

THE BARITO ISOLECTS OF BORNEO:
A Classification Based on
Comparative Reconstruction and Lexicostatistics

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Comparative Reconstruction and Lexicostatistics

by

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FOREWORD

This study of Bornean languages by Alfred B. Hudson constitutes a major contribution to the linguistic history of this group and its place within the large Austronesian family. Of special interest to the field of general linguistics, as well as to specialists in other disciplines, who are studying this important part of the world, results of the study are greatly enhanced by the author's use, both of the methods of comparative reconstruction and those of lexicostatistics. Indeed, the data alone are no small contribution, for in this area, as in many others, linguistic history is hampered by the lack of reliable information.

Though Dr. Hudson wrote his dissertation, of which this study was a part, in the field of anthropology, he is demonstrably equally at home in the field of linguistics. His extensive study of the Ma'anjan on the one hand, and his linguistic studies on the other, virtually constitute two separate but integrated dissertations. Both fields may congratulate themselves on having a member who combines with such high competence the methods and techniques of each.

Dr. Hudson has already begun plans for expanding his linguistic studies of Borneo, both in depth and breadth, in the near future. It is with considerable anticipation that the results of his further research are awaited.

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Ithaca, New York
August 1967

PREFACE

From December 1962 to May 1964, I was engaged in anthropological field research in three Ma'anjan Dajak communities in the Indonesian province of Central Kalimantan. In the course of my work, I collected traditional oral histories that indicated that the Ma'anjan had originated from an area somewhat to the east of their present territory, in an area called the Hulu Sungai district, that is now inhabited by speakers of Bandjar Malay. I began a search for historical corroboration of this tradition, but found little relevant data in the literature. In areas of the world where historical records plumb to no great depth, linguistic evidence often provides one of the few keys to the establishment of ethnic relationships and the interpretation of pre- and proto-historic events. I consulted published ethnic and linguistic classifications, but found much evident confusion, deriving primarily from a lack of accurate comparative data and from imprecision in the application of terminology in existing classifications. I thereupon began gathering my own linguistic data from various Dajak and Malay groups to provide the corpora for comparative analysis that was to provide a classification.

The bulk of my field time in Borneo was spent within the confines of a small Ma'anjan community which offered few opportunities for the accumulation of linguistic material from non-Ma'anjan sources. Consequently, when I travelled to the coastal city of Banjarmasin every six months, to renew my cholera immunization, I made it a practice to seek out young Dajaks who were enrolled at the various educational and technical institutions located in that city. There I was able to find bright young people, in their late teens and early twenties, fresh from remote inland villages. I found that these students made excellent informants. However, since my sojourns in Bandjarmasin never lasted more than a few days to a week, I was forced to choose between working intensively with one or two informants, to collect large corpora on a small number of languages, or of limiting myself to the collection of a limited lexical list from a large number of languages. I ultimately decided on the latter course as being more productive at this period, and eventually collected comparable lexical material, representing twenty-five languages, or, as I term them, isolects.

I employed both comparative reconstruction and lexico-statistical techniques in analyzing my materials, the two yielding essentially identical results in terms of the subgroupings that emerged. As the result of my analysis, I was able to assign fifteen of the isolects represented to a unit which I have labeled the Barito family. Three of the isolects turned out to be Malay; the rest of the lists represented isolects having affinities to languages beyond the domain of the Barito and Malay groups.

It is the primary aim of this paper to set forth my classification of the Barito isolects, and to support the classification by presenting the evidence upon which it is based. Since by nature linguists are skeptics, I have appended the complete set of word lists with which my analyses have operated in order to facilitate replicability of results or correction of my own errors by other interested scholars. The problems involved in identifying and scoring cognates in the lexicostatistical method make it especially important that the comparative lists used be published, not only to provide the opportunity for replicability by independent scholars, but to facilitate the comparison of newly gathered material with old.

The historical interpretation of my classification is not included in this work, but will appear in future publications. In a forthcoming article, to be published in the journal, INDONESIA, I will use the linguistic evidence of discontinuous distribution of the Southeast Barito isolects to substantiate my contention that early pepper cultivation in the Hulu Sungai area was in the hands of Dajaks practicing swidden cultivation, and only later taken over by Bandjar Malays when the Dutch monopoly in other areas of the Indonesian archipelago increased the demand for Bandjar pepper.

Another article will deal with a re-evaluation of the evidence bearing on the purported immediate genetic relationship of Malagasy and Ma'anjan. Here I merely point out that there are many Dajak languages not exhibiting similarities to Malagasy, that are obviously more closely related to Ma'anjan than is the Madagascar isolect. It remains to be proven that Ma'anjan is the closest linguistic relative of Ma'anjan. A Malagasy list is appended for reference by interested scholars.

I wish to acknowledge my debt to the Ford Foundation Foreign Area Training Program for supporting my Bornean field research.

Alfred B. Hudson

August 1967

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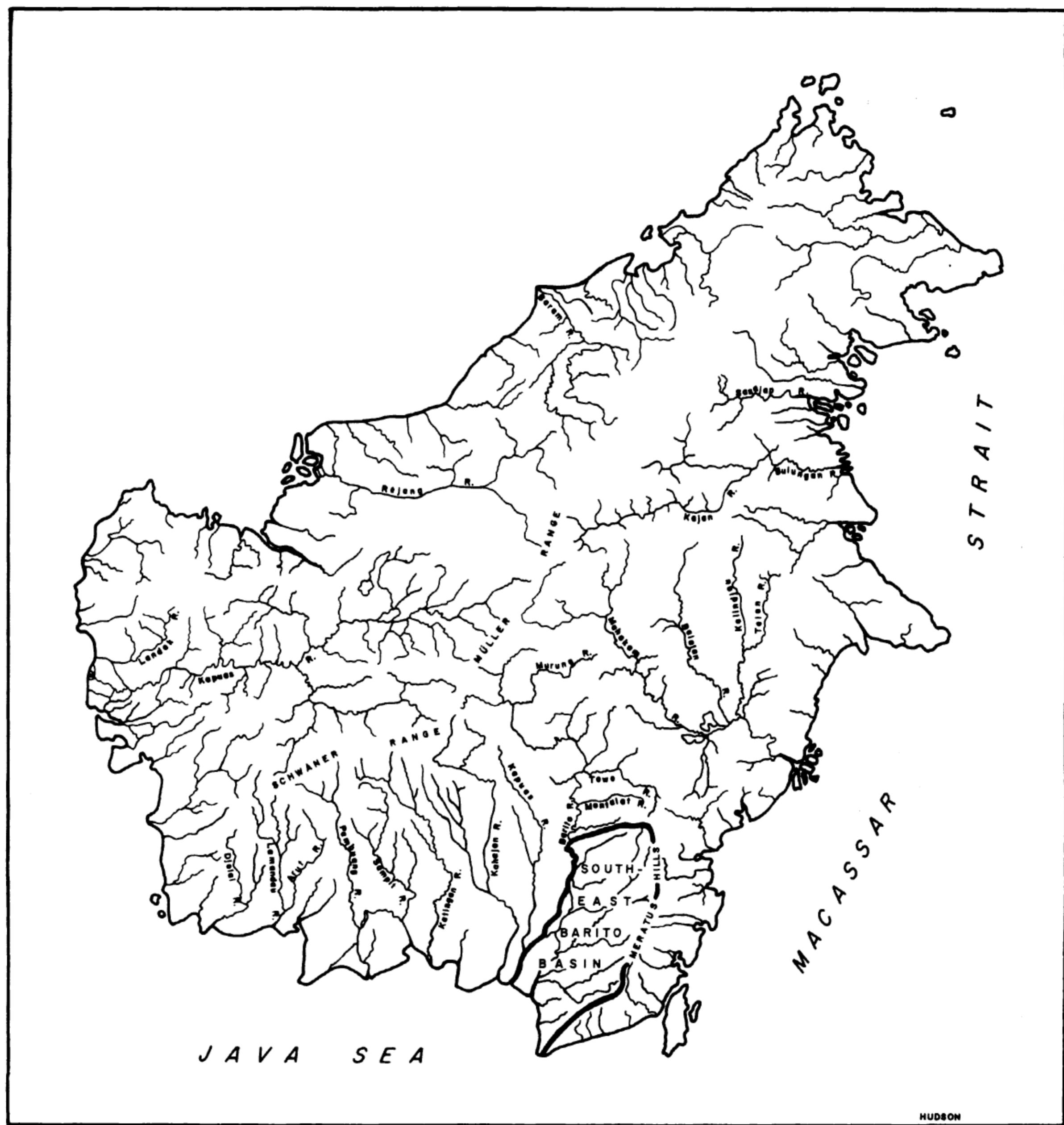
INTRODUCTION

Southern Borneo, comprising the Indonesian provinces of South and Central Kalimantan, is an area exhibiting a fair amount of linguistic variation within the confines of the West Indonesian branch of the Austronesian family. There are two main groups of languages represented in this area: the Malay and the Barito. The speakers of Malay inhabit mainly the coastal regions of the area but their distribution continues far inland along the courses of the larger rivers. The speakers of the Barito languages fall under the indeterminate rubric of Dajak, and occupy the inland areas to the east and west of the Barito River (see Maps 1 and 2).

In this paper I will propose a more detailed, and I hope somewhat more consistent classification of the south Bornean languages than has been available heretofore. This classification is based on linguistic evidence derived from the phonological and lexicostatistical analysis of a set of comparable word lists collected in the field by the writer.

It will be good to begin my exposition with a consideration of the much used, but frequently misunderstood terms, "Dajak" and "Malay". "Dajak" is a general term that has been used to denote all non-Moslem indigenous peoples of Kalimantan.¹ In summarizing his discussion of

¹This convention has been regularly followed by Dutch and German scholars,



MAP 1: BORNEO, SHOWING THE SOUTHEAST BARITO BASIN

"Dajak," Mallinckrodt, the principal authority on ethnic classification in southern Borneo, finds that the origin of the word is debatable, but goes on to say that:

...it is certain that the population, with the exception of the Sea Dajaks, does not use the term to refer to themselves. For the majority of the population it is taken as an abusive term similar in meaning to "hick," "yokel" and "hillbilly." However, in most recent times, since Nationalism has made an entrance into Borneo, the people consider it a suitable word with which to express the solidarity of the Bornean population. At least the word has been incorporated into the names of some associations, such as the Sarikat Dajak and the Co-operatie Dajak; the first pursues political ends with a nationalistic tendency while the second establishes the economic interests of the Dajak population in opposition to those of foreigners, especially Malays and Chinese. The lumping together of all the heathen tribes under the rubric "Dajak" has the disadvantage that the often very considerable mutual differences tend to be obscured, giving the impression that they all have the same origin, which is by no means proven. The converted heathens who have embraced Christianity also consider themselves to be Dajaks.²

Thus "Dajak" has about the same specificity of meaning as the term (American) "Indian," and both of these categories can be broken down into a number of more meaningful units consisting of tribes, or the Indonesian equivalent, suku.

In the Bornean context, the term "Malay" is the reciprocal of "Dajak," and in an equally general way is used as a cover for all Moslems of "Indonesian" origin.³ Moslems of Dajak origin have usually been placed in

and others dealing primarily with the Indonesian part of the island. Leach, under the influence of Harrisson, has suggested that this practice also be followed by investigators concerned with Sarawak and Sabah. See Leach 1950, 51.

² Mallinckrodt 1928: I, 10. Translated by the author.

³ Mallinckrodt 1928: I, 9. The "Indonesian" qualification distinguishes Moslems indigenous to the Indonesian archipelago and vicinity from those of Arabic, Indian or other foreign origin.

the Malay category, but there are inconsistencies in this respect. For example, Mallinckrodt appends the Bakumpai, a Dajak tribe that was converted to Islam some centuries ago, to his Ngadju Dajak category, with the ambiguous note that, "strictly speaking, this tribe which consists of devout Moslems does not belong here. However, by descent they do."⁴ The reason for this ambiguity becomes apparent in the light of the additional information that the Bakumpai "originally belonged to the Ngadju and their language is a dialect thereof."⁵ In short, linguistic factors crosscut the purely religious definition of "Malay" and "Dajak," and Mallinckrodt could not quite bring himself to class the Bakumpai, whom he knew through personal contact to be ethnically closely related to known Dajak tribes, with the "real" Malay Bandjar, with whom they shared a common religion but from whom they otherwise remained quite distinct. In this case we have a strongly Islamicized group that retains its native Dajak language. In the case of the Iban, or Sea Dajaks of West Kalimantan and Sarawak, we have a non-Islamic group that speaks a language obviously derived from the Malay-South Sumatra homeland of the "Malay" language.⁶

As Mallinckrodt himself realizes, the classical Dajak-Malay distinction "has to do with differences of a religious nature, rather than with differences of origin."⁷ However, it was not by choice that he based his ethnic classification of Bornean peoples on distinctions of religion and adat, or customary law.

