

THE PHONOLOGY AND MORPHOLOGY
OF THE SUNDANESE LANGUAGE

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in the
University of Michigan
1959

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To My Wife
Florence Smith Van Syoc

ACKNOWLEDGEMENTS

The author wishes to acknowledge the kind assistance given him by the members of his doctoral committee, each of whom gave generously of his time and professional experience to aid in bringing this dissertation to its present form. He is particularly grateful to the chairman of the committee, Professor Herbert H. Paper, for his guidance and careful supervision.

He wishes to make special mention of the help given him by Professor Isidore Dyen of Yale University when the latter was on the staff of the Linguistics Institute in Ann Arbor during the summer of 1957 and again in June of 1958 when he made it possible for the author to consult extensively with him in New Haven.

The author also wishes to express gratitude to his three principal informants and to his other Sundanese friends, who have shown a lively and helpful interest in this analysis and description of their language.

TABLE OF CONTENTS

	Page
LIST OF ILLUSTRATIONS	vi
 Chapter	
I. INTRODUCTION	
Part I.	
Historical Conditions Affecting the	
Language	1
Indian Influence	10
Moslem Influence	11
Central Javanese Influence	14
European Colonization	15
Chinese Influence	17
Recent Trends	18
Part II.	
Dialect Areas	22
Borrowings	24
Levels of Usage	30
Part III.	
Informants and Methods	36
 II. PHONOLOGY	
2.0 Introduction	40
2.1 The Sound Segments	40
2.2 Phoneme Sequences	54
2.3 Prosodic Features	61
 III. SYNTACTIC SEQUENCES FOR DETERMINING LEXEME CLASSES	
3.0 Introduction	69
3.1 Need for Syntactic Frames in Morphemic	
Analysis	69
3.2 Syntactic Frames Used to Determine	
Lexeme Classes	70

TABLE OF CONTENTS--Continued

Chapter	Page
IV. MORPHOPHONEMIC ALTERNANTS	
4.0 Introduction	72
4.1 Alternants Involving Verb Paradigms	72
4.2 Alternants Involving Verb	75
4.3 Alternants Involving Fusion	75
4.4 Alternants Involving Loss of Sound	77
4.5 Alternants Involving Affixes	78
4.6 Alternants Involving Doubling of Roots	78
V. MORPHOLOGY	
5.0 Method	81
5.1 Immediate Constituents in Larger Utter- ances	82
5.2 Immediate Constituents of a Single Lex- eme	82
5.3 Classification of Lexemes	87
5.4 Inflection and Derivation of Lexemes	90
APPENDIX	
I. VOWEL AND CONSONANT SEQUENCES	133
II. SPECTROGRAMS OF JUNCTURE AND INTONATION	137
III. A SUNDANESE TEXT	141
IV. LEXICON OF SELECTED ROOTS	145
BIBLIOGRAPHY	173

LIST OF ILLUSTRATIONS

	Page
Map: Dialect Areas of West Java	25
Figure	
1. Spectrogram	139
2. Spectrogram	140

CHAPTER I

INTRODUCTION

Part I

Historical Conditions Affecting the Language

Sundanese, a language in the Malay branch of the Malayo-Polynesian language family¹, is spoken in the Pasundan region, West Java, by an estimated fourteen million people. Since very little attention appears to have been given the language in terms of the methods employed by descriptive linguists, it would seem that it merits a descriptive analysis. This is especially true in view of the fact that the Indonesian government has been vigorously implementing a program aimed at developing and establishing the official Indonesian language, Bahasa Indonesia, another language of the Malayo-Polynesian language family, as a unifying factor in education, commerce, government, social life, and general cultural development throughout the entire Indonesian archipelago.

It is the purpose of this dissertation to present an analysis of the phonological and morphological systems of the Sundanese language as found in a corpus of data based on

¹Leonard Bloomfield, Language (New York: Henry Holt and Co., 1933), p. 71.

some 250 hours of phonetic transcription collected during three years of residence in Indonesia.

Since the Sundanese language has been written in two alphabets, the Roman and another believed to be derived from Sanskrit, it is obvious that Sundanese has been studied in the past by European and Hindu scholars. In more recent years several Sundanese scholars have devoted considerable time to the study of their language. A search for published studies of Sundanese has disclosed the following:

Adiwidjaja, R. K. Adegan Basa Sunda. (The Foundation of the Sundanese Language). Djakarta: J. B. Wolters, 1951.

Coolsma, Sierk. Hollandsch-Soendaneesch Woordenboek. Leiden: (no publisher given). 1910.

_____. Soendaneesche Spraakkunst. Leiden: A. W. Sijthoff, 1904.

De Wilde, A. Nederduitsch-Maleisch en Soendasch Woordenboek. Amsterdam: Johannes Muller, 1841.

Grashuis, G. J. Over de Verbale Vormen in het Soendaneesch.¹ (Place of publication not given): Bijdragen Derde Volgreeks, 1873.

_____. Soedaneesch Leesboek. Leiden: (no publisher given), 1874.

_____. Soendaneesch Spraakkunst, Schrift en Uitspraak. Leiden: (no publisher given), 1882.

_____. De Soendaneesche Tolk. Hollandsch-Soendaneesche Woorden-lijst. Leiden: (no publisher given), 1874.

Kats, J. Spraakkunst en Taaleigen van het Soendaesch. Batavia: N. V. Boekhandel en Drukkerij, Visser and Co., 1929.

¹R. H. Robins mentions this work in a footnote to his article, "The Phonology of the Nasalized Verbal Forms in Sundanese," Bulletin of the School of Oriental and African Studies, XV, Part 1 (1953) pp. 138-45. However, I have not been able to find any trace of it.

Lezer, L. A. De Vier Indische Talen Leerboek voor Zelfonder-
richt in de Nederlandsche, Maleische, Soendaneesche
en Javansche Taal. Bandung: De Boekenbeurs. (No
date given).

_____. De Soendaneesche Taalcursus (Voor Zelf-Onderricht).
Bandung: (no publisher given), 1919.

_____. Woordenboek Walanda Soenda. Tasikmalaja, Java:
Lezer, Boekhandel, 1923.

Nataprawira, P. Tata Basa Sunda. (Secrets of the Sundanese
Language). Bandung: Toko Buku Melodie, 1953.

Oosting, H. J. Soendasche Grammatica. Amsterdam: J. Muller,
1884.

Rigg, Jonathan. A Dictionary of the Sunda Language. Batavia:
Lange and Company, 1862.

Robins, R. H. "The Phonology of the Nasalized Verbal Forms
in Sundanese," Bulletin of the School of Oriental
and African Studies, XV, Part 1 (1953).

Satjadibrata, R. Kamoes Basa Soenda. (A Dictionary of the
Sundanese Language). Djakarta: Balai Pustaka, (no
date given).

_____. Kamoes Soenda-Indonesia. (A Sundanese-Indonesian
Dictionary). Djakarta: Balai Pustaka, 1950.

A thorough search of the catalog of the national li-
brary of Indonesia, Lembaga Kebudayaan Indonesia, in Djakarta
indicated that it possessed two works on the Sundanese lan-
guage: the dictionary by Jonathan Rigg and the grammar by
J. Kats listed above. No collection of works in Sundanese
could be found in that library. I was told that during the
Japanese occupation of Indonesia from 1942 to 1945 many books
in the library had been destroyed. The Sundanese language
section of the Cultural Division of the Ministry of Educa-
tion, however, does have a small collection of writings in
Sundanese, including a translation of the Bible.

Having found so few Sundanese books collected together, it seemed necessary to try to find them in bookstores in West Java. A search through bookstores selling both new and used books yielded forty-nine titles of books in Sundanese, alongside books in Javanese, Dutch, English, and Chinese. The works in Sundanese included several series of pamphlets for instructional purposes in the elementary schools of Pasundan, a few novels, two or three collections of poems, a book of herb remedies, an almanac, translations from the Mahābhārata, and one book on educational psychology.¹

With the establishment of Indonesian independence in 1949 and the more settled conditions which followed, more periodicals came into being. A small pocket-size magazine, Tjandra, is published monthly in Bogor. It began publication in 1953. A larger magazine, Warga, also published in Bogor, was established in 1950. Three small Sundanese newspapers are published in Bandung: Panghegar, established in 1952, Kudjang, established in 1956, and Sipatahoenan, which began publication in 1924.¹

Linguistically speaking, the island of Java is divided into three parts: Pasundan in the west where Sundanese is spoken; Central Java where Javanese, a language distinct from Sundanese but closely related to it, is spoken; and Eastern Java, where Madurese is the principal language spoken but where some people speak what is known as Eastern Javanese, a dialect of Central Javanese.

¹Books and periodicals in Sundanese are listed on pp. 173-176.

Pasundan is roughly the western one-third of Java. It is bordered on the south and west by the Indian Ocean, on the north by the Java Sea, and on the east by an irregular boundary, the most distinguishable features of which are the Tjianduj and Tjisanggarung rivers.

Since this region, along with the rest of the Indonesian archipelago, has undergone several acculturative intrusions which are linguistically interesting, it seems appropriate to begin with its historical background.

Recorded history does not give the origin of the inhabitants of Java, but from the fossil remains of Java Man found in Central Java, we know that the island has been inhabited perhaps as long as any area in the world. One writer, B. ter Haar¹, suggests that since we cannot say anything of the origin of these people we begin our discussions by taking into consideration the distinct law-areas, of which Pasundan is one, as they exist today. He submits that the emergence of the communities as they are today is the result of continual colonization. Since shortly after the beginning of the Christian era, at least, the lush islands of Indonesia have held a commercial attraction for other peoples. Because of commercial activities and, to an even greater extent, religious activities, Pasundan, with the rest of Indonesia, has been influenced most notably by the Hindus, Arabs, Portuguese, English, Dutch, and Chinese.²

¹B. ter Haar, Adat Law in Indonesia (New York: Institute of Pacific Relations, 1948), p. 101.

²See page 26 ff.

Traditionally, Pasundan was feudal, with many small states. But the domain and power of these weak feudal states shifted frequently, since both the form and the success of the political organization depended upon the personal power of the rulers. Political boundaries sometimes crossed language boundaries. This was particularly significant during invasions of the region by the armies of the two Central Javanese empires, the Madjapahit Empire, circa 1400 A.D., and the Mataram Empire, circa 1600 A.D. During both of these political and acculturative invasions there must have been an impact of the Javanese language on the Sundanese language, which would account for the common forms for many lexical items. (Another plausible explanation for the common forms, however, would be that Sundanese and Javanese are derived from a proto-language.)

In his book, Nationalism and Revolution in Indonesia, George M. Kahin observes that the political structure in West Java at the time of the recent revolution was quite different from that of the Central Java and Eastern Java regions.¹ He points out that Pasundan was without the aristocratic autonomous rulers so common in the rest of Java and the other regions of Indonesia. Although there are indications that there were small ruling families in isolated areas of Pasundan at various times, certainly a strong ruling class was never a prominent feature of Sundanese life, as it was in Central Java, for instance. Consequently the common people were not forced into

¹George M. Kahin, Nationalism and Revolution in Indonesia (Ithaca: Cornell University Press, 1952), p. 368.

situations involving such radical cultural changes as resulted in other parts of Indonesia where the ruling class was stronger and in a better position to promulgate changes among their subjects.

In general, then, the social structure of Pasundan was made up of small more-or-less autonomous communities consisting of thirty to fifty persons who used the "ladang" type of land cultivation. This practice involved cutting and burning an area in the forest at the beginning of the dry season. When the fertility of the soil was used up after a few crops, the community moved to another area and repeated the process. This mode of living made for a very fluid society throughout the entire Pasundan region. J. J. Van Klaveren makes this comment:

Native civilization based on ladang-culture will generally never attain the level of those based on sedentary agriculture. If there are no navigable rivers of importance it is impossible to cultivate fields at a great distance from the settlement. The settlement (kampong) therefore has to shift frequently and can contain only so many people as can be fed from the small action radius. They can consist of a few families only, maybe up to 30 or 50 people. De Haan tells us of the people of the Priangan that their huts were made of branches and leaves and that even fruit trees were not planted as the people did not stay long enough to enjoy the fruits. It is symptomatic of their way of cultivation that the Sundanese did not know surface measures till well into the 19th century....The organization of these tribes is very simple. Cutting and burning as well as making a fence against wild pigs are collectively done. Then each 'pater familias' gets his parcel which he divides among his families.¹

Although society was fluid once the temporary territory a family or community was to occupy had been estab-

¹J. J. Van Klaveren, The Dutch Colonial System in the East Indies (Rotterdam: No publisher given, 1953), p. 14.

lished, the territory assigned was extremely important to the structure of the community's society. According to B. ter Haar the territorial factor then became more important than kinship factors.¹

Ladang culture still predominates in the Bantam region of northwest Pasundan and along the south coast of the region. The entire Pasundan region was dominated by ladang type of agriculture until the Dutch finally succeeded in gaining control in the nineteenth century and changed it into a region of rich coffee plantations, particularly in the Priangan, a hilly and mountainous section in the southern part. These coffee plantations, together with the introduction of sawah agriculture (wet rice cultivation) by the Central Javanese invaders and the colonists of the sixteenth and seventeenth centuries, changed the people slowly but surely from semi-nomads to relatively permanent residents who were more easily controlled in the customary colonial pattern.

Dr. J. M. van der Kroef gives a succinct and apparently accurate description of a typical Indonesian village when he says that it

...is a closed society, traditionally self-sufficient and seclusive, with its own customs, its own law, and often its own religious practices. The individual is first of all a member of the group, and his freedom of action is restricted in every way by the lore of the past; self-assertion, economic interest not hallowed by accepted tradition, and social innovation are frowned upon--indeed, resisted--and generally lead to ostracism. Legally the village is a closed community. Changes in tradition and law are the work of spontaneous evolution in the community as a whole; the collective, not the individual, element predominates in

¹ B. ter Haar, p. 51.

the communal ethos. It is therefore altogether incorrect to regard the village as a democratic institution in the Western sense of the word, for the very structure of this society militates against those concepts of the sanctity of the individual and of a recognition of basic individual rights which underlie Western democratic traditions. It is not the individual's interest but the communal adat (custom law) which has supreme rights.¹

My informants have told me that the above description is characteristic of the Sundanese community today. It is very difficult, they say, for an outsider ever to join a real Sundanese community, even through marriage. Mixed marriages usually occur only in the larger cities. In general the individual is not free to choose his own mate but must conform to what the community considers appropriate for him as an individual and as a member of the community.

The powerful influence of adat, or custom law, on the small community is present even today and has no doubt been one of the causes of the slow rate of change in community life. It has worked against amalgamation of the Sundanese language with other nearby languages, keeping it distinct.

Despite the fact that the small communities were closed and that changes were difficult and slow, we should not conclude that the region did not come under foreign rulers or foreign influence before the arrival of the Dutch with their brand of 17th century colonialism. It is believed that from the first to the fifteenth century Hindu culture imported directly from India was present in Indonesia and that it was no doubt one of the greatest unifying elements in Pasundan during that time. How-

¹J. M. van der Kroef, Indonesia in the Modern World, (Bandung: Masa Baru, 1954), Part I, pp. 61,62.

ever, the strata of society most heavily touched by Hindu culture, historians agree, was the top layer and then only in certain aspects of life, most notably in the rituals. Throughout the fifteen centuries of Hindu influence among the rulers and princes, the masses of Sundanese people continued to live very much as they always had--in a closed communal organization.

Indian Influence

Van Leur¹ points out that the intrusion of large groups of Indians into the Indonesian civilization is not at all probable. Had such a type of colonization taken place the Indians would have brought with them their own concepts of cities and countrysides. They would have brought their caste system, including all levels of society. They would have brought their crafts, their types of houses and business buildings, their vernacular language, traditional law, and political organization. There is no evidence of such changes having been superimposed.

Van Klaveren has this to say:

Hinduisation proceeded together with the contacts of trade. It was a peaceful development, a cultural assimilation of Indonesian principalities by India. It was brought about by the merchants and others who came in growing numbers after the beginning of the Christian era. Since the number of emigrants were not sufficient to create actual Hindu settlements, the most important influence on native society was achieved especially by the second wave of the two higher castes of Brahmins and Aryans who came to Indonesia after the 4th century A.D. and intermarried with the native princely houses. A period of enlightenment of the princes took place. The kingship acquired a religious halo and they more and more exerted an active influence over their people, especially on the trade that passed through the Indonesian waters and ports.²

¹J. C. Van Leur, Indonesian Trade and Society (Bandung: W. Van Hoeve, Ltd., 1955), pp. 103-104.

²J. J. Van Klaveren, p. 16.

The "enlightenment" of the princes seems to have consisted of learning the duties of the hierocracy along Hindu lines and of a preoccupation with monuments, sanctuaries, monasteries, burial temples, and bathing places, together with the study of Hindu literature, theological writings, and law. The general population, whose function so far as the ruling class was concerned was solely to render service and pay levies, did not participate directly in this acculturative activity. This made for the continuity of the culture of the common Sundanese man in contrast to the changing culture of the ruling class. The courts took many Sanskrit words into the language, some of which inevitably permeated to the masses.

There are still Indian traders in Pasundan today, as in the rest of Indonesia, but they remain essentially traders, dealing in cloth, bicycles, and other commercial items, mixing practically not at all with the native population except commercially.

The real influence of the Indian people on the lives of the Sundanese, then, came principally through the Brahmins rather than the traders. This influence is manifest in modern Pasundan in the large number of words derived from Sanskrit that are found in the language, especially in the wayang stories, which are enjoyed by people of every class.

Moslem Influence

Although the masses of Sundanese people were self-sufficient in political and economic matters, along the

fringes of the region pepper was always traded, and a certain amount of other goods was also exchanged in the port cities of Banten and Jacatra (modern Djakarta). These two cities on the north coast were constantly being visited by foreign traders from China, Iran, and Arabia, as well as from short-lived kingdoms in other parts of Indonesia.

There were Arab communities on the west coast of Sumatra as early as 674 A.D. and Arabic tombstones dating from 1082 have been found on Java.¹ For several centuries the Arabs included the Indonesian archipelago in an international trading system that reached from Egypt to the Far East, but there is no indication of efforts to proselytize the people to any great extent. Toward the end of the thirteenth century, however, the Arabs began to make converts to the Moslem faith among the Indonesians. This trend developed rapidly in the fourteenth century and became one of the dominating aspects of Indonesia during the fifteenth and sixteenth centuries. The ties of the Indonesian Moslems with the Islamic world were strengthened by the fall of the Hindu-Javanese empire of Madjapahit at the beginning of the fifteenth century. After that the culture, science, and theology of the courts were ostensibly Islamic, but Islam seems to have grown in the court circles largely as a political expedient of the aristocracy, who thereby endowed themselves with an aura of sanctity to which their subjects were willing to defer.

Scholars seem to agree that Islam was first directed

¹Van Leur, pp. 111-112.

toward the ruling classes and that such a plan was expedient for the Moslems who came from the Gujarati regions of West India and who had commercial and political motives for coming to Indonesia. From the court circles Islam spread to the masses. This process was slow in Central and East Java, but in West Java and Sumatra the trend was more forceful, and it is in these two regions that Islam is strongest today. During the past fifty years Islam has become strongly associated with the ideal of nationalism, and adherence to its precepts, at least in form, has become a cultural animus throughout all Indonesia.

With the arrival of the European colonial powers, who were ostensibly Christian, Islam became a rallying point for the people. When the Dutch finally gained indisputable control of the islands, the Indonesians gained strength as a people through the Islam ideology, which served as an animus of defiance. The religious leaders and teachers of the Islamic faith are today highly respected by the average Indonesian. Arabic is taught in many of the secondary schools and many educated persons can read it, some even speaking it.

The impact of the Islamic religion has not, however, been accompanied by Arab influence on such mundane things as modes of trade or transportation. These have remained essentially the same as they were before. Islamic law has prevailed in the realm of the scholars only and has had little effect on common law. It has only limited validity in the courts and lacks any influence on cardinal points, according to Van Leur.¹

¹ Van Leur, p. 116.

Central Javanese Influence

The Pasundan region had its greatest and most lasting injection of Islamization at the time of the Mataram kingdom in the sixteenth century, though there had been Arabic dynasties at Bantam in the northwest and at Cheribon in the northeast before that time. During the sixteenth century the Islamic Javanese princes established colonies in Pasundan, bringing with them their own courts and religion from Central Java. This penetration began first about 1500 A.D. when the sawah system of agriculture, so prominent today in all but the extreme west and south portions of Pasundan, was first established. The Javanese influence was accelerated by the conquest of the prosperous Priangan region in the south by the Mataram dynasty from Central Java in 1590. This strong influence from Central Java lasted until the Dutch finally wrested Pasundan from Javanese hands.

There have been two important periods, therefore, when the Central Javanese people were influential in Pasundan: during the invasion by the Hindu-Javanese of the Madjapahit kingdom mentioned earlier, and the invasion by the Islam-Javanese of the Mataram kingdom.

Subsequent to the Mataram empire there has been more or less continuous contact of the Sundanese people with the Central Javanese and this, of course, has left its mark on the Sundanese language as the Sundanese people have taken on expressions borrowed from the more culturally advanced Javanese.

The Banten kingdom of northwest Pasundan struggled against the Javanese invaders as long as it could, and even extended its influence to the east somewhat. These struggles caused much confusion among the people. Neighboring villages would be paying homage to different lords, one Javanese-speaking, the other Sundanese. Both kingdoms were relatively uninterested in gaining control of land but wanted control of people. Mataram, the stronger of the two kingdoms, controlled more people and ruled its subjects more rigidly.¹ When the unfortunate Sundanese sent their representatives to the Mataram capital of Kartasura in Central Java with their tributes, the Javanese princes treated them with little respect and put them to menial tasks during their stay at court.

Any of the Sundanese who came in contact with the more diverse culture of their conquerors from the Mataram kingdom no doubt found it expedient to learn as much of the Central Javanese language as possible. It is highly probable that it was during this time of the Central Javanese occupation of Pasundan that a large number of Javanese words were assimilated into Sundanese.

European Colonization

The Islamic influence on Pasundan had scarcely been established before commercial interests from Europe began to exploit Indonesia. The Portuguese, Dutch, and English were active in the coastal cities of Pasundan before 1600, but

¹Van Klaveren, pp. 26-58.

the Dutch were rapidly gaining control of all Java. In 1616 they founded the city of Batavia, which is present-day Djakarta, on the site of the Sundanese city of Jacatra. The Javanese were still the most active colonizers in Pasundan at this time, and in 1661 they established a colony not far from Batavia on the Bekasi River, but the Dutch did not allow it to stand. The Bantam rulers, in the meantime, gave up trying to expand further in Pasundan and devoted their time more and more to international trade, especially with England.

In 1682 the Sultan of Bantam began to quarrel with his son, who was influential in the government. The Dutch saw an opportunity to intervene, and by siding with the son against his father gained virtual monopoly of the Bantam pepper trade. The English commercial interests were driven out of Bantam and the English lost one of their important footholds in Southeast Asia. From that time on the Dutch were indisputably in control of the Pasundan area, except for a few years in the early nineteenth century when England's fortunes in the Napoleonic wars gave her control of the East Indies. Through every means possible, including intrigue and rendering of strategic support to various factions among the petty kingdoms, the Dutch wrested control of the region from the Mataram rulers, and in 1704 the Dutch government sent regents to Pasundan commissioned to bring the area under control and develop it.

The account of the ousting of the Portuguese and the English from Pasundan and Indonesia is an interesting one from the historian's point of view, but has little importance from the linguistic standpoint, even in the lexicon.

Since the Dutch controlled the East Indies through the already-existing hierarchy of native lords and princes, there was little contact between the Dutch and the masses. There was only a casual effect upon the Sundanese language from the Dutch occupation, and this slight influence was chiefly in lexical items.

Chinese Influence

Another people who have been present in Pasundan in such large numbers that they cannot be ignored are the Chinese. Their interests have been chiefly commercial. They have, however, given a few vocabulary items to the language. Since their activities have been principally carried out within the framework and under the government of whoever happened to be in control, and because they have assimilated with the indigenous inhabitants only very slightly, they cannot be said to be of importance linguistically other than lexically although the Chinese have apparently been in Indonesia as long as any intrusive group. It should be pointed out, however, that since they were widespread and were, and still are, an extremely important segment of international trade involving not only Indonesia but Malaya as well, it is possible they were a factor in the spread of Malayan as a lingua franca. Thus, they may have indirectly helped to introduce Malayan lexical elements into the Sundanese language.

To sum up the discussion of outside influences on Pasundan, it is safe to say that although a considerable number of foreign cultures have found their way into the region, by far the greatest influence on the language has come from Sanskrit, Arabic, and Javanese. However, a Sundanese-Indonesian

dictionary¹ published in 1950 lists fourteen sources of influence on the language: Persian, Arabic, Dutch, Modern Javanese, Ancient Javanese, English, Indonesian, Greek, Latin, French, Portuguese, Sanskrit, Chinese, and Turkish.

Recent Trends

Recent trends in the culture of the Sundanese people which might affect the language should perhaps be mentioned. Today more freedom is permitted the individual in terms of marriage, changing mates, exchanging property, and choosing location of residence, although often at the price of breaking communal ties, leaving the village, and moving to a city. In the village the individual is important to the group chiefly because of his economic role in the group. His property and income are expected to be shared, which is apparently done quite willingly. Kahin points out that although common ownership and disposition of property have all but disappeared, the communal psychology remains.²

Intermarriage, a factor apt to affect a language situation, sometimes takes place between Central Javanese and Sundanese who have broken their communal ties. However, such marriages are rather rare. The general practice is for parents to select their children's partners from families well known to them and considered by the community to be suitable.

Until recently education was on an elementary level only. Since the revolution, however, many Sundanese children have been receiving a secondary school education, but with

¹R. Satjadibrata, Kamoes Soenda-Indonesia (Djakarta: Balai Pustaka, 1950).

²Kahin, p. 18.

Indonesian as the language of instruction. Illiteracy is high among the older inhabitants, but everyone receives a classical education of sorts through the wayang, or puppet, shows, which are presented in Sundanese and are enjoyed by old and young alike. The dalangs, or story-tellers, are able to make the characters of the Hindu legends which constitute the wayang shows come to life through their expertly manipulated puppets. Most of the stories are adaptations of the Mahābhārata tales, probably brought to Indonesia by those Hindus who came to help the native rulers organize the people into tractable subjects, for in addition to furnishing entertainment they also teach ethical values. Although translated into Sundanese, they are studded with words of Sanskrit derivation.

The Islamic religious organization in Indonesia has an educational system for religious training, as well as a system of elementary and secondary schools for secular training. There are also Christian parochial schools on the elementary and secondary levels.

Another system of schools, known as Taman Siswah, stresses the development of nationalism in Indonesia. These schools endeavor to develop interest in local and national history, languages, arts, and crafts. They employ conscientious teachers who in general do their work well.

The public schools, supported and controlled by the central government, include elementary, secondary, and university systems.

In all of the above schools instruction is given exclusively in Sundanese for the first three years. The study of Indonesian is begun in the fourth year but the instruction is still in Sundanese. At the junior high school level Indonesian becomes the language of instruction, and English is taught as the first foreign language. As a result of this type of education it is almost impossible to find a graduate of the elementary school who cannot speak and read at least two languages. Those who have been graduated from high school almost invariably can read English and speak it to some extent. (Those of the older generation fortunate enough to have received a comparable education almost invariably speak Dutch well.) I met only one Sundanese person of the educated class who did not speak at least two languages. She was the wife of a former residen (government official) whose husband had controlled a residency between Djakarta and Bandung. She spoke only Sundanese. Unfortunately she was not available as an informant.

The historical religious influences which have had bearing on the language of Pasundan have been previously dealt with in connection with the political, governmental, and commercial impacts from the outside, but it should be reiterated here that the Hindu religion, even though it apparently touched only the princely classes, ultimately increased lexical items in the language of the people. The written language symbols of Sundanese are based almost entirely on an adaptation of Sanskrit symbols, as are the Old Javanese. Tradition has it that the Sundanese alphabet was originally introduced by a Hindu

scholar.

In contrast, the Arabic language, through the Islamic religion, reaches directly every stratum of society. The Arabic influence on the lexicon of Sundanese is undoubtedly greater than that of any other language group.

The Christian religion can be found in all parts of Indonesia but in Pasundan there is little evidence that any large number of people have been touched by either the Christian faith or the languages which brought it. Most of the Christian churches in Pasundan were built for the Dutch people and the services were conducted in Dutch. Since it was the policy of the Dutch to respect native society as they found it, evangelical activities on their part were at a minimum. Although the Dutch were interested in the welfare of the poorer classes, especially after 1870, their actual contact with the people was not an all-pervading one, as the Islamic contact has been. It is not in religious matters that one sees the Dutch influence on the Sundanese language but in matters of commerce, transportation, communication, and education.

The speech influences which have tended to affect the language through aesthetic activities are few. The stories of the wayang shows are the principal literature but these are prevalent in other regions of Java and in Bali as well, forming a kind of culture link between these two islands not experienced by the other islands of the archipelago.

Aside from the wayang shows, drama seems relatively

unimportant. Very few villages, except those along the highways, even boast a movie house. Since by far the largest number of movies are in English, it might be expected that there would be some traces of intrusion of English into the language. So far, however, very little evidence of such intrusion exists.

The music that is to be heard is mostly of the folk-song or lullaby type, tending to stabilize the language rather than alter it. Many of the songs in Sundanese contain advice to children on how they should treat their parents or otherwise conduct themselves.

Part II

Dialect Areas, Borrowings, and Levels of Usage

Dialect Areas

There are today six distinct dialect areas in Pasundan.¹ To the west one finds the Banten dialect, which is principally an admixture of Sundanese with Javanese and Arabic. To the east of the northern part of Banten is the area of the Djakarta dialect. This includes the city of Djakarta itself and the surrounding villages for a radius of roughly fifteen miles. This dialect is not considered true Sundanese but a mixture of Sundanese, Indonesian, and other language elements. The vocabulary and pronunciation are quite different from Sundanese, but the grammar is very similar. Sundanese persons from other areas cannot easily understand the Djakarta dialect unless they have studied it or otherwise had close contact with it.

¹See map on p. 25 for location of dialect areas.

To the east of the Djakarta area is a region where the Tambun dialect is spoken. It has enough elements from both Djakartanese and the accepted Sundanese that it can be understood fairly well by people from both areas. There are no natural boundaries separating this Tambun area from the Krawang dialect area which lies still farther east, but the inhabitants of each dialect area seem to isolate themselves by gravitating toward the cities of Tambun and Krawang respectively.

The Cheribon or Tjilamaja dialect is different from other Sundanese dialects in that it resembles the language spoken farther east in the north coastal regions of Central Java. Because it has differences in pronunciation and vocabulary, this dialect is difficult for other Sundanese and neighboring Javanese alike to understand. The greatest number of speakers of this dialect live in Cheribon but it is also spoken in a little speech island in a small section of the northern part of the Krawang region called Tjilamaja. This tiny speech island is populated by persons whose principal occupation is fishing and who have close contact with the fishermen from Indramaju, in the northern Cheribon region, through fishing and trading.

