( \text{icên} \) (H) 'give'.

Example:

(5-21) Icang \(\emptyset\)-baang \(\text{ca}'\) pipise (L)
(UTj) 1ST A1U1U2k- give (AFj) 2ND (U2Tk) money DEF

'You give me the money'

With a ditransitive verb, like \(\text{baang} \) 'give' in the example above, both a core UNDERGOER-TOPIC (the thing given) and non-core dative UNDERGOER-TOPIC (the person to whom something is given) can occur. It appears that there are two TOPICS: one is core and the other is non-core.

5.8 Root and stem; basic verb classes

Many scholars such as Matthews (1974), Robins (1980) and Bauer (1983) distinguish root, stem and base. In this study, it will be sufficient for my purposes to use only root and stem. The basic form of a lexeme will be called root, which is a form that cannot be broken down into further analysis in morphology. Root can be applied to noun, adjective, and verb root morphemes. For instance, with the verb \(\text{mub\-et\-ang} \), the root is \(\text{ub\-et} \), to which first the suffix -ang, then the prefix \(\text{ma-} \) have been added.

A stem is a form which consists of a root and bound morphemes i.e prefixes, infixes and suffixes. It should be noted that a stem can also be a root, but a root cannot be a stem. For example, in the form \(\text{ub\-et\-ang} \), the root is \(\text{ub\-et} \) and the stem is \(\text{ub\-et\-ang} \). The idea of root and stem is illustrated in the following diagram.

```
\{ ma- \{ ub\-et \} ROOT -ang \}
```

Verbs in Balinese are characterized by whether they can stand alone or require affixes to form lexicalized units. In this regard, there are two categories of verbs:

I. Free verb forms, i.e verbs which can occur with bare stems which can take transitivity marking affixes. Examples: \(\text{alap} \) 'pick', \(\text{daar} \) 'eat', \(\text{j\-em\-ak} \) 'take', \(\text{si\-il\-i\-h} \) 'borrow', \(\text{t\-ig\-t\-i\-g} \) 'beat'.

---

15 The basic contrast of Balinese is not only between transitive and intransitive but between an actor and an undergoer as well as between state and action. According to Vendler (1967), semantic theory classifies verb into activities, states, achievements and accomplishments. Chafe (1970:105) classifies verbs in terms of semantic units: state, process, action, action process, and ambient.
II. Bound verb forms, i.e. verb stems which occur as lexicalized units [affixes + root]. The transitivity marking affixes attach to the verb roots in order to produce meaningful lexical units. Examples: breakang < (breok + ang) 'pour', pandusin < (pandus + in) 'bathe', pêgatang < (pêgat + ang) 'cut, break', rasayang < (rasa + ang) 'feel, taste', ubêtang < (ubêt + ang) 'close'.

Both verb types can be *static* or *action*, and they can be transitive or intransitive verbs.

5.9 Standard Balinese affixes

SB affixes are divided into verbal and nominal affixes. As developed above, verbal affixes may indicate semantic case-role marking and pragmatic categories TOPIC and FOCUS. Indices subscripts \(-j\), \(-k\) and \(-\) are used to identify core NP's which are indexed by verbal affixes. For non-core arguments, such as prepositional agent, instruments indices indices will not be used.

5.9.1 Shift of TOPIC to FOCUS

In various constructions with verbal morphology, both TOPIC and FOCUS can occur verb initially, and UNDERGOER-TOPI can occur in either of two peripheral positions. These constructions are taken up in detail in 5.11. In example (5-22) UNDERGOER-TOPI is shown to occur in several positions when the affixes ka- and -a are present.

Examples:

(5-22) a. \( ...\text{i lalipi } \text{ka-tuēk} \text{ antuk } \text{kēris}... \) \( (\text{UT}_1) \) \( \text{snake } \text{U}_1 \)-stab \( \text{PREP } \text{kēris} \)

'...the snake is stabbed by a kēris'.

b. \( ...\text{ka-tuēk } \text{antuk } \text{kēris } \text{i lalipi} \) \( (\text{H}) \)

\( \text{U}_1 \)-stab \( \text{PREP } \text{kēris } (\text{UT}_1) \text{snake } \)

\( \text{PREP } \text{kēris } (\text{UT}_1) \text{snake } \text{U}_1 \)-stab

c. \( ...\text{antuk } \text{kēris } \text{i lalipi } \text{ka-tuēk}. \) \( (\text{H}) \)

\( \text{PREP } \text{kēris } (\text{UT}_1) \text{snake } \text{U}_1 \)-stab

d. \( ...\text{tur } (\text{atur-ang})-a \text{ unduke }... \) \( (\text{H}) \)

\then \text{ tell } -\text{U}_1 \text{ (UT}_1 \text{ case DEF}

'...then the case is told.'

---

16 DN, 2:5
17 Raden Galuh Gde:2
e. ...unduke nur {atur-ang}-a (H)
   (UT₁) case DEF then tell -U₁

'...then the case is told.

The pragmatic formula of the above examples is:

```
   UT  V
```
or

```
   V  UT
```

In some cases when there is more than one verbal form in a sentence, the pragmatic status of certain NP's is complex. The NP may perhaps be in construction with more than one verb. Full treatment of these cases is beyond the scope of this thesis. In the examples below it seems that TOPIC may be shifted to FOCUS when the NP is preceded by existential verbs, wentên (H) or ada (L) 'exist'.

Examples:

(5-23) a. Malih danghyang mamargi nganginang, wentên pura
   again TI walk east exist (UF₁) temple

   rusak ka-panggih₁¹ (H)
collapse UF- find

'Again, Danghyang walks toward the east; there is a collapsed temple being seen'. (LIT.)

b. Putu sèdèng madaar, ada anak N-gèdor jèlanan (L)
Pn (1st born) PROG eat exist (AF₁) people AUFj - knock (UFj) door

'(While) Putu is eating, there are people who knock at the door'.

The formula of the above examples appears to be:

```
   wentên/ ada F  V
```

Note that the result in some cases as in (b) is a marked double FOCUS construction.

---

¹¹ DN, 2:11
5.9.2 Morphology in speech levels

The function and meaning of SB affixes are the same whether in high, medium or low level except for the prefix *ka-* and the suffix *-a*. They are used with some differences in high and low levels as will be explained in section 5.11.2 and 5.11.3 below. To illustrate the similarity of affixes across speech level, I first consider derivations based on the following root forms. There is no essential difference in the meaning of these two sets of verbs as in the following examples.

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>sare</td>
<td>sirēp/mērēm</td>
</tr>
<tr>
<td>dinēh</td>
<td>pirēng/piragi</td>
</tr>
<tr>
<td>'sleep'</td>
<td>'listen/ hear'</td>
</tr>
</tbody>
</table>

The prefix *pa-...-an₂*, which forms derived nominals from verbs, is used in low as well as for high levels.

Examples:

(5-24) a.  **Pa-sare-an₂ I Made ne luung pēsan (L)**
           NOM- sleep -NOM Pn (2nd born) 3RD good INTEN

'I Made's bedroom is very good'.

b.  **Pa-mērēm-an₂ Ida Dewa Agung becik pisan (H)**
       NOM- sleep -NOM Hon kinggood INTEN

'The king's bedroom is very good'.

The suffix *-ang* can be used to rearrange and increase the valency¹⁹ of a verb (for details see section 5.11.2). This suffix can be used in low or high level.

Examples:

(5-25) a.  **Dinēh-ang ja muñin bapān cēninge (L)**
           listen -VI COM word father GEN child DEF

'You should listen to your father's advice'.

¹⁹ Moesel (1991:3) defines this as follows: 'valency [as] the property of the verb which determines the obligatory and optional number of its participants, their morphosyntactic form, their semantic class membership (e.g. ± animate, ± human) and their semantic role (e.g. agent, patient, recipient). The valency inherently gives information on the nature of the semantic and syntactic relations that hold between the verb and its participant'.
b. *Pirèng-ang ja auə aji̍n*  I Dewane (H)  
listen -VI COM word father GEN 2ND DEF

'Please listen to your father’s advice'.

From my investigation, it appears that affixes are used more frequently in written SB than in the spoken language, where bare-stem constructions (5-10) are common.

### 5.9.3 Inventory of Standard Balinese affixes

The inventory of SB affixes treated in this thesis is illustrated as follows.

**Verbal affixes**

<table>
<thead>
<tr>
<th>Prefixes</th>
<th>Suffixes</th>
<th>Confixes</th>
<th>Complex verbal affixations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ma-</td>
<td>-ang</td>
<td>ma-,...-an₁</td>
<td>ma- [V root-ang/-in]</td>
</tr>
<tr>
<td>N-</td>
<td>-in</td>
<td>ka-,...-an₁</td>
<td>N- [V root-ang/-in]</td>
</tr>
<tr>
<td>ka-</td>
<td>-a</td>
<td></td>
<td>N-[N/Adj/ Adv root-ang/-in]</td>
</tr>
<tr>
<td>maka/-pinaka-</td>
<td>-an₁</td>
<td></td>
<td>ka-[V root-ang/-in]</td>
</tr>
<tr>
<td>pah-</td>
<td></td>
<td></td>
<td>{V root-ang/-in}-a</td>
</tr>
</tbody>
</table>

**Nominal Affixes**

<table>
<thead>
<tr>
<th>Prefixes</th>
<th>Suffixes</th>
<th>Confixes</th>
<th>Complex verbal affixations</th>
</tr>
</thead>
<tbody>
<tr>
<td>pa/-paN</td>
<td>-an₂</td>
<td>pa-,...-an₂</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ka-,...-an₂</td>
<td></td>
</tr>
</tbody>
</table>

### 5.10 Bare-stems

Bare-stem constructions are formed in two ways. They can be formed with verbs which belong to category I above, i.e free verb forms. These verbs can stand alone as lexical units or can be used with verbal morphology. Verbs which belong to category II also can be used in these constructions by attaching the suffixes -ang or -in to the roots. Bare-stem constructions are quite common in colloquial discourse, whether in low, medium or high level in SB.

Two interesting restrictions on ACTOR-FOCUS NP’s in the bare-stem construction relate to third person reference:

(i) If a common noun can potentially be used as a personal reference form in the first and second persons (e.g. *bapa* (L) or *aji* (H) ‘father’, *meme* (L) or *biang/ibu* (H) ‘mother’) then they cannot receive third person interpretation as ACTOR-FOCUS. Instead, the interpretation will be first or second person, as context determines. On the
other hand, for common nouns such as *polisi* 'police', *maling* 'thief' (and all non-human nouns) which are not used for first and second personal reference, this restriction does not hold and normal third person interpretation applies.

(ii) If the ACTOR-FOCUS is a pronoun, the speech level must be considered. For high level, the pronouns:

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Level</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>tu̍tʰiŋ</em></td>
<td>1ST</td>
<td>'I'</td>
</tr>
<tr>
<td><em>cokɔr ratu</em></td>
<td>2ND</td>
<td>'you'</td>
</tr>
<tr>
<td><em>ɪda</em></td>
<td>3RD</td>
<td>'she/he/they'</td>
</tr>
</tbody>
</table>

are all available as ACTOR-FOCUS. But for low level, only

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Level</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>iciŋ</em></td>
<td>1ST</td>
<td>'I'</td>
</tr>
<tr>
<td><em>cai</em></td>
<td>2ND</td>
<td>'you'</td>
</tr>
</tbody>
</table>

are available. That is, the normal third person pronoun *ia* cannot occur as ACTOR-FOCUS in this construction. (Instead, a construction with suffix -a is used, see section 5.11.2).

The bare-stem constructions are divided into:

1. Declarative
2. Question
3. Negative
4. Imperative

5.10.1 Declarative

According to Kersten (1984), the bare-stem construction is categorized as the 'first passive'. Here it will be argued that this is not so much a passive, as an UNDERGOER-TOPIC construction. In this construction, given the right circumstances the UNDERGOER argument may be suppressed. The ACTOR NP's must always be present in declarative bare-stem constructions. For this reason 'passive' does not seem an adequate description. Bare-stem constructions usually occur with transitive verbs. The NP's function as UNDERGOER-TOPIC or ACTOR-FOCUS depending on the information given by the NP's.

One common formula for bare-stem of declarative constructions is as follows:

| UT | V | AF |

The following examples are from spoken SB.
(5-26) a. *Tambahe* 0-jēmēk icang (L)
    (UTi) hoe DEF  UiAj- take (AFj) 1ST
    'I take the hoe'.

b. *Siapē* 0-tomploēk motor (L)
    (UTi) chicken UiAj- hit (AFj) car
    'A car hits the chicken'.

c. *Jīnahe* 0-ambil Ida (H)
    (UTi) money DEF UiAj- take (AFj) 3RD
    'She/he takes the money'.

d. *Sanganane* 0-rērēh sēmut (H)
    (UTi) cake DEF UiAj- look for (AFj) ant
    'Ants look for the cake'.

e. *Jukuṭe* 0-{adon-ang} cai (L)
    (UTi) vegetable DEF UiAj- mix-VI (AFj) 2ND
    'You mix the vegetables'.

f. *Cakēpanne* jagi 0-{wacen-in} titiāng (H)
    (UTi) manuscript DEF FUT UiAj- read-VI (AFj) 1ST
    'I will read the manuscript'.

The word order of the above constructions can be changed and bare-stem verbs can occupy initial position, followed by two NPs: ACTOR FOCUS and UNDERGOER TOPIC. According to Foley (Personal Communication, 3 October 1991), it is very common in Austronesian languages that a clause begins with a verb. Notice that topic NP is in a more peripheral position. The formula for bare-stem constructions like this is as follows.

\[
\begin{array}{ccc}
V & AF & UT \\
\end{array}
\]

Examples: (compare (5-26)):

(5-27) a. *Jēmēk icang tambahe.*
    b. *Tomploēk motor siapē.*
    c. *Ambil Ida jīnahe.*
    d. *Rērēh sēmut sanganane.*
    e. *Adonang cai jukuṭe.*
    f. *Jagi wacenin titiāng cakēpanne.*
The following examples are taken from the story 'Matêgul Tan Patali'. The relational conjunction same appears before the VP.

(5-28) a. Ajêng-ajêngan same Ø-adol ipun ring warung ipune\textsuperscript{20} (H)
   eat NOM (UT\textsubscript{1}) REL Uj\textsubscript{J} sell (AF\textsubscript{1j}) 3RD PREP shop 3RD DEF

   'The food that she sells in her shop'.

   b. "...pangupête same pacang Ø-trima tiang\textsuperscript{21} (H)
      mistake DEF (UT\textsubscript{1j}) REL FUT Uj\textsubscript{J} receive (AF\textsubscript{1j}) 1ST

      '...the fault that I will receive'.

Keenan and Comrie (1977) claim that all languages allow subjects to be relativized, and that some languages allow only objects to be relativized. It should be noted that it appears that only UNDERGOER-TOPIC can be relativized in SB bare-stem constructions.

The relationship between TOPIC and relative has been widely discussed in the literature, e.g. by Givón (1979), and Schachter (1976). Schachter has suggested that the relativization is a definite description and thus its association with topicality.

5.10.2 Question

In questions, bare-stem normally follow a question word, such as:

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>apa</td>
<td>punapi/ napi</td>
<td>what</td>
</tr>
<tr>
<td>dija</td>
<td>ring dija</td>
<td>where</td>
</tr>
<tr>
<td>nguda</td>
<td>kenapi</td>
<td>why</td>
</tr>
<tr>
<td>ñen</td>
<td>sapasira/ sira</td>
<td>who</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In bare-stem questions, apparently the UNDERGOER may be questioned. For instance, if we want to question the UNDERGOER NP, the clause will start with apa 'what' or ñen 'who' (see formula (i) below). Questions in dija 'where', nguda 'why' etc., are formed with the second formula. The pragmatic formulae of these constructions are:

(i) \begin{array}{lll} \text{QUEST} & \text{V} & \text{AF} \end{array}

(ii) \begin{array}{llll} \text{QUEST} & \text{V} & \text{AF} & \text{UT} \end{array}

\textsuperscript{20} Matêgul Tan Patali, 1977:1
\textsuperscript{21} Matêgul Tan Patali, 1977: 9
Examples:

(5-29) a. Apa kal Ø-tampah bēli buhnmani? (L)
what FUT Aj-kill (AFj) older brother tomorrow

'What (is it) you are going to kill tomorrow?'. (U is suppressed)

b. Ring ija Ø-(gēnah-ang) Cokor Ratu ajënganne? (H)
where AjUj- place-VI (AFj) 2ND (UTj) rice DEF

'Where do (you) place the rice?'

c. Nguda Ø-tīgtig mbok I Nyoman? (L)
why AjUj- hit (AFj) older sister (UTj) Pn (3rd born)

'Why did (you) hit Nyoman?'.

As shown, for bare-stem verbal forms the preverbal argument must be the UNDERGOER. A convincing indication of this concerns the question word ĕn 'who'. If ĕn occurs preceding a bare-stem form, it must question the UNDERGOER (see example (5-30a) below). Questions in ĕn relating to the ACTOR NP are impossible with bare-stem verbs as in (b) and (c). The pragmatic formula of this construction is:

<table>
<thead>
<tr>
<th>QUEST</th>
<th>V</th>
<th>AF</th>
</tr>
</thead>
</table>

(5-30) a. ĕn Ø-tīgtig cai? (L)
who Aj- hit (AFj) 2ND

'Who did you hit?'.

b. *ĕn Ø-tīgtig kuluke (L)
who Uj-hit (UTj) dog DEF

'Who hits the dog?'.

c. *Sira Ø-ambil bukun titiang (H)
who Uj-take (UTj) book GEN 1ST

'Who takes my book?'.

5.10.3 Negative

Negative constructions in SB are formed with the negators *tusing / sing* (L) or *nentën* or *tën* (H) 'not'; *tonden* (L) or *durung / dereng* (H) 'not yet'. The negators precede the bare-stems as in the following examples; otherwise, the declarative construction applies. The most frequent pragmatic formula of this construction is:

\[
\text{NEG} \ V \ \text{AF} \ \text{UT}
\]

or

\[
\text{UT} \ \text{NEG} \ V \ \text{AF}
\]

Examples:

(5-31) a. *Sing Ø-tawang icang umahne* (L)

\[
\text{NEG} \ A1Uj-know (AF1) 1ST \ (UTj) \ house \ 3RD
\]

'I do not know his/her house'.

b. *Pisange dereng Ø-taur Ida* (H)

\[
(UTj) \ banana \ DEF \ NEG \ A1Uj-pay (AFj) \ 3RD
\]

'He has not paid for the banana yet'.

5.10.4 Imperative

Imperative sentences are also formed with bare-stems of transitive verbs. The semantic function of the NP's in the imperative sentence is as UNDERGOER-TOPICS. Imperative constructions are normally verb initial, and imperative markers *ja*, occasionally *ba* after the verb is optional, and the agent is assumed to be the second person. The most frequent pragmatic formula of this construction is:

\[
V \ \text{UT}
\]

Examples:

(5-32) a. *Ø-Daar ja jajane, Luh* (L)

\[
U1-eat \ COM \ (UTj) \ cake \ DEF \ VOC \ Pn \ (1st \ born)
\]

'You should eat the cake Luh'.

b. *Ø-Beli ba bajune, Tut* (L)

\[
U1-buy \ COM \ (UTj) \ clothes \ DEF \ VOC \ Pn \ (4th \ born)
\]

'You should buy those clothes Tut'.
c. \( \emptyset \)-\{ambil\} jinahe (H)
    Ut-take-VI (UTj) money DEF

'Please take the money.'

The examples (a) and (b) are accompanied by vocatives \textit{Luh} and \textit{Tut}, and in example (c) without a vocative. The use of vocatives is very common in imperative sentences. Note that the addressee of the vocative coincides with the suppressed ACTOR NP.

\section*{5.11 Morphology, function and meaning of Standard Balinese affixes}

The discussion of Morphology, function and meaning of SB affixes is divided into verbal affixes, complex verbal affixes and nominal affixes. Verbal affixes are further divided into verbal prefixes, suffixes and confixes. Nominal affixes are further divided into nominal prefixes, suffixes and confixes.

\subsection*{5.11.1 Verbal prefixes}

Verbal prefixes are affixes which can occur with transitive or intransitive verbs. Verbal affixes are also attached before a stem to verbalize nouns or adjectives. SB verbal prefixes are:

\begin{itemize}
\item[a.] \textit{ma-}
\item[b.] \textit{N-}
\item[c.] \textit{ka-}
\item[d.] \textit{maka-} / \textit{pinaka-}
\item[e.] \textit{pah-}
\end{itemize}

\textbf{a. ma-}

As discussed in (5.3) the prefix \textit{ma-} becomes \textit{m-} before a stem beginning with a vowel; for instance, \textit{ma} + ikuh > mikuh 'have a tail', \textit{ma} + adan > madan 'to be given a name'. The prefix \textit{ma-} usually marks intransitive verbs, especially those which express state, although sometimes action is expressed. Also, \textit{ma-} can be attached to nouns to form NP predicates in stative sentences. The derived predicate may denote possession of the NP, or a similar notion. In addition, \textit{ma-} can also be used with transitive verb stems. In this case \textit{ma-} normally forms a derived intransitive with suppressed ACTOR, or \textit{ma-} may select ACTOR argument. When \textit{ma-} occurs with transitive verbs it may have one surface argument i.e an ACTOR or UNDERGOER argument. The \textit{ma-} form occurs in all three speech levels.
ma- with intransitive verbs

The most common pragmatic formula of the prefix ma- with intransitive verbs is:

\[
\text{AT} \quad \text{ma-V}
\]

Note that occasionally the TOPIC is postposed.

Examples:

(5-33) a. *I Nyoman Jater ma-gae di uma* 22 (L)
\(\text{AT}1\) Pn \(A1\)-work PREP rice field

'I Nyoman Jater works in the rice field'.

b. *Kyayi Dauh Panulis'an dahat ledang Ida ma-lingga'h irika* 23 (H)
\(\text{AT}1\) 'Tl Pn INTEN willing hon \(A1\)- sit DM

'Kyayi Dauh Panulis'an is really willing to sit there'.

c. *"Ingghih, titiang jagi ma-pamit"* 24 (H)
yes \(\text{AT}1\) 1ST FUT \(A1\)- ask for permission to go

"Yes, I will ask permission to go".

ma- with nouns

When ma- occurs with nouns, it has the pragmatic formula as:

\[
\text{AT} \quad \text{ma-N}
\]

(5-34) a. *Dyah Komala turunan Dēha ma-putra kakalih* 25 (H)
\(\text{AT}1\) Pn original Pl name \(A1\)- child two

'Dyah Komala (who) comes from Dēha has two children'.

b. *Torise ma-bok gading ...* 26 (L)
\(\text{AT}1\) tourist DEF \(A1\)- hair ivory (colour)

The tourist has blonde hair'.

22 Satua I Nyoman Jatër, 1971:18
23 DN, 6:7
24 Nang Tiwas Nang Sugih, 1971:1
25 DN, 1:7
26 Togog, 1977:24
c. ...makëjang ma-pipis\textsuperscript{27} (L)  
\begin{tabular}{ll} (ATf) all & A\_ money \\
\end{tabular}  
'...all produce money'.

d. Putu ma-udëng (L)  
\begin{tabular}{ll} (ATf) Pn (1st born) A\_ head dress \\
\end{tabular}  
'Putu wears an head dress'.

e. Komang ma-bëli tëken tiang (M)  
\begin{tabular}{ll} (ATf) Pn (3rd born) A\_ elder brother & PREP 1ST \\
\end{tabular}  
'Komang calls (me) elder brother'.

The prefix \textit{ma-} + nouns in the above examples convey the meaning: 'possessive or characterized by it in some way'. The possessor (etc.) NP will be considered as a subtype of the ACTOR macrorole. This is illustrated below:

\begin{center}
\begin{tabular}{lll}
Noun & meaning & derived intransitive verb with \textit{ma-} \\
\hline
putra & child & have (\ldots) children \\
bok & hair & have (\ldots) hair \\
pipis & money & have (\ldots) money \\
uðëng & head dress & wear (\ldots) head dress \\
bëli & elder brother & call (\ldots) elder brother \\
\end{tabular}
\end{center}

\textit{ma-} + transitive verbs with UNDERGOER argument

The prefix \textit{ma-} which occurs with overt UNDERGOER is never marked for agent (anti agent). The pragmatic formula of this construction is:

\begin{center}
\textbf{UT} \textit{ma-V}
\end{center}

\begin{enumerate}
\item[(5-35)] a. ...bajune suba ma-umbah (L)  
\begin{tabular}{ll} (UTf) clothes DEF & PERF U\_ wash \\
\end{tabular}  
'...the clothes have been washed'.

b. Jangane ampun ma-urab (M)  
\begin{tabular}{ll} (UTf) vegetable DEF PERF & U\_ mix \\
\end{tabular}  
'The vegetables have been mixed up'.
\end{enumerate}

\textsuperscript{27} Togog, 1977:23
c. ...sëkare sampun ma-tusuk ²⁸ (H)  
   (UT₁) flower DEF PERF U₁- skewer
   ...
   the flowers have been on skewers'.

For a very small set of verbs, such as *ganti* 'change', *daar* 'eat', *balih* 'watch',
*garang* 'fight', *boros* 'hunt', *ma* - + transitive verbs may occur with ACTOR arguments.
The pragmatic formula of this construction is:

```
AT ma-V
```

or

```
AT ma-V UF ?
```

Examples:

(5-36) a. *Tamiune* ėnu ma-daar ²⁹ (L)  
   (AT₁) guest DEF still A₁- eat
   'The guests are still eating'.

b. *Tamiune* ėnu ma-daar nasi (L)  
   (AT₁) guest still A₁- eat rice
   'The guests are still eating rice'.

c. *Tiang* ma-balih ajahan ³⁰ (M)  
   (AT₁) 1ST A₁- watch a while
   'I will watch for a while'.

d. *Tiang* ma-balih wayang (H)  
   (AT₁) 1ST A₁- watch puppet
   'I watch shadow puppets'.

The prefix *ma*- in the above examples should be interpreted as marking the ACTOR-
TOPIC, not the UNDERGOER as in examples (5-35). The occurrence of the NP's in post
verbal positions as in examples (b) and (d) is optional, and presents some questions for
the present analysis. The tests proposed above (5.6.2) are inconclusive: The UNDERGOER
NP's are optional, but if present, must follow the verb directly and do not admit definite
marking with *e* or *ne*.

²⁸ Satua I Nyoman Jatër, 1971:24
²⁹ Satua Nang Bangsing ëken I Bëlog, 1971:12
³⁰ Togog, 1977:15
The examples above indicate that, with intransitive verbs, ma- occurs with a single core argument whose semantic $S_A$ or $S_U$ varies depending on the verb. Only rarely can this construction be expanded to state a full transitive predicate.

b. $N$-

This is a verbal prefix which mainly marks transitive verbs as well as some dynamic intransitive verbs. In SB, the $N$- form is made by a simple modification of the stem usually by substitution or addition of homorganic nasals (see section 5.3 above).

$N$- forms always have two core arguments when attached to transitive verbs. They are the ACTOR-TOPIk and the UNDERGOER-FOCUS. However, when it is added to dynamic intransitive verbs and adjectives, $N$- appears to form intransitive constructions which only have one core argument. When it is added to a noun it can have one or two core arguments. $N$- forms occur in all three speech levels. The most frequent pragmatic formula of the prefix $N$- is as below. Note that the TOPIC is occasionally postposed.

\[
\begin{array}{c}
\text{AT} & \text{N-V} & \text{UF} \\
\end{array}
\]

or

\[
\begin{array}{c}
\text{N-V} & \text{UF} & \text{AT} \\
\end{array}
\]

$N$- with transitive verbs

Examples:

(5-37) a. ...nu sèmèngan pèsan caï $N$-angkid bubu $^{31}$(L)
still morning INTEN (ATj) 2ND AïUj- take (UFj) fish trap

'...it should be still early in the morning you take out the fish trap'.

b. Wayan Tamba $N$-siup kopine $^{32}$(L)
\begin{array}{l}
\text{(ATj) Pn AïUj- drink (UFj) coffee 3RD}
\end{array}

'Wayan Tamba drinks his coffee'.

c. ...bëli $N$-silih jaran icange $^{33}$(L)
\begin{array}{l}
\text{(ATj) older brother AïUj-borrow (UFj) horse 1ST DEF}
\end{array}

'...You borrow my horse'.

$^{31}$ Satua Nang Bangsing tëken I Bëlog, 1971:5
$^{32}$ Togog, 1977:17
$^{33}$ Satua Nang Bangsing tëken I Bëlog, 1971:12
**N- with dynamic intransitives or derived intransitives**

When the prefix *N-* occurs with dynamic intransitives or derived intransitives, it normally has one core argument. The most frequent pragmatic formula of this construction is:

\[
\text{AT} \quad \text{N-V}
\]

Examples:

(5-38) a. *tukad Cengcenge ênto linggah, ia kewèh pèsan N-liwat* ³⁴ (L)
    river Pl name DM wide (ATj) 3RD difficult INTEN A₁- pass

    '...the river of Cengceng is very wide and it is very difficult for him to pass by.'

b. *palinggit lan Idane kantun N-kambang ring sagarane*³⁵ (H)
    (ATj) vehicle Hon 3RD still A₁- float PREP sea DEF

    '...his vehicle is still floating on the sea'.

**N- with nouns**

When *N-* form occurs with a noun, it normally indicates an action characterized by the noun. The pragmatic formula of this construction is:

\[
\text{AT} \quad \text{N-N} \quad \text{(UF)}
\]

Examples:

(5-39) a. *Bapa N-sèrèg jèlanan* (L)
    (ATj) father A₁Uj- key (UFj) door

    'Father opens a door with a key'.

b. *Nang Oman N-arit padang* (L)
    (ATj) Ti Pn A₁Uj- sickle (UFj) grass

    'Nang Oman cuts the grass with a sickle'.

c. *Dayu Putu kantun N-sampat ring natare* (H)
    (ATj) Pn still A₁-broom PREP yard DEF

    'Dayu Putu is still sweeping in the yard'.

³⁴ Lutung tèken Kakua
³⁵ DN, 1:6
N- + nouns in the examples above can be formulated as follows:

<table>
<thead>
<tr>
<th>Noun</th>
<th>meaning</th>
<th>derived transitive and intransitive verb with N-</th>
</tr>
</thead>
<tbody>
<tr>
<td>sêkêg</td>
<td>key</td>
<td>to perform the action by using (...) key</td>
</tr>
<tr>
<td>arit</td>
<td>sickle</td>
<td>to perform the action by using (...) sickle</td>
</tr>
<tr>
<td>sampat</td>
<td>broom</td>
<td>to perform the action by using (...) broom</td>
</tr>
</tbody>
</table>

c. ka-

The prefix ka- marks an UNDERGOER-TOPIC of transitive verbs. In special cases, an UNDERGOER-FOCUS is introduced by an existential verb we navigator 'exist'. The agentive prepositional phrases can be omitted. The speech level distribution of the ka- form depends on the person who is the agent of the action. The following chart illustrates ka- which is used in high and low levels.

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST person</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2ND person</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3RD person</td>
<td>x</td>
<td>x</td>
<td>-</td>
</tr>
</tbody>
</table>

The ka- form in high level can occur with the first, second or third person agents, and the agents can be preceded by prepositional phrases. Ka- in low level only occurs when the agent is the first or second person, but never with the third person, both in plural and singular. The following examples show the prefix ka- which is used with the third person agent in high level in written language. The pragmatic formula of the prefix ka- is:

UT ka-V (A)

or

UF ka-V

Examples:

(5-40) a. *Indike punika ka-pirêng antuk Ida Pranda* 36 (H)

(UTj) matter DM Uj- hear PREP (A) Hon priest

'The problem is heard by the priest'.

36 DN, 1:5
b. Raden Mantri *ka-iring* baan I Patih 37 (H)
   (UT) Pn Uj- accompany PREP (A) Ftn

'Raden Mantri is accompanied by I Patih'.

c. Sasangin Ida Prameswari *ka-pirêng* antuk Ida Batara Guru 38 (H)
   (UT)vow GEN Hon princess Uj- hear PREP (A) Hon God's name

'The vow of the princess is heard by Ida Batara Guru'.

d. Ida Pranda turun ring Purancak, wentên pura alit ka-aksi 39 (H)
   Hon priest arrive PREP Pl name exist (UF) temple small Uj- see

'The priest arrives at Purancak, there is a small temple being visible'.

Examples (a), (b) and (c) are with oblique ACTOR NP's marked by prepositions, while (d) does not express the agent overtly. It appears that the agents in *ka-* constructions in SB are optional. When the information is new, the agent is needed as in examples (a), (b) and (c). On the other hand, when the information is known (the agent is already mentioned previously in the discourse and it is clear) the agent need not be expressed overtly as in (d) where the NP functions as UNDERGOER-FOCUS.

The following examples are *ka-* which is used in high level spoken Balinese with the first or second person agent. It should be noted that *ka-* construction with the first or second person agent can occur with any transitive verbs, and the oblique ACTOR NP's are always marked by prepositional phrases, otherwise the third person agent is understood.

Examples:

(5-41) a. Indike punika dereng ka-manah antuk titiang (H)
   (UT) matter DEF DM NEG Uj- think PREP (A) 1ST

'That matter has not been thought by me yet'.

b. *Ka-bawos* antuk Cokor Ratu (H)
   Uj- say PREP 2ND

'It is said by you'.

The following example refers to the *ka-* form used in medium level. *Ka-* in medium level apparently has a similar function as *ka-* in high level.

---

37 Raden Galuh Gde:2
38 Raden Galuh Gde:1
39 DN, 1:3
(5-42) Raos tiange ka-(tekëd-ang) baam Men Putu (M)
    (UT) talk 1ST DEF U- tell- VI PREP (A) Tl Pn

'My talk is told by Men Putu'.

The examples below are in low level

(5-43) a. Bajune suba ka-saluk (L)
    (UT) clothes DEF PAST U- wear

'The clothes were worn (by the speaker or addressee).

b. Padine ka-duduk (L)
    (UT) rice DEF U- collect

'The rice is collected (by the speaker or addressee).

It is clear that the prefix ka- in examples (5-43) is used in low level without an oblique preposition, and from the context, it can be understood that the agent must be the first person or the second person. However, in examples (5-40) the agent is the third person.

d. maka-/pinaka-

The prefix maka-/pinaka- marks the UNDERGOER-TOPIC. Maka- is frequently used with low level lexical items, although it can also occur with certain high level vocabulary. However, pinaka- usually exists with high level vocabulary. The prefix maka-/pinaka- is normally attached to nouns, to verbalize them.

It should be noted that maka-/pinaka- is not productive in SB. The pragmatic formula of the prefix maka-/pinaka- is:

\[
\text{UT maka-/pinaka-V}
\]

---

40 Maka- can also occur with an adverb or adjective as well as a numeral, but the resulting form has an adverbial function.

1. Maka- with adverb or adjective to convey the meaning 'until'.
   Example:
   Bapa magambël ðë para maka-pëtëng (L)
   father gambël PREP temple until night

   'Father is playing gambëlan (music instrument) at the temple until all the night'.

2. Maka- with a numeral or a classifier. When maka- occurs with a numeral or a classifier, it means 'all'.
   Example:
   Awakne maka-ukud siam yeh angët (L)
   body 3RD ALL - CLASS pour water hot

   'Hot water pours to his whole body'.
Examples:

(7-44) a. *Gulência*  
gèdẹ́ *maka-ciri* lakar ujan (L)  
(UT₁) cloud DEF big U₁-sign FUT rain

'The big cloud is **used as a sign** (that) it will rain'.

b. *Ida*  
*pinká- tędung* jagate (H)  
(UT₁) Hon' 3RD U₁-umbrella universe DEF

'He is considered as **protector** of the universe' (LIT. He is considered as the umbrella for the universe).

e. *pah-*

The prefix *pah-* marks the UNDERGOER-TOPIC construction. It always attached to numerals to form NP predicates. This prefix can occur in all three speech levels. The pragmatic formula of this construction is:

```
 pah- NUMERALS UT
```

or

```
 UT pah- NUMERALS
```

Examples:

(7-45) a. *Warisane*  
pah-tēlu (L)  
(UT₁) inheritance DEF U₁-three

'The inheritance **should be divided into three**'.

b. *Pah-pat*  
*jinahe* (H)  
U₁-four (UT₁) money DEF

'The money **should be divided into four**'.

5.11.2 Verbal suffixes

Verbal suffixes are affixes which are added after the root or stem. These suffixes are used to verbalize nouns, adjectives, and also can occur with transitive or intransitive verb stems. There are four verbal suffixes in SB; they are

a. *-ang*
b. *-in*
c. *-a*
d. *-an*
-ang and -in have similar functions and distributions. Both affixes behave differently if compared with the suffix -a. Verbs which take -ang and -in are those which belong to category II: bound verb forms (see section 5.8). These verbs are never followed directly by the suffix -a which usually marks the UNDERGOER TOPIC. If suffix -a is attached to bound verb forms, the verb must occur as a lexical unit by attaching the suffixes -ang or -in to the verb root, followed by the suffix -a (see section 5.11.2c). It appears that -ang and -in rearrange the valency of the verbs. Verbs which belong to category I can also take the suffixes -ang and -in; in this case, -ang and -in will increase the valency of the verb by one argument.

a. -ang

-ang is used to form a derived lexical unit when it is attached to verbs which belong to category II. It can also verbalize nouns and adjectives. This suffix can occur with transitive or intransitive verbs. A verb stem in -ang, with no further affixation, can occur in declarative, interrogative negative and imperative constructions. (See section 5.9 above). It appears that the function of -ang is to rearrange and increase the valency of the verb, i.e. if -ang is attached to a transitive verb which belongs to category II, it does not increase the number of arguments, but, it will rearrange the valency of the transitive verb. If -ang is added to a transitive verb which belongs to category I, it will increase the number of arguments, i.e. from two to three arguments. When -ang is attached to an intransitive verb or a noun, it increases the number from one to two arguments. The main function of -ang is valence increasing (VI).