⁴ Mallinckrodt 1928: I, 27.

⁵ Mallinckrodt 1927, 578.

⁶ Sandin 1956, 54-81.

⁷ Mallinckrodt 1928: I, 9.

...One great defect pervades the entire literature on Borneo, virtually obstructing the investigation of the tribal relationships obtaining between the different subgroups of the population. This is the fact that no linguists have studied the most prominent languages of the island, with the result that almost nothing is known about them. Hardeland's Ngadju dictionary stands alone; the various other word lists that exist were all compiled by laymen and are of comparatively little use for the determination of language relationships...We must thus, on the whole, base a tribal classification on material derived from adat law...⁸

Along with Mallinckrodt, I feel that an ethnic classification based on linguistic relationships would be very useful at this stage in the development of Borneo research. Fortunately there is enough material available today to allow us to attempt one, at least for the part of southern Borneo with which we are concerned.

Linguistic Classification

Henceforth the term "Dajak" will be reserved for languages, and their speakers, indigenous to Borneo. A language will be considered indigenous to Borneo if it has not been shown to have closer affinities to languages indigenous to regions outside Borneo than it has to other Borneo languages. This definition is purposely put in the negative. Borneo languages will be considered to be indigenous, i.e., "Dajak," until shown to be otherwise.⁹

⁸ Mallinckrodt 1928: I, 5-6. Mallinckrodt apparently had no linguistic training and little respect for word lists. There is no denying the paucity of linguistic materials for Borneo and especially for what is now Indonesian Kalimantan, but the compilation of a few word lists for languages spoken in the Barito region, where Mallinckrodt lived for some years, might have clarified some aspects of the picture of ethnic relationships that he presents in his writings.

⁹ It should be noted that this definition excludes the Ibans or Sea Dajaks, sometimes considered to represent the epitome of Dajakness. In reality, the Iban are fairly late-comers to the Bornean scene who became

Non-Dajak languages fall into several categories, of which "Malay" is one.

...It is to be observed at present that on Borneo, along the coasts and along the rivers up to deep into the interior, languages are spoken which, in spite of small differences between them, show a striking similarity with Malay as it is used, with many variations, over a large area on Sumatra and in the Malay Peninsula. This similarity is so striking that scholars have been fully justified in calling them Malay dialects. Other languages, which are occasionally indicated by a name of their own, like Banjarese and Sea Dayak will undoubtedly have to be counted among these dialects.¹⁰

The term "Malay" will be used to indicate languages more closely related to those of the Malaya-South Sumatra region than to other indigenous Bornean languages.¹¹ Other non-Dajak languages include Bugis, originating in south Celebes, various languages from the Philippines, and several Chinese languages.

So much for general terminology. Since we are primarily interested in the Southeast Barito Basin, it will be sufficient to discuss one Malay language, Bandjar, and a closely related group of Dajak languages that form what I call the Barito family. I will deal with the latter first.

The Barito Family

Languages of the Barito family are spoken in the area of southern

hyperacculturated to Bornean ways. They came, apparently, from Sumatra and settled originally in the Kapuas basin of western Borneo. They did not move extensively into Sarawak until the end of the eighteenth century. See Richards 1949 and Sandin 1956. The Malay affiliation of the Iban language is supported by the quotation cited on p. 28.

¹⁰ Cense and Uhlenbeck 1958, 3-4.

¹¹ For a summary of the Malay dialects of Borneo, see Cense and Uhlenbeck 1958, 7-13.

Kalimantan limited roughly by the Sampit (or Mentaja) River on the west;¹² the Schwaner and Müller ranges, the Busang, Murung and Mahakam rivers on the north; and, disregarding the Malay and Bugis coastal groups, by the Java Sea and Macassar Strait on the south and east (see Map 2). This is the area inhabited by the "Ngadju" ethnic group according to Kennedy,¹³ the "Ot Danum" by Mallinckrodt,¹⁴ and alternately "Ot Danum" and "Ngadju" by Esser.¹⁵ Tjilik Riwut divides this area into two coordinate ethnic regions, the "Ot Danum" and the "Ngadju."¹⁶

Neither "Ot Danum" nor "Ngadju" has a precise ethnic referent. Like "Dajak," both had an original pejorative connotation of "hick" or "person of the interior," and neither is used by any group to refer to itself. Among scholars the terms have gained respectability through recurrent usage, but even here they remain ambiguous. While both Ngadju and Ot Danum are used on occasion to indicate the extended linguistic group I call the Barito family, they are also commonly used to refer to ethnic linguistic groups of more limited extent, Ngadju for my Southwest Barito group,¹⁷ and Ot

¹² For a comment on the western limits of the Barito family, see pp. 29-30 below.

¹³ Kennedy 1962, 84.

¹⁴ Mallinckrodt 1928: I, 21-31.

¹⁵ Esser follows Mallinckrodt in using the term Ot Danum in his list of major Borneo language families. However, on his map he has the word "Ngadju" prominently displayed in the middle of the relavent area, and the term "Ot Danum" does not appear. Atlas 1938, Map 9b.

¹⁶ Tjilik Riwut 1958, 207.

¹⁷ E.g., see Mallinckrodt 1928: I, 26-27; Cense and Uhlenbeck 1958, 42-45; Hardeland, the author of the standard Ngadju grammar and dictionary, uses the term in this limited sense.

Danum both for my Northwest Barito group¹⁸ or even more narrowly for the Dohoi language.¹⁹

Because of the denotative ambiguity and the underlying pejorative meaning of "Ngadju" and "Ot Danum," I propose to use the term Barito family to refer to the collective group of languages spoken in the southern Kalimantan region delimited in the preceding paragraph. I use "Barito" for several reasons: it is a term of some antiquity in the region, appearing in historical records as early as the fourteenth century;²⁰ it appears to be neutral in connotation; it has not been used before in an ethnic or linguistic sense and thus will not introduce any new ambiguities; it does not give "preference" to any constituent language or language group;²¹ and finally, because the main bundle of isoglosses separating the two immediate subgroups of the southern Kalimantan region runs roughly along the Barito River.

I will now give an outline of my classification of the languages of the Barito family. This is not the place to give a complete analysis of all the data bearing on the problem, and I will present only enough examples to indicate the general line of reasoning upon which the classification is based.

The classification is based on two independent techniques of analysis, the establishment of contrastive sound correspondences, and lexico-

¹⁸ See Mallinckrodt 1928: I, 21-25; Cense and Uhlenbeck 1958, 45-46.

¹⁹ See Lumholtz 1920: II, 327.

²⁰ Pigeaud 1962: III, 16; IV, 32.

²¹ "Ngadju" and "Ot Danum" in their more restricted meanings apply only to languages of my West Barito group.

statistical subgrouping.²² My data are taken from sixteen word lists collected in Kalimantan. The lists consist of some 350 terms divided among three sections. The first section contains the 215 items of the original Lees-Swadesh basic vocabulary list;²³ the second contains 107 items of basic Dajak vocabulary compiled by the author; the third consists of kinship terminology extending up and down three to five generations, outward to three to five degrees of collaterality and including affines.²⁴ Items from all three sections were used for establishing sound correspondences, and 196 of the items on the Lees-Swadesh list were used for the lexico-statistical analysis.²⁵

Each informant from whom a list was obtained was a native speaker of the "language" represented by that list. That is, it was the language of orientation in his natal household. Most of the lists were obtained in Bandjarmasin on the few occasions that I visited the city,²⁶ for it was

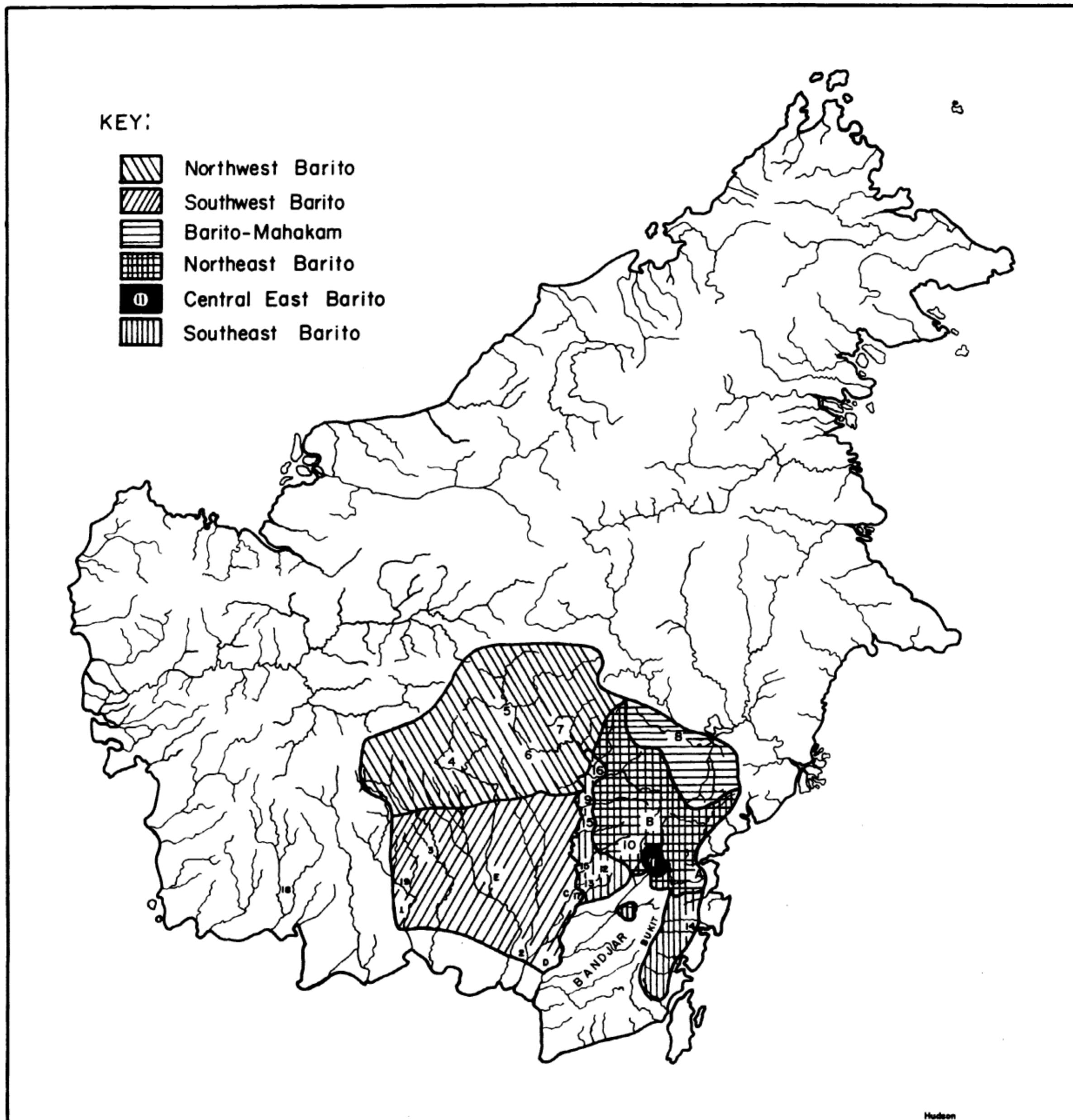
²² "Lexicostatistical subgrouping" is not to be confused with "glotto-chronology." See Hymes 1960, 4. For a discussion of the methodology of lexicostatistical subgrouping, see Dyen 1960, 1962, 1965; and Hymes 1960, 24-27.

²³ See Lees 1953.

²⁴ The completed word lists for the sixteen languages of the Barito family, plus a Bandjar list, appear in Appendix II.