The two remaining dialects, Southern Sundanese and the Krawang, the dialects treated in this dissertation, are spoken in the remaining areas of Pasundan. The Krawang area extends from the Java Sea to about the middle of the island. The Southern dialect area extends from the southern border of the Krawang area to the Indian Ocean on the south. Together

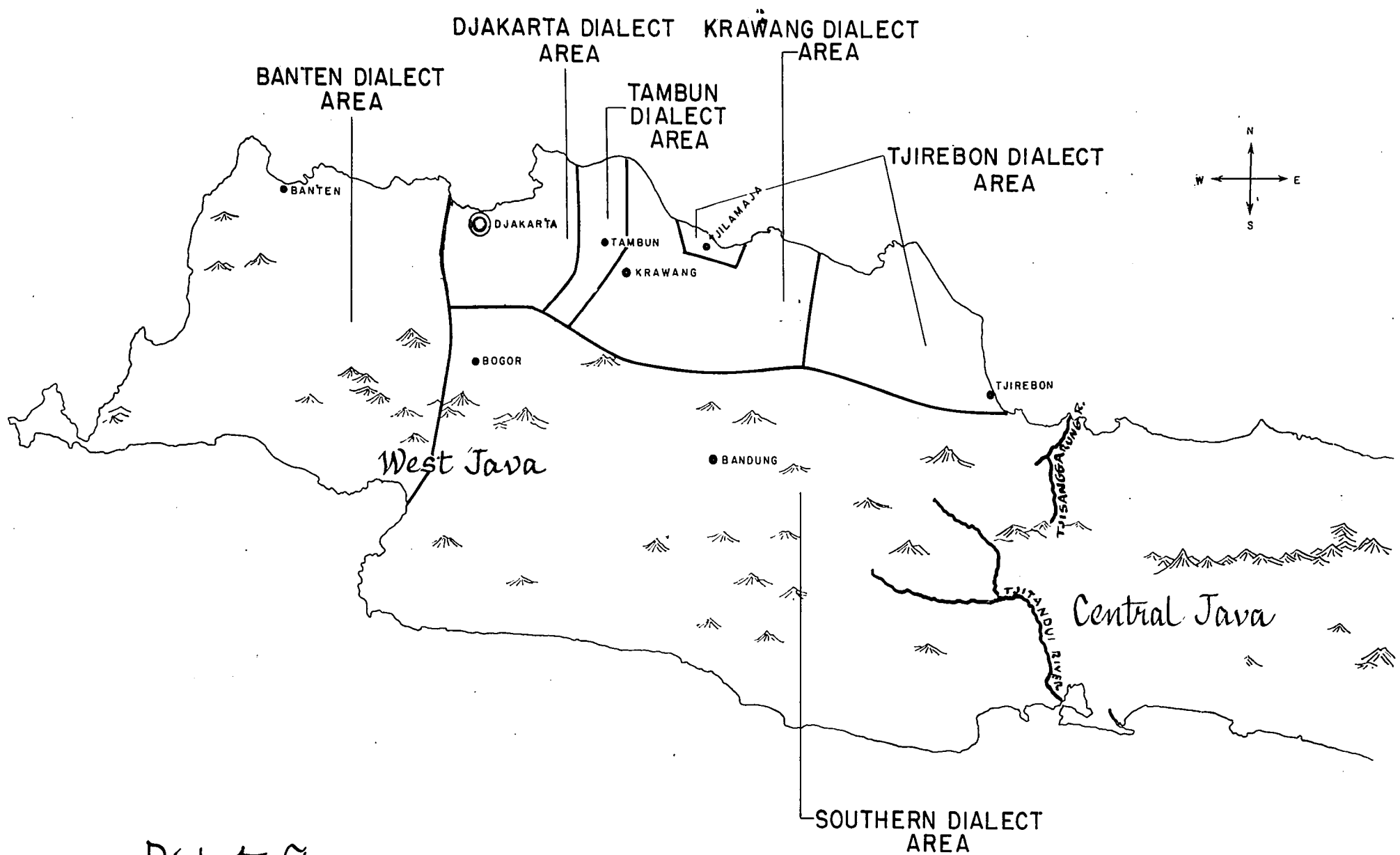
these two areas comprise roughly the eastern one-half of the entire Pasundan region and their dialects carry the most social prestige. Many noblemen from the courts of the former sultanates at Bogor and Bandung have given prestige to the Southern Sundanese dialect, while the prosperity of the farmland plains of Krawang has given the speech from that area a certain rank. These two dialects are mutually intelligible, but the Southern dialect is considered the "softest" and most elegant of all of the dialects. The only real difference between it and the Krawang dialect is the less "harsh" way in which it is spoken, reflecting the greater refinement of its users, in the opinion of the Sundanese.

My first principal informant was from the Southern dialect area, but when I checked his speech against that of an informant from the Krawang area I found no distinctive contrasts between the two dialects other than stylistic elements. The Krawang speaker tended to use more emphatic particles¹ and to have greater variety in the nonphonemic elements of his intonation contours. These two speech characteristics are common among speakers of Sundanese in the Krawang area.

Borrowings

The contacts of the Sundanese people with foreign cultures, as related in Part I, are reflected in the Sundanese language of the present day. Lexical borrowings from Sanskrit

¹See p. 70, section 3.2.1.

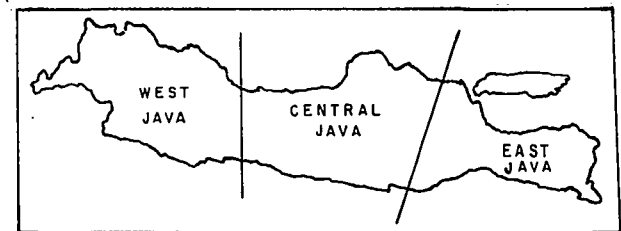


Dialect Areas
of
West Java

SCALE OF MILES



1" = 22 MILES



show up in the prologues and names of characters in the wayang stories, although the narratives themselves are related in the Sundanese language. Since these stories have always been an integral part of the average Sundanese child's life and training, the Sanskrit found in them can be said to be part of the language, though a number of the words are used only in this particular setting. The percentage of Sanskrit words I found in the Sundanese-Indonesian dictionary¹ is small.

Although the borrowings from Arabic have come chiefly through the Islamic religion, not all are limited to religion. The Arabic word abu is used for "father" alongside the Sundanese bapa. Sabab is used for "because" alongside lantaran in low Sundanese and margi in high.² A random check in the Sundanese-Indonesian dictionary indicates that approximately 6.5 per cent of the words listed are of Arabic origin.

The list of words taken into Sundanese from Chinese is quite small and is chiefly related to food. Many items in the Indonesian diet were introduced by the Chinese. A large percentage of the restaurateurs are Chinese.

The Sundanese dictionary, Kamoes Basa Soenda,³ designates a number of words in its lists as originating from

¹Kamoes Soenda-Indonesia.

²See pp. 30-33 for a discussion of high and low levels of Sundanese.

³R. Satjadibrata, Kamoes Basa Soenda (2d ed.; Djakarta: Balai Pustaka, no date given).

the Dutch. My informants supplemented the list with more Dutch words which they say are also in common usage. Even taking into consideration words not given in the dictionary, the number of Dutch loan words in the language is relatively quite small. It is significant that most of the words have to do with modern concepts of education, communication, clothing, commerce and industry, and modern inventions and devices. It is interesting that for most of these concepts no other Sundanese word has developed, whereas words borrowed from Arabic and Javanese often have Sundanese synonyms.

The borrowings credited to Javanese and Old Javanese in Kamoes Soenda indicate an intimate association of the Sundanese with their neighbors to the east. There is also a group of words which cannot be definitely classed as borrowed but which are practically the same in both Sundanese and Javanese. The pronunciations follow the phonemic systems of the respective languages. For example, endog (egg) in Sundanese is endok in Javanese. Javanese does not have final voiced consonants. It is virtually impossible to determine which language borrowed from the other, or whether the words came from some Proto-Sundanese-Javanese language form.

There are only a very few words which are considered as having come from the Portuguese. Among these are such household words as lamari from Portuguese almario for "wardrobe," and medza from Portuguese mesa for "table."

As to borrowed elements of structure, it is practically impossible to trace any phonemic influence which might have

come about through contact with any of the foreign languages mentioned, since written records are practically nonexistent. Whenever words have been borrowed it appears that they have been made to fit the phonemic pattern of Sundanese. An example of this is the way in which Arabic words have been changed in the process of assimilation into Sundanese. Arabic sabun, "soap," remained sabun in Sundanese. The sounds in this word were apparently very similar in both languages, but the classical Arabic word for "sermon," chotbah /xutba/, appears as kotbah /kotbah/ in Sundanese. Classical Arabic /šayta:n/, "Satan," appears in Sundanese as /setan/, there being no grooved palatal fricative and no long vowels in Sundanese.

An interesting aspect is that young people who have studied Arabic and can speak it have no trouble making two distinct phonemes of /s/ and /š/ in learning to speak English, while those who do not speak Arabic do not hear the difference between the two sounds. Until the difference between the two is carefully taught, the students use them as if they were freely fluctuating allophones of a single phoneme.

Until further research is done on the subject of loan words in Sundanese, we cannot ascertain that borrowings have caused changes in the Sundanese phonemic structure. An interesting example of a Sanskrit adaptation may be pointed out, both Sanskrit words çūra, "bold," and sura, "God," appear in Sundanese as /sura?/. [ç], a palatal grooved fricative corresponding to [š]¹, which is not in the Sundanese phonemic

¹William Dwight Whitney, Sanskrit Grammar (Cambridge: Harvard University Press, 1941), p. 22.

became /s/. The Sanskrit vowels apparently were also made to conform, since Sanskrit [ú] became Sundanese /u/. Thus two different borrowings from Sanskrit became homonyms.

In more modern times Dutch /glas/, "glass," became /gelas/ since the cluster [gl] does not occur and since the syllable pattern CV or CVC predominates. Dutch /kwast/, "paint brush," became /kuas/, since no word-final cluster [-st] occurs in Sundanese. The English phrase "free kick" from soccer occurs as /prikik/.

We cannot prove that the morphemic structure of Sundanese has been in any way affected by contact with other languages, even Javanese. This is not to say that absolutely no such influence has taken place, but without more records of older forms it is practically impossible to make any valid generalization. Although the number of stems or stem morphemes has been increased through borrowings, the morphemic system itself apparently remains unchanged.¹

It should perhaps be pointed out that Javanese, like Sundanese, has a morphemic system involving the use of a large number of affixes which are attached to a root in order to bring about changes in meaning, but the affixes have no great correspondence in the two languages as far as their form is concerned. The general structure of the affixal system and the meanings of the affixes are similar, and further research could no doubt show interesting corre-

¹See Chapter V for an analysis of the present-day morphological system.

spondence in the affixes used in the two languages.

/Levels of Usage

There are traditionally five levels of usage which must be considered in learning or using the Sundanese language: very high (lemes pisan), used very rarely and only when speaking to an extremely high-ranking prince or government official; high (lemes), used in all those situations in which someone must be honored through word usage, either in the family itself or in social relationships outside the family; a middle level (panengah), used in familiar situations where respect is not a requirement in the relationship; low (kasar), used when it is necessary to indicate that the person spoken to or about is of lower rank than others involved in the communication; and very low (kasar pisan), used for animals, beggars, thieves, and to express anger with servants.

The number of words in the very high and the very low groups is extremely limited. Few examples of these words occur in my data. For all practical purposes the vocabulary can be divided into two levels: high and ordinary. The words in the very high and very low categories are merely based on lexical connotations that are given to words comparable to the "your excellency" which we use when addressing an ambassador, or to the word "cur" used when we wish to express extreme contempt.

There is a subdivision in the Sundanese high level which involves a limited number of words: high humiliating and high elevating. If the speaker considers himself and his listener both to be high, he will refer to himself, the members of his body, his health, his house, his kin, and a few personal possessions such as clothing in the humiliating form, but will use the high elevating form in referring to the listener or subject matter not related to himself in a personal or intimate way. Most of the words contained in the Sundanese language can be used in any situation, regardless of levels required.

In many families the husband and wife speak low Sundanese to each other, but in households that follow the conservative feudal ideals the wife is required to speak high Sundanese to her husband while he speaks low Sundanese to her. Parents always speak low Sundanese to their children and most Sundanese children speak high Sundanese to their parents all their lives no matter what changes in status may occur. In some families where there is a hearty spirit of comradeship, the parents and children may all speak low Sundanese together. In most families, however, children are definitely considered inferior to their parents and are not allowed to associate freely with them. They are not allowed in the same room with them when eating, resting, reading, or the like. Children are taught the appropriate high forms at a very early age.

Brothers-in-law and sisters-in-law speak high Sundanese to each other for several years after a wedding. When they be-

gin to speak low forms together it marks a special milestone in comradeship and esteem.

In schools all teachers, both male and female, use high forms with each other and low forms with the pupils, regardless of the pupils' age or their families' rank. The pupils use high Sundanese exclusively with the teachers and employ practically the same mannerisms and gestures that they use with their parents. They are required to pay similar respect to school servants, secretaries, etc. At home, however, the children use low forms with the servants. Among themselves the children of all ages and school grades speak low Sundanese. If a new student enters the school from another Pasundan region the pupils will use high Sundanese until they begin to feel acquainted. The change to low forms will be gradual and may take as long as two months to complete.

Outside the family circle or school, people usually speak in the high form until they become well acquainted. As a rule, however, age is taken into consideration and one speaks high forms with an older person regardless of how long he has known him. The older person, on the other hand, is not required to speak low forms with a younger person. If the younger individual comes from a higher ranking family or is better educated, the older person will always use high Sundanese. If he is in doubt, he will use high Sundanese until the younger person's classification becomes clear.

The level of speech which will be used between individuals is sometimes very delicately balanced due to the various factors which may be involved. For example, difference in

length of attendance at a university or living in different rooms in the same dormitory may cause persons who would otherwise speak low Sundanese to each other to use high forms.

In the case of religious leaders, high Sundanese is used in communication with Moslem leaders, regardless of age, and usually with leaders of all other religious faiths. In speaking to a congregation the leader will use high Sundanese unless it happens to be in a small village where he knows everyone. In speaking privately to anyone a religious leader resorts to the usual conventions.

If a Sundanese person is speaking with a government official he shows linguistic respect similar to that accorded to religious leaders. A Sundanese government official, however, is expected to use the Indonesian language as much as possible in carrying on his business. If he must use Sundanese to be understood, he follows the conventional respect pattern.

Shopkeepers use high Sundanese, whenever it is at all feasible, as a matter of good business. A shopkeeper may even use the high forms with his customer's servants even though he knows them well.

Although a great deal is made of the different levels of speech, and it is no doubt troublesome to one learning the language to remember the proper forms, it is actually only a matter of vocabulary and vocabulary concordance. The same phonemic, morphemic, and syntax systems are used in all levels of respect.

Male and female language is practically the same. The biggest difference is in the voice register, the male intonation

patterns having a much wider range than the female. My male informants claim that girls pronounce what are normally alveolar stops as interdental and that this is a distinctly female characteristic. I found that girls frequently do this but I also found that my three male informants often pronounce their alveolar stops in the same way.

The list of taboo words is the same for both men and women. My informants believe, though, that there are certain words that men and women may use with members of their same sex which may not be used in mixed groups. The slang words used by both sexes are essentially the same, but slang and swearing are usually an indication of lower class, and families wishing respect avoid their use. In general, persons of high ranking families are very careful of their use of language, even when they feel anger.

There are distinct differences between rural and urban speakers of the language. The country man is usually marked by his gestures, countenance, and intonation. Another telltale characteristic is his desire to be very polite to the urban man, whom he considers superior. He seems to believe that this requires him to use a large number of "filler" words in his sentences. These words apparently have no significant meaning other than to express politeness, though the same forms in other situations may have definite lexical meaning. As a result the rural man's sentences are longer than the city man's.

It is probably correct to say that there are no basic gestures which accompany speech that are distinctly rural or urban, but any gesture which denotes humility is more elabor-

ately executed by the rural man in the presence of a man of higher rank, whether in his own village or in the city. As is the custom throughout all Java, the rural man puts the palm or fingers of his left hand on his right elbow when giving or receiving anything. He makes a great point of this gesture, whereas the urban man may frequently omit it. In making an introduction, the country man will point to the person he is introducing with the thumb of his right hand while placing the fingers of his left hand on his right elbow. The city man will merely use his thumb. In bowing while speaking the country man lowers his head much farther than the city man and moves his shoulders farther forward. When speaking, all persons try to avoid looking for long into the eyes of another, but the country man goes to the extreme in keeping his eyes averted.

There is a marked difference between rural people and city people in regard to style of pronunciation. The rural people tend to lengthen the vowels in final syllables. This is apparently considered more humiliating to oneself. City people may occasionally use longer vowels to express surprise or incredulity.

An interesting linguistic aspect aside from considerations of levels and styles of usage is the desire of a so-called elite group to elevate themselves socially by interspersing their vocabulary with Dutch words. This group is comprised chiefly of Dutch-educated people and white-collar workers, particularly those in government offices. If one has sufficient money he may enjoy membership in this elite group without resorting to this device, but otherwise those who know

a few Dutch words endeavor to mingle them with Sundanese words, high or low, in such a way that no adjustment of morphemes or syntax is required. They pronounce the Dutch words with Sundanese phonemes. This practice carries down to some of the young people of today, who try to learn enough Dutch words to maintain a position in the elite group. My informants tell me that this tendency is not growing but is remaining static. Young people do not go out of their way to use Dutch words with new acquaintances, but if a relationship had already been established before the revolution then friends will continue to intersperse Dutch with Sundanese. During the Japanese occupation from 1942 to 1945 the Japanese tried to stamp out this type of speech but close friends continued to use it in secret.

Part III

Informants and Methods

My first informants were two sisters, Bibi and Yeti, daughters of a late residen of Purwakarta. Once when their mother was visiting them she participated for an hour by telling some bedtime stories, which I attempted to record on a tape recorder. Because of mechanical difficulties, the recording was not successful but I was able to get a clear impression of intonation melodies.

After a short time one of the girls left Djakarta to attend a dental school in Surabaya and the other started to work in a bookstore, so they were no longer available as informants. It later seemed advisable to discard the material transcribed from them because of the influence of Djakartanese on their speech.

When I moved to Jogjakarta I found three young men who were willing to serve as informants. The first, Aka Tjakra Tanuatmadja, had finished his senior high school course shortly before and was studying to become an English teacher. He speaks only Sundanese within his family circle but before the war studied Dutch a short while. He can read a little Dutch and understands some spoken Dutch but cannot speak it himself. As a child he lived in a Sundanese village where most of the people speak only Sundanese. His village is not far from Bandung, the center of the Southern dialect area. His parents speak only Sundanese in the home although his father was previously a foreman on a Dutch plantation and can speak Dutch. His mother attended elementary school and studied Dutch but forgot it long before Aka was born.

My second informant, Sumukti Rukmantoro, had also just completed his high school studies and was studying to be an English teacher. His childhood was spent in Tjikampek in the heart of the Krawang dialect area. After the revolution he went to Djakarta to junior high school and to Purwokerto for senior high school. Purwokerto is in the Central Javanese region, not far from the Sundanese border. As far as I can tell he is bilingual, although he says he thinks in Sundanese when alone and prefers to speak it rather than Javanese. He can speak Indonesian fluently, as can all the people who have gone beyond the elementary school level. His mother had no schooling and is illiterate. His father died when Sumukti was small but because his mother's family were astute business people and

were able to accumulate some money, Sumukti is considered one of the elite.

The third informant, Rusman Surono, is from the Southern dialect area and has spent most of his life in the environs of Bandung. During the revolution his family fled to Central Java. His father worked in the office of the national radio organization and was forced to move frequently. The boy went to school for awhile in Central Java. Although he has a passive use of Javanese he speaks Indonesian with his Javanese friends. With his Sundanese friends he speaks only Sundanese. Like the other two young men, Rusman had only recently completed high school, and was preparing to become an English teacher.

The method used for obtaining most of my data was to have an informant come to my home for an hour or more daily. I had him speak Sundanese to me at a rate of speed as nearly normal as he could maintain while I recorded the material as rapidly as possible with phonetic symbols. We used a bilingual approach to obtain utterances. Considerable data were obtained when the informants spoke extemporaneously on a given subject. In this way they gave short autobiographical sketches, sample conversations, and folk stories without interruption from me except as I needed to have a word or an intonation pattern repeated. I then translated these utterances into English, using a free translation but at the same time endeavoring to assign meaning to every morpheme rather than arriving at good English.

I checked back often with the informants from my tran-

scribed notes to see if, by means of the phonetic symbols, I could reproduce satisfactorily the utterances made previously. I endeavored to make at least a tentative analysis of the sound system as soon as possible after taking the data and to assign meanings to the morphemes, at the same time searching for any new evidence pertinent to the morphological system. However, before attempting to arrive at definite conclusions concerning the morphology it proved necessary to have large amounts of data to work with. Some of the elements of the syntactic structure became apparent early in the work, but a comprehensive study of its complexities merits a separate study.

I endeavored to transcribe the sounds I heard as narrowly as possible, including in the transcription all those elements which might possibly prove contrastive and thus be significant in determining the segmental phonemes. For example, aspiration and lip rounding of consonants, and nasalization and lengthening of vocoids proved to be stylistic devices and were therefore irrelevant to the final description of the phonemic structure.

I also recorded prosodic features, such as stress, intonation, and juncture, when they were detectable.

A tape recording was made of conversation between all three informants speaking together. The conversations were completely unrehearsed, although a general topic for conversation was agreed upon beforehand. Later the recorded utterances were transcribed with phonetic notation in very much the same way as the data obtained directly from the speakers.

CHAPTER II

PHONOLOGY

2.0 This chapter deals with the structure of the segmental phonemes, the phoneme sequences, and the prosodic features of Sundanese utterances.¹ An utterance is defined here as the continuum of speech between two pauses which occur in conjunction with specific intonation contours. These contours will be discussed in Section 2.3.1.

The Sound Segments

2.1 The following types of phones were found in the corpus of data used for this analysis: [i, I, ɨ, ɩ, u, ʊ, e, ɛ, ə, ɤ, o, ɔ, ɔi, a, aⁱ, p, p^o, t, t^o, ʈ, k, k^ʔ, ʔ, b, b_h, d, d_h, g, g_h, m, n, ñ, ŋ, s, h, x, tʃ, dʒ, dʒ_h, l, r̄].

2.1.1 The following pairs of phones were considered suspicious; that is, analytical procedures² must be applied to the pairs to determine whether they have contrastive features which are significant in the structure of the language:

¹Although syllable structure is often included in a discussion of the phonological features of a language, the syllable is not treated in this dissertation since it proved to be of no structural significance.

²The method of analysis used here is based primarily on Kenneth L. Pike's Phonemics, A Technique for Reducing Languages to Writing. (Ann Arbor: University of Michigan Press, 1947.)

- [i] and [I] [i], a high front unrounded close vocoid, and [I], a high front unrounded open vocoid, occur only in free variation with each other, as in [liŋih] and [lIŋih] 'sit', and never occur in contrast in similar or identical distribution. [i] and [I] are members of the group of allophones comprising the phoneme /i/.
- [i̯] and [i̯] [i̯], a high front unrounded extremely close vocoid, contrasts with [i] in [paŋjaktosna?] 'the most truthful one' and [paŋiatkɪn] 'to make something strong for someone else'. They are therefore separate phonemes. Because [i̯] is distributed as a consonant, it is classed as a semivowel and written /y/.
- [i̥] and [i̥] [i̥], a high mid unrounded vocoid with a slight glide toward mid center, is, because of this glide, of slightly longer duration than other vocoids. [i̥] contrasts with [i] in [liŋih] 'neat' and [li̥ŋit] 'lose'. [i] and [i̥] are therefore members of the classes of allophones comprising the phonemes /i/ and /i̥/ respectively.
- [i̥] and [e] [e] is a mid central unrounded vocoid. [i̥] and [e] contrast in [hidɪŋ] 'black' and [hidɛŋ] 'know'. They are therefore members of a class of allophones comprising the phonemes /i̥/ and /e/ respectively.

- [ɨ] and [u] [u] is a high back rounded vocoid. [ɨ] and [u] contrast in [ʔimɨt] 'to check something carefully' and [ʔimut] 'to smile'. They are therefore members of the classes of allophones comprising the phonemes /ɨ/ and /u/ respectively.
- [y] and [ɥ] [ɥ], a tense high back rounded vocoid, contrasts with [u] in [paŋɥartosankɨn] 'Tell the news for him!' and [paŋuatkɨn] 'Make it strong for him!'. Therefore they are not allophones of the same phoneme. Since [ɥ] is distributed as a consonant, it is classed as a semivowel and written /w/.
- [u] and [o] [o] is a mid back slightly rounded vocoid. [u] and [o] contrast in [paus] 'a kind of fish' and [paos] 'long'. Therefore they are members of classes of allophones comprising the phonemes /u/ and /o/ respectively.
- [u] and [ə] These contrast in [bəleɣug] 'stupid' and [məleɣeg] 'to be surprised'. They are therefore members of classes of allophones comprising the phonemes /u/ and /ə/ respectively.
- [e] and [ɛ] [e] is a mid front unrounded close vocoid. [ɛ] is a mid front unrounded open vocoid. [e] occurs only before another vowel, while [ɛ] never occurs there; e.g. [beak] 'used up', but [mɛsɛɾ] 'buy'. Since they have complementary distribution and are phonetically similar, these two sounds are members of a class of allophones comprising the phoneme /e/.

- [i] and [ɛ] [i] and [ɛ] contrast in the words [lison] 'cigar' and [lɛsot] 'to lose hold of'. These are therefore members of the classes of allophones comprising the phonemes /i/ and /e/ respectively.
- [ɨ] and [ɛ] These sounds contrast in [tanɨh] 'soil' and [manɨh] 'you'. They are therefore members of classes of allophones comprising the phonemes /ɨ/ and /e/ respectively.
- [ɛ] and [ə] These sounds contrast in [sɛbaʔ] 'offer' and [səbat] 'call'. They are therefore members of classes of allophones comprising the phonemes [ɛ] and [ə] respectively.
- [ɛ] and [a] [a] is a low central unrounded vowel. [ɛ] and [a] contrast in [batʃaʔ] 'rickshaw' and [batʃaʔ] 'read'. They are therefore members of classes of allophones comprising the phonemes /e/ and /a/ respectively.
- [ə] and [a] These sounds contrast in [řəndaʔ] 'night watch' and [řandaʔ] 'widow'. They are therefore members of classes of allophones comprising the phonemes /e/ and /a/ respectively.
- [ə] and [ɤ] [ɤ] is similar to [ə] but is articulated slightly higher and slightly farther back. [ɤ] and [ə] occur only in free variation, as in [gənɐp] or [gɤnɐp] 'six'. There was no occurrence of meaningful contrast between them. Therefore they are members of a single class of allophones making up the phoneme /e/.

- [ə] and [o] These sounds contrast in [səbat] 'call' and [sobat] 'friend'. They are therefore members of classes of allophones comprising the phonemes /ə/ and /o/ respectively.
- [o] and [ɔ] [ɔ] is similar to [o] but is articulated slightly lower. These sounds occur only in free variation and are therefore members of the same class of allophones making up the phoneme /o/; e.g., [moñət] and [moñɛt] 'monkey'.
- [o] and [ɔⁱ] These sounds are in complementary distribution. [ɔⁱ], with a rising glide toward the front, occurs only preceding [j]. [o] never occurs there. An example is [hɔⁱɪŋ] 'want'. These sounds are therefore members of a class of allophones comprising the phoneme /o/.
- [o] and [a] These sounds contrast in [panon] 'eye' and [panan] 'uncle'. Therefore they are members of classes of classes of allophones comprising the phonemes /o/ and /a/ respectively.
- [a] and [aⁱ] [aⁱ] is a low mid unrounded vocoid with a rising glide to the front. [a] and [aⁱ] are in complementary distribution. [aⁱ] occurs only preceding [j], and [a] never occurs there. An example is [háⁱɪam] 'chicken'. They are therefore members of a class of allophones comprising the phoneme /a/.

The above statements establish seven vowels and two semivowels in the Sundanese language. The following contrasts further support the above evidence.

- [i] and [u] These contrast in [kiat] 'strong' (honorific level) and [kunt] 'strong' (ordinary level). They are therefore members of the classes of allophones comprising the phonemes /i/ and /u/ respectively.
- [i] and [e] These sounds contrast in [kidul] 'south' and [kədul] 'lazy'. They are members of the classes of allophones comprising the phonemes /i/ and /e/ respectively.
- [i] and [o] These sounds contrast in [sian] 'delight' and [soaŋ] 'goose'. They are therefore members of the classes of allophones comprising the phonemes /i/ and /o/ respectively.
- [i] and [a] These sounds contrast in [ʔiŋkah] 'move out' and [ʔaŋkat] 'go'. They are therefore members of the classes of allophones comprising the phonemes /i/ and /a/ respectively.
- [ɨ] and [o] These sounds contrast in [bɨŋkɨt] 'bind' and [boŋkot] 'stick'. They are therefore members of the classes of allophones comprising the phonemes /ɨ/ and /o/ respectively.
- [ɨ] and [a] These sounds contrast in [liŋit] 'lose' and [laŋit] 'sky'. They are therefore members of the classes of allophones comprising the phonemes /ɨ/ and /a/ respectively.
- [u] and [ɛ] These sounds contrast in [manuk] 'bird' and [manɛh] 'you'. They are therefore members of the classes of allophones comprising the phonemes [u] and [ɛ] respectively.
- [u] and [a] These sounds contrast in [tuŋtuŋ] 'end' and [taŋtuŋ] 'stand'. They are therefore members of the classes of allophones comprising the phonemes /u/ and /a/ respectively.

[ɛ] and [o] These sounds contrast in [sɛba?] 'offer' and [sobat] 'friend'. They are therefore members of the classes of allophones comprising the phonemes /e/ and /o/ respectively.

Below are suspicious pairs of consonantal sounds. Statements showing why they are assigned to a particular phoneme follow each pair.

[p] and [p°] [p], a voiceless unaspirated plosive bilabial stop, is in complementary distribution with [p°], a voiceless unaspirated unreleased bilabial stop. [p°] occurs only preceding pause. [p] never occurs in that position. Since they are in complementary distribution and are phonetically similar, they are members of a class of allophones comprising the phoneme /p/.

[b] and [p] [b] is a voiced bilabial unaspirated stop. [b] and [p] contrast in the words [bapa?] 'father' and [papak] 'flat'. They are members of the classes of allophones comprising the phonemes /b/ and /p/ respectively.

[b] and [p°] These sounds contrast in [donkap°] 'to come' and [halabbab] 'thirsty', and are members of the classes of allophones comprising the phonemes /b/ and /p/ respectively.

[b] and [p̚] [p̚], a fortis nasalized voiced unaspirated bilabial stop, occurs only following a homorganic nasal; e.g. [kampan] 'flower'. [b] occurs in all other environments. Since they are in complementary distribution and are phonetically similar, they are members of the same class of allophones comprising the phoneme /b/.

- [p] and [p̥] These contrast in [tamb̥aŋ] 'rope' and [tampaŋ] 'tobacco plant hearts' and are therefore in the classes of allophones comprising the phonemes /p/ and /b/ respectively.
- [b] and [w] These sounds contrast in [balik] 'return' and [yalikota?] 'mayor'. They are members of the classes of allophones comprising the phonemes /b/ and /w/ respectively.
- [t], [t°], and [t̚] [t] is a voiceless unaspirated dental plosive stop and [t°] is its unreleased counterpart. [t̚] is strongly fronted. [t] occurs following and preceding pause, as in [tilas] 'former' and [laŋit] 'sky'. [t°] and [t̚] occur only word final and then in free variation with [t]; e.g., [laŋit], [laŋit°], and [laŋit̚] 'sky'. Since these sounds do not contrast in identical distribution, they are combined as members of the class of allophones which comprise the phoneme /t/.
- [t] and [d] [d] is a voiced unaspirated dental stop, slightly more retracted than [t], and contrasts with [t] in [katut] 'including' and [kadut] 'a bag for rice'. They are members of the classes of allophones comprising the phonemes /t/ and /d/ respectively.
- [d] and [d̥] [d̥] is a fortis voiced unaspirated dental stop which is strongly nasalized. It occurs only following a homorganic nasal, as in [mandi?] 'bath'. [d] occurs elsewhere. Since these sounds occur in complementary distribution, they are in the class of allophones comprising the phoneme /d/.