In the following examples -ang is used to rearrange the valency of the transitive verb, i.e. to form a derived lexical unit. All verbs in the examples below are bound verb forms in imperative sentences. This suffix can occur in all three levels.

Transitive verbs with -ang

The pragmatic formula of the suffix -ang in this construction is:

\[
\text{V}-\text{ang UT}
\]

Examples:

(5-46) a. Kidɛm-ang maun cɛninge (L)
close -VI/ U₁ (UT₁) eye child DEF

'You should close your eyes.'
b. *Basēh-ang* limane (L)
   wash -VI/ U₁ (UT₁) hand DEF

   'You should wash your hands'.

c. *Eling-ang* mabantēn jotan ...⁴¹ (H)
   remember- VI/ U₁ offering (UT₁) name of offering

   'You should remember to make an offering'.

d. *Rēsēp-ang* ja rawos hapan cēninge (L)
   understand -VI/ U₁ COM (UT₁) talk father GEN kid 3RD

   'You should understand your father’s advice'.

**Intransitive verbs with -ang**

The -ang form transitivizes the intransitive verbs. In this construction -ang increases the valency of the verb as shown in the following examples. The pragmatic formula of the suffix -ang in this construction is:

```
V-ang  AF  UT
```

or

```
UT   V-ang  AF
```

(5-47) a. *Sampun wali-ang* Ida cakēpanne (H)
   PERF return VI/ A₁Uj (AF₁) Hon (UT₁) manuscript 3RD

or Cakēpanne dereng wali-ang Ida
   (UT₁) manuscript 3RD NEG return VI/ A₁Uj (AF₁) Hon

   'He has not returned the manuscripts yet'.

b. *...bakal mati-ang* icang jarane ...⁴² (L)
   FUT die -VI/ A₁Uj (AF₁)₁ST (UT₁) horse DEF

or jarane bakal mati-ang icang
   (UT₁) horse DEF FUT die -VI/ A₁Uj (AF₁)₁ST

   'I will kill the horse'.

---

⁴¹ Maţgul Tan Patali, 1977:1
⁴² Nang Bangsing tēken I Bēlog, 1971:13
Nouns with -ang

When -ang is added to a noun, it verbalizes the noun and also specifies either one or two arguments, depending on the resulting verb's semantics.

Examples:

(5-48) a. I ēmbok madu-ang bēli
(UTj) older sister co-wife -VI/ UjAj (AFj) older brother

'You (older brother) have taken another wife (older sister)'.

b. "Inggih urip-ang titiaŋ".45 (H)
yes life -VI/ Uj (UTj) 1ST

"Please revive me to life".

Adjectives with -ang

When -ang is added to an adjective, it verbalizes the adjective and also increases the valency of the verb. The -ang form in the following examples occurs in imperative constructions.

(5-49) a. Sampunang ja panjang-ang indike punika (H)
NEG COM long -VI/Uj (UTj) problem DEF DM

'Do not prolong that problem'.

b. Nik, mēlah-ang pianak bēline, I Putu (L)
VOC good -VI/Uj (UTj) child older brother Pn (1st born)

'Nik, (you) take good care of my child, I Putu'.

b. -in

This suffix has similar syntactic function as the suffix -ang, i.e. to rearrange and increase the valency of the verb. When it is added to intransitive verbs, it transitivizes intransitive verbs and when it is added to nouns it verbalizes nouns. The suffix -in can also convey a causative notion. One difference between -ang and -in is that the suffix -ang is often used when the ACTOR has high direct involvement and the indirect

---

43 I ēmbok is a constrastive topic, madu-ang idiomatically means 'to have a second wife'
44 Marṭgul Tan Patali, 1977:12
45 DN, 5:10
UNDERGOER functions as a benefactee, while -in is used when the UNDERGOER has high direct involvement and the UNDERGOER usually functions as a locative, recipient, goal or patient. This suffix can occur in all three speech levels.

Transitive verbs with -in

The suffix -in is added to a verb which belongs to category II to rearrange the valency of the verb. The UNDERGOER seems to function as a goal or patient. The pragmatic formula of the suffix -in in this construction is:

\[
\begin{array}{c}
V\text{-}in \\
UT
\end{array}
\]

In the following examples the suffix -in occurs in the imperative constructions.

(5-50) a. \ldots këmo taken-in Sang Naga \(^{46}\) (L)
\ldots go \quad ask -VI/Ut \quad (UT\text{_}1) Hon Pn

'You should go and ask Sang Naga'.

b. Pilih-in \quad mën bebeko \(^{47}\) (L)
choose -VI/Ut \quad COM (UT\text{_}1) duck DEF

'You should choose the duck'.

c. Këmo ja balih-in payake lamun kanggoang (L)
go \quad COM try -VI/Ut \quad (UT\text{_}1) pot if like

'Go there and (you) should try the earthen cooking pot if you like it'.

Intransitive verb with -in

When suffix -in is attached to intransitive verbs, it transitivityes the verbs. The following examples will show that by adding the suffix -in the valency of the verb will be increased by one. The pragmatic formula of this construction is:

\[
\begin{array}{c}
UT \\
V\text{-}in \\
AF
\end{array}
\]

or

\[
\begin{array}{c}
V\text{-}in \\
AF \\
UT
\end{array}
\]

Example:

(5-51) a. \text{i Kënu} tëka-in tamiu liu pësan (L)
\quad \quad \quad (UT\text{_}1) Pn (4th born) come -VI/UtAj \quad (AF\text{_}1) guest many INTEN

---

\(^{46}\) Dadong Pësët Luh Mëntis:1
\(^{47}\) Satau Pan Bëlog, 1971:16
or

b. *Tēka-in*  *taniu*  *I Kētut*  *liu*  *pēsan* (L)
   come -VI/UïAï (AFj) guest (UTï) Pn (4th born) many INTEN

'Many guests visit I Ketut'.

**Nouns with -in**

The suffix -in with nouns occurs in imperative constructions as shown in the examples below. The pragmatic formula of these constructions is similar to the imperative construction above.

Examples:

(5-52) a. *Saput-in*  *pianake* (L)
   blanket-VI/ Uï (UTï) child DEF

'You should put the blanket over the child'.

b. *Kancing-in bajune,*  *Tut* (L)
   button -VI/ Uï (UTï) clothes DEF VOC, Pn (fourth born)

'You should button your clothes, Tut'.

c. -a

The suffix -a has three functions, distinguished here as -a1, a2, and a3. The -a1 form marks the UNDERGOER-TOPIC with the first, second or third person UNDERGOER. The suffix -a1 is normally added to transitive verbs and it can be followed by the preposition *antuk* in high level and the preposition *tēken* in low level with the third person agent in high and low levels (cf. Kersten 1984:95). This suffix can also be followed by an instrument which is usually preceded by a preposition *a*ī 'with'. This suffix never occurs with the first or the second person prepositional agent either in spoken or written language. The construction which is formed with the suffix -a1 is more frequently used in low level colloquial language rather than in written style or in high speech level. When -a1 is used in high level it usually occurs in spoken language. For high level, instead of using the suffix -a1 the *ka* - form will normally be used (cf. 5.11.1c). The pragmatic formula of the suffix -a1 is:

\[
\text{UT} \quad \text{V-a1} \quad (A/1 \{3RD\})
\]

The -a1 form is used in low level as in the following examples.
(5-53) a. *Sai-sai ia gandong-a₁ tēken bapanne*₄₈ (L)
     often (UT₁) 3RD carry -U₁ PREP (A) father 3RD

'He is often carried by his father'.

b. *Pan Bēlog tunden-a₁ ka pēkēn tēken kurēnne*₄₉ (L)
     (UT₁) Pn ask -U₁ PREP market PREP (A) wife 3RD

'Pan Bēlog is asked by his wife to go to the market'.

c. *Bajun tiange umbah-a₁ aqī sabun* (L)
     (UT₁) clothes GEN 1ST DEF wash -U₁ PREP (I) soap

'My clothes are washed with soap'.

The suffix -a₂ also occurs with a transitive verb to express future intention or irrealis₅₀ (cf. Kersten, 1984:96). This construction is mostly used in low or medium level in colloquial speech. Note that the agent is not expressed overtly; however, it is understood that the agent must be the first person. The difference between -a₁ and -a₂ is that -a₁ marks an UNDERGOER-TOPIC and the verb usually followed by a third person agent in a prepositional phrase. Whereas -a₂ is characterized by a verb in initial position, sometimes followed by the particle mēn with the agent interpreted as the first person. This construction frequently occurs in colloquial language. The pragmatic formula of this construction is:

V-a₂ UT

Examples:

(5-54) a. *(orah-in)-a₂ mēn satua* (L)
     help -vi-A₁U₁/-IRR₅¹ PTC (UT₁) story

'(I) will tell (you) stories'.

b. *Nah, baang-a₂ pipis* (L)
     yes give -A₁U₁/-IRR (UT₁) money

'Yes, (I) will give (you) money'.

---

₄₈ Sauta men Cubling
₄₉ Sauta Pan Bēlog, 1971:16
₅₀ For discussion of realis and irrealis see Foley and van Valin (1984:213).
₅¹ Further discussion of realis and irrealis see Foley and van Valin (1984:213).
Adjective + \textit{a}_3 \textit{ also} expresses irrealis, denoting progressive action in a subordinate clause. The suffix \textit{-a}_3 \textit{ is usually preceded by the word sëdëng 'in progress'. This suffix is usually attached to an adjective to express the progressive action and it frequently occurs in low level (cf. Karna, 1983:43; Kersten, 1984:74). The pattern of this construction is sëdëng + adjective-\textit{a}_3 + main clause.

Examples:

(5-55) a. Sëdëng \textit{tiëh-\textit{a}_3} \textit{panakne} \textit{madaar}, \textit{memene} \textit{tëka} (L)
\hspace{1cm} \text{PROG busy -IRR child DEF eat mother DEF come}

'While the child is being busy eating, her/ his mother comes'.

b. Sëdëng \textit{bëcik-\textit{a}_3} \textit{rau} \textit{rawuh}, \textit{titiang mapamit mangkin} (H)
\hspace{1cm} \text{PROG good -IRR Hon arrive IST go now}

'It being a good time, you arrive, (and) I go now'.

da. \textit{-an}_1

The suffix \textit{-an}_1 \textit{ only occurs with nouns to form NP predicates in stative sentences. It marks the UNDERGOER-TOPIC construction.

The pragmatic formula of this construction is:

\begin{center}
\text{UT} \hspace{.5cm} \text{N-an}_1
\end{center}

Examples:

(5-56) a. \textit{Nang Oman} \textit{uban-an}_1 (L)
\hspace{1cm} (UT\textsubscript{1}) Tl Pn white hair-U\textsubscript{1}

'Nang Oman's hair becomes white'.

b. \textit{Sami palinggihe} \textit{ring pura lumut-an}_1 (H)
\hspace{1cm} (UT\textsubscript{1}) all shrine DEF PREP temple moss-U\textsubscript{1}

'All the shrines in the temple become moss'.

c \textit{Siapë} \textit{panës-an}_1 (L)
\hspace{1cm} (UT\textsubscript{1}) cock DEF heat- U\textsubscript{1}

'The cock is suffering from the heat (LIT. the cock is caught by the sun)'.

d.  
\[
\begin{array}{llllll}
\text{Panake} & \text{ujan-an} & \text{ibi} & \text{sanja} & (L) \\
(UT) & \text{child} & \text{DEF} & \text{rain-U} & \text{yesterday} & \text{evening}
\end{array}
\]

'Our child was caught in the rain yesterday evening'.

5.11.3 Verbal confixes

Confix refers to two bound morphemes, i.e., a prefix and a suffix used together with a root to form a complex word. The combination of a prefix - suffix is considered to be a confix when they occur together with a root; prefix- root -suffix to form a meaningful unit. The verbal confixes can be added to transitive or intransitive verbal roots, and also to nouns. The occurrence of prefix - suffix is not considered a confix if one of the bound morphemes (a prefix or a suffix) can be deleted and the resulting word itself is still acceptable. The following examples show this.

Examples:

(5-57) a.  
\[
\begin{array}{llllllll}
\text{Ida} & \text{sēdēng} & \text{ka-atur-an} & \text{rayunan} & (H) \\
(UT) & \text{Hon} & \text{PG} & \text{U}-\text{give-U} & \text{(AF)} & \text{food}
\end{array}
\]

'He/she is being given the food'.

b.  
\[
\begin{array}{llllllll}
\text{Purane} & \text{babal} & \text{ka-\{rubuh-ang\}} & \text{angin} & (H) \\
(UT) & \text{temple} & \text{DEF} & \text{collapse} & \text{U}\text{A}\text{j}-\text{strike-VI} & \text{(AFj) wind}
\end{array}
\]

'The temple has collapsed, struck by the wind'.

If examples (a) and (b) are compared, it clears that ka -...-ang in (b) is not a confix because karubuhang is formed first by rubuh + ang > rubuhang 'strike' and ka + rubuhang > karubuhang 'something is struck'. (For further discussion of this form see 5.11.4). On the other hand, ka -...-an in (a) is a confix because if one of these affixes is deleted the resulting form either will convey a different meaning or be unacceptable. For instance ka + atur > *katur (unacceptable), atur + an > aturan 'ritual offering'(a noun). So ka -...-an must be used together to form the word katuran 'to be given'(a verb). Pragmatic formulae for these superficially similar forms are different (see below). Only two verbal confixes are recognized in this study:

a. \text{ma -...-an} \\
b. \text{ka -...-an}

The formulae for these confixes are similar to those for prefixes being used alone.
a. ma-\-an

This is a verbal conffix which can be attached to nouns, verbs and adjectives. This conffix usually conveys a progressive notion. However, in the case of some verbs, an added notion of reciprocal action is present.

The conffix ma-\-an usually marks the ACTOR-TOPIC. The pragmatic formula of the conffix ma-\-an is similar to that for the prefix ma- above (see 5.11.1a above). This affix occurs in all three speech levels.

ma-N root-an

When ma-\-an occurs with nouns it normally conveys a progressive notion.

Examples:

(5-58) a. sami munggal ma-jukung-an (AT) all get in A\_canoe -A

'...all the people are going canoeing'.

b. Bapa ma-jaran-an (L) father A\_horse -A

'Father is riding a horse'.

ma-V root-an

When the conffix ma-\-an occurs with transitive verbs, it usually refers to actions which are carried out reciprocally or it indicates multiplicity. The UNDERGOER coincides with the ACTOR.

Examples:

(5-59) a. Anak lanang punika ma-jagur-an (M) (AT) people male DM A\_hit -A

'The men are hitting each other'.

b. Pianake ma-tagel-an (L) (AT) child DEF A\_throw stone -A

'Our children are throwing stones at one another'.

\[52\] DN, 1:9
ma - Adi root -anI

When this conffix is affixed to an adjective, the adjective usually has a reduplicated form, and the meaning of it is 'competing'.

Examples:

(5-60) a. Tukan gambare ma-duég-duég-anI ngadungan warna (L)
       (ATI) workman picture DEF A1-clever-A1 match colour

'The painters are competing to match the colours'.

b. Anake čenik činto ma-gēcang-gēcang-anI malaib (L)
   (ATI) people DEF small DM A1-quick-A1 run

'The children are competing in running'.

b. ka-...-anI

This conffix marks the UNDERGOER-TOPIC of transitive verbs. This conffix can be used in high, medium and low levels. The pragmatic formula of the conffix ka-...-anI is similar to that for the prefix ka - above (see section 5.11.1c above). Note that the agent of the construction should be interpreted as the third person.

Examples:

(5-61) a. ..pan Balang Tamak ka-arah-anI 53 (L)
       (UTI) Pn U1- tell -U1

'Pan Balang Tamak is told (to come)'.

b. Yeh carike bēdauh ka-pēgat-anI (L)
   (UTI) water rice field DEF west U1- stop -U1

'The water of the wet rice-field in the west is stopped' (LIT).

c. Ida Bagus Oka ka-atur-an rayunan (H)
   (UTI) Pn U1U2j-give-U1U2j (U2Fj) food

'Ida Bagus Oka is given food'.

The example (c) above has two UNDERGOERS, because the verb atur 'give' can have two UNDERGOERS. The first UNDERGOER is a TOPIC and the second UNDERGOER is a FOCUS. (See section 5.7 above).

53 Pan Balang Tamak, 1971:42
If the agents are already known or not necessary to be known, they do not need to be mentioned and the verb roots may occur with the prefix ka-...-an\textsubscript{1} as in the above examples. But if the agents are mentioned overtly, they will occur in prepositional phrases, and the verbs will be marked only by the prefix ka- {verb root-ang/-in} as shown in the following examples. (See also discussion 5.11.4 d below).

(5-62) a. Titiang \textit{ka-\{seng-in\}} antuk Ida Ratu Pranda (H)
\textsubscript{(UT\textsubscript{1})} 1ST \textsubscript{U\textsubscript{1}-} call-VI \textsubscript{PREP (A)} Hon priest

'I was called by the priest'.

b. Taline \textit{ka-\{p\textsubscript{e}gat-ang\}} baan Pan Murni (L)
\textsubscript{(UT\textsubscript{1})} rope DEF \textsubscript{U\textsubscript{1}-} break -VI \textsubscript{PREP (A)} TI Pn

'The rope is broken by Pan Murni.

c. Ida Bagus Oka \textit{ka-\{atur-ang\}} rayunan antuk rabin idane (H)
\textsubscript{(UT\textsubscript{1})} Pn \textsubscript{U1\textsubscript{1}U2j-} give-VI (U2F\textsubscript{j}) food \textsubscript{PREP (A)} wife GEN 3RD

'Ida Bagus Oka is given food by his wife'.

5.11.4 Complex verbal affixations

In the model presented here, a distinction is made between conffixes and instances of complex affixation. The complex units \textit{ka-\{V-ang\}} and \textit{ka-\{V-in\}} are not considered conffixes because the suffixes -ang and -in are used to form a meaningful lexical unit and to rearrange the valency of verbs before the prefix \textit{ka-} is added to the verbs. This process results in complex verbal affixation. In the analysis of complex verbal affixes, it appears that the verb stems must be formed as lexical units first, by attaching the suffixes -ang or -in, and then other affixes, whether prefixes or suffixes, can be added to form complex verbal affixation.

This analysis differs from previous works on Balinese morphology, such as Kersten (1984), Granoka \textit{et al.} (1984/1985) and Clynes (1989) who treat \textit{ka-...-ang} or \textit{ka-...-in} as a conffix. Kersten (1984:92-98) states that there are three forms of passive in SB. The first passive is the unmarked passive (see section 5.9). The second passive is marked by \textit{ka-ang} and \textit{ka-in} with the agent preceded by a preposition. And the third passive is formed by the \textit{ka-an} (cf. section 5.11.3 b) above.
In this study, -ang and -in are treated as stem internal suffixes. The complex verbal affixes which will be discussed below are:

a. ma- {V root -ang / -in }
b. N- {V root -ang / -in }
c. N- {N/Adj/Adv root -ang/ -in }
d. ka- {V root -ang / -in }
e. {V root -ang / -in }-a

a. ma- {V root -ang / -in }

The ma- {V-ang / -in } form can be attached to intransitive verbs to transitivize the intransitive verbs, and to increase the valency of the verb by one. This complex affixation can also occur with transitive verbs. The ma- {V-ang / -in } form normally conveys a causative meaning. This affix occurs in all three speech levels. The pragmatic formula of this construction is:

```
AT     ma-{V-ang/ in}   UF
```

**ma- {V INTRANS-ang / -in }**

Examples:

(5-63) a. Meonge ma-{laib-ang} be (L)
(ATi) cat DEF Aij- run -VI (UFj) fish

'The cat steals fish'.

b. Putri ma-{laib-in} adinne (L)
(ATj) Pn Aij- run -VI (UFj) sister/brother 3RD

'Putri makes herself to run away from her sister/brother'.

If the examples (a) is compared with (b), it appears that in example (a) the ACTOR has a direct involvement, whereas, in (b), the UNDERGOER has direct involvement. It should be noted that sometimes -ang and -in are used interchangably.

**ma- {V TRANS-ang / -in }**

Examples:

(5-64) a. Ia ma-{silih-ang} pipis (L)
(ATi) 3RD Aij- borrow -VI (UFj) money

'She/he makes (someone) borrow the money'.

b. *Men Gde ma-(daar-in) panakne (L)*
   (ATj) Ti Pn A1Uj- eat VI (UFj) child 3RD

'Men Gde has to feed her child'.

b. *N- {V root -ang / -in }*

*N- {V-ang }* occurs in causative constructions of transitive or intransitive verbs which emphasizes the direct involvement of the agent. The ACTOR of the causative sentence has direct involvement, responsibility or intent, with respect to the verb's core semantics. The suffix -ang in this construction increases the valency of the verb by one argument. This affix occurs in all three speech levels. The pragmatic formula of this construction is:

\[
\text{AT} \quad \text{N-}\{\text{V-ang}\} \quad \text{UF}
\]

*N- {V\text{\textunderscore}INTRANS\text{-ang} }*

Examples:

(5-65) a. *Made N-\{(pandus\text{-ang})\} panakne (L)*
   (ATj) Pn (2nd born) A1Uj- bathe VI (UFj) child 3RD

'Made bathes her child'.

b. *Putu N-\{tēgak\text{-ang}\} Dogler di dampare (L)*
   (ATj) Pn (1st born) A1Uj- sit VI (UFj) Pn PREP bench DEF

'Putu made Dogler sit on the bench'.

The ACTORS Made and Putu in the above examples are the causers and the UNDERGOERS, panakne and Dogler, are the causees.

*N- {V\text{\textunderscore}TRANS\text{-ang} }*

When -ang occurs with a transitive verb, the verb becomes ditransitive (see section 5.7). In this construction -ang will increase the valency of the verb by one argument, that is the number of arguments increase from two to three arguments. This suffix indicates that the action of the verb is performed for somebody else and the indirect UNDERGOER NP functions as benefactive. The pragmatic formula of this construction is:

\[
\text{AT} \quad \text{N-}\{\text{V-ang}\} \quad \text{U1F} \quad \text{U2T}
\]
Examples:

(5-66) a. I Bélog  \(N\{\text{ampak-ang}\} \text{ memenne jélana} \)  \(^{54}\) (L)
\((\text{AT}_1) \text{ Pn} \) \(A_1U_1jU_2k\)-open -VI (U1Fj) mother 3RD (U2T_k) door

'I Bélog opens the door for his mother'.

b. Ade  \(N\{\text{umbah-ang}\} \text{ niang baju} \)  \(^{55}\) (M)
\((\text{AT}_1) \text{ Pn} \) \(A_1U_1jU_2k\)-wash -VI (U1Fj) 1ST (U2T_k) clothes

'Ade washes those clothes for me'.

c. Wayan Narti  \(\{\text{N-jèmak}\}-\text{ang panakne nasi} \)  \(^{55}\) (L)
\((\text{AT}_1) \text{ Pn} \) \(A_1U_1jU_2k\)-take-VI (U1Fj) child 3RD (U2T_k) rice

'Wayan Narti takes rice for her child'.

\(N\{(\text{V-in})\} \)

\(N\{(\text{V-in})\} \) also conveys causative meaning with transitive or intransitive verbs and the \text{UNDERGOER} appears as a recipient. The pragmatic formula of this construction is:

\[
\begin{array}{c}
\text{AT} \quad N\{(\text{V-in}) \} \quad \text{UF}
\end{array}
\]

Example:

(5-67) \(Gde \quad N\{\text{labuh-in}\} \quad \text{Adi} \quad \text{uling motore} \)  \(^{55}\) (L)
\((\text{AT}_1) \text{ Pn} \) \(A_1U_1j\) fall - VI (U1Fj) Pn PREP car DEF

'Gde makes Adi fall down from the car'.

The \text{UNDERGOER} of the causative construction in the example (5-68) above has high direct involvement because it is affected by the the action of the verb which is carried out by the \text{ACTOR} (as a causer).

\(N\{(\text{V-trans-in})\} \)

When the suffix \text{-in} is added to a transitive verb, the verb becomes ditransitive and the \text{UNDERGOER} behaves as a locative or has locative like properties as in (a) and as a recipient as in (b). In this construction the valency of the verb increases by one. The pragmatic formula of the suffix \text{-in} in this construction is:

\[
\begin{array}{c}
\text{AT} \quad N\{(\text{V-in}) \} \quad \text{U1F} \quad \text{U2T}
\end{array}
\]

---

\(^{54}\) Satua Nang Bangsing tèken I Bélog, 1971:11

\(^{55}\) Togog, 1977:22
Examples:

(5-68) a. *la $N$-{isi-in} baas payuke (L)
   (ATi) 3RD A1U1jU2k-fill-VI (U1Fj) cooking pot (U2Tk) rice DEF

   'He fills the pot with rice'.

b. Putu $N$-{tagih-in} tiang pipis (M)
   (ATi) Pn (1st born) A1U1jU2k-ask -VI (U1Fj) 1ST (U2Tk) money

   'Putu asks me for some money'.

c. $N$ - {N/Adj/Adv root -ang / -in }

   The following examples -ang / -in verbalize noun, adjective and adverb and they occur with the prefix $N$- to produce complex verbal affixations. -ang/-in usually increase valency.

Examples:

(5-69) a. Titang $N$-{sisir-in} rambune Dayu Kade (H)
   (ATi) 1ST A1U1jU1k-comb-VI (U1Fj) hair 3RD (U2Tk) Pn

   'I comb Dayu Kade's hair'.

b. Cai tusing dadi $N$-{jéjéh-in} anak cénik (L)
   (ATi) 2ND NEG allow A1Uj-scare -VI (AFj) person little

   'You are not allowed to frighten little girls/boys'.

c. Kédise makébér $N$-{kaja-kauh-ang} (L)
   (ATi) bird DEF fly A1-north-west-VI

   'The bird flies going north-west'.

d. Ka- {V root -ang / -in }

   The ka-{V-ang} and ka-{V-in} construction only occurs in high level, normally followed by an ACTOR NP in oblique prepositional phrase, and the agent must be the third person singular or plural (cf. Kersten, 1984: 98). Clynes (1989:168) treats ka-...-ang / -in as a conffix with oblique preposition which can be used when the agent is the first, second or third person. Based on my observations, ka-{V-ang / -in} is not a conffix and when it occurs with oblique prepositions it is usually used with the third person agent.
In the present analysis, a more general function for ka- can be stated: it marks the 
UNDERGOER-TOPIC. This is true whether ka- is prefixed to a simple verbal root or to the 
complex verb stems V+ ang or V+in. The pragmatic formula of this affix is:

\[
\text{UT } ka-(V+ang/in) \; (A)
\]

Examples:

(5-70) a. ...putran Ida sedeng ka-(tangkil-in) olih I wong
\(\text{(UT}_1\text{)son GEN Hon PROG U}_1\text{- call on-VI PREP (A) human being}
\)

desa sami \(^{56}\) (H)
village all

'The son of (the priest) is called on by all the villagers'.

b. Palinggihe puniki ka-(karya-(n)ang)antuk I Puja (H)
\(\text{(UT}_1\text{) shrine DM U}_1\text{- build-VI PREP Pn}
\)

'This shrine is built by I Puja'.

The agents in both examples are preceded by the preposition olih or antuk 'by'. For further examples see also examples 4-62 above.

The following examples of \(ka-(V\text{-ang }/\text{-in})\) with the first or second person agent are unacceptable in SB (at least for the great majority of SB speakers).

(5-71) a. *Ida pranda ka-(iring-ang) olih titiang (H)
\(\text{(UT}_1\text{) Hon priest U}_1\text{- accompany-VI PREP (A) 1ST}
\)

'The priest is accompanied by me'.

b *Batune ka-(linggih-in) ring mrajan antuk Cokor Rau (H)
\(\text{(UT}_1\text{) stone U}_1\text{- put-VI PREP shrine PREP (A) Hon (you)}
\)

'The stone is put in the shrine by you'.

If the prepositions olih and antuk in the above examples are deleted, and the sentences are changed into bare-stem constructions, they will be grammatical and acceptable as in the examples below.

(5-72) a. Ida pranda iring-ang titiang (H).

b. Batune linggih-in Cokor Ratu ring mrajan (H).

\(^{56}\) DN, 2:12
e. \{V root-ang / -in \}-a₁

As been discussed in 5.11.2c the suffix -a₁ marks the UNDERGOER-TOPIC. It appears that the suffix -a₁ in this construction decreases the valency of the verb by one argument. Thus, while the suffix -ang / -in increase the valency of the verb by one, after the suffix -a₁ is further added to the verb stem, the valency of the verb decreases. The construction is followed by an agent which is usually preceded by a preposition.

The pragmatic formula of the \{V-ang /-in \}-a₁ is similar to that for the suffix -a₁ in section 5.11.2 above.

\[ \{V_{TRANS-ang /-in \}}-a₁ \]

Examples:

(5-73) a. Ipun dereng \{uning-in\}-a₁ antuk ida pranda (H)
   (UT₁) 3RD NEG know-VI -VD/U₁ PREP Hon (A) priest
   'She/ he is not known by the Hindu priest'.

b. Lemate sampun \{wali-ang\}-a₁ antuk pāñeroanne (H)
   (UT₁) knife PERF return-VI -VD/U₁ PREP (A) servant DEF
   'The knife is returned by the servant'.

It seems that the -a₁ form which is used in high level rarely occurs in the written form. In fact, the example (a) is the only one which is found from the stories I investigated.

\[ \{N root-ang /-in \}-a₁ \]

Example:

(5-74) I Made Gde \{santana-ang\}-a₁ baan rēramane (L)
   (UT₁) Pn Pn heritate -VI-VD/U₁ PREP (A) family 3RD
   'I Made Gde is given an inheritance by his family'.

5.12 Nominal affixes

In this study, the nominal affixes are also discussed in order to show the complete range of semantics of SB affixes. Nominal affixes of SB consist of prefix, suffix and confix. Nominal affixes are affixes which are used to nominalize verbs, adjectives or adverbs. However, nominal affixes can also occur with nouns.
5.12.1 Nominal Prefix

Only one true nominal prefix occurs in SB, namely *pa*- /paN-. This will be discussed below.

*pa*- /paN-

Prefix *pa*- is used when the verb root can have *ma*- verbal prefix and *paN-* is used when the verb root can have *N*- verbal prefix (see section 5.11.1b). There are not more than five verbs that can take both forms. According to Warna, *pa*- has an allomorph variant *pi*- . This has three phonological conditions: (a) *pi*- is never followed by nasal, (b) *pi*- is usually used when the stems beginning with vowel /o/ and (c) *pi*- never co-occurs with stems in /a/ (1983:32). However, based on the data taken from *Kamus Bali-Indonesia* (‘Balinese-Indonesian Dictionary’), it appears that *pi*- is just a free variation of the prefix *pa*- /paN-. The followings are some words which can occur with the prefix *pi*.\(^{57}\)

---

\(^{57}\) There are two other prefixes in SB, they are *a*- and *sa*-.

1. *a*-  

The prefix *a*- can be attached to nouns, classifiers as well as to numerals. The function of the prefix *a*- is like a quantifier, and it often means ‘one’.

Examples:

-  

*a. Baxang anoke beli roos a-bédik* (L) (Matégul tan Patali, 1977:7)  
give PTC older brother speech QUAN-little  

’Please say something to me’ [LIT. give me a stick of speech].

b.  

*Nasine amak kuluk a-payuk* (L)  
rice DEF eat dog QUAN - cooking pot  

’A dog eats one cooking pot of rice’.

2. *sa*-  

The prefix *sa*- is usually added to nouns. It conveys various meanings as discussed below.

2.1 *Sa*- prefixed to a duplicated noun means ‘all’, and sometimes is translated into English as ‘every’ as in the example (b).

Examples:

-  

*a. ...kauningan sa-indik-indikì Bèlog* (H) (Nang Bangsing tèken I Bèlog, 1971:8)  
tell ALL-problems Pn  

’...(he) was told (about) all I Bèlog’s problems’.

b.  

*Gaene tush ka carik sa-dina-dina* (L)  
job 3RD only PREP rice field EVERY-day  

‘His job is only working in the wet rice field everyday’.
pi + andēl > piandēl  'someone that can be trust'
pi + dadah > pidabdah  'the regulation'
pi + olas > piolás  'help'
pi + olih > pikolih  'the result'
pi + orah > piorah  'the announcement'
pi + tulung > piritulung  'help'

Prefix pa-/paN- nominalizes transitive verbs, and the resulting nouns refer to the action of the verbs.

Examples:

(5-75) a. Pa-wēwēh  I Made Rai (M)
      NOM- give  (2nd born) Pn

'The gift of I Made Rai'.

b. Ketu pa-bēsēn  bapan ne (L)
      DM  NOM- order  father  3RD

'That is the message of his/her father'.

c. Pa-dum  karang (L)
      NOM- divide  land

'The division of the land'.

d. Luung pēsan  paN-rēsēp  anak  cēnike  ēnto (L)
      good  INTEN  NOM- understand  people  little  DEF DM

There is a good understanding of that little child'.

2.2 Sa- prefixed to an adjective means 'superior'.
Example:
Sa-duēg-duēgne  Oka  ngadungan  warna, ada  masih  anak  hadcadin (L)
SUPER-clever  Pn  match  colour  exist  still  people  criticize

'(although) Oka is the most clever (man) at matching the colour, there are still people who criticize (him)'.

2.3 Sa- prefixed to a verb means 'at the same time/ soon after'.
Example:
...sa-rawuhe  ring  Bali... (H) (DN.2:15)
SOON -arrive  PREP  Pl name

'...soon after (his) arrival in Bali...'

58 'That little child's understanding is good'.

58
c. *Pi-olas jêrone trima tiang* (M)
   NOM-help 2ND DEF accept 1ST

'I accept your help'.

pa-/paN- with intransitive verbs

(5-76) *PaN-rawuh Bapak Gubernur kasambut antuk para warga*
    NOM- arrive Hon governor respect PREP PL people

*desane* (H)
    village DEF

'The arrival of the governor is respected by all the villagers'.

The prefix *pa-/paN-* nominalizes the intransitive verbs and conveys the meaning of 'someone who carries out the meaning of the verbs'.

Examples:

(5-77) a. *Bapa tusing ūak ngalih paN-ayah* (L)
    father NEG willing look for NOM- help

'Bapa does not want to look for a servant'.

b. *PaN-angonne jêmèt pèsan* (L)
    NOM- herd DEF diligent very

'The cowherd is very diligent'.

c. *Kewèh pèsan ngalih paN-ijèng* (L)
    difficult INTEN look NOM- guard

'It is very difficult to look for a guard'.

d. *Pa-dérêpe makèjang mareren sawireh*
    NOM- help harvest rice DEF all stop because

*hujane balès pèsan* (L)
    rain DEF heavy INTEN

'All the harvesters stop working, because of the heavy rain'.

pa- with adjectives

When the prefix *pa-* occurs with adjectives, it denotes instrument.

Examples:

(5-78) a. *Jangin timbæne pa-baat apang hæk hïlën*  ka yehe (L)
give bucket DEF NOM-heavy IRR able submerge
PREP water DEF

'Please give the bucket a *counterweight* so that it can be submerged into the water'.

b. *Bapa luas ka uma ngëjang pa-takut apang padine tusing amaha tëken këdïse* (L)
fathergo PREP wet rice field put NOM-scare IRR rice DEF NEG eat PREP bird DEF

'My father goes to the wet rice field to put up a *scarecrow* so that the rice will not be eaten by the birds'.

5.12.2 Nominal suffix

There is only one nominal suffix in SB, this is *-an2.*

---

59 There are two other suffixes in SB which can only be added to nouns. These are the genitive marker *-n* and the definite marker *-eine.*

1. *-n*

The suffix *-n* is a genitive marker in SB which can only occurs with a stem ends in a vowel. It marks the possesee item, not the possessor. However, if the stem ends in a consonant, *-n* is not needed. The two elements are simply conjoined.

Examples:

a. *...fur abua lanas bulu-n kampidïne akatik* (L) (Satua Nang Bangsing CONJ take the then fur-GEN wing 3RD CLASS tëken I Bêlog, 1971:7)

'...then (he) took one of the fur of the bird's wing'.

b. *...lanas tall-n punapine ane buin pâpkâk tiang* (M) (Men Muntig, then rope-GEN shelf REL again bite 1ST 1971:34)

'...then I bite again the rope of the shelf of the fire place'.

2. *-eine*

The suffix *-e* is realized as *-ne* if a word ends in a vowel. This suffix is only added to a noun to make the noun definite.

Examples:
This suffix is added to transitive and intransitive verbs to nominalize the verbs. It also can be added to nouns to denote a variety of derived notions, such as location, metaphorical comparison, or associated characteristic.

**Transitive verbs with -an2**

(5-79) a. *Ia nulengek nganiu * dum-an2 biunne 60 (L)  
3RD look up wait divide -NOM banana GEN 3RD

'He looked up waiting for his division of the banana.'

b. ...*kenken ja daar-an2 béline, jarane*  
what COM eat -NOM elder brother horse DEF

*musti are keto baang* 61 (L)  
should REL DM give

'...whatever your food is, the horse must be given some as well'.

When -an2 is added to transitive verbs, it may signify tools or instruments.