²⁵ It seemed reasonable to use the same 196 items already utilized by Dyen for his Austronesian classification. See Dyen 1965, 16-17.

²⁶ With the exception of the one or two languages accessible to me in Telang, I was able to devote only about two to three weeks to collecting linguistic material when I was in Bandjarmasin. I decided that it would be best to use the limited amount of time available to collect a fairly extensive word list from as many languages as possible, for purposes of subgrouping, rather than concentrate on a more detailed description of one or two languages. (These remarks do not apply to Ma'anjan.) In all I collected some 22 lists representing not only the Barito family, but several other Malay and Dajak languages. I obtained two lists each for Paku, Dusun Dejah and Dusun Witu.



**MAP 2: APPROXIMATE DISTRIBUTION OF SUBGROUPS
OF THE BARITO LANGUAGE FAMILY**

KEY TO MAP 2: LANGUAGE GROUPS OF THE BARITO FAMILY

Numbers indicate location of informants' home villages; letters indicate related dialects not represented by full word lists.

ISOLECT

VILLAGE OF ORIGIN

Southwest Barito:

1	Ba'amang	Ba'amang (Sampit)
2	Kapuas	Kuala Kapuas
3	Katingan	Pendahara
C	Mengkatip	
D	Bakumpai	
E	Kahajan	

Northwest Barito:

4	Dohoi	Tumbang Sian
5	Murung-1	Muara Djuloy
6	Murung-2	Kelapi' Baru
7	Siang	Olung Apat

Barito-Mahakam:

8	Tundjung	Muara Bunjut
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Northeast Barito:

9	Tabojan	Malungai
10	Lawangan	Ampah
A	Pasir	
B	Bawu	

Central East Barito:

Dusun Dejah	Mengkopong
-------------	------------

Southeast Barito:

12	Paku	Tampa
13	Ha'anjan	Siong
14	Samihim	Mangka'
15	Dusun Witu	Baruang, Marawan
16	Dusun Malang	Nihan

Coastal Malay:

17	Bandjar	Kelanis
18	Delang	Delang
19	Tamuan	Luwuk Buntur

only there that I was able to find speakers of languages from the more remote parts of Kalimantan. Most of the informants were students at various educational institutions in Bandjarmasin, were young and had not been away from their natal region long enough to lose command of their native language. Numbers indicating the location of each informant's village of origin will be found on Map 2.

The language appellations applied to each list were supplied by the informants. Although each list is identified by a different name, they do not all necessarily represent independent languages. The distinction between language and dialect is often a difficult one to make, and this is particularly true in Kalimantan. The same language is known by different regional names in different places. I will use the term "isolect" for any language unit that is accorded a separate name by its speakers, regardless of whether it is, technically, a dialect or language.²⁷ Thus, the Southwest Barito group (see below), for example, may very well form a single dialect area,²⁸ but in each river drainage the language receives a separate name, e.g., Bahasa Mangkatip,²⁹ Bahasa Kapuas, Bahasa Katingan, Bahasa Bakumpai, Bahasa Kahajan, Bahasa Sampit, etc., leading to a seeming prolifera-

²⁷ The term "isolect," which I propose here, denotes a language isolate of undefined scope. It subsumes the traditional linguistic appellations of "dialect" and "language" in both their technical and non-technical meanings. The use of "isolect," which is connotationally neutral in regard to dialect-language identification, obviates the need for defining the precise status of a language isolate when such a definition is, for any reason, impracticable, and it eliminates any possibility of ambiguity that might arise from the misconstruction of the specificity of the terms "language" or "dialect" by the unwary reader.

²⁸ Bloomfield 1933, 51.

²⁹ Bahasa is the Indonesian term for 'language,' or rather, 'isolect.'

tion of languages in the area. This multiplicity of names should not be allowed to give the impression that this is necessarily an area of great linguistic diversity.

Although a certain reserve is necessary in view of the great gaps in our knowledge, we still agree with Kern and Leach that the profusion of languages in Borneo has been overestimated by former observers and even to a certain extent by Ray. Slight differences, mostly of a lexical nature and occasionally in some parts of the phonemic system, have led the observers, who usually lacked linguistic training, to postulate the presence of separate languages on occasions when there hardly seems to exist a reason to speak of separate dialects.³⁰

The sixteen lists represent the following isolects: Ba'amang, Dohoi, Dusun Dejah, Dusun Malang, Dusun Witu, Kapuas, Katingan, Lawangan, Ma'anjan, Murung-1, Murung-2, Paku, Samihim, Siang, Tabojan, and Tundjung. This set of lists by no means exhausts the roster of isolects belonging to the Barito family, but it does give representation to the principal subgroups of that family. Two languages, Tundjung and Murung-1, are represented by incomplete lists, although occasional forms are missing for some other languages as well.

The Barito family is divided into three major subgroups: the West Barito, the East Barito and the Barito-Mahakam groups. The Barito-Mahakam group is represented by only one list and is not further subdivided here.³¹ The West Barito group is further divided into two minor subgroups: the Northwest and the Southwest Barito groups. Similarly, East Barito contains three minor subgroups: the Northeast, the Central East and the Southeast Barito groups. The constituents of minor subgroups are individual iso-

³⁰ Cense and Uhlenbeck 1958, 6.

³¹ When more language material is available from the Mahakam region, the Barito-Mahakam group may be found to have minor subgroup diversity similar to that of the East and West Barito groups.

lects. The general scheme of the classification is presented in Table 1.

TABLE 1: GENERAL SCHEME OF LINGUISTIC CLASSIFICATION OF THE BARITO FAMILY

Family	Major Subgroup	Minor Subgroup	Isolect
Barito	Barito-Mahakam		Tundjung
	West Barito	Northwest Barito Southwest Barito	Dohoi Murung-1 Murung-2 Siang Ba'amang Kapuas Katingan
	East Barito	Northeast Barito Central East Barito Southeast Barito	Tabojan Lawangan Dusun Dejah Dusun Malang Dusun Witu Paku Ma'anjan Samihim

The following summary will refer mainly to divergent sound correspondences isolating subgroups within the East and West Barito groups. Since the list of items representing Tundjung is not complete, there is not enough material available to allow any strong conclusions to be drawn regarding the precise status of the Barito-Mahakam group vis-a-vis the other major subgroups of the Barito family. It can only be mentioned that although Tundjung appears to show closer affinities with the West Barito

than with the East Barito group,³² which also contrasts with the West Barito languages in certain respects.³³ Also, since Tundjung shares some characteristics with the Northwest Barito group, some with the Southwest Barito group, and contrasts with others of the West Barito languages in others, for the present I prefer to classify Barito-Mahakam as a separate major subgroup within the Barito family, coordinate with both East Barito and West Barito.

The main criteria distinguishing the East Barito from the West Barito isolects are based on their segmental reflexes of the Proto-Barito phonemes */h/ and */tj/. Proto-Barito */h/ continued as */h/ in Proto-West Barito, but was replaced by /j/ in Proto-East Barito.³⁴ Proto-Barito */tj/ apparently had two phonologically conditioned allophones.³⁵ Proto-Barito */tj/ continued as /tj/ in Proto-West Barito, where it is reflected by /tj/ and/or /dj/ in some West Barito isolects. The allophones of */tj/ (P-B) split in Proto-East Barito, with one allophone merging with */r/ (P-EB) and the other allophone merging with */l/ (P-EB). This split and coalescence process resulted in the loss of /tj/ from the inventory of Proto-East Barito phonemes. The shifts that led to the contrastive sound correspondences that distinguish from each other the isolects of the East Barito and West Barito groups are summarized below. The

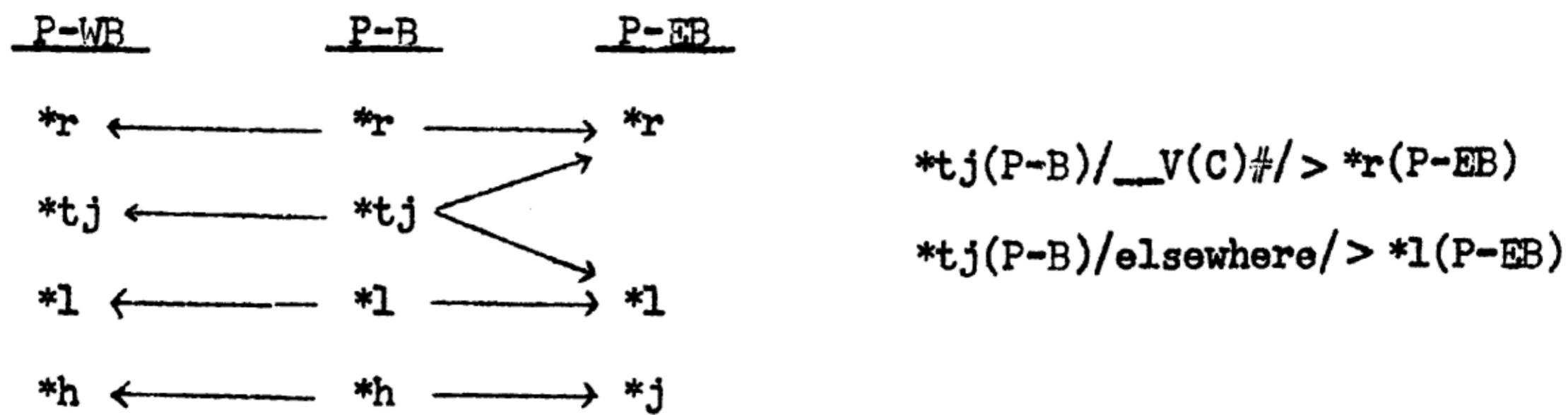
³² Tundjung, like the West Barito dialects, shows a /tj/ reflex of Proto-Barito */tj/, and an /h/ reflex of Proto-Barito */h/, both of which contrast with the East Barito reflexes of these protophonemes. See Appendix I, pp. 38-42.

³³ See Appendix I, pp. 55-57.

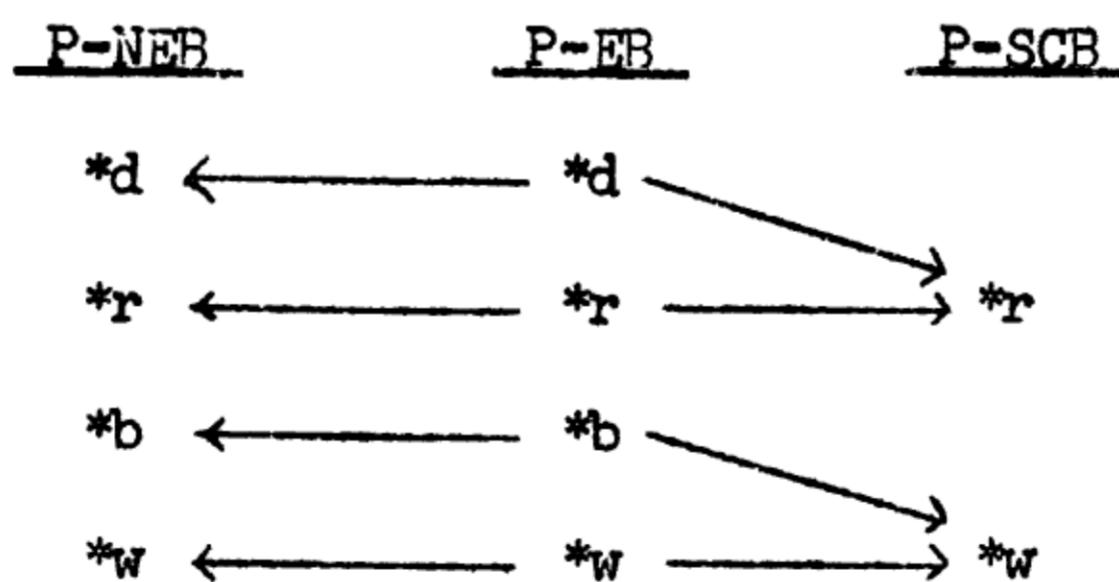
³⁴ /j/ represents a palatal semivowel.

³⁵ See Appendix I, p. 39.

conditioning factors governing phonemic splits are indicated to the right of this and subsequent summary diagrams.