- [d̥] and [t] These sounds contrast in [mand̥iʔ] 'bath' and [gartiʔ] 'change'. Therefore they are members of classes of allophones comprising the phonemes /d/ and /t/ respectively.
- [t] and [ʔ] [t] and the glottal stop, [ʔ], contrast in [sobat] 'friend' and [səbaʔ] 'offer'. They are members of the classes of allophones comprising the phonemes /t/ and /ʔ/.
- [k] and [kʔ] [k], an unaspirated voiceless velar stop, occurs syllable initial and final; e.g., [kuʔ] 'by' and [taktak] 'shoulder'. [kʔ], a glottalized form of [k], occurs only in free variation with [k] in final position, as in [kontrak], [kontrakʔ] 'plantation'. Since they occur in free variation they are members of a class of allophones comprising /k/.
- [ʔ] and [k] These sounds contrast in [lobaʔ] 'many' and [lobak] 'white radish'. They are therefore members of the classes of allophones comprising the phonemes /ʔ/ and /k/.
- [k] and [g] [g] is an unaspirated voiced velar stop. [k] and [g] contrast in [kuruʔ] 'thin' and [guruʔ] 'teacher'. They are therefore members of the classes of allophones comprising the phonemes /k/ and /g/ respectively.
- [g] and [g̃] [g̃] is a fortis nasalized voiced velar stop occurring only following a homorganic nasal, as in [ning̃ɪl] 'to beat', and never occurs elsewhere. Since [g] and [g̃] are in complementary distribution as well as being phonetically similar, they are members of a class of allophones comprising the phoneme /g/.

- [k] and [g] These sounds contrast in [ʔaŋgʊʔ] 'wear' and [doŋkoʔ] 'stop'. They are members of the classes of allophones comprising the phonemes /k/ and /g/ respectively.
- [m] and [n] These bilabial and dental nasal sounds contrast in [manah] 'heart' and [nanah] 'pus'. They are members of the classes of allophones comprising the phonemes /m/ and /n/.
- [n] and [ɲ] The dental and alveo-palatal nasals contrast in [natah] 'to chisel' and [ɲataʔ] 'to clear' and are members of the classes of allophones comprising the phonemes /n/ and /ɲ/¹ respectively.
- [n] and [ŋ] The dental and velar nasals contrast in [ŋaʔan] 'name' and [ŋaʔaŋ] 'to write an essay'. They are members of the classes of allophones comprising the phonemes /n/ and /ŋ/.
- [ɲ] and [ŋ] The alveo-palatal and velar nasals contrast in [ɲiʔiʔit] 'to sting' and [ŋiʔiʔit] 'to cut'. They are members of the classes of allophones comprising the phonemes /ɲ/ and /ŋ/.
- [h] and [x] [h] is a voiceless heavily breathed oral cavity fricative. [x] is a velar fricative occurring only following high vowels and always in free variation with [h]. For example, [pasih], [pasix] 'to give'. These sounds are phonetically similar and are both allophones comprising the phoneme /h/.

¹It was decided not to analyze [ɲ] as /ny/ since this would have created an anomalous consonant sequence with /y/ following pause. No other consonant occurs with /y/ in that position.

- [ʔ] and [h] These sounds contrast in [tambah] 'increase' and [tambaʔ] 'remedy' and are members of the classes of allophones comprising the phonemes /ʔ/ and /h/ respectively.
- [tʃ̥] and [dʒ̥] [tʃ̥] is a voiceless alveo-palatal affricate contrasting with [dʒ̥], a voiced alveo-palatal affricate; e.g. [betʃ̥aʔ] 'rickshaw' and [bedʒ̥aʔ] 'news'. [ʃ̥] and [ʒ̥] do not occur except in the combinations [tʃ̥] and [dʒ̥]. Therefore these two affricated sounds are considered to be members of the classes of allophones comprising the phonemes /č̥/ and /ǰ̥/ respectively.
- [dʒ̥] and [d̥ǰ̥] These sounds are in complementary distribution. [d̥ǰ̥], a nasalized affricate, occurs only following /ŋ/ and /n/, but [dʒ̥] occurs elsewhere. Examples are [lonǰ̥ʒ̥on] 'oval' and [panǰ̥ʒ̥an] 'long'. These sounds are therefore members of a class of allophones comprising the phoneme /ǰ̥/.
- [l] and [r̥] [l] is a voiced laterally released liquid. [r̥] is a voiced liquid with a flapped or slightly trilled release. They contrast in [tuluy] 'then' and [tuŋuy] 'a bunch of bananas' and are members of the classes of allophones comprising the phonemes /l/ and /r/.

2.1.2 From the distribution of the allophones shown above, the following phones are established: /i/, /ɨ/, /u/, /e/, /ɛ/, /o/, /a/, /p/, /t/, /k/, /ʔ/, /b/, /d/, /g/, /m/, /n/, /ñ/, /ŋ/, /s/, /h/, /č̥/, /ǰ̥/, /l/, /r/, /w/, and /y/.

The following chart lists the seven vowel phonemes, indicating their contrastive points of articulation:

CHART I

SUNDANESE VOWEL PHONEMES

	Front	Central	Back
High	i	ɨ	u
Mid	e	ə	o
Low		a	

The vowels are distinguished one from another chiefly by the contrastive positions of the tongue in relation to the oral cavity during articulation.

The three vowels, /i/, /ɨ/, and /u/, are pronounced with the tongue high in the mouth. They are articulated in front, mid, and back positions respectively. The high front vowel further contrasts with the back vowel in that it is unrounded, whereas the lips are rounded for the high back sound. The high central vowel is unrounded and has a slight glide toward mid center though not low enough to coincide with the class of allophones comprising the phoneme /ə/. This glide causes a slightly longer duration of sound than is present in the other six vowels. A further contrastive feature which characterizes all three of the high vowels is a greater degree of tenseness in articulation than is present in the remaining four.

The three vowels pronounced in mid position, /e/, /ə/, and /o/, are pronounced mid front, mid central, and mid back respectively. The mid vowels tend to be pronounced

closer toward the position of the central vowel than is the case with the high vowels. The mid back vowel contrasts with the high back vowel in that the first has a lesser degree of lip rounding. The mid front and mid central vowels are pronounced unrounded.

There is only one low vowel, /a/. It is pronounced in the central position and is unrounded.

2.1.2.2 The nineteen consonantal phonemes, which are shown in the chart on the following page, contrast as to stops, fricatives, affricates, nasals, liquids, and semivowels. The chart also shows the contrastive features of voicing and voicelessness and the points of articulation.

The stops, /p/, /t/, /k/, /ʔ/, /b/, /d/, and /ɣ/, contrast as to voicing, the first four being voiceless. The voiceless stops contrast in four points of articulation: bilabial, dental, velar, and glottal. The voiced stops also contrast in all these points of articulation except the glottal. The voiced phoneme, /d/, however, is articulated in a slightly retracted position just back of the teeth.

The nasals are contrastive in four points of articulation: the bilabial, the dental, the alveo-palatal, and the velar.

The two fricatives, /s/ and /h/, contrast as to point of articulation, the first being dental and the other being in the velar or pharyngeal regions of the oral cavity. The first is a local fricative and the second a general oral cavity fricative.

CHART II

THE SUNDANESE CONSONANTS¹

Type of Consonant	Points of Articulation				
	Bilabial	Dental Alveolar	Alveo-Palatal	Velar	Glottal
Vl. Stops	p	t		k	ʔ
Vd. Stops	b	d		g	
Nasals	m	n	ɲ	ŋ	
Vl. Fricatives		s		h	
Vl. Affricate			tʃ		
Vd. Affricate			dʒ		
Lateral Liquid		l			
Flap Liquid		r			
Semivowels	w		y		

The two affricated consonants, /tʃ/ and /dʒ/, are articulated in the alveo-palatal region. Voicing versus voicelessness is their principal contrastive feature.

The liquids, /l/ and /r/, articulated at the alveolar ridge, contrast only as to method of release, the one, /l/, being a lateral and the other, /r/, a flap of the tongue tip, or a slight trill.

The semivowels, /w/ and /y/, contrast as to point of articulation. /w/ is phonetically a vocoid articulated by optional lip rounding accompanied by a rising of the root of the tongue toward the velum. /y/ is articulated by a

¹R. H. Robins shows a similar analysis of the Sundanese phonemes in an article entitled "The Phonology of Nasal Verbal Forms in Sundanese," Bulletin of the School of Oriental and African Studies, University of London, XV, No. 1 (1953), pp. 138-145.

raising of the tongue blade toward the alveo-palatal region.

Phoneme Sequences

2.2 A minimal utterance in normal speech is a $C_1(C_2)VC$ sequence where C_1 and C_2 stand for different consonants, V for any vowel, and C for any consonant. Although no limitation as to length of word¹ is apparent, no word containing more than seven vowels appeared.

2.2.1 The maximum phoneme sequence may be symbolized as

$$-(C_1[C_2(C_3)])V(C[C(C)])-$$

This maximum sequence may occur in any position between pauses, with the following restrictions: (1) vowels do not occur immediately following or preceding pause; (2) no more than two consonants occur following pause; (3) only one consonant can occur preceding pause; (4) no more than two vowels occur in succession; (5) no more than three consonants occur in succession; (6) geminates of vowels and consonants do not occur.

2.2.1.1 In words containing more than one vowel, initial minimal sequences which occurred are CV- and CCV-. Only one minimal sequence, -VC, occurred finally. The initial and final minimal sequences, CV- and -VC, may be joined to form a word, either without a consonant, or with one, two, or three consonants. CCV- may be joined to -VC to form a word with a single consonant between them.²

¹For a definition of word, see sec. 2.3.2.

²This technique of describing the phonemic sequences was developed with the help of Yao Shen.

Words made up of these combined sequences are as follows:

<u>Initial minimal sequence</u>	<u>Connecting consonants</u>	<u>Final minimal sequence</u>	<u>Example</u>
CV-	---	-VC	/beak/ 'finish'
CV-	C	-VC	/budak/ 'child'
CV-	CC	-VC	/taplak/ 'tablecloth'
CV-	CCC	-VC	/kunčluŋ/ 'dip into liquid'
CCV-	C	-VC	/prabu?/ 'king'

Words may also be made up by the joining of initial and final minimal sequences with intervening medial sequences. These medial sequences are comprised of one or more minimal sequences of either the initial or final type. These two types may be joined either directly or with intervening consonants, provided that there are no more than three consonants in sequence and that all the limitations mentioned in section 2.2.1 are complied with.

2.2.2 The following vowel-consonant sequences occurred between pauses:

CVC	pok	'say'
CVCVC	pikir	'think'
CVVCVC	buahan	'to bear fruit'
CCVCVC	prabu?	'king'
CVCVCVC	sabudak	'a child'
CVCVVCVC	bubuhan	'imitation fruit'
CVCCVCVC	punbiyaŋ	'my mother'
CVVCVCVC	duarebu?	'two thousand'
CCVCVCVC	prabuna?	'the king'
CVCCVVCVC	paŋdiukan	'a place to sit'
CVCVCVCVC	pi?awewe?	'one who is unusually fond of women'

CVVCCVCVC	tuangrama?	'your father'
CVCVCVVCVC	pibalai?in	'future danger'
CVCVVCVCVC	kabiasa?an	'habit'
CVCVCCVCVC	jalanjalan	'to take a walk'
CVCCVCVCVC	paŋweŋina?	'the very latest part of the night'
CVVCCVVCVC	meakmeakin	'to try to finish faster than usual'
CVCVCVCVCVC	pikaهرانin	'cause of amusement'
CVCCVCCVCVC	paŋsaktina?	'the most powerful one'
CVCVCCVCVCVC	?arak?arakan	'a line of marchers'
CVCVCVCVCVCVC	pirorompokin	'my future home'
CVVCVCVVCVCVC	tiasatiasakin	'surpass your normal ability.'
CVCVCVCVCVCVC	samejamejana?	'any of the tables'
CVVCVCVCCVCVC	duaratusrebu?	'two hundred thousand'
CVCVCCVCCVCVC	dipaŋgantikin	'to be changed for someone'
CVCVCVCVCCVCVC	tiluratusrebu?	'three hundred thousand'
CVCVCCVCVCVCVC	?aranjinanana?	'they'
CVCCVCCVCCVCVC	?ajrut?ajrutan	'to jump up and down aimless- ly'
CVCVVCVVCVVCVC	ditiasatiasakin	'one's normal ability is sur- passed'
CVCVCCVCCVCCVCVC	sajalmijalmina?	'any of the men'
CCVC	prak	'about to eat'
CVCCVC	taplak	'tablecloth'
CVCCVC	kunclun	'dip into liquids'
CVCCVC	budakna?	'the child'
CVVCVCCVC	dualaksa?	'twenty thousand'
CVCVVCVC	naluarakin	'to publish'
CVCVVCVC	punlanckik	'my oldest brother'
CVCVCVCCVC	barudakna?	'the children'
CVVCCVVCVC	niatniatkin	'to exceed one's normal strength'
CVCVCCVCCVC	paŋenjinna?	'the earliest time of day'
CVCCVCVCCVC	paŋdamanna?	'the healthiest one'
CVCCVCCVCCVC	paŋsangemna?	'the one most willing to do something'
CVCCVCCVVCVC	paŋgantiankin	'change something for some- one'
CVVCVCVVCVCVC	diasonasonkin	'one's normal ability is surpassed'
CVCVCCVVCVCVC	dikiatkiatkin	'one's normal strength is surpassed'

CVCVCCVCCVCCVC	ḡabantubantu?	'to help in any way possible'
CVCVCCVCCVCCVC	pabintihbintih	'to attack each other'
CVCVCCVCCVCCVC	dipaḡantiānkīn	'to be changed for someone'
CVCVCCVCCVCCVC	dibetahbetahkīn	'to be made happier than usual'
CVCVCCVCCVCCVC	dipaḡgarantiānkīn	'to be changed for someone (plural)'
CVCVCCVCCVCCVC	sawaktoswaktosna?	'any time'
CVVC	diuk	'sit'
CVCVVC	tatae?	'to climb continuously'
CVCVVCVC	bubulao?	'blue part'
CVCVVCVC	pikaeraīn	'a cause for embarrassment'
CVCVCCVVC	panonpoe?	'sun'
CVCVVCVCVC	pateḡḡteḡ	'to look for each other'
CVCVVCVCVC	pikaḡriīn	'something which is going to be laughed at'

2.2.3 The possibilities and restrictions of the distribution of individual phonemes in the above sequences are as follows:

2.2.3.1 Any consonant, or semivowel, may occur singly, that is, without an adjacent consonant, or semivowel, in any location, with the following exceptions:

/ḡ/, /č/, /j/, and /w/ do not occur before pause.

/p/, /b/, /g/, /ḡ/, /č/, and /j/ do not occur as the second consonant in any CVVC sequence.

/p/, /b/, /d/, /ḡ/, /č/, /j/, /r/ and /w/ do not occur as the third consonant in CCVC sequences immediately following or preceding pause.

2.2.3.2 CCC sequences occurring in the data were rare. An example is /-nčl-/ in /kunčluḡ/ 'to dip into liquids'.

2.2.3.3 All vowels may occur singly, that is, without an adjacent vowel, in any location, with the following exceptions:

/u/ does not occur preceding /w/

/e/ does not occur preceding /ñ/ or /y/.

/ə/ does not occur following /y/.

/ə/ does not occur preceding /ʔ/, /h/, or /y/.

/o/ does not occur preceding /w/.

No vowel immediately follows or precedes pause.

2.2.3.4 The binary combinations of phonemes occurring in the data are given in Chart III on the next page. A + symbol on the chart indicates that the phoneme listed in the left-hand column of the chart can be followed by the phoneme listed above the + symbol. For example, /i/ can be followed by /i̇/, /u/, /e/, and /a/ among the vowels. If no + symbol is shown, in a particular square, it indicates that the phoneme at the left on a line with the square is not followed by the phoneme listed above the square.

2.2.3.4.1 From the chart it will be seen that identical vowels do not occur in sequence. /ə/ does not occur in sequence with any other vowel.¹ /o/ and /e/ do not occur in sequence with any of the high vowels. /a/ does not occur in sequence with mid or low back vowels.

The chart indicates that the number of CC sequences is relatively small. Using the formula $K(R) = \frac{nR}{(nP)^2 - 1}$, found in an article by Harary and Paper, the sequences of

¹See Appendix I for examples of the various vowel and consonant clusters which occurred in the data.

CHART III

BINARY SEQUENCES OF PHONEMES

	i	ɪ	u	e	ə	o	a	p	t	k	ʔ	b	d	g	m	n	ñ	ŋ	s	h	ç	j	l	r	w	y	# ¹
i		+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ɪ	+						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
u	+	+					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
e							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ə							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
o							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
a	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
p	+	+	+	+	+	+				+														+	+		+
t	+	+	+	+	+	+				+	+													+	+		+
k	+	+	+	+	+	+	+	+	+	+	+	+	+	+						+	+		+	+		+	+
ʔ	+	+	+	+	+	+	+				+													+			+
b	+	+	+	+	+	+	+				+		+								+			+	+		+
d	+	+	+	+	+	+	+				+																+
g	+	+	+	+	+	+	+																	+	+		+
m	+	+	+	+	+	+	+	+			+		+											+			+
n	+	+	+	+	+	+	+				+	+												+	+		+
ñ	+	+	+	+	+	+	+																				+
ŋ	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
s	+	+	+	+	+	+	+				+	+									+				+		+
h	+	+	+	+	+	+	+				+	+	+														+
ç	+	+	+	+	+	+	+																	+	+		+
j	+	+	+	+	+	+	+																	+	+		+
l	+	+	+	+	+	+	+	+																			+
r	+	+	+	+	+	+	+	+	+				+	+	+	+					+	+					+
w	+	+		+	+	+	+																				+
y		+	+	+		+	+																				+
# ¹								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

¹# symbolizes pause.

occurrence were found to be 24.2% of the combinations theoretically possible.¹ There were no examples of geminates.

/ŋ/ occurs as the first member in CC sequences with all other consonants except /ʔ/ and /ŋ/. The prefix /paŋ-/ occurring in the verb lexemes (sec. 5.4.1.1.2) is the source of many of these sequences. /ʔ/ and /ŋ/ are always dropped following /paŋ-/. No example of the sequence /ny/ occurred.

The suffix /-kɪn/, which occurs in many verb lexemes, accounts for the large number of CC sequences in which /k/ is the second member.

The suffix /-naʔ/, which occurs in the noun inflection, would be expected to produce a larger number of CC sequences with /n/ as the second member than actually occurred. The scarcity of these sequences is purely a matter of chance and it is possible that different data would contain a greater variety.

It is interesting that voiced stops are found in very few CC sequences.

/ñ/ does not occur as the first member of a CC sequence and /ŋ/ does not occur as the second member.

¹Frank Harary and Herbert H. Paper, "Toward a General Calculus of Phonemic Distribution," Language, Vol. XXXIII, No. 2, p. 155.

Prosodic Features

2.3 The prosodic features of an utterance to be considered here are intonation, pause, juncture, and stress.

2.3.1 The only suprasegmental element with structural significance detected in Sundanese was intonation when it occurred in conjunction with pause. There are three levels of pitch: low (symbolized by 1), middle (symbolized by 2), and high (symbolized by 3). A speaker's variations in intonation, unless they are in conjunction with pause, may vary freely from any of the three levels of pitch without structural significance.

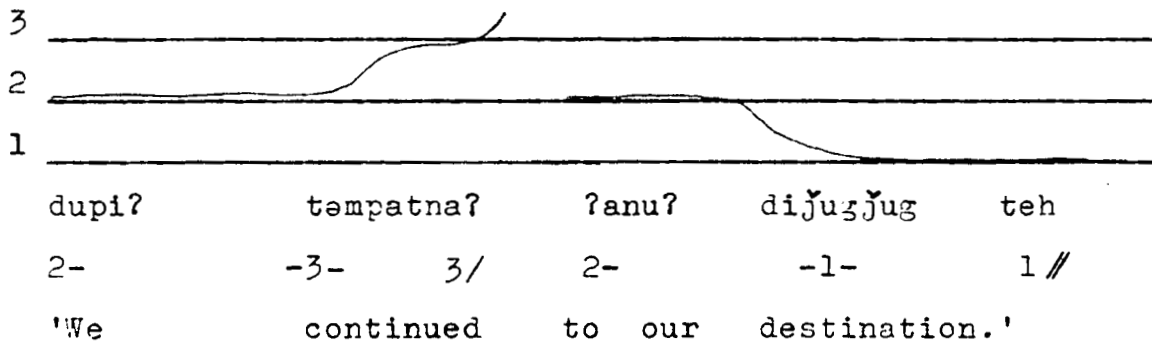
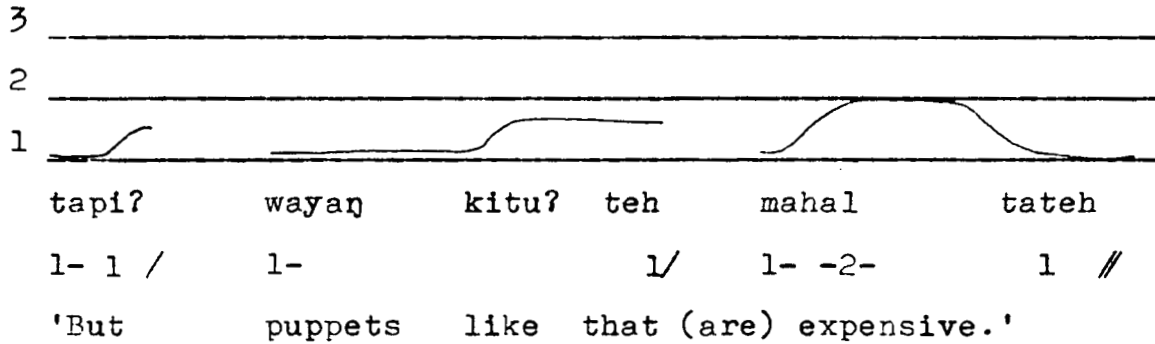
If pause occurs with a rise in intonation but the rise does not reach the next highest level, a tentative pause occurs. This slight hesitation in the continuum of speech, apparently a stylistic device, is without structural significance since the meaning of the utterance is not changed by its occurrence. Tentative pause is symbolized by a single slant line, /.

Pause which is accompanied by a variation from one pitch level to another, either up or down, is called final pause.¹ It signals the end of an utterance and is symbolized by two slant lines, //.

In the following sentences, the intonation changes preceding both tentative and final pauses are shown. The horizontal lines above the sentences represent the three levels of pitch and the curved lines represent the intonation configurations. Below the sentences numbers and slants

¹There are a few examples where pause, accompanied by level intonation, also signal the end of an utterance. See pp. 63 and 64.

are also used to represent intonation curves and tentative and final pauses. The latter method alone is used subsequently in transcribing intonation and pause.



Only those parts of an intonation configuration immediately preceding final pause are significant. These significant parts are called intonation contours. The change of pitch in the intonation contours may be either abrupt or gradual without causing any change in meaning.

The following types of significant contours occur in the data. The point where significant contour begins is indicated by the symbol °.

I. Statements

A. °2 - 1

?abdi? hoyon mios
 2 - °2-1 //
 ' I want to go.'

B. °2 - 2

biasana? sok dugi? ka? ?enjin
°2 - - 2 //
'Usually I stayed until morning.'

C. °3 - 1

lipas tina? sunut maun? ?asup kana? sunut buaya?
2- -2/ 2- -2°3-1//
'I'm free from the mouth of the tiger; then
I enter the mouth of a crocodile.'

D. °3 - 2

si?ir bumi? ?anu? sae?
2 °3-2//
'There are many good houses.'

E. °2- -1 (Some contrastive contours are carried over
an entire sentence with a gradual lowering
of the pitch.)

harita? numbe? kulawargi? ?abdi? naraos sunun
°2- -1//
'At that time my family began to feel relieved.'

II. Questions

A. Without other question marker:

(1) °2 - 3

?uraŋ bade? ?aŋkat kakota?
2- °2-3//
'Are we going to the city?'

(2) °1 - 2

salira? bade? mulih
2- °1 - 2//
'Are you planning to go home?'

B. With other question marker (question words).

(1) °2 - 1

dimana? ?anjɨn lingih
2- °2 - 1//
'Where do you live?'

(2) °3 - 2

kunaon dilandoꝃanana?

2 - 3 - °3-2//

'By what medicine were you cured?'

?eta? teh naon

2- °3-2//

'What is that?'

(3) °2 - 2

saha?

°2-2//

'Who?'

(4) °3 - 3

na? ?aya? naon

2- °3-3//

'What's the matter?'

(5) °2 - 3-

dupi? ?anj^ĩn parantos sabaraka? taun dinusna?

2 - 2/ 2 - -3 -2 °2 - 3-//

'And you have already how many years of service?'

III. Requests

A. °2 - 1

manga?

°2 - 1//

'Please!' (come in; drink your tea; sit down, etc.)

manga? ?uraꝃ ?anꝓat kabumi? ?anj^ĩna?

2 - °2-1//

'Let's go to his house.'

B. °2 - 2

punten

°2- 2//

'May I pass?' (on the street, in the theater, etc.)

?aka? ?apalkin ?eta?

2- 2/ °2- -2//

'Aka, memorize that.'

2.3.2 Potential pause determines the boundaries of a word. A word is defined here as the smallest meaningful unit of the speech continuum which can stand alone between two pauses. However, in normal speech the pause between two words is often imperceptible. Since native speakers are nevertheless able to differentiate between words in such a pauseless speech continuum, it can be assumed that they rely on familiarity with roots and affixes as well as pause to identify words.

In analyzing the data, as many words as possible were found in isolation between pause. However, morphological information often made it possible to find stretches of sound which could potentially stand between pause. Thus many additional words could be discovered.

Length of pause is not phonemic in Sundanese since it can range from practically zero duration to indefinite length without changing the meaning of the utterance. Spacing between words, which is used to indicate pause here, represents pause of any length.

Both tentative and final pause have been previously discussed and illustrated in Section 2.3.1. As stated there tentative pause, a stylistic device, is accompanied by a slightly rising intonation configuration. Final pause, which is accompanied by any one of a system of intonation contours, indicates the end of an utterance.

2.3.3 Juncture, as used here, is not pause itself but is the transition between one sound and another and between sound and pause. There is no apparent significance

in juncture phenomena but several items of interest can be pointed out.

The spectrograms shown in Appendix II, p. 139 ff., show that transitions from consonant to vowel and from consonant to **consonant** is much more abrupt than from vowel to vowel and vowel to consonant.

It is also clear that the vowels and consonants immediately preceding any pause are lengthened. This is made perceptible by a lengthening and fading away of sounds before pause.

No structural significance can be detected in the length of time involved in the fading of sounds before pause. Since no structural significance can be attached to juncture, it is not symbolized in phonemic transcriptions in this dissertation.

2.3.4 Although three degrees of stress--heavy, medium, and weak--were distinguishable in the speech of my three informants, stress appeared to be noncontrastive and apparently nonphonemic. Heavy stress occurred frequently, but not always, at the beginning of a significant intonation contour before final pause or immediately before tentative pause. When any of the informants pronounced words in isolation, however, the words were almost invariably pronounced with level stress and level intonation.

One informant almost always used heavy stress on the last syllable of a pause group. The other two had much greater variety in the position of stress, often using a heavy stress in the middle of a flow of speech between

pauses. No structural significance was detected in the various positions of stress. If I repeated an utterance but changed the position of any degree of stress, none of the informants seemed to notice the change but would instead correct a vowel or consonant which they felt I had not repeated correctly. I do not recall ever having been corrected on stress.

If a speaker wants to emphasize a word in a sentence, he uses a medium or heavy stress to contrast with the other words in the utterance.

In summary, then, degrees of stress are not phonemic on the lexical level, but heavier stress usually, though not obligatorily, occurs pre-pause in either tentative pause groups or utterance final pause, and, between pauses, to emphasize a word.

Examples from the data show the stress possibilities. [´] indicates primary stress, [˘] indicates medium stress, and no symbol above a sound indicates weak stress. The numbers below the sentences which follow indicate levels of pitch. In these particular utterances the pitch is level until just preceding the final pause. The numbers symbolizing intonation contours are discussed in Section 2.3.1.

[màŋgà? ʔuraŋ ʔaŋkat kabùmi? salirá?] 'Let's go to your home.'
2- °2- 1//

[dimána? ʔanʃín liŋʒih] 'Where are you living?'
2- °2- 1//

[ʔanʃína? nuʃu? čalik] 'He is sitting.'
2- 2/ 2- °2- 1//

[sumuhun ?eta? pameget kuləm raos] 'Yes, the man slept well.'
2- °2- 1//

[sumuhun ?eta? ?istri? kuləm ráos] 'Yes, the woman slept
2- °2- 1 well.'

CHAPTER III

SYNTACTIC SEQUENCES FOR DETERMINING LEXEME CLASSES

3.0 A lexeme is defined as a constituent which is always a constituent, provided that, in a given case, it is not included in a constituent that is always a constituent.¹ For example, in English the word boy is a lexeme. The word boys is another lexeme, but the element boy included in boys is not a lexeme because, in this given case, boy is included in a constituent that is always a constituent. Likewise, in Sundanese, /wartos/ 'something to tell, news' and /wartosan/ 'Tell the news!' are separate lexemes. /wartos/ is one of the immediate constituents of /wartosan/, the second lexeme, and therefore, in this given case, is not a lexeme.

3.1 Because of the large number of lexemes which are derivational in construction, or are homophonous, but which obviously have different syntactical distribution, little progress could be made in classifying lexemes by relying on their internal structure alone. Consequently, without attempting to treat syntax as a complete structural system, syntactic sequences or frames were discovered, by a series of attempts, which could be used as the basis for dividing lexemes into contrastive classes on a syntactic basis.

¹This concept of a lexeme was given to me by Isidore Dyen of Yale University, and was later confirmed by Bernard Bloch in a conversation on June 11, 1958.

3.2 After trying many syntactic sequences, the following three were found usable as frames to separate all lexemes into four distinct classes: verbs, nouns, adjectives, and particles. (The blanks represent any lexeme which can be substituted in the sequence.)

Sequence I	moal	_____	'never _____'
Sequence II	?aya?	_____	'exist _____'
Sequence III	tɪ?	_____	'not _____'

3.2.1 Lexemes which can be substituted in Sequence I are called verbs. Verbs may also be substituted in Sequence III, and to that extent are related to adjectives, since adjectives are substitutable in Sequence III only. Lexemes which can be substituted in Sequence II are called nouns. Nouns cannot be substituted in Sequences I or III. Lexemes which can be substituted in Sequence III but not in I and II are called adjectives. Lexemes which cannot be substituted in any one of the three sequences are called particles.

Following is a graphic explanation of the above:

<u>Sequence</u>	<u>Verb</u>	<u>Noun</u>	<u>Adjective</u>	<u>Particle</u>
I	+	0	0	0
II	0	+	0	0
III	+	0	+	0

3.2.2. An exhaustive check of all lexemes in the data revealed none outside the four classifications listed above. /moal/ and /tɪ?/ do not fit in any of the blanks and are therefore particles. /?aya?/, on the other hand, is a verb because it can follow both /moal/ and /tɪ?/.

Chapter V deals with the internal structure or morphology of verbs, nouns, pronouns, adjectives, and numbers. Since particles are only one morpheme¹ in length and have no internal structure from a morphological point of view, they are no longer the concern of this dissertation. However, they are included in the list of lexemes in Appendix IV. A complete description of the syntax would include a classification of particles on the basis of their usage in syntactic constructions.

3.2.3 As will be shown in Chapter V, all lexemes except particles, pronouns, and numbers are either part of the paradigms of the verb, noun, and adjective inflections, or are derived forms of the same lexeme classes. The same single morpheme may be the root for an indefinite number of lexemes in one or more of the lexeme classes.