Examples:

(5-80) a. *Dija kikih-an2-ne, me ?* (L)  
where grate -NOM DEF mother

'Where is the grater, mother?'

b. Lamun bapa tulus ka Badung ingélang měli sangih-an2 (L)  
if father decide PREP Pl name remember buy sharpen -NOM

'If you (father) decide to go to Badung, please remember to buy a sharpener'.

---

a. *Tukad-e linggah pésan* (L)  
river DEF wide INTEN

'The river is very wide'.

b. *Raksasa-ne mamanai géde* (L)  
giant- DEF eye big

'The giant has big eyes'.

60 Satua 1 Lutung têken Kekua
61 Nang Bangsiing têken 1 Bêlog, 1971:12
Intransitive verbs with -an2

(5-81) a. I Putu ngalih tēgak-an2 (L)
    Pn (1st born) look for sit -NOM

'I Putu is looking for a seat'.

b. Ibi sanja liu anak wēka di sangkēp-an2-ne (L)
    yesterday evening many people come PREP attend62 -NOM DEF

'Many people came to the meeting yesterday evening'.

Nouns with -an2

-an2 in the examples below signifies location.

Examples:

(5-82) a. ...sasubane jarane jumah-an2 63 (L)
    ...after horse DEF house -LOC

'...after the horse is inside the house'.

b. ...lantas macēpol langgat-an2 punapine augēl 64 (L)
    ...then break shelf -LOC shelf of the fire DEF a part

'...then a part of the shelf of the fireplace broke'.

c. I Bapa mara kēma ka sēkolah-an2 ngajak pianake (L)
    father just go PREP school -LOC PREP child DEF

'Father has just gone to school with the child'.

d. Umah tiange nampēk prēbēkēl-an2 65 Dangin Puri (M)
    house 1ST near area -LOC Pl name

'My house is near the village office of Dangin Puri'.

The suffix -an2 in the following examples also marks a noun, signifying a concept associated with N (referred to below as -LIKE). These forms can function as simple stative predicates with no copula, but formally they are still nominals.

62 Sangkēp means to attend the meeting
63 Satua Nang Bangsing tēken I Bēlog, 1971:10
64 Men Muntig, 1971:33
65 Area of prēbēkēl (village office)
Examples:

(5-83) a. *Batis* tiange sēmut-an₂ (L)
foot 1ST ant-LIKE

'My feet feel as though they are going to sleep'.

b. *Ada* adēng-an₂ abēsik di jagutne (L)
exist charcoal- LIKE CLASS PREP chin 3RD

'There is a beauty mark on her chin'.

5.12.3 Nominal confixes

There are two nominal confixes in SB. They are *pa-*-/paN-...-an₂ and *ka-*...-an₂.

a. *pa-*-/paN-...-an₂

This confix is added to a verb to nominalize the verb.

Examples:

(5-84) a. *Pa-tingal-an₂* bēline barak (L)
NOM- see -NOM elder brother red

'Your eyes are red'.(*Bēli*=you)

b. *Waluh* pa-lingga-h-an₂ Ida ne kantun kacingak
pumpkin NOM- sit -NOM Hon 3RD still see

ngambang ring sēgarane ⁶⁶ (H)
float PREP sea DEF

'The pumpkin is his vehicle and is seen still floating on the sea' (LIT. place to sit).

c. *Ida* wentēn ring pa-mērēm-an₂ (H)
Hon 3RD exist PREP NOM- sleep -NOM

'She/ he is in the bedroom'.

b. *ka-...-an₂

This confix nominalizes verbs, adjectives or adverbs. However, when it is added to nouns it produces new nouns to denote place or location.

---

⁶⁶ DN, 1:6
**ka-...-an2 with verbs**

examples:

(5-85) a. *Ida* ka-turun-an₂ pranda Kumenuh (H)
Hon NOM-come down-NOM priest Pl name

'She/he is the descendant of the priest from Kumenuh'.

b. *Putri* ka-kasih-an₂ bēlin tiange (M)
Pn NOM-love-NOM elder brother GEN 1ST DEF

'Putri is my brother's girl friend'.

**ka-...-an2 with adjectives**

Examples:

(5-86) a. *I Bandesa Mas* tan mari amuji-nuji ka-hotama-an₂ Ida
TL Pn NEG CONT appreciate NOM-superior -NOM Hon

*pranda* ⁶⁷ (H)
priest

'I Bandesa Mas always appreciated the superiority of the priest'.

b. *Tusing ada anak mati ngaba* ka-sugih-an₂ (L)
NEG exist people die bring NOM-rich -NOM

'Nobody dies bringing wealth'.

c. *Putu* demên pêsan ngadu ka-jëgeg-an₂ (L)
Pn 1st born like INTEN compete NOM-beautiful -NOM

'Putu likes beauty competition'.

**ka-...-an with nouns**

Example:

(5-87) *Ida* malingih ring ka-datu-an₂ (H)
Hon 3RD live PREP LOC-king-LOC

'She/he lives in a palace'.

---

⁶⁷ DN, 3:7
5.13 Pronominal system in Standard Balinese

The SB pronominal system will be illustrated in the following diagram.

5.13.1 Free forms

(a)

<table>
<thead>
<tr>
<th>Persons</th>
<th>Levels</th>
<th>Sor</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST Person</td>
<td>tiang</td>
<td>tiang</td>
<td></td>
<td>icang</td>
</tr>
<tr>
<td>2ND Person</td>
<td>cokor ratu/ dewa</td>
<td>-</td>
<td>-</td>
<td>cai</td>
</tr>
<tr>
<td>3RD Person</td>
<td>ida</td>
<td>ipun</td>
<td>dane</td>
<td>ia</td>
</tr>
</tbody>
</table>

All the pronouns in diagram (a) above can function as ACTOR and UNDERGOER-TOPIC or as ACTOR and UNDERGOER-FOCUS. They can also function as possessive pronouns when they occur with nouns, except for the third person pronoun ia. It should be noted that in SB, the pronominal system is not marked for number and gender.

a. As ACTOR and UNDERGOER-TOPIC or as ACTOR and UNDERGOER-FOCUS

Examples:

(5-88) a. ...*tiang tan manggihin sira-sira* 68 (M)

(AT) 1ST NEG see who

'...I did not see anyone'.

b. *Nasine suba amah cai* ? (L)

rice DEF PERF eat (AF) 2ND

'Did you eat the rice?'.

c. ...*maris Ida* mapamit 69 (H)

then (AT) 3RD Hon  go

'...then she/he goes...'

---

68 Raden Galuh Gde:4
69 DN, 7:9
b. As possessive pronouns

Examples:

(5-89) a. Pianak tiang-e luas ka Jawa (M)
    child 1ST POSS DEF go PREP Pl name

    'My child goes to Java'.

b. Wangjron Cokor Ratu kantun nunas (H)
    servant GEN 2ND POSS still eat

    'Your servant is still eating'.

5.13.2 Clitic forms

Only the third person pronoun has post-clitic form in SB which functions as a possessive pronoun. This is shown in diagram (b) below.

(b)

<table>
<thead>
<tr>
<th>Clitic form</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons</td>
<td>Singgih</td>
</tr>
<tr>
<td>3RD Person</td>
<td>-ida</td>
</tr>
</tbody>
</table>

As Possessive pronouns

Examples:

(5-90) a. Gigi-nne putih sajan (L)
    teeth 3RD POSS white INTEN

    'Her/ his teeth are very white'.

b. ...putran-ida sane mabiang saking Daha 71 (H)
    son GEN 3RD POSS REL mother form Pl name

    '...his son whose mother is from Daha'.

70 The post clitic -ne is added to a noun ending in a consonant. -ne > -nne , for a noun ending in a vowel. For instance, bapa + ne > bapanne 'her/ his father'; batis + ne > batisme 'her his feet'.

71 DN, 3: 8-9
CHAPTER VI
LEXICON AND MORPHOLOGICAL PROCESSES IN MOUNTAIN BALINESE

This chapter will analyze the function and meaning of verbal affixes in MtB which are different from those in SB. The MtB nominal affixes will not be discussed in detail, because they are all the same as in SB.

As Granoka et al. (1984-1985:16) have pointed out there are no speech level phenomena in MtB. This may be due to the fact that those villages are very isolated and therefore have less contact with other people outside the villages. All the words which are used in everyday conversation in MtB belong to either neutral or low level in SB. Some of the OB lexical items which are no longer used in SB are still used productively in MtB villages. However, the functions and meanings of MtB affixes are closer to SB than to OB.

As there are many similarities in morphological processes between MtB and SB, only the differences will be discussed here. This chapter begins with a discussion of the MtB lexicon.

6.1 Mountain Balinese lexicon

If the MtB lexicon is compared to OB and SB, it appears that some OB lexical items are still used productively in everyday conversation in MtB but not in SB. By my count, of the 1709 OB words, in Goris' word list (1954), around 1340 (78.5%) still occur in MtB, but only 1300 words (77%) in SB. Most of the OB vocabulary items which do not occur in MtB and SB are special nouns, e.g. titles for a functionary, proper names and names of coinages, animals, taxes and villages. Some sample items in the OB lexicon which occur in MtB but not in SB are listed below.

<table>
<thead>
<tr>
<th>OB</th>
<th>MtB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>cadar</td>
<td>ðedar</td>
<td>dog</td>
</tr>
<tr>
<td>dakar</td>
<td>dakër</td>
<td>a kind of bird</td>
</tr>
<tr>
<td>kabayan</td>
<td>kubayan/ baan/ kēbahēn</td>
<td>a title</td>
</tr>
<tr>
<td>kēdi</td>
<td>kēdi</td>
<td>hermaphrodite</td>
</tr>
<tr>
<td>kuyur</td>
<td>kuyuh</td>
<td>a fish</td>
</tr>
<tr>
<td>sahing</td>
<td>sahing</td>
<td>widow</td>
</tr>
</tbody>
</table>


6.1.2 Pronouns

aku  aku¹  I
-ku  -ku  1ST person post-clitic
-mu  -mu  2ND person post-clitic
-fia  -fia  3RD person post-clitic

6.1.3 Verbs

bobab  nibab  lie
habab  habhab  to cut
hafang  hafang  capture

6.2 Morphophonemic alternants in Mountain Balinese

Most of the morphophonemic alternants of MtB are similar to those of SB; those which are different from the SB are illustrated below.

6.2.1 Allomorphic variants of -ne

The third person marker -ne has allomorphic variants -ane when attached to a word ending in a vowel and -nane when attached to a word ending in consonant. These variants were recorded only in the MtB village of Bēlantih.

Examples:

a.  {adi} + ne > adinane  'his/ her younger brother or sister'
    {baju} + ne > bajunane  'his/ her cloth'
    {meme} + ne > memenane  'his/ her mother'
    {kaka} + ne kakanane  'his/ her elder brother'

b.  {sekolah} + ne > sekolahane  'his/ her school'
    {nanang} + ne > nanangane  'his/ her father'
    {timpal} + ne > timpalane  'his/ her friend'

6.2.2 Nasal insertion rule

In MtB, n is inserted when a word ends in a vowel and is followed by a suffix which also begins with a vowel, such as -ang , -in , or -an as in the examples (a) below. However, y is inserted for certain words which have the final vowel /a/ followed by suffixes beginning with the vowel /a/ e.g. the suffixes -ang or -an as in the examples (b).

¹ This form is found in SB dictionaries but is virtually never used.
Examples:

a. mai + ang > main ang 'be closer'
baju + ang > bajun ang 'put a cloth on someone'
isi + in > isin in 'fill with something'
gula + in > gulan in 'put sugar on something'
b. sanja + an > sanjay an 'in the afternoon'
rasa + ang > rasay ang 'to feel something'

The insertion of intervocalic n and y was found to vary from person to person. The items above also show that some people say: gulain, sanjaan, or rasaang.

6.3 Inventory of Mountain Balinese affixes

Affixes are used very productively in MtB. Almost all of them appear to be similar to SB affixes. Fifteen affixes were recorded which are still used in MtB. They can be categorized as verbal and nominal affixes and are as follows.

Verbal affixes

Prefixes

Prefixes (Dialectal variants)

<table>
<thead>
<tr>
<th>Prefix</th>
<th>(Dialectal variants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ma-</td>
<td>mê- (at the villages of Pêdawa and Cêmpaga)</td>
</tr>
<tr>
<td>N-</td>
<td>kê- (at the villages Pêdawa and Cêmpaga)</td>
</tr>
<tr>
<td>ka-</td>
<td></td>
</tr>
<tr>
<td>maka-</td>
<td></td>
</tr>
<tr>
<td>pah-</td>
<td>(Pêdawa, Cêmpaga, Bêlanthi and Sukawana) but as (pah- Numerals)-ên (in the MtB village of Tigawasa)</td>
</tr>
</tbody>
</table>

Suffixes

Suffixes

<table>
<thead>
<tr>
<th>Suffix</th>
<th>(Dialectal variants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ang</td>
<td>êng (only occurs at the village of Tigawasa)</td>
</tr>
<tr>
<td>-in</td>
<td>a at the villages of Cêmpaga and Pêdawa. However, -ña (only occurs at the village of Tigawasa)</td>
</tr>
<tr>
<td>-a</td>
<td></td>
</tr>
<tr>
<td>-an₁</td>
<td></td>
</tr>
</tbody>
</table>

Confixes

Confixes

<table>
<thead>
<tr>
<th>Confix</th>
<th>(Dialectal variants)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ma---an₁</td>
<td>mê---an₁ (at the villages of Pêdawa and Cêmpaga)</td>
</tr>
<tr>
<td>ka---an₁</td>
<td>kê---an₁ (at the villages Pêdawa and Cêmpaga)</td>
</tr>
</tbody>
</table>
Complex affixations
ma-\{V root -ang/-in\}
N-\{V root -ang/-in\}
N-\{N/Adj/Adv root-ang/-in\}
\{V root-ang/-in\}-añ

Nominal affixes

Prefix
pa- paN

Suffix
-an\textsuperscript{2}

Confixes
pa-...-an\textsuperscript{2}
ka-...-an\textsuperscript{2}

6.3.1 Verbal affixes

The MtB verbal affixes, such as the prefixes ma- and N-, the suffixes -ang, -in, the confix ma-...-an\textsuperscript{1}, and complex verbal affixes have the same function, meaning and distribution as in SB. MtB affixes which have different forms, distributions or functions and meanings from SB are as follows.

a. ka-

This is a verbal prefix in SB which normally marks the UNDERGOER_TOPIC when added to transitive verbs (see section 5.11.1c). Although the agent is not present in the clause, it is understood that the agent is the first or the second person. This construction is rarely used in everyday conversation in MtB. When speakers want to emphasize that it is the first or the second person who does the action, they prefer to choose the bare-stem construction. The prefix ka- in MtB is similar to that of SB which is used in low level (cf. example (5-43 above)). It should be noted that the prefix ka- which has the third person agent does not occur in MtB. Normally the suffix -a or -añ is used instead if the agent is the third person (see 6.3.1b below). The pragmatic formula of the prefix ka- is:

\[
\text{AT} \quad \text{ka-} \quad \text{V}
\]
or

\[
\text{ka-} \quad \text{V} \quad \text{AT}
\]
Examples:

(6-1)  
\[ \text{a. } \text{Selane} \quad \text{ka-tugèl} \]  
\((\text{UT}_{1}) \) sweet potato DEF \( \text{U}_{1} \)-cut  
'Sweet potatoes are cut (by me or you)'.

\[ \text{b. } \text{Ku pantèg nipine} \]  
\( \text{U}_{1} \)-hit \((\text{UT}_{1})\) snake DEF  
'The snake is hit (by me or you)'.

If the examples above are changed into bare-stem constructions, they become:

(6-2)  
\[ \text{a. } \text{Selane} \quad \text{tugèl-ku} \]  
\((\text{UT}_{1})\) sweet potato \( \text{U}_{1}\text{A}_{1} \) cut -(\( \text{AF}_{1} \)) IST  
'I cut the sweet potatoes'.

\[ \text{b. } \text{Pantèg-mu nipine} \]  
\( \text{U}_{1}\text{A}_{1} \) hit-(\( \text{AF}_{1} \)) 2ND \((\text{UT}_{1})\) snake DEF  
'You hit the snake'.

b. -a and -ňa

Both suffixes have a similar distribution. The only difference between them is in the dialect variation. -a which is used in the villages of Pédawa, Cempaga, Bélantih and Sukawana; whereas -ňa is used in the village of Tigawasa. -a and -ňa mark the UNDERGOER-TOPIC and always occur with semantically transitive verbs. Constructions with the -a and -ňa forms usually have third person agents whether singular or plural and the agents are normally indicated by prepositional phases ayang, ken, and bēhan 'by'. MitB -a and -ňa are the same as the suffix -a1 in SB. The pragmatic formula of this suffix is:

\[ \text{UT} \quad \text{V-ňai-a} \]

The following examples are from the village of Tigawasa.

(6-3)  
\[ \text{a. } \text{Baju窄ane} \quad \text{jahit-ňa} \quad \text{ken} \quad \text{menešane} \]  
\((\text{UT}_{1})\) cloth 3RD sew -U1 PREP (A) mother 3RD  
'Her/ his clothes are sewn by her/ his mother'.
b. *Umahene běli-ña ayang nanangkune*
   (UT₁) house DEF buy -U₁ PREP (A) father 1ST

'This house is bought by my father'.

The following examples are from the villages of Pědawa, Cěmpaga, Bělantih and Sukawana.

(6-4) a. *Nasine amah-a ken cēdare*
   (UT₁) rice DEF eat -A₁ PREP (A) dog DEF

'The rice is eaten by the dog'.

b. *Batiswange caplok-a ken cicing ibo*
   (UT₁) foot 1ST bite -U₁ PREP (A) dog 2ND

'Very foot is bitten by your dog'.

c. *Bajunane jahit-a běhan memenane*
   (UT₁) cloth 3RD sew -U₁ PREP (A) mother 3RD

'Her cloth is sewn by her mother'.

d. *Rinun opak-a ken bapanne*
   (UT₁) Pn blame -U₁ PREP (A) father 3RD

'Rinun is blamed by her father'.

c. *pah- or {pah- NUMERALS}-ën*

The *{pah- numerals}-ën* always occurs together with the suffix -ën in the village of Tigawasa which marks the UNDERGOER-TOPIC construction. However, in the villages of Pědawa, Cěmpaga, Bělantih and Sukawana, *pah- never occurs with the suffix -ën although it is added to numerals. This is similar to that of SB (see section 5.11.1e). The examples (a) and (b) are taken from the village of Tigawasa, and example (c) is from Pědawa and Bělantih. The pragmatic formula of this affix, especially for examples (6-5a and b.) is:

\[
\begin{array}{|c|c|}
\hline
\textit{pah-NUMERALS}-ën & \text{UT} \\
\hline
\end{array}
\]

or

\[
\begin{array}{|c|c|}
\hline
\text{UT} & \textit{pah-NUMERALS}-ën \\
\hline
\end{array}
\]

The example (a) is from Pědawa, (b) is from Cěmpaga, (c) is from Bělantih and (d) is from Sukawana.
The pragmatic formula for examples (6-5c) see section 5.11.1d.

Examples:

(6-5) a. \[\text{Pah-dua}-\text{en mên padine}\]
   \[\text{U}_1\text{-divide two -U}_1\text{ PTC (UT}_1\text{) rice DEF}\]
   'The rice should be divided into two'.

b. \[\text{Tarakáane uba \{pah-nêm\}-en}\]
   \[\text{(UT}_1\text{) land 3RD DEF PERF U}_1\text{-divide six -U}_1\]
   'The land had been divided into six'.

c. \[\text{Nah pah-tlu ba dumanne}\]
   \[\text{yes U}_1\text{- divide three PERF (UT}_1\text{) divide NOM 3RD}\]
   'Yes, the portions should be divided into three'.

6.4 Mountain Balinese pronominal clitics

The MtB pronominal clitics, which are categorized as free forms and post-clitics, are illustrated in the following diagram.

<table>
<thead>
<tr>
<th>Person</th>
<th>Free form</th>
<th>Clitic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB Villages</td>
<td>T</td>
<td>P</td>
</tr>
<tr>
<td>1ST person</td>
<td>aku</td>
<td>aku</td>
</tr>
<tr>
<td>2ND person</td>
<td>ko</td>
<td>ñngko</td>
</tr>
<tr>
<td>3RD person</td>
<td>ia</td>
<td>ia</td>
</tr>
</tbody>
</table>

[Key: T= Tigawasa; P= Pêdawa; C= Cêmpaga; B= Bêlantih; S= Sukawana].
6.4.1. Free form

In MtB, the free form pronouns function as ACTOR-TOPICS and UNDERGOER-TOPICS, depending on the verb. As in SB, the pronominal system in MtB is not marked for number and gender.

Examples:

(6-6) a. \textit{Aku N-gēlah celeng gēde kud}  
\textit{(AT)} \textit{iST} \textit{A}_{i}U_{j}\text{-have} \textit{(UF)} \textit{pig} \textit{big} \textit{one}  

'I have a big pig'.

b. \textit{Ko japa N-gaga jani}  
\textit{(AT)} \textit{j} \textit{2ND} \textit{where A}_{i}\text{-rice} \textit{now}  

'Where are you going to plant the rice now'.

c. \textit{Ia Ø-tigig-ku}  
\textit{(UT)} \textit{3RD} \textit{U}_{i}\text{-A}_{j}\text{-hit-(AF)} \textit{1ST}  

'I hit him'.

6.4.2. Clitic form

A clitic form in MtB can have two functions. Firstly, when it is attached to transitive verbs it functions as an ACTOR-FOCUS. Secondly, when it is attached to common nouns, it is as a possessive pronoun.

a. \textbf{As ACTOR-FOCUS}

(6-7) a. \textit{Pohe alap-ku ibi}  
\textit{mango} \textit{DEF} \textit{pick -1ST (AF)} \textit{yesterday}  

'I picked up the mangoes yesterday'.

b. \textit{Pulpenne kal gen-mu nulis?}  
\textit{pen} \textit{DEF} \textit{FUT} \textit{use -2ND (AF)} \textit{write}  

'Is this pen you will use to write with?'.

---

3 In SB, these examples become:

a. \textit{Icang ngēlah celeng gēde aukud. (L)}

b. \textit{Cai dijo mañi jani. (L)}

c. \textit{Ia tigig icang. (L)}
b. As possessive pronouns

Examples:

(6-8) a. **Ading-kune**
   younger sibling-1ST DEF POSS
   **jëmët sajan**
   quiet INTEN

   'My sister is very quiet'.

   b. **Bëhang ja aku ūlīh bajung-mune**
   give
   COM 1ST borrow clothes-2ND DEF POSS

   'Please let me borrow your clothes'.

   c. **la was ngaga ayang meme-ñane**
   3RD go rice PREP mother-3RD DEF POSS

   'She/he goes to the dry rice field with her/his mother'.

   All the possessive pronouns in the examples above are followed by the definite article *ne*. It appears that in MtB all the possessive pronouns are definite which are always indicated by the definite marker *ne*.

---

4 In SB, these examples become:
   a. **Pohe alap icang ibi.** (L)
   b. **Pulpëne laker anggon cai nullu?** (L)
   c. **Lalipine lantas pantiŋ-g-a.** (L)

5 In SB, these examples become:
   a. **Adin icange jëmët pesan.** (L)
   b. **Baang ja icang ūlīh bajun caine.** (L)
   c. **Ia luas mañi ajak memene.** (L)
CHAPTER VII
MORPHOLOGICAL PROCESSES IN OLD BALINESE

In this chapter, OB affixes will be treated along the lines developed in Chapter 5 for SB. In OB, there is frequent zero anapora. It appears that the NP which occupies the preverbal position is not indicated in the texts when it occurs for the second time, but is understood from the discourse. Brown and Yule (1983:204) state that 'the relationship of reference is taken to hold between expressions in a text and entities in the world, and that of co-reference between expressions in different parts of a text'. In OB inscriptions, when the text refers to the same NP in the previous discussion, it is usually omitted. This is of course one of the basic determinants of a TOPIC NP as developed in section 5.6.2. The fact that TOPIC can often be identified contextually in this way, and that ACTOR and UNDERGOER can be determined in a straightforward way from the meaning of a clause, makes analysis of OB passages using the present framework especially attractive. If, the more traditional notions of 'subject' and 'object' were used instead, in many cases identifying these categories in OB passages would lead to problems.

The discussion of OB affixes will be divided into OB affixes which no longer occur in MB, and OB affixes which still exist and are productive in MB. As will be noted below, it appears that few morphological changes occur between AD 882 to AD 1050. The morphophonemic alternants of OB will precede the discussion of 'Function and Meaning of OB Affixes'.

OB does not show speech levels. As mentioned in Chapter 2, there are many Sankrit words occurring in the OB inscriptions and OB affixes can occur with Sankrit and Old Javanese (hereafter OJ) words. It should be noted that Sankrit and OJ words have usually undergone OB morphophonemic processes.

7.1 Morphophonemic alternants

The discussion of OB morphophonemic alternants is divided into:

1. Nasal assimilation
2. Sandhi
3. Free morphophonemic variation

---

1 According to Halliday and Hasan (1976:18), '(relations) which look back in the text for their interpretation are called anaphoric relations'.

7.1.1 Nasal assimilation

As in MB, N- undergoes morphophonemic alternations according to the initial phonemes of the verb to which it is affixed. The morphophoneme N- can be attached to the verbal prefix ma- as well as to the nominal prefix pa-. The complete range of alternations of N- is difficult to trace because of the limited corpus. However, the N- at least has the following realizations.

a. N- as homorganic nasals are realized as follows:

1. As /n/ before bilabials /b/, /p/ and /w/

Examples:

104 2a1 maN + {bhar} > mamaren
002 2a1 maN + {buru} > mamuru
203 1b 4 paN + {bli} > pamli
104 3b2 maN + {prili} > mamrih
104 3a 2 maN + {pukul} > mamukul
003 1b 4 maN + {wantilan} > manantilan

've to give'
've to hunt'
'payment'
've to make an effort'
've to hit'
've to make a pavilion'

2. As /n/ before apicals /t/, and as /n/ before Sanskrit words beginning with /d/.

Examples:

108 1b 6 maN + {tanduk mayong} > mananduk mayong 'to make something out of a stag’s horn'
304 5a 4 maN + {tögër} > manögerang
201 1a 5 maN + {tuduh} > manuduh
209 4a 4 paN + {dakša} + yan > panaškšayan

've to make something higher'
've to indicate'
'inscription' (cf. example 004 4a a below)

3. As /n/ before laminal /s/3

Examples:

003 2b 4 maN + {sumbah} > mañumbah
003 2b 4 paN + {sungsung} + an > pañungsungan
001 1b 1 maN + {surat} + ang > mañuratang

'pay homage'
'place of worship'
've to write'

---

2 In this chapter, OB material is documented by designations like 002 2a 1 identifying the inscription, face and line according to the numbering system of Gonor (1954).

3 In the OB corpus, a root beginning with /c/ that occurs with maN- is not found. However, apparently an example from an inscription shows the following process: as /nt/ before /c/. Example: 431 9a 2 aN + {cacak} > ašacak 'to cut in pieces'.
4. As /ng/ before dorsal /k/

Examples:

004 2b 1 maN + {kuning} + in > mangunining 'to make something yellow'
304 4a 1 paN + {kiansan} + in > panginsanin 'place to keep something(?)

b. N- as non-homorganic including prevocallically

1. Vowels

Examples:

004 3a 1 maN + {amah} > mangamah 'to eat'
002 2b 4 paN + {arung} > pangarung 'tunnel maker'
001 2a 1 maN + {ikêt} > mangikêt 'to weave'
003 3b 5 paN + {isi} + in > pangisin 'content'

2. Consonants

Examples:

004 3a 2 paN + {dakṣa} + yan > pangdakṣayan 'inscription' (cf. example 209 4a 4 above)
101 2 4 maN + {darat} > mangdarat 'opening up the land'
205 A 6 paN + {diri} > pangdiri 'alone'
102 1b 4 maN + {dirus} > mangdirus 'to have a bath'
003 2b 3 paN + {dulur} > pangdulur 'the companion'
004 2b 3 maN+{gurumandi}+yan > manggurumandyang 'to make'
302 3a 1 maN + {hyang} > manghyang 'to beg'
207 1a 2 paN + {harar} + yan > panghlaryan 'side(?)'
304 4b 1 paN + {jakan} + ën > pangjakanen 'cooking utensil'
003 2a 3 maN + {jwang} + in > mangjwangin 'to take'
001 3a 1 paN + {lapu} + an > panglapuan 'court of justice'
101 7 1 maN + {larang} + in > manglarangin 'to forbid'
001 2a 1 maN + {nila} > mangnila 'dye in blue'\(^4\)
001 2a 1 maN + {rapuh} > mangrapuh 'burn lime'

There are some variations of morphophoneme N- realization.

a. In the corpus, N- is realized as /n/ before /d/ only with the word dundun.

Examples:

201 3a 4 maN + {dundun} > manundun 'to wake up'

---

\(^4\) Cf. nila 'dark'.
\[104\text{ b 2 } paN + \{dun\} + an > panundun \]
'someone who does the job to wake up people in a village'

b. The following example appears not to follow the rule (a. 1) above.

Example:
\[101\text{ 2 8 } maN + \{bhar\} + an > mangbharen \]
'to give'

The evidence above shows that the nasal assimilation rule is not complete by the eleventh century AD. It appears that \(ng\) may be the basic form of, or source for, \(N\).

### 7.1.2 Sandhi

Sandhi is a Sanskrit term meaning 'joining together'. This process also occurs in OB. It is traditionally divided into internal and external sandhi. External sandhi has been described in Sanskrit as the joining of the final and initial vowels of two words. Internal sandhi applies to the final sound of verbal roots and nominal stems when followed by certain suffixes or terminations. Rules of internal sandhi operate within words. In this thesis, the term 'sandhi' is used in a wider sense which includes sound systems as well as orthography. Note that for OB the distinction of 'internal' and 'external' is for convenience only, since the same rules apply in both cases.

#### Internal sandhi

Combination of final and initial vowels

a. Vowel lengthening

Examples:
\[104\text{ b 3 } ka + \{anak\} + an > kānakan \]
'members (of a village)'
\[302\text{ 3a 3 } pa + \{alap\} + n > pālapknan \]
'gathering'
\[304\text{ 4b 2 } sa + \{at\} + a > sātak \]
'two hundred'

It should be noted that the lengthening of the other vowels /i/ and /u/, /e/, and /o/ is not found in the corpus.

b. /i/ + /a/ becomes /ya/

Examples:
\[001\text{ 2b 4 } ka + \{jadi\} + an > kajadayan \]
'intended for'
\[003.2b 1 \text{ pa } + \{ga\} + an > paga\text{ndyan} \]
'a weapon'
\[005\text{ 6 } ki + \{bhat\} + an > kibhakhtyan \]
'respect'
In another case, /u/ + /a/ > /e/ found from the corpus occurs only with the word bhari.

Example:

106 3a 1 maN + {bhari} + an > mangbharen

'to give'

c. /u/ + /a/ becomes /wa/

Example:

110 1b 5 ka + {datu} + an > kadatwan

'palace'

Such changes, however do not always occur for suffixes beginning with /a/. For instance, the vowel /u/ is sometimes maintained when it is attached to a suffix beginning with /a/. Thus, I found panglapwan (003 4a 3), varies with panglapuan (001 3a 1) 'court of justice'; katahwan (104 3b 3) varies with katahuana (105 1b 6) 'to be known'
d. Insertion of /n/ and /y/ between two /a/ vowels, hence -ana - and -aya -.

They can occur with Sanskrit as well as native Balinese nouns.

/n/ is inserted

Examples:

001 1b 3 par + {tapa} + an > partapanan

'hermitage' (cf. Sanskrit tapa).

001 2b 4 -y in-fix+{punya} + an + ku > pyunyan + ang ku > pyunyanangku

'my donation'

105 1b 6 par+{byaya} + an > parbyayan

'the expenditure'

/y/ is inserted

Examples:

104 2a 4 {argha}+ang ña > arghayangña

'value'

001 1b 1 pir+{cinta}+an + ku > pircintayangku

'my concern'

004 3a 2 paN + {dakṣa}+ an > pangdakṣayan

'inscription'

002 3a 3 pa+{danga} + an + ña > padangayañña

'cooking utensils'

106 1b 3 ka+{rakṣa} + an + ña > karaksayañña

'protected territory'

002 1b 2 {sima}+ang + ña > simayangña

'the boundary'

102 1b 5 ka + {sima} + an > kasimayan

'bordered territory'

As shown in the examples above (indicated by bold face), in some cases, /n/ > /ng/ before /k/, and n > ñ in certain environments.
External sandhi

There are not many external sandhi found in the texts because the OB inscriptions are prose, not a poetical work like OJ kakawin.

Examples:

005 2  \( \{ \text{tani} \} + \{ \text{ada} \} > \text{tanyada} \)  \('\text{not exist}'\)
002 2a 4  \( \{ \text{ana} \} + \{ \text{ada} \} > \text{anāda} \)  \('\text{if it exists}'\)
208 2a 6  \( \{ \text{twā} \} + \{ \text{anak} \} > \text{twānak} \)  \('\text{that person}'\)

In some cases, the vowel lengthening rule fails

Example:

304 1b 2  \( \{ \text{hēntwa} \} + \{ \text{anak} \} > \text{hēntwanak}^5 \)  \('\text{that person}'\)

Old Javanese comparison

Many external sandhis are found in the OJ kakawin. The OJ kakawin derives from Indian metres. The metric rules of kakawin are fixed, for instance: as stated by Zoetmulder (1983:121), a stanza of Bhāratayuddha in Prthvītala-metre consists of four lines having the metric pattern: 0 – 0 1 0 0 – 1 0 – 0 1 0 0 – 1 0 – 1 0 -- 17 syllables. The sign 0 stands for a metrically short, and the sign – for a metrically long syllable. The vertical lines separate groups of three syllables. Because of this pattern, very often two words are joined together to obtain a metric fit. The following examples are from Zoetmulder (1983:121).

Examples:

\textit{Mūlat mara sang Arjunaśēmu kamānusān kasrēpan}
\textit{ri tingkah i musuh nira n pada kadang taya wwang waneh}
\textit{hana pwa ng anak ing yayah mwang ibu len uwānggēh paman}
\textit{makādi npa Šalya Bhūṣha sira sang dwijānggēh guru}^6

Three external sandhi are found in the texts above. They are indicated by bold face:

a. Arjuna + asēmu > Arjunaśēmu  \('\text{like Arjuna}'\)
b. uwa + anggēh > uwānggēh  \('\text{being an uncle}'\)
c. dwija + anggēh > dwijānggēh  \('\text{being a brahman}'\)

\(^5\) It was found that \{hēntwa\} varies with \{hēnto\} in 304 4a 4.
\(^6\) Zoetmulder (1983:146) translate the text as:
'\text{When Arjuna looks around, he looks very suprised and sad, because all the enemies are his relatives, he knows everyone among them. Some of them are his cousins from his father and his mother, and his uncle Šalya, then Bhūṣha and Droṇa, the brahman who used to be his teacher.'
7.1.3 Variant of the infix -um-

The infix -um- has an allomorphic variant m-. -um- appears to be as the prefix m- before roots beginning with vowels and consonant /p/. As the OB data are limited, it should be noted that the infix -um- which has an allomorphic variant m- was not found before roots beginning with the consonants /b/ and /w/. Apparently, OJ shows similarities with those of OB. (See Old Javanese comparison below.)

Examples:

108 1b 2 -um- + {idi} > midih 'ask'
002 1b 3 -um- + {pat} > mati 'die'
102 1b 6 -um- + {panek} > maneke 'to climb'
209 4a 2 -um- + {pupul + ang} > mupulang 'to gather'
001 1b 4 -um- + {usir + ang} > musirang 'take refuge'

Old Javanese Comparison

According to Zoetmulder and Poedjawijatna (1961: 60-61), the infix -um- ~ m- occurs before roots beginning with vowels and consonants /b/, /p/, /m/ and /w/.

Examples:

-um- + {iket} > miket 'to tie'
-um- + {unggu} > munggu
-um- + {balik} > malik 'to turn'
-um- + {pangan} > mangan 'to eat'
-um- + {wawa} > mawa 'to bring'

7.1.4 Free morphophonemic variations

Free variations occur with certain OB affixes. They are:

a. -an ~ -yan
b. ha- ~ a-
c. ka- ~ ki-
d. par- ~ pa-

Free variation refers to two alternating morphemes without any consequent change in the meaning of the word.

Examples:

003 2b 5 kabakatan 'be affected; be charged (with tax)'
003 2b 4 kabakatyun
7.2 Inventory of Old Balinese affixes

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<td>maN- {N/V root-in/-ang}</td>
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<tr>
<td>pi- / ping- {N/V root-in/-ang}</td>
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<td>pir-...-(y)an</td>
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<td></td>
<td>par-...-an2</td>
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</tbody>
</table>
7.3 Bare-stem constructions in Old Balinese

There are only four bare-stem forms occurring in the OB data. These include the transitive verbs: kna 'to charge', biri 'to give', and the intransitive verbs: usir 'to take refuge', turun 'to come down'.