Within the East Barito group, the criteria distinguishing the Northeast Barito isolects from the Central East and Southeast Barito isolects are based on their divergent reflexes of Proto-East Barito */b/, */d/, and */t/.³⁶ Proto-East Barito */b/ continues as */b/ in Proto-Northeast Barito (P-NEB), but merges with */w/ in Proto-Central East-Southeast Barito (P-CSB).³⁷ P-EB */d/ continues as */d/ in P-NEB, but merges with */r/ in P-CSB. The contrasting reflexes produced by these two shifts may be depicted as



³⁶ */b/(P-EB) < */b/(P-B); */d/(P-EB) < */d/(P-B); */t/(P-EB) < */t/(P-B).

³⁷ /w/ represents a voiced bilabial spirant.

CEB and SEB isolects also contrast with NEB isolects in terms of the divergent reflexes of */t/(P-EB) that appear in some environments, where isolects of the former two groups show an /s/ reflex and those of the latter group a /t/ reflex. This shift will be discussed in the following paragraph.

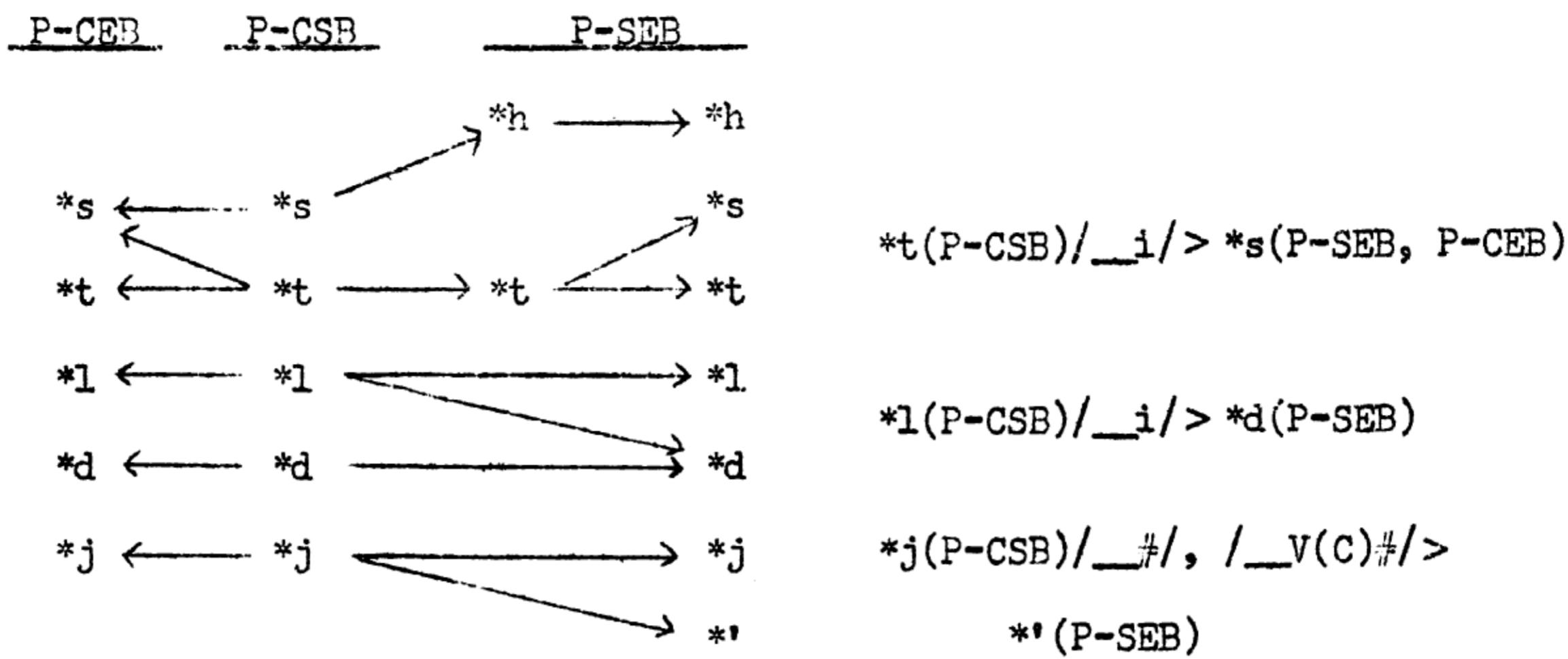
The Southeast Barito isolects diverge from the other CSB and East Barito isolects in their reflexes of the CSB proto-phonemes */s/, */l/, and */j/.³⁸ Proto-CSB */s/ continues as */s/ in P-CEB but is replaced by */h/ in P-SEB. Proto-CSB */t/ apparently had two phonologically conditioned allophones.³⁹ One allophone occurred immediately before */i/(P-CSB) (i.e., */_i/), and this allophone merged with /s/ in CEB and was replaced by */s/ in P-SEB after the shift */s/(P-CSB)> */h/(P-SEB) had taken place. The other allophone of */t/(P-CSB) continued as */t/ in P-CEB and P-SEB.

Proto-Southeast Barito */l/ also had two allophones, with one occurring immediately before */i/(P-SEB) (i.e., */_i/) and the other occurring elsewhere. Proto-SEB */l/ split, with the first allophone merging with */d/(P-SEB) and the second allophone continuing as */l/(P-SEB). Proto-SEB */j/ also split, with one allophone, occurring either finally or as the initial consonant in a final syllable terminated with a voiceless stop (i.e., */_#/ or */_VT^{vcl}#/), being replaced by */⁹/(P-SEB),⁴⁰ and the other allophone, occurring elsewhere, continuing as */j/(P-SEB). These shifts may be represented briefly as

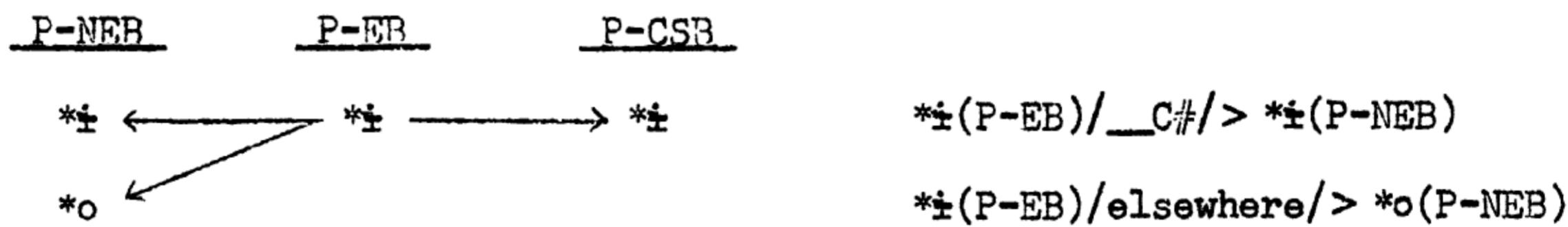
³⁸ */s/(P-CSB)< */s/(P-B); */l/(P-CSB)< */l/(P-B) and < */tj/(P-B); */j/(P-CSB)< */h/(P-B).

³⁹ See Appendix I, pp. 45-46.

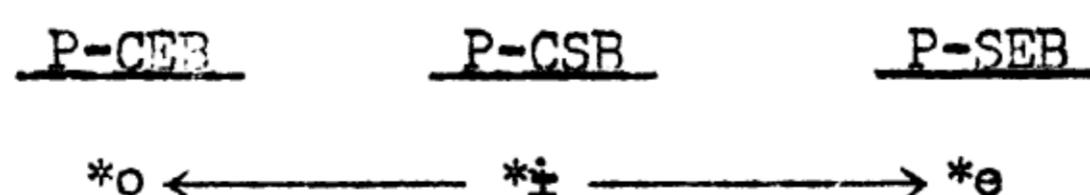
⁴⁰ ⁹/ represents a glottal stop.



The three constituent subgroups of the East Barito group exhibit a three-way contrast in the reflexes of Proto-East Barito */i/.⁴¹ Proto-EB */i/ split in P-NEB, with one allophone, occurring before final consonants (i.e., */C^h/), continuing as /i/(P-NEB) and the other, occurring elsewhere, becoming established as an independent phoneme */o/(P-NEB). */i/ (P-EB) continued as */i/ in Proto-CSB. This shift may be depicted as



Proto-CSB */i/ became gradually backed in P-CEB and eventually became established as */o/(P-CEB). In contrast, */i/(P-CSB) became fronted in P-SEB and became established as */e/(P-SEB).

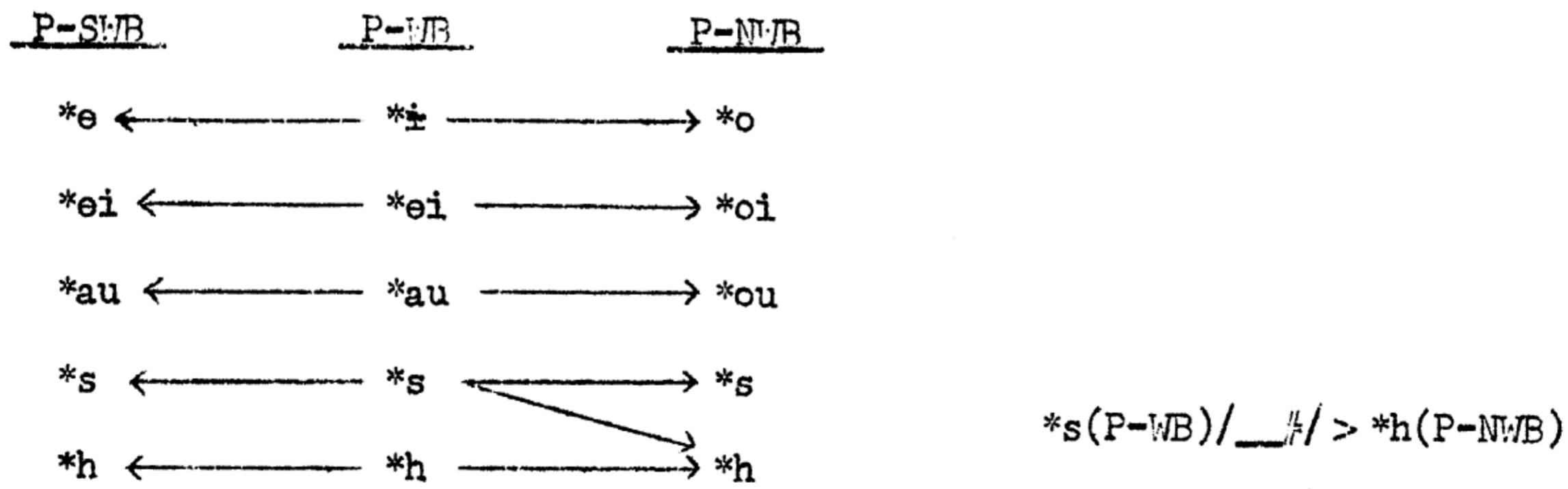


⁴¹ /i/ represents a high, central vowel. */i/(P-EB) < */i/(P-B).

Thus, */e/(P-EB) is reflected by /e/ in SEB isolects, by /o/ in CEB, and by both /e/ and /o/ in NEB isolects.

The reflexes of */ei/(P-EB)⁴² offer a contrast between the SEB isolects on the one hand, and the CEB and NEB isolects on the other. It appears that */ei/(P-EB) > */e/(P-NEB), and that this shift spread to contiguous CEB by diffusion, since Dusun Dejah exhibits an /e/ reflex of */ei/(P-EB) that must have been acquired after the separation of P-NEB and P-CSB.