3.2.4 Examples of the lexeme classes which can be substituted in the sequences listed in section 3.2 are:

<u>Verb</u>	/moal meser/	'never buy'	(Sequence I)
	/tɨ? meser/	'does not buy'	(Sequence III)
<u>Noun</u>	/?aya? gagak/	'there is a crow'	(Sequence II)
<u>Adjective</u>	/tɨ? kuat/	'not strong'	(Sequence III)

3.2.5 Examples of particles are /ka?/ 'to', /sumahun/ 'yes', and /manga?/ 'Please!'.

¹For a definition of morpheme as used here see footnote 2, p. 82.

CHAPTER IV

MORPHOPHONEMIC ALTERNANTS

4.0 Morphophonemic alternants are present when the allomorphs of a morpheme have systematic variation in phonemic shape. The variation in phonemic shape can be called morphophonemic change. The five common types of changes found in the morphophonemic alternants are discussed below.

4.1 A morphophonemic change with wide distribution is the nasalization occurring in the active category of verb paradigms.¹ The entire group of morphophonemic alternants related to the active category, including both the alternation with homorganic nasals and the prefix /ŋa-/, are designated by N-. N- therefore includes all types of nasals and /ŋa-/. These are used according to a system described below.

4.1.1 All verb bases² beginning with voiceless stops and affricates have, in the active category of their paradigms, initial homorganic nasal phonemes. Another way of stating the phenomenon is that the initial consonant of the verb base alternates with its homorganic nasal³ to form the

¹The active and other categories expressed in the verb paradigms are discussed in section 5.4.1.1.3.

²Verb bases are explained in section 5.4.1.1.3. Examples of the Base A type are used in this chapter for simplicity, but any of the five types of bases could have been used.

³Roots beginning with either /ʔ/ or /k/ have initial /ŋ/ in the active.

active category if the initial consonant is a voiceless stop or affricate. Examples of the different initial sounds in the base and the active category are listed below:

<u>Base A</u>	<u>Active Category</u>	<u>Meaning</u>
/piroseaʔ	/miroseaʔ/	'to heed'
/tanaʔ/	/nanaʔ/	'to ask'
/čokot/	/n̄okot/	'to take'
/kirit/	/ŋirit/	'to cut'
/ʔalaʔ/	/ŋalaʔ/	'to pick'

4.1.2 Verb bases which begin with /s/ begin with /n̄/ in the corresponding active category of the paradigm. For example:

<u>Base A</u>	<u>Active Category</u>	<u>Meaning</u>
/səbut/	/n̄əbut/	'to call'

4.1.3 Verb bases with the initial consonant /b/ begin in the active category of the paradigm with the homorganic nasal /m/, under the following conditions:

(a) If a base has one of the three following sequences of identical vowels:

	<u>Base A</u>	<u>Active Category</u>	<u>Meaning</u>
i - i	/biŋkit/	/miŋkit/	'to bind'
e - e	/bereʔ/	/mereʔ/	'to give'
a - a	/bawaʔ/	/mawaʔ/	'to carry'

(b) If a base occurs with the following sequences of unlike vowels:

	<u>Base A</u>	<u>Active Category</u>	<u>Meaning</u>
i - i	/b̄iliʔ/	/m̄iliʔ/	'to buy'
e - e - i	/berəsih/	/merəsih/	'to clean'

(c) Verb bases beginning with /b/ which have the following vowel sequences may, in the active, begin either with /m/ as above, or with the prefix /ŋa-/. However a particular base does not alternate between the two forms of nasalization. No procedure for predicting which of the alternate forms will occur has been found. Following are examples of each form of change:

	<u>Base A</u>	<u>Active Category</u>	<u>Meaning</u>
e - a	/beak/	/meak/	'to finish'
	/beʃaʔ/	/ŋabeʃaʔ/	'to tell the news'
a - i	/balik/	/malik/	'to return'
	/bandiŋ/	/ŋabandiŋ/	'to compare'
a - u	/bantuʔ/	/mantuʔ/	'to help'
	/banʃur/	/ŋabanʃur/	'to pour'
a - ə	/bales/	/males/	'to get revenge'
	/bates/	/ŋabates/	'to make a border'

All other verb bases beginning with /b/ simply combine with the prefix /ŋa-/ to form the nasalized allomorph, as /betir/, /ŋabetir/ 'to flee'.

4.1.4 There is a single example in the data of a verb base with an initial /d/, which may, in the active category of its paradigm, begin with either the homorganic nasal /n/ or with the prefix /ŋa-/. This example is /dɪliʔ/ (Base A) 'see', which has the alternating active forms /nɪliʔ/ and /ŋadɪliʔ/ 'to see'.

4.1.5 There are also single occurrences in the data of verb bases beginning with the voiced consonants /g/ and /ʃ/, which have an initial homorganic nasal in the active

category of their paradigms, namely, /gəgəl/ (Base A) 'bite' but /ŋəgəl/ (active) 'to bite', and /jɪɪn/ (Base A) 'make' but /ñiɪn/ (active) 'to make'.

4.1.6. All other verb forms in the active category begin with the prefix /ŋa-/ regardless of what consonant the base begins with. When the prefix /ŋa-/ occurs in the active category, the initial consonant of the base does not undergo any change.

4.2 The same type of morphophonemic alternation occurs in verb bases D and E.¹ These two bases include Base A and Base B¹ respectively. Following the /ŋ/ of the prefix /paŋ/, the same system of nasalized sounds is found as occurs initially in the active category of the paradigms of all bases. For example, /čəkət/ (Base A) 'approach' occurs in Base D with /ñ/, as follows: /paŋñəkətɪn/ 'approach something for someone'. Likewise /teŋetan/ (Base B) 'observe something' occurs in Base E with an initial /n/, as follows: /paŋnəŋetankɪn/ 'check something for someone'. However, where two adjacent velar nasals would otherwise occur, one of them is dropped. For example, /kiatan/ (Base B) 'make something strong' occurs in Base E as /paŋiatankɪn/ 'strengthen something for someone'.

4.3 A second type of morphophonemic change which is also rather common in occurrence is fusion.

4.3.1 Verb roots beginning with the phonemes /ʔu-/ undergo fusion if they combine with the prefix /ka-/.

Where the sequence of two vowels might be expected to re-

¹See section 5.4.1.1.2.

sult from the combination of the two morphemes, a single vowel /o/ occurs. The single example in the data is /kočap/ 'something was spoken unintentionally or without thinking', which is derived from what would normally be */ka?učap/ if it followed the usual pattern of ka + root lexemes.

4.3.2 Fusion also occurs if a noun root ending in either /-u?/ or /-i?/ combines with the affixes /ka- --- -an/, a discontinuous morpheme¹ indicating 'location or domain'. The final glottal stop of the root disappears but instead of the vowel sequence /ua/, the single phoneme /o/ occurs, or, if the sequence of vowels is /ia/, the phoneme /e/ occurs. An example of each type follows: /ratu?/ 'king' but /karaton/ rather than */ka-ratu?-an/ 'palace', and /bupati?/ 'government official', but /kabupaten/ rather than */ka-bupati?-an/ 'the place or domain controlled by a bupati?'.

4.3.3 Fusion in verb lexemes may involve affixation at the same time that doubling and reduplication occur.² An example of fusion in a doubled root combined with the suffix /-an/ is /?aku?/ 'confess', but /?akonakon/ rather than */?aku?anaku?an/ 'to confess to just anything'.

¹See section 5.4.1 for a rationale for discontinuous morphemes in Sundanese.

²Doubling consists in a repetition of the root; for example, /jalan/ 'walk', /jalanjalan/ 'to walk aimlessly'. Reduplication consists in the repetition of the first consonant and the first vowel of a root, as /koniŋ/ 'yellow' and /kokoniŋ/ 'the yellow part'.

4.3.4 An example of fusion which involves reduplication with the suffix /-an/ follows: /bati?/ 'profit' but /babaten/ rather than */babati?-an/ 'the profiting'.

4.3.5 If a noun root ends with /-a?/ and combines with the discontinuous morpheme /ka- --- -an/, the sequence /a?a/ is replaced by /a/. For example: /wadana?/ 'the lesser government official' but /kawadanan/ rather than */ka-wadana?-an/ 'the domain of the lesser government official'.

4.4 A third type of morphophonemic phenomenon is the loss of sound which occurs when affixes are attached to roots.

4.4.1 Initial glottal stops are lost when the prefixes /paŋ/ and /baraŋ/ are added to the root. For example: /ʔamis/ 'sweet' but /paŋamisna?/ 'the sweetest'.

4.4.2 Roots ending in glottal stops usually lose the glottal stops when the suffixes /-kin/ and /-na?/ are attached. For example, /bahe?/ 'spill' but /bahekin/ 'to spill something' and /guru?/ 'teacher' but /guruna?/ 'the teacher'.

If the suffix /-kin/ is attached to a root ending in /k/, an allomorph of /-kin/, namely /-in/, will be attached as in /balik/ 'return' but /malikin/ 'to return something'.

If a root ends in /n/ and the suffix /-na?/ is attached to it, an allomorph of /-na?/ is used. For example /ʔaŋin/ 'soup' but /ʔaŋina?/ 'the soup'.

4.5 A fourth type of morphophonemic alternation occurs in connection with the plural morpheme /-ar- ~ -al-/. If the root of a lexeme has either an initial /l-/ or a final /-r/, the infix /-al-/ is used. The infix /-ar-/ is used to form the plural of all other lexemes. Examples of the three types of environments follow:

/lega?/	'wide'	but	/laləga?/	'wide'	(plural)
/dahar/	'eat'	but	/dalahar/	'eat'	(plural)
/budak/	'child'	but	/barudak/	'children'	(plural)

4.6 Morphophonemic changes also accompany doubling of certain roots. These changes may be divided into two groups: first, those that involve no vocalic change but do involve the dropping of consonants; and second, a group involving a complicated system of vocalic change.

4.6.1 If the simple allomorph of a root which is doubled ends in a glottal stop, the glottal stop will be lost in the word medial position, but will be retained in word final position. However, if doubling is accompanied by suffixation, the final glottal stop may also be lost in accordance with section 3.4. Examples of both types of doubling follow:

/buku?/	'book'	but	/bukubuku?/	'books'
/bisa?/	'to be able'	but	/ʔabisabisakɪn/	'to exceed one's normal ability'

4.6.2 The morphophonemic changes of those doubled morphemes¹ which show vocalic change can be classified into five distinct groups according to the vowel concordance appearing in the two parts of the words.

4.6.2.1 In the first group, the first half of the lexemes have the consonant-vowel pattern CaCa(Ca) where C stands for any consonant. The second part of the word may have the vowel sequences given in the following illustrations:

- CiC(C)iC /lanʃanʃlinʃinʃ/ 'to pace angrily to and fro'
CeCeCeC /balahambelehem/ 'to smile and simper'
CəCəCəC /balačatbəlečət/ 'to squirm in one's seat'
CoCoC /laʒaʒloʒoʒ/ 'to gawk'

4.6.2.2 The second group contains the sequence CuC(C)uc in the first half of the doubled lexeme. The second half contains the following vowel sequences:

- CaC(C)aC /rumpurampaʔ/ 'to touch things nervously'.

4.6.2.3 The third group is characterized by the sequence Cə(Cə)C(C)aC in the first half of the doubled word while the following sequences occur in the second half:

- CəCiC /rəwagrewiʒ/ 'to dishevel the hair'
CəCəCCuC /kədəprakədəpruk/ 'to stumble repeatedly'

¹Although such lexemes appear to be doubled, no occurrence of any of them in undoubled form was found in the data except /goreng/ 'fry'. (See sec. 4.6.2.4). It should also be noted that none of them occurred with affixes, although according to the syntax sequences in Chapter III they all belong to the verb lexeme class since they can be substituted in both Sequences I and III, but not in Sequence II. (See sec. 3.2).

4.6.2.4 The fourth group is characterized by the sequence Cu(C)(C)aC in the first part of the doubled word and the following sequences in the second part:

CiCuC	/gʊragiruʔ/	'to be in a hurry'
CiuC	/ruaŋriuŋ/	'to be inseparable companions'
CuCiC	/ʔuwakʔuwik/	'to lash with a whip'
CaCeC	/gudagadeʔ/	'to pawn repeatedly'
CaCCoC	/guplakgaplok/	'to beat something repeatedly'
CaCuC	/kapatkaput/	'to sew and sew'
CaCɿC	/luŋalaŋɿʔ/	'to look nonplussed and sad'
CəCoC	/gudarɣədor/	'to knock repeatedly'
CəCəC	/pusakpəsək/	'to take the back or the skin off something'
CoCəC	/guraŋgoreŋ/	'to fry something again and again'
CuCuC	/durakduruk/	'to set fire to something time after time'

4.6.2.5 The fifth type of doubled roots with vocalic change was rare in the data. The first half of the doubled word contains the syllable pattern CoC and the second half CaC. An example is /dordar/ 'to sound like cannon-ading or the slamming of doors'.

CHAPTER V

MORPHOLOGY

Method

5.0 The morphology of Sundanese consists of the internal structure of its lexemes. Syntax, except as it is used in the syntactic frames in Section 3.2 to determine lexeme classes, is kept separate from morphology and is not a part of this analysis. A definition of the term lexeme is given on page 69.

5.1 Rulon S. Wells' method for determining the immediate constituents¹ of an utterance has been commonly employed in language analysis in the last decade. By his method an utterance composed of any number of morphemes² in sequence is cut into successively smaller sequences which are "maximally independent sequences--sequences which consistently preserving the same meaning, fit in the greatest number of environments and belong to focus-classes

¹Rulon S. Wells, "Immediate Constituents," Language, Vol. XXIII, 1947, pp. 81-117.

²Nida defines morphemes as the "minimal meaningful units which may constitute words or parts of words." See E. A. Nida, Morphology (Ann Arbor: University of Michigan Press, 1956), p. 1.

[classes of morpheme sequences mutually substitutable in the same environment] with the greatest possible variety of content." According to his method, this process is continued until the analyst has obtained that portion of an utterance which is of use to him. The morpheme sequences on both sides of each cut are called immediate constituents. Individually they are called constituents. Taken together they are called a construction. Wells' method, which is commonly thought of as working down from the utterance to the morpheme, is a useful tool for breaking up utterances into lexemes.

5.2 On the other hand, for purposes of analyzing the immediate constituents in a single lexeme, the methods used by Wallace L. Chafe in his Seneca Morphology¹ seems a more direct way to obtain the morphs which make up an individual lexeme. The principal difference between the two methods is that Chafe begins with minimal sequences and, by successively adding phonemic sequences which make a difference in meaning, arrives at longer utterances.

Chafe's method differs significantly from that of Wells'. Chafe retains the criterion that immediate constituents have relative freedom of occurrence, but this freedom must be "within the framework of the following restrictions and extensions:

¹Wallace L. Chafe, Seneca Morphology, in an unpublished dissertation at Yale University, 1958.

- (a) priority of shorter over longer morpheme sequences [e.g. in English, boy would be examined before boyish or boyishness, and boyish would be likewise examined before boyishness]
- (b) respect for immediate constituent divisions once established. [Once boyishness has been cut into the immediate constituents boyish and ness it cannot be recut into boy and ishness]
- (c) parallel analysis of parallel utterances [boy and boyish would both be analyzed before proceeding to boyishness]
- (d) exclusion of discontinuous immediate constituents that are never continuous [the elements boy and ness in boyishness could not be considered discontinuous immediate constituents, since boyness does not occur as a normal morpheme sequence in English. On the other hand, call and up in call Mary up can be considered discontinuous immediate constituents since we have the sequence call up Sue]."¹

5.2.1 Except for restriction (d) Chafe's method has given a consistent technique for determining the immediate constituents of Sundanese lexemes. For certain types of Sundanese morpheme sequences, it is advantageous to include discontinuous immediate constituents. For example, the construction /paŋ-wartosan-kɪn/ is of frequent occurrence, but there are no forms */paŋ-wartosan/ or */wartosan-kɪn/. Since a change of meaning accompanies the simultaneous addition of /paŋ-/ and /-kɪn/, they are combined into a

¹Ibid., p. 20.

discontinuous morpheme, /paŋ---kɪn/, even though the form */paŋkɪn/ does not occur. Another type of lexeme, /paŋ-bodas-na?/ 'the whitest one', a lexeme of the noun class, has two phoneme sequences, /paŋ-/ and /-na?/ which, added simultaneously to the root, /bodas/ 'white', make a single change in meaning. The form */paŋ-bodas/ does not occur. The form /bodas-na?/ 'the white color' occurs but it is in a different inflectional category. /paŋ---na?/, therefore, is considered a discontinuous morpheme, even though the form */paŋna?/ does not occur.

5.2.2 In Chafe's system morphs are found by beginning with minimal utterances and contrasting them with other utterances which are partially identical. Minimal utterances are discovered in Sundanese by using the criterion that they are single morphemes occurring with pause both preceding and following them. Once a single-morpheme utterance is determined, it is considered as a lexeme and is compared with other utterances which differ only in the presence of one additional minimal sequence of phonemes which have meaning; that is, with one additional morph. Chafe sets up the restriction that the additional morph should never be separated by an intervening morph from the immediate constituents already determined. The comparison of utterances partially similar to the minimal utterance continues until the longest utterance containing it as one of its constituents is found. The process is then repeated until all ut-

terances have been examined and all morphs isolated. Morphs which are semantically similar but have complementary or noncontrastive distribution are alternants of the same morpheme.

To illustrate, the Sundanese phonemic sequence /wartos/ 'something to tell, news' can stand alone between pauses. Because it cannot be further divided and have any meaning, it is a minimal utterance, as well as a lexeme. Other utterances which contain the sequence /wartos/ and which can stand alone between pauses are /wartosan/, /*na*wartosan/¹, /pa*ng*wartosankin/, /ma*ng*wartosankin/², and /di*pa*ngwartosankin/.

Starting with the minimal utterance /wartos/ and comparing it with an utterance differing by only one additional morpheme, the morph sequence /wartos-an/ would be next in order. Since the meanings of /wartos/ 'news' and /wartos-an/ 'Tell the news!' differ, a second morph, /-an/ has been discovered. /di-wartos-an/ differs from /wartos-an/ by one additional morph. /di-wartos-an/ and /*na*-wartos-an/ both differ from /wartos-an/ by one additional morph. They are examples of parallel utterances which are both to be compared with the same utterance, in this

¹/*na*-wartos-an/ is actually /N-wartos-an/ where /N-/ stands for a system of morphophonemic alternants, as stated in Section 4.1.1.

²/*ma*ng-wartos-an-kin/ is actually /N-*pa*ng-wartos-an-kin/. See Footnote 1 above.

case, /wartos-an/. /di-wartos-an/ 'the news is told' contains a new morph, /di-/, indicating passive voice.

/ŋa-wartos-an/ means 'to tell the news'. Another morph, /ŋa-/, indicating active voice, has therefore been isolated.

The next larger utterance is /paŋ-wartos-an-kɪn/. Neither */paŋ-wartos-an/ nor */wartosan-kɪn/ occur in the data. /paŋ-wartos-an-kɪn/ has the meaning 'Tell the news for someone!' Since neither the form */paŋ-wartos-an/ nor the form */wartos-an-kɪn/ occurs in the data, it is attractive to consider that /paŋ-wartos-an-kɪn/ contains /wartos-an/ plus an additional discontinuous morpheme, /paŋ---kɪn/. This means that the phoneme sequence /paŋ-/ which occurs simultaneously with the sequence /-kɪn/ must differ in meaning from all other occurrences of /paŋ-/. /paŋ-/ together with /-kɪn/ indicates benefactive action, that is, an action done for the benefit of someone else. When either /paŋ-/ or /-kɪn/ occurs separately in a combination with other phoneme sequences it does not indicate benefactive action. Any occurrence of /paŋ-/ without /-kɪn/, therefore, must be treated as a different morph.

It should be noted that /paŋ-wartos-an-kɪn/ is imperative in mode as well as being benefactive. The imperative feature of the utterance is signalled not by the presence of a phoneme sequence, but by the absence of a phoneme sequence signalling either active or passive voice. This is not considered to be a zero morph, since there is no phonemic sequence which forms a morph meaning imperative in any imperative lexeme.

The next larger utterance, consisting of one additional morph, is /di-paŋ-wartos-an-kɪn/. This differs from /paŋ-wartos-an-kɪn/ in that it is passive, with the meaning 'some news was told for someone'. But the previous comparison of /di-wartos-an/ and /wartos-an/ has already revealed /di-/ as a morph with the meaning of passive voice, so no new morph has been discovered. Likewise, /maŋ-wartos-an-kɪn/ (actually /N-paŋ-wartos-an-kɪn/ as per sec. 4.1, p. 70) differs from /paŋ-wartos-an-kɪn/ by one additional meaningful phoneme sequence, since the meaning of the form is the active-benefactive; that is, 'to tell the news for someone'. But /N-/ has already been classified as a morph indicating active voice, so no new morph has been discovered.

5.2.3 By the above process of comparison, the following new morphs, in addition to the minimal form /wartos/ 'news', were discovered: /-an/ indicating transitive action, /di-/ indicating passive action, /N-/ indicating active action, and /paŋ---kɪn/ indicating benefactive action.

5.3 Once the morphs of all utterances in the corpus have been determined and have been classified as to morphemes, and the morpheme combinations comprising lexemes have been determined, the lexemes are then classified as to particles, verbs, nouns, or adjectives. All lexemes except particles, which are single morpheme lexemes, are further classified as to their place in an inflectional system or as derived forms. Bloch defines an inflected form as a "member of a closed group or set of words called a para-

digm."¹ In a footnote he defines a paradigm as "one of a number of closed sets of words, the words in each set being related but different in both form and meaning in such a way that the differences are parallel from set to set."²

In determining Sundanese paradigms, the lexemes must first be separated into word classes according to their syntactic frames, as explained in Chapter III.³ Those lexemes within a word class which hold a one-to-one relationship to each other, both as to form and meaning, belong to the same paradigm. The feature of meaning which is common to all lexemes in a paradigm is the lexical meaning of the paradigm,⁴ and the part of the lexeme which carries the common meaning of all lexemes in a paradigm is called a base. Every base has one morpheme which carries the central meaning. This morpheme is called the root. Bases may have more than one morpheme but no base with more than three morphemes occurred in the data.

An inflectional system may have several classes of bases in Sundanese. For example, the lexemes comprising the transitive verb inflection are divided into five singular bases and five plural bases. All paradigms in the same base class have features of meaning in common called the base meaning. Within a given base the paradigms differ

¹Bernard Bloch, "Studies in Colloquial Japanese I: Inflection," Journal of the American Oriental Society, Vol. LXV, No. 2, April-June, 1946, p. 97.

²Ibid., p. 97, footnote 2.

³Efforts to divide the lexemes into word classes by morphological criteria alone proved fruitless because of the large number of homonyms.

⁴Bloch, p. 97

from each other in both form and meaning only as the roots differ in form and meaning.

These features of meaning by which lexemes of a paradigm differ are the categories for which the paradigm is inflected.¹ For example, in the transitive-verb paradigms in Sundanese there are three categories of actions: passive, active, and imperative. Singular noun paradigms also have three categories: generic, specific, and indefinite. Plural noun bases, on the other hand, have only two categories: generic and specific. The formal features by which members of a paradigm differ are the inflectional affixes.

Derived forms differ from inflected forms in Sundanese in that the derived lexemes, unlike the inflected lexemes, manifest considerable selectivity in the categories of roots to which derivational affixes may be attached. The affixes which constitute an inflectional system are attached to a large number of roots, whereas the affixes of a derived form may occur with a limited number of roots. The same root may occur in both inflected forms and derived forms. Likewise, certain derived forms may comprise the base of an inflected form. For example, the root /ʔawak/ 'body' may be inflected regularly as a singular noun, as follows: /ʔawak/ 'body' (generic), /ʔawaknaʔ/ 'the body' (specific), and /saʔawak/ 'a body' (indefinite). A derived form from the same root, /paŋawakan / 'a body-like object or statue' may be the base of another paradigm as follows:

¹Ibid., p. 97

/paᅇawakan/ 'statue' (generic), /paᅇawakanana?/ 'the statue' (specific), and /sapaᅇawakan/ 'a statue' (indefinite).

On the other hand, another derived form with the root /?awak/, /sa?awakna?/ 'just any one of the bodies', cannot have other morphemes affixed to it and therefore cannot be the base for an inflected form.

Another characteristic of the Sundanese language, as of many languages, is that the root of an inflected form in one lexeme class is also the root of a derived form in another lexeme class. For example, the root /sapatu?/ 'shoe' can be inflected as a noun, but it is not inflected as a verb or adjective. The derived form /disapatu?/ 'wear shoes', however, can be used in the verb syntax frame in Chapter III and is therefore a verb lexeme.

5.4 Following is an exposition of the inflections and derivations of lexemes; that is, of the verbs, nouns, and adjectives. Since particles are comprised of roots only, and have no additional significant morphological features, they are not included in this discussion.

The Verb Inflections

5.4.1 There are two inflectional systems in Sundanese verbs, the transitive and the intransitive.

5.4.1.1 The transitive system consists of paradigms comprised of five singular bases and five plural bases, each with three categories, which are indicated by the presence or absence of certain prefixes. The three categories are

imperative, active, and passive. The imperative is expressed by a base without a prefix. The active is expressed by the addition of the prefix /N-/¹, and the passive by the addition of the prefix /di-/.

5.4.1.1.1 Following is an example of a paradigm from the transitive verb inflectional system. The lexemes are formed from the singular base /peser/ 'buy'. /peser/ is a root form and is therefore an example of Base A. The other bases are explained in the next section.

peser	'Buy it!'	<u>imperative</u>
meser (N-peser)	'buy'	<u>active</u>
dipeser (di-peser)	'it is bought'	<u>passive</u>

5.4.1.1.2 The singular bases are by far the most widely used and in a sense the plural bases could be considered as being derived from the singular bases. The five bases are constituted as follows:

Base A is a single morpheme which is always a root. For example, /dahar/ 'eat'.

Base B is a root plus the suffix /-an/. For example, /wartos-an/ 'Tell the news (to someone)!'

Base C is the root plus the suffix /-kɪn/. For example, /tamat-kɪn/ 'Graduate (someone)!'

Base D forms have as one of their immediate constituents the discontinuous morpheme /paŋ---kɪn/. The other immediate constituent is any one of the uninflected

¹/N-/ is the symbol to indicate the morpho-phonemic alternates occurring in the active categories of the paradigms, as explained in Chapter IV.

Base A forms. Thus the Base D form with the root /čaket/ 'approach' is /paŋ-ñaket-kɪn/. The other constituent is any of the uninflected Base B forms. For example, Base B, /wadah-an/ 'put (something) (somewhere)', occurs in the Base E form /paŋ-wadah-an-kɪn/. With the exception of /w/, the initial phoneme alternates with its homorganic nasal, as in Base D.

An alternate analysis of Base E would be to consider the immediate constituents as /paŋ-/ plus any of the Base C forms. Since no particular advantage is gained and since the morpheme /paŋ---kɪn/ in both Base D and Base E has the same meaning, that is, benefactive action, it makes for a simpler analysis to avoid using a morphemic alternate for /paŋ---kɪn/, namely /paŋ-/, as would be necessary if the second analysis were used.

Following is a summary of the composition of the five bases, with examples of each base:

Base A	root	peser
Base B	root + an	liwih-an
Base C	root + kɪn	pindah-kɪn
Base D	paŋ + Base A + kɪn	paŋ-peser-kɪn
Base E	paŋ + Base B + kɪn	paŋ-liwih-an-kɪn

Each base has meaning over and above the lexical meaning of the root. This is the base meaning. The base meanings are grammatical in nature.

Base A has the meaning of transitive action. It implies that there is a goal to the action whether the ac-

tion is expressed or not.

Base B has the added meaning that the speaker is intending to stress the goal and that the action is either a momentary action, or a series of momentary actions, as in slicing bread or chewing something. The goal of this action may optionally be included in the utterance.

Base C contrasts with Base A and Base B in that the action is completed in a single continuous manner rather than in a momentary or repetitive manner. Concepts such as desiring something, /*q̄ersakɪn*/; making something dirty, /*q̄iruhkɪn*/; and to decide something, /*naŋtukɪn*/, are typically expressed in this base.

Although, in general, a particular root does not occur in both Base B or Base C, an occasional root is found in both bases. For example, /*quatan*/ 'to make someone strong by means of a meal or a dose of medicine' and /*quatkɪn*/ 'to strengthen someone by means of a continuous process'.

Base D and Base E have the same base meaning, that of indicating a benefactive action. In other words, the actor carries out a transitive action in behalf of another person.

Roots which occur in Base A may also occur in one or more of the other bases and it is obvious that there is a kind of derivational relationship between bases, or even lexemes, which contain the same root. However, the term derivation is reserved in this analysis for use in designating the relationship between noninflected lexemes in re-

lation to their own bases, and is not used to indicate the relationship between bases in an inflection. The fact that paradigms of different bases in the same inflection may have the same root is of incidental interest rather than of structural significance.

5.4.1.1.3 The forms of the transitive inflectional paradigms are shown below. The bases are separated from the inflectional prefixes by the symbol +. The letter R is used to indicate the root in the paradigm. Hyphens are used to separate other morphemes contained in the bases from the roots. N stands for a system of morphophonemic alternates.

Singular Paradigms of the Transitive Inflection

<u>Base A</u>		<u>Base B</u>	
Imperative:	R	Imperative:	R-an
Active:	N + R	Active:	N + R-an
Passive:	di + R	Passive:	di + R-an
<u>Base C</u>		<u>Base D</u>	
Imperative:	R-k i n	Imperative:	paŋ-R-k i n
Active:	N + R-k i n	Active:	N + paŋ-R-k i n
Passive:	di + R-k i n	Passive:	di + paŋ-R-k i n
<u>Base E</u>			
Imperative:	paŋ-R-an-k i n		
Active:	N + paŋ-R-an-k i n		
Passive:	di + paŋ-R-an-k i n		

5.4.1.1.4 Examples of verbs in the paradigm of each base given above are as follows:

<u>Base A</u>	ganti?	'Change it!'
	nganti?	'to change'
	diganti?	'to be changed'
<u>Base B</u>	gantian	'Change it (by means of repeated actions)!'
	ngantian	'to change something by repeated action'
	digantian	'to be changed by repeated action'
<u>Base C</u>	gantikin	'Change it (in one continuous action)!'
	ngantikin	'to change something in one continuous action'
	digantikin	'to be changed in one continuous action'
<u>Base D</u>	gantikan	'Change (something for someone)!'
	ngantikan	'to change something for someone'
	digantikan	'to be changed for someone'
<u>Base E</u>	gantikan	'Change something for someone (in one brief action or series of brief actions)!'
	ngantikan	'to change something for someone in one brief action or series of brief actions'
	digantikan	'to be changed for someone in one brief action or series of brief actions'

5.4.1.1.5 The singular bases are used for both singular and plural subjects. However, if it is desired to emphasize the plurality of the subject of an action, each of the five bases occurs with the plural morpheme /-ar- ~ -al-/. The infix /-al-/ is used with bases containing CVC(C)VC-type roots beginning with the phoneme /l-/, or ending in /-r/ as in /lumpat/ 'run' (singular) and /lalumpat/ 'run' (plural), or /?ajar/ 'teach' (singular) and /?alajar/ 'teach' (plural). The infix /-ar-/ is used in the plural form of all other verb bases. For example, /nakalan/ 'to cheat' and /narakalan/

'to cheat' (plural) and /g³aduh/ 'have' and /gar³aduh/ 'have' (plural).

5.4.1.1.6 Examples of paradigms with plural bases of the transitive inflection are as follows: (The meanings of the lexemes are the same as for the singular base paradigms except that the subject of the action must be plural in number. The root used is the same as for the singular base paradigms.)