7.3.1 Simple bare-stem constructions

In OB, the bare-stems of transitive verbs appear to select arguments which are UNDERGOER-TOPIC of semantically transitive verbs. In the corpus, ACTORS do not occur in the OB bare-stem constructions. The bare-stems of intransitive verbs select arguments with the ACTOR-TOPIC. The pragmatic formulae of the bare-stem construction of transitive verbs are:

\[ V \quad UT \]

and

\[ UT \quad V \]

Bare-stem with transitive verbs

Examples:

(7-1)  
a. \( ...tani \ \emptyset \cdot kna \quad tikasan \)  
\( \text{NEG} \ U_1 \cdot \text{charge} \quad (UT_j) \text{tax of } tikasan \)

'...(they) should not be \textit{charged} with \textit{tikasan} tax'.

b. \( yanad\.a^9 \cdot cak\.s\.u - \quad paracak\.s\.u \ \emptyset \cdot \textit{biri} \quad \textit{mangamah} ... \)  
\( \text{if exist (UT}_i) \text{ inspector} \quad \text{PL inspector} \ U_1 \cdot \text{give} \ \text{eat} \)

'If there are inspectors (they) should be given (something) to eat...'

Bare-stem with intransitive verbs

When bare-stem constructions occur with intransitive verbs, they have the pragmatic formula as follows:

\[ AT \quad V \]

---

7 Other forms are constituted with derivative suffix -ang.
8 PB 003 1b 5
9 For the treatment of TOPIC and FOCUS after existential verbs in MB, see section 5.11.1c. For OB, NPs will be analyzed in terms of their relations to their own predicates, not to existential verbs such as: ana, anada, yanada, etc. This is because such NP's usually occur with definite marking, indicating TOPIC rather than FOCUS.
10 PB 302 4a 2
or

Examples:

(7-2) a. ...ana waa banyaga turun ditu ...

exist DM (AT1) mercahkan A1 - arrive there

'...if there is a merchant (who) arrives there...'

b. ...tanyada husir yya anak aanr jalan katba

NEG exist A1 - refuge 3RD (AT1) people in group road PREP down kadahulu 12

PREP up

'...there is no refuge for the people travelling up and down (the mountain)'.

All the examples above have subordinate characteristics, as they occur with the existential verbs and after an existential verb or existential negator.

7.3.2 Bare-stem constructions in -ang

Bare-stems can also consist of root + suffix in OB. As in SB, the OB verbal suffix -ang is also attached to verbs which belong to category II (see section 5.8) to rearrange or increase the valency of the verbs. In the OB inscriptions -ang usually conveys a causative meaning. In the following examples the suffix -ang occurs in imperative constructions and it is always followed by the pronominal clitic -ña. The pragmatic formula of this construction is:

or

-ang with verbs belonging to category II

(7-3) a. ...maruhihi dua bhagi hatur-ang-ña, babini

(UT1) male two part give -VI/Ui -3RD (UT1) female

11 PB 002 2b 3
12 PB 001 1b 2
habhagi  hatur-ang-ña  
CLASS part  give  -VI/U₁-3RD

'...the widowers should be given two parts, and widows one part...'

b. yan  aña  krangan  di  babu  banwa-ña,  bwaat-ang-ña
if  exist  childless  PREP  mother  village  3RD  bring -

VI/U₁-3RD

drbya-ña  di  nayakaña
(UT₁) property  -3RD  PREP  Fnt  3RD

'If there are childless widows in the main village, their property should be
brought to the nayaka'.

-ang with nouns

When -ang is added to nouns, it forms a verb with UNDERGOER-TOPIC. It should be
noted that the pragmatic formula of the following examples is similar to that for 'bare-
stem constructions in -ang above'.

Examples:

(7-4) a. ...kunang  tahil-ang-ña  ya  di  banwaña
however  weight-VI/U₁  3RD  (UT₁)  3RD  PREP  village  3RD

di  turuñan  angkên  cextra
PREP  Pl  name  every  month  of  Cextra

'...the people who live at the village of Turuñan should be taxed in the month
of Cextra'.

b. ...sima-(y)ang-ña  hangga  tingkad  karuh  hangga  puhpuhan  kadya ...
border-VI/U₁  3RD  PREP  Pl  name  west  PREP  Pl  name  north

'...the border (of the hermitage) should be set as follows: to the west is
the village of Tingkad, to the north is the village of Puhpuhan...'

7.4 Function and meaning of Old Balinese affixes

The discussion of the function and meaning of OB affixes is divided into affixes
which do occur in MB and affixes which do not occur in MB.

13  PB  001  2b  1
14  PB  304  5a  2
15  PB  004  2a  2
16  PB  001  1b  3
7.4.1 Old Balinese verbal affixes still occurring in Modern Balinese

OB verbal affixes still occurring in MB are all very productive, and are illustrated in the following discussion.

7.4.1.1 Verbal Prefixes

There are four verbal prefixes which still occur in MB, namely:

a. ma-
b. maN- (~ ang- ?)
c. ka-
d. maka-/pinaka-
a. ma-

Prefix ma - is a verbal prefix which always marks the ACTOR-TOPIC. In this study, the prefix ma- is marked as ma1- and ma2-. The prefix ma1- is usually affixed to intransitive verbs as well as to nouns, while ma2- is used with roots having a transitive semantic notion, in which case an overt UNDERGOER is always present.

ma1- with an intransitive verb

Only one intransitive verb found in the corpus occurs with ma1-. The pragmatic formula of this construction is:

\[
\begin{array}{c}
\text{AT} \\
ma1-V
\end{array}
\]

Example:

(7-5) a. kapwa ta ma1-larib, mapaspasan pada prihawak 17
       (AT1) all PTC A1-flee hide PL oneself

'(They) all flee and hide themselves'.

ma1- with nouns

When ma1- is added to nouns, it is similar to mar- (see section 7.4.3.1a) which is used to form predicate NP's and means 'contains', 'possess', 'wear', 'use', 'do' and 'acquire'. The pragmatic formula of this construction is:

\[
\begin{array}{c}
\text{AT} \\
ma1-N
\end{array}
\]

17 PB 304 1b 6
(7-6) a. anada wa bhikṣu grama musirang ya
if exist DM (ATj) monk marry take refuge 3RD

ma1-rumah ditu 18
A1- house there

'If there are married monks who take refuge and live there'. 19

b me anak ma1-danga ditu 20
and (ATj) people A1- cooking utensil there

'...and the people who have cooking utensils there'.

c. ...tani kabakatan laku langkah ma1-kayu ma1-tringtihing 21
NEG get corvee A- wood A- bamboo

'(they) are not subjected to corvee such as carrying wood and bamboo...'

ma2- with overt UNDERGOER

As mentioned before, zero anaphora and TOPIC discourse tracking are common in the OB inscriptions. In the examples below, when no NP is identified as ACTOR-TOPIC, it is to be assumed that the NP has been introduced earlier in the text. The pragmatic formula of this construction is:

```
AT ma2-V UF
```

Examples:

(7-7) a. ...matuluang joa ma2-kmit ḍbya haji 22
...cook cake AUj guard (UFj) property king

'(They) are making cake, (and) guarding the property of the king'.

b ...mamatēk papan ma2-tpap bantilan laṅcang pērahu...23
make board AUj-used as (UFj) pavilion canoe boat

'...(they) make boards to be used for pavilions, canoes and boats...

In these examples ma2 - is used for 'referential tracking'. This means a single ACTOR
is understood to dominate a string of predicates.

---

18 PB 001 1b 4
19 'If there is a married monk taking refuge and living there'
20 PB 002 1b 4
21 PB 003 1b 4. The AT is not specified.
22 PB 001 1b 5
23 PB 001 1b 5
b. \( maN \)-

The prefix \( maN \)- derives from \( ma + N \). \( N \)- is realized by /m~n/n~̃n~ng/ (for detail see section 7.1.1). The OB prefix \( maN \)- has a simplified form in MB. While the unit \( N \)- is still retained in MB, the \( ma \)- is totally dropped. In OB, \( maN \)- usually marks the \( \text{ACTOR-TOPIC} \) and \( \text{UNDERGOER-FOCUS} \) of transitive verbs. It can be prefixed to nouns to make them NP’s predicate, at least in some semantic sense. Only one example is found where \( maN \)- is added to an intransitive verb. The majority of \( maN \)- in the corpus are in subordinate clauses. The most frequent pragmatic formula of the prefix \( maN \)- is:

\[
\begin{array}{ccc}
\text{AT} & \text{maN-v} & \text{UF}
\end{array}
\]

\( maN \)- with transitive verbs

(7-8) a. anak barua di banwa baru nru pradayaña
\( (\text{AT}_j) \) people village PREP Pl name joint plan 3RD

\[
\begin{array}{llll}
\text{jang} & \text{maN-buru} & \text{karāmbo} & 24
\end{array}
\]

all \( \text{AiUj} \)- hunt \( (\text{UF}_j) \) buffalo

'The people of the village Banwa Baru (New Village) should follow all their order, to hunt buffaloes...'

b. \( \text{aṭēhēr to} \) barua di air rawang... \( \text{maN-alap} \) air
then DM \( (\text{AT}_j) \) village PREP Pl name \( \text{AiUj} \)- take \( (\text{UF}_j) \) water

\[
\begin{array}{llll}
\text{ḍanu} & 25
\end{array}
\]

lake

'Then the people of the village of Air Rawang... take water from the lake'.

c. \( ...\text{twanak} \text{manambaḥ} \text{di sang ratu, maN-idih} \)
\( (\text{AT}_j) \) DM people pay respect PREP king \( \text{AiUj} \)- ask

\[
\begin{array}{llll}
(\text{bangu})\text{nan paratapanan} \text{di thānin buru} & 26
\end{array}
\]

build \( (\text{UF}_j) \) ascetic PREP village hunt

'...the villagers pay respect to the king asking a hermitage to be built at the hunting ground'.
maN- with nouns

When maN- is added to nouns, it forms NP predicates.

(7-9) a. tani kabakatan pawaruga kayu ting maN-{bantil-an}
     NEG get hall wood bamboo A- pavilion

maN-dingdingari maN-bugbug... \(^{27}\)
     A- sunscreen A- roof

'(they) are not taxed for making halls, (using) wood and bamboo, making pavilions, sunscreens, roofs...'

b. ...mamaiêk papan matkap bantilan lañcang perahu
     make board used as pavilion canoe boat

maN-rapuh maN-harañi ... \(^{28}\)
     A- limestone A- charcoal

...(they are not taxed) for making boards for pavilions, canoes and boats, for making limestone, charcoal...'

c. ...tani kabakatan tikasan maN-nila maN-bangkudu ... \(^{29}\)
     NEG pay tax A- indigo A- name of a tree

...(they) are not taxed for making blue dye, red dye...'

maN- with an intransitive verb

There appears to be only one example found in the texts, when the prefix maN- is attached to an intransitive verb. The pragmatic formula of this construction is:

\[
\text{maN-} \quad \text{AT}
\]

(7-10) ana maN-halu ya ka pasar di tanah winait...
     if A\(_{j}\) peddle (AT\(_{1}\)) 3RD PREP market PREP Pl name

'If they peddle to the market at Tanah Winait...'

\(^{27}\) PB 108 1b 6. The AT is not specified in this and following examples.
\(^{28}\) PB 001 1b 5
\(^{29}\) PB 002 2a 3
\(^{30}\) PB 107 2b 5
The *ang-* form may have been an allomorphic variant of the prefix *maN-* in OB, because it seems to have the same function and distribution as *maN-*. However, there is only one example of prefix *-ang* found in the data and little can be concluded about this affix. (Cf. (7-8) c.)

(7-11) pyañambahña di sang rau manghyang ang-idih
pay respect 3RD PREP Ti king ask AU- request

ya ndi drbya hajiña ...
3RD where property king 3RD

'(The purpose of) paying respect to the king is to request (the review of the king’s property)...'

**Austronesian comparison**

The prefix *ang-* in OB seems to be comparable with that of OJ. The *ang-* form is an allomorph of *maN-* in OJ. According to Becker and Oka, the absence of *m-* in OJ is due to distance or detachment from the action of the verbs. On the other hand, the occurrence of *m-* marks the closeness or involvement of the speaker (1974:244). The OB examples above, especially (7-8) c and (7-11), suggest that OB is not making such distinction.

According to Hunter, *maN-* becomes the quintessential marker in OJ of volitional, agentic and outer-directed actions (1988:66). It is clear from examples listed by Zoetmulder and Poedjowijatna (1961: 60), that verbs with prefix *maN-* can be used either transitively or intransitively. The following examples, from the OJ inscription show that Hunter’s argument does not seem convincing.

(7-12)

[OJ] a. tan wehên mang-rapa-rapa irikeng anak
NEG give disturb there people

than 32 village

'(they) are not allowed to disturb the villagers (of Air Rawang)'.

b. ...mañuratang mang-aran pungkur ...
letter name Pn

'...the scribe named Pungkur...'

---

31 PB 302 2b 6
32 PB 305 9a 1
33 PB 355 1:1-2
From the Old Malay inscriptions, it is known that the prefix *maN-* is also used transitive

(7-13) [OM]
\[ \kamu \ marwuat \ wini \ haji \ an \ kahu \ an \ tengah \]
2ND make woman king SUB know SUB middle

\[ \text{runah manguari yang mamawa mas dravya} \]
house speak REL carry gold REL property

'You induce my harem women to get knowledge about the interior of my place and get into contact with those who carry gold and property'.

As for Tagalog, according to Bloomfield (1917:239), *maN-* expresses action more deliberate, selective or in a larger quantity (professional, habitual) than *mag-*. The following example is Bloomfield's.

(7-14) [TAG]
\[ Sya y nangharang nang mangtao \]
He made a practice of holding people up'

c. *ka- ~ ki-*

The prefix *ka/-ki-* marks the UNDERGOER-TOPIc and suppresses agent. I found from the data that *ka/-ki-* as prefix only occurs with two verb roots namely: *siddha 'to permit*, and *ha\'ang 'to abduct*.

The pragmatic formula of the prefix *ka/-ki-* is:

\[ \begin{array}{c}
   \text{ki-V} \\
   \text{UT}
\end{array} \]

or

\[ \begin{array}{c}
   \text{UT} \\
   \text{ki-V}
\end{array} \]

Example:

(7-15) a. *...ki-siddha ya mangalap sahayan...* 35
\[ U1- \text{permit} \quad UT1-3RD \quad \text{take} \quad \text{slave} \]

'...they are permitted to take slaves...'

\[ \text{De Casparis, 1956} \]
\[ \text{PB 004 3a 4} \]
b. \ldots tani burung, māti ka-hañang \ldots \textsuperscript{36}

\begin{tabular}{l}
NEG cancel die & \textsuperscript{36} U- abduct by force
\end{tabular}

\ldots (the villagers of Julah whose houses and families were plundered), who
certainly killed (and) abducted by force.

The prefix \textit{ka-} is used when the speaker wants to emphasise the state of the action
which is expressed by the verbs, not the agent who does the action (cf. section 7.4.3.3b).
It appears that the prefix \textit{ka-} in OB is similar to the prefix \textit{ter-} in Indonesian.

d. \textit{maka-/pinaka-}

The prefix \textit{maka-}, which may derive from \textit{um} + paka (for the prefix \textit{paka-}, see section
7.4.3.1d), marks the \textsc{undergoer-topic}, and forms verbs from nouns. This prefix
means 'under the jurisdiction of'. On the basis of available evidence in OB, \textit{maka-} can
be followed by one of the two quantifying prefixes \textit{sa-} and \textit{ha-}. The pragmatic formula of
the prefix \textit{maka-} is:

\begin{center}
\textit{UT} & \textit{maka-(sa-/ha-)} \textit{N}
\end{center}

Examples:

(7-16) a. \ldots mupulang rwanak banwa di julah

assemble (UT\textsubscript{1}) DM people village PREP Pl name

\textit{maka-pasukuta} \ldots \textsuperscript{37}

\textit{U\textsubscript{1}-fortified settlement}

\ldots (they) assemble the people of Julah who are \textit{under the jurisdiction of a}
\textit{fortified settlement}...'

b. \ldots me anak banua di simpat bunut maka-(sa-hulukayu) \ldots \textsuperscript{38}

and (UT\textsubscript{1}) people village PREP Pl name \textit{U\textsubscript{1} - CLASS-forester}

\ldots and the people of the village of Simpat Bunut who are \textit{under the}
\textit{jurisdiction of a forester}...'

c. ada pnah anak banua di tamlingan maka-(ha-jumpung) \textsuperscript{39}

exist matter (UT\textsubscript{1}) people village PREP Pl name \textit{U\textsubscript{1} - CLASS- certain official (?)}

\ldots There is the matter of the villagers of Tamblingan who are \textit{under the}
\textit{jurisdiction of a jumpung}.'

\textsuperscript{36} PB 351 6b 1
\textsuperscript{37} PB 209 4a 2-3
\textsuperscript{38} PB 005 3
\textsuperscript{39} PB 110 1b 1
The prefix *pinaka-* is derived from the prefix *paka-* (see section 7.4.3.1d) and the
infix *-in* -. This prefix selects an argument with UNDERGOER-TOPIC, which conveys the
meaning 'something to be considered as or something which is used as'. The pragmatic
formula of the prefix *pinaka-* is:

\[
\text{UT \hspace{1cm} \textit{pinaka-N}}
\]

Examples:

(7-17) a. *praknan bras pinaka-pacaru di sanghyang di turuñan* 40
          use (UT) rice U - as offering  PREP god  PREP Pl name

...the rice is used as the (demon) offering for the God of Turuñan'.

b. *caru l hundan arukud tikër
   offering one (UT) duck  CLASS (UT)mat

   baru l hambar l *pinaka-pamapas di sanghyang
   new sheet 1 U - a ceremony  PREP god

   pangdaksayan 41
   inscription

'A demon offering: a duck and a new mat, which are used as a purification
offering for the holy inscriptions'.

Old Javanese comparison

The OB prefixes *maka-* and *pinaka-* resemble the same form in OJ. The meaning of
this affix is similar to the prefix *maka-* above (Cf. Zoetmulder and Poedjawijatna,

In OJ, on the other hand, *maka-* is prefixed directly to the nominal stem as shown in
the following example. The meaning of *maka-* in OJ is similar to that of OB.

(7-18)

[OJ] a. *yan māryya maka-huluña* 42
       if stop as slave 3RD

'If (you) stop becoming slaves'.

---

40 PB 004 2a 4-5
41 PB 004 3a 3
42 PB 436 3b 2
b. ...nguniwah pinaka-pangupajiwa \[^{43}\] as livelihood

'...and (it is used) as livelihood'.

7.4.1.2 Verbal confixes

There are two verbal confixes which still occur in MB, namely:

a. ma\[^{1}\]--\[^{1}\]\[^{1}\]--an\[^{1}\]

b. ka-/ki--\[^{1}\]--an\[^{1}\]

a. ma\[^{1}\]--\[^{1}\]--an\[^{1}\]

In OB, the confix ma\[^{1}\]--\[^{1}\]--an\[^{1}\] only occurs with the verbs paspas 'to hide'\[^{44}\]. It seems that this confix marks the ACTOR-TOPIC which usually indicates multiplicity or randomness. The UNDERGOER coincides with the ACTOR (cf. 5.11.3a). Below is the only example that is found from the corpus. The pragmatic formula of the confix ma\[^{1}\]--\[^{1}\]--an\[^{1}\] is:

\[
\text{AT} \quad \text{ma}^{1} \quad \text{V} \quad \text{an}^{1}
\]

Example:

(7-19) kapwa \[^{45}\] i\[^{a}\] la\[^{a}\] \[^{a}\] ma-larib, ma\[^{1}\]--paspas--an\[^{1}\] pada prihawak

(\text{AT}\[^{1}\]) all PTC flee A\[^{1}\] hide A\[^{1}\] PL oneself

'(They) all flee and hide themselves'.

b. ka-/ ki--\[^{1}\]--an\[^{1}\]

This confix marks the UNDERGOER-TOPIC of achievement or action verbs to denote activities. The pragmatic formula of the confix ka-/ki--\[^{1}\]--an\[^{1}\] is:

\[
\text{UIT} \quad \text{ka/k} \quad \text{V} \quad \text{an}^{1} \quad \text{U2T}
\]

or

\[
\text{UT} \quad \text{ka/k} \quad \text{V} \quad \text{an}^{1} \quad \text{A}
\]

\[^{43}\] Prasati Bwahan, Part 4 2a 2

\[^{44}\] There is another form, i.e marabian (304 5a 4). The root of this word is rabi 'garden'. The ma-an is not a confix, but it is a complex affixation. The formation of this word may be: rabi + an > rabian (similar to abian in MB), and ma + rabilian > marabian 'open a garden'.

\[^{45}\] PB 304 1b 6
Examples:

(7-20) a. anada tua bhikṣu grama musirang ya
    if exist DM  (U1T1) monk marry refuge 3RD

    marunāḥ diu tani ka-bakat-an1 laku langkah 46
    house there NEG U1jU2j- obtain -U1jU2j (U2Tj) corvee

    'If a married monk takes refuge and lives there, he is not subjected to the
corvee.'

b. ana cakcak lancangña ka-jady-an1
    exist wreck  (U1T1) canoeU1jU2j- become -U1jU2j

    papagērāngēn kuta 47
    (U1Tj) fence fencefortified settlement

    'If his canoe is wrecked, its wood is used as a fence of the fortified settlement'.

c. dang udu ki-bhakt(y)an1 sang ratu di hyang karimama 48
    (UTj) Pn Uj- respect -Uj A Hon king PREP temple Pn

    'The God Dangudu is honoured (by) the king at the temple Karimama'.

7.4.1.3 Complex verbal affixations

Three complex verbal affixations still occur in MB. These are:

a. ma2- {N/V root-ang/-in}
b. maN- {N/V root -ang/-in}
c. {par - Numeral}-an1

a. ma2- {N/V root+ang/in}

The ma2- {N root -ang} form marks the ACTOR-TOPIC and UNDERGOER-FOCUS. It
should be noted that there is only one word with this affix found in the corpus. The
pragmatic formula of the affix ma2-(N root -ang) is similar to that for the prefix ma2-
above.

---

46 PB 001 1b 4
47 PB 002 2b 3-4
48 PB 005 2
ma₂-{N root -ang}

Example:

(7-21) ...hënwa mabwaṭhaji di buru ma₂-{tahil-ang} (AT) DM corvee PREP hunting ground AḷUḷ-weight-VI
... pangrothka māsu 9 hatmwang hatmwang...⁴⁹ (UFj) tax māsasuwarna 9 CLASS year CLASS year

'...those (people) who do corvee at the royal hunting ground have to pay rot tax of nine su of gold every year....'

The ma₂-{N root -in} marks the ACTOR-TOPIC in a construction with an overt UNDERGOER. The pragmatic formula of the affix ma₂-{N root -in} is similar to that for the prefix ma₂- above.

ma₂-{V root -ang/-in}

The ma₂-{V root -ang/-in} in the OB corpus occurs with transitive verbs. It marks the ACTOR-TOPIC and UNDERGOER-FOCUS. The pragmatic formula of this construction is similar to that for the prefix ma₂- above.

ma₂-{V root -ang}

Example:

(7-22) ...ma₂-{tulu-ang} jaja māknit dhpya haji ⁵⁰ ...AḷUḷ -cook-VI cake guard (UFj) property king

'(They) are making cake, (and) guarding the property of the king.'

ma₂-{V root -in}

Examples:

(7-23) a. ...tu anak banwa mai ma₂-{tarah-in} kuta ...⁵¹ (ATj) DM people village die AḷUḷ-plunder -VI (UFj) fortified settlement

'...those villagers who die from plundering a fortified settlement...'

b. ya hetu syurukku...maṇuratang ratha hulukayu piduk ma₂-{samah-in} reason order 1ST letter (ATj) Pn forester Pn AḷUḷ-complete-VI

⁴⁹ PB 302 2b 4-5
⁵⁰ PB 001 1b 5
⁵¹ PB 002 1b 3
kanurunan  bhatara  da tonta 52
(UFj) descent  God  Pn

'This is the reason I order the scribe Ratha, (and) the forester Piduk to have a full meeting concerning the descent of the God Da Tonta'.

b. maN- {N/V root-ang/-in}

The affix maN- {N/V root -ang/-in} marks the ACTOR-TOPIC and UNDERGOER-FOCUS.

maN- {N root-ang/-in}

The pragmatic formula of the affix maN- {N root -ang/-in} is similar to that for the prefix maN- above.

Example:

(7-24) a. ...maN-{surat-ang} aqiña danañjaya ...53
    AUj- letter -VI order Pn

'(someone) who writes (king's) order is Danañjaya...'

b. .... maN- {kamuning-in} bhatāra da tonta 54
    AUj- a tree -VI (UFj) God  Pn

'...(the villagers) decorate the God Da Tonta with yellow paste'.

maN- {V root-in}

When the prefix maN- occurs as a in complex affixation, it is normally used in a subordinated clause. The pragmatic formula of the affix maN- {V root -in} is similar to that for the prefix maN- above.

52 PB 003 1b 3
53 PB 001 1b 1
54 PB 004 2b 1
Examples:

(7-25) a. ...tani šrangsīsikēn to banwa ulihka
   NEG tax DM village PREP Hon
   maN-{jwang-in} dhwyā haji $^{55}$
   AUj- take -VI (UFj) property king

'...(the villagers) are not taxed with šrangsīsikēn tax by the honorable collectors of the property of the king'.

b. anada maN-{larang-in} ya dī tārub maṣaka l...$^{56}$
   if exist AUj-forbid-VI (UFj) 3RD PREP tax maṣaka 1

'If there are people, who forbid (?), they have to pay tax of tārub 1 maṣaka...'

c. {par-NUMERAL}-an1

This affix may mark the UNDERGOER-TOPIC. There is only one example {par + Numeral}-an1 found in the data. The pragmatic formula of this affix is:

\[
\text{\{par - NUMERAL\}-an1} \quad \text{UT}
\]

(7-26) ava mati ya uwa banyaga {par-dua}-an1 dhbya -nā
   exist die 3RD DM merchant Ui-two -U1 (UT1) property -3RD
   praṅāra ...$^{57}$
   etc

'if a merchant dies, his property etc., should be divided into two'.

7.4.2 Old Balinese nominal affixes still occurring in Modern Balinese

7.4.2.1 Nominal Prefix

Only one OB nominal prefix still occurs in MB, this is: pa- _ paN-

pa- _ paN-

The nominal prefix pa- _ paN- is normally attached to nouns to convey associated meanings, such as 'someone who performs the actions', 'something to perform the actions', or 'associated tax', etc. (shown below by LEX). The nominal prefix pa- _ paN- can also occur with verbs to nominalize the verbs.

$^{55}$ PB 004 2a 3
$^{56}$ PB 101 1 6-7
$^{57}$ PB 002 2b 3
The prefix *pa-* is used with verbs which can take the prefix *ma-* in verbal morphology, while *paN-* is used with verbs which can take the prefix *maN-* in verbal morphology. This prefix *pa-* is similar to *par-* (Cf. section 7.4.4.1).

**pa-/paN- with transitive verbs**

When *pa-/paN-* occurs with transitive verbs, it has two meanings: (i) 'someone who carries out the action of the verb' and (ii) 'instrument'.

---

58 There are two prefixes and one suffix in OB which can only be attached to nouns. They are *ha- ~ a* and *sa- and a genitive marker -an*. The genitive marker *-an* will be discussed under section 7.4.2.2.

**a. ha- ~ a-**

The prefix *a-* is the allomorph of the prefix *ha-*.* Ha- ~ a- can be added to common nouns as well as to numerals. When *ha-* or *a-* is prefixed to common nouns, it has the meaning 'one’or ‘each'.

Examples:

a. *...más ma 2 da ha-diri* (PB 001 2a 4-5)
   gold masaka two PREP ONE- person
   '...every one (has to pay) two masaka of gold'.

b. *...takkañas ya pàngrama más pl 2 da ha-diri a-[imu-anj] a-[imu-anj]* (PB 101 2 4)
   ONE- person ONE-year
   '...everyone has a duty to pay tax of pangrama, two piling of gold every year'.

**b. sa-**

*Sa-* usually marks noun stems, both abstract and concrete. *Sa-* in OB is used before plural nouns to mean 'all’. *Sa-* can also mean 'as much as'.

a. *...sa-[karama-n] majêngan da kuta* (PB 104 3b 1-2)
   ALL- people eat PREP fortified settlement
   '...all the people eat at a fortified settlement'.

b. *tani pawryan mangamak da caksu paracaksu sa-lyu*
   NEG provide eat PREP inspector PL inspector ALL-plenty
   *-ha mangbharen ka ditu* (PB 101 2 8)
   3RD give PREP there
   'All the inspectors should not be given the food if they go there'.
Examples:

(7-27) a. ...tani kadan pa-bwat-fa di nayakaña.
Neg subject NOM- work -3rd prep fn 3rd

"...the work is not subjected to the nayaka'.

b. tathapi tua bilang ...kajadyan paN-bli pulu tikér pangjakan...
but DM member use NOM- buy rice mat cook

'But all of them... are used for the purchase of rice containers, mats and cooking utensils...'

c. ...tani kawakatan paN-bli paN-idih prakara.
Neg get NOM- buy NOM-request etc

di dinganga...

PREP dinganga

...(they) are not taxed for buying, requesting, etc. by the dinganga...'  

(7-28) e. ...mañuratang raya madwan paN-dundun pu dara.
scribe great fn NOM- wake up tl fn

"...the chief scribe Madwan, (and) the one who has the duty to wake up
(other people), Pu Dara,...'

d. ...paN-pukul pagending pabuñjing papadaha...
NOM play song angklung drum

'...the gamelan player, the singer, the angkung player, the drummer...'

pa-/paN-/ with nouns

When pa- is attached to nouns it conveys various lexical derivations, e.g. agent
nominalizations and names of taxes associated with the root.

Persons | Taxes
--- | ---
002 2b 5 pagending 'singer' | 108 1b 5 paculung 'tax for pig'
002 1b 5 pabuñjing 'angklung player' | 004 2a 2 pagahij 'tax for elephant'
002 2b 5 papadaha 'drummer' | 003 2a 4 paburu 'tax for hunting'

59 PB 108 2a 5
60 PB 001 2b 4-5
61 PB 101 1 7-8
62 PB 108 1b 2
63 PB 002 2b 5
002 2b 2 pangarung 'a person who makes 104 2a 1 pawarunga 'tax for making hall' a tunnel'

Examples:

(7-28) a. ...pamukul pa- günding suling bhangsi pande mas pande
          play LEX-song flute smith gold smith
          wsi undahagi kayu prakara piling 4 kabakatayanna 64
          iron craftman wood etc piling 4 get 3RD

...the gambelan players, the singers, the flautists, the goldsmiths, blacksmiths, carpenters, etc, must pay 4 piling (to the God).

b. ...pa-buñjing pa-padaha parhangsi partapukan parbwayang
          LEX-angklung LEX-drum flute mask puppet
          panekên di hyang api tikasanña 65
          take PREP God Fire tax of tikasan

... (for) angklung players, drummers, flautists, mask dancers, puppet players, their tikasan tax should be taken to the Fire God.

c. ...yan ada twanak palamswan marhuna mangrawi
          if exist DM people Ftn rice field garden
          ditu pamayarn pang-rama 66 mā 1 di hadiri 67
          there NOM pay LEX-entrance money masaka 1 PREP CLASS-
          person

...if there are palamswan people, who own rice fields and gardens there, they should pay entrance money to be full members of the village, 1 masaka for each person.

d. ...tani kawakaiən pa-glar, pa-bharu... 68
          NEG get LEX-tax of glar LEX-tax of new

...(people who live at Pakuwwan) should not pay the tax of glar, tax for new people...

64 PB 004 2a 1
65 PB 002 2b 5
66 Rama is a full member of the village community, and pangrama is entrance tax to be paid in order to become a rama.
67 PB 104 3b 2-3
68 PB 203 1b 5
7.4.2.2 Nominal Suffix

The nominal suffix -an₂ is the only nominal suffix which still occurs in MB. It nominalizes transitive and intransitive verbs, and conveys the meaning 'someone or something that is affected by the action of a verb' as in (7-29a and b) or 'something which is denoted by the verb' as in (7-29c). The suffix -an₂ can also be added to a noun to denote location.⁶⁹

*an₂* with transitive and intransitive verbs

Examples:

(7-29) a. ana tka suruh-an₂ hulu kayuña ...
if come order-NOM forester 3RD

'If the messenger of their foresters comes...'

b. yanada tarah-an₂ tunēken twa partapanan di
if exist plunder -NOM come DM ascetic PREP
dharmmakuta ...
Pl name

'If the hermitage of Dhammadaka comes under an attack...'

c. angkēn māgha mahānawami di lakw-an₂ di ulih-an₂
every month of māgha ninth day PREP go -NOM PREP return -NOM

'On every ninth day of the month of māgha, at the time of departure and arrival'.

---

⁶⁹ The suffix -n functions as a genitive. It should be noted that the genitive marker marker in OB marks the head of the NP as shown in the example below.

Example:

Kwagung yan sumangül bhajana-n sanghyang (PB 003 4a 1)
PTC if carry jar -GEN God
di Truñan...
PREP Pl name

'However, if (villager) carry the jar (cooking utensil) of God at Truñan...'

⁷⁰ PB 002 2a 5
⁷¹ PB 209 5a 5
⁷² PB 004 3a 2
-an₂ with a noun

Example:

(7-30) ... iod parlak *hayang* karanti, *rapuh-an₂* kajadyan *human*
south ganden God Pn limestone -LOC used ricefield

*hayang* api ...\(^73\)
God Fire

'...to the south of the garden of God Caranti (and to the west of ?), the *limekilin* is used for the ricefields of Fire God...'

7.4.2.3 Nominal Confixes

There are two nominal confixes of OB which are still used in MB, namely:

a. *pa-/paN-...-an₂*
b. *ka-...-an₂*

a. *pa- / paN-...-an₂^-yan*

This confix which occurs with verb stems to nominalize the verbs. It is also added to noun stems to produce new nouns indicating an associated category.

*pa-\text{TRANS}-an₂*

When the confix *pa-...-an₂* occurs with transitive verbs, it nominalizes the transitive verbs.

Examples:

(7-31) a. ...*cakṣu* paracakṣu kunang *pa-bri'-yan* mangamañ
inspector PL inspector PTC NOM- give-NOM eat

sayathaśaktiña \(^74\)
according to their ability

'...all the taxation officials should be given food according to their ability...'(LIT.).

\(^73\) PB 005 16-17
\(^74\) PB 304 4a 5
b. ...pa-tmu-yaŋ2-ña tunggal 75 māgha mahanawami 76
   NOM- find -NOM single month of māgha ninth

'...the contribution is on the ninth day of the month of māgha'.

pa-V{INTRANS-an2}

The following examples show that when the infix pa-...-an2 is added to verbs, it also nominalizes the verbs that denote place or location.

Examples:

(7-33) a. ...turun di paN-lapu-an2 di singhamandawa 77
   come down PREP LOC- report -LOC PREP PI name

'...done at the court of justice at Singhamandawa'.

b. ...paN-sungsung-yan di catuspatha78
   LOC-worship-LOC PREP PI name

'...place of worship is at Catuspatha'.

c. ...pañcuran pa-sibu-an2 prasada...79
   water spring LOC-bath-LOC shrine

'...water spring, bathing place, shrine...'

pa-N root-an2

When the confix pa-...-an2 occurs with noun roots, it produces new nouns which may convey the meaning of 'collection of (N)' as in examples (7-33a) or a place as in (7-33b).

(7-33) a. ...sahadān pa-danga-yan2-ña ...80
   all LEX-cooking utensil-LEX 3RD

'...all their property...'

75 According to Goris (1954) patmuyan tunggal 'Something that should be brought once per year as a contribution'.
76 PB 106 3a 3
77 PB 100 3a 1
78 PB 102 1b 4
79 PB 209 5a 3
80 PB 003 3a 2
b. ...tulunγen to pa-tapa-an2 di dharmmakuta 81 help DM LOC- ascetic-LOC PREP Pl name

'...the hermitage at Dharmmakuta should be helped'.

b. ka/ki-...-an2

This prefix can be attached to an intransitive verb and to a noun. When it is added to the verb it nominalizes the verbs. Attached to a noun, it produces a new noun indicating place.

ka-VINTRANS-an2

Only one intransitive verb found in the corpus occurs with the prefix ka-...-an2.

(7-34) ya hetu syuruhku...mañurataang rathā hulukayu piduk masamahin
reason order 1ST letter Pn forester Pn complete

ka-turun-an2 bhatara da tonta 82
NOM- come down -NOM God Pn

'This is the reason I order the scribe Rathā, (and) the forester Piduk to have a full meeting concerning the descent of the God Da Tonta'.

ka-N root-an2

This prefix seems to denote location when it occurs with noun.

(7-35) apan hnu syuruh hyang tahnini ...
because stay order holy Tahnini

masamahin ka-datw-an2 hyang wihāra prakara 83
meet LOC-god-LOC holy monastery etc

'Because they stay by the order of holy Tainini to have full meeting concerning the palace, holy monastery etc'.

7.4.3 Old Balinese verbal affixes not occurring in Modern Balinese

The discussion of verbal OB affixes which do not occur any more in MB is divided into verbal prefixes, suffixes, infixes and conffixes.

---

81 PB 209 Sa 6
82 PB 003 Ib 3
83 PB 110 Ib 5
7.4.3.1 Verbal prefixes

Four OB verbal prefixes do not occur in MB. These are:

a. mar-
b. pir-
c. pi- ~ ping-
d. paka-

a. mar-

I find only a few words with the prefix mar- in the corpus. Namely:

<table>
<thead>
<tr>
<th>Intransitive verbs</th>
<th>Meaning</th>
<th>Nouns</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>marburu</td>
<td>'to hunt'</td>
<td>marbuathaji</td>
<td>'to do corvee'</td>
</tr>
<tr>
<td>marulih</td>
<td>'to return'</td>
<td>marhuantu</td>
<td>'to make a ceremony for the dead people'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>marhuma</td>
<td>'to cultivate wet-rice field'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>markalula</td>
<td>'to have a servant'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>marparlak</td>
<td>'to cultivate dry-rice field'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>marpunya</td>
<td>'have a sanctuary'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mararihi</td>
<td>'to plant trees'</td>
</tr>
</tbody>
</table>

The function of mar- is to mark the ACTOR-TOPIC. The prefix mar- can be attached to intransitive verbs as well as to nouns. This prefix is only found in inscriptions prior to the tenth century AD. After that time the function of mar- seems to have been taken over by mar1-, but the evidence for this is very limited. See the following diagram.