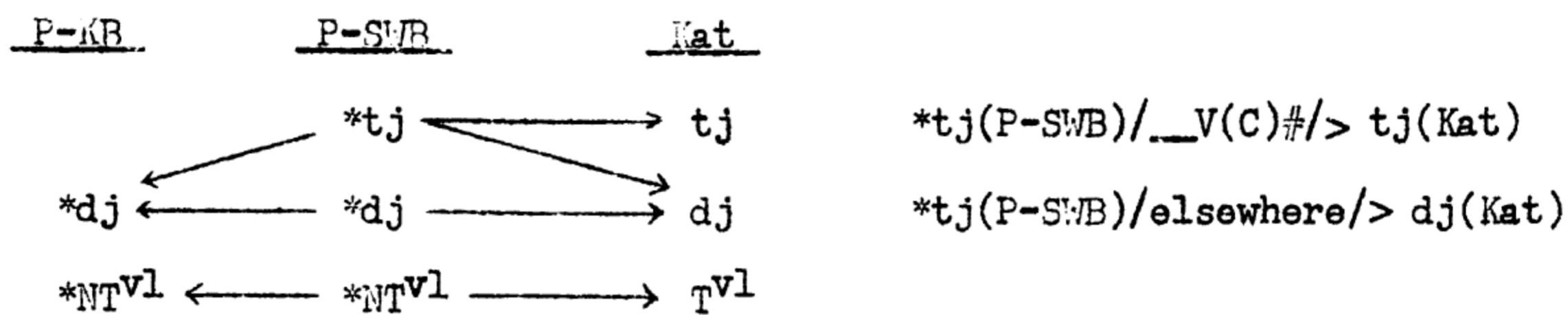
Within the West Barito group, the contrasting reflexes of Proto-West Barito (P-WB) */e/, */ei/, */au/, and */s/⁴³ distinguish the isolects of the Northwest Barito group from those of the Southwest Barito group. The Proto-Southwest Barito (P-SWB) reflexes of P-WB */e/, */ei/, and */au/ are, respectively, */e/, */ei/, and */au/, while the Proto-Northwest Barito (P-NWB) reflexes are */o/, */oi/, and */ou/. P-WB */s/ continues as */s/ in P-SWB, but splits in P-NWB, where one allophone, occurring in final position (i.e., */s/), merged with */h/(P-NWB), while the other allophone, occurring elsewhere, continued as */s/(P-NWB). These shifts may be represented in tabular form as



⁴² */ei/(P-EB) < */ei/(P-B).

⁴³ */e/(P-WB) < */e/(P-B); */ei/(P-WB) < */ei/(P-B); */au/(P-WB) < */au/(P-B); */s/(P-WB) < */s/(P-B).

Further subgrouping within the Southwest Barito and Northwest Barito groups can be made on the basis of contrastive sound correspondences brought about by shifts involving the reflexes of Proto-Barito */tj/ and */NT^{V1}/ clusters (i.e., clusters composed of a voiceless stop immediately preceded by a homorganic nasal). In the Southwest Barito group, */tj/ (P-SWB)⁴⁴ merged with */dj/ in Proto-Kapuas-Ba'amang (P-KB), and split in Katingan (Kat), with one allophone, occurring as the initial consonant in a final syllable (i.e., */__V(C)#/), continuing as /tj/(Kat), and the other allophone, occurring elsewhere, merging with /dj/(Kat). Katingan has lost the nasal member in its reflexes of */NT^{V1}/(P-SWB) clusters, a feature that also contrasts with Kapuas-Ba'amang. These contrastive shifts may be tabulated as

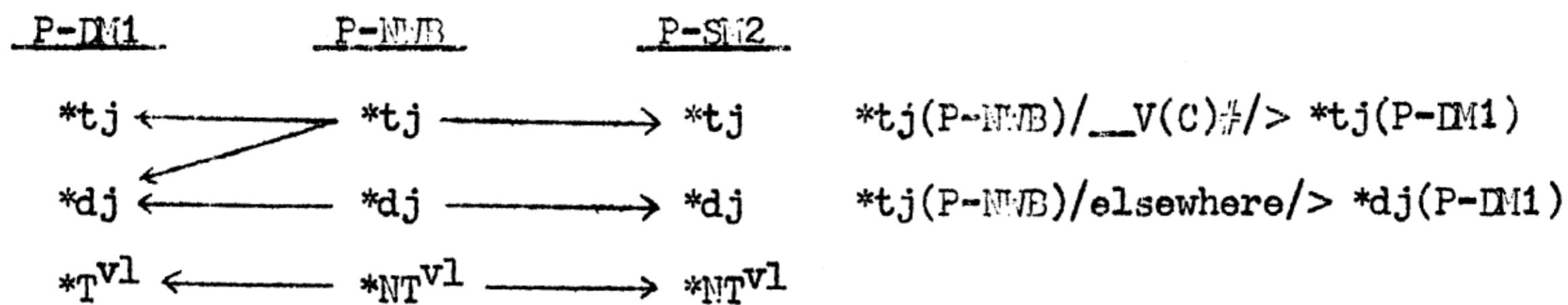


In the Northwest Barito group, Dohoi and Murung-1 form a subgroup in opposition to Siang and Murung-2. In Proto-Siang-Murung-2 (P-SM2), */tj/(P-NWB)⁴⁵ continues as */tj/(P-SM2), while in Proto-Dohoi-Murung-1 (P-DM1) the protoallophones of */tj/(P-NWB) have split in the same manner as in Katingan, with one allophone continuing as */tj/(P-DM1), and the other merging with */dj/(P-DM1). Similarly, the */NT^{V1}/(P-NWB) cluster is reflected by */NT^{V1}/(P-SM2) and */T^{V1}/(P-DM1). These shifts may be sum-

⁴⁴ */tj/(P-SWB) < */tj/(P-B).

⁴⁵ */tj/(P-NWB) < */tj/(P-B).

marized by



Dohoi is distinctive among all the Barito isolects for its medial preaspirated stops and spirant. However, I have not yet been able to discover an environmental factor that would have conditioned the merger of */∅/(P-NWB) with /h/(Dohoi). It is possible that this medial preaspiration element reflects the vestige of a proto-phoneme that has been lost in that position in all other Barito groups, but, at the present time, there is too little evidence at hand to make possible any clear statement one way or the other on the subject.

A synopsis of examples illustrating the divergent sound correspondences used in subgrouping the Barito isolects appears in Table 2 below. A list of Proto-Barito phonemes and their reflexes in the various isolects of the Barito group will be found in Appendix I, Table 3. The approximate distribution of the subgroups of the Barito family is indicated on Map 2.

TABLE 2: SYNOPSIS OF DIVERGENT SOUND CORRESPONDENCES USED IN SUBGROUPING THE BARITO LANGUAGES

Barito-Mahakam and West Barito vs. East Barito:

1. */tj/ tj:r utjan (Kat, NWB, EM), udjan (Kap, Ba); uran (NEB, CEB, SEB) 'rain'
2. */tj/ dj:l djela' (SWB), djola' (Doh, Mu1), tiola' (Si, Mu2), tiela' (EM);
 lola' (NEB), lela' (CEB, SEB) 'tongue'
3. */h/ h:j ahem (Kat), ahom (NWB); ajim (NEB), ajom (CEB), ajem (SEB) 'anteater'

Northeast vs. Central and Southeast Barito:

4. */b/ b:w batu' (NEB), watu (CEB, SEB); also batu' (SWB, NWB, EM), bahtu' (Doh) 'stone'
5. */d/ d:r du'r (NEB), rueh (CEB, SEB); also due' (SWB), duo (NWB); r^ga' (EM) 'two'
6. */t/ t:s bitik (NEB), wisik (CEB, SEB); also bitik (SWB, NWB), bihtik (Doh) 'ant'

Northeast and Central vs. Southeast Barito:

7. */s/ s:h pasu' (NEB), pasu (CEB), pahu (SEB) 'cheek'
8. */ei/ e:ei baw_e (NEB), waw_e (CEB), waw_ei (SEB) 'woman'
9. */l/ l:d tali (NEB, CEB), tadi (SEB); also tali' (SWB, NWB, EM) 'rope'
10. */h/ j:' daja (NEB), raja' (CEB), ira_e (SEB); also daha' (SWB, NWB), raha' (EM) 'blood'
11. */h/ j:' bo_jat (NEB), we_at (SEB); also ba_hat (NWB, EM), babe_hat (SWB) 'heavy'

Northeast vs. Central East vs. Southeast Parito:

12. */^h/ ^h:o:o *ut^hk* (NEB), *uto^hk* (CEB), *ute^hk* (SEB) 'head'
 as^hk (NEB), *aso^hk* (CEB), *ehe^hk* (SEB) 'dibble stick'

Southwest vs. Northwest Barito:

- | | | | | |
|-----|--------------|-------|--|----------------------------|
| 13. | <i>*/ə/</i> | e:o | <i>le<u>wu</u></i> (SWB), <i>low<u>u</u></i> (NWB)
<i>beruk</i> (SWB), <i>boruk</i> (NWB) | 'village'
'k.o. monkey' |
| 14. | <i>*/ei/</i> | ei:oi | <i>ate<u>i</u></i> (SWB), <i>at<u>oi</u></i> (NWB); also <i>ate<u>e</u></i> (NEB, CEB), <i>ate<u>i</u></i> (SEB) | 'liver' |
| 15. | <i>*/au/</i> | au:ou | <i>bal<u>au</u></i> (SWB), <i>bal<u>ou</u></i> (NWB); also <i>al<u>au</u></i> (BM), <i>bal<u>o</u></i> (NEB),
<i>wal<u>o</u></i> (CEB), <i>wulu</i> (SEB) | 'hair' |
| 16. | <i>*/s/</i> | s:h | <i>baras</i> (SWB), <i>barah</i> (NWB)
<i>banipis</i> (Kap, Kat), <i>mipi<u>h</u></i> (Si, Mu2), <i>mihpi<u>h</u></i> (Doh) | 'sand'
'thin' |

Kapuas-Ba'amang vs. Katingan:

- | | | |
|--|---|--|
| 17. */tj/ dj:tj | <u>idje'</u> (K-B), <u>itje'</u> (Kat); also <u>itjo</u> (Si, Mu2), <u>ihtio'</u> (Doh), 'one'
<u>tja'</u> (Hl), <u>era</u> i (NEB, CEB) | |
| 18. */tj/ dj:dj | <u>djalan</u> (K-B), Kat); also <u>tjalan</u> (Si), <u>lalan</u> (CEB, SEB) | 'path' |
| 19. */NC ^{Vl} / NC ^{Vl} :C ^{Vl} | <u>sampit</u> (Fa), <u>sepit</u> (Kat)
<u>buntal</u> (Iap, Ba), <u>butal</u> (Kat)
<u>tengkuk</u> (Kap, Ba), <u>tekuk</u> (Kat) | 'narrow'
'blowfish'
'nape of neck' |

Dohoi-jurung¹ vs. Siang-jurung²:

20. */tj/ tj:tj -lutja' (Doh, Mu1, Mu2); also -lutja' (Kat), ludja' (Kap, Ba), njura' (NJB), irura' (Pak) 'to spit'
- */tj/ dj:tj See example 2 above.
21. */NC^{v1}/ C^{v1}:NC^{v1} lapang (Doh, Kat), lampung (Si, Mu2), lampang (Kap) 'to float'
otu' (Doh), ontu' (Mu2), hantu' (Kap) 'corpse'
lukung (Doh), lungkung (Si, Mu2), lukeng (Kat) 'worm'

Dohoi vs. Other Barito Languages:

22. */C^{v1}/ hC:c ohpat (Doh), opat (Mu2, Si, NEB, CEB), epat (SEB), pat (BM) 'four'

A subgrouping of the Barito languages based on lexicostatistical analysis of cognate percentages generally corroborates the previously presented subgrouping based on the comparative method. Each of the subgroups identified appears to be a discrete unit, but there are varying degrees of statistical confidence: Southwest Barito and Siang-Murung-2 are significantly discrete at the 5 per cent confidence level; Northwest Barito and Southeast Barito, at the 10 per cent confidence level; Dohoi and Murung-1, 15 per cent; Northwest Barito, 25 per cent; West Barito, 40 per cent; Barito-Mahakam and East Barito, less than 60 per cent. See Appendix I, pp. 499-506 for an analysis of the lexicostatistical data. Figure 1 gives a diagram of Barito intra-family relationships showing a lexicostatistical classification superimposed on the classification derived by the comparative method; the vertical dashed lines represent isogloss bundles.