<u>Base A</u>	garanti?
	ᵐagaranti?
	digaranti?
<u>Base B</u>	garantian
	ᵐagarantian
	digarantian
<u>Base C</u>	garantik ^ᵐ
	ᵐagarantik ^ᵐ
	digarantik ^ᵐ
<u>Base D</u>	paᵑgarantik ^ᵐ
	maᵑgarantik ^ᵐ
	dipaᵑgarantik ^ᵐ
<u>Base E</u>	paᵑgaranti ^ᵐ ank ^ᵐ
	maᵑgaranti ^ᵐ ank ^ᵐ
	dipaᵑgaranti ^ᵐ ank ^ᵐ

5.4.1.2 Most verb lexemes are in one of the paradigms of the transitive inflection. However, a small group of verbs do not have a passive form in the paradigm for Base A. These verb lexemes are intransitive, since the action is not performed upon a goal or object.

5.4.1.2.1 Base A comprises the only base in the intransitive inflection, and, since it lacks a passive form, there are only two categories, imperative and active, in the paradigm. Examples of singular and plural base paradigms are as follows:

<u>Base A</u>	Imperative:	?unsi?	'Flee!'	(singular)
	Active:	nunsi?	'to flee'	(singular)
	Imperative:	?arunsi?	'Flee!'	(plural)
	Active:	narunsi?	'to flee'	(plural)

Verb Derivatives

5.4.1.3 Some Sundanese lexemes which classify as verbs according to the syntactic frames in Chapter III do not fit into either the transitive or intransitive inflections, for the reason that at least one of their immediate constituents cannot be accounted for through the inflectional prefixes and bases. These lexemes are verb derivatives.

The immediate constituents which are not accounted for in the inflectional structure are of limited distribution. They usually occur coincident with particular roots, in contrast with inflectional immediate constituents which occur with a wide range of roots.

The different derivational types are apparently not closed lists, since any root which is semantically compatible with the derivational combination may be used to form a new lexeme.

The derived lexemes are composed of bases plus

prefixes. The base is, as in the case of inflected lexemes, composed of a root, or a root plus a suffixal phoneme sequence. The suffixal phoneme sequence combines with a prefix to form a discontinuous morpheme. (If the derived lexeme is comprised of only the base, as in R - an and R - kⁿn below, the phoneme sequence can, of course, be considered a morpheme.)

The roots found in the verb derivational lexemes also occur in inflected verb lexemes as well as in noun, adjective, and particle lexemes. Some of the derivational types have roots of the same general semantic type. This is discussed in conjunction with the lists of examples given below, but no structural significance could be found in this semantic grouping.

Bases of three types were found in the data, as follows: the root alone, designated by R; the root followed by /-an/¹, designated by R - an; and the root followed by /-kⁿn/, designated by R - kⁿn. Following is a list of the formal derivational combinations found with each type of base:

¹The suffixes /-an/ and /-kⁿn/ occurring in the derivational lexemes are not the same morphs as occur in inflected lexemes since their meaning is not the same.

I. Derivational Base R

- | | |
|-----------------------------------|-----------------------------------|
| 1. (a) pi - R | 6. baraj - R |
| (b) mi - R | 7. di - R |
| (c) kapi - R | 8. silih - R ² |
| 2. (a) pika - R ¹ | 9. (a) doubling - R |
| (b) mika - R | (b) N + doubling - R ³ |
| (c) dipika - R | 10. infix /-in-/ - R |
| 3. ka - R | 11. infix /-um-/ - R |
| 4. pa + doubling - R ² | 12. na + doubling - R |
| 5. ba - R | |

¹Efforts to combine pika - R with pi - R, or with ka - R proved fruitless since it was not possible to establish distributional relationships among these types from the examples found in the data.

²Because of their close semantic relationship, pa + doubling of R and silih - R can be considered alternate forms of the same lexeme, or as synonyms. With a larger body of data, it might be possible to prove a stylistic contrast between the two forms.

³A third subclass of this type is derived on the formula doubling of N+R - kin. (See footnote 3 on next page.) A fourth subclass of this type, which does not correspond with any of the three general verb derivational types, is a group of lexemes formed by reduplication of the first consonant and vowel of the imperative or the active form of Base A paradigms in either the transitive or intransitive inflections. This fourth group is listed below. (See sec. 5.4.1.3.9 (d)).

II. Derivational Base R - an

1. R - an
2. ka - R - an¹
3. doubling of R - an²
4. reduplication of R - an

III. Derivational Base R - kɪn

1. ka - R - kɪn
2. (a) doubling of R - kɪn
(b) doubling of N+R - kɪn
(c) di + doubling of R - kɪn
3. doubling of N+R - kɪn³

The derived verb lexemes occurring in the data are listed below. Each lexeme is comprised of two immediate constituents, or morphemes: the root, and the verbalizing immediate constituent.⁴ The verbalizing immediate constituent is comprised of the phoneme sequence following the root,

¹ka - R - an combines with ka - R in one general lexeme group with the meaning of passive. In the examples given below, they are listed together despite the difference in form between the two bases. (See sec. 5.4.1.3.3 (b)).

²Because of their close semantic relationship this type and na + doubling of R are listed below as subclasses of one general lexeme group. (See sec. 5.4.1.3.12(b)).

³Because of their close semantic relationship this type and doubling of R are listed together below as subclasses of one general derivational group. (See sec. 5.4.1.3.9 (c)).

⁴The verbalizing immediate constituent is one which, when attached to a root, makes a lexeme that is clearly in the verb class since it can be used in Sequences I and III shown in Chapter III.

or that sequence plus a prefix to the root. (R is used to symbolize the root. The verbalizing immediate constituents, or morphemes, are separated from the roots by means of hyphens. Although the order of the lists given above has been followed for the most part, certain changes in the order have been made where a general semantic relationship indicated that two or more derivational groups are actually subclasses of a general group.)

5.4.1.3.1 (a) pi - R This derivative is an imperative form commanding someone to consider a third person as if he were in a specific kinship relation. The form occurs only with kinship terms, as follows: /pikolot/ 'Consider him as your parent!', /pi?induŋ/ 'Consider her as your mother!', /piuwa?/ 'Consider him as your uncle!', /pianak/ 'Consider him as your child!', /pibapa?/ 'Consider him as your father!', /pidulur/ 'Consider him as your relative!', /pilaŋčik/ 'Consider him as your older brother!'.

(b) mi - R This derivative is the active form of (a) above. Examples are /mikolot/ 'to consider someone as a parent', /mi?induŋ/ 'to consider someone as one's mother', /miuwa?/ 'to consider someone as one's uncle', /miadi?/ 'to consider someone as one's younger brother', /mianak/ 'to consider someone as one's child', /mibapa?/ 'to consider someone as one's father', /midulur/ 'to consider someone as one's relative', /milaŋčik/ 'to consider someone as an older brother'.

(c) kapi - R This form is the passive of the active forms listed in (b) above. Examples are: /kapikolot/

'to be considered as a parent, or older person',
/kapi?indun/ 'to be considered a mother', /kapiuwa?/ to be
considered an uncle', /kapiadi?/ 'to be considered a young-
er brother', /kapianak/ 'to be considered as someone's
child', /kapibapa?/ 'to be considered as someone's father',
/kapidulur/ 'to be considered as someone's relative',
/kapilaŋčik/ 'to be considered as an older brother'.

5.4.1.3.2 (a) pika - R¹ This is an imperative form which
parallels in meaning the imperative in the transitive inflec-
tion. The prefix is used with only a small number of roots
in the data, as follows: /pikaera?/ 'Make (someone) em-
barrassed!', /pika?asih/ 'Love (someone)!', (high form),
/pikañeri?/ 'Give (someone) pain!', /pikaña?ah/ 'Love (some-
one)!' (ordinary form), /pikasiñ/ 'Frighten (someone)!',
/pikarəsep/, 'Enjoy (someone or something)!', /pikaheran/
'Surprise (someone)!'.

(b) mika - R This derivative is the active voice
of the form discussed in (a) above. Examples are:
/mikaera?/ 'to embarrass someone', /mika?asih/ 'to love
someone' (high form), /mikaneri?/ 'to desire someone',
/mikañeri?/ 'to hurt someone', /mikaña?ah/ 'to love someone
or to care for someone', /mikasiñ/ 'to frighten someone',
/mikaheran/ 'to surprise someone', /mikahoyon/ 'to want
someone' (high level), /mikahayan/ 'want someone' (ordinary
level), /mikarəsep/ 'to enjoy someone'.

(c) dipika - R This derivative is the passive
of the forms listed in (a) above. The examples in the data
are: /dipikaera?/ 'to be embarrassed', /dipika?asih/ 'to be

¹See footnote 1, p. 99.

loved' (high level), /dipikanəri?/ 'to be desired', /dipikañəri?/ 'to be hurt', /dipikañaʔah/ 'to be loved, or to be cared for' (ordinary level), /dipikasiɳn/ 'to be frightened', /dipikaheran/ 'to be surprised', /dipikahoyon/ 'to be wanted' (high level), /dipikahayan/ 'to be wanted' (ordinary level).

5.4.1.3.3 (a) ka - R¹ This derivative is a passive form occurring only with roots denoting an action which can be conceived of as occurring unintentionally or accidentally. In every case there is a parallel passive form in the transitive inflection which has the connotation of occurring with intention on the part of the actor. Examples occurring in the data are: /katambah/ 'to be increased unintentionally', /kadupak/ 'to be kicked unintentionally', /kadəne?/ 'to be heard unintentionally', /kahaʒa?/ 'to be done unintentionally', /karasa?/ 'to be felt unintentionally'.

(b) ka - R - an² (or ka - Base B of the transitive inflection). This derived form is similar in meaning to (a) above. Examples are: /kapaehan/ 'to be accidentally killed, or to lose consciousness', /katitipan/ 'to be entrusted unwittingly', /katatamuan/ 'to be visited without having issued an invitation', /kačičiŋan/ 'to be lived with by someone unexpectedly'.

5.4.1.3.4 pa + doubling of R³ This derivative is quite widely distributed among the roots. It has the meaning of recipro-

¹See footnote 1 on p. 100.

²See footnote 1 on p. 100.

³See footnote 2 on p. 99.

cal or competitive action on the part of two or more persons. Examples occurring in the data are as follows:

/papondokpondok/ 'to see which is the shorter',
/papanjanpanjan/ 'to see which is the longer', /papayunpayun/
'to face each other', /pateantean/ 'to look for each other',
/pa?iriri?iri/ 'to follow each other' (high level),
/pa?udag?udag/ 'to follow each other' (ordinary level),
/pa?amis?amis/ 'to compare each other's candies',
/pa?alus?alus/ 'to compare the superiority of each other's
things', /pabintihbintih/ 'to attack each other',
/pa?ulunguluŋ/ 'to roll over each other', /pačiumčium/ 'to
kiss each other', /palilalila?/ 'to compare the length of
time each spent in some activity'.

5.4.1.3.5 ba - R This formation has only two examples in the data: /balabuh/ 'to drop anchor' and /baganti?/ 'to alternate'. The meaning of the constituent /ba-/ is not clear from these two examples.

5.4.1.3.6 baraŋ - R This formation signifies that the action indicated in the root is carried out on any object indiscriminately. Five examples occur in the data: /baraŋteda?/ 'to eat anything' (high level), /baraŋasakan/ 'to cook just anything', /baraŋbili?/ 'to buy anything' (ordinary level), /baraŋdahar/ 'to eat anything' (ordinary level), /baraŋgalih/ 'to buy anything' (high level).

5.4.1.3.7 di - R This derivative is formed with roots which refer to items of clothing. The general meaning of the derived type is 'to put on (items of clothing)'. Four examples occur: /dikameja?/ 'to put on a shirt', /dibaŋju?/

'to put on clothes', /disapatu?/ 'to put on shoes', and /dičalana?/ 'to put on pants'.

5.4.1.3.8 silih - R¹ This derivative formation has the meaning of reciprocal or competitive activity. It is similar in meaning to the derived form pa+doubling - R. It is probable that there is a stylistic distinction between the two formations but this was not made clear through the data. The examples occurring in the data were: /silihpiptih/ 'to strike each other', /silihtukir/ 'to change each other', /silihtewek/ 'to stab each other', /silihponjok/ 'to hit each other', /silihtarik/ 'to pull each other', /silihkoet/ 'to scratch each other', /silih?imut/ 'to smile at each other', /silihgegel/ 'to bite each other', /silihčium/ 'to kiss each other', /silihsisil/ 'to scold each other.

5.4.1.3.9 (a) doubling of R The meaning of this derivative is continuous action. Examples occurring are: /pikirpikir/ 'to think again and again, to meditate', /jalanjalan/ 'to take a walk', /sukasuka?/ 'to please oneself continuously'.

(b) N - doubling of R The general meaning, as in (a) above, is continuous action. The only forms of N used in the data were /ŋa-/ and /ŋ-/. Two examples occurred: /ŋadagodaŋo?/ 'to wait and wait for someone or something' and /ŋarep?arep/ 'to long for someone'.

(c) doubling of N+R - k+n² The meaning of this derivative is similar to that of (a) above. Only two exam-

¹See footnote 2, p. 99.

²See footnote, 3, p. 100.

ples occurred: /mikirmikirkɪn/ 'to meditate about something' and /ñukañukakɪn/ 'to please someone for a long time'.

(d) Reduplication of the first consonant and the following vowel of the imperative or active forms of Base A paradigms in either the transitive or intransitive inflections The meaning of these derived forms, in addition to the meaning carried by the root, is that of continuous action. The examples from the data are: /tataeʔ/ 'to climb continuously', /tataros/ 'to be always asking something', /tɪtɪlin/ 'to jump up and down in the water continuously', /kikimbah/ 'to wash clothes or dishes continuously', /mimikir/ 'to be thinking about something continuously', /mimiluʔ/ 'to be always following someone' (ordinary level), /ŋiŋiriŋ/ 'to be always following someone' (high level), /sasapuʔ/ 'to be always sweeping', /čačarios/ 'to be always talking' (high level), /čačaritaʔ/ 'to be always talking' (ordinary level).

5.4.1.3.10 R with the infix /-in-/ This type of derivative indicates that the action in the root is passive. All the examples of this type of derivative have parallel forms in the transitive inflection. The examples are as follows: /pinangih/ 'to be found' (from /paŋgih/ 'find'), /sinəbah/ 'to be paid respect' (from /səbah/ 'to pay respect'), /sineʃaʔ/ 'to be intended' (from /seʃaʔ/ 'intention'), /senərat/ 'to be written to' (from /sərat/ 'letter'), /sinəlir/ 'to be selected as a concubine' (from /səlir/ 'concubine').

5.4.1.3.11 R + the infix /-um-/ The meaning of this derivational form is to pretend to have the quality indicated in the root. Only two examples occurred in the data: /gumɪlis/ 'to pretend to be beautiful' (from /gɪlis/ 'beautiful'), and /gumèdeʔ/ 'to pretend to be big, or to be proud.' (from /gèdeʔ/ 'big').

5.4.1.3.12 (a) na + doubling - R¹ This derivative has the meaning of indefiniteness of direction or lack of purpose regarding the action expressed in the root. The unique example in the data is /nabantubantuʔ/ 'to help in any way possible!.

(b) doubling - R - an¹ This derivative is formed with only two different roots in the data. The meaning is similar to the derivative in the preceding section, that is, one of indefiniteness or purposelessness of action. The examples are /ʔaŋkatʔaŋkatan/ 'to go just anywhere', and /ʔaʃrutʔaʃrutan/ 'to jump up and down without definite purpose'.

5.4.1.13 R - an The general semantic meaning of the suffix /-an/, in combination with the roots given here, is that of sending forth, bearing, issuing, or manifesting whatever is indicated in the meaning of the root. The following examples occur in the data: /putraʔan/ 'to have children', /kukuan/ 'to grow fingernails', /kembangan/ 'to bear flowers', /karaan/ 'to have a mole', /ʔəndogan/ 'to lay an egg', /ʔanakan/ 'to have offspring', /buahan/ 'to bear fruit',

¹See footnote 2, p. 100.

/gɪrɪhaʔan/ 'to have a wife', and /wanian/ 'to show bravery'.

5.4.1.3.14 Reduplication of R - an The meaning of this derivative form is repetitive, but aimless, action. Following are the examples occurring in the data: /kokoʃayan/ 'to swim around aimlessly', /ʔiʔinditan/ 'to go somewhere repeatedly', /bebeakan/ 'to be repeatedly finishing some activity but in an aimless way', /babačaʔan/ 'to read rites from a holy book, but paying little attention to the meaning', /ʒuʒurilapan/ 'to glitter', /gəgəlutan/ 'to be constantly wanting to fight with no apparent reason', /gagambaran/ 'to doodle or draw aimlessly', /sasauran/ 'to talk continuously but say nothing of importance', /sasareʒan/ 'to continuously do things together', /nuhuʒanan/ 'to go out in the rain just for fun', /hahawatosan/ 'to worry about something continuously but to no avail', /čičirikan/ 'to weep without cause, or to pretend to weep', /lulumpatan/ 'to run and run but without reason or purpose'.

5.4.1.3.15 ka - R - kɪn This derivative has the meaning of commanding someone to approach or enter the object mentioned in the root. Examples are /kaʔimahkɪn/ 'Come into the house!' (ordinary level), /kaʔabdikɪn/ 'Come to me!', /kabumikɪn/ 'Come into the house!' (high level), /kabečakɪn/ 'Come, get in the bejak (pedicab)!', /kasisikɪn/ 'Come to the side!'.

5.4.1.3.16 doubling of R - kɪn This derivative has the meaning of asking someone to surpass his normal capacity to carry out the action expressed by the root. Examples which occur in the data are: /tiasatiasakɪn/ 'Surpass your normal ability!', /təpitempitkɪn / 'Exceed your normal

strength!', /bisabisak_{in}/ 'Try to finish up (something) faster than usual!', /betahbetahk_{in}/ 'Force yourself to be happier!'.

(b) doubling of N+R - k_{in} This derivative has the meaning of surpassing one's normal capacity to carry out the action expressed by the root. It is actually the active form of (a) above. If N is /ŋa-/ or /ŋ-/ , N may not be doubled, but merely precedes the doubled root. The examples from the data are: /meakmeak_{in}/ 'to try to finish something faster than usual' (from /beak/ 'finish, use up'), /niasaniasak_{in}/ 'to surpass one's normal ability' (from /tiasa?/ 'to be able'), /nepitnepitk_{in}/ 'to reach farther than usual' (from /tepit/ 'reach'), /ŋiatŋiatk_{in}/ 'to exceed one's normal strength' (from /kiat/ 'strong'), /ŋasonasonk_{in}/ 'to advance faster than one feels inclined to' (from /?ason/ 'advance'), /ŋabisabisak_{in}/ 'to try harder than one is accustomed to' (from /bisa?/ 'to be able'), /ŋabetahbetahk_{in}/ 'to force oneself to be happy whether one feels like it or not' (from /betah/ 'happy').

(c) di + doubling of R - k_{in} This is the passive form of the derivative and corresponds to (a) and (b) above. Examples are: /ditiasatiasak_{in}/ 'one's normal reach is surpassed', /dikiatkiatk_{in}/ 'one's normal strength is surpassed', /diasasonasonk_{in}/ 'something is attempted with greater speed than usual', /dibetahbetahk_{in}/ 'to be made happier than usual'.

5.4.1.3.17 One example of a verb root derived by compounding two root forms occurred in the data as follows:

/hudansare?/ 'wake up (from /hudaŋ/ 'wake' and /sare?/ 'sleep'). This compound verb root did not occur with affixation in the data.

The Noun Inflection

5.4.2 There is a single inflection for noun lexemes in Sundanese.

5.4.2.1 As in the verb bases, there are singular and plural forms of the noun base. The singular base consists of a root¹ only; for example, /budak/ 'child'. The plural base consists of the root plus a pluralizing morpheme: /-ar-/ - /-al-/ - doubling.²

Inflectional lexemes with a singular base have three categories: the generic, the specific, and the indefinite. The lexemes inflected on the plural base have two categories only, the generic and the specific.

5.4.2.1.1 The noun inflectional paradigm can be illustrated in the following chart: (The root is indicated by R. The bases are separated from the inflectional affixes by the + symbol.)

¹For the Sundanese language the term root indicates a single morpheme which carries the central meaning of a lexeme. (See sec. 5.3.). The same root form may carry the central meaning of verbs, nouns, adjectives, and particles. Just as in English it is impossible to assign the word book to a form class without more linguistic information, so roots in Sundanese cannot be assigned to particular lexeme classes unless the root occurs in a larger construction.

²The infix /-al-/ occurs with roots beginning with /l-/ or ending with /-r/. The infix /-ar-/ occurs in all other bases except a few which require doubling. Doubling occurs with specific bases, but the few examples in the data do not make it possible to predict which bases will be doubled for plurality or which will use an infix.

Paradigm of the Noun Inflection

<u>Singular Base</u> ¹		<u>Plural Base</u> ¹	
Generic	R	Generic	R + the plural morpheme infix
Specific	R + na?	Specific	R + the plural morpheme infix + na?
Indefinite	sa + R		

5.4.2.1.2 Examples of noun lexemes in the paradigm of each base given above are as follows:

<u>Singular Base</u>	budak	'child'
	budakna?	'the child'
	sabudak	'a child'
<u>Plural Base</u>	barudak	'children'
	barudakna?	'the children'

Noun Derivatives

5.4.2.2 Noun derivatives are lexemes which can follow /?aya?/ 'exist' in the syntactic frames explained in Section 3.2, but at least one of their immediate constituents cannot be accounted for through the prefixes and bases of the noun inflection. The immediate constituents which are attached to roots, but which cannot be accounted for in the inflectional system, are of limited distribution, usually occurring only with particular roots of a rather limited range of roots. As in the case of verb derivation forms, the list of roots in the different derivational types is not closed, since roots which are semantically compatible with the mean-

¹In most situations it is not necessary to specify whether the subject is singular or plural, as is required in English. If the speaker wishes to state specifically that the subject is plural he uses a plural base.

ing of the derivational combination may be used to form new lexemes belonging to the derivational type.

Like verb derivatives, noun derivatives are composed of bases plus affixes. The base is composed of a root alone, or of a root plus a phoneme sequence. The phoneme sequence cannot be said to constitute a morpheme since no meaning can be assigned to it alone.¹ Rather, it combines with a prefix to form a discontinuous morpheme.² For purposes of formal classification it is clearer to arrange the derivational lexemes according to bases rather than according to the discontinuous morphemes. There are four types of bases in the noun derivatives, as follows:

I. Derivational Base R

- | | |
|-----------------------|---------------------------|
| 1. pi - R | 5. (a) pa + N - R |
| 2. pun - R | (b) pa + N - R (agentive) |
| 3. tuaŋ - R | 6. pa + reduplication - R |
| 4. (a) ka - R | 7. reduplication - R |
| (b) ka - R (ordinals) | |

¹If the derived lexeme is comprised only of a base, as in R - an, the phoneme sequence could, of course, be called a morpheme.

²Although there is one exception, R - an, where the base itself is the derivational lexeme (see sec. 5.4.2.2.8), and although there is a large number of derived lexemes comprised of only a root base plus a prefix, the recognition of discontinuous morphemes in noun derivatives, as in verb derivatives, is inescapable. It would be attractive to assign a common semantic meaning to the same suffixal element in the different types of bases, but it has proved to be impossible to do so. In such lexemes, the root does not occur with either the prefixal element or the suffixal element alone, but always with the two affixal elements simultaneously.

II. Derivational Base R - an

1. R - an
2. (a) pa - R - an (locative)
(b) paŋ - R - an (locative)
(c) pa - R - an
3. ka - R - an
4. doubling of R - an
5. (a) reduplication of R - an (imitative)
(b) reduplication of R - an (plural)

III. Derivational Base R - ~~t~~n¹

1. R - ~~t~~n¹
2. pi - R - ~~t~~n¹
3. pika - R - ~~t~~n¹

IV. Derivational Base R - na?

1. paŋ - R - na?
2. sa + doubling of R - na?

A limited number of noun derivatives are formed by combining two roots. (See sec. 5.4.2.2.18).

Derived noun lexemes often have a kind of secondary derivation of specificity which is made by adding the suffix /-na?/ to a lexeme, as /kokoniŋna?/ 'the yellow part' (from /kokoniŋ/ 'yellow part' which is in turn from /koniŋ/ 'yellow').

Derived noun lexemes occurring in the data are listed below. Each lexeme is made up of two immediate con-

¹Efforts to combine these three types into one general base with a particular meaning to which prefixes might be added did not prove successful since the semantic relationship of the examples in the data was not close enough to warrant such an arrangement.

stituents.¹ The nominalizing immediate constituent is composed of the phoneme sequence following the root, or that sequence plus a prefix preceding the root. The lists of roots used in some of the noun derivational types have a close semantic relationship; for example, /pun-/ occurs only with kinship terms. On the other hand, the roots used in many other derivational types are completely unrelated as far as meaning is concerned. Where there is a semantic tie among the roots used for a particular derivational type, this has been indicated in the following sections. As can be seen from the derivational types listed on pp.112 and 113, close semantic relationship among the roots can cause a subdivision of lexemes which on the purely formal basis would belong to the same derivational type. (In the lists which follow, R is used to symbolize the root. The nominalizing immediate constituents, or morphemes, are separated from the roots by means of hyphens.)

5.4.2.2.1 pi - R The prefix /pi-/ combines with certain roots to form noun lexemes. Although the roots in the data with which it combines are correlated with roots in other noun and verb lexemes, it is reasonable to assume that a larger body of data would reveal others which correlate with roots in adjective lexemes also.

The general meaning of this group is that of

¹The nominalizing immediate constituent is one which, when attached to a root, results in a lexeme that is clearly in the noun class since it can be used in Sequence II as shown in Chapter III.

'being inordinately fond of something or someone'. The examples from the data are as follows: /pipandita?/ 'one who is fond of wisdom or spiritual things' (from /pandita?/ 'priest'), /pi?indun/ 'one who is unusually fond of his mother' (from /?indun/ 'mother'), /piawewe?/ 'one who is unusually fond of women' (from /?awewe?/ 'woman'), /piduit/ 'one who is unusually fond of money' (from /duit/ 'money'), /pihatur/ 'speech at a party' (from the root /hatur/ 'invitation or greeting'). The correlation in meaning in the last example is not clear.

5.4.2.2.2 pun - R Derivatives with the prefix /pun-/ are limited to lexemes including roots which indicate kinship. The common meaning of the derivative is first person possessive.¹ Examples from the data are: /punibu?/ 'my mother' (from /?ibu?/ 'mother'), /punəman/ 'my uncle' (from ?əman/ 'uncle'), /punaki?/ 'my grandfather' (from /?aki?/ 'grandfather'), /punadi?/ 'my younger brother' (from /?adi?/ 'younger brother'), /punbiyaŋ/ 'my mother' (from /biyaŋ/ 'mother'), /punboŋo?/ 'my wife' (from /boŋo?/ 'wife'), /punbapa?/ 'my father' (from /bapa?/ 'father'), /punlaččk/ 'my older brother' (from /lanččk/ 'older brother').

5.4.2.2.3 tuaŋ - R This derivative is limited to high level kinship terms apparently. The only occurrence in the data is /tuaŋrama?/ 'your father'. (/rama?/ is the high

¹In its literal sense this derivative is used to indicate first person possessive, but it is also used as an honorific form for second person possessive in the form /punanak/ 'your child' (actually meaning 'my child is your child').

level form for 'father'). The morpheme /tuaŋ-/ has the meaning of second person.

5.4.2.2.4 (a) ka - R Most of the roots of this group of derived lexemes are also inflected as verbs and the meaning of the derived forms is closely related to the meaning of the root. When the roots are preceded by /ka-/ they fulfill the requirements for noun lexemes. Examples from the data are: /kapuas/ 'satisfaction' (from /puas/ 'satisfy'), /kapalay/ 'desire' (from /palay/ 'to want'), /katiasa?/ 'ability' (from /tiasa/ 'to be able'), /kabisa?/ 'ability' (from /bisa?/ 'to be able'), /kadaek/ 'willingness' (from /daek/ 'to be willing'), /kañeri?/ 'pain' (from /ñeri?/ 'to give pain'), /kaña?ah/ 'care' (from /ña?ah/ 'to care for someone'), /kahayaŋ/ 'desire' (from /hayaŋ/ 'to want something').

Three lexemes from this group have roots which commonly occur as adjectives: /ka?ɬnah/ 'delicacy' (from /?ɬnah/ 'delicate'), /kaɬ?ɬl/ 'pain' (from /sɬ?ɬl/ 'painful'), and /kahawək/ 'greed' (from /hawək/ 'greedy').

(b) The ordinal numbers, which are also formed according to the formula ka - R_n, function as noun lexemes because they can be substituted in the syntactic frames discussed in Section 3.2. The formula might well be rewritten as ka - R_n, R_n standing for roots made up of number lexemes only. Examples are: /kahiŋi?/ 'the first', /kadua?/ 'the second', /kagənəp/ 'the sixth', /karatus/ 'the hundredth', et cetera.

5.4.2.2.5 (a) pa + N¹ - R Derivatives of this group are composed of lexemes which are the nominal counterpart of an action indicated in the root. If N in the formula should be /ŋa-/, the resulting sequence paŋa - R is reduced to paŋ - R, as in /paŋhapuntən/ 'forgiveness' (from /ŋahapuntən/ 'to forgive'), and /paŋrewon/ 'trouble or annoyance' (from /ŋarewon/ 'to trouble or annoy').

Examples of lexemes with the other values of N occurring in the data are as follows: /pamenta?/ 'request' (from /menta?/ 'to ask'), /pamere?/ 'a gift' (from /mere?/ 'to give'), /panaŋtaŋ/ 'the challenge' (from naŋtaŋ/ 'to challenge'), /panirɪt/ 'stinger' (from /nirɪt/ 'to sting'), /panekəl/ 'handle' (from /nekəl/ 'to hold or to grasp something'), /panana?/ 'supposition' (from /nana?/ 'to suppose'), /paŋintən/ 'the thought' (from /ŋintən/ 'to think'), /paŋeliŋ/ 'something to be remembered' (from /ŋeliŋ/ 'to remember'), /paŋaŋgo?/ 'clothing' (from /ŋaŋgo?/ 'to wear'), and /paŋarti?/ 'understanding' (from /ŋarti?/ 'to understand').

(b) A small group of derived lexemes of the agentive type also have the derivational formula pa + N - R. The following examples occurred: /panaŋgun/ 'one who carries things on his shoulder' (from naŋgun/ 'to carry things on one's shoulder'), /paŋəbon/ 'one who works in the garden or field' (from /ŋəbon/ 'to work in the field') and /paŋapiŋ/ 'a caretaker' (from /ŋapiŋ/ 'to look after something').

5.4.2.2.6 pa + reduplication - R These derivational lexemes are all related to times of the day and indicate an

¹For an explanation of N see Section 4.1.

indefinite time just before the time of day indicated in the root. The four examples in the data are: /paʔiʔisuk/ 'about morning' (from /ʔisuk/ 'morning'), /pabibiraŋ/ 'about late morning'¹ (from /biraŋ/ 'late morning') /pasosontən/ 'almost evening' (from /sontən/ 'evening'), and /pasosoreʔ/ 'about evening' (from /soreʔ/ 'evening').

5.4.2.2.7 Reduplication - R This derivative indicates that the quality mentioned in the root is part of a whole unit. Some of the lexemes have specialized meanings, as will be shown in the following examples: /kokoniŋ/ 'yellow part' (from /koniŋ/ 'yellow'), /ʔoʔorok/ 'babyhood, the baby part' (from /ʔalit/ 'small'), /bibiruʔ/ 'blue part' (from /biruʔ/ 'blue'), /bibirəm/ 'yolk of an egg, the red part' (from /bərəm/ 'red'), /bubudak/ 'childhood' (from budak/ 'child'), /bubulaoʔ/ 'blue part' (from /bulaoʔ/ 'blue'), /bobodas/ 'white of an egg, the white part' (from /bodas/ 'white'), /hihiditŋ/ 'black part' (from /hiditŋ/ 'black'), /heheʒoʔ/ 'green part' (from heʒoʔ/ 'green'), /lilitik/ 'childhood' (from /litik/ 'small').