<table>
<thead>
<tr>
<th>Period</th>
<th>8th c.</th>
<th>9th c.</th>
<th>10th c.</th>
<th>11th c.</th>
<th>12th c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>mar-</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ma-</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

mar- with intransitive verbs

Examples:

(7-36) a.ana mar-ulih buninya pusitanya mās mā 4 dihadiri 84
exist A - return hide 3RD possess 3RD gold masaka 4 PREP CLASS
person

'If (they) come back with their hidden (possessions), every person is allowed to have 4 māsaka of gold'.

84  PB 002 1b 5
b. ratāpi tani kasiddhan iali-nyan simaña mar-buru ...85
   but NEG fulfill forget-3RD boundary 3RD A - hunt

   'However, they should not forget the boundary of the hunting area (the
   freehold area where to hunt)...'

mar- with nouns

mar- is attached to nouns to form NP predicates. It conveys the meaning: 'possess,
contain, use, make, do or acquire the nominal referent'. The pragmatic formula of this
construction is:

[AT mar-N]

Examples:

(7-37) a. anāda sama -tiha ha- banwa mar-punya ...86
   if exist (ATf) member 3RD whole village A3 - sanctuary

   'If the village community has a sanctuary...'

b. ...pi(r)-ccintayang- ku man tua anak
   concern 1ST DM DM (ATf) people
mar-buatthaji di kudungan me di silihan88
   A3 - corvee PREP Pl name CONJ PREP Pl name

   '...my concern is to those people who do corvee (labour) at Kudungan and at
   Silihan'.

c. anada tu anak manglamsuan mangdarat mar-parlak ka diiu ...89
   if exist DM (ATf) people outside land A3 - dry land PREP there

   'If there are people from outside the village of (Julah) open new land and own
   dry rice fields there...'

d. yanada toldak palamswan mar-huma mangrawi ditu ...90
   if exist (ATf) DM-people outside A3 - wet rice field garden there

   'If there are people from outside the village of (Julah) own rice fields and
   garden there...'

85 PB 106 3a 3-4
86 PB 104 2b 2-3
87 sama 'whole, all members of the village community'
88 PB 105 1b 1-2
89 PB 101 2 3-4
90 PB 104 3b 2
...sesan yalap mar-hantu ya panekën di hyang api\textsuperscript{91}
\(\text{AT}_{1}\) remainder take \(\text{A}_{1}\)-soul\textsuperscript{92} 3RD take PREP God Fire

'...the remainder (of the property) used for holding the ceremony for the dead people should be taken to God Fire'.

The prefix \(\text{mar-}\) in examples (a, b, c, d and e) is used semantically in a 'transitive sense'; that is, a 'semantic object' becomes a one-argument transitive verb through prefixation with \(\text{mar-}\).

At one stage the prefixes \(\text{mar-}\) and \(\text{ma-}\) occur side by side. Thus besides example (7-36b) we also have (7-37a) and besides (7-36e) we also have (7-37b). However, after the tenth century AD \(\text{mar-}\) was taken over by \(\text{ma-}\).

(7-38) a. ...adapnah anak ma-bwatthaji di buru....\textsuperscript{93}
exist \(\text{AT}_{1}\)people \(\text{A}_{1}\)-corvee PREP hunt

'...there are people who do corvee (labour) at the hunting ground...'

b. ...sesan yalap ma-hantu ya panekan di sanghyang
\(\text{AT}_{1}\) remainder take \(\text{A}_{1}\)-soal 3RD take PREP God

\(\text{turufan}\)\textsuperscript{94}

'...the remainder (of the property) used for holding the ceremony for the dead people should be taken to the God of Turufan'.

Austronesian comparison

If OB \(\text{mar-}\) is compared with Old Malay \(\text{mar-}\) (Modern Malay \textit{ber-}) and Tagalog \textit{mag-}, it appears that these prefixes have similar function. According to Hunter, in Old Malay, \(\text{mar-}\) can be used transitively or in transitively (1988:123).

(7-39)
[OM] ... kāmu mar-wuat saki\textsuperscript{95} 2ND make ill

'you make ill'.

\textsuperscript{91} PB 002 3a 4-5
\textsuperscript{92} \textit{Hantu} means 'the soul of the deceased'
\textsuperscript{93} PB 108 1b 1
\textsuperscript{94} PB 003 3b 2
\textsuperscript{95} De Casparis, 1956: 33
The example (7-38) is taken from the Old Malay text where mar- appears to function as an ACTOR-TOPIC. The prefix mar- marks the transitive verb wuat 'to make', in Old Malay which is the same as buat ~ wuat.

b. pir-

The form pir- used alone as a prefix only occurs with two roots in OB inscriptions, with examples occurring until the tenth century AD. Pir- marks an UNDERGOER-TOPIC. For pir- [V-ang ], see section 7.4.3.4.

(7-40) a. kunang pir-anak ua sāstra di dharmapura 96
    and U-child DM rest house PREP Pl name

'...and (it has) been considered as a subsidiary of the resthouse at Dharmapura'.

b. anugraham sang ratu aũtakrabhu, me pir-pagēh-da
    favour king king of the past and U-establish Hon

    ya tani kapunaruktan pangraksayan-ia ulih datu
    3RD NEG change inscription -3RD PREP king

kabudi kabudi 97
later

'The favour of (the inscription of) the deceased king is affirmed, (and) the inscription should not be changed by future kings'.

c. pi- ~ ping-

Prefix pi- in OB has two forms: pi- ~ ping- for the stem beginning with vowels. Otherwise pi- is normally unchanged. For instance:

206 1a 6 ping-(abuh-an-ang)-da 'something which is being made less'
304 1b 6 pi-(suruh-ang) 'someone to be asked'

The prefix pi- marks an UNDERGOER-TOPIC in a construction; this prefix usually conveys a causative meaning. (cf. Complex verbal affixation below).

(7-41) a. ... pi-kaluarc diu sātra di air mih 98
    U1-out there (UT1) rest house PREP Pl name

'...the rest house is extended there at Air Mih'.

96 PB 207 1a 2
97 PB 209 4a 4-5
98 PB 206 1a 4-5
b. ...piN-aliṅ-nya ...⁹⁹
   Ut  search -3RD

...(they) are searched by them...'(?text partly illegible)

d. paka-

The prefix paka- usually marks the stative verb in jussive constructions in OB. The effect is similar to a 'deontic' modal in English, like 'should'. The pragmatic formula of the prefix paka- is:

```
| UT | paka- v |
```

Example:

(7-42) Yumu paka-tahu sarbwa kumpi addhi dingangati
   (AT1) 2ND A₁ - know all old young Ftn Pn
   ndayakan makarun cakra ...¹⁰⁰
   Ftn Pn

'You should know, all young and old, the dinganga is Atri, the ndayakan makarun is Cakra...'

7.4.3.2 Verbal suffix

There is one OB verbal suffix which does not occur in MB. This is -an₁ ~ -ēn ~ -yan.

-an₁ ~ -ēn ~ -yan

It appears that -an₁ ~ -ēn ~ -yan are the same suffix. They can be attached to transitive verbs to convey the meaning of future imperative, so that for the purpose of this study these suffixes are considered jussive markers (may also be similar as irrealis markers). The imperative jussive may be directed to persons in general, not to a specific person, to express what is appropriate or should be done. The ACTOR can be considered suppressed. The pragmatic formula of the suffix -an₁ ~ -ēn ~ -yan is:

```
| UT | V-an₁ ~ -ēn ~ -yan |
```

or

```
| V-an₁ ~ -ēn ~ -yan | UT |
```

---

⁹⁹ PB 205 B 2  
¹⁰⁰ PB 002 1b 1
-an\textsubscript{1} with transitive verbs

Example:

(7-43) tua hetu syuruh\textsubscript{ku} nayakan praddhana ...

\begin{tabular}{llll}
DM & cause & order 1ST & Ptn & Pn \\
\hline
bangun-an\textsubscript{1} & janganan & hyang api & 101 \\
build & -U\textsubscript{i} & (UT\textsubscript{1}) building God Fire & \\
\end{tabular}

'This is the reason I order nayakan Praddhana... that Fire temple should be built'.

-\textit{en} with transitive verbs

Examples:

(7-44) a. tua hetu syuruhku senapati danda ... bangun-\textit{en}

\begin{tabular}{llll}
DM & because & order 1ST & Ptn & Pn \\
\hline
partap\textsubscript{2}an & sagra & di & katahan & buru & 102 \\
(UT\textsubscript{1}) hermitage & rest house & PREP & ground & hunt & \\
\end{tabular}

'This is why, I order senapati Danda...to have a hermitage with a hospice be built at the royal hunting ground'.

b. ...tani duduk-\textit{en} up\textsubscript{2}ahagi prak\textsubscript{2}ara ....103

\begin{tabular}{llll}
NEG & collect tax & -U\textsubscript{i} (UT\textsubscript{1}) & craftsman etc & \\
\end{tabular}

'...let the craftsmen, etc should not be taxed...'

c. ...5 mulyan m\textsubscript{2}asaka 4 alap-\textit{en} mar\textsubscript{2}anu ya 104

\begin{tabular}{llll}
(UT\textsubscript{1}) 5 value & masaka & 4 & expend -U\textsubscript{i} dead & 3RD & \\
\end{tabular}

'...let an amount of 4 masakas be expended for the ceremony of dead people'.

-y\textit{an} with transitive verbs

Examples:

(7-45) a. tath\textsubscript{a}pi tani kasiddh\textsubscript{a}n duduk-y\textit{an} anak ditu 105

\begin{tabular}{llll}
but & NEG & complete & levy tax & -U\textsubscript{i} (UT\textsubscript{1}) & people & there & \\
\end{tabular}

'...but the tax should not be collected from the people there'.

\begin{footnotes}
101 PB 002 1b 2
102 PB 001 1b 2-3
103 PB 108 2a 1
104 PB 002 3a 5
105 PB 002 2b 4
\end{footnotes}
b. \textit{...brās karu} \textit{l banjar} \textit{di indrapura juang-yan ya}\textsuperscript{106} (UT\textsubscript{1}) rice bowl 1 territorial unit \textit{PREP Pl name take} -U\textsubscript{1} 3RD

'...one bowl of rice \textbf{should be taken} by the territorial unit of Indrapura'.

c. \textit{...tathāpi tani bli-n\textsuperscript{107}yan karambo sampi kambing} \textsuperscript{108} but \textit{NEG buy} -U\textsubscript{1} (UT\textsubscript{1}) buffalo (UT\textsubscript{1}) cow (UT\textsubscript{1}) goat

'...but buffalos, cows, (and) goats \textbf{should not be bought}...'

The words \textit{dudukyan} in example (a) and \textit{juangyan} in (b) may derive from \{\textit{duduk + in }\} + an\textsubscript{1}, and \{\textit{juang + in }\} + an\textsubscript{1}. Evidence in the OB corpus shows that there are other forms, such as: \textit{dyudukin} (PB 004 3a 5) and \textit{mangjuangin} (PB 004 2a 3). These forms may suggest that they are the first stems before the irrealis -an\textsubscript{1} is further added.

\textit{-yan with noun}\textsuperscript{109}

(7-46) \textit{...me tani dudukyan karambo sampi besara_tani tandas-yan} \textsuperscript{110} and \textit{NEG collect tax} buffalo cow horse \textit{NEG head tax} -U

'...and tax should not be levied for buffaloes, cows, horses, (they) \textbf{should not be required to pay head-tax}'.

\subsection*{7.4.3.3 Verbal infixes}

Verbal infixes are verbal affixes which are added within verbal roots or stems. There are three OB infixes which do not occur in MB. They are:

\begin{itemize}
  \item a. \textit{-y-}
  \item b. \textit{-in-}
  \item c. \textit{-um-}
\end{itemize}

a. \textit{-y-}

The infix \textit{-y} - marks an \textbf{UNDERGOER-TOPIC}. It is infixed before the consonant and vowel of the first syllable of the verb, or prefixed to a word which begins with a vowel. The infix \textit{-y} probably derives from \textit{-i-}, which becomes \textit{-y-} because of the sandhi role i.e. after \textit{-i-} is inserted or prefixed to the roots beginning with vowels (see section 7.1.2b).

\textsuperscript{106} PB 006 2a 1
\textsuperscript{107} For detail about the occurrence of \textit{/h/} see section 7.
\textsuperscript{108} PB 002 2a 4
\textsuperscript{109} Brandes (1884:35) states that \textit{-yan} is a dialectal variant of \textit{-an} in OB.
\textsuperscript{110} PB 108 2a 1
-y- with words beginning with consonants:

104 3a 5 -y-(tarah)
202 1b 1 -y- (turun)
004 2b 4-5 -y-(duduk-in)
104 3b 4 -y-(panek-ang)
001 3a 1 -y-(suhun-ang)

' to be plundered'
'to be given (to lower person)'
'(tax) to be levied'
'to be brought to higher place'
'to be carried (on the head)'

-y- with words beginning with vowels:

002 3a 5 -y-alap
210 2b 4 -y-anugrahən
101 2 5 -y-ubuh

'to be taken'
'to be given'
'to be bred (cattle)'

The infix -y- can be added to transitive verbs whose agents which are expressed by pronominal clitics, which can be considered cases of ACTOR-FOCUS. The pragmatic formula of the infix -y- is:

```
-y- V AF UT
```

or

```
UT -y- V AF
```

Examples:

(7-47) a. tua hetu s-y-uruh-ku senapati danda ...bangunèn
DM because -U1- ask -AF 1ST (UT1) Ftn Pn build

parapadanan sara di kahanan buru 111
hermitage rest house PREP ground hunt

'That is why I order senapati Danda... that an hermitage with a hospice be built at the royal hunting ground'.

b. ana krangan ampung ya sahadan padangayani-ña
if childless single 3RD all (UT1) cooking utensils 3RD

y-aba-ña marunah ditu ...112
U1- bring -AF 3RD house there

'For childless single persons, all the cooking utensils should be brought there when they arrive...'

111 PB 001 1b 2
112 PB 003 3a 5-3b1
b. -\textit{in-}

This is an \textit{UNDERGOER-TOPIC} infix. Brandes (1889:36) states that the relationship between infix \textit{-y-} and \textit{-in-} is not clear because there are not many examples found in the data. However, examination of the complete OB corpus shows an important difference between \textit{-y-} and \textit{-in-}. The infix \textit{-y-} is always followed by an agent while the infix \textit{-in-} apparently is not used with an overt agent. It seems that the OB infixes \textit{-y-} and \textit{-in-} are similar to the prefix \textit{di-} in Indonesian. The pragmatic formula of the infix \textit{-in-} is:

\begin{center}
\text{\texttt{UT in- V}}
\end{center}

Example:

(7-48) \textit{yanada sama\textalpha{\textcopyright}a habanwa b-in-icara di\textalpha{\textcopyright}u...} \textsuperscript{113}
\textit{if exist (UT\textalpha{\textcopyright}) community 3RD CLASS village -U\textalpha{\textcopyright} lawsuit there}

'If the village community is \textit{engaged in a lawsuit} there...'

\textbf{Austronesian comparison}

Zoetmulder and Poedjawijatna categorize two passives in OJ. These passives are marked by \textit{ka-} and the infix \textit{-in-}. The difference between \textit{ka-} and \textit{-in-} is 'when the action and its performer is more important -in- is used as a passive marker, whilst \textit{ka-} is used as a passive marker when the state is brought about by the action' (Zoetmulder and Poedjawijatna, 1961:78-81). In this sense the infix \textit{-in-} is similar to the prefix \textit{di-} and \textit{ka-} to \textit{ter-} in Indonesian.

(7-49)
\textit{[OJ] ikang wsrabha p-in-angguh ta air\textalpha{\textcopyright}wana ik\textalpha{\textcopyright} 114}
\textit{DM horse find PTC Pn DM}

'that horse which \textit{was found} by you is Air\textalpha{\textcopyright}wana'.

There is also a difference of agents between these passives. If the performer of the action of an \textit{-in-} verb is expressed as a pronoun, it is placed after the passive verb. According to Brandes (1884:172), the infix \textit{-in-} is very common in written Javanese.

If a pronominal form is used to represent the performer of the action of the \textit{ka-} passive, then the performer cannot be put directly after the verb, but has to be preceded by the preposition \textit{de} 'by'.

\textsuperscript{113} PB 104 2b 5
\textsuperscript{114} Zoetmulder et al (1961:79)
(7-50) *t-in-onira*  
*ka-ton de nira*  
'it is seen by her/him'

If the infix *-in-* in OB is compared to that of OJ, it would appear that OB *-in-* is not the same as that of OJ. However, it seems that OJ *-in-* is closer to the infix *-y-* in OB.

In Old Malay, *ni-* appears to mark an UNDERGOER-TOPIC. It seems that PAN *-in-* corresponds to *ni-* in Old Malay and is similar to *-in-* in OB, OJ, and Tagalog.

Examples:

(7-51)

[OM] a...*kadam kāmu lāl lari ni-wunuḥ kāmu sumpah*  
and if 2ND go kill 2ND curse

'*...and if you go over to them, you will be killed by a curse'.

b. *wala yam ni-wawa di samaryāda muah yam*

army REL (?) send PREP frontier province fruit REL (?)

*muah ni-minymāmu*  
fruit drink 2ND

'The army which is sent to all the frontier provinces, you will get the fruits which are drunk by you'.

In Toba Batak, infix *-in-* also appears to mark the UNDERGOER-TOPIC when no specific agent is alluded to (Tuuk, 1971:169).

(7-52) *p-in-aluwa pe ursa on ija nung do sun s-in-anggulan*  
'This deer will be set free'  
'If the statue has already been provided with a sanggul'

The infix *-in-* in Toba Batak seems to be similar to that of OB, because in OB apparently the agent is usually absent. However, Old Malay *ni-* is apparently similar to OJ *-in-*.

c. *-um-

Infix *-um-* is used with transitive as well as intransitive verb roots. When the infix *-um-* occurs with transitive verb roots, it marks an ACTOR-TOPIC and UNDERGOER-FOCUS. However, when *-um-* occurs with intransitive verb roots, it has only one core

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115 De Casparis, 1956:34
116 De Casparis, 1956:36
argument, and it marks an ACTOR-TOPIC. It appears that -um- has a similar function and
distribution to ma2- which can occur with transitive verbs (overt UNDERGOER) and -um-
also appears to be similar to that of the prefix maN-. The pragmatic formula of the infix
-um- with transitive verbs is:

\[
\text{AT} \quad \text{um- V} \quad \text{UF}
\]

-um- with transitive verbs

Examples:

(7-53) a. ḍapan k-u̱m-mit ḍbyan sang hyang ya tani
    because -AUj- guard (UFj) property Hon God 3RD NEG

ṣrangsisikan to banwa ulihda mangjiwangin ḍbya
    tax     DM village return hon take property

haji 117
king

'Because (the village) guards the property of the temple, it should not be levied of ṛangsisikan tax by the tax collector'.

b. ...anak banwa s-um-ambah aku midhiḥ
    (ATj) people village -AUj- pay respect (UFj)1ST ask

pamasamahyan kuta -na 118
meeting fortified settlement 3RD

'... the villagers... ask me respectfully to hold a meeting for all (the people of) the fortified settlements'.

-um- with intransitive verbs

The pragmatic formula of the infix -um- with intransitive verbs is:

\[
\text{AT} \quad \text{um- V}
\]

or

\[
\text{um- V} \quad \text{AT}
\]

Examples:

(7-54) a. yan ada sarahan t-um-ēken twa partaparan di
    if exist (ATj) plunderer -A1- arrive DM hermitage PREP

117 PB 003 2a 3-4
118 PB 104 1b 3
dharmmakuta ... \(^{119}\)
Pl name

'If the hermitage of Dharmmakuta comes under an attack...'

b. \(\text{tathāpi} \quad \text{ara} \quad \text{l-um-aku} \quad \text{ya} \quad \text{matap} \quad \text{psu} \quad \text{\(^{120}\)}}\)
but if \(-\text{A}\text{T}_1\)-walk (AT\(_1\)) 3RD go out

'but if there are (people) walking and going out'(?).

The \(m\)-form is an allomorphic variant of the infix \(-\text{um}\) - (see section 7.1.3 for variant of the infix \(-\text{um}\)-). This affix in the following examples can be used transitively as in (a) and intransitively as in (b). The pragmatic formula of \(m\)- is similar to that for infix \(-\text{um}\)-above, both for transitive and intransitives.

(7-55) a. ...\(\text{labuh} \quad \text{m-panek} \quad (k)\text{ayu} \quad \text{\(^{121}\)}}\)
fall AU\(j\) climb (UF\(j\)) tree

'...(they) fall down (from) climbing a tree.'

b. ...\(\text{tathāpi} \quad \text{tu} \quad \text{anak} \quad \text{m-pati} \quad \text{\(^{122}\)}}\)
but DM (AT\(_1\)) people A\(_1\)-die

'...but those people die...'

Austronesian comparison

According to Zoetmulder and Poedjawijatna (1961:60-61), in OJ the infix \(-\text{um}\)- is inserted between the first consonant and first vowel for the words beginning with consonants other than bilabials. However, if the words begin with bilabials such as /p/, /b/, /m/ and /w/, \(-\text{um}\)- appears as a prefix, \(u\) is often deleted and \(-\text{um}\)- > \(m\)-. The following examples are from Zoetmulder and Poedjawijatna (1961:61).

a. \(-\text{um}- + \text{pangan} > \text{umangan} \sim \text{mangan} \quad \text{‘to eat’}\)
b. \(-\text{um}- + \text{bañcana} > \text{umañcana} \sim \text{mañcana} \quad \text{‘to have a disaster’}\)
c. \(-\text{um}- + \text{mitra} > \text{umitra} \sim \text{mitra} \quad \text{‘to have a friend’}\)
d. \(-\text{um}- + \text{wanguan} > \text{umangun} \sim \text{mangun} \quad \text{‘to rise’}\)

Hunter (1988:64) states that in OJ \(-\text{um}\)- marks the motion verbs or perception verbs referring to psychological symptoms, as well as 'meteorological verbs' and verbs describing natural phenomena with a dynamic character. However, I also find that the

---

\(^{119}\) PB 209 5a 5
\(^{120}\) PB 110 1b 5
\(^{121}\) PB 102 1b 6
\(^{122}\) PB 002 1b 3
infix -un - can occur with a state transitive verb as in (a) and an action intransitive verb as in (b). The following examples are taken from an inscription in Bali, which is in OJ.

Examples:

(7-56) a. hana pwa sira wiku bala haji h-um-aturi
exist majesty monk soldier king ask

pasamuhana makahaham
assembly all together

'There are monks of bala haji, (who) ask questions in the assembly all together' (the interpretation is not clear).

b. ikad ja yan turunikang karaman sataganing tunggalan
DM TPC if come down villager call Fin

salarong wukir ikang t-um-urun ...
north hill DM come down

'If all the villagers under the senapati Tunggalan in the northern mountain come down...'

In Tagalog, -um - can mark transitive and intransitive verbs. It often occurs with the verbs denoting casual action, and/or action not involving movement of an object external to the ACTOR (Schachter and Otanes, 1972:292).

(7-57) k-um-ain 'eat'.

um-ibig 'love'.

b-um-uti 'become good'.
d-um-ating 'arrive'.

7.4.3.4 Complex verbal affixations

Five complex verbal affixations do not occur in MB. These affixes are:

a. pi-iping- {N/ V root -in/-ang}
b. {V root-ang}-en -an1
c. -um- {V root -ang}
d. -y- {V root-in}
e. -in- {V root -ang}

Their absence, obviously, because affixes such as pi-iping-, -en - -an1, -um-, -y-, and -in- do not exist in MB.

123 PB 305 2a 4
a. *pi-/ping-* \{N/V root -in/-ang\}

The *pi-/ping-* \{V root -ang\} form marks the UNDERGOER-TOPIC construction which usually occurs with transitive verbs. The most frequent pragmatic formula of the affix *pi-/ping-* \{V root -ang/in\} is:

\[
\text{UT} \quad \text{*pi-/ping-* \{N/V root -ang/in\}}
\]

\text{*pi-/ping-* \{N root -in\}}

Example:

(7-58) a. *kunang thānin da sanghyang di turuñan*
   and territory Hon (UT) deity PREP Pl name

\text{*pi-\{rumah-in\} banua di air rawang \ldots^{124} Uf- house -VI village PREP Pl name}

'But the territory of the God at Turuñan village which is occupied (by the villagers) of Air Rawang...'

\text{*pi-/ping-* \{V root -ang\}}

Examples:

(7-59) a. *saha twa ping-\{jady-ang\}-ńa sakit kapwañña \ldots^{125} so that U- cause -VI -3RD suffer all together 3RD

'So that they all were caused to suffer'.

b. *tēhēr pi-\{paly-ang\} go to banwa di turuñan \ldots^{126} then U- ceremony -VI PREP DM village PREP Pl name

'Then (Lord Da Tonta) should be purified by the villagers of Turuñan...'

b. \{V root -ang\}-ēn ~-an₁

This affix marks the UNDERGOER-TOPIC, and it only occurs with intransitive verbs namely *lipēt* 'multiply' and *uilih* 'return'. The pragmatic formula of \{V root -ang\}-ēn ~-an₁ is:

\[
\{\text{V root} -\text{ang}\} -\text{ēn/-an₁} \quad \text{UT}
\]

\[\text{124} \quad \text{PB 004 2a 4}\]
\[\text{125} \quad \text{PB 302 2b 6}\]
\[\text{126} \quad \text{PB 004 3b 1}\]
Examples:

(7-60) a. ...twa (he)tu syuru kku, [lipet-ang]-en anak parunahan
DM reason order 1ST doule -VI-U1 (UT1) people house

di kuaña 127
PREP fortified settlement 3RD

'...that is why I order that the population of the fortified city should be doubled'.

b. ana krang ka mawalu... ya suhunang tangganang
if childless widow 3RD head-burden128 shoulder-burden

{ulih-ang}-an1...arha pra kara 129
return -VI-U1 (UT1) property etc

'If there is a childless widow, ...her property etc. should be returned'.(?)

c. -um- {V root -ang}

The -um- {V root -ang} marks the ACTOR-TOPIC and UNDERGOER-FOCUS of a transitive verb (as in example (a)) and the ACTOR-TOPIC of an intransitive verb (as in (b)). The pragmatic formula of this construction is similar to that for the infix -um- which is used transitively or intransitively above (see section 7.4.3.3c).

Example:

(7-61) a. ...ser pasar ida kumpi dara dyah damai m-(pupul-ang)
(AT1) Ftn Hon old Pn A1- gather-VI

swanak banwa di julah...130
(UF1) DM people village PREP Pl name

'...the ser pasar Ida kumpi Dara Dyah Damai gathers the people of the village of Julah...'

127 PB 104 1b 3-4
128 Suhunang 'something carried on the head'.
129 PB 005 11
130 PB 209 4a 2-3
b. arada uga bhikṣu grama m-{usir-ang} ya marunah
   if exist DM (AT) monk married A₁- refuge-VI 3RD house

\textit{ditu} \ldots \textsuperscript{131}
there

'If there is a married monk taking refuge and living there...'

d. \textit{-y-}\{V root-in\}

The \textit{-y-}\{V root-in\} form marks the \textsc{undergoer-topic}. One case of agent occurring in a prepositional phrase is documented in example b. below. The pragmatic formula of \textit{-y-}\{V root-in\} is:

\[ \textit{-y-}\{V root -in\} \text{ UT } (A) \]

Examples:

(7-62) a. \ldots jadi \textit{-y-}\{bayar-in\} sang grama bapa \textsuperscript{132}
   so U₁- expend -VI T₁ (UT₁) married father

'...so the leader of the married people has to be paid'.

b. \ldots yan namek basa to banua di air rawang
   if make spices DM village PREP Pl name

\textit{-y-}\{duduk-in\} ya got to lampuran bungsu di turuñan\textsuperscript{133}
U₁- collect -VI (UT₁) 3RD PREP DM Pn PREP Pl name

'...if the village of Air Rawang makes spices, these are taxed by Lampuran Bungsu of Turuñan'.

e. \textit{-in-}\{V root-ang\}

This affix seems to mark the \textsc{undergoer-topic}, but only the verb \textit{lipêt} 'multiply' occurs with this affix in the inscriptions. The pragmatic formula of \textit{-in-}\{V root - ang\} is:

\[ \text{UT } \textit{in-}\{V root - ang\} \]

\textsuperscript{131} PB 001 1b 4
\textsuperscript{132} PB 201 1b 2
\textsuperscript{133} PB 004 2b 5
Example:

(7-63) halyun to -in-(lip'ét-ang) dug sang ratu
       (UT1)-all DM Uf- multiply-VI since Hon king

       sang lunāh di bwahrangga
       Hon entomb PREP Pl name

'All of them (i.e. the tributes), have been multiplied since the reign of the king
who entombed at Bwah Rangga'.

7.4.4 Old Balinese nominal affixes not occurring in Modern Balinese

These OB nominal affixes consist of a nominal prefix, and two nominal confixes.

7.4.4.1 Nominal Prefix

There is only one OB nominal prefix no longer occurring in MB: par -

par-

The prefix par- nominalizes transitive verbs with the resulting nominal in an
UNDERGOER relationship with the source verbal notion. It also marks the noun stems.
When par- occurs with a noun it denotes 'one professionally connected with what is
expressed in the nominal base'. It should be noted that the prefix par- usually occurs with
the post-clitic ūa ~ nya.

par- with transitive verbs

(7-64) a. anada tua banyaga turun ditu panekēn di
       if exist DM merchant arrive there climb PREP

       hyangapi par-unggah-ūa
       God Fire NOM- climb 3RD

'...if there are merchants who land there, the cargo of their ship should be
taken to the Fire God'.

---

134 PB 209 4a 3
135 PB 002 2b 3
...sumambah aku midih tani kadan hapit par-ganti-ña
pay respect 1ST ask NEG exist in between NOM- turn -3RD

di sang ratu 136
PREP king

'... (the villagers) pay respect to me and ask me for the change of their bad condition' 137 (LIT.).

par- with nouns

When the prefix par- occurs with nouns it can produce new nouns, to convey the meaning 'someone who performs the action', or 'something which is expressed by the noun base'.

Example:

(7-65) ...par-byaya-nya ya rapangənya 138
NOM- expend 3RD 3RD tight 3RD

'...the expenditure has to be tightened by them'.

There is good evidence that pa- functions as an allomorph of par-. For instance, papadaha ~ parpadaha, pabuñjing ~ parbuñjing.

Examples:

(7-66) a ...pabuñjing papadaha par-bhangši par-tapukan par-bwayang
angklung drum LEX- flute LEX- mask LEX- puppet

panekan di hyang api tikasanña 139
climb PREP God Fire tax 3RD

'...(as to) the angklung players, drummers, flautists, mask dancers, puppeters, their tikasan taxes should be taken to the Fire God'.

b ...par-sangkha par-padaha balian ... 140
LEX-horn LEX- drum medicineman

'...(they are taxed if they are) horn blowers, drummers, medicinemen...'

136 PB 108 1b 3
137 The villagers come to see the king in order that their bad condition could change
138 PB 209 5a 5
139 PB 002 2b 5
140 PB 001 2a 3
Toba Batak comparison

In Toba Batak, the prefix par- has a similar function to par- in OB. In OB, this agent-marking function occurs with nouns, while in Toba Batak par- is normally prefixed to transitive verbs to represent the meaning: 'someone who performs the action of the stem'. e.g. par-modom 'a sleeper'.

7.4.2.2 Nominal confixes

a. pir-...-(y)an

The confix pir-...-(y)an apparently become pir-...-(y)ang when the pronominal clitic -ku is attached to the verbs (see section 7.1.2d). According to Zoetmulder and Poedjowijata (1961:30), in OJ final /n/ is often realized as /ng/ if it is followed by -ku, e.g. ngaran +ku > ngaran'ku. The OB case may be similar to that of OJ.

In the data, this confix only occurs with verbs cinta and siddha which both derived from Sanskrit. Since there are only two words co-occurring in the data with this confix, therefore it is difficult to make a generalization about the function and meaning of this confix.

Examples:

(7-67) a. pir-cinta-yâng -ku män tua ulan di bukit
   NOM- concern -NOM 1ST DM DM take care PREP hill

   cintamani mma\l\ 143
   Pl name garden

   'My concern is to take care of the (people) on the hill of Cintamani'.

---

141 PB 002 2b 5
142 Tuuk, 1971:186
143 PB 001 1b 1
b. *ya krana pir-siddha-yang -ku ya*<sup>144</sup>  
3RD order NOM- fulfilled -NOM 1ST 3RD

'This is the regulation of accomplishment (LIT.)*

b. *par-....an<sub>2</sub>*

Nouns can take prefix *par-....an<sub>2</sub>* to form an associated locative noun in OB (shown below by LOC).

Examples:

(7-68) a.*tathāpi ua par-tapa-(n)<sup>145</sup> an di hyang karimana ...<sup>146</sup>  
but DM LOC- ascetic -LOC PREP god Pn

'But the hermitage of the sanctuary of Karimama...'

b ...*tkapan rumah gusali bujur par-panty-an jinang ...*<sup>147</sup>  
built UP house Pn LOC- temple -LOC granary

'...(the king asks the functionary) to build houses, forges, Bujurs, a precinct for purification, granaries...'

7.5 Old Balinese pronominal clitics

The following diagram illustrates the pronominal clitics which occur in OB.

<table>
<thead>
<tr>
<th>Person</th>
<th>free form</th>
<th>clitic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST person</td>
<td>aku</td>
<td>-ku</td>
</tr>
<tr>
<td>2ND person</td>
<td>yumu</td>
<td>-</td>
</tr>
<tr>
<td>3RD person</td>
<td>ya</td>
<td>-ña ~ nya</td>
</tr>
<tr>
<td>3RD person (honorific)</td>
<td>ida/ da</td>
<td>-da</td>
</tr>
</tbody>
</table>

In OB, the free pronominal form represents the NP which functions as the ACTOR-TOPIC or UNDERGOER-TOPIC. Clitic forms can have two functions. First, when it occurs with transitive verbs it functions as the ACTOR-FOCUS or UNDERGOER-FOCUS. Second, when it occurs with nouns, it functions as a possessive marker (POSS below). It should

<sup>144</sup> PB 108 2a 6  
<sup>145</sup> For (n) insertion see section 7.  
<sup>146</sup> PB 005 17  
<sup>147</sup> PB 106 1b 4
be noted that the pronominal system in OB is not marked for number as well as for gender, thus the third person pronoun above, for instance, can refer to she, he, it and they.

7.5.1 Free form

Examples:

(7-69) a. ...sumambah **aku** midih...\(^{148}\)
   ... pay respect 1ST (UT) ask
   
   '...(the villagers) pay respect to me (Sang Ratu) and ask...

   a. **Yumu** pakatahu...\(^{149}\)
   (AT) 2ND know
   
   'You should know...'

c. **anakatwa** bhikṣugrama musirang ya marumah ditu... \(^{150}\)
   if exist DM monk married take refuge (AT) 3RD live there

   'If there is a married monk who takes refuge (and) lives there...

   or

   'If there are married monks who take refuge (and) live there...

   d. **anakaiwa** ida mañumbah angkên asuji...\(^{151}\)
   if down (AT) Hon 3RD worship every 3rd month

   'If his majesty comes to worship every third month in the saka year...

7.5.2 Clitic form

a. As **ACTOR-FOCUS**

Examples:

(7-70) a. ya **hetu syuruh-ku** kumpi siddhi...\(^{152}\)
   3RD reason ask- (AF) 1ST old Pn

   'That is the reason, I order kumpi Siddhi...' (LIT. kumpi Siddhi is ordered by me).

\(^{148}\) PB 108 1b 2-3
\(^{149}\) PB 004 1b 1
\(^{150}\) PB 001 1b 4-5
\(^{151}\) PB 003 2b 3
\(^{152}\) PB 003 1b 2
b. ...padangayana yaba-ña marunah ditu 153  
cooking utensil 3RD bring- (AF) 3RD house there

'...their cooking utensils should be brought by them (when they) live there'.

c. ...sahatwa yanugrahen-da wa da pusamaha di
then grant -(AF) 3RD Hon DM Hon abbot PREP

buwunan... 154
Pl name

'...then the abbots of Buwunan... are bestowed grants by his majesty'.

b. As possessive pronoun

Examples:

(7-71) a. ...pircintayang-ku tu anak wanua di sadungan... 155
...concern -1ST POSS DM people village PREP pl name

'... my concern to the villagers of Sadungan...'

b. ...simayang-ña hangga tingkad karuh... 156
...boder -3RD POSS to pn west

...its (the hermitage's) boundary is to the west is (the village of) Tingkad,...'

c. ara maai ya wa banyaga parduan dpbya-ña ... 157
exist die 3RD DM merchant two property -3RD POSS

'If those merchants die their properties should be divided into two...'