The Relation Between the Barito Linguistic Classification and Mallinckrodt's Ethnic Classification

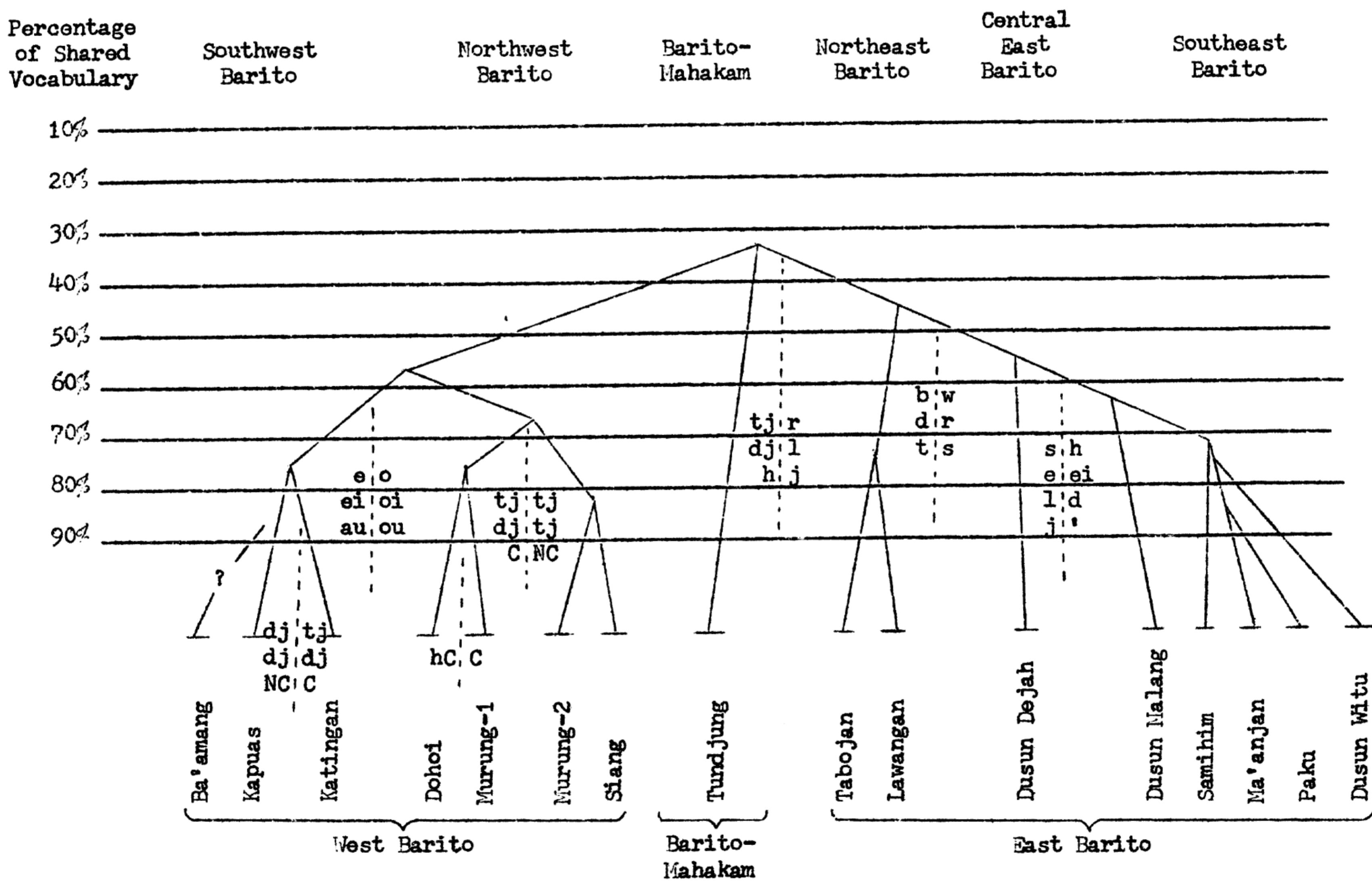
The general relationship between the linguistic classification presented above, and Mallinckrodt's ethnic classification from Het Adatrecht van Borneo, is as follows: Mallinckrodt's "stammenras der Ot Danum"⁴⁶ has the same ethnic referent as the Barito family. The Ot Danum "stammenras" has five subgroups.

- (1) "Ot Danum"⁴⁷ is equivalent to the Northwest Barito group. It might be noted here, that the term "Murung" is a general geographical term, referring to the region of the upper Barito River, that

⁴⁶ Mallinckrodt 1928: I, 21-30.

⁴⁷ Ibid., pp. 21-25.

FIGURE 1: DIAGRAM SHOWING THE RELATIONSHIP BETWEEN PHONOLOGICAL AND LEXICOSTATISTICAL CLASSIFICATIONS OF BARITO FAMILY LANGUAGES



has little meaning in terms of indicating the immediate genetic relationship between languages to which it is applied. At least three varieties of "Murung" were identified by my Murung informants: Murung hulu or upriver Murung = my Murung-1; Murung tengah or middle Murung = Murung-2; Murung hilir or downriver Murung = Dusun Malang. Murung-1 and Murung-2 were shown to be more similar, in terms of shared sound correspondences, to other isolects, respectively to Dohoi and Siang, than they were to each other. This is corroborated by lexicostatistical evidence. Dohoi and Murung-1 share 75 per cent of the Swadesh word list items, while Siang and Murung-2 share 80 per cent. However, Murung-1 and Murung-2 share only 66 per cent. Murung hilir or Dusun Malang has been shown to be a member not of Northwest Barito but of Southeast Barito, although Dusun Malang has borrowed considerable vocabulary from the adjacent Northwest Barito languages. It is possible that other varieties of "Murung" will be found in future investigations even further up the Barito River.

- (2) The "stammengroep der Ngadju"⁴⁸ is equivalent to the Southwest Barito group. However, future linguistic research may show that some of Mallinckrodt's ethnic groups should be assigned to other categories. For example, Mallinckrodt places Tamuan in the Ngadju group, but analysis of a Tamuan word list that I obtained in the field indicates clearly that Tamuan is a Malay language with close affinities to Bandjar (see Appendix II, Part III).

⁴⁸ Mallinckrodt 1928: I, 26-27.

- (3) The "stammengroep Maanjan"⁴⁹ is equivalent to only part of the Southeast Barito group. The languages of the various Ma'anjan ethnic groups identified by Mallinckrodt are practically identical, with only a few very slight dialectal variations to distinguish among them. The adat differences separating them are somewhat more significant, however.
- (4) The "Doessoen stammengroep" makes up the remaining portion of the Southeast Barito group. Like "Murung," "Dusun" is more a geographical than a linguistic term, relating generally to the east bank of the middle section of the Barito River. Dusun appears as an alternate name for the Barito River on many Dutch maps.
- (5) The "stammengroep der Lawangan"⁵⁰ is roughly equivalent to the Northeast Barito group. I know that Mallinckrodt's assignment of Bawu to the same category as Tabojan and Lawangan is correct.⁵¹ However, Mallinckrodt includes Tundjung and Paku in his Lawangan group, where they obviously do not belong on linguistic grounds, the former being more properly allocated to the Barito-Mahakam category and the latter to the Southeast Barito group. Mallinckrodt also assigns Bukit, an ethnic group inhabiting the southern Meratus Mountains (see Map 1), to his Lawangan group, which may be open to question. There appears to be an approximate correlation between habitat and language distribution in the southern

⁴⁹ Mallinckrodt 1928: I, 27-28.

⁵⁰ Ibid., pp. 28-30.

⁵¹ For Bawu, I have collected a few diagnostic terms from a Lawangan speaker who also knew Bawu.

Kalimantan region. The speakers of Northwest Barito and Northeast Barito languages inhabit the extremely hilly and mountainous interior regions in the upper drainages of the major rivers, while the Southwest Barito, Central East Barito and Southeast Barito speakers live in the areas of low rolling hills and flat regions of the lower drainages. However, one question remains to be answered in regard to this apparent correlation: to which group does Bukit belong? The correlation would suggest its membership in Northeast Barito, but, if the correlation is spurious, it could equally well belong to Southeast Barito, since the Bukit region intersects segments of the Southeast Barito region, or to Central East Barito, which is contiguous to the Bukit area in the north. Mallinckrodt is probably correct in questioning Dewal's earlier statement that the Bukit ethnic group was of Bandjar origin.⁵² but unfortunately he gives no evidence to support his inclusion of Bukit in the Lawangan (i.e., Northeast Barito) group. The allocation of the Bukit isolect will have to be held in abeyance pending the acquisition of reliable linguistic data.

It is interesting to note that most maps purporting to delimit the ethnic groups of Borneo indicate that the territory occupied by speakers of Barito family languages extends as far west as the Pembuang (Mallinckrodt) or even the Lamandau (Kennedy, Tjilik Riwut) rivers. However, I have as yet found no evidence that Barito languages are spoken to the west of the Sampit drainage. There is no indication, other than Mallinckrodt's supposition, that many of the groups that inhabit the Sampit region

⁵² Mallinckrodt 1928: I, 30.

itself properly belong to his Ngadju group. Tamuan, at least, appears to be a Malay rather than a Dajak language, though it may perhaps represent an eastward extension of the "Land Dajak" languages of West Kalimantan.⁵³ Tamuan and Bandjar share 66 per cent of their Swadesh word list vocabulary, while Tamuan and contiguous Ba'amang share 57 per cent.

Mallinckrodt's map also indicates that the territory of his Ot Danum group extends northward as far as the Kapuas River of West Kalimantan.⁵⁴ Though speakers of Northwest Barito languages have probably traveled extensively in the Kapuas drainage, the existence of permanent Dohoi settlements on the Kapuas itself should be accepted with caution until it is verified by linguistic evidence.

Bandjar

Bandjar is the principal representative of the Malay language family found in the south Kalimantan region. It is spoken not only in the Bandjar region of the Southeast Barito Basin, where several dialects have been recognized, but in the coastal regions of Pulau Laut, Kutai and Pasir⁵⁵ in the east, and at least as far as the Sampit area in the west.⁵⁶ Although Bandjar is undoubtedly a Malay language, it appears to contain some elements borrowed from Javanese, probably during the seventeenth century when many Javanese refugees fled to Bandjarmasin to escape the Mata-

⁵³ See Cense and Uhlenbeck 1958, 13-17, for a discussion of the Land Dajak problem.

⁵⁴ Not to be confused with the Kapuas River of southern Kalimantan.

⁵⁵ Knappert 1905, 588-590; Nusselein 1905, 555-560; Hamer 1889, 456.

⁵⁶ Hamer 1889, 456.

ram onslaught.

Thus, for example, we find the following Javanese lexical items in Bandjar:⁵⁷

<u>Bandjar</u>	<u>Javanese</u>	<u>Malay</u>	<u>Gloss</u>
kiwa ^o	kiwo(K, Ng)	kiri	'left'
rigat	ragat(K, Ng)	kotor	'dirty'
gulu ^o	gulu(K, Ng)	tengkuk	'nape'
ilat	ilat(Ng)	lidah	'tongue'

In discussing Javanese influences on Bandjar, Cense reports that:

We already have evidence of this from the seventeenth century, for in 1633 we hear from Van den Kerkhoven that "the Malay language that is spoken here is not pure, but is mixed with the Javanese language." Somewhat later [1691] Jacob Jansz de Roy informs us that, as a result of the great intermixing of the population in this region, Bandjarese is made up of Malay, Javanese and native elements...All along the southeast coast, for that matter, the language, especially the court language, was influenced by Javanese. This was true in Kutei, Kotawaringin, and in Sukadana.⁵⁸

Whatever the extent of Javanese influence on Bandjar, the latter retains its primary status as a Malay dialect. Bandjar shares a cognate percentage of 73 with Indonesian Malay (see the word lists of Bandjar and Malay in Appendix II). Bandjar shares much lower cognate percentages with representatives of the various Barito subgroups: e.g., 39 per cent (Kapuas), 38 per cent (Dusun Dejah, Tundjung), 32 per cent (Ra'anjan, Lawangan), 30 per cent (Siang).⁵⁹ These figures clearly reflect the linguistic

⁵⁷ Ng = Ngoko; K = Kromo.

⁵⁸ Cense 1928, 117-118. See also Hamer 1889, 480, note 1.

⁵⁹ Ra'amang, which has borrowed heavily from Bandjar, shares a 60 per cent cognate percentage with it. See Appendix I, p. 60.

cleavage between the Barito family and Bandjar Malay. It is beyond the scope of this study to enter into a discussion of Bandjar-Barito sound correspondences.