The above derivatives may also be combined with the suffix /-naʔ/ from the noun inflection (Section 5.4.2.1.1) in order to specificity. For example, /kokoniŋnaʔ/ 'the yellow part'.

5.4.2.2.8 R - an The suffix /-an/ combines with certain roots which are also found in verb, adjective, and other noun lexemes. The examples of derivations of this type oc-

¹In Sundanese the day is divided into four parts: early morning, late morning, early afternoon, evening.

curring in the data are: /piwaraŋan/ 'messenger' (from /piwaraŋ/ 'message'), /paŋsiunan/ 'a retired person, a person on a pension' (from /paŋsiun/ 'pension'), /titahan/ 'messenger' (from /titah/ 'message'), /?ukuran/ 'an instrument for measuring length' (from /?ukur/ 'measure'), /bulɬdan/ 'circle' (from /bulɬd/ 'round'), /balaŋan/ 'reward' (from /balaŋ/ 'repay'), /jawaban/ 'an answer' (from /jawab/ 'to answer'). It is apparent that a common meaning for the members of this group is not so obvious as in other groups.

5.4.2.2.9 (a) pa - R - an Derivatives in this group have locative meaning, usually indicating the place where the action indicated by the root occurs. The examples from the data are: /patuaŋan/ 'stomach' (from /tuaŋ/ 'rice, eat'), /pakuleman/ 'a place to sleep' (from /kulem/ 'sleep'), /padamelan/ 'a place to work, a job' (from /damel/ 'work'), /paɣawean/ 'a place to work' (from /ɣawe?/ 'work'), /pamatuhan/ 'a place to stay' (from /matuh/ 'stay'), /pamandian/ 'a place to bathe' (from /mandi?/ 'bathe'), /paŋaŋian/ 'a place to read religious works' (from /ŋaŋi?/ 'to read religious works'), /paseban/ 'a place for giving offerings' (from /seba?/ 'offering'), /palingihan/ 'a place to sit down' (from /lingih/ 'to sit').

(b) Certain derivatives with the formula paŋ - R - an have the same meaning, locative, as those in (a) above. The prefix /paŋ-/ is used with roots beginning with the following phoneme sequences: /?a-/, /?u-/, /?i-/, /di-/, /gə-/ and /či-/. If these derivatives have roots

with initial glottal stops, the glottal stops are dropped. Examples occurring in the data are: /paŋ~~ɨ~~ri~~n~~an/ 'a place to stop' (from /?ɨri~~n~~/ 'stop'), /paŋulinan/ 'a place to play' (from /?ulin/ 'play'), /paŋadilan/ 'a place of justice' (from /?adil/ 'justice'), /paŋdiukan/ 'a place to sit' (from /diuk/ 'sit'), /paŋgəliŋan/ 'a place to mill rice' (from /gəliŋ/ 'rice mill'), /paŋčičiŋan/ 'a place to wait' (from /čičiŋ/ 'stay').

(c) pa - R - an Noun lexemes in this derivational group have meaning related to the root, but no common meaning for the group was found. Before initial /?a-/ and /d-/ in the root the prefix /paŋ-/ occurs instead of /pa-/, and the glottal stop is lost.

Examples with R occur as follows: /pakampunan/ 'a group of villages' (from /kampuŋ/ 'village'), /padalaŋan/ 'things pertaining to the dalaŋ or puppeteer' (from /dalaŋ/ 'narrator in a puppet show'), /paŋdudua?an/ 'a couple' (from /dua?/ 'two'), /pagunuŋan/ 'incline, hill' (from /gunuŋ/ 'mountain'), /paŋaŋaran/ 'education' (from /?aŋar/ 'teach'), /pasaderekan/ 'relationship' (from /saderek/ 'relative'), /pawayanaŋ/ 'paraphernalia of the puppet show' (from /wayanaŋ/ 'puppet show').

In one example, /pamasihan/ 'gift' (from /pasih/ 'give'), the inflected form of the verb /masih/ 'give' is used instead of R.

5.4.2.2.10 ka - R - an Lexemes derived by this formula are always closely related to the root as regards meaning. The

roots found in this group correlate with roots found in verb and adjective lexemes as well as other nouns.

Examples of the formula ka - R - an found in the data follow: /kapulesan/ 'the falling asleep' (from /pules/ 'sleepy'), /katurunan/ 'generation, descendant' (from /turun/ 'to descend'), /katerangan/ 'information' (from /terang/ 'to explain'), /kakiraŋan/ 'the lack of something' (from /kiraŋ/ 'to lack') /kakuraŋan/ 'the lack of something' (from /kuraŋ/ 'to lack'), /kaʔayaʔan/ 'situation' (from /ʔayaʔ/ 'exist'), /kaʔadilan/ 'justice' (from /ʔadil/ 'just'), /kabiŋaʔan/ 'habit' (from /biŋaʔ/ 'to be accustomed to'), /kabinaŋiran/ 'righteousness' (from /binaŋir/ 'right'), /kabendon/¹ 'anger' (from /benduʔ/ 'angry'), /kadaharan/ 'food' (from /dahar/ 'eat'), /kamulusan/ 'health' (from /mulus/ 'wellbeing'), /kanagaraʔan/ 'things relating to the government' (from /nagaraʔ/ 'country'), /kasaeŋan/ 'goodness' (from /saeʔ/ 'good'), /kasukaʔan/ 'something which is liked, a hobby' (from /sukaʔ/ 'enjoy'), /kasangupan/ 'readiness or agreeableness to do something' (from /sangup/ 'ready'), /kahirupan/ 'the living condition' (from /hirup/ 'to live'), /kaʔadian/ 'the happening' (from /ʔadiʔ/ 'become'), /karaton/¹ 'the kingdom, the palace' (from /ratuʔ/ 'king'), /karepotan/ 'trouble' (from /repot/ 'busy'), /kalahiran/ 'the birth' (from /lahir/ 'to bear young'), /kalapatan/ 'mistake, misdemeanor' (from /lapat/ 'mistaken'), /kawajiban/ 'responsibility' (from /wajib/ 'to have to do something').

¹Note the fusion resulting in /-o-/ where otherwise the vowel sequence /u-a/ would have occurred. (See sec. 4.3.2).

5.4.2.2.11 Doubling - R - an Derivatives formed in accordance with this formula occurred with two roots only in the data. In each case the meaning is 'a line of something'. The two examples are /ʔiriŋʔiriŋan/ 'a line of followers' (from /ʔiriŋ/ 'follow', and /ʔarakʔarakan/ 'a line of marchers' (from ʔarak/ 'march').

5.4.2.2.12 (a) Reduplication - R - an The lexemes in this derivative group denote a miniature or imitative facsimile of the object mentioned by the root. Examples from the data follow: /pɪpɪčagan/ 'toy mouse deer' (from /pɪčaŋ/ 'mouse deer') /popoean/ 'laundry' (the analogy here is not clear-cut since /poeʔ/ means 'day'), /papaŋgalan/ 'toy top' (from /paŋgal/ 'top'), /papayun/ 'toy umbrella' (from /payun/ 'umbrella'), /tataŋkalan/ 'imitation trees' (from /taŋkal/ 'tree'), /kəkərisan/ 'toy dagger' (from /kəris/ 'dagger'), /kokorsian/ 'toy chair' (from /korsiʔ/ 'chair'), /ʔəʔəranken/ 'anything resembling a shelf or rack' (from /ʔərak/ 'rack'), /ʔoʔorokan/ 'doll' (from /ʔorok/ 'baby'), /ʔaʔanʒiŋan/ 'toy dog' (from /ʔanʒiŋ/ 'dog'), /bubuahan/ 'imitation fruit' (from /buah/ 'fruit'), /bubuayaʔan/ 'toy crocodile' (from /buayaʔ/ 'crocodile'), /dudularan/ 'like a relative', (from /dular/ 'relative'), /momoŋetan/ 'toy monkey' (from /moŋet/ 'monkey'), /mamaŋan/ 'toy tiger' (from /maŋaŋ/ 'tiger'), /mamanukan/ 'toy bird' (from /manuk/ 'bird'), /sasatoan/ 'toy animals' (from /satoʔ/ 'animal'), /sosowaŋan/ 'toy goose' (from /sowaŋ/ 'goose'), /ʒaʒaruman/ 'anything resembling a needle' (from /ʒarum/ 'needle'), /hahayaman/ 'toy chicken'

(from /hayam/ 'chicken'), /raranĵanan/ 'toy bed' (from /ranĵan/ 'bed'), /lolomarian/ 'toy cupboard' (from /lomari?/ 'cupboard'), /lalaukan/ 'toy fish' (from /lauk/ 'fish').

(b) Reduplication - R - an There is a relatively small number of derivatives with plural meanings expressed by the same formula as in Section 5.4.2.2.12 (a). In some cases this results in homonyms with both imitative and plural meaning. Examples of plural lexemes from the data follow: /papangalan/ 'tops', /tontonan/¹ 'tons' (from /ton/ 'ton'), /tonĵonan/¹ 'barrels' (from /tonĵ/ 'barrel'), /tataŋkalan/ 'trees', /kekembangan/ 'various kinds of flowers', /bubuhan/ 'various kinds of fruit', /daŋdaunan/ 'leaves' (from /daun/ 'leaf' (the reduplication in this lexeme is irregular), /sasatoan/ 'various kinds of animals', /čočo?oan/ 'toys' (from /čo?o?/ 'something to play with'), /čačandakan/ 'gifts brought home when one returns from a trip' (from /čandak/ 'carry').

5.4.2.2.13 R - in The suffix /-in/ combines with certain roots to form a derived noun lexeme. The common meaning of derived lexemes of this type is 'things which are to undergo the action mentioned in the root'. The examples occurring in the data are: /?aŋinⁱⁿ/ 'ingredients for soup' (from /?aŋin/, the root of /ŋaŋin/ 'to make soup'), /b^{ili}in/ 'something to buy' (from /b^{ili}?/ 'buy'), /daharⁱⁿ/ 'things to eat' (from /dahar/ 'eat'), /jualⁱⁿ/ 'things to sell' (from /jual/ 'sell') and /leresⁱⁿ/ 'things to be corrected'

¹No explanation of this type of reduplication has been found unless it is the fact that the roots are monosyllables.

(from /lares/ 'correct').

5.4.2.2.14 pi - R - in pi---in combines with certain roots to form a noun lexeme indicating futurity. The examples from the data are: /pikumaha~~n~~/ 'How will it be?' (from /kumaha~~?~~/ 'How is it?'), /pikabita~~n~~/ 'something which will prove desirable' (from /kabita~~?~~/ 'desire'), /pibahan~~n~~/ 'materials for something to be made in the future' (from /bahan/ 'raw materials'), /pibalay~~n~~/ 'future danger' (from /balay/ 'danger'), /pimitohan~~n~~/ 'future parents-in-law' (from /mitohan/ 'parents-in-law'), /pirorompok~~n~~/ 'my future home' (from /rorompok/ 'house, home'), /pilembur~~n~~/ 'a future village' (from /lembur/ 'village').

One lexeme in this group, /piʔaŋin~~n~~/ 'ingredients (usually vegetables) which are to be made into soup' has an alternate form, /ʔaŋin~~n~~/, with the same meaning. There may be some significance in the fact that /ʔaŋin~~n~~/ 'soup' is also the root of the inflected verb form 'to make soup'. (See Section 5.4.2.2.13). A larger corpus of data might conceivably yield further examples of this type.

5.4.2.2.15 pika - R - in¹ This group of derivatives is made up of noun lexemes which show a causative relationship toward the concept indicated in the root. The examples occurring in the data are: /pikaerain/ 'a cause of embarrassment' (from /?era?/ 'embarrass'), /pikaherain/ 'cause of amusement' (from /heran/ 'amuse'), /pikahayanin/ 'cause of desire' (from /hayan/ 'desire').

5.4.2.2.16 paŋ - R - na? The roots in this group of derivatives, except those listed in the footnote below,² correlate with adjective lexemes. (See Section 5.4.4.1). The members

¹pika - R - in might also conceivably be analyzed as pi-ka-R-in, in which case it would have to be decided whether /-ka-/ is an infix in the derivative type pi - R - in (see sec. 5.4.2.2.15), or whether /pi-/ is a prefix added to */ka - R - in/, a form which does not occur in the data. /-ka-/ might then be considered a prefix to R - in, which does occur. On the other hand, /-ka-/ might also be considered as an infix in the derivative type pi - R (see sec. 5.4.2.2.1) resulting in */pi-ka-R/, another form which does not occur, to which would be added the suffix /-in/.

Since the sequence /ka-/ does not occur as a separate morpheme with the meaning of causative, and since the sequence /pika-/ always has that meaning in noun derivatives when, and only when, it occurs in conjunction with the suffix /-in/, it seems wise to consider /pika---in/ a discontinuous morpheme. Another factor is that the list of roots occurring with /pika---in/ is in complementary distribution with the roots occurring with /pi---in/, /---in/, and /pi---/.

²Those derivatives which are formed in accordance with this formula but which do not correlate with adjective lexemes are: /paŋperana?/ 'the very nicely separated grains of cooked rice' (from /pera?/ 'cooked rice that separates into individual grains'), /paŋkidulna?/ 'southernmost place' (from /kidul/ 'south'), /paŋenjinna?/ 'the earliest time' (from /?enjin/ 'morning'), /paŋmawatna?/ 'the luckiest one' (from /mawat/ 'fortune'), /paŋhidenna?/ 'the most intelligent one' (from /hidən/ 'know, realize'), /paŋharipna?/ 'the place farthest front' (from /harip/ 'front'), /paŋčikalna?/ 'the very oldest son or daughter' (from /čikal/ 'the oldest son or daughter'), /paŋwəŋina?/ 'the very latest time in the night' (from /wəŋi?/ 'night').

of this group of noun derivatives constitute a subclass of noun lexemes in that they cannot be followed by the lexemes /?iyɨ?/ 'this' and /?eta?/ 'that' (see Section 5.4.3.6) as the other noun lexemes can. In terms of meaning alone, they are closely related to adjectives. On the other hand, they belong to the noun lexeme class in terms of the syntactic frames listed in Section 3.2, which are being used as the bases for determining lexeme classes. Seventy-two examples of this type of derivative occurred in the data, but a few examples suffice to illustrate the type: /paŋalusna?/ 'the finest one' (from /?alus/ 'fine'), /paŋsaktina?/ 'the most powerful one' (from /sakti?/ 'power'), /paŋsaŋgemma?/ 'the one who is most willing to do something' (from /saŋgem/ 'willing').

5.4.2.2.17 sa + doubling - R - na? This group of derivatives can be called indiscriminate partitives, translated as 'any of the'. For example, /sabukubukuna?/ 'just any of the books' (from /buku?/ 'book'). Other examples from the data are: /sakorsikorsina?/ 'any of the chairs' (from /korsi?/ 'chair'), /sameĵameĵana?/ 'any of the tables' (from /meĵa?/ 'table'), /saĵalmiĵalmina?/ 'any of the men' (from /ĵalmi?/ 'man'), /sawaktoswaktosna?/ 'any time' (from /waktos/ 'time').

5.4.2.2.18 A limited number of noun lexeme roots were derived by compounding two single roots. These derivatives occurred in the data without any affixes. The examples of compounds which occurred are: /panonpoe?/ 'sun' from /panon/ 'eye and /poe?/ 'day'), and /damargantu?/ 'chandelier' (from /damar/ 'lamp' and /gantū?/ 'hang').

Pronoun Inflection

5.4.3 Pronouns are a subclass of noun lexemes which are not followed by the pronouns /ʔetaʔ/ 'that' and /ʔiyɨʔ/ 'this'. There are two types: personal and demonstrative. Personal pronouns are inflected for person and number only. Many categories expressed by case in some languages are expressed in this language either by syntactical position or by particles in connection with pronouns.¹

5.4.3.1 As with the nouns, each base has a singular and plural form. The plural base is formed by adding the plural morpheme /-ar-/ to the singular base. For example, /maneh/ 'you' and /maraneh/ 'you' (plural).

5.4.3.2 The first person singular and plural pronoun bases, (R₁), have no formal relationship with the second and third person bases, (R₂).

5.4.3.3 Third person is expressed by adding the suffix /-naʔ/ to the pronoun base, (R₂).

5.4.3.4 A schematic presentation of the pronominal system can be charted as follows:

	<u>Singular</u>	<u>Plural</u>
First person:	R ₁	R ₁ plus /sahayaʔ/ ² 'all' or /kabeʔ/ ² 'all'
Second person:	R ₂	R ₂ - /-ar-/
Third person:	R ₂ - naʔ	R ₂ - /-ar-/ - naʔ

¹What can be considered as pronominal prefixes, /pun-/ and /tuaŋ-/, are used with kinship terms to show possession in the first and second person. See sec. 5.4.2.2.2 and 5.4.2.2.3 for the occurrence of these prefixes in the data.

²R₁ is often used in both singular and plural meaning. If one wishes to stress plurality, /sahayaʔ/ or /kabeʔ/ is used.

5.4.3.5.1 The high elevating form pronouns are:

	<u>Singular</u>	<u>Plural</u>
First person:	/ʔabdiʔ/	/ʔabdiʔ (sadayəʔ) ¹ /
Second person:	/ʔanj±n/	/ʔaranj±n/
Third person:	/ʔanj±naʔ/	/ʔaranj±naʔ/

5.4.3.5.2 The high humiliating form pronouns are:

	<u>Singular</u>	<u>Plural</u>
First person:	/pribados/	/pribados (sadayə) ¹ /
Second person:	/sampean/	/sampean/ ²
Third person:	/manehnaʔ/	/maranehnaʔ/

5.4.3.5.3 The ordinary form pronouns are:

	<u>Singular</u>	<u>Plural</u>
First person:	/kuriŋ/	/kuriŋ (kabeh) ³ /
Second person:	/maneh/	/maraneh/
Third person:	/manehnaʔ/	/maranehnaʔ/

5.4.3.6 The lexemes /ʔetaʔ/ 'that' and /ʔiy±ʔ/ 'this' are also a subclass of noun lexemes which, since they designate specific objects or concepts, can be called demonstrative pronouns. Demonstrative pronouns are not inflected. In certain syntactic positions, usually following nouns, the demonstratives are used attributively, as in the phrase /tokoʔ ʔetaʔ/ 'that store'.

¹See footnote 2 on preceding page.

²There is no alternate form for the second person plural in the high humiliating form.

³/ʔuraŋ/ 'we' is often used on the ordinary level rather than /kuriŋ/ or /kuriŋ kabeh/.

The Adjectives

5.4.4 Adjectives are here defined as those lexemes which can follow the negative particle /tɨʔ/ 'not' in the syntactic constructions explained in Section 3.2. There is no occurrence in the data of any adjectival lexemes which are inflected or derived. They are all root forms, or root forms with the plural infixes /-ar-/ and /-al-/, as for example, /biŋah/ 'happy', /bariŋah/ 'happy' (plural).

Adjective lexemes differ from noun and verb lexemes in that they can occur following /tɨʔ/ 'not' but not following /ʔayaʔ/ 'exists', as nouns can, nor /moal/ 'never', as verbs can.

5.4.4.1 Seventy-two root-form lexemes which are adjectives occur in the data. A few examples are: /kolot/ 'old', /ʔamis/ 'sweet', /saʔat/ 'shallow', and /panas/ 'hot'.

5.4.4.2 Roots which are adjective lexemes also occur in the data as roots of verb or noun lexemes. For example, the roots listed above as adjectives occur in the following verb lexemes: /ŋolotkɨn/ 'to make something old, or to age something', /ŋamiskɨn/ 'to sweeten something', /ŋaʔatkɨn/ 'to make something (as a pond) dry', and /manaskɨn/ 'to heat something'.

Examples of noun lexemes which have the same root forms as the above adjectives are: /paŋkolotnaʔ/ 'the oldest person', /paŋamisnaʔ/ 'the sweetest thing', /paŋsaʔatnaʔ/ 'the shallowest water', and /paŋpanasnaʔ/ 'the hottest person or thing, the most jealous person'. (See Section 5.4.2.2.10 for a discussion of this type of noun derivative.)

The Numerals

5.4.5.1 The numbering system is arranged on the basis of ten. The numbers from zero through nine are all single morphemes, as follows:

?enol	'zero'	lima?	'five'
hiʃi?	'one'	gənəp	'six'
dua?	'two'	tuʃu?	'seven'
tilu?	'three'	dalapan	'eight'
?opat	'four'	salapan	'nine'

5.4.5.2 The numbers from eleven through nineteen are comprised of two morphemes: the unit number plus /-belas ~ -welas/. Number eleven, however, uses, instead of /hiʃi?-/ , 'one', the prefix /sa-/ added to /-belas ~ -welas/. /hiʃi?-/ and /sa-/ are allomorphs of the same morpheme by suppletion. The list is as follows:

sabelas	'eleven'	gənəpbelas	'sixteen'
duabelas	'twelve'	tuʃubelas	'seventeen'
tilubelas	'thirteen'	dalapanbelas	'eighteen'
?opatbelas	'fourteen'	salapanbelas	'nineteen'
limabelas	'fifteen'		

5.4.5.3 The numbers in the tens' place are expressed by adding the morpheme /-puluh/ to the unit morphemes, except for 'ten', where the prefix /sa-/ is used instead of /hiʃi?-. The following are examples of the tens' place numbers:

sapuluh	'ten'
duapuluh	'twenty'
tilupuluh	'thirty'

5.4.5.4 The numbers in the hundreds' place are formed by adding the morpheme /-ratus/ to the unit morphemes in the same manner in which they were added to /-puluh/ for the numbers in the tens' place. Examples are:

saratus	'one hundred'
duaratus	'two hundred'
tiluratus	'three hundred'

5.4.5.5 The thousands' place numbers are formed by adding /-rebu? ~ -rewu?/ to the unit morphemes, as follows:

sarebu?	'one thousand'
duarebu?	'two thousand'
tilurebu?	'three thousand'

5.4.5.6 The numbers in the ten thousands' place are formed by combining the unit morphemes with /-laksa?/. Examples are:

salaksa?	'ten thousand'
dualaksa?	'twenty thousand'
tilulaksa?	'thirty thousand'

5.4.5.7 Numbers in the hundred thousands' place are formed by adding the two morphemes /-ratus/ and /-rebu? ~ -rewu?/ to the unit morphemes. Examples are:

saratusrebu?	'one hundred thousand'
duaratusrebu?	'two hundred thousand'
tiluratusrebu?	'three hundred thousand'

5.4.5.8 The millions' place is expressed by adding /-yuta?/ to the unit morphemes, as follows:

sayuta?	'one million'
duayuta?	'two million'
tiluyuta?	'three million'

5.4.5.9 Numbers made up of combinations of the different places are not combined into a single lexeme but are expressed as sequences of lexemes, as in /limapuluh genep/ 'fifty-six', /?opatratuŝ salapanpuluh tilu?/ 'four hundred ninety-three', /tuŝurebu? dalapanpuluh hiŝi?/ 'seven thousand eighty-one'.

Number lexemes serve as roots in the verb inflections, as illustrated with the number /tilu?/ 'three':

ditilukin	'to be separated into three parts'
nilukin	'to separate something into three parts'
tilukin	'Separate it into three parts!'
dipaŝnilukin	'to be separated into three parts for someone else'
maŝnilukin	'to separate something into three parts for someone else'
paŝnilukin	'Separate it into three parts for some- one else!'

5.4.5.10 Since they fulfill the requirements for noun lexemes, the ordinal numbers, /kahiŝi?/ 'the first one', /kadua?/ 'the second one', /katilu?/ 'the third one', et cetera, are discussed in Section 5.4.2.2.4 (b).

APPENDIX I. VOWEL AND CONSONANT SEQUENCES IN SUNDANESE

The following vowel sequences occur in Sundanese:

/-iɿ-/	?iɿ?	'this'
/-iu-/	diuk	'to sit'
/-ie-/	bie?	'soft'
/-ia-/	pias	'pale'
/-ɿi-/	dɿi?	'again'
/-ɿa-/	tɿas	'hard'
/-ui-/	hui?	'potato'
/-uɿ-/	buɿk	'owl'
/-ua-/	buah	'fruit, mango'
/-eo-/	peot	'wrinkle'
/-ea-/	beas	'uncooked rice'
/-oe-/	poe?	'day'
/-oa-/	moal	'never'
/-ai-/	čai?	'water'
/-aɿ-/	taɿwɿh	'that which does not exist'
/-ae-/	paeh	'dead'
/-ao-/	maok	'to steal'

The following consonant sequences occur in Sundanese within the limits of a single word:

/-pk-/	nasupkɿn	'to put in'
/-pl-/	taplak	'tablecloth'

/ pr-/	prak	'to begin (to eat)'
/-tk-/	ṅabaketkṅin	'to throw down'
/-t?-/	?aṅkat?aṅkatan	'to walk repeatedly'
/-tn-/	kaṣabatna?	'called'
/-tl-/	patlot	'pencil'
/-tr-/	?atra?	'obvious'
/-kt-/	taktak	'shoulder'
/-km-/	tasikmalaya	'the name of a city'
/-kn-/	mēlakna?	'the planting'
/-ks-/	ruksak	'damaged'
/-kč-/	čakčak	'lizzard'
/-kl-/	?aṅklun	'bamboo musical instrument'
/-kr-/	čakra?	'a proper name'
/-?k-/	naṅa?kṅin	'to ask'
/-?n-/	naṅa?na?	'the question'
/-?l-/	ma?lum	'to tolerate'
/-?y-/	ra?yat	'the people'
/-bk-/	taṅkubkṅin	'to turn something over'
/-bd-/	?abdi?	'I'
/-bh-/	halabhab	'thirsty'
/ bl-/	blak	'to begin to fall on one's back'
/ br-/	bral	'to begin to go'
/-dk-/	taṅkodkṅin	'to put something on one's back'
/-gn-/	?əndogna?	'the egg'
/-ṅr-/	raṅrag	'to fall'
/-mp-/	tempat	'place'
/-mk-/	?aṅčlomkṅin	'Dip it!'
/-mb-/	kəmbaṅ	'flower'

/-ml-/	jumlah	'total'
/-nt-/	dinten	'day'
/-nk-/	paṅnolakankin	'Lock it for me.'
/-nd-/	landoṅ	'cure'
/-nč-/	renčəṅ	'friend'
/-nj-/	?anjin	'dog'
/-np-/	pinpin	'thigh'
/-nt-/	tuntun	'end'
/-nk-/	taṅkal	'tree'
/-nb-/	baṅbara?	'beetle'
/-nd-/	daṅdan	'to dress'
/-ng-/	liṅgih	'sit'
/-nm-/	paṅmayarkin	'Pay it for me!'
/-n-/-	sabinaṅna?	'whatever is accomplished'
/-nñ-/	paṅñokotkin	'Get it for me!'
/-ns-/	maṅsa?	'season'
/-nl-/	lanlayanen	'kite'
/-nr-/	saṅray	'to roast'
/-nč-/	ñančəṅ	'to tie'
/-nj-/	janjan	'wing'
/-nh-/	ñanharipan	'to face'
/-st-/	mastaka?	'head'
/-sk-/	ṅalipaskin	'to release something'
/-sn-/	hartosna?	'the meaning'
/-sr-/	naksrak	'to investigate'
/-sw-/	parameswari?	'queen'
/-čl-/	ṅačləṅ	'to jump, to spring'

/-čr-/	kečrik	'fish net'
/-j1-/	naĵleŋ	'to jump down'
/-jr-/	naĵrut	'to jump up'
/-lp-/	pulpen	'fountain pen'
/-lk-/	?alketip	'rug with pile'
/-ln-/	didamelna?	'the action of working'
/-lm-/	ĵalmi?	'person'
/-rp-/	garpuh	'fork'
/-rt-/	?artos	'money'
/-rk-/	perkunpulan	'organization'
/-rd-/	dordar	'to sound like cannonading'
/-rg-/	margi?	'because'
/-rm-/	permios	'May I go?'
/-rn-/	luhurna?	'the height'
/-rs-/	korsi?	'chair'
/-rč-/	perčaya?	'believe'
/-ry-/	peryogi?	'important'
/-hk-/	tangahkin	'Lift up the chin!'
/-hb-/	silihbaledog'	'to throw stones at each other'
/-hn-/	manehna?	'he'
/-h?-/	silih?akalan	'to play tricks on each other'

APPENDIX II. SPECTROGRAMS OF JUNCTURE AND INTONATION

The spectrograms on pages 139 and 140 were made from the speech of Rukmantoro Hadi Sumukto, one of my three principal informants.

Figure 1 gives examples of spectrograms showing the lengthening of the final vowel in a word before silence. Figure 1-A illustrates /bade?/, 'desire'; 1-B illustrates /lingih/, 'to remain'; 1-C shows /manga??aŋkat/, 'Let's go.' Although the final /a/ in /manga?/ shows some lengthening, the pause between /manga?/ and /?aŋkat/ is imperceptible. The two glottal stops coalesce into one. The final vowel in the sentence is lengthened a great deal, thus illustrating the juncture before silence. Figure 1-D showing /?abdi? hoyoŋ mios/, 'I want to go', also illustrates the relatively slight lengthening of final vowels in word final sequences, except for the utterance final sequence, where the lengthening is very pronounced.

Figure 2 shows three examples of spectrograms which corroborate statements concerning intonation on pages 57-60. In each picture the tenth harmonic (ninth overtone) is used to show the intonation. Figure 2-A shows a statement, /?abdi? hoyoŋ mios/, 'I want to go.'

2 - 2/
2 °2-1//

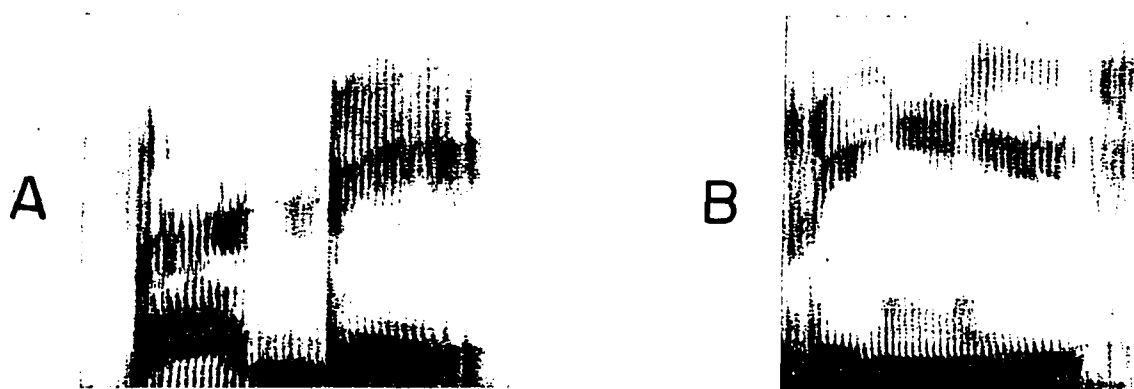
The rise in intonation for tentative pause following /?abdi?/ shows clearly. The fall for utterance final

intonation is also obvious.

Figure 2-B shows an intonation curve for a sentence without tentative pause. The break in the lines in Figures 2-A and 2-B occurs only where voiceless sounds occur and do not represent intonation breaks.

Figure 2-C shows the intonation curve for a question, /mama? ?aya?/, 'Is Father here?' In the figure the break in the intonation line is not significant. The confusion in the contour of the harmonic did not indicate exactly how to continue the line.