153 PB 001 2b 2
154 PB 102 1b 1
155 PB 101 1
156 PB 001 1b 4
157 PB 002 2b 3
CHAPTER VIII

DIACRONIC CHANGES IN LEXICON AND MORPHOLOGY

In the previous chapters, the morphological processes of SB, MtB, and OB were discussed. In this section an attempt is made to analyse the changes which have occurred diachronically in the morphological processes from OB to MB.

Initially, there will be a discussion of the evolution of speech levels in Balinese and borrowings from Sanskrit and Old Javanese. This discussion provides the necessary background for considering morphological changes.

8.1 Evolution of speech levels in Balinese

Due the scarcity of data, it is hard to determine the time when speech levels first appeared in Bali, and the reasons for the emergence of such a complicated system on such a small island. It is not surprising, therefore, that opinions are varied. According to Granoka et al., for instance, the occurrence of speech levels in Bali was caused by the caste system (1984-1985:16-17). In other words, the speech levels, according to those authorities, may have existed in OB because of the adoption of the caste system under the influence of Indian religion. For instance, the word brahmawangsa, 'brahman descent' (Zoetmulder, 1982:255) belonging to the brahmans', already occurs in one of the earliest inscriptions found in Bali, namely Truñan AI, dated 891 AD (003 2b 1), although the names of the four castes (brāhmaṇa, kṣatriya, vaśya, sudra) appeared for the first time one and half centuries later, namely in the inscription Sembiran A IV issued by Anak Wungṣu, dated AD 1065.1

Alternatively, other scholars, such as Bagus (1979) and Bawa, et al. (1985) argue that there are no speech levels in OB. While the occurrence of words such as umanugrahen 'to grant favour' (202 2), khbhraktyan 'respect' (005 1-2) or the honorific (i)da (210 2-3), may support the former opinion, my close reading of the OB inscriptions seem to confirm the latter – that there was no speech level differentiation in OB. Since in the evolution of the Balinese language, the MtB (as has been argued in previous chapters) occupies the intermediary position between OB and SB, the lack of speech level

---

1 The text is as follows:

409 11b 1-2 ... irikanang karaman i julah saddhikara sapasuk parimaṇḍalanya kabañ, brāhmaṇa, kṣatriya, vaśya, sudra, hadyan hulu matuha raej, lakiaki, wadwan grhasta,...
differenciation in MtB (see Granoka et al., 1984-1985) seems to support the findings of Bagus (1979) and Bawa et al. (1985).

Probably, the occurrence of speech levels in Balinese developed gradually. The speech level phenomenon which exists in SB now may have come about due to Javanese influence. Among the languages of Indonesia, four have speech levels: Javanese, Sundanese, Madurese and Balinese (see section 2.9.1). The first three of these languages are used on the island of Java. But when the speech levels first appeared in Java is also not certain.

Some scholars believe that speech levels may have existed in OJ before the fifteenth century. According to Pigeaud, in the mid-fourteenth century the Javanese kings were addressed in honorific language (1962, IV:8). The Suma Oriental which was written by Tomé Pires, who spent his time in Malacca and India between 1512-1515, seems to support the argument that speech levels in Java might have developed as early as AD 1500. Thus, according to Pires:

'...there is no greater pride than in Java, there are two languages, one for the nobles and the other for the people. They do not differ as the language at court does with us; but the nobles have one name for things and the people another; this must certainly be the same for everything' (Cortesao, (ed. and his translation) 1944:199).

Clynès (1989:122-124) also proposes that the Javanese speech level system was well developed in the earlier sixteenth century and appeared in Bali after the fall of the Majapahit empire. However, most scholars are of the opinion that speech levels in Java were developed in the seventeenth or eighteenth century (see Subardi, 1975: 56; Ricklefs 1976: 468).

As to Balinese, Zurbuchen (1987:18) gives the following diagram on the evolution of spoken Balinese.

<table>
<thead>
<tr>
<th>Time</th>
<th>Linguistic Base</th>
<th>Source of influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD 500</td>
<td>Old Balinese</td>
<td>Sanskrit (pre-Javanization)</td>
</tr>
<tr>
<td>The first OB inscription (882 AD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD 1100</td>
<td>Sanskrit-Balinese</td>
<td>OJ/Kawi (pre-Majapahit)</td>
</tr>
<tr>
<td>AD 1400</td>
<td>Kawi-Balinese</td>
<td>Javanese (Majapahit &amp; after)</td>
</tr>
<tr>
<td>(AD 1700/ 1800)</td>
<td>High     Low</td>
<td></td>
</tr>
</tbody>
</table>
Zurbuchen claims that the existence of Balinese speech levels may have been crucially influenced by the Javanese after the fall of Majapahit, at least in the late seventeenth century AD. She proposes that speech levels in Bali may have occurred in the late seventeenth century or at the beginning of the eighteenth century AD, and this seems possible because, as mentioned in section 2.8, the Géguritan Linggarjapetak dated in 1753 is in SB, and based on my close reading on this text, it appears that speech level differentiation does occur in that text.

8.2. Lexical sources for Standard Balinese speech levels

As has been pointed out in Chapter 2, political contact between Java and Bali had existed since the tenth century AD when the Balinese king, Dharmmodayana Warmadewa married a princess from east Java, Gunapriya Dharmapatni and ruled Bali from AD 989-1011. This indicates that at that time a strong relationship between Java and Bali did exist. Borrowing in one form or another or in one direction or another may have occurred since that period. Data taken from the inscriptions prove that OB was used as a court language from AD 882 to AD 1050. After this period, OJ appears to have become more dominant. It became the language of the court and administration and all associated inscriptions are in OJ (for details see Chapter 2). However, although OJ was a court language in Bali for a long period, this does not mean that OJ is necessarily direct predecessor of SB speech levels. It is clear from Figure 3 below that OJ is not the only lexical source of SB speech level differentiation. All the three languages used in Balinese inscriptions, namely OB, OJ and Sanskrit, have contributed vocabulary to both high and low speech levels in MB.
8.2.1 Old Balinese contribution

An analysis of Goris' OB word-list of 3067 shows that 20% of the items have no SB equivalents. Of the remaining items, about 60% are neutral as to speech levels, 10% are high and 10% are low. Of the words used in SB low, my estimate is that about 87% are from OB, 11% from OJ and 2% from Sanskrit, whereas according to my count, of the words used in high level, only about 56% belong to OB, 19% to OJ and 25% to Sanskrit. Some of these words are illustrated below:  

---

2 For the complete list see Appendix D; for phonological changes see section 4.8.
<table>
<thead>
<tr>
<th>OB</th>
<th>SB/ high</th>
<th>SB/ low</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>angan</td>
<td>angan</td>
<td>kênêh</td>
<td>thought</td>
</tr>
<tr>
<td>bañu</td>
<td>bañu</td>
<td>yeh</td>
<td>water</td>
</tr>
<tr>
<td>bras</td>
<td>bĕras</td>
<td>baas</td>
<td>rice</td>
</tr>
<tr>
<td>gnar</td>
<td>gënah</td>
<td>tongos</td>
<td>place</td>
</tr>
<tr>
<td>kmit</td>
<td>kêmît</td>
<td>jaga</td>
<td>to guard</td>
</tr>
<tr>
<td>unggah</td>
<td>unggah</td>
<td>pênekJ</td>
<td>to climb</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OB</th>
<th>SB/ low</th>
<th>SB/ high</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>aba</td>
<td>aba</td>
<td>bakta</td>
<td>to bring</td>
</tr>
<tr>
<td>amah</td>
<td>amah</td>
<td>rayun</td>
<td>to eat</td>
</tr>
<tr>
<td>bajah</td>
<td>bayah</td>
<td>taur</td>
<td>to pay</td>
</tr>
<tr>
<td>bli</td>
<td>bĕli</td>
<td>tumbas</td>
<td>to buy</td>
</tr>
<tr>
<td>idih</td>
<td>idih</td>
<td>tunas</td>
<td>to ask</td>
</tr>
<tr>
<td>Iwas</td>
<td>luwas</td>
<td>lunga</td>
<td>to go</td>
</tr>
<tr>
<td>ñak</td>
<td>ñak</td>
<td>kayun</td>
<td>willing</td>
</tr>
</tbody>
</table>

As mentioned above, some special OB words are no longer used in MB. Most of these words belong to nouns: proper names, names of places, names of animals, names of offerings, as do the examples listed below:

- besara: 'uncertain animal'(?)
- pancayan: 'a kind of animal'
- hundan: 'a kind of duck'

### 8.2.2 Borrowings from Sanskrit

When languages are in contact with each other, borrowing inevitably occurs. OB borrows Sanskrit words, especially those which can be categorized as nouns: for instance, proper names, names of the gods, temples, offerings and the lunar calendar. One reason for the borrowing is that OB lacked words for certain concepts, and those words already existed in Sanskrit. In the first OB inscription, that is 001 Sukawana AI dated AD 882, there are about 29% Sanskrit words and 71% OB words, whereas in the last OB inscription reviewed here, that is 401 Trujían C dated AD 1049, only 8% are Sanskrit words, 82% OB and 9% OJ. The older the inscription is the more words appear to have been borrowed from Sanskrit. It seems that most of these Sanskrit borrowings still exist in SB, the great majority of which recur in high levels. My count shows that there are about 705 Sanskrit words, of which about 680, or more than 90% belong to the high vocabulary. Some of those words are illustrated below:

---

3 For the borrowing of Sanskrit in Indonesian languages in general see the exhaustive study of Gonda (1973).
<table>
<thead>
<tr>
<th>Sanskrit</th>
<th>SB/ high</th>
<th>SB/ low</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ambara</td>
<td>ambara</td>
<td>langit</td>
<td>sky</td>
</tr>
<tr>
<td>anugraha</td>
<td>anugraha</td>
<td>pabaang</td>
<td>grant</td>
</tr>
<tr>
<td>ciha</td>
<td>ciha</td>
<td>ciri</td>
<td>sign/mark</td>
</tr>
<tr>
<td>prajña</td>
<td>prajña</td>
<td>duĕg</td>
<td>intelligence</td>
</tr>
<tr>
<td>warsa</td>
<td>warsa</td>
<td>tiban</td>
<td>year</td>
</tr>
<tr>
<td>wastra</td>
<td>wastra</td>
<td>kamën</td>
<td>clothe</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sanskrit</th>
<th>SB/ low</th>
<th>SB/ high</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>karana</td>
<td>karana</td>
<td>mawinan</td>
<td>because</td>
</tr>
<tr>
<td>margga</td>
<td>margga</td>
<td>margi</td>
<td>road</td>
</tr>
<tr>
<td>mula</td>
<td>mula</td>
<td>tandur</td>
<td>plant</td>
</tr>
</tbody>
</table>

The OB corpus shows that there are not any affixes borrowed from Sanskrit.

### 8.2.3 Borrowings from Old Javanese

As indicated above, OB also borrowed certain words from OJ since at least from around the eleventh century AD, or probably even prior to this period. Thus in the inscription Truñan C dated 1050, we find the following words which replace the OB words (including from Sanskrit) occurring in the earlier inscriptions.

<table>
<thead>
<tr>
<th>OJ</th>
<th>OB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>401 1b 1</td>
<td>dwn</td>
<td>bhagi</td>
</tr>
<tr>
<td>401 Ob 1</td>
<td>wetan</td>
<td>kangin</td>
</tr>
<tr>
<td>401 Ob 2</td>
<td>kidul</td>
<td>kalod</td>
</tr>
</tbody>
</table>

On the other hand, in some OJ inscriptions found in Bali, some Balinese vocabulary is always found. Some of these words are as follows:

<table>
<thead>
<tr>
<th>OJ</th>
<th>OB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>303 3 7</td>
<td>par-</td>
<td>'nominal prefix'</td>
</tr>
<tr>
<td>303 2 10</td>
<td>sa-</td>
<td>'quantifying prefix'</td>
</tr>
<tr>
<td>303 2 4</td>
<td>ling</td>
<td>'oil'</td>
</tr>
<tr>
<td>305 3b 4</td>
<td>tangkalik</td>
<td>'horse breeder'</td>
</tr>
<tr>
<td>305 2b 3</td>
<td>psu</td>
<td>'go out'</td>
</tr>
<tr>
<td>602 3b 1</td>
<td>wingkang</td>
<td>'boundary of a lake'</td>
</tr>
</tbody>
</table>

Although the evidence is limited, these words can be used as indications that borrowing in one form or another or in one direction or another has occurred.
According to my account, 364 OB words have OJ cognates. Approximately, 9% of these words are used in high level in SB, 23% are used in low level and 68% neutral in SB.

OB words which have OJ cognates used in high in SB include:4

<table>
<thead>
<tr>
<th>OB, SB/ high</th>
<th>OJ</th>
<th>SB/ low</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ajen</td>
<td>ajen</td>
<td>amah</td>
<td>in front</td>
</tr>
<tr>
<td>lali</td>
<td>lali</td>
<td>engsap</td>
<td>to forget</td>
</tr>
<tr>
<td>pendem</td>
<td>pendem</td>
<td>tanem</td>
<td>to bury</td>
</tr>
<tr>
<td>rabi</td>
<td>rabi</td>
<td>kurknap</td>
<td>wife</td>
</tr>
<tr>
<td>susu</td>
<td>susu</td>
<td>fnoho</td>
<td>woman's breasts, udder</td>
</tr>
<tr>
<td>uning</td>
<td>uning</td>
<td>tawang</td>
<td>to know</td>
</tr>
<tr>
<td>hatur</td>
<td>atur</td>
<td>baang</td>
<td>to give</td>
</tr>
</tbody>
</table>

OB words which have OJ cognates used in low level in SB include:

Examples:

<table>
<thead>
<tr>
<th>OB, SB/ low</th>
<th>OJ</th>
<th>SB/ high</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>alap</td>
<td>alap</td>
<td>ambil</td>
<td>'to take'</td>
</tr>
<tr>
<td>bapa</td>
<td>bapa</td>
<td>aji</td>
<td>'father'</td>
</tr>
<tr>
<td>diri, didi</td>
<td>diri</td>
<td>raga</td>
<td>'oneself'</td>
</tr>
<tr>
<td>jaja</td>
<td>jaja</td>
<td>sanganan</td>
<td>'cake'</td>
</tr>
<tr>
<td>kayu</td>
<td>kayu</td>
<td>taru</td>
<td>'wood'</td>
</tr>
<tr>
<td>kurken</td>
<td>kurken</td>
<td>rabi</td>
<td>'household'</td>
</tr>
<tr>
<td>mata</td>
<td>mata</td>
<td>panyuryanan</td>
<td>'eyes'</td>
</tr>
<tr>
<td>rumah, umah</td>
<td>rumah, umah</td>
<td>puri</td>
<td>'house'</td>
</tr>
</tbody>
</table>

8.3 Old Balinese affixes not occurring in Modern Balinese

Five OB affixes no longer occur in MB, these affixes are:

pir- and pi-/ping-
paka-
par- ~ pa-
-y-
-in-

Accordingly, the conffix pir-...-(y)an as well as complex verbal affixations such as pi-/ping- {V root -in/-ang}, -y- {V root + in} and -in- {V root -ang} do not occur in MB. The sections below will argue that the reason that these affixes no longer occur in MB is

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4 For the complete list see Appendix C
that they had functions which were similar to other affixes, or that other affixes took over their functions.

a. *pir- and pi-/ ping-

The prefixes *pir- and *pi- mark the UNDERGOER-TOPIC in OB constructions and both of these affixes seem to convey causative meaning. The prefix *pir- occurred until the ninth century AD (see section 7.4.3.1c). After that period, this prefix disappeared and apparently, the suffixes -ang and -in took over its function in SB; similarly, for the prefix *pi-. It should be noted that the prefixes *pir- and *pi- and suffixes -ang and -in occur side by side before the ninth century. In OB as well as in MB, the causative constructions are formed by attaching the suffixes -ang and -in to the roots (see section 5.11.2a,b).

The prefix *pir-...-(y)an, as mentioned in section 7.4.2.2, only occurs with the Sanskrit words cinta 'thought' and siddha 'succeed' and it appears that this prefix has not been productive since the OB period. This prefix occurred until the inscription 108 Sêrai AI dated AD 966, after which it no longer appears. It seems that no other affixes have taken over its function in MB.

The pi-/ping- [V root-in-/ang] form is similar to the prefix *pi- which marks the UNDERGOER-TOPIC in OB constructions. (For examples of this affix see section 7.4.3.4a).

b. *paka-

The prefix *paka- appears not to be very productive in OB inscriptions. It only occurs with the verb rahu 'know'. This prefix is normally used at the beginning of certain inscriptions which have the 'Yumu pakatahu' style (see section 2.7) The prefix *paka- occurs until the inscription 110 Gobleg, Pura Batur A, after which it disappears. It seems that this prefix was totally dropped and that no other affix took over its function. The prefix *paka- may be similar to maka- (derives from -um- + paka) and pinaka- (derives from -in- + paka) which still occur in MB, but the function and meaning of OB *paka- are different from those of the MB maka-/ pinaka-.

c. *par- ~ pa-

*par- nominalizes transitive verbs, and can also be attached to nouns to denote 'one professionally connected with what is expressed in the nominal root'. Since the OB period, the prefix *par- has had the free allomorph variant pa- (see section 7.4.4.1). The prefix par - can occur with both OB and words derived from Sanskrit, such as
*padaha* 'drum' and *bhangšī* 'flute'. In MB, this prefix appears to shift to a lexical item
*juru*, which means 'skilled worker'. For example:

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>par-gēnding</td>
<td>juru gēnding</td>
<td>singer</td>
</tr>
<tr>
<td>par-padaha</td>
<td>juru kēndang</td>
<td>drummer</td>
</tr>
<tr>
<td>par-bhangšī</td>
<td>juru suling</td>
<td>flautist</td>
</tr>
</tbody>
</table>

It should be noted, however, that the word *juru* was already occurring in 925 AD, in the inscription Pëngotan AI (105). In the OB inscriptions, the word *juru* probably has two meanings: (i) leader, for instance, *juru hūam* 'leader of teenagers', *juru wanyaga* 'leader of merchants' and (ii) skilled worker, e.g. *juru mangjahit kajang* 'tailor'. It is the second meaning which survives in MB, and apparently has taken over the function of the OB prefix *par*.

d. *-y-*

The infix *-y* marks the UNDERGOER-TOPIC of transitive verbs which is usually followed by an agent. The absence of this infix in MB may be due to the similarity of the semantic function of this affix to that of the prefix *ka-* and so it is likely that *ka-* has taken over at least the function of *-y*-. As with the infix *-y* in OB, the prefix *ka-* in SB marks the UNDERGOER-TOPIC. It can be used both in high and low levels. However, while in high level it can optionally have the first, second or third person agents, in low level, it should be interpreted as having the first or second person agent only. Moreover, this agent is never marked overtly (see section 8.7b below). In MtB, the prefix *ka-* can only have the first or second person unmarked agent, similar to its usage in low level in SB.

e. *-in-*

The infix *-in-* marks the UNDERGOER-TOPIC of transitive verbs in OB. This infix seems to have a similar function and meaning to that of the infix *-y* above. As argued in 7.4.3.3b, the main difference between the infixes *-y* and *-in-* is that the infix *-y* is usually followed by an agent while *-in-* apparently is not used with an overt agent. The function and meaning of the infix *-in-* is probably taken over by the prefix *ka-* in MB as well.\(^5\)

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\(^5\) According to Brandes (1884:72) most people prefer to use the prefix than the infix.
8.4  Old Balinese affixes occurring in Modern Balinese with limited changes in functions and meanings

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ka-/ki-...-an₁</td>
<td>ka-...-an₁</td>
</tr>
<tr>
<td>pa-/paN-</td>
<td>pa-/paN-</td>
</tr>
<tr>
<td>maka-/pinaka-</td>
<td>maka-/pinaka-</td>
</tr>
<tr>
<td>{par- Numeral}-an₁</td>
<td>pah- or {pah- Numerals}-én</td>
</tr>
<tr>
<td>-an₂</td>
<td>-an₂</td>
</tr>
<tr>
<td>ka-...-an₂</td>
<td>ka-...-an₂</td>
</tr>
<tr>
<td>par-/pa-/paN-...-an₂</td>
<td>pa-/paN-...-an₂</td>
</tr>
</tbody>
</table>

a. Old Balinese ka-/ki-...-an₁ > Modern Balinese ka-...-an₁

This conffix marks the UNDERGOER-TOPIC of transitive verbs both in OB and MB. In SB, it can occur both in low and high levels. Neither the OB ka-/ki-...-an₁ nor MB ka-...-an₁ is marked by an agent overtly. The function and meaning of the OB conffix ka-/ki-...-an₁ are closer to those of the MtB ka-...-an₁ than those of SB.⁶

Compare the following examples:

**OB:**

<table>
<thead>
<tr>
<th>anada</th>
<th>tua</th>
<th>bhikṣu</th>
<th>grama</th>
<th>musirang</th>
<th>ya</th>
</tr>
</thead>
<tbody>
<tr>
<td>if exist</td>
<td>DM</td>
<td>(UIT₁) monk</td>
<td>marry</td>
<td>refuge</td>
<td>3RD</td>
</tr>
</tbody>
</table>

marumah  ditu  tani  ka-bakat-an₁  laku  langkah⁷

house  there  NEG  U₁Uj-j  obtain  -U₁Uj  (U₂Tₙ) corvee

'If married monks take refuge and live there, they are not subjected to corvee'.

**MtB:**

Bapa  ka-bakat-an₁  Rp 5000,-
(UIT₁) father  U₁Uj-j  obtain  -U₁Uj  (U₂Tₙ) Rp 5000,-

'Father is subjected to paying Rp 5000,-'.

**SB:**

Titiang  ka-seng-an₁  ka  puri (H)
(UIT₁) 1ST  U₁  call  -U₁  PREP  palace

'I was called (to come) to the palace'.

**SB:**

Bukune  ka-tinggal-an₁  jumah (L)
(UIT₁) book  DEF  U₁  leave -U₁  home

'The book is left at home'.

---

⁶ For another possible of ditransitive, see section 5.7.
⁷ PB 001 1b 4
b. Old Balinese pa-/paN- > Modern Balinese pa-/paN-

The pa-/paN- form in OB and MB is a nominal prefix, which in OB can occur with verbs as well as nouns. When it occurs with verbs, it nominalizes them and conveys the meaning of: (i) 'someone who carries out the action' and (ii) 'instrument'. However, when it is added to nouns it conveys the meaning 'agent nominalization and names of taxes associated with the roots' (see section 7.4.2.1). In MB, pa-/paN- also nominalizes verbs and adjectives but never nouns (see section 5.12.1). As in OB, in MB it can convey the meaning 'someone who carries out the action' and 'instrument'. In MB, it is never used to lexicalize words especially in relation to taxes.

Compare the following examples:

OB: tathapi tua bilang... kajadyan paN-bli pulu ...
    but DM money use NOM-buy rice container

    'But all of money is used for the purchase of a rice container...'

MB: Jinahe niki angge paN-tumbas jangan (H)
    money DEF DM use NOM-buy vegetable

    'This money is used for the purchase of vegetables'.

OB: ...paN-pukul pa-gëŋding pa-buñjing pa-padaha ...
    NOM- hit song angklung drum

    '...the gamelan player, the singer, the angklung player, the drummer...'

MB: PaN-ijënge galak pësan (L)
    NOM- guardDEF tough INTEN

    'The guard is very tough'.

c. Old Balinese maka-/pinaka- > Modern Balinese maka-/pinaka-

As mentioned in (7.4.1.1d), in OB, maka- means 'under the jurisdiction of' and pinaka- 'something to be considered as or something which is used as'. Both maka- and pinaka- are still used in SB, but not very productive. The prefix maka- is frequently used in low level, although sometimes also occurs with certain high vocabulary. On the other hand, pinaka- mostly occurs only with high lexical items. Maka- and pinaka- have similar meanings in SB, which seem to be similar to the prefix pinaka- in OB. In MtB, the prefix

---

8  PB 001 2b 4
9  PB 002 2b 5
pinaka- does not exist, but maka- is still used and its function and meaning is similar to that of SB. In OB, the prefix maka- often occurs with the quantifying prefixes sa- and a- 'one' which normally precede the nouns before the prefix maka- is added. In MB, maka- never occurs with these two quantifying prefixes. On the other hand, in MB maka- can be attached to numerals which mean 'all'.

Compare the following examples:

**OB:** ...
me anak banua di simpat bunut maka-sa-hulukayu
and people village PREP Pl name become all forester

'...and the people of the village of Simpat Bunut which is under the jurisdiction of a forester'.

**MB:** Kuluke N-kongkong maka-cihna aka anak tka
dog DEF bark as sign exist people come

'The dog is barking (which is) indicating (used as a sign) that someone is coming'.

**MB:** Maka-telu panakne duèg-duèg (L)
all three child 3RD clever

'All three of their children are very clever'.

**OB:** ...
praknan bras pinaka-pacaru di sanghyang di Truñan
use rice as offering PREP god PREP Pl name

'...the rice is to be used as the demon offering for the God at Truñan'.

**SB:** Ipun pinaka-bapan titiang (H)
3RD as father GEN 1ST

'He is considered as my father (or He is my father)'.

d. Old Balinese *(par- NUMERAL)*-an! > Modern Balinese *pah-*

The OB affixation *(par- Numeral)*-an! becomes *pah-* Numeral in MB, both in SB and MtB, except in the MtB village of Tigawasa, where it becomes *(pah- Numerals)*-ën (see section 6.3.1c). This affixation marks the UNDERGOER-TOPIE both in OB and MB.
Compare the following examples:

**OB:** *ana maa ya ssa banyaga (par-dua)-an1 dhyaña*.\(^{12}\)
  if die 3RD DM merchant two -U\(_1\) (UT\(_1\)) property 3RD

'If the merchant dies (his) property...should be divided into two'.

**MB:** *Pah-dua tanahet*
  U\(_1\)-two (UT\(_1\)) land DEF

'The land should be divided into two'.

**MtBT:** *(pah-dua)-ën nase*
  U\(_1\)-two -U\(_1\) (UT\(_1\)) rice DEF

'The rice should be divided into two'.

e. Old Balinese *-an\(_2\)* > Modern Balinese *-an\(_2\)*

In OB, *-an\(_2\)* can occur with verbs and nouns. When it is attached to the root of a transitive or an intransitive verb, it nominalizes the verb and denotes 'a person or a thing that is affected by the action of the verb'. Thus from the root *tarah* 'to pluride', for instance we have *tarahan* which means 'place that comes under attack', and from *suruh* 'to order', we have *suruhanan* which means 'someone who is ordered to do something (messenger)'. When attached to a noun, *-an\(_2\)* denotes location, (see section 7.4.2.2).

In MB, as in OB, *-an\(_2\)* is also a nominal suffix which can be affixed to both nouns and verbs. When it is added to transitive or intransitive verbs it nominalizes them with similar meaning as in OB (for details see section 5.12.2), and when it is added to nouns it also conveys the same meaning as in OB, i.e. location. However, in MB *-an\(_2\)* also has other meaning which does not appear in the OB data. This additional meaning is: it signifies a concept associated with N. (For details see section 5.12.2)

Compare the following examples:

**OB:** *
...*tani piritan ya di amah-añña, inum-añña*.\(^{13}\)...\(^{14}\)
  NEG tax (?) 3RD PREP eat-NOM drink-NOM

'...(they) are not taxed with *piritan* tax for *food* and *drink*...' (?)

---

\(^{12}\) PB 002 2b 3
\(^{13}\) For n > f see section 7.1.2d
\(^{14}\) PB 106 3a 2
SB:  
\( Tiant \ N\text{-}nambas \ ajeng\text{-}an2 \) (M)  
1ST buy eat-NOM

'I buy food'.

OB:  
...lod parlak \ hyang caranti, rapuh\text{-}an2 \ kajadyan \ human  
south garden God Pn limestone\text{-}LOC use ricefield

\( hyang \ api...^{15} \)  
God Fire

'...to the south of the garden of God Caranti (and to the west of?), the limekiln is used for the ricefields of Fire God...'

MB:  
\( Payuke \ janga \ di \ langgai\text{-}an2 \) ne (L)  
cooking pot put PREP shelf\text{-}LOC DEF

'The cooking pot is put the shelf'.

f. Old Balinese \( ka\text{-}...\)an2 > Modern Balinese \( ka\text{-}...\)an2

\( Ka\text{-}I \) ki ...an2 nominalizes an intransitive verb in OB. It can also occur with a noun to produce a new noun to denote location (see section 7.4.2.3). In MB, it can nominalize verbs, adjectives or adverbs (see section 5.12.3). When \( ka\text{-}...\)an2 occurs with a noun, it also denotes location.

Compare the following examples:

OB:  
\( apan \ hnu \ syuruh \ hyang \ tahnuni... \)  
because stay order holy Tahnuni

\( masamahin \ ka\text{-}datw\text{-}an2 \ wiharad \ prakara^{16} \)  
meet LOC- god-LOC monastery etc

'Because they stay by the order of holy Tainuni to have full meeting concerning the palace, holy monastery etc.'.

MB:  
\( Ida \ malinggih \ ring \ ka\text{-}datu\text{-}an2 \) (H)  
3RD sit PREP LOC- king-LOC

'She/he lives at the palace'.

---

\(^{15}\) PB 005 16-17  
\(^{16}\) PB 110 1b 5
g. Old Balinese par-/pa-/paN-...-an2 > Modern Balinese pa-/paN-...-an2

The nominal prefix par- -pa-/paN-...-an2 form in OB becomes the nominal prefix pa-/paN-...-an2 in MB. In OB as well as in MB, this prefix nominalizes verbs, both transitive and intransitive, and sometimes affixed to nouns (see section 5.12.3).

Compare the following examples:

OB pa-/paN-...-an2 > MB pa-/paN-...-an2 with transitive verbs.

OB: ...pa-tmu-(y)aŋ2ña 17 tunggal māgha mahānawami 18
   NOM- find -NOM 3RD single month of māgha the ninth

'...the contribution is on the ninth in the month of māgha'.

MB: Puri N-bell paN-saring-an2 (L)
   Pn buy NOM- sift -NOM

'Putri bought a sieve'.

OB par- -pa-...-an2 > MB pa-...-an2 with noun.

OB: ...rathāpi wa par-tapa-(n)an2 di hyang Karimama 19
   but DM NOM-ascetic-NOM PREP God Pn

'...but the hermitage of the sanctuary of Hyang Karimama'.

MB: Dija tongos pa-tapa-an2 sang Arjuna? (L)
   where place NOM-ascetic-NOM Hon Pn

'Where is Arjuna’s hermitage?'.

8.5 Old Balinese prefixes merging into a single prefix in Modern Balinese

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-um-</td>
<td>N-</td>
</tr>
<tr>
<td>-um- {V root -ang}</td>
<td>N- {V root -ang}</td>
</tr>
<tr>
<td>maN-</td>
<td>N-</td>
</tr>
<tr>
<td>maN- {N/V root -ang/-in}</td>
<td>N- {N/V root -ang/-in}</td>
</tr>
<tr>
<td>mā2-</td>
<td>ma-</td>
</tr>
<tr>
<td>mā2- {N/V root -ang/-in}</td>
<td>ma- {N/V root -ang/-in}</td>
</tr>
</tbody>
</table>

17 See foot note 75 in section 7.4.2.3, for how the meaning of pa-tmu- tunggal becomes 'contribution'. Two processes occur in this word: (i) y is inserted between two vowels and (ii) n + n > fitt
18 PB 106 3a 3
19 PB 005 17
In OB, *ma₂-, maN- and -um-* mark the ACTOR-TOPOIC and UNDERGOER-FOCUS of transitive verbs. These affixes apparently have a similar distribution, function and meaning. They seem to be in free variation. The following examples illustrate this.

| 003 2b 4 | maN- -sumbah | ~ 104 1b 3 | s-um- -umbah | 'to pay respect' |
| 108 2a 6 | maN- -idih | ~ 108 1b 3 | m- -idih | 'to ask' |
| 001 1b 5 | ma- -kmit | ~ 003 2a 3 | k-um- -mit | 'to guard' |

It appears that *maN-* occurs either in a main clause or in a subordinated clause, while -um-* seems to be used only with a main clause. There are only three examples of *ma₂-* with transitive verbs, namely *kmit* 'to guard', *tarah* 'to plunder' and *bēri* 'to give', and all of them occur in main clauses. There might be also semantic differences between the infix -um-* and the prefixes *maN-* and *ma₂-*, but it is difficult to define them because of the limited data.

a. -um -

The infix -um-* does not occur in MB. After the twelfth century, the function of -um-* might have been taken over by OB *maN-* which finally developed into *N-* in MB.

Compare the following examples:

**OB:**

...*s-um-ambah aku* ...

AUj-pay homage (UFj) 1ST

'...[they] pay homage to me...'

**SB:**

*Titiang N- -sumbah Ida Bēsara (H)*

(ATj) Pn AIUj-pay homage (UFj) God

'I pay homage to the God'.

In OB, the complex verbal affixation -um- {V root -ang} form marks the ACTOR-TOPOIC and UNDERGOER-FOCUS construction. It is attached to intransitive verbs *usir* 'to take refuge' and *pupul* 'gather'. In this particular case, the -um- {V root -ang} form becomes *N-* {V root -ang} in MB.

Compare the following examples:

**OB:**

...*ser pasar ida kumpi dara dyah damai -um-{pupul-ang}* ...

(ATj) Ftn Hon old Pn AI- -gather-VI

---

20 PB 104 1b 3
...the *ser pasar kumpi* Dara Dyah Damai *gathers* the people of the village of Julah'.

'b. maN-

Based on the discussion above, it seems reasonable to conclude that the *maN*- form in OB is simplified to *N*- in MB. The OB prefix *maN*- can be attached to transitive or intransitive verbs, as well as to nouns. When it is attached to transitive verbs it always has two core arguments, i.e. ACTOR and UNDERGOER. However, when it occurs with intransitive verbs or nouns it selects only one argument and frequently an ACTOR argument. The MB equivalent of this prefix is *N*- . Like the OB *maN*- , *N*- also selects two arguments, when occurs with transitive verbs, and one argument when attached to intransitive verbs or nouns (see section 5.11.b). It appears that while the phonological realization of the prefix *maN*- in OB was not fixed, the realization of *N*- in MB is regular and fixed. (See sections 7.1.1 for OB and 5.3 for SB).

Compare the following examples:

**OB:**

\[
\begin{align*}
\text{aëhër to banua} & \quad \text{di air rawang} \quad \text{..maN-alap} & \quad \text{air danu} \quad \text{..}\23
\text{then} & \quad \text{DM} & \quad \text{village} & \quad \text{PREP} & \quad \text{Pl name} & \quad \text{AiUj-take} & \quad \text{(UFj) water} & \quad \text{lake}
\end{align*}
\]

'Then the people of the village of Air Rawang take water from the lake."

**MB:**

\[
\begin{align*}
\text{Bapa} & \quad \text{N-alap} & \quad \text{nyuh} & \quad \text{di} & \quad \text{tëgale} \quad \text{(L)}
\end{align*}
\]

(b) Father 'takes' a coconut from the garden'.

When the prefix *maN*- occurs in complex verbal affixation in OB (i.e. *maN*- \{ *V root-angl-in* \}), usually exists in a subordinate clause, while in MB it can occur in a main clause or in a subordinate clause. This affix marks the ACTOR-TOPIC of transitive or intransitive verbs.

---

21 PB 209 4a 2-3
22 *Klian* means 'the head of the village'.
23 PB 004 2b 1-2
Compare the following examples:

**OB maN- {N root -ang} > SB N- {N root -ang}**

**OB:** ...
*maN- {surat-ang} ațiña kamaja ...*

AUi- letter –VI (UFI) order Pn

'...the scribe Kamaja...' (LIT. one who writes the king's order is Kamaja)

**MB:**
*Tiang ampun N- {surat-ang} Putu (M)*

(AtI) 1ST PERF AUi- letter –VI (UFI) Pn

'I have been writing a letter for Putu'.

**OB maN- {V root -in} > SB N- {V root -in}**

**OB:** ...
*tani šransisikan to banwa ulihda*

NEG tax DM village PREP hon

*maN- {jwang-in} dbya haji*

AUi- advise –VI (UFI) property king

'...(they) are not levied of šransisikan tax by the tax collector' (LIT. one who collects the king’s property).

**MB:**
*la N- {juang-in} nasin adinne (L)*

(AtI) 3RD AUi- take –VI (UFI) rice GEN younger sibling 3RD

'She/he takes her/his sister/brother's rice'.

**c. ma2-**

The prefix ma2- with overt UNDERGOER rarely occurs in OB constructions. In the entire corpus I found only three examples following this pattern. The prefix ma2- appears to have been used until the Serai AII inscription (302), dated AD 993. This prefix is still exist in MB, but it can only occur with certain verbs (see section 5.11.1a). It appears that the prefix ma2- in OB becomes N- and ma- in MB. (Further discussion of the prefix ma- see section 8.6a below).
Compare the following examples:

OB: \[\ldots \text{ma}_2\text{-}kmit \ \text{la}^\text{n}cang \ m\text{\-}a \ \text{2 habulan}\ \text{habulan}\ \text{26}\]
\[\text{AiUj- guard (UFj) canoe m\text{\-}asaka 2 one month one month}\]
\[\ldots (\text{taxes are collected for people}) \ \text{guarding} \ \text{canoes, 2 m\text{\-}asaka} \ \text{every month}.\]

SB: \[\text{Pura kr\text{\-}ama desa sam\text{\-}i N-k\text{\-}emit bant\text{\-}en ring pura (H)}\]
\[\text{PL (ATj) people village all AiUj- guard (UFj) offering PREP temple}\]
\[\text{All the villagers guard offerings in the temple}.\]

MB: \[\text{Kulu}k\text{e ma-garang tulang}\]
\[\text{(ATj) dog DEF AiUj- fight (UFj) bone}\]
\[\text{The dogs are fighting over the bone}.\]

There is evidence to suggest that OB \text{ma}_2\{\text{N/V root -ang/-in}\}, which marks the ACTOR-TOPIC with an overt UNDERGOER becomes N- \{\text{N/V root -ang/-in}\} in MB. In OB as well as in MB examples, -\text{in} rearranges the valency of transitive verbs which belong to category II. This affix always has two arguments, the ACTOR-TOPIC and UNDERGOER-FOCUS.