APPENDIX I

LINGUISTIC ANALYSIS

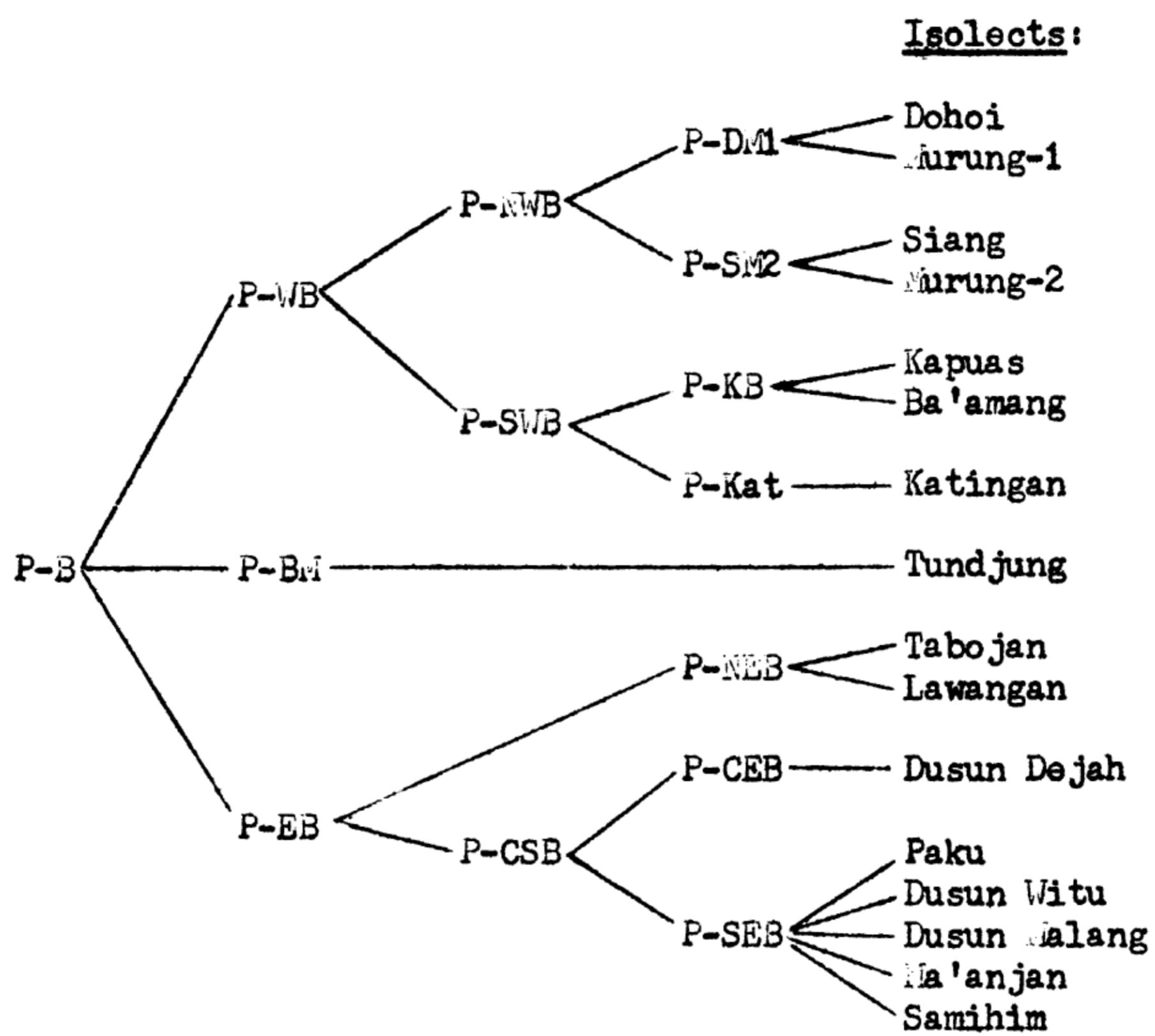
Introduction

This appendix contains a comparative analysis to support the subgrouping of the Barito languages outlined in the body of the text. The appendix contains two sections: Part I is comprised of an analysis of the major diagnostic sound correspondences obtaining among the various isolects that I have used in delimiting the various groups and subgroups within the Barito family; Part II presents the evidence for a lexicostatistical subgrouping of the Barito isolects. It will be shown that the lexicostatistical classification agrees on every major point with the classification based on the analysis of sound correspondences. The illustrative examples contained in Appendix I are rendered in phonemic transcription.

Appendix II contains all the raw word lists upon which the analyses in this appendix are based. The lexical items presented in Appendix II are rendered in phonetic transcription.

The genetic relationship and divergence order of the various Barito family subgroups is illustrated in Figure 2 below.

FIGURE 2: DIVERGENCE ORDER OF BARITO FAMILY SUBGROUPS



PART I: SOUND CORRESPONDENCES

In the following section I will present evidence, based on the establishment of contrastive sound correspondences in cognates drawn from the various languages of the Barito family, to support the classification outlined above. Because there is only one representative of the Barito-Mahakam group, I will limit my discussion of that group to a few summary comments at the end of this section. The main concentration will be on the East and West Barito groups, and even there the analysis is intended by no means to be exhaustive, but merely indicative.

Examples cited will be drawn from the word lists appearing in Appendix II. The citations will consist of a three letter prefix (to indicate one of the three special lists), a number (to indicate its position in the list) and a gloss.

The following symbols will be used in this section:

For proto-languages:

P- plus one of the language group abbreviations

For language groups:

B	Barito
EB	East Barito
WB	West Barito
BM	Barito-Mahakam
NEB	Northeast Barito
CSB	Central East-Southeast Barito
SEB	Southeast Barito
NWB	Northwest Barito
DM1	Dohoi-Murung-1
SM2	Siang-Murung-2
SWB	Southwest Barito
KB	Kapuas-Ba'amang
CEB	Central East Barito

For isolects:

Ba	Ba'amang
Dej	Dusun Dejah
Doh	Dohoi
Kap	Kapuas
Kat	Katingan
Law	Lawangan
Ma	Ma'anjan
Mal	Dusun Malang
Mu1	Murung-1
Mu2	Murung-2
Pak	Paku
Sam	Samihim
Si	Siang
Tab	Tabojan
Tun	Tundjung
Wit	Dusun Witu

For subsections of word lists in Appendix II used in citations:

SWL	Swadesh word list
SDL	Special Dajak list
KTL	Kinship term list

For phonemic environments:

V	Vowel
C	Consonant
T ^v l	Voiceless stop and affricate
N	Nasal Consonant
#	Lexical boundary
()	Optional element

Guide to special phonic values used in examples:

tj	voiceless palatal affricate
dj	voiced palatal affricate
j	palatal semivowel
w	bilabial semivowel in Kapuas and Lawangan; voiced bilabial spirant in other isolects
'	glottal stop
‡	lower high central vowel
L	voiced palatal lateral flap

Where proto-phonemes are reconstructed, they do not necessarily have the phonetic values that might be implied by the symbols representing them. Reconstructed phonemes are preceded by *.

The inventory of Proto-Barito phonemes that I have been able to reconstruct so far with a fair degree of certainty are:

Consonants:

*b	*d	*dj		
*p	*t	*tj	*k	*?
*m	*n		*ng	
*w	*s		*h	
	*l			
	*r			

Vowels:

*i	*?	*u
	*a	

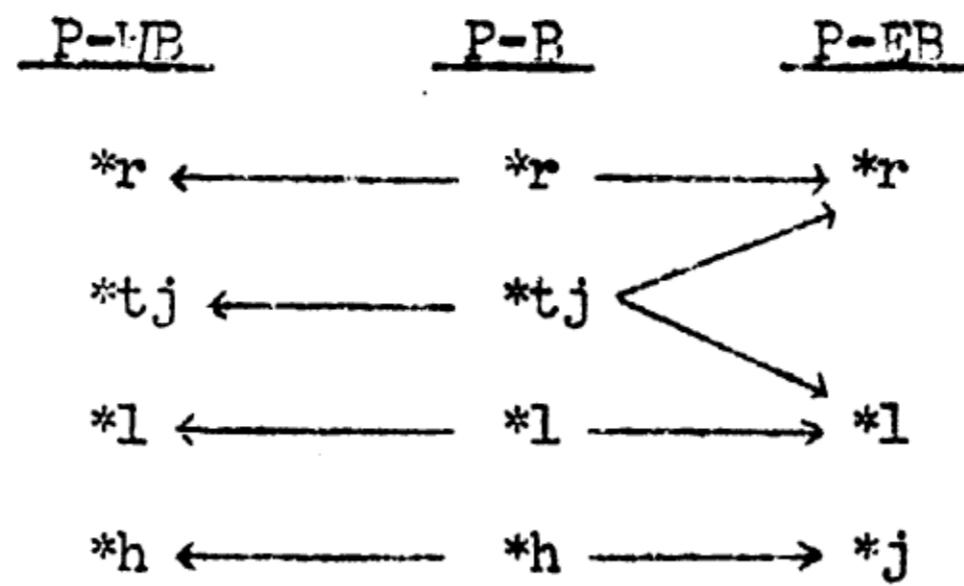
Diphthongs:

*ei	*au
-----	-----

However, it is quite possible that future analysis of a wider body of Barito linguistic material will reveal additional evidence for other proto-phonemes as well.

Correspondences Reflecting the East Barito ; West Barito Split

The major evidence reflecting the divergence of P-EB and P-WB from P-B is derived from the reflexes of P-B *tj and *h exhibited in the various isolects of the two groups. *tj(P-B) continued as *tj in P-WB, but split to merge with *r and *l in P-EB. *h(P-B) continued as *h in P-WB, but was replaced by *j in P-EB.



Upon consideration of the history of the Proto-Barito phoneme that I have represented as *tj, it seems apparent that this proto-phoneme had two allophones whose conditioning environments may be deduced, but whose precise phonetic attributes remain indeterminate. The first allophone, which may be symbolized as *tj¹, occurred in the Proto-Barito environment */_V(C)#/ as the initial consonant in a final syllable. This may be termed *tj environment 1 (*tj/env-1/). The second allophone, symbolized as *tj², occurred elsewhere. This may be termed *tj environment 2 (*tj/env-2/). In Proto-East Barito, the phonetic qualities of each allophone altered and diverged to the point where each merged with a different P-EB phoneme, *tj(P-B)/env-1/ merging with *r(P-EB) and *tj(P-B)/env-2/ merging with *l(P-EB). In Proto-West Barito, however, both allophones retained a phonetic distinctiveness and distributional complementation that maintained their position as allophones of *tj(P-WB) in the Proto-West Barito phonemic system. Evidence will be given later in the appendix to demonstrate that the final developments in the history of the *tj¹ and *tj² allophones did not take place until after P-SWB and P-NWB had diverged from P-WB.

Examples of reflexes of *tj(P-B).

*tj(P-B)/env-1/ > *tj(P-WB), *r(P-EB):

- | | | | |
|----|-------|---|----------------|
| 1. | utjan | (Tun; Kat; Doh, Mu2, Si) | SWL 138 'rain' |
| | udjan | (Kap, Ba) | |
| | uran | (Tab, Law; Dej; Mal, Sam, Wit, Pak, Ma) | |

2.	<u>matjuh</u>	(Tun)	SWL 39	'to spit'
	<u>-lutja'</u>	(Kat; Doh, Mui, Mu2)		
	<u>maludja'</u>	(Kap, Ba)		
	<u>njura</u>	(Tab)		
	<u>ndura'</u>	(Dej)		
	<u>ndora'</u>	(Sam)		
	<u>njura'</u>	(Mal)		
	<u>irura</u>	(Ma)		
	<u>irura'</u>	(Pak)		

*tj(P-B)/env-2/> *tj(P-WB), *l(P-EB):

3.	<u>djela'</u>	(Kap, Ba, Kat)	SWL 35	'tongue'
	<u>djiola'</u>	(Doh, Mui)		
	<u>tiola'</u>	(Mu2, Si)		
	<u>tiela'</u>	(Tun)		
	<u>lola</u>	(Tab, Law)		
	<u>lela'</u>	(Dej; Mal, Sam, Wit, Pak, Ma)		
4.	<u>djalan</u>	(Kap, Ba)	SWL 7	'path'
	<u>tjalan</u>	(Si)		
	<u>lalan</u>	(Dej; Sam, Wit, Ma)		
5.	<u>-djatuh</u>	(Kap, Ba)	SWL 95	'to fall'
	<u>lotu</u>	(Tab, Law; Pak)		
	<u>latu'</u>	(Dej; Sam)		

It will be noted that *tj² is reflected by /dj/ in all the contemporary WB isolects except Siang and Murung-2. However, the merging of *tj² with /dj/ in the West Barito isolects results from later developments in P-SWB and P-NWB that will be discussed below.