FIGURE I



b a d e ?

l i n g i h



m a n g a ? ? a n k a t

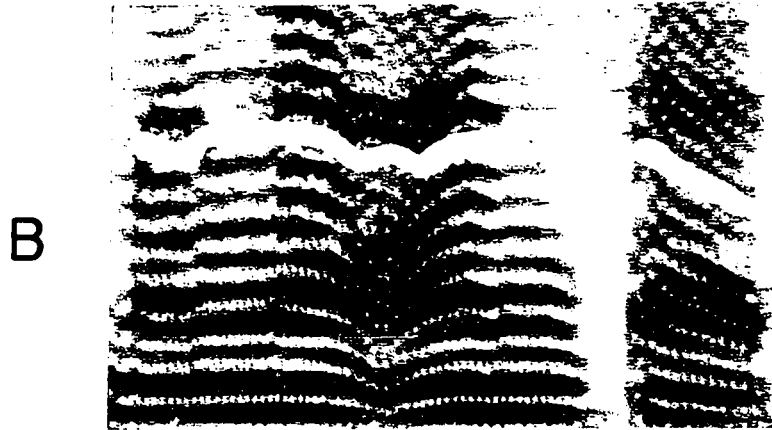


? a b d i ? h o y o n m i o s

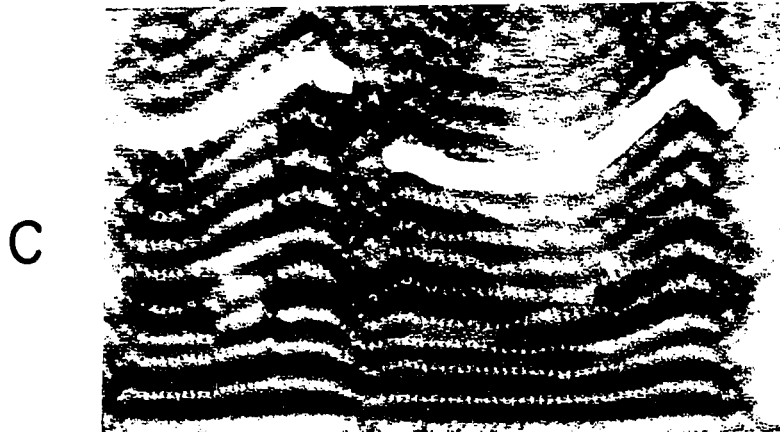
FIGURE 2



? a b d i ? h o y o η m i o s



m a η g a ? ? a η k a t



m a m a ? ? a y a ?

APPENDIX III. A SUNDANESE TEXT

The text below is given in phonemic transcription. The intonation contours and tentative and final pauses are indicated by the numbers and slants under the transcription. A free translation follows the transcription. Following the translation the literal meaning of each lexeme is given. For convenience the sentences in the text have been numbered.

kaña?ah ?indun

(1) kačarita? ?aya? ?učin boga? ?anak ?opat ?anu? marulus
2- 2/ 2- 2/ 2 2/ 2- 2/

sarta? ?aralus buluna? (2) ?učin ña?ah pisan ka?
2- °2-1// 2-

?anakanakna? j̣iŋ ka? mana? maranehna? ?ulin tantu?
-2/ 2- 2/ 2-

dituturkin (3) dina? hiŋi? poe? ?anakanak ?učin tadi?
°2- 1// 2- 2/ 2- 1- 1/

?arulin di? kəbon haripin ?imah (4) bari? ?indunna? ŋiuhan
2- °2-1// 2- 2/ 2-

di? handapin tanjal buah (5) henti? lila? ?aya? hilaŋ
°2-1// 2- 2/ 2- 2/

kakalayaan neaŋan kahakanan (6) kabeneran hilaŋ tadi?
2- °2-1// 2- 2/ 2- 2/

nenjo? ?anakanak ?učin ?anu? kir ?arulin sarta? terus turun
2- 2/ 2-

ka? handap namber ?anak ?učin (7) hiŋi? terus dičankerəm
2/ 2- °2-1// 2- °2-1//

(8) baran ?indunna? nenjo? ka?aya?an kitu? ti? antaparəh
2- 2/ 2-

d*i*? manehna? lumpat nampirk*n* hila*n* tadi? sarta? terus
2/ 2- 2/ 2-

gegel sukuna? ?anu? kinča? bari? noetan ?awakna? (9) baran
2/ 2- °2- 1// 2-

karasa? neri? ?anak ?uči*n* dilegotk*n* (10) sarta?
2/ 2- °2- 1// 2-

gabintihan ?indun*n*a? (11) lilalila? hila*n* qarasa? ti? kuat
°3- 2// 2- 2/ 2-

qalawan ?uči*n* tadi? terus napun d*i*? (12) ?uči*n* tadi?
2/ 2- °2- 1// 2-

rahat tapi? ti? dirasak*n* (13) terua nampirk*n* ?anakna?
2/ 2- °2- 1// 2- 2/

sarta? qaletakan rahatna? ?anakna? (14) j*i*n rahatna?
2- °2- 1// 2-

manehna? soragan (15) sakitu? kaña?ah ?indun ka? ?anak
°3- 2// 2- 2/ 2- °2- 1//

A Mother's Care

It is said there was a cat that had four kittens which were healthy and had beautiful fur. The cat loved the kittens very much and wherever they played they were always followed by her. On a certain day the kittens of the cat just mentioned played in the garden in front of the house while the mother sat in the shade under a mango tree. Not long after, there was a hawk soaring around to look for food. By chance the hawk saw the cat's kittens which were playing and immediately dived down, swooping over the cat's kittens. Then one was grabbed up.

When the mother saw the situation was like that, not hesitating once, she ran to approach the hawk and immediately bit his left leg while scratching his body repeatedly. When the pain was felt, the kitten was freed. Then the hawk attacked the mother. Later the hawk felt no

strength to fight against the cat. Then he flew away again.

The cat was hurt, but it was not felt by her.

Then she approached the kitten and licked its wounds. And she licked her own wounds also.

Like this is the love of a mother toward her children.

Literal Translation

- (1) kačarita? ?aya? ?učin boğa? ?anak ?opat
it is said exist a cat have offspring four
- ?anu? marulus sarta? ?aralus
which healthy (plural) and fine (plural)
- buluna?
the fur
- (2) ?učin ña?ah pisan ka? ?anakanakna? j̄in
a cat loves very toward her offspring and
- ka? mana? maranehna? ?ulin tantu?
toward where they play certain
- dituturk̄in
to be followed
- (3) dina? hīji? poe? ?anakanak ?učin tadi?
in one day offspring cat just mentioned
- ?arulin di? kebon har̄ipin ?imah
play (plural) at garden in front of house
- (4) bari? ?indunna? niuhan di? handap̄in
where the mother stayed in at underneath
the shade
- taṅkal buah
tree mango
- (5) hent̄i? lila? ?aya? h̄ilaṅ kakalayaan
not long time exist hawk soaring back and
forth
- neṅan kahakanan
looking for something to eat
- (6) kabeneran h̄ilaṅ tadi? nen̄jo? ?anakanak
something hawk just see offspring
good mentioned

- | | | | | | |
|------|------------------------------|-----------------------------------|------------------------------|-------------------------|-----------------------------------|
| | ʔučin
cat | ʔanu?
which | kir
(progressive) | ʔarulin
play | sarta?
and |
| | terus
then | turun
descend | ka?
to | handap
below | number
swoop
over |
| | ʔučin
cat | | | | ʔanak
offspring |
| (7) | hiʔi?
one | terus
then | dičankərəm
was grabbed up | | |
| (8) | baraŋ
when | ʔindunna?
the mother | nenjo?
see | kaʔavaʔan
situation | kitu?
like that |
| | ti?
not | antaparah
hesitate | dii?
again | manehna?
she | lumpat
run |
| | ŋampirkin
to approach | hilaŋ
hawk | tadi?
just mentioned | sarta?
and | terus
then |
| | ŋeʒel
bite | sukuna?
his leg | ʔanu?
which | kinča?
left | bari?
while |
| | ʔawakna?
his body | | | ŋoetan
scratch | |
| (9) | baraŋ
when | karasa?
was felt | nəri?
pain | ʔanak
offspring | ʔučin
cat |
| | | | | | dilesotkin
was freed |
| (10) | sarta?
and | ŋabintihan
attacked repeatedly | | ʔindunna?
the mother | |
| (11) | lilalila?
in a short time | hilaŋ
hawk | ŋarasa?
feel | ti?
not | kuat
strength |
| | ŋalawan
to fight | ʔučin
cat | tadi?
just mentioned | terus
then | ŋapun
fly |
| | | | | | dii?
again |
| (12) | ʔučin
cat | tadi?
just mentioned | rahit
wound | tapi?
but | tii?
not |
| | | | | | dirasakan
was felt |
| (13) | terus
then | ŋampirkin
approach | ʔanakna?
the offspring | sarta?
and | ŋaletakan
licked
many times |
| (14) | ʔin
and | rahitna?
the wounds | manehna?
her | soraŋan
own | |
| (15) | sakitu?
like that | kaŋaʔah
love | ʔindun
mother | ka?
toward | ʔanak
offspring |

APPENDIX IV. LEXICON OF SELECTED ROOTS

The two lists which follow contain most of the lexical items in the data. Certain low frequency items which illustrate no additional morphological phenomena are omitted. Only the root forms of the Sundanese words are given.

Beneath the roots in the Sundanese-English list are symbols designating the lexeme classes in which the roots appear in the data. V stands for verb, N for noun, A for adjective, P for particle, Pn for pronoun, and Num. for numeral. Following these symbols are given the sections of the dissertation which treat of the morphological structure of the types of lexemes which are formed on the roots. The roots are arranged in the following alphabetic order: p, t, k, ʔ, b, d, g, m, n, ñ, ŋ, s, h, č, ĵ, l, r, w, and y. The order of the vowels is as follows: i, i̇, u, e, ə, o, and a.

The English-Sundanese list is arranged alphabetically according to the English meanings of the Sundanese roots. The word classes of the English meanings have no direct relation to the lexeme classes of the Sundanese words which may be constructed upon these roots. In some cases two or more Sundanese roots correspond to a single English meaning. The alternate Sundanese forms usually result from the system of honorific distinctions in the lexicon which characterize the language but which are not part of this analysis, although reference has been made to them occasionally.

Sundanese-English List.

pikir - think	pulas - color
V 5.4.1.1.3	V 5.4.1.1.3
5.4.1.3.9 (a)	N 5.4.2.1.1
pintur - intelligence	penta? - ask
V 5.4.1.1.3	V 5.4.1.1.3
5.4.1.3.16 (b)	N 5.4.2.2.5 (a)
pisan - very	perkol - turn
A 5.4.4	V 5.4.1.1.3
pirosea? - consider	peser - buy
V 5.4.1.1.3	V 5.4.1.1.3
piwaraj - command	peso? - knife
V 5.4.1.1.3	N 5.4.2.1.1
N 5.4.2.2.8	permios - farewell
pipih - hit	P 5.4
V 5.4.1.1.3	pelak - plant
5.4.1.3.8	V 5.4.1.1.3
N 5.4.2.2.5 (a)	N 5.4.2.2.12 (b)
pičanj - mouse deer	para? - rice (uncooked)
N 5.4.2.1.1	N 5.4.2.1.1
5.4.2.2.12 (a), (b)	5.4.2.2.16
pirna? - hoarse	perčaya? - trust
N 5.4.2.2.16	V 5.4.1.1.3
A 5.4.4	N 5.4.2.1.1
puas - satisfy	5.4.2.2.10
V 5.4.1.1.3	peryogi? - important
N 5.4.2.2.4 (a)	N 5.4.2.2.10
5.4.2.2.16	A 5.4.4
A 5.4.4	poe? - sun
putra? - child	V 5.4.1.1.3
V 5.4.1.1.3	N 5.4.2.2.12
N 5.4.2.1.1	pok - say
punten - May I come in?	P 5.4
P 5.4	N 5.4.2.1.1
pules - sleepy	pondok - short
N 5.4.2.2.10	V 5.4.1.1.3
A 5.4.4	N 5.4.2.2.16
pulang - return	A 5.4.4
V 5.4.1.1.3	

- pongawa? - soldier
N 5.4.2.1.1
- pohara? - very
A 5.4.4
- paeh - dead
V 5.4.1.1.3
5.4.1.3.3 (b)
N 5.4.2.1.1
A 5.4.4
- paok - steal
V 5.4.1.1.3
- papak - blunt
N 5.4.1.1.3
A 5.4.4
- pake? - use
V 5.4.1.1.3
5.4.1.3.3 (a)
N 5.4.2.2.8
- pameget - male
N 5.4.2.1.1
- paman - uncle
V 5.4.1.3.1 (c)
N 5.4.2.1.1
- pamajikan - wife
N 5.4.2.1.1
5.4.2.2.14
- panas - hot
V 5.4.1.1.3
A 5.4.4
- panto? - door
N 5.4.2.1.1
- pandita? - priest
N 5.4.2.1.1
5.4.2.2.1
- panjara? - prison
V 5.4.1.1.3
N 5.4.2.1.1
- panjih - find
V 5.4.1.1.3
5.4.1.3.3 (a)
- pansiun - pension
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.8
- pasih - give
V 5.4.1.1.3
N 5.4.2.2.9 (c)
- para? - attic
N 5.4.2.1.1
- parantos - completed
A 5.4.4
- paliq - thief
V 5.4.1.1.3
N 5.4.2.1.1
- palay - desire
V 5.4.1.1.3
N 5.4.2.2.4 (a)
- payun - umbrella
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.12 (a)
- pribados - I
Pn 5.4.3.5.2
- ti? - tina? - from
P 5.4
- tiasa? - able
V 5.4.1.1.3
5.4.1.3.16 (a) and (c)
N 5.4.2.2.4 (a)
5.4.2.2.10
5.4.2.2.16
A 5.4.4
- tikah - marry
V 5.4.1.1.3
- ti?is - quiet
V 5.4.1.1.3
N 5.4.2.2.16
A 5.4.4
- tingal - leave
V 5.4.1.1.3
N 5.4.2.2.12 (b)

tilu? - three	tujuhbelas - seventeen
Num. 5.4.5.1	Num. 5.4.5.2
V 5.4.1.1.3	tuluy - continue
N 5.4.2.2.4 (b)	V 5.4.1.1.3
tilubelas - thirteen	N 5.4.2.1.1
Num. 5.4.5.2	teang - search
tilas - former	V 5.4.1.1.3
N 5.4.2.2.9 (a)	5.4.1.3.4
A 5.4.4	tetela? - obvious
tiiŋ - very	V 5.4.1.1.3
A 5.4.4	A 5.4.4
tiktik - slice	tenda? - tent
V 5.4.1.1.3	V 5.4.1.1.3
N 5.4.2.2.5 (a)	N 5.4.2.1.1
5.4.2.2.8	tenjo? - see
tii? - not	V 5.4.1.1.3
P 5.4	5.4.1.3.3
tiiim - sink	tereh - quick
V 5.4.1.1.3	N 5.4.2.2.16
5.4.1.3.14	A 5.4.4
tuan - eat	tepi? - until
V 5.4.1.1.3	V 5.4.1.1.3
N 5.4.2.2.9 (a)	P 5.4
5.4.2.2.13	tebak - guess
tutup - close	V 5.4.1.1.3
V 5.4.1.1.3	teda? - eat
N 5.4.2.1.1	V 5.4.1.1.3
5.4.2.2.8	5.4.1.3.6
tukir - change	N 5.4.2.1.1
V 5.4.1.1.3	tempat - place
N 5.4.2.2.9 (c)	V 5.4.1.1.3
tuduh - point	N 5.4.2.1.1
V 5.4.1.1.3	tepat - observe
tuntun - end	V 5.4.1.1.3
N 5.4.2.1.1	tejah - middle
5.4.2.2.16	N 5.4.2.2.5 (a)
A 5.4.4	A 5.4.4
tujuh - seven	terus - continue
Num. 5.4.5.1	V 5.4.1.1.3
V 5.4.1.1.3	
N 5.4.2.2.4 (b)	

- terang - obvious
V 5.4.1.1.3
N 5.4.2.2.10
- teras - continue
V 5.4.1.1.3
N 5.4.2.1.1
- teras - then
P 5.4
- tewek - thrust
V 5.4.1.1.3
5.4.1.3.8
- toko? - store
N 5.4.2.1.1
- ton - ton
N 5.4.2.1.1
5.4.2.2.12 (b)
- taun - year
N 5.4.2.1.1
- taek - climb
V 5.4.1.1.3
- tatamu? - guest
V 5.4.1.1.3
N 5.4.2.1.1
- tadi? - just mentioned
P 5.4
- tamat - graduate (finish)
V 5.4.1.1.3
- tateh - chisel
V 5.4.1.1.3
N 5.4.2.1.1
- tatek - shoulder
V 5.4.1.1.3
N 5.4.2.1.1
- tampik - refuse
V 5.4.1.1.3
- tambah - increase
V 5.4.1.1.3
5.4.1.3.3
N 5.4.2.2.8
- tamban - rope
N 5.4.2.1.1
- tanda? - sign
V 5.4.1.1.3
N 5.4.2.1.1
- tanjak - ascend
V 5.4.1.1.3
N 5.4.2.2.8
- taña? - ask
V 5.4.1.1.4
- tantun - stand
V 5.4.1.1.3
5.4.1.2.1
- tantan - challenge
V 5.4.1.1.3
N 5.4.2.2.5 (a)
- tanjal - tree
N 5.4.2.1.1
5.4.2.2.12 (a) and (b)
- talaga? - lake
N 5.4.2.1.1
- tarik - fast
V 5.4.1.1.3
5.4.1.3.4
N 5.4.2.2.16
A 5.4.4
- tarik - pull
V 5.4.1.1.3
5.4.1.3.8
N 5.4.2.2.8
- tarima? - receive
V 5.4.1.1.3
- tara? - never
P 5.4
- taros - ask
V 5.4.1.1.3
- ton - barrel
N 5.4.2.1.1
5.4.2.2.12 (b)
- ki? - thus
P 5.4

- kiat - strong
V 5.4.1.1.3
5.4.1.3.16 (b), (c)
N 5.4.2.2.10
5.4.2.2.16
A 5.4.4
- kidul - south
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.16
- kinten - think
V 5.4.1.1.3
N 5.4.2.2.5 (a)
- kiruh - dirty (for liquids)
V 5.4.1.1.3
N 5.4.2.2.16
A 5.4.4
- kira? - suppose
V 5.4.1.1.3
- kiraŋ - lack
V 5.4.1.1.3
N 5.4.2.2.10
5.4.2.2.16
A 5.4.4
- kir - (progressive action)
P 5.4
- kirit - cut
V 5.4.1.1.3
5.4.1.1.5
N 5.4.2.2.5 (a)
- kuat - strong
V 5.4.1.1.3
N 5.4.2.2.10
5.4.2.2.16
A 5.4.4
- kuas - brush
N 5.4.2.1.1
- ku? - by (agentive)
P 5.4
- kumaha? - how
N 5.4.2.2.14
P 5.4.
- kuŋsi? - flee
V 5.4.1.2.1
- kuru? - thin
N 5.4.2.2.16
A 5.4.4
- kuraŋ - lack
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.10
- kulem - sleep
V 5.4.1.2.1
N 5.4.2.1.1
5.4.2.2.9 (a)
- kenča? - to the left
V 5.4.1.1.3
5.4.1.3.15
- keŋiŋ - may
P 5.4
- kebon - garden
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.5 (a)
5.4.2.2.12 (a)
- kecul - lazy
N 5.4.2.2.4 (a)
5.4.2.2.16
A 5.4.4
- kembang - flower
V 5.4.1.3.13
N 5.4.2.1.1
- keris - dagger
N 5.4.2.1.1
5.4.2.2.12 (a)
- kersa? - desire
V 5.4.1.1.3
N 5.4.2.1.1
- kečap - word
N 5.4.2.1.1
- koet - scratch
V 5.4.1.1.3
5.4.1.3.4
5.4.1.3.8

kotor	- dirt	kandang	- cage, stable
V	5.4.1.1.3	V	5.4.1.1.3
N	5.4.2.2.8	N	5.4.2.1.1
A	5.4.4	kanča?	- friend
kota?	- city	N	5.4.2.1.1
N	5.4.2.1.1	kačidah	- very
konči?	- key	A	5.4.4
V	5.4.1.1.3	kali?	- dig
N	5.4.2.1.1	V	5.4.1.1.3
kojaj	- swim	ka?	- to, toward
V	5.4.1.2.1	P	5.4
	5.4.1.1.3	kasawat	- disease
	5.4.1.3.14	N	5.4.2.1.1
N	5.4.2.1.1	karep	- wish
korsi?	- chair	N	5.4.2.1.1
N	5.4.2.1.1		5.4.2.2.16
	5.4.2.2.12 (a)	kawit	- begin
	5.4.2.2.17	V	5.4.1.1.3
kolot	- old	kawin	- marry
V	5.4.1.1.3	V	5.4.1.1.3
	5.4.1.3.1 (b), (c)	N	5.4.2.1.1
N	5.4.2.1.1	?itu?	- that
	5.4.2.2.16	Pn	5.4.3.6
A	5.4.4	?imut	- check (a list)
kagunan	- have	V	5.4.1.1.3
V	5.4.1.1.3	?imut	- smile
kameja?	- shirt	V	5.4.1.2.1
V	5.4.1.3.7		5.4.1.3.8
N	5.4.2.1.1		5.4.1.3.14
kamari?	- yesterday	N	5.4.2.1.1
P	5.4	?inum	- drink
kampung	- village	V	5.4.1.1.3
N	5.4.2.1.1	?indit	- go
	5.4.2.2.9 (c)	V	5.4.1.1.3
kantun	- leave		5.4.1.3.14
V	5.4.1.1.3	N	5.4.2.1.1
N	5.4.2.1.1	?indun	- mother
kantor	- office	V	5.4.1.3.1. (a), (b)
N	5.4.2.1.1	N	5.4.2.2.1
	5.4.2.2.8		

- ?isuk - morning
N 5.4.2.1.1
5.4.2.2.6
5.4.2.2.16
- ?istri? - woman
N 5.4.2.1.1
- ?irin? - follow
V 5.4.1.1.3
5.4.1.3.4
N 5.4.2.2.5 (a)
5.4.2.2.11
- ?irin - stop
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.9 (a)
- ?iraha? - when
P 5.4
- ?iyi? - this
Pn 5.4.3.6
- ?ukur - measure
V 5.4.1.1.3
N 5.4.2.2.8
- ?ubin - tile
V 5.4.1.1.3
N 5.4.2.1.1
- ?ubar - medicine
V 5.4.1.1.3
N 5.4.2.1.1
- ?udur - sick
N 5.4.2.2.16
A 5.4.4
- ?udag - chase
V 5.4.1.1.3
5.4.1.3.4
- ?uraq - we
In 5.4.3.5.3 (Footnote)
- ?ulin - play
V 5.4.1.1.3
N 5.4.2.2.9 (b)
- ?eta? - that (near)
P 5.4
Pn 5.4.3.6
- ?enjin - morning
N 5.4.2.1.1
5.4.2.2.6
5.4.2.2.16
- ?era? - embarrass
V 5.4.1.3.2 (a), (b), (c)
N 5.4.2.2.15
- ?eleh - defeat
V 5.4.1.1.3
5.4.2.2.16
- ?eyaq - grandfather
N 5.4.2.1.1
5.4.2.2.2
- ?emoi? - soft
N 5.4.2.2.16
A 5.4.4
- ?emaq - uncle
N 5.4.2.1.1
5.4.1.3.1 (c)
- ?ena? - yes
V 5.4.1.1.3
P 5.4
- ?endog - egg
V 5.4.1.3.13
N 5.4.2.1.1
5.4.2.2.12 (a)
- ?enke? - later
N 5.4.2.1.1
P 5.4
- ?erak - rack
N 5.4.2.1.1
5.4.2.2.12 (a)
- ?opat - four
V 5.4.1.1.3
N 5.4.2.2.4 (b)
Num. 5.4.5.1
- ?opatbelas - fourteen
Num. 5.4.5.2

?obrol - chat	?agɨŋ - big
V 5.4.1.1.3	V 5.4.1.1.3
?omong - speech	5.4.1.3.4
V 5.4.1.1.3	N 5.4.2.2.16
?onkos - expense	A 5.4.4
V 5.4.1.1.3	?amis - sweet
N 5.4.2.1.1	V 5.4.1.1.3
?osok - usually	5.4.1.3.4
P 5.4	N 5.4.2.1.1
?orok - baby	5.4.2.2.16
N 5.4.2.1.1	A 5.4.4
5.4.2.2.7	?ambekan - breathe
5.4.2.2.12 (a)	V 5.4.1.2.1
?apung - fly	?anak - child
V 5.4.1.1.3	V 5.4.1.3.1 (b)
N 5.4.2.2.9 (a)	5.4.1.3.13
?apal - memorize	N 5.4.2.1.1
V 5.4.1.1.3	?anjɨŋ - dog
N 5.4.2.2.8	N 5.4.2.1.1
?atik - educate	5.4.2.2.12 (a)
V 5.4.1.1.3	?anjɨn - you
?atur - regulate	Pn 5.4.3.5.1
V 5.4.1.1.3	?anin - wind
N 5.4.2.2.9 (c)	V 5.4.1.1.3
?akal - trick	N 5.4.2.1.1
V 5.4.1.1.3	?angkat - go
N 5.4.2.1.1	V 5.4.1.3.1
?abdi? - I	5.4.1.3.12 (b)
V 5.4.1.3.15	5.4.1.3.14
Pn 5.4.3.5.1	?anɨŋo? - wear
?adik - brother (younger)	V 5.4.1.1.3
V 5.4.1.3.1 (b)	N 5.4.2.2.5 (a)
N 5.4.2.1.1	?asih - loving
5.4.2.2.2	V 5.4.1.3.2 (a), (b)
?adil - just (equitable)	N 5.4.2.2.16
N 5.4.2.2.9 (b)	A 5.4.4
5.4.2.2.10	?asup - enter
5.4.2.2.16	V 5.4.1.1.3
A 5.4.4	V 5.4.2.1.1
	?ačan - not yet
	P 5.4

- ?ajar - study
V 5.4.1.1.3
N 5.4.2.2.9 (c)
- ?ajar - educate
N 5.4.2.2.9 (c)
- ?ajrut - jump
V 5.4.1.1.3
5.4.1.3.12 (b)
- ?alit - small
V 5.4.1.1.3
N 5.4.2.2.7
5.4.2.2.16
A 5.4.4
- ?alus - fine
V 5.4.1.3.4
N 5.4.2.2.16
A 5.4.4
- ?ala? - obtain
V 5.4.1.1.3
- ?alam - experience
V 5.4.1.1.3
N 5.4.2.2.9 (c)
- ?arek - will (future)
P 5.4
- ?arak - march
V 5.4.1.1.3
N 5.4.2.2.11
- ?aran - name
V 5.4.1.1.3
N 5.4.2.1.1
- ?arti? - meaning
N 5.4.2.2.5 (a)
- ?artos - pay
V 5.4.1.1.3
N 5.4.2.1.1
- ?awewe? - female
N 5.4.2.2.1
A 5.4.4
- ?awak - body
N 5.4.2.1.1
5.4.2.2.9 (c)
- ?ayena? - now
P 5.4
- ?aya? - is, exists
V 5.4.1.1.3
N 5.4.2.1.1
5.4.2.2.10
- biasa? - common
V 5.4.1.1.3
N 5.4.2.2.10
A 5.4.4
- bintih - attack
V 5.4.1.1.3
5.4.1.3.4
5.4.1.3.8
- bingah - happy
N 5.4.2.2.10
5.4.2.2.16
A 5.4.4
- biwir - lip
N 5.4.2.1.1
- biyan - mother
N 5.4.2.1.1
5.4.2.2.2
- bibir - belt
V 5.4.1.3.7
N 5.4.2.1.1
- bintir - correct, good
V 5.4.1.1.3
N 5.4.2.2.10
5.4.2.2.13
5.4.2.2.16
A 5.4.4
- binkit - bind
V 5.4.1.1.3
- bisi? - iron
N 5.4.2.1.1
- bili? - buy
V 5.4.1.1.3
5.4.1.3.6
N 5.4.2.2.13

buah	- fruit		
V	5.4.1.3.13		
N	5.4.2.1.1		
	5.4.2.2.12 (a), (b)		
buaya?	- crocodile		
N	5.4.2.1.1		
	5.4.2.2.12 (a)		
buku?	- book		
V	5.4.1.1.3		
N	5.4.2.1.1		
	5.4.2.2.17		
bubur	- porridge		
V	5.4.1.1.3		
N	5.4.2.1.1		
budak	- child		
N	5.4.2.1.1		
	5.4.2.2.7		
bumi?	- house		
V	5.4.1.3.15		
N	5.4.2.1.1		
bulad	- round		
N	5.4.2.2.8		
A	5.4.4		
bulu?	- feathers		
V	5.4.1.1.3		
N	5.4.2.1.1		
beak	- finish		
V	5.4.1.1.3		
	5.4.1.1.5		
	5.4.1.3.14		
N	5.4.2.1.1		
	5.4.2.2.16		
A	5.4.4		
beas	- rice (uncooked)		
N	5.4.2.1.1		
beda?	- different		
N	5.4.2.1.1		
A	5.4.4		
beča?	- rickshaw		
V	5.4.1.3.15		
N	5.4.2.1.1		
beja?	- news		
V	5.4.1.1.3		
	5.4.1.1.5		
N	5.4.2.1.1		
bere?	- give		
V	5.4.1.1.3		
	5.4.1.1.5		
N	5.4.2.2.5 (a)		
beresih	- clean		
V	5.4.1.1.3		
N	5.4.2.2.10		
	5.4.2.2.16		
A	5.4.4		
beləjug	- stupid		
N	5.4.2.1.1		
A	5.4.4		
bodas	- white		
V	5.4.1.1.3		
N	5.4.2.2.7		
	5.4.2.2.16		
A	5.4.4		
boğa?	- possess		
V	5.4.1.1.3		
N	5.4.2.1.1		
	5.4.2.2.12 (a)		
bosin	- bored		
V	5.4.1.1.3		
N	5.4.2.2.4 (a)		
	5.4.2.2.16		
A	5.4.4		
bojo?	- wife		
N	5.4.2.1.1		
	5.4.2.2.2		
bapa?	- father		
V	5.4.1.3.1 (b)		
N	5.4.2.1.1,		
	5.4.2.2.2		
batis	- boundary		
V	5.4.1.1.3		
N	5.4.2.1.1		
bata?	- brick		
V	5.4.1.1.3		
N	5.4.2.1.1		

banding - compare	dua? - two
V 5.4.1.1.3	V 5.4.1.1.3
banjur - pour	N 5.4.2.2.4 (b)
V 5.4.1.1.3	Num. 5.4.5.1
bahan - material	dupak - kick
V 5.4.1.1.3	V 5.4.1.1.3
N 5.4.2.1.1	5.4.1.3.3
5.4.2.2.14	5.4.1.3.3
bača? - read	dulur - relative
V 5.4.1.1.3	V 5.4.1.3.1 (a), (b), (c)
5.4.1.3.14	N 5.4.2.1.1
N 5.4.2.2.8	dege? - hear
bales - repay	V 5.4.1.1.3
V 5.4.1.1.3	5.4.1.3.3 (a)
N 5.4.2.2.8	daun - leaf
balai? - danger	N 5.4.2.1.1
N 5.4.2.1.1	5.4.2.2.12 (a)
5.4.2.2.14	daek - willing
balanja? - purchase	N 5.4.2.2.4 (a)
V 5.4.1.1.3	5.4.2.2.16
N 5.4.2.1.1	A 5.4.4
balay - cobblestone	daek - willingness
N 5.4.2.1.1	P 5.4
bawa? - bring	daŋo? - wait
V 5.4.1.1.3	V 5.4.1.1.3
di? - dina? - at	damel - work
P 5.4	V 5.4.1.1.3
diuk - sit	N 5.4.2.2.8 (a)
V 5.4.1.1.3	5.4.2.2.9 (c)
5.4.1.2.1	damaŋ - health
N 5.4.2.1.1	N 5.4.2.1.1
5.4.2.2.9 (a)	
d+i? - again	dahar - eat
P 5.4	V 5.4.1.1.3
duit - money	5.4.1.3.6
V 5.4.1.1.3	N 5.4.2.2.10
N 5.4.2.1.1	5.4.2.2.13
5.4.2.2.1	
duabelas - twelve	dalapan - eight
Num. 5.4.5.2	V 5.4.1.1.3
	N 5.4.2.2.4 (b)
	Num. 5.4.5.1