Compare the following examples:

OB: \[\ldots \text{ma}_2\text{-}(\text{tulu-ang}) \ jaja \ldots \text{27}\]
\[\text{AiUj- cook-VI (UFj) cake}\]
\[\ldots \text{those who make cake...}.\]

MB: \[\text{Meme N-}\{\text{gae-ang}\} \ \text{ti}\text{a}g \ jaja \ \text{ibi (M)}\]
\[\text{(ATj) mother AiUj\text{UK-}make -VI (U1Fj) 1ST (U2Fk) cake yesterday}\]
\[\text{Mother made cake for me yesterday}.\]

OB: \[\ldots \text{senapati di pelajungan}\ldots \text{ma}_2\text{-}(\text{tutur-in}) \ \text{dha senapati}\]
\[\text{(ATj) Ftn PREP court AiUj- guard-VI Hon (UFj) Ftn}\]
\[\text{di sadatan}\ \text{29}\]
\[\text{PREP Pl name}\]
\[\text{The senapati at the court of justice advises...the senapati at the village of Sadatan}.\]

---

26 PB 108 1b 5
27 PB 001 1b 5
28 According to Goris (1954:73), \text{pelajungan} may be similar to \text{panglapuan}, 'court of justice'.
29 PB 201 1b 1
MB: Meme N-(tutur-in) panakne (L) (AT: mother A:Uj- advise -VI (UFj) child 3RD

'Mother advises her child'.

8.6 Old Balinese prefix still occurring in Modern Balinese with additional functions and meanings

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>mar -&gt; maₐ₁</td>
<td>ma-</td>
</tr>
<tr>
<td>maₐ₁-...-an₁</td>
<td>ma-...-an₁</td>
</tr>
<tr>
<td>ka- /ki-</td>
<td>ka-</td>
</tr>
<tr>
<td>-ang</td>
<td>-ang</td>
</tr>
<tr>
<td>-in</td>
<td>-in</td>
</tr>
</tbody>
</table>

a. mar -> maₐ₁ in Old Balinese > ma- in Modern Balinese

The OB prefix mar- only occurs prior to the tenth century AD, and after that period its function was taken over by maₐ₁- (see section 7.4.3.1). Both prefixes, mar- and maₐ₁-, mark the ACTOR-TOPIC. It appears that mar- is only used intransitively in OB, and can be attached to intransitive verbs as well as nouns. For the analysis of maₐ₁- with transitive verbs see section 8.5c above.

In MB, ma- always has one surface argument, i.e an ACTOR or an UNDERGOER. Ma- marks the ACTOR-TOPIC when it occurs with intransitive verbs. When ma- is added to a noun, it forms the predicate NP and also marks the ACTOR-TOPIC. Ma- with transitive verbs can have an ACTOR or UNDERGOER argument. (i) When ma- has an ACTOR argument, the UNDERGOER is optional (with this constructions, ma- occurs with a limited set of transitive verbs, see section 5.11.1 ). (ii) When ma- selects an argument with UNDERGOER, it is never followed by the agent (anti-agent, see section 5.11.1 ). These two patterns are not found in OB constructions.

Compare the following examples:

OB maₐ₁- -> MB ma- with intransitive verb.

OB: ...kapwa ki maₐ₁-larib mapaspasan pada prihawak 30
all PTC A₁- flee hide PL oneself

'...(they) all flee and hide themselves'.

30 PB 304 lb 6
MB: *Made ma-la(h)ib ka rununge* (L)
   (AT1) Pn (2nd born) A1 - run PREP alley DEF

'Made runs in the alley'.

OB *ma1-* MB *ma-* with noun.

OB: ...*tēhēr ya ma1-ciiciciściśma1-mata,*
   and (AT1) 3RD T1 - rings T1 - eye

*ma1-tiŋtiŋtiŋ* *ma1-mata* 31
   T1 - earrings T1 - eye

'...then it wears rings set with precious stone, (and) earrings set with precious stone'. (i.e. they decorate the statue of god Da Tonta with rings, etc.)

MB: *la ma-bungkung ma-mata teken ma-subōng mas* (L)
   (AT1) 3RD T1 - ring T1 - eye and T1 - earrings gold

'She is wearing a ring set with precious stone and golden earrings'.

The prefix *ma1-* also occurs as a confix *ma1---an1*, but only one example found from the corpus, i.e. with the verb *паспас* 'to hide'. It seems that this confix marks the ACTOR-TOPIC to convey the meaning of 'multiplicity or randomness'.

As shown in section 5.11.3a, in MB the confix *ma---an1* can be added to nouns, verbs and adjectives. When this confix is added to a noun, it usually conveys progressive meaning, and when it is attached to a verb, it normally refers to an action which is carried out with reciprocity or multiplicity. However, when the confix *ma---an1* is attached to an adjective, usually in a reduplicated form, it conveys the meaning of 'competing'. This confix marks the ACTOR-TOPIC. (See section 5.11.3a for the examples of this confix).

Compare the following examples:

OB: *kapwa ta malarib ma1-paspaš-an1 pada prihawak* 32
   (AT1) all PTC flee A1- hide -A1 PL oneself

'(They) all flee and hide themselves'.

---
31  PB 004 2b 2
32  PB 304 1b 6
b. *ka-ki* in Old Balinese > *ka-* in Modern Balinese

The prefix *ka-*, which appears only in a few OB inscriptions, has a free allomorphic variant *ki-*. *Ka- ~ ki-* marks the UNDERGOER-TOPIC and it appears to be used with the third person UNDERGOER. In the OB corpus *ka-* seems not to occur with an agent, although it is understood from the context that the agent is the third person (see section 7.4.1.1c).

In SB, *ka-* which can be used in high and low levels, also marks an UNDERGOER-TOPIC. In high usage, it can occur with the first, second, or third person UNDERGOER, although it most frequently has the third person UNDERGOER. The verb is normally followed by an agent which can be the first, second or the third person, preceded by the preposition *antuk* 'by'. For constructions with third person agents, the agents are optional if they have been mentioned or they are already understood. For constructions with the first and second person agents, the agents are preceded by the preposition *antuk* which is obligatory. Otherwise, it would be assumed that the agents are third persons.

In low level, *ka-* always has third person UNDERGOER (as in OB). The prefix *ka-* in this construction never occurs with an overt agent (see section 5.11.1c). In MtB, the function and meaning of the prefix *ka-* is similar to *ka-* in low level SB. The prefix *ka-* which has third person agent is hardly found to be used in MtB; the suffix *-a1* or *-ña* is used instead.

Compare the following examples:

**OB:** ...
\* tani 
\* burung 
\* mai 
\* ka-hañang...

NEG 
fail 
die 
U1 - abduct

'... (the villagers of Julah whose houses and families were plundered), who certainly were killed (and) abducted by force...'

**MtB:**
\* Kopine 
\* bo 
\* ka-duduk

(UT1) coffee DEF 
PERF 
U1 - collect

'The coffee has been collected'.

33 PB 351 6b 1
SB:  Asune sampun ka-pangguh antuk panyéroanne (H)  
(UT) dog DEF PERF U₁ - find PREP servant 3RD

'The dog has been found by her/his servant.'

The ka- {V root -ang/-in} form does not appear in the OB inscriptions. As mentioned above, the prefix ka- only appears twice in the entire corpus, and apparently does not occur in verbal complex affixation. This may be comparable to the prefix ka- in OJ. According to Zoutmulder and Poedjowijana, the prefix ka- cannot occur with the suffix -akën in the complex verbal affixation, while the infix -in- can. Thus, besides OJ words such as winëkasakën 'to be left behind' and inalahakën 'be defeated' we do not find kawëkasakën and kalahakën, but kavëkas and kali (1961:78).

In MB, the ka- {V root -ang/-in} marks the UNDERGOER-TOPIC. This affix usually has third person agent in high level, in which the agent can be preceded by a preposition. This complex affixation has a similar function and meaning with the prefix ka-. As mentioned before, the suffixes -ang and -in normally rearrange the valency of the verbs which belong to category II, or they can also increase the valency of the verb by one, before the prefix ka- is further added. In MtB, ka- {V root -ang/-in} is hardly used. (For details see section 5.11.4 )

c. -ang in Old Balinese > -ang in Modern Balinese

In OB, the suffix -ang, conveys a causative meaning with the agent in high direct involvement. It also appears to rearrange (lexicalize) and increase the valency of a verb. When -ang occurs with an intransitive verb, it transitivizes the intransitive verb, and when it occurs with a noun it verbalizes the noun. In MB, this suffix also rearranges and increases the valency of a verb by one argument (see section 5.11.2a ). When it occurs with transitive verbs -ang ditransitivizes transitive verbs. In this construction the valency of the verb will be increased by one, the verb will have two UNDERGOERS and the indirect UNDERGOER functions as a benefactive.

Compare the following examples:

OB:  ...maruhani dua bhagi hatur-ang-ña ...
(UT) male two part give-VI/U₁-3RD

'...the widowers should be given two parts (of their properties)...'

---

34 PB 001 2b 1
d. -in in Old Balinese > -in Modern Balinese

The suffix -in is also used to transitivize intransitive verbs or nouns in OB as well as in MB. As in MB, the suffix -in in OB may also convey a causative meaning with the UNDERGOER in high direct involvement and it functions as recipient, goal, patient or locative. The suffix -in rearranges and increases the valency of the verbs.

Compare the following examples:

**OB:** ...tani [s]rangsisikan to banwa ulihka  
NEG tax PREP village PREP Hon

\[\text{maN-(jwang-in) abya} \quad \text{haji}^{35}\]
\[\text{A}_{1}U_{1}\text{- collect - VI (U}_{1}\text{F}_{1}\text{) property king}\]

'...[they] are not levied of srangsisikan tax by the tax collector' (LIT. by the one who collects the king's property).

**MB:** Suji \(N\)-[juang-in] meme yeh di  
\(\text{Pn A}_{1}U_{1}U_{2}\)- take-VI (U_{1}F_{1}) mother (U_{2}F_{k}) water PREP

\[\text{bulakanne} \quad \text{(L)}\]
small well DEF

'Suji takes water for mother from the small well'.

8.7 Old Balinese affixes which change their functions and meanings

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>-an₁ ~ -yan ~ -en</td>
<td>-a₁ (MB) -ña (MtB of Tigawasa)</td>
</tr>
<tr>
<td></td>
<td>-a₂</td>
</tr>
<tr>
<td></td>
<td>-a₃</td>
</tr>
<tr>
<td>{V root-ang} -en</td>
<td>{V root-ang} -a₁ (MB),</td>
</tr>
<tr>
<td></td>
<td>{V root-ang} -ña (MtB of</td>
</tr>
<tr>
<td></td>
<td>Tigawasa</td>
</tr>
<tr>
<td></td>
<td>-an₁</td>
</tr>
</tbody>
</table>

\[^{35}\text{PB 003 2a 3-4}\]
Old Balinese-\(a_n\) \(\sim\) \(\text{-yan} \sim\) \(\text{-\(\ddot{e}n\)} \) \(\rightarrow\) Modern Balinese-\(a_1\)

\(\text{-\(a_n\)} \sim\) \(\text{-yan} \sim\) \(\text{-\(\ddot{e}n\)} \) appear in irrealis clauses and mark the UNDERGOER-TOPIC of transitive verbs in OB. They convey the meaning of 'future imperative' (jussive marker). These suffixes survive as suffix \(-a_1\) in SB and split functionally as \(-a_1\), \(-a_2\), \(-a_3\) (see section 5.11.2c). The suffix \(-a_2\) and \(-a_3\) in MB denotes future intention which is similar to irrealis, while \(-a_1\) marks the UNDERGOER-TOPIC. For restrictions on (non-core) ACTOR in this construction, see section 5.11.2c. The function and meaning of the suffix \(-a_1\) in SB is similar to that of most of MtB. The exception is in the MtB village of Tigawasa where \(-a_1\) becomes \(-\tilde{n}a\). This construction always has the third person agent. Note that while the suffix \(-a_1\) in SB can also be used in high level, Balinese speakers are inclined to avoid using it and prefer the prefix \(ka\)- instead.

In MB, the suffix denoted here as \(-a_3\) (or as \(-\tilde{n}a\) in case of the MtB village of Tigawasa) indicates irrealis and/or conveys progressive meaning. This suffix which usually occurs with adjectives (see section 5.11.2c), is not found in OB, although the OB suffixes mentioned above usually occur in irrealis clauses.

Compare the following examples:

**OB:**

<table>
<thead>
<tr>
<th>NEG</th>
<th>kasiddhān</th>
<th>duduk-yan</th>
<th>anak</th>
<th>ditu$^{36}$</th>
</tr>
</thead>
</table>

'the tax) should not be collected from the people there'.

**MB:**

<table>
<thead>
<tr>
<th>Nah</th>
<th>duduk-(a_2)</th>
<th>padine (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>collect -IRR</td>
<td>rice DEF</td>
</tr>
</tbody>
</table>

'Yes, I will collect the rice'.

**MB:**

<table>
<thead>
<tr>
<th>Padine</th>
<th>duduk-(a_1)</th>
<th>baan Wayan (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(UT₁) rice DEF</td>
<td>collect -U₁</td>
<td>PREP Pn (1st born)</td>
</tr>
</tbody>
</table>

'The rice is collected by Wayan'.

**MtBT:**

<table>
<thead>
<tr>
<th>Aha-(\tilde{n}a)</th>
<th>mën</th>
<th>mulih</th>
</tr>
</thead>
<tbody>
<tr>
<td>bring-IRR</td>
<td>PTC</td>
<td>home</td>
</tr>
</tbody>
</table>

'I will bring (it) home'.

$^{36}$ PB 002 1b 2
MtBT: *Nasine* amah-ña
(UT₁) rice DEF eat -U₁

'The rice was eaten (by someone)'.

In addition, the function and meaning of OB -an₁ seems to shift in MB. In MB, the suffix -an₁ is not an irrealis marker. It usually occurs with nouns to form NP predicates and marks UNDERGOER-TOPIC construction. (See section 5.11.2d.)

MB: *Purane* lumut-an₁ (L)
(UT₁) temple DEF moss -U₁

'The temple becomes mossy'.

MB: *Ia tēka tēkat sawireh ia ujan-an₁ (L)
3RD come late because (UT₁) 3RD rain -U₁

'She/ he came late, because she/ he was caught in the rain'.

The OB, complex affixation {V root -ang} -ën - an₁ and MB {V root -ang} -a₁ and {V root -ang} -ña in MtB of Tigawasa mark UNDERGOER-TOPIC constructions. This affix only occurs with an intransitive verb in OB. As mentioned above, the suffix -ang increases the valency of the verb + one. However, in MB, this complex affixation can occur with intransitive verbs or transitive verbs which belong to category II (bound verb forms) or to nouns. As in OB, -ang in MB also increases the valency of verbs by one argument or rearranges the valency of verbs. After the suffix -ang is attached to verbs, the suffix -ën is added in OB, while MB -a₁ is added (or -ña in the case of Tigawasa).

Compare the following examples:

OB: *ana krängan mawalu... ya suhunan tanggungan
exist married widow 3RD head-burden shoulder-burden

{*ulih-ang*} -ën...dhyana prakara³⁷ return-VI -U₁ (UT₁) property etc

'If there is a childless widow,...her property etc should be returned'.

MB: *Pipise* {ulih-ang} -a₁ baen Made (L)
(UT₁) money DEF return-VI -U₁ PREP Pn (2nd born)

'The money was returned by Made'.

---

³⁷ PB 001 2a 5-2b 1
MtBT: Narengkune (uli-h-ang)-ña  ibi
         (UT₁) tray 1ST DEF return-VI -U₁ yesterday

'My tray was returned yesterday'.

8.8 Old Balinese post clitics and prominalization in Standard and Mountain Balinese

The OB verbal post clitics -ku 'first person singular' and -ña 'third person singular/plural' are usually replaced by the free pronouns titiang 'first person', cocor ratu 'second person', ida 'third person' in high level and icang 'first person', cai 'second person', ia 'third person' in low level in SB. In MtB, the post clitics -ku 'first person', -mu 'second person', and -ña 'third person' are still very productively used in everyday conversation. However, the semantic and pragmatic function of MtB post clitics seems different from those of the OB. The OB post clitics -ku and -ña function as ACTOR-FOCUS or UNDERGOER-FOCUS when they are attached to verbs with the prefix ka- and the infix -y-. MtB post clitics only function as ACTOR-FOCUS. In SB, the free form pronouns can have a semantic and pragmatic function as ACTOR-FOCUS which normally occurs in bare-stem constructions. The chart below illustrates that OB and MtB post-clitics are replaced by full pronouns in SB.\(^{39}\)

\[^{38}\] Because of the available data are limited, the post clitic for the second person singular or plural is not found. However, comparison with MtB and OB suggest that -mu might have existed.

\[^{39}\] As mentioned in chapter 7.5.2, in OB the post clitic -ku and -ña can occur with nouns (nominal post clitic) and function as possessive. Nominal post clitics also occur in MtB as well as in SB. In MtB, they can be the first person -ku, the second person -mu and the third person -ña. In SB, however, nominal post clitics can only occur with the third person: -ida, -ipun (H), -dane (M), -ne (L).

Compare the following examples:

**OB:** 002 2a 5  …hamulan  hutang-ña
principle     debt      3RD

'...the principle of their debt'.

**MtB:**

Dijapa memeng-mune
where       mother GEN 2ND DEF

'Where is your mother'.

**SB:**

Titiang bapan-ipun
1ST        father GEN 3RD

'I am her/ his father'.

In MB, except for the village of Tigawasa, it appears that the genitive marker n is inserted between the noun and the post clitic when the noun ends in a vowel (e.g. bajunne 'his shirt'), otherwise it is not needed, (e.g. hutanne 'her/his/their debt'). Similar cases are also found in OB: i.e. 004 2a 2 droyan
<table>
<thead>
<tr>
<th>Verb+ clitic-</th>
<th>OB</th>
<th>MtB</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td>First person</td>
<td>V + ku</td>
<td>V + ku</td>
<td>V + titiang (H)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V + tiang (M)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V + icang (L)</td>
</tr>
<tr>
<td>Second person</td>
<td>-</td>
<td>V + mu</td>
<td>V + cokor ratu (H)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- (M)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V + cai (L)</td>
</tr>
<tr>
<td>Third person</td>
<td>V + ūa</td>
<td>V + ūa</td>
<td>V + ida (H)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V + dane (M)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V + ia (L)</td>
</tr>
</tbody>
</table>

Compare the following examples:

**OB:** ...padangayañña yaba-ūa marumah ditu 40
cooking utensil 3RD bring-3RD house there

'...their cooking utensils are brought by them (if) they live there'.

**MtB:** Payuke aba-ku mulih
cooking pot bring-3RD back home

'I bring the cooking pot back home'.

**SB:** Lëgan bèline trima tıang 41 (M)
kindness GEN older sibling DEF accept 1ST

'I accept your kindness'.

---

_sanghyang_ 'the property of sanghyang'. In the MtB village of Tigawasa the genitive marker _n_ > _ng_ , for instance, bajurgn̪ane 'his/ her clothes'

40 PB 001 2b 2

41 Mautigul tan Patali, 1977:7
8.9 Summary of diachronic relationships of Old and Modern Balinese affixes

The following diagram summarises main diachronic relationships of OB affixes to MB affixes.

<table>
<thead>
<tr>
<th>OB</th>
<th>MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>pir- / pi- -ping</td>
<td>Ø</td>
</tr>
<tr>
<td>paka-</td>
<td>(loss)</td>
</tr>
<tr>
<td>pa- / paN-</td>
<td></td>
</tr>
<tr>
<td>-(pah- numeral) -an₁</td>
<td>ka- - an₁</td>
</tr>
<tr>
<td>-an₂</td>
<td>pa- / paN-</td>
</tr>
<tr>
<td>ka- - an₂</td>
<td>maka- / pinaka-</td>
</tr>
<tr>
<td>par- / pa- / paN- - an₂</td>
<td>pah- - (pah-numerals) - an</td>
</tr>
<tr>
<td></td>
<td>- an₂</td>
</tr>
<tr>
<td>- um-</td>
<td>ka- - an₂</td>
</tr>
<tr>
<td>- um- - (V root- ang)</td>
<td>pa- / paN-</td>
</tr>
<tr>
<td>maN-</td>
<td>maka- / pinaka-</td>
</tr>
<tr>
<td>maN- - (N/V root- ang/ in)</td>
<td>pah- - (pah-numerals) - an</td>
</tr>
<tr>
<td>maN- - (N/V root- ang/ in)</td>
<td>- an₂</td>
</tr>
<tr>
<td>ma- (N/V root- ang/ in)</td>
<td>ma- - an₁</td>
</tr>
<tr>
<td>ma- - an₁</td>
<td></td>
</tr>
<tr>
<td>ma- - an₁</td>
<td></td>
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<tr>
<td>ma- - an₁</td>
<td></td>
</tr>
<tr>
<td>ka- / ki-</td>
<td>ka-</td>
</tr>
<tr>
<td>- ang</td>
<td>- ang</td>
</tr>
<tr>
<td>- in</td>
<td></td>
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<tr>
<td>- an₁- - yan- - - en</td>
<td>- a₁</td>
</tr>
<tr>
<td>(V root- ang) - an₁</td>
<td>- a₂</td>
</tr>
<tr>
<td></td>
<td>- a₃ (SB and MtB of P, C, B, S)</td>
</tr>
<tr>
<td></td>
<td>- fa  (MtB of Tigawasa)</td>
</tr>
<tr>
<td></td>
<td>{V root - ang} - a₁ (SB and MtB of P, C, B, S)</td>
</tr>
<tr>
<td></td>
<td>{V root - ang} - fa (MtB of Tigawasa)</td>
</tr>
</tbody>
</table>
8.10 Summary of construction in the Old Balinese corpus

Below, constructions in the OB corpus are summarized in quantitative terms;\textsuperscript{42} those recognized in this study are divided into:

1. Verb-initial constructions
2. ACTOR-initial constructions
3. UNDERGOER-initial constructions

8.10.1 Verb-initial constructions

<table>
<thead>
<tr>
<th></th>
<th>Occurrences in corpus</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>( V_{\text{TRANS}} \text{ UF} )</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>( V_{\text{INTRANS}} \text{ AT} )</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>( ka-/ki- \text{ V UF} )</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>( -y- V_{\text{TRANS}} \text{ AF UF} )</td>
<td>45</td>
<td>6.5</td>
</tr>
<tr>
<td>( -y- V_{\text{INTRANS}} \text{ UF} )</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>( V_{\text{TRANS}} -ang \text{ AF UT} )</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>( V_{\text{TRANS}} -in \text{ UT} )</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>( V_{\text{TRANS}} -anj \text{ UF} )</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>( V_{\text{TRANS}} -en \text{ UF} )</td>
<td>9</td>
<td>1.3</td>
</tr>
<tr>
<td>( V_{\text{TRANS}} -yan \text{ UT} )</td>
<td>18</td>
<td>2.6</td>
</tr>
<tr>
<td>( pa- V_{\text{INTRANS}} -anj -en \text{ UT} )</td>
<td>15</td>
<td>2.2</td>
</tr>
<tr>
<td>( par- \text{ NUMERALS} -anj \text{ UT} )</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>( ping- { V_{\text{TRANS}} -ang } \text{ UT} )</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>( -y- { V_{\text{TRANS}} -in } \text{ UT} )</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>( -y- V_{\text{TRANS}} -en \text{ AF UT} )</td>
<td>4</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Sub-total: 110  
15.8

\textsuperscript{42} This analysis based on OB inscriptions in Goris (1954), \textit{Prasasti Bali I}.
### 8.10.2 ACTOR-initial constructions

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrences in corpus (n=694)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>[AT \textit{V}_{INTRANS}]</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>[AT \textit{ma- V}_{INTRANS}]</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>[AT \textit{ma- N}]</td>
<td>106</td>
<td>15.3</td>
</tr>
<tr>
<td>[AT \textit{ma- V}_{TRANS \text{ UF}}]</td>
<td>19</td>
<td>2.8</td>
</tr>
<tr>
<td>[AT \textit{maN- V}_{TRANS \text{ UF}}]</td>
<td>46</td>
<td>6.6</td>
</tr>
<tr>
<td>[AT \textit{maN- V}_{INTRANS}]</td>
<td>15</td>
<td>2.2</td>
</tr>
<tr>
<td>[AT \textit{maN- N}]</td>
<td>47</td>
<td>6.8</td>
</tr>
<tr>
<td>[AT \textit{mar- V}_{INTRANS}]</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>[AT \textit{mar- N}]</td>
<td>19</td>
<td>2.8</td>
</tr>
<tr>
<td>[AT \textit{paka- V}_{TRANS}]</td>
<td>19</td>
<td>2.8</td>
</tr>
<tr>
<td>[AT \textit{-um- V}_{TRANS \text{ UF}}]</td>
<td>15</td>
<td>2.2</td>
</tr>
<tr>
<td>[AT \textit{-um- V}_{INTRANS}]</td>
<td>17</td>
<td>2.4</td>
</tr>
<tr>
<td>[AT \textit{ma- (V}_{TRANS\text{-ang/-in}) \text{ UF}}]</td>
<td>16</td>
<td>2.3</td>
</tr>
<tr>
<td>[AT \textit{ma- (N-ang)}]</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>[AT \textit{maN- (V}_{TRANS\text{-in}) \text{ UF}}]</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>[AT \textit{maN- (N-in)}]</td>
<td>5</td>
<td>0.7</td>
</tr>
<tr>
<td>[AT \textit{-um- (V}_{TRANS\text{-en}) \text{ UF}}]</td>
<td>6</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Sub-total: 355 \hspace{1cm} 51.3
8.10.3 **UNDERGOER-initial constructions**

<table>
<thead>
<tr>
<th>[UF] V_{TRANS}</th>
<th>Occurrences in corpus (n=694)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>[UT] maka- N</td>
<td>47</td>
<td>6.8</td>
</tr>
<tr>
<td>[UT] pinaka- N</td>
<td>5</td>
<td>0.7</td>
</tr>
<tr>
<td>[UT] pir- V_{TRANS}/N</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>[UT] pir- [N-angi-in]</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>[UT] pi- V_{TRANS}</td>
<td>6</td>
<td>0.8</td>
</tr>
<tr>
<td>[UF] -y- V_{TRANS}</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>[UT] -in- V_{TRANS}</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td>[UT] V- ang</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>[UT] N- ang</td>
<td>13</td>
<td>1.9</td>
</tr>
<tr>
<td>[UT] V- ēn</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>[UT] V_{TRANS}-yan</td>
<td>5</td>
<td>0.7</td>
</tr>
<tr>
<td>[UT] ka- V_{TRANS}-an1</td>
<td>113</td>
<td>16.3</td>
</tr>
<tr>
<td>[UT] [V-ang]-ēn</td>
<td>8</td>
<td>1.2</td>
</tr>
<tr>
<td>[UT] -in- [V-ang]</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Sub-total: 229 33
8.11 Summary of construction in the Modern Balinese corpus

The text of Dang Hyang Nirartha was investigated for the MB corpus to use as a comparison with the OB corpus.\footnote{The language used in this text is SB.} While this text might appear problematic because of its different content, nevertheless analysis of it does help to show how MB constructions are quantitatively similar to those of OB. As with OB, MB is analyzed according to three construction types as follows:

1. Verb-initial constructions
2. ACTOR-initial constructions
3. UNDERGOER-initial constructions

8.11.1 Verb-initial constructions

<table>
<thead>
<tr>
<th>Construction</th>
<th>Occurrences in corpus (n=418)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>[V_TRANS AF UT]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[ma_ V_INTRANS AT]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[ma_ V_TRANS AT]</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>[N_ V_INTRANS AT]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[ka_ V_INTRANS UT]</td>
<td>6</td>
<td>1.4</td>
</tr>
<tr>
<td>[N _ang _AT]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[V_INTRANS UF]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[ma_ V_UNTRANS_an AT]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[N_ {V _ang} AT]</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Sub-total: 21 5
8.11.2 **Actor-intial constructions**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrences in corpus (n=418)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>[AT V_INTRANS]</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td>[AT ma- V_INTRANS]</td>
<td>49</td>
<td>12</td>
</tr>
<tr>
<td>[AT ma- N]</td>
<td>43</td>
<td>10.2</td>
</tr>
<tr>
<td>[AT ma- V_TRANS]</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>[AT N- V_TRANS UF]</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>[AT N- V_TRANS]</td>
<td>7</td>
<td>1.7</td>
</tr>
<tr>
<td>[AT N- V_INTRANS]</td>
<td>15</td>
<td>3.6</td>
</tr>
<tr>
<td>[AT V_TRANS -ang]</td>
<td>7</td>
<td>1.7</td>
</tr>
<tr>
<td>[AT N- {V_TRANS -ang} UF]</td>
<td>31</td>
<td>7.4</td>
</tr>
<tr>
<td>[AT N- {N/ADI -ang}]</td>
<td>6</td>
<td>1.4</td>
</tr>
<tr>
<td>[A ka- {V_TRANS -ang} UT]</td>
<td>15</td>
<td>3.6</td>
</tr>
<tr>
<td>[AT N- {V_TRANS -ang} U1F U2F]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[AT N- {V_INTRANS -ang}]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[AT N- {V_INTRANS -in} UF]</td>
<td>15</td>
<td>3.6</td>
</tr>
<tr>
<td>[AT N- {V_TRANS -in} UF]</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>[AT N- {V_TRANS -in}]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[AT ma- N-an]</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Sub-total: 289  69
### 8.11.3 UNDERGOER-initial constructions

<table>
<thead>
<tr>
<th>Structure</th>
<th>Occurrences in corpus (n=418)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>[UT (V_{\text{TRANS}}) (\text{AF})]</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>[UT (V_{\text{TRANS}})]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[UT (mα) (V_{\text{TRANS}})]</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>[UT (ka) (V_{\text{TRANS}}) (A)]</td>
<td>43</td>
<td>10.2</td>
</tr>
<tr>
<td>[UF (ka) (V_{\text{TRANS}})]</td>
<td>8</td>
<td>1.9</td>
</tr>
<tr>
<td>[U1T (ka) (V_{\text{TRANS}}) U2F]</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>[UF ((V_{\text{TRANS}} \text{-ang})) AT]</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>[UT (ka) ({(V_{\text{TRANS}} \text{-ang})}) (A)]</td>
<td>9</td>
<td>2.2</td>
</tr>
<tr>
<td>[U1T (ka) ({(V_{\text{TRANS}} \text{-ang})}) U2F]</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>[UT (ka) ({V_{\text{INTRANS}} \text{-ang}})]</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>[UT (ka) ({V_{\text{TRANS}} \text{-in}}) (A)]</td>
<td>11</td>
<td>2.6</td>
</tr>
<tr>
<td>[U1T (ka) (N \text{-in}) U2F]</td>
<td>8</td>
<td>1.9</td>
</tr>
<tr>
<td>[UT (ka) (N \text{-in}) (A)]</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>[UT (ka) (V_{\text{TRANS}} \text{-an})]</td>
<td>6</td>
<td>1.4</td>
</tr>
</tbody>
</table>

---

Sub-total: 108 | 26
8.12 Discussion

When the OB constructions occurring in the corpus are compared to those of the MB, a distinctive trend can be identified. First, 51.3% of the OB corpus and 69% of the SB corpus have the pattern of [A \textsc{vtrans} U] or [A \textsc{vintrans}] constructions. Second, 33% of the OB corpus and 26% of the SB corpus have the pattern of [U \textsc{vtrans}] constructions. Third, 15.8% of the OB corpus and 5% of the SB corpus have Verb-initial constructions. OB and modern written MB then are roughly similar in that the majority of clauses in connected discourse are \textsc{actor}-initial, with \textsc{undergoer}-initial somewhat less frequent and verb-initial least frequent. (More samples of SB would be needed to confirm this). It is reasonable to conclude that this trend seems to be confirmed over the period separating OB from SB. In particular, there is a decrease in verb-initial constructions.\footnote{According to Pawley and Reid (1976:116), verb-initial word order is found in Toba Batak, Merina as well as in Philippine and Formosan languages. They argue that that word order is common in Proto Austronesian. However, verb-initial languages allow or require subjects to be clause-initial in some contexts, for instance, in relative clauses and secondary topicalization, so that the precondition for a change to \textsc{sv} \textsc{vo}, namely synchronic variation between \textsc{vs} and \textsc{sv} order is no doubt always present.}

According to Foley (1976:6), languages such as Balinese, Javanese as well as the languages of Asian mainland often have an optional, or in some cases obligatory word order S V O. This pattern is the most common type in Austronesian languages.\footnote{Pawley and Reid (1976:116) states that in languages in the world where subject is basically equated with actor, \textsc{sv} \textsc{vo} is more likely to be the preferred order than \textsc{vos}.}

In tracing a general pattern of shift from OB to SB, some ideas of Givón (1984) may be relevant. According to Givón (1984:188-89), there are three dependent parameters in word-order\footnote{The dependent parameters are: 
(a) Basic word-order in complex clauses
(b) The order of nouns vs. modifiers in noun phrases
(c) The morphotactics of prefixes of suffixes in bound morphology} which can be used to predict word order type in a simple clause. Givón (1984:189) who seems agree with Greenberg's (1966) ideas, summarizes the major typological predictions as follows:\footnote{Givón (1984:189), summarizes the major predictions that may be made with respect to these three dependencies, it should be noted, however, point (a and b) are relevant to the Balinese data, while (c) is irrelevant to the Balinese data.}

- Word-order in complex clauses should be the same as in simple clauses
- ...if (a language) has the order VERB-OBJECT (VO) in simple clauses, it should have the order NOUN-MODIFIER (N-M) in noun phrases.

The word order of complex OB and MB clauses are similar to that of the simple clauses, while the word order of noun phrases is NOUN-MODIFIER. For instance:
a. *anak*  
    *jëgëg*  
    person beautiful

b. *këñëm*  
    *mantis*  
    smile sweet

Givón (1984:189) further mentions that there are two issues which must be explained concerning the predictions above. These are:

1. The typological consistency of languages is governed primarily by *diachronic change*.
2. The typological consistency is rarely perfect even without the intervention of major word order change.

Thus the above statements suggest that a language does not quickly change its basic word order type. According to Givón (1984:189), 'If a language has not undergone word-order change within the last two to three thousand years of its history, it is expected to be "topological consistent" in the way (the) dependent variables agree with the independent variable of basic word-order of simple clauses'. This statement seems to be true for the Balinese constructions, and the [A V<sub>TRANS</sub> U] construction type has existed since the Old Balinese period, but at least to judge from the OB inscriptions analysed, there has been a moderate increase in frequency of use.

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48 According to Givón (1984:189, fn 3), "languages do not change their dependent variables to "fit" the word order of simple clauses via a simple process of analogy. Rather, complex diachronic processes controlled by many independent factors are involved in imposing—over a long time span—a modicum of "typological consistency" within a language. Figure of two to three thousand years is a conservative guess, although we know frozen dependent features of an older typological state to persist longer."
CHAPTER NINE
CONCLUSION

This study has attempted to clarify changes which have taken place in the Balinese language especially in verbal morphology. The preceding chapters have traced phonological and morphological changes which have occurred between Old Balinese and Modern Balinese (that is Standard Balinese and Mountain Balinese). How Old Balinese was influenced by other languages like Sanskrit and Old Javanese is also discussed. Evidence in Chapter 8 shows that there is not Old Javanese influence in Balinese morphology, although borrowing of lexical items from Old Javanese to Old Balinese has existed since AD 1001.

The findings of this study support Foley and Van Valin's (1984) general approach to the notion of semantic macro-roles, ACTOR and UNDERGOER. This study illustrates their utility in clarifying issues in Old Balinese and Modern Balinese morpho-syntax. To account for Balinese data, this thesis proposes that semantic macro-roles combine with pragmatic categories TOPIC and FOCUS. Five specific criteria used in distinguishing TOPIC and FOCUS NP's are discussed in detail in section 5.6.2. The notion of TOPIC and FOCUS NP's in Balinese has something in common with what Kiss (1991) proposes for Hungarian.

With regard to Balinese cultural history, Chapter 2 discusses the contact between Bali and Java existing since the tenth century AD or prior to that period. The chapter clarifies the nature of Javanese–Balinese cultural contact, especially as it affected language.

Since speech levels are an essential feature of Standard Balinese, and since previous works have not given adequate picture of how they are used, Chapter 2 also treats the sociolinguistic issues relating to speech level. The structural properties of the speech levels are described in Chapter 5.

Old Balinese appears not to have had speech levels, and thus it was similar to Mountain Balinese, although this is still a problematic issue. The occurrence of Standard Balinese speech levels might have been influenced by Javanese. In Standard Balinese, morphologically or syntactically there are only a few differences between sentences of various levels. Verbal morphology is mainly shared across speech levels, but the prefix ka- and the suffix -ař (both indicating UNDERGOER-TOPIC) are very sensitive to speech levels. These mainly deal with constraints on the third person, (discussed in Chapter 5.)
Lowland Balinese was somewhat influenced by Old Javanese, but the Balinese people who live in the mountain villages have undergone less Javanese influence than those from the lowland areas (see Chapter 2). The important difference between the Standard Balinese and Mountain Balinese dialects is:

(1) speech level differentiation occurs in Standard Balinese, but not in Mountain Balinese.
(2) Generally, the Standard Balinese phoneme system is similar to that of Mountain Balinese. However, the phoneme /a/ which is realized as [a] in Standard Balinese is still retained as [a] when it occurs in final position in the Mountain Balinese villages of Tigawasa, Pêdawa, Sukawana and Bêlantih, and only in the Mountain Balinese village of Cêmpaga, it is realized as [o]. The phoneme /h/ only occurs finally in Standard Balinese and in the Mountain Balinese villages of Pêdawa and Cêmpaga, while in the Mountain Balinese villages of Tigawasa, Bêlantih and Sukawana /h/ can occur initially, intervocally or finally. This appears to have been its distribution in Old Balinese, confirming the generally conservative character of the Mountain Balinese dialect.
(3) The phonemes /i/ and /u/ are realized higher in the Mountain Balinese villages of Tigawasa and Bêlantih than in other villages which are similar to that of Standard Balinese.
(4) The prefix ka-, which is used in low level in Standard Balinese and usually marks an UNDERGOER-TOPIC, and which can only have the first and the second person agents, occurs in Mountain Balinese. However, based on my observation, the prefix ka- is never used with the third person agent in Mountain Balinese. Mountain Balinese villagers will choose the suffix -aj (or -ãa for the Mountain Balinese village of Tigawasa only) instead of ka- to mark the UNDERGOER-TOPIC construction with the third person agent.

Given these differences and similarities, Mountain Balinese dialects can be considered as a link between Old Balinese and Standard Balinese. It is interesting to note that some Old Balinese lexical items are still very productively used in Mountain Balinese, such as cêdar 'dog', jaha 'where', kабайан 'a title', etc. These words do not occur in Standard Balinese. Similarly, the FOCUS post-clitics -ku, -mu, and -ãa are still found in Mountain Balinese but not in Standard Balinese. On the other hand, almost all the Mountain Balinese affixes, except the suffix -ãa, also occur in Standard Balinese. The meaning of these affixes is similar in Mountain Balinese and Standard Balinese.

Both Mountain Balinese and Standard Balinese are still spoken in Bali, thus the phoneme system of these dialects is known. However, since Old Balinese is no longer spoken, identifying spelling variations and correspondences between Old Balinese graphemes and the Modern Balinese phoneme systems assist determining the Old Balinese phoneme system. This was done in Chapter 4. It appears that the Old Balinese phoneme system is generally similar to that of Modern Balinese, although there are sound changes which have occurred between Old Balinese and Modern Balinese.

These changes may partly be due to patterns of syllable stress as well as to influence to articulatory lenition. For instance, Old Balinese /a/ > /ã/ in Modern Balinese; the lenition of Old Balinese /r/ > /h/ in Mountain Balinese > /h/ in
Standard Balinese; Old Balinese /w/ > /b/, sporadically, in Modern Balinese or Old Balinese /p/ > /b/ in Modern Balinese.

In terms of syllable structure, the analysis in Chapter 3 and 4 demonstrates that the majority of Modern Balinese and Old Balinese root morphemes are bisyllabic. The maximal monosyllabic canonic syllable pattern is C₁ (C₂) V (V) (C₃). A detailed quantitative analysis based on more than 15,000 lexical items is presented in Chapter 3.

The following table compare the proportions of root morpheme patterns in Modern Balinese root morphemes and Old Balinese.

<table>
<thead>
<tr>
<th>Root morphemes</th>
<th>Modern Balinese (%)</th>
<th>Old Balinese (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root morphemes with one vowel</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Root morphemes with two vowels</td>
<td>90</td>
<td>8.4</td>
</tr>
<tr>
<td>Root morphemes with three vowels</td>
<td>7</td>
<td>9.6</td>
</tr>
<tr>
<td>Root morphemes with four vowels</td>
<td>-</td>
<td>0.1</td>
</tr>
</tbody>
</table>

The main concern of this thesis is the analysis presented in Chapter 8, analysing the diachronic changes in Balinese, highlighting the evolution of verbal morphology. A good number of Old Balinese affixes no longer exist in Modern Balinese.

Around twenty eight affixes appeared in the Old Balinese inscriptions which divided into sixteen basic affixes, and the possible combinations consisting of five confixes and seven complex affixation, but they are reduced into eighteen affixes consisting of ten basic affixes, four confixes, and four complex affixations in Modern Balinese (both Standard Balinese and Mountain Balinese). The evolution of Balinese verbal morphology is as follows:

1. Some Old Balinese prefixes have totally lost their functions and meanings and no other affixes have directly taken these over.
2. Some Old Balinese affixes that still exist in Modern Balinese show limited changes in functions and meanings.
3. One important case, three of these which had similar Old Balinese functions and meanings merge into a single affix in Modern Balinese in a simplified form (N-).
4. Old Balinese affixes which still occur in Modern Balinese have additional functions and meanings. Examples:

   a. In the Old Balinese data, the suffix ka- is used to mark the UNDERGOER-TOPIX with the third person agent, which is understood from the context. In Standard Balinese, the prefix ka- also marks the UNDERGOER-TOPIX; however, it can have the first and second person agents in low level, and the first, second and the third person agents in high level. In Mountain Balinese, ka- can only have the first and second person agents, never the third. In terms of these restrictions the prefix ka- in Modern Balinese represents a functional innovation.

   b. It has been argued that three Old Balinese suffixes which mark the UNDERGOER-TOPIX and function as irrealis become, in form, a single suffix which in this study is marked as -a₁, -a₂, and -a₃ in Standard Balinese. This is also true in the Mountain Balinese villages of Pêdawa,
Compaga, Bélantih and Sukawana but the form is -ña in the Mountain Balinese village of Tigawasa. In Standard Balinese, -a₁ marks the UNDERGOER-TOPOIC, -a₂ and -a₃ the irrealis markers.

Main features of the evolution of verbal morphology in Balinese are sketched as follows. (See section 8.9 for the complete summary of diachronic relationships of Old and Modern Balinese affixes.)

\[
\begin{align*}
\text{pir-} / & \text{pi-} / \text{ping} \quad \emptyset \\
\text{päkä-} & \\
\text{par-} / & \text{pa-} \\
\text{-y} & \\
\text{-in-} & \\
\text{ka-/} & \text{ki-} / \text{-an₁} \quad \text{ka-} / \text{-an₁} \\
\text{pa-/} & \text{paN-} \\
\text{-an₂} & \\
\text{-um-} & N \quad -\text{N-} \\
\text{maN-} & \\
\text{ma₂-} & \\
\text{mar-} & \text{ma₁-} \quad \text{ma-} \\
\text{ka-} & \text{ka-} \\
\text{-ang} & \text{-ang} \\
\text{-in} & \text{-in} \\
\text{-an₁} & \text{-yan-} / \text{-en} \quad \text{a₁-} \\
\text{-a₂-} & \text{a₃-} \\
\end{align*}
\]

It was also found that Old Balinese post-clitics remain such in Mountain Balinese, but they are replaced by full pronouns in Standard Balinese.¹ It should be noted that the semantic and pragmatic functions of the Old Balinese post-clitics are somewhat different from those of Mountain Balinese. In Old Balinese, the post-clitics function as either as ACTOR-FOCUS or UNDERGOER-FOCUS; while in Mountain Balinese, they function as ACTOR-FOCUS only. In Standard Balinese, these clitics do not occur and the free form pronouns can have several semantic and pragmatic functions including ACTOR-FOCUS, UNDERGOER-FOCUS, etc.

As for basic types of clauses, three types of constructions are recognized both in Old Balinese and Modern Balinese. Their evolution is traced in terms of three basic construction types. They are:

1. verb--initial constructions
2. ACTOR-initial constructions
3. UNDERGOER-initial constructions

¹ This is an interesting reversal of the usual functional trend to replace full pronominal forms with clitics or incorporated person-marking affixes.
For both Old Balinese and Modern Balinese analyzed in Chapter 8 data show that the ACTOR-initial construction, i.e. \([A \text{ V}_{\text{TRANS}} U]\) construction type is the most frequent. My analysis shows that 51.3% of Old Balinese corpus and 69% of Modern Balinese corpus belong to this type. The alternant of the \([A \text{ V}_{\text{TRANS}} U]\) construction is \([V_{\text{TRANS}} A U]\) construction. According to my count only 15.8% of the Old Balinese corpus and 5% of the Modern Balinese corpus use this pattern. It appears that the \([A \text{ V}_{\text{TRANS}} U]\) construction has been a basic pattern of OB and MB.

The analysis shows some increase in ACTOR-initial constructions over the 1000 years under consideration.

**Suggestions for further research**

1. **Lexicon and speech levels**

   More research is needed for a more accurate and comprehensive historical study of the Balinese language. Up to the present time only a few scholars have completed studies on Old Balinese inscriptions compared with the many studies done on Modern Balinese. This may be due to the difficulty in understanding Old Balinese inscriptions and their lack of accessibility. This was discussed in section 1.6, and in Chapter 2.

   Since this thesis focuses on Old Balinese inscriptions dating from AD 882-AD 1050, it would be worth continuing research on Balinese inscriptions in Old Javanese (dated after the eleventh century AD). Such research could provide a greater understanding of the close historic relationship between Bali and Java until at least before the collapse of Majapahit empire. It could also result in a better understanding of the evolution of speech levels in Bali.

   When speech levels first appeared in Bali is still an unanswered question, although, as mentioned in previous chapters, Sanskrit words, and honorific forms which were used to address the kings, did occur in the Old Balinese inscriptions. This may suggest that some forms of speech levels might have existed since the ninth century or prior to this period. On the other hand, some scholars believe that the existence of speech levels in Bali may have been influenced by Javanese speech levels after the fall of the Majapahit kingdom. Further research is required to solve this problem, although lack of data makes it most unlikely that we will have satisfactory solution.

2. **Morpho-syntactic theory**

   In general, the notions of ACTOR and UNDERGOER combined with TOPIC and FOCUS as developed in this thesis are very useful for analysing the Balinese data diachronically. However, certain problems still remain. There are still some problems in identifying
TOPIC and FOCUS. Balinese data show that there are sometimes cases of double TOPICS, while test for FOCUS mentioned in section 5.6.2 sometimes cannot be applied. For instance:

The prefix *ma-* can occur only with a very small set of transitive verbs, usually with ACTOR-TOPIC argument. The UNDERGOER-FOCUS (as the UNDERGOER occurs directly after the verb and nothing can intervene between verb and undergoer) is optional. If we go back to the criteria which are used to determine TOPIC and FOCUS above, actually it is TOPIC which can be deleted, not the FOCUS. On the other hand, if the UNDERGOER is considered to be TOPIC, the UNDERGOER can be marked with definite marker *e/ne, this test is also cannot be applied.

Thus the general approach applied in this study is valid, but further work is needed to test and refine the approach presented here.
# Appendices

## Appendix A

**List of Old Balinese Inscriptions dated AD 882–AD 1050**

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<th>Date</th>
<th>Place found</th>
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<td>914</td>
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<td>6 lines in Nāgari script, 13 lines in Kawi script 2 plates</td>
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### Appendix B

**Old Balinese Words with Their Cognates in Old Javanese**

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<th>OJ</th>
<th>Meaning</th>
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<td>adan</td>
<td>aran</td>
<td>name</td>
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<tr>
<td>addhi</td>
<td>ari</td>
<td>younger brother/ sister</td>
</tr>
<tr>
<td>adêg</td>
<td>ađêg</td>
<td>to stand up</td>
</tr>
<tr>
<td>air</td>
<td>air</td>
<td>water</td>
</tr>
<tr>
<td>ajêng</td>
<td>ajêng</td>
<td>front</td>
</tr>
<tr>
<td>aku</td>
<td>aku</td>
<td>first person pronoun</td>
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<td>alah</td>
<td>alah</td>
<td>lose, be defeated</td>
</tr>
<tr>
<td>alap</td>
<td>alap</td>
<td>to take</td>
</tr>
<tr>
<td>alapkna</td>
<td>alapkna</td>
<td>deliberation</td>
</tr>
<tr>
<td>alas</td>
<td>alas</td>
<td>forest</td>
</tr>
<tr>
<td>alih</td>
<td>alih</td>
<td>OB: to look for; OJ: to move</td>
</tr>
<tr>
<td>ambah</td>
<td>ambah</td>
<td>to enter</td>
</tr>
<tr>
<td>ampuhan</td>
<td>ampuhan</td>
<td>wave, surf, breakers</td>
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<td>ana</td>
<td>an</td>
<td>if</td>
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<td>anak</td>
<td>child</td>
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<td>downward pressure</td>
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<td>aŋđêl</td>
<td>believe, trust</td>
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<td>api</td>
<td>api</td>
<td>fire</td>
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<tr>
<td>ara</td>
<td>ara</td>
<td>a kind of tree</td>
</tr>
<tr>
<td>arnak (a-mak)</td>
<td></td>
<td>marshland</td>
</tr>
<tr>
<td>arung</td>
<td>arung (352 3a 1)</td>
<td>tunnel</td>
</tr>
<tr>
<td>atak</td>
<td>atak</td>
<td>two hundred</td>
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<td>awak</td>
<td>awak</td>
<td>body, oneself</td>
</tr>
<tr>
<td>awur</td>
<td>awur</td>
<td>mixed up together</td>
</tr>
<tr>
<td>babar</td>
<td>babar</td>
<td>OB: once; OJ: scattered</td>
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<tr>
<td>bahan</td>
<td>bahan</td>
<td>material, ingredient</td>
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<td>canoe, boat</td>
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<td>bangkudu (352 2a 3)</td>
<td>to build</td>
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<td>wasês</td>
<td>pavilion</td>
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<td>wantilan (352 2a 4)</td>
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<td>wanua/ wanwa</td>
<td>clown, clownerly</td>
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1 OB words listed here are from Goris (1954) and their OJ cognates are based on Zoetmulder (1982). A number of OJ words which occur in the OJ inscriptions found in Bali are not listed in Zoetmulder’s dictionary. They are included here with their places in the inscriptions in brackets.
<table>
<thead>
<tr>
<th>bharu</th>
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<td>waruga</td>
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<td>wéli</td>
<td>to buy</td>
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<td>bubur</td>
<td>OB: porridge, OJ: to destroy</td>
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<td>hang</td>
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<td>hangga/hingan</td>
<td>up to; border</td>
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<tr>
<td>haangang</td>
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<td>up to, until</td>
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<td>irit</td>
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<td>isi</td>
<td>in small quantities</td>
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<td>joh</td>
<td>sweets, dainties</td>
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<td>jro</td>
<td>far</td>
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<tr>
<td>juga</td>
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<tr>
<td>jukung</td>
<td>karaton</td>
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<td>also, only</td>
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</tr>
<tr>
<td></td>
<td>canoe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the 9th wuku</td>
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</tbody>
</table>
juru        juru        leader
kabayan    kabayan    a functionary
kabeh      kabeh      all, everything
kabon      këbon/këbwan gardens, plantation
kaliwon    kaliwon    the fifth day of the
kambing    kambing    five-day week
kampil     kampil     goat
kapwa      kapwa      sack, bag
karang     karang     all
karung     karung     land
kayu       kayu       male pig, boar
kduk       hëduk      wood
këkës      këkës      (black) fibre of the
kikis      kikis      sugar-palm
kilat      kilat      keep hidden
kmit       këmit      border, boundary
kna        këna       lightning
ton        kon        to guard
kryan      rakryan    subjected to
ku          ku         command, order
culang-kaling kulang-kaling denoting a person of rank
kulawu     kulawu     first person pronoun
kulit      kulit      walk around
kunang     kunang     the 27th wuku
kuning     kuning     skin, bark
kuningan   kuningan   but, further
kuñit      kuñit      yellow
kupang     kupang     the 12th wuku
kuren      kurën      turmeric
kuruhlüt   kuruhlüt   coinage
labuh      labuh      household
laga       laga       the 17th wuku
lagi       lagi       to come to an end
laku       laku       battle, fight
lali       lali       in the past up to the present
lamak      lamak      to go, to walk
lañcang    lañcang    forget
landëp     landëp     a mat
langkir    langkir    a part. type of boat
larang     larang     the 2nd wuku
larib      lari       the 13th wuku
len        len (303)   forbid
lima       lima       OB: run; OJ: move, walk
linga      ënga       other
lod        lod         five
luh         luh         sesame, oil
lpas        ëpas         sea, toward the sea
lulun      lulun         tears
mañangkungan mañangkungan free, released
mañangkungan
mañangkungan    the 20th wuku
roll
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<td>mata</td>
<td>eye, precious stone</td>
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<td>the six day of the six-day week</td>
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<td>mayang</td>
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<td>miñak</td>
<td>miñak (431.5a.3)</td>
<td>oil</td>
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<td>pet</td>
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<td>(especially fish)</td>
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<td>puluh</td>
<td>ten</td>
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<td>punya</td>
<td>punya (351 6b 5-6)</td>
<td>to have</td>
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<td>puring</td>
<td>puring</td>
<td>kind of (ornamental) tree</td>
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<td>pupul</td>
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<td>rabi</td>
<td>OB: garden; Of: wife</td>
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<td>woven basket, wicker basket</td>
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<td>the leader, father</td>
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<td>sukēṭ</td>
<td>sukēṭ</td>
<td>wild growth of weeds and shrubs</td>
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suku          suku          coinage
suling       suling       flute
surat        surat       to write
suruh        suruh       to order
susu         susu         woman's breasts, milk
tadah        tadah        to receive (from above)
tahil        tahil        weight, especially of gold and silver
tahu         tahu         to know
таежм        таежм        sharp
такут        такут        afraid
таль        таль         rope
тама         тама         to enter, penetrate
тамбак       тамбак       fish pond, dike, dam
тамбанг      тамбанг      rope
тамбар       тамбар       baggage
тамбир       тамбир       the 19th wuku
танах        танах         land, country
tанак/танем   танем        to plant
тандая       тандага      sign
тандас       тандас       a kind of tax or levy
танга        танга         head
танггунг      танггунг    ladder
tangkalik    tangkalik    to bear
тапук        тапук         horse breeder
тарах        тарах         the iris of the eye or eyelid
таруб        таруб         plunder
тарух        тарух         workshop, shelter
тасик        тасик         to compete with
татан        татан         sea
тавинг       тавинг       negator
тиба         тиба          wall, screen, partition
tимтим       тимтим       to fall
тимлур       тимлур       OB: content; OJ: to keep safe, store
тингкир      тингкир      OB: young; OJ: east
tити         тити          candle nut
тити         тити          foot bridge
тка          тека          plan, arrangement
ткап         текап          to come, arrive
ту           тэлу         by, the way how (one does something)
tu           tэму         three
умах         умах          the result of a change
тунаг        тунаг         middle
толу         толу          the 5th wuku
туха         туха          old age
tulak        тулак         to ward off
тунгаг       тунгаг         bone
tunngu       tunngu       to write
tunngle      tunngle       to help
turun        turun         single, one, only, wait
                           the first day of the six-day week
                           to descend, descent
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### Appendix C

**Old Balinese words which still exist in Standard Balinese**

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<tr>
<th>OB</th>
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<th>SB/Low</th>
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<td>body, oneself</td>
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<td>good, beautiful</td>
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<td>once, jump</td>
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<td>to return, reverse</td>
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<p>| balimbing | blingbling | - | - | star fruit |
| balu | balu | - | - | widow |
| balung | balung | - | - | bone |
| bangun | bangun | - | - | to build |
| baniar | baniar | - | - | a unit territory |
| bantas | bantás | - | - | border |
| bantilan | wantilan | - | - | pavilion |
| banua | banua | - | - | village |
| bañwal | bañol | - | - | clown, clownery |
| bapa | bana | - | bapa | father |
| baringin | bingin | - | - | banyan tree |
| basa | basa | - | - | spice |
| batu | batu | - | - | stone |
| bayar | bayah | - | be | to pay |
| be | be | - | - | fish |
| beyya | bea | - | - | expenses, count |
| bingkuk | bungkuk | - | - | bend, bow |
| bisas | bias | - | - | sand |
| blah | bélah | - | - | break |
| bhi | béli | - | - | to buy |
| bnang | bénang | - | - | thread |
| bras | béras | - | baas | rice |
| brat | bérat | - | baat | heavy |
| bsi | wesi | - | bési | iron |
| btěng | běťeng | - | - | the 2nd day of the three-day week |
| buat (bwat) | buat | - | - | to bring |
| bubur | bubuh | - | - | porridge |
| budi | budi | - | - | desire, in the future |
| bugbug | bugbug | - | - | the corner of the part of the roof |
| bukir | bukit | - | - | hill |
| bulan | wulan | bulan | moon |
| buluh | buluh | - | - | name of bamboo |
| bunga | bunga | - | - | flower |
| bungbung | wungbung | bungbung | container, bamboo cylinder |
| buntill | buntill | - | - | wrap |
| bunut | bunut | - | - | something in the waist, name of a tree |
| buru | buru | - | - | hunt, chase |
| burung | buung | - | - | cancel |
| buyut | buyut | - | - | great |
| byu | biu | - | - | grandparents |
| byut | biut | - | - | banana |
| cakcak | cakcak | - | - | chaos, riot |
| camalagi | clagi | - | - | to break |
| cificin | cincin | - | - | tamarind |
| ring |</p>
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<th>Word</th>
<th>Meaning</th>
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Honorable
suddenly
hand and hand
cooking pot
east
a kind of
offering in the
form of meru
lake
coconut leaf
west
king
length
way of acting
to hear
at, on
little, small
amount
wall
here
body,
ourselves
to bath
there
leaf
fathom
two
collect
since
the 29th wuku
joint,
companion
the 11th wuku
young man or
gentle birth
bath
bend, curve
see
hanging
drum
big
particle
now
place, location
complete
urn jar
the 6th wuku
earth
a, one
exist
fron, eat
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pwan I  -  -  puan  two days ago
pwan II pon  -  -  the 3rd day of
rabi abian  -  -  the five-day
rakryan -  rakrian  -  week
rama rama  -  -
rampas rampas  -  -
ramu ramu  -  -
rapet rapet  -  -
rapuh -  apuh  -
rara lara  -  -
ratu -  ratu  -
ratus satus  -  -
†bah -  bah  -
rbwang roang  -  -
rggas -  -
rimpi rimpi  -  -
rinyuh rënyah  -  -
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ruang jurang  -  -
rukud -  ukud  -
rumah -  umah  -
rumbas -  tumbas  -
ruri -  duri  -
ruyung uyung  -  -
rwa -  dua  -
saga saga  -  -
sahing saing  -  -
sakit -  sakit  -
salar salaran  -  -
sambah -  -
sambung -  -
sampi -  sampi  -
sanghyang sang hyang  -  -
saput saput  -  -
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sigi sigi  -  -
sih sih  -  -
singgah singgah  -  -
singhal singël  -  -
sisik siksik  -  -
skar -  -
sëkar
slat sëlat  -  -
šrah -  -
sërah
subal -  -
suba  -

a kind of tree
OB: childless
friend
sick, pain
contribution
homage, to pay
homage
to join
cow
god
to cover, a
piece of cloth to
cover the
breasts
while, enough
wick
love
come over
piece of cloth
to scratch,
peck someone
flower
a boundary
to hand over
end, finish
<p>| sudang | sudang | - | - | dried fish |
| suhun | suun | - | - | to carry on one head |
| sukat | sukat | - | - | measurement |
| sukēt | sukēt | - | - | wild growth of weeds and shrubs |
| suku | suku | - | - | monetery unit |
| suling | suling | - | - | flute |
| sumbah | sumbah | - | - | honour, worship |
| sungsang | sungsang | - | - | the 10th wuku head |
| sungsung | sungsung | - | - | to carry on one head |
| surang | jurang | - | - | a mountain ridge |
| surat | surat | - | - | write |
| susu | susu | - | - | woman's breasts, milk |
| syap | siap | - | - | chicken |
| syut | siut | - | - | cooking utensil |
| taban (tawan) | tawan | - | - | to capture, bolly |
| tādah | tādah | - | - | to receive from above |
| tahu | tau | - | - | to know |
| tajēm | tajēp | - | - | sharp |
| tajuk | tajuk | - | - | plant |
| taki | taki | - | - | to prepare |
| takut | takut | - | - | afraid, scare, fear |
| tali | tali | - | - | rope, cord |
| talur | taluh | - | - | egg |
| tambak | tambak | - | - | fish pond, dike, dam |
| tambēl | tambēl | - | - | patch |
| tambir | tambir | - | - | the 19th wuku |
| tampih | tampih | - | - | OB: to increase, to multiply; SB: to fold |
| tanah | tanah | - | - | land, country |
| tanam (tanēm) | tanēm | - | - | to plant |
| tanda | tanda | - | - | sign |
| tandas (tēhas) | tēdas | - | - | head |
| tanduk | tanduk | - | - | horn |
| tangga | tangga | - | - | ladder |
| tanggép | tanggép | - | - | to receive |
| tanggung | tanggung | - | - | to bear |
| tapuk | tapuk | - | - | the iris of the eye or eyelid |
| tarub | tarub | - | - | workshop, shelter |
| tasik | tasik | - | - | salt in SB, sea in OB |
| tatas | tatas | - | - | clear |</p>
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Appendix D
List of Officials/ Functionaries

A functionary is 'one who has certain functions to perform; an official'. A title is 'an appellation attaching to an individual (or family) in virtue of rank, function, office or attainment, or the possession of or association with certain lands, etc.; especially an appellation of honour pertaining to a person of high rank...' (Oxford Dictionary). In this list I will not distinguish the titles and functionaries because they are sometimes overlapping.

### Functionaries in seven OB inscriptions with "Yumu paka tahu" types

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Functionaries in OB Inscriptions from AD 955-967

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Functionaries in OB inscriptions From AD 989-1011

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<td>Kumpi Siddhi</td>
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<td>Juru tunggal</td>
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Words preceded by Ser

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Words preceded by Cakṣu

Cakṣu Dikārana 209 5b 2
Cakṣu Kārana 302 5a 3
Cakṣu Tuha Bera 210 3a 1-2
Cakṣu Tuha Jaddhara 210 3a 1
Cakṣu Tuha Manorbawa 210 3a 1
Cakṣu Tuha Nagata 209 5b 2-3
Cakṣu Tuha Rājana 209 5b 3

Words preceded by Mpu

Mpu Abhi 107 1b 3
Mpu Dara 108 1b 2 (see Example 7-27e)
Mpu Juligara 107 2a 4
Mpu Sagota Māheswara 304 1b 2
Mpu Guṇa 107 1b 3

Words preceded by Hulu

Hulu kayu 003 3a 3 (see Example 7-33)
Hulu lapu 301 3b 4
Hulu sambaḥ 005 14
Hulu warak 106 3a 5

List 1

Tree, and flower names in OB inscriptions dated from AD 882-1050

Tree

bangkudu 'a kind of tree' 002 2a 3 (see Example 7-9c)
bulu 'name of bamboo' 302 3b 4
dafiu 'dried coconut leaf' 351 6b 4
ptung 'name of bamboo' 302 3b 4
ruyung 'palm trunk' 302 3b 4

Flower names

bunga añcap 003 3b 4
List 2

Animals, fish and birds in OB inscriptions from AD 882-1001

Animals

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<tr>
<td>asu</td>
<td>'dog'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>babi</td>
<td>'pig'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>besara</td>
<td>'uncertain animal'</td>
<td>108 2a 1</td>
<td>(see Example 7-46)</td>
</tr>
<tr>
<td>cadar</td>
<td>'dog'</td>
<td>107 3a 1</td>
<td></td>
</tr>
<tr>
<td>culung</td>
<td>'pig'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>hundan</td>
<td>'a kind of duck'</td>
<td>004 3a 3</td>
<td>(see Example 7-18b)</td>
</tr>
<tr>
<td>kambing</td>
<td>'goat'</td>
<td>002 2a 4</td>
<td>(see Example 7-45b)</td>
</tr>
<tr>
<td>karambo</td>
<td>'buffalo'</td>
<td>002 2a 1</td>
<td>(see Example 7-8a)</td>
</tr>
<tr>
<td>karung</td>
<td>'boar'</td>
<td>210 3 4</td>
<td></td>
</tr>
<tr>
<td>pañcayan</td>
<td>'deer'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>puruh</td>
<td>'fox'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>sampi</td>
<td>'cow'</td>
<td>002 2a 4</td>
<td>(see Example 7-45b)</td>
</tr>
<tr>
<td>sukët</td>
<td>'boar'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
<tr>
<td>ustausta</td>
<td>'cow' (Skt)</td>
<td>104 3a 5</td>
<td></td>
</tr>
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</table>

Fish

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
<th>OB Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ŋalyan</td>
<td>'sp. fish'</td>
<td>003 2b 2</td>
<td></td>
</tr>
<tr>
<td>kuyur</td>
<td>&quot;</td>
<td>004 2b 4</td>
<td></td>
</tr>
<tr>
<td>simbur</td>
<td>&quot;</td>
<td>003 2b 2</td>
<td></td>
</tr>
<tr>
<td>sudang</td>
<td>&quot;</td>
<td>104 2a 5-6</td>
<td></td>
</tr>
</tbody>
</table>

Bird

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
<th>OB Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>dakër</td>
<td>'turtledove'</td>
<td>001 2a 2</td>
<td>(see Appendix B)</td>
</tr>
</tbody>
</table>

List 3

Measurement in OB inscriptions

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
<th>OB Code</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluki</td>
<td>'scale for wine'</td>
<td>003 3b 5</td>
<td></td>
</tr>
<tr>
<td>dpa</td>
<td>'fathom'</td>
<td>006 1b 5</td>
<td></td>
</tr>
<tr>
<td>gući</td>
<td>'urn jar'</td>
<td>004 3b 1</td>
<td></td>
</tr>
<tr>
<td>guñja</td>
<td>'a scale which is used to weight rice, corn, etc.'</td>
<td>004 3b 1</td>
<td></td>
</tr>
<tr>
<td>jëmek</td>
<td>'a handful'</td>
<td>004 2a 5</td>
<td></td>
</tr>
<tr>
<td>kāru</td>
<td>'a scale made of coconut bowl'</td>
<td>006 2a 1</td>
<td>(see Example 7-45b)</td>
</tr>
<tr>
<td>lämbar</td>
<td>'a sheet'</td>
<td>004 3a 3</td>
<td>(see Example 7-18b)</td>
</tr>
<tr>
<td>pulu</td>
<td>'rice container'</td>
<td>107 2a 2</td>
<td>(see Example 7-27b)</td>
</tr>
</tbody>
</table>
List 4
Crafts and other activities

mabantilan 'make a hall' 003 1b 4 (see Example 7-9)
makayu 'job dealing with wood' 003 1b 3-4 (see Example 7-6)
mamangkudu 'dying in red' 002 2a 3 (see Example 7-9)
mamatek papan 'make a board' 001 1b 5 (see Appendix B)
mangubug 'make rooves' 108 1b 6 (see Example 7-9)
mangdingding ari 'make sunscreens' 108 1b 6 (see Example 7-9)
mangiket 'to weave' 001 2a 1 (see Appendix B)
mangrapuh 'make limestone' 001 1b 5 (see Appendix B)
mangharañi 'make charcoal' 001 1b 5 (see Appendix B)
mangnila 'dying in blue' 001 2a 1 (see Appendix B)
manutu 'to pound' 001 1b 5 (see Appendix B)
marunqdan 'to weave' 001 2a 1 (see Appendix B)
maringtingihing 'Job dealing with bamboo' 003 1b 4 (see Example 7-6)
pande bsi 'iron smith' 004 2a 1 (see Example 7-28a)
pande mäs 'gold smith' 004 2a 1 (see Example 7-28a)
pande tambaga 'copper smith' 002 2b 5 (see Example 7-66c)
undagi batu 'craftman dealing with stone' 002 2b 4 (see Example 7-28a)
undagi kayu 'carpenter' 004 2a 1 (see Example 7-28a)
undagi laicang 'craftman who makes a canoe' 002 2b 4 (see Example 7-28a)
undagi pangarung 'craftman who makes tunnel' 002 2b 4

List 5
Musical Instruments

bhangşi 'flute' 004 2a 1 (see Example 7-28a)
gendàng 'drum' 002 2a 4 (see Appendix B)
padaha (Skt) 'drum' 001 2a 2 (see Appendix B)
sangkha 'shell ...' 104 2b 4 (see Example 7-28a)
sarf 'a kind of gitar' 104 2b 4
suling 'flute' 004 2a 1 (see Example 7-28a)

List 6
Money

mäsaka (mä)¹ 101 1 6-7 (see Example 7-25b)
mäsaka suwarna (mäs) 302 2b 4-5 (see Example 7-22)
kupang (ku) 001 2a 4 (see Appendix B)
piling (pi) 004 2a 1 (see Example 7-28a)

¹ According to Stutterheim (1940:17), 1 suwarna = 1 tahil = 16 mä = 64 ku.
1 tahil = 1/16 kati
1 suwarna = 0.038601 kg
1 mä = 0.002412 kg
1 kupang = 0.000603 kg
6 piling = 1 mäsaka
List 7  
Name of Buildings

<table>
<thead>
<tr>
<th>Building</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baleśwara</td>
<td>209 4a 6</td>
</tr>
<tr>
<td>Carniti</td>
<td>005 16</td>
</tr>
<tr>
<td>Gusalı Buju</td>
<td>106 1b 4 (see Example 7-68b)</td>
</tr>
<tr>
<td>Hyang Api</td>
<td>001 2b 3 (see Appendix B)</td>
</tr>
<tr>
<td>Hyang Karimama</td>
<td>005 2 (see Example 7-20c)</td>
</tr>
<tr>
<td>Parantyan</td>
<td>106 1b 4</td>
</tr>
<tr>
<td>Prasada</td>
<td>209 5a 3</td>
</tr>
<tr>
<td>Punta Hyang</td>
<td>104 3b 4</td>
</tr>
</tbody>
</table>

List 8  
Name of Taxes

<table>
<thead>
<tr>
<th>Tax</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blindarah</td>
<td>003 1b 5</td>
</tr>
<tr>
<td>Brahmawangsa</td>
<td>003 2b 1</td>
</tr>
<tr>
<td>Buruk Tanah</td>
<td>005 11</td>
</tr>
<tr>
<td>Laga</td>
<td>104 2b 1</td>
</tr>
<tr>
<td>Pabharu</td>
<td>203 1b 5 (see Example 7-28d)</td>
</tr>
<tr>
<td>Paburu</td>
<td>003 2a 4</td>
</tr>
<tr>
<td>pacakṣu</td>
<td>003 2a 2</td>
</tr>
<tr>
<td>Paculung</td>
<td>108 1b 5</td>
</tr>
<tr>
<td>Paṭampāḍam</td>
<td>004 2a 3</td>
</tr>
<tr>
<td>Paṭajah</td>
<td>004 2a 2</td>
</tr>
<tr>
<td>Paṇāḍyaṇa</td>
<td>003 2b 1</td>
</tr>
<tr>
<td>Pahilir</td>
<td>005 8</td>
</tr>
<tr>
<td>Paṭbur</td>
<td>002 2b 2</td>
</tr>
<tr>
<td>Pamuhakyan</td>
<td>002 2a 5</td>
</tr>
<tr>
<td>Pamuka Lawang</td>
<td>005 15</td>
</tr>
<tr>
<td>Pangglar</td>
<td>203 1b 5 (see Example 7-28d)</td>
</tr>
<tr>
<td>Pangrama</td>
<td>104 3b 2-3 (see Example 7-28c)</td>
</tr>
<tr>
<td>Pangṛhōṇ</td>
<td>101 1 7</td>
</tr>
<tr>
<td>Pangrotēṇ</td>
<td>203 1b 5 (see Example 7-22)</td>
</tr>
<tr>
<td>Papuṇīcagiri</td>
<td>202 1b 5</td>
</tr>
<tr>
<td>Parangām</td>
<td>002 1b 3</td>
</tr>
<tr>
<td>Partyakṣuṇa</td>
<td>001 2a 4 (see Appendix B)</td>
</tr>
<tr>
<td>Pasang Gunung</td>
<td>004 2a 1</td>
</tr>
<tr>
<td>Pasuk Alas</td>
<td>005 15</td>
</tr>
<tr>
<td>Pawalungan</td>
<td>004 2a 4</td>
</tr>
<tr>
<td>Pawaruga</td>
<td>104 2a 1</td>
</tr>
<tr>
<td>Pawuran</td>
<td>108 1b 5</td>
</tr>
<tr>
<td>Pracakṣu</td>
<td>004 2a 1</td>
</tr>
<tr>
<td>Purbwa tustus</td>
<td>202 1b 5</td>
</tr>
<tr>
<td>Paṇambah</td>
<td>002 2b 2</td>
</tr>
<tr>
<td>Sasarhawu</td>
<td>003 2a 4</td>
</tr>
<tr>
<td>Śrāngsisikan</td>
<td>004 2a 3 (see Example 7-25a)</td>
</tr>
<tr>
<td>Tandas</td>
<td>003 2b 1</td>
</tr>
<tr>
<td>Tarub</td>
<td>004 1b 5 (see Example 7-25b)</td>
</tr>
</tbody>
</table>

Rake and Samgat
Rakryan
Hino
Hulu/ watu Tihang
Sirikan
Wka
Halaran and Pagarwsi
Wadihati/ Ayam Têas
Makudur
Tiran
Pangkur, Tawân and Tirip
Patih
Wahuta
Nayaka
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