dalapanbelas - eighteen	gandiṅ - noise
Num. 5.4.5.2	V 5.4.1.1.3
ḡiriha? - wife	N 5.4.2.2.16
V 5.4.1.3.13	A 5.4.4
N 5.4.2.1.1	ḡawe? - work
ḡilis - beautiful	V 5.4.1.1.3
V 5.4.1.3.11	N 5.4.2.2.9 (a)
N 5.4.2.2.16	mios - go
A 5.4.4	V 5.4.1.1.3
ḡunuṅ - mountain	N 5.4.2.1.1
N 5.4.2.1.1	mitoha? - parents-in-law
5.4.2.2.9 (c)	N 5.4.2.1.1
5.4.2.2.12 (a)	5.4.2.2.14
ḡeḡel - bite	mimiti? - begin
V 5.4.1.1.3	V 5.4.1.1.3
5.4.1.3.4	mingu? - week
5.4.1.3.8	N 5.4.2.1.1
ḡede? - large	mulih - return (home)
V 5.4.1.1.3	V 5.4.1.1.3
N 5.4.2.1.1	N 5.4.2.1.1
5.4.2.2.16	mulus - health
A 5.4.4	N 5.4.2.2.10
ḡenep - six	5.4.2.2.16
V 5.4.1.1.3	A 5.4.4
N 5.4.2.2.4 (b)	murakalik - child
Num. 5.4.5.1	N 5.4.2.1.1
ḡenepbelas - sixteen	meḡa? - table
Num. 5.4.5.2	N 5.4.2.1.1
ḡelas - glass	5.4.2.2.17
N 5.4.2.1.1	menit - minute
ḡaduh - have	V 5.4.1.1.3
V 5.4.1.1.3	N 5.4.2.1.1
ḡambar - picture	melanṅ - uneasy
V 5.4.1.1.3	N 5.4.2.2.4 (a)
5.4.1.3.13	5.4.2.2.16
N 5.4.2.1.1	A 5.4.4
ḡanti? - change	moal - never
V 5.4.1.1.3	P 5.4
5.4.1.3.5	model - modern
	I. 5.4.2.2.16
	A 5.4.4

mondok - sleep	manah - heart
V 5.4.1.2.1	V 5.4.1.1.3
N 5.4.2.1.1	N 5.4.2.1.1
moñet - monkey	mantu? - help
N 5.4.2.1.1	V 5.4.1.1.3
5.4.2.2.12(a)	5.4.1.3.12 (a)
main - play	mandi? - bath
V 5.4.1.2.1	V 5.4.1.1.3
maun - tiger	N 5.4.2.1.1
N 5.4.2.1.1	5.4.2.2.9 (a)
5.4.2.2.12(a)	manga? - please
maot - die	V 5.4.1.1.3
V 5.4.1.2.1	P 5.4
N 5.4.2.1.1	mastaka? - head
muñbae? - but	N 5.4.2.1.1
P 5.4	mahal - expensive
matuh - stay	N 5.4.2.2.16
V 5.4.1.2.1	A 5.4.4
N 5.4.2.1.1	margi? - because
5.4.2.2.9 (a)	P 5.4
matak - cause (causa- tive mode)	malik - return
P 5.4	V 5.4.1.1.3
mata? - eye	mawat - lucky
N 5.4.2.1.1	N 5.4.2.2.16
maksud - purpose	A 5.4.4
N 5.4.2.1.1	nuhun - thank
ma?lum - tolerant	V 5.4.1.1.3
V 5.4.1.1.3	5.4.1.2.1
N 5.4.2.1.1	nuju? - (progressive mode)
manuk - bird	P 5.4
N 5.4.2.1.1	neri? - pain
5.4.2.2.12 (a)	V 5.4.1.3.2 (a), (b)
maneh - you	naon - what
Pn 5.4.3.5.3	P 5.4
manehna? - he	nagara? - nation
Pn 5.4.3.5.2	N 5.4.2.1.1
5.4.3.5.3	5.4.2.2.10
mana? - where	nanah - pus
P 5.4	V 5.4.1.3.13
	N 5.4.2.1.1

naha?	- why	silop	- sandal
P 5.4		N 5.4.2.1.1	
ñeri?	- hurt	sirit	- sting
V 5.4.1.3.2. (b),(c)		V 5.4.1.1.3	
N 5.4.2.2.16		N 5.4.2.2.5 (a)	
A 5.4.4		siri?	- laugh
ñata?	- clear	V 5.4.1.1.3	
V 5.4.1.1.3		N 5.4.2.1.1	
N 5.4.2.2.10			
A 5.4.4		suka?	- please (to please)
ña?ah	- love	V 5.4.1.1.3	
V 5.4.1.1.3		N 5.4.2.2.10	
5.4.1.3.2. (a), (b), (c)		suhun	- beg
N 5.4.2.1.1		V 5.4.1.1.3	
5.4.2.2.4 (a)		sumahun	- yes
ñana?	- suppose	P 5.4	
V 5.4.1.1.3		sunut	- mouth
N 5.4.2.1.1		N 5.4.2.1.1	
5.4.2.2.5 (a)		susu?	- milk
ñora?	- young	N 5.4.2.1.1	
N 5.4.2.1.1		seba?	- offer
5.4.2.2.16		V 5.4.1.1.3	
A 5.4.4		5.4.1.3.10	
sipat	- character	N 5.4.2.2.9 (a)	
N 5.4.2.1.1		sendok	- spoon
sisi?	- side	N 5.4.2.1.1	
V 5.4.1.1.3		sepuh	- old
5.4.1.3.15		N 5.4.2.1.1	
N 5.4.2.1.1		A 5.4.4	
silañ	- friend	sebut	- call
N 5.4.2.1.1		V 5.4.1.1.3	
sɨ?ɨl	- pain	sebat	- call
N 5.4.2.1.1		V 5.4.1.1.3	
5.4.2.2.4 (a)		5.4.1.3.3 (a)	
A 5.4.4		sedih	- sad
sɨ?ɨl	- scold	N 5.4.2.2.4.(a)	
V 5.4.1.1.3		5.4.2.2.16	
N 5.4.2.1.1		A 5.4.4	
5.4.2.2.4 (a)			
sɨ?ɨr	- many		
V 5.4.1.1.3			
N 5.4.2.2.16			
A 5.4.4			

- sering - often
N 5.4.2.2.16
A 5.4.4
- serat - letter
V 5.4.1.1.3
5.4.1.3.10
N 5.4.2.1.1
- sore? - evening
N 5.4.2.1.1
5.4.2.2.6
5.4.2.2.16
- sora? - sound
N 5.4.2.1.1
- sovan - goose
N 5.4.2.1.1
5.4.2.2.12 (a)
- saur - speak
V 5.4.1.1.3
5.4.1.3.14
- sae? - good
N 5.4.2.1.1
5.4.2.2.10
5.4.2.2.16
A 5.4.4
- sapatu? - shoe
V 5.4.1.3.7
N 5.4.2.1.1
- sato? - animal
N 5.4.2.1.1
5.4.2.2.12 (a)
- sakola? - school
V 5.4.1.1.3
N 5.4.2.1.1
- sakti? - powerful
V 5.4.1.1.3
N 5.4.2.2.4 (a)
5.4.2.2.10
A 5.4.4
- safat - shallow
V 5.4.1.1.3
N 5.4.2.2.16
A 5.4.4
- sabun - soap
N 5.4.2.1.1
- sabelas - eleven
Num. 5.4.5.2
- sabab - because
N 5.4.2.1.1
P 5.4
- sampir - approach
V 5.4.1.1.3
5.4.1.3.4
- sampean - you
Pn 5.4.3.5.2
- sambur - swoop
V 5.4.1.1.3
- sanes - other
N 5.4.2.1.1
- sanu? - rice (cooked)
V 5.4.1.1.3
- sangup - ready
V 5.4.1.1.3
N 5.4.2.2.10
5.4.2.2.16
A 5.4.4
- sangem - say
V 5.4.1.1.3
- sangem - willing
V 5.4.1.1.3
N 5.4.2.2.16
A 5.4.4
- saha? - who
P 5.4
- salapan - nine
V 5.4.1.1.3
N 5.4.2.2.4 (b)
Num. 5.4.5.1
- salapanbelas - nineteen
Num. 5.4.5.2
- sareq - and
V 5.4.1.1.3
5.4.1.3.14

sawah	-	rice field	heran	-	clean (for liquids)
N	5.4.2.1.1		V	5.4.1.1.3	
sayagi?	-	prepare	N	5.4.2.2.16	
V	5.4.1.1.3		A	5.4.4	
N	5.4.2.2.8		hoyon	-	want
hidin	-	black	V	5.4.1.1.3	
V	5.4.1.1.3			5.4.1.3.2.(a),(b),(c)	
N	5.4.2.2.7		N	5.4.2.2.15	
	5.4.2.2.16		hapuntan	-	forgive
A	5.4.4		V	5.4.1.1.3	
hidon	-	know	N	5.4.2.2.5 (a)	
V	5.4.1.1.3		hatur	-	invitation
N	5.4.2.2.16		V	5.4.1.1.3	
hiji?	-	one	N	5.4.2.2.1	
V	5.4.1.1.3		hate?	-	heart
N	5.4.2.2.4 (b)		V	5.4.1.1.3	
hirup	-	life	N	5.4.2.1.1	
N	5.4.2.1.1		handap	-	under
	5.4.2.2.10		N	5.4.2.2.13	
hila?	-	first	A	5.4.4	
V	5.4.1.1.3		halan	-	obstacle
	5.4.1.3.4		V	5.4.1.1.3	
N	5.4.2.1.1		N	5.4.2.1.1	
hiri?	-	joke	harita?	-	that time
V	5.4.1.1.3		P	5.4	
N	5.4.2.1.1		harep	-	front
hudan	-	wake up	V	5.4.1.1.3	
V	5.4.1.1.3		N	5.4.2.2.16	
N	5.4.2.1.1		A	5.4.4	
hujan	-	rain	hawek	-	greedy
V	5.4.1.1.3		N	5.4.2.2.4 (a)	
	5.4.1.3.3. (b)			5.4.2.2.16	
hejo?	-	green	A	5.4.4	
A	5.4.4		hawatos	-	worry
heran	-	surprise	V	5.4.1.1.3	
V	5.4.1.1.3			5.4.1.3.14	
	5.4.1.3.2 (b) (c)		N	5.4.2.2.16	
N	5.4.2.2.16		A	5.4.4	
A	5.4.4		hayam	-	chicken
			N	5.4.2.1.1	
				5.4.2.2.12 (a)	

hayang - want	čarios - say
V 5.4.1.1.3	V 5.4.1.1.3
5.4.1.3.2 (a),(b),(c)	N 5.4.2.1.1
N 5.4.2.2.4 (a)	
čikal - child (oldest)	čaram - forbid
N 5.4.2.1.1	V 5.4.1.1.3
5.4.2.2.16	
čiči? - fill (with liquid)	jiin - make
V 5.4.1.1.3	V 5.4.1.1.3
	N 5.4.2.2.12 (a)
čuraŋ - unfair	jin - and
V 5.4.1.1.3	P 5.4
P 5.4.2.2.16	
A 5.4.4	jumlah - total
	V 5.4.1.1.3
čekel - hold	N 5.4.2.1.1
V 5.4.1.1.3	
N 5.4.2.2.5 (a)	jurang - valley
	N 5.4.2.1.1
čokot - take (to grasp)	jeruk - citrus
V 5.4.1.1.3	N 5.4.2.1.1
čo?o? - play	jero? - inside
V 5.4.1.1.3	V 5.4.1.1.3
N 5.4.2.2.15	A 5.4.4
čobi? - try	jabī? - except
V 5.4.1.1.3	P 5.4
čoba? - try	jadi? - become
V 5.4.1.1.3	V 5.4.1.1.3
	N 5.4.2.2.10
čaj? - water	jaso? - rooster
V 5.4.1.1.3	N 5.4.2.1.1
N 5.4.2.1.1	5.4.2.2.12 (a)
čau? - banana	janten - thus
N 5.4.2.1.1	N 5.4.2.2.10
čaket - near	P 5.4
V 5.4.1.1.3	
N 5.4.2.1.1	jendela? - window
A 5.4.4	N 5.4.2.1.1
čagir - healthy	jajal - try
V 5.4.1.1.3	V 5.4.1.1.3
A 5.4.4	
	jajar - row
čankerem - grab	V 5.4.1.1.3
V 5.4.1.1.3	N 5.4.2.1.1

jalan	- street	libit	- full (of fruit)
N 5.4.2.1.1		N 5.4.2.2.16	
jalan	- walk	A 5.4.4	
V 5.4.1.1.3		linit	- lose
N 5.4.2.1.1		V 5.4.1.1.3	
jalaraan	- because	N 5.4.2.1.1	
N 5.4.2.1.1		liwih	- more
P 5.4		V 5.4.1.1.3	
jalmi?	- person	N 5.4.2.1.1	
N 5.4.2.1.1		liwinj	- forest
jarum	- needle	N 5.4.2.1.1	
N 5.4.2.1.1		luar	- out
5.4.2.2.12 (a)		V 5.4.1.1.3	
jawab	- answer	N 5.4.2.2.10	
V 5.4.1.1.3		lumpat	- run
N 5.4.2.1.1		V 5.4.1.1.3	
lima?	- five	5.4.1.3.14	
V 5.4.1.1.3		luncat	- jump
N 5.4.2.2.4 (b)		V 5.4.1.1.3	
Num. 5.4.5.1		5.4.1.3.14	
limabelas	- fifteen	luhur	- tall
Num. 5.4.5.2		V 5.4.1.1.4	
lingih	- stay	N 5.4.2.1.1	
N 5.4.2.1.1		5.4.2.2.13	
5.4.2.2.9 (a)		5.4.2.2.16	
liren	- rest	A 5.4.4	
V 5.4.1.1.3		luhur	- up
N 5.4.2.2.9 (b)		N 5.4.2.2.13	
liwat	- pass	A 5.4.4	
V 5.4.1.1.3		letak	- lick
lipas	- free	V 5.4.1.1.3	
V 5.4.1.1.3		5.4.1.3.4	
N 5.4.2.1.1		lesot	- loose
litik	- small	V 5.4.1.1.3	
V 5.4.1.1.3		A 5.4.4	
N 5.4.2.1.1		lepat	- mistake
5.4.2.2.7		V 5.4.1.1.3	
5.4.2.2.16		N 5.4.2.1.1	
A 5.4.4		5.4.2.2.10	
li?it	- drink	lebet	- enter
V 5.4.1.1.3		V 5.4.1.1.3	

lega?	- wide	lagu?	- song
V 5.4.1.1.3		V 5.4.1.1.3	
N 5.4.2.2.16		N 5.4.2.1.1	
A 5.4.4		lami?	- long (time)
lëmbur	- village	V 5.4.1.1.3	
N 5.4.2.1.1		N 5.4.2.1.1	
5.4.2.2.14		5.4.2.2.16	
lesu?	- weak	lamun	- if, to daydream
N 5.4.2.2.12 (a)		V 5.4.1.2.1	
A 5.4.4		N 5.4.2.2.12(a)	
5.4.4		P 5.4	
leres	- correct	landon	- remedy
V 5.4.1.1.3		V 5.4.1.1.3	
N 5.4.2.2.16		N 5.4.2.1.1	
A 5.4.4		lanček	- brother (older)
loba?	- many	V 5.4.1.3.1. (b)	
N 5.4.2.1.1		N 5.4.2.1.1	
5.4.2.2.16		5.4.2.2.2	
A 5.4.4		lanlayagan	- kite
lomari?	- cupboard	N 5.4.2.1.1	
N 5.4.2.1.1		lahir	- bear (a child)
5.4.2.2.12 (a)		N 5.4.2.1.1	
loḡok	- visit	laliḡ	- fly
V 5.4.1.1.3		N 5.4.2.1.1	
lain	- not	lalaki?	- male
P 5.4		V 5.4.1.1.3	
laut	- sea	N 5.4.2.1.1	
N 5.4.2.1.1		lawan	- resist
lauk	- fish	V 5.4.1.1.3	
N 5.4.2.1.1		riḡ	- dizzy
5.4.2.2.12 (a)		N 5.4.2.1.1	
laun	- slow	A 5.4.4	
V 5.4.1.1.3		rinčaq	- friend
N 5.4.2.2.16		V 5.4.1.1.3	
A 5.4.4		N 5.4.2.2.12 (b)	
lëtar	- floor	r#j#ḡ	- with
N 5.4.2.1.1		N 5.4.2.2.12	
labuh	- fall	P 5.4	
V 5.4.1.1.3		rupa?	- appear
5.4.1.3.5		V 5.4.1.1.3	
N 5.4.2.1.1		N 5.4.2.1.1	

rupa?	- type		
N	5.4.2.1.1		
repat	- busy		
V	5.4.1.1.3		
N	5.4.2.2.10		
rewon	- bother		
V	5.4.1.1.3		
	5.4.1.2.1		
N	5.4.2.2.5 (a)		
resep	- fond		
N	5.4.2.2.4 (a)		
	5.4.2.2.16		
rorompok	- house		
P	5.4.2.1.1		
	5.4.2.2.14		
rao.	- feel		
V	5.4.1.1.3		
	5.4.1.3.3 (a)		
N	5.4.2.2.4 (a)		
	5.4.2.2.16		
A	5.4.4		
ratu?	- king		
V	5.4.1.1.3		
N	5.4.2.1.1		
	5.4.2.2.10		
ra3rag	- fall		
V	5.4.1.1.3		
N	5.4.2.1.1		
rama?	- father		
N	5.4.2.1.1		
	5.4.2.2.3		
ramal	- predict		
V	5.4.1.1.3		
N	5.4.2.1.1		
ranjan	- bed		
N	5.4.2.1.1		
	5.4.2.2.12 (a)		
rah#t	- injure		
V	5.4.1.1.3		
N	5.4.2.1.1		
	5.4.2.2.16		
A	5.4.4		
rasa?	- feel		
V	5.4.1.1.3		
	5.4.1.3.3		
rahayat	- people		
N	5.4.2.1.1		
raja?	- rule		
V	5.4.1.1.3		
N	5.4.2.1.1		
wani?	- night		
V	5.4.1.1.3		
N	5.4.2.1.1		
	5.4.2.2.16		
waktos	- time		
V	5.4.1.1.3		
N	5.4.2.1.1		
waktos	- when		
P	5.4		
wadah	- place		
V	5.4.1.1.3		
N	5.4.2.1.1		
wani?	- bold		
A	5.4.4		
wap#l	- return		
V	5.4.1.1.3		
N	5.4.2.1.1		
wajib	- duty		
V	5.4.1.1.3		
N	5.4.2.1.1		
walupan	- river		
N	5.4.2.1.1		
wartos	- news		
V	5.4.1.1.3		
N	5.4.2.1.1		
wayan	- puppet show		
N	5.4.2.1.1		
	5.4.2.2.9 (c)		
yen	- that		
P	5.4		
yaktos	- true		
N	5.4.1.1.3		

English-Sundanese

able	- bisa?, tiasa?	book	- buku?
again	- d <i>4</i> i?	bored	- bos <i>4</i> n
and	- sare <i>ŋ</i> , j <i>4</i> n	bother	- rew <i>ŋ</i>
animal	- sato?	boundary	- batis
answer	- jawab	breathe	- ?ambekan
appear	- rupa?	brick	- bata?
approach	- sampir	bring	- bawa?
ascend	- tanjak	brother (older)	- lan <i>č</i> ek
ask	- penta?, ta <i>ŋ</i> a?, taros	brother (younger)	- ?adik
at	- di? - dina?	brush	- kuas
attic	- para?	busy	- repot
baby	- ?orok	but	- mu <i>ŋ</i> bae?
banana	- <i>č</i> au?	buy	- peser, b <i>4</i> li?
barrel	- to <i>ŋ</i>	by (agen- tive)	- ku?
bath	- mandi?	cage, stable	- kanda <i>ŋ</i>
bear (a child)	- lahir	call	- se <i>4</i> but, se <i>4</i> bat
beautiful	- gi <i>4</i> lis	cause (to cause)	- matak
because	- margi?, sabab, jalaran	chair	- korsi?
become	- jadi?	challenge	- ta <i>ŋ</i> ta <i>ŋ</i>
bed	- ranjan	change	- tukir, ganti?
beg	- suhun	character	- sipat
begin	- kawit, mimiti?	chase	- ?udag
belt	- bi <i>4</i> ir	chat	- ?obrol
big	- ?agi <i>ŋ</i>	check (a list)	- ?im <i>4</i> t
bind	- bi <i>ŋ</i> kit	chicken	- hayam
bird	- manuk	child	- putra?, ?anak, budak, mura <i>ŋ</i> kalik
bite	- se <i>4</i> gel	child (oldest)	- <i>č</i> ikal
black	- hid <i>4</i> n		
blunt	- papak		
body	- ?awak		
bold	- wani?		

chisel	-	tatah	drink	-	?inum, libit
citrus	-	jeruk	duty	-	wajib
city	-	kota?	eat	-	tuang, tedar?, dahar
clean	-	beresih	educate	-	?atik, ?ajar
clean (for liquids)	-	herang	egg	-	?endog
clear	-	ñata?	eight	-	dalapan
climb	-	taek	eighteen	-	dalapanbelas
close	-	tutup	eleven	-	sabelas
cobble- stone	-	balay	embarrass	-	?era?
color	-	pulas	end	-	tuntun
command	-	piwaran	enter	-	?asup, lebet
common	-	biasa?	evening	-	sore?
compare	-	banding	except	-	jabih?
completed	-	parantos	expense	-	?onkos
consider	-	pirosea?	expensive	-	mahal
continue	-	tuluy, terus, teras	experience	-	?alam
correct	-	binir, leres	eye	-	mata?
crocodile	-	buaya?	fall	-	ragrag, labuh
cupboard	-	lomari?	farewell	-	permios
cut	-	kirit	fast	-	tarik
danger	-	keris	father	-	bapa?, rama?
danger	-	balai?	feather	-	bulu?
dead	-	maeh	feel	-	raos, rasa?
defeat	-	?eleh	female	-	?awewe?
desire	-	palay, kersa?	fifteen	-	limabelas
die	-	maot	fill (with liquid)	-	čiči?
different	-	beda?	find	-	panggih
dig	-	kali?	fine	-	?alus
dirt	-	kotor	finish	-	beak
dirty (for liquids)	-	kiruh	first	-	hila?
disease	-	kasawat	fish	-	lauk
dizzy	-	riit	five	-	lima?
dog	-	?anjing	flee	-	kanji?
door	-	panto?	floor	-	latah
			flower	-	kembang

fly	-	?apun, lalir	hear	-	dene?
follow	-	?irin	heart	-	manah, hate?
fond	-	resap	help	-	mantu?
forbid	-	čaran	hit	-	pipih
forest	-	liwin	hoarse	-	pirna?
forgive	-	hapunten	hold	-	čekel
former	-	tilas	hot	-	panas
four	-	?opat	house	-	bumi?, rorompok
fourteen	-	?opatbelas	how	-	kumaha?
free	-	lipas	hurt	-	neri?
friend	-	kanča?, silain, rinčan	I	-	pribados, ?abdi?
from	-	ti? - tina?	if	-	lamun
front	-	harep	important	-	peryogi?
fruit	-	buah	increase	-	tambah
full (of fruit)	-	libit	injure	-	rahit
garden	-	kebon	inside	-	jero?
give	-	pasih, bere?	intelli- gence	-	pintur
glass	-	gelas	invitata- tion	-	hatur
go	-	?indit, ?angkat mios	iron	-	bisi?
good	-	binir, sae?	is, exists	-	?aya?
goose	-	sowan	joke	-	hiri?
grab	-	čankerem	jump	-	?ajrut, lunčat
graduate (finish)	-	tamat	just (equitable)	-	?adil
grand- father	-	?eyan	key	-	konči?
greedy	-	hawek	kick	-	dupak
green	-	hejo?	king	-	ratu?
guess	-	tobak	kite	-	lanlayan
guest	-	tatamu?	knife	-	peso?
happy	-	bingah	know	-	hiden
have	-	kagunan, gaduh	lack	-	kiran, kuran
he	-	manehna?	lake	-	talaga?
head	-	mastaka?	large	-	gede?
health	-	daman, mulus	later	-	?enje?
healthy	-	čagir	laugh	-	siri?
			lazy	-	kedul
			leaf	-	daun

leave	-	tinggal, kantun	mouse	
left	-	kenča?	deer	- pičan
letter	-	serat	mouth	- sunut
lick	-	letak	name	- qaran
lip	-	biwir	nation	- nagara?
live	-	hirup	near	- čakət
long	-	lila?, lami?	needle	- ĵarum
(time)			never	- tara?, moal
loose	-	lesot	news	- beĵa?, wartos
lose	-	lĳnit	night	- weni?
love	-	na?ah	nine	- salapan
loving	-	?asih	nineteen	- salapanbelas
lucky	-	mawat	noise	- gandin
make	-	ĵin	not	- tĳ?, lain
male	-	pameĵet, lalaki?	not yet	- ?učan
many	-	si?ir, loba?	now	- ?ayena?
march	-	?arak	observe	- teĵet
marry	-	tikah, kawin	obstacle	- halan
material	-	bahan	obtain	- ?ala?
may	-	keĳin, muĳi?	obvious	- tetela?, teran
May I			offer	- seba?
come in?	-	punten	office	- kantor
meaning	-	?arti?	often	- seriĳ
measure	-	?ukur	old	- kolot, sepuh
medicine	-	?ubar	one	- hiĳi?
memorize	-	?apal	other	- sanes
middle	-	teĳah	out	- luar
milk	-	susu?	pain	- si?il, neri?
minute	-	menit	parents-	
mistake	-	lepat	in-law	- mitoha?
modern	-	model	pass	- liwat
money	-	duit	pay	- ?artos
monkey	-	moĳet	pension	- paĳsiun
more	-	liwih	people	- rahayat
morning	-	?isuk, ?enĳin	person	- ĵalmi?
mother	-	?indun, biyan	picture	- gambar
mountain	-	gunun	place	- tempat, wadah

plant	-	pelak	return	-	mulih
play	-	?ulin, main, čo?o?	(home)	-	
please	-	maŋga?	rice	-	pera?, saŋu?
please	-	suka?	(cooked)	-	
(to please)	-		rice (un-	-	beas
point	-	tuduh	cooked)	-	
porridge	-	bubur	rice field	-	sawah
possess	-	boŋa?	rickshaw	-	beča?
pour	-	banjur	river	-	waluŋan
powerful	-	sakti?	rooster	-	jaŋo?
predict	-	ramal	rope	-	tambaŋ
prepare	-	sayagi?	round	-	bulid
priest	-	pandita	row	-	jajar
prison	-	panjara?	rule	-	raja?
(progressive	-		run	-	lumpat
action)	-	kir, nuju?	sad	-	sədih
pull	-	tarik	sandal	-	silop
puppet	-		satisfy	-	puas
show	-	wayaŋ	say	-	pok, saŋem, carios
purchase	-	balanja?	school	-	sakola?
purpose	-	maksud	scold	-	si?il
pus	-	nanah	scratch	-	koet
quick	-	tereh	sea	-	laut
quiet	-	ti?is	search	-	teaŋ
rack	-	?arak	see	-	tenjo?
rain	-	hujan	seven	-	tujuh
read	-	bača?	seventeen	-	tujuhbelas
ready	-	saŋgup	shallow	-	sa?at
receive	-	tarima?	shirt	-	kameja?
refuse	-	tampik	shoe	-	sapatu?
regulate	-	?atur	short	-	pondok
relative	-	dulur	shoulder.	-	taktak
remedy	-	landoŋ	sick	-	?udur
repay	-	bales	side	-	sisi?
resist	-	lawan	sign	-	tanda?
rest	-	liren	sink	-	tilam
return	-	pulaŋ, malik, waŋsel	sit	-	diuk
			six	-	genep

sixteen	-	genəpbelas	that	-	?itu?, yen
sleep	-	kuləm, mondok	that (near)-	-	?eta?
sleepy	-	pulas	that time	-	harita?
slice	-	tiktik	then	-	teras
slow	-	laun	thief	-	paliŋ
small	-	?alit, lɛtik	thin	-	kuru?
smile	-	?imut	think	-	pikir, kinten
soap	-	sabun	thirteen	-	tilubelas
soft	-	?əmoi?	this	-	?iyɛ?
soldier	-	ponɣawa?	three	-	tilu?
song	-	laɣu?	thrust	-	tewek
sound	-	sora?	thus	-	kiɛ?, ʃanten
south	-	kidul	tiger	-	mauŋ
speak	-	saur	tile	-	?ubin
spoon	-	sendok	time	-	waktos
stand	-	tanɣuŋ	to, toward	-	ka?
stay	-	lingih, matuh	tolerant	-	ma?lum
steal	-	paok	ton	-	ton
sting	-	sirit	total	-	ʃumlah
stop	-	?irin	tree	-	tanɣal
store	-	toko?	trick	-	?akal
street	-	ʃalan	true	-	yaktos
strong	-	kiat, kuat	trust	-	perčaya?
study	-	?ajar	try	-	čobi?, čoba?, jaʃal
stupid	-	bələgug	turn	-	penkol
sun	-	poe?	twelve	-	duabelas
suppose	-	kira?, nana?	two	-	dua?
surprise	-	heran	type	-	rupa?
sweet	-	?amis	umbrella	-	payuŋ
swim	-	koʃay	uncle	-	paman, ?əmaŋ
swoop	-	sambur	under	-	handap
table	-	meʃa?	uneasy	-	melaŋ
take (to (grasp)	-	čokot	unfair	-	čuraŋ
tall	-	luhur	until	-	tepi?
tent	-	tenda?	up	-	luhur
thank	-	nuhun	use	-	pake?
			usually	-	?osok

valley	-	ḡuraḡ	year	-	taun
very	-	pisan, pohara? kačidab, tšiq	yes	-	?əña?, sumuhun
village	-	kampung, lembur	yesterday	-	kamari?
visit	-	lonok	you	-	?anjin, maneh, sampean
wait	-	dago?	young	-	ḡora?
wake up	-	hudaḡ			
walk	-	ḡalan			
want	-	hoyon, hayaḡ			
water	-	čai?			
we	-	?uraḡ			
weak	-	lesu?			
week	-	mingu?			
what	-	naon			
when	-	?iraha?, waktos			
where	-	mana?			
white	-	bodas			
who	-	saha?			
why	-	naha?			
wide	-	leḡa?			
wife	-	pamaḡikan, boḡo?, ḡiraha?			
will (future)	-	?arek			
willing	-	daek, sangem			
willing- ness	-	daek			
wind	-	?aḡin			
window	-	ḡandela?			
wish	-	karəp			
with	-	ršḡiq			
women	-	?istri?			
word	-	kečap			
work	-	damel, ḡawe?			
worry	-	hawatos			

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Note:

This list does not pretend to be exhaustive. It represents the titles I was able to find in book shops and the government printing office between the years 1953-56.

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