*tj(P-B) has been reconstructed for both tj:r and dj:l correspondences between West Barito and East Barito isolects. It has already been mentioned that the two correspondences are in complementary distribution, but this fact in itself would not preclude the reconstruction of *dj(P-B) for the dj:l(WB:EB) correspondence. However, several considerations preclude this. First, /tj/ is statistically extremely infrequent in the EB isolects, indicating that all reflexes of *tj(P-B) have merged with other sounds, notably /r/ and /l/, while at the same time /dj/ is a phoneme of fairly high frequency of occurrence in East Barito isolects. Secondly,

it can be shown that there is a dj:dj(WB:EB) correspondence between East Barito and West Barito isolects that is the logical reflex of a *dj(P-B) proto-phoneme.

Examples of reflexes of *dj(P-B).

*dj(P-B) > *dj(P-WB,P-EB):

6. djantung (Mal, Sam, Pak, Ma; Ba, Kat; Doh, Mu1) SWL 22 'heart'
7. djala' (Dej; Sam; Doh, Mu2) SDL 48 'fish net'
8. pandjang (Tab, Law; Kap, Ba, Kat) SWL 160 'long'
9. djukung (Kap, Ba; Mu2; Tab, Law; Dej; Mal, Wit, Pak, Ma) SDL 47 'canoe'

Thirdly, there is an r:r(WB:EB) correspondence that should logically be reconstructed as *r(P-B).

Examples of reflexes of *r(P-B).

*r(P-B) > *r(P-WB,P-EB):

10. urung (Tab, Law; Dej; Mal, Sam, Wit, Pak, Ma; Tun; Kap, Kat; Doh, Mu1, Mu2, Si) SWL 30 'nose'
11. rata' (Tab, Law; Mal, Wit, Ma; Kap, Kat; Mu2) SWL 146 'smooth'
rata (Dej; Pak; Ba)
ratat (Tun)
Lahta (Doh)
12. aran (Tab, Law; Mal, Sam, Wit; Doh, Mu2, Si) SWL 63 'name'
ngaran (Dej; Pak, Ma; Kat)
aram (Kap)
arai (Mu1)
13. turui (Tab, Law; Dej) SWL 49 'sleep'
surui (Pak)
tirui (Mu1, Mu2, Si)
-tiruh (Kap, Ba, Kat)
tiro (Tun)

Note: See also Ex. 52.

Similarly, there is a regular 1:1(WB:EB) correspondence that should be reconstructed as *l(P-B).

Examples of reflexes of *l(P-B).

*l(P-B)> *l(P-WB,P-EB):

14.	<u>ulun</u>	(Tab, Law; Dej; Sam, Wit, Pak, Ma; Tun; Kat; Mu2)	SWL 53	'person'
	<u>lun</u>	(Mal)		
	<u>duLun</u>	(Si)		
	<u>kolunon</u>	(Doh)		
	<u>uluh</u>	(Kap, Ba)		
15.	<u>tolu'</u>	(Tab, Law; Kat; Doh, Mu2)	SWL 206	'three'
	<u>tolu</u>	(Dej)		
	<u>toLu</u>	(Si)		
	<u>teLu</u>	(Mal, Pak)		
	<u>telu'</u>	(Ba, Kat)		
	<u>teLo</u>	(Sam, Wit, Ma)		
	<u>teLo'</u>	(Kap)		
	<u>talu</u>	(Tun)		
16.	<u>bulu'</u>	(Tab; Tun; Kap, Ba, Kat)	SWL 99	'feather'
	<u>bulu</u>	(Law; Mu2)		
	<u>buLui</u>	(Doh, Lui)		
	<u>buLun</u>	(Si)		
	<u>wulu</u>	(Dej; Sam, Wit, Pak, Ma)		
	<u>ulu</u>	(Mal)		

Note: See also Exs. 3, 7, 40, 41, 43, 49, 57 and 77.

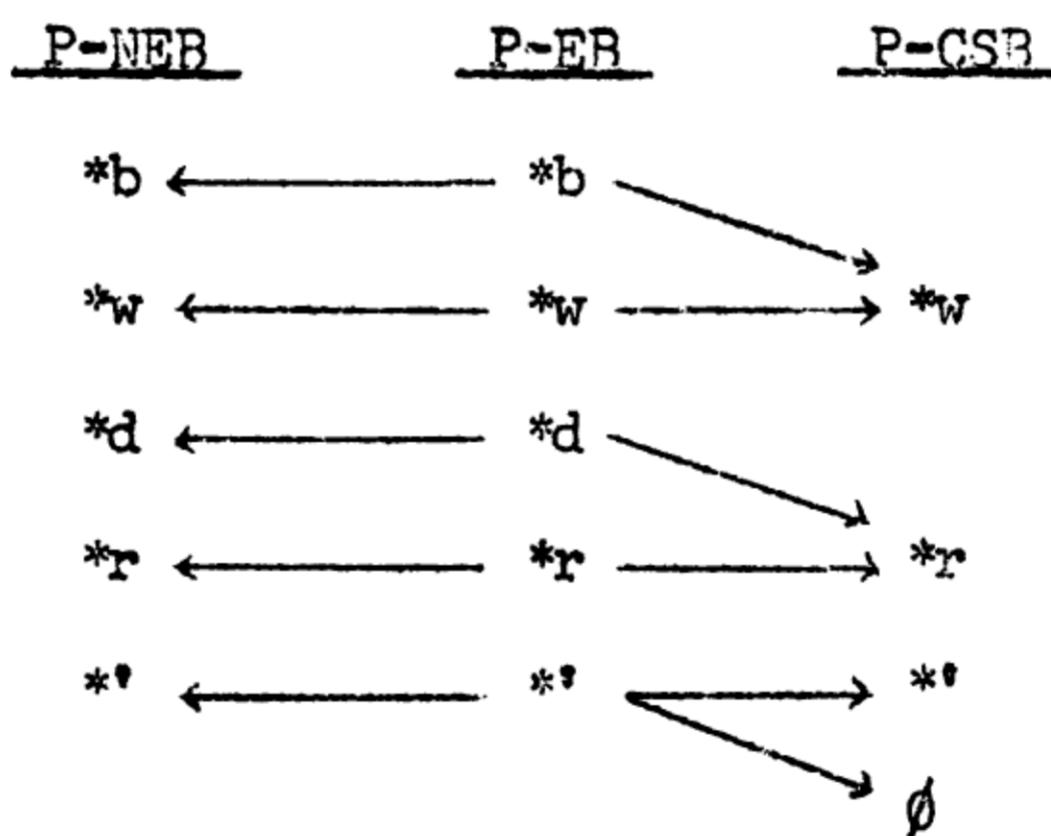
Examples of reflexes of *h(P-B).

*h(P-B)> *h(P-WB), *j(P-EB):

17.	<u>ahem</u>	(Kat)	SDL 82	'anteater'
	<u>ahom</u>	(Doh, Mu2, Si)		
	<u>ajim</u>	(Law)		
	<u>ajom</u>	(Dej)		
	<u>ajem</u>	(Wit, Ma)		
	<u>ajum</u>	(Pak)		
18.	<u>bahuang</u>	(Kap, Kat)	SDL 58	'bear'
	<u>bohuang</u>	(Doh, Mu2)		
	<u>bijang</u>	(Tab, Law)		
	<u>waJuang</u>	(Ma)		
	<u>woJuang</u>	(Sam)		

Correspondences Reflecting the Northeast Barito : Central East-Southeast Barito Split.

The major evidence reflecting the divergence of P-NEB and P-CSB from P-EB is derived from the reflexes of P-EB *b, *d, and *. *b(P-EB) < *b(P-B); *d(P-EB) < *d(P-B); *(P-EB) < *(P-B). The West Barito cognates included in the examples given below seem to indicate that the P-CSB reflexes are divergent, while P-NEB conserves the common Barito reflexes of P-B *b, *d, and *. *b(P-EB) continued as *b in P-NEB but merged with *w in P-CSB. *d(P-EB) continued as *d in P-NEB but merged with *r in P-CSB. *(P-EB) continued as * in P-NEB but split in P-CSB, with one former allophone, occurring finally after *(P-EB) (i.e., */z/) merging with zero in P-CSB, and the other allophone, occurring elsewhere, continuing as *(P-CSB).



Examples of reflexes of *b(P-EB).

*b(P-B) > *w(P-CSB), *b(P-NEB):

19. watu (Dej;Mal, Sam, Wit, Pak, Ma) SWL 120 'stone'
batu' (Tab, Law; Tun; Kap, Kat; Mu2)
batu (Si)
bahtu (Doh)

20. watang (Dej; Mal, Sam, Wit, Pak, Ma) SWL 79 'stick'
batang (Tab, La; Kap, Ba, Kat; Mui, Mu2, Si)
bahtang (Doh)

Note: See also Exs. 18, 29, 35, 40 and 47.

There is a regular w:w:w(NEB:CSB:WB) correspondence that should be reconstructed as *w(P-EB) < *w(P-B).

Examples of reflexes of *w(P-EB).

*w(P-EB) > *w(P-NEB, P-CSB):

- | | | | | |
|-----|--------------|----------------------|-------|-------|
| 21. | <u>biwi'</u> | (Tab, Law) | SDL 3 | 'lip' |
| | <u>biwih</u> | (Kap, Kat; Doh) | | |
| | <u>beweh</u> | (Mu2, Si) | | |
| | <u>wiwi</u> | (Dej, Sam, Wit, Pak) | | |
| | <u>wiwi'</u> | (Ma) | | |
-
- | | | | | |
|-----|--------------|-------------------------------|--------|------------|
| 22. | <u>bawui</u> | (Law; Kap, Kat; Doh, Mu2, Si) | SDL 56 | 'wild pig' |
| | <u>bawi</u> | (Tab) | | |
| | <u>wayui</u> | (Dej; Mal, Sam, Wit, Pak, Ma) | | |

Note: See also Exs. 47 and 51.

Examples of reflexes of *d(P-EB).

*d(P-EB) > *r(P-CSB), *d(P-NEB):

- | | | | | |
|-----|--------------|--|---------|---------|
| 23. | <u>ranu'</u> | (Dej; Mal, Sam, Wit, Pak, Ma) | SWL 122 | 'water' |
| | <u>danum</u> | (Tab, Law; Kap, Ba, Kat; Doh, Mu2, Si) | | |
-
- | | | | | |
|-----|--------------|--------------------------|---------|-------|
| 24. | <u>rueh</u> | (Dej; Mal, Sam, Wit, Ma) | SWL 205 | 'two' |
| | <u>ruo</u> | (Pak) | | |
| | <u>dut'</u> | (Tab, Law) | | |
| | <u>due'</u> | (Kap, Ba, Kat) | | |
| | <u>duo'</u> | (Doh, Mu2) | | |
| | <u>duo</u> | (Si) | | |
| | <u>raga'</u> | (Tun) | | |
-
- | | | | | |
|-----|-----------------|----------------|---------|-------|
| 25. | <u>anrau</u> | (Mal, Sam, Ma) | SWL 172 | 'day' |
| | <u>kanrau</u> | (Wit) | | |
| | <u>konrou</u> | (Dej) | | |
| | <u>ka'unrou</u> | (Pak) | | |
| | <u>andau</u> | (Kap, Ba, Kat) | | |
| | <u>ondou</u> | (Doh, Mu2, Si) | | |

Note: The NEB forms for 'day' are /olo/, which seem obviously related to but technically cognate with the other forms cited in Ex. 25. For reflexes of *r(P-B), see Exs. 10-13.

Examples of reflexes of *ⁱ(P-EB).

*ⁱ(P-EB)/s/ > \emptyset (P-CSB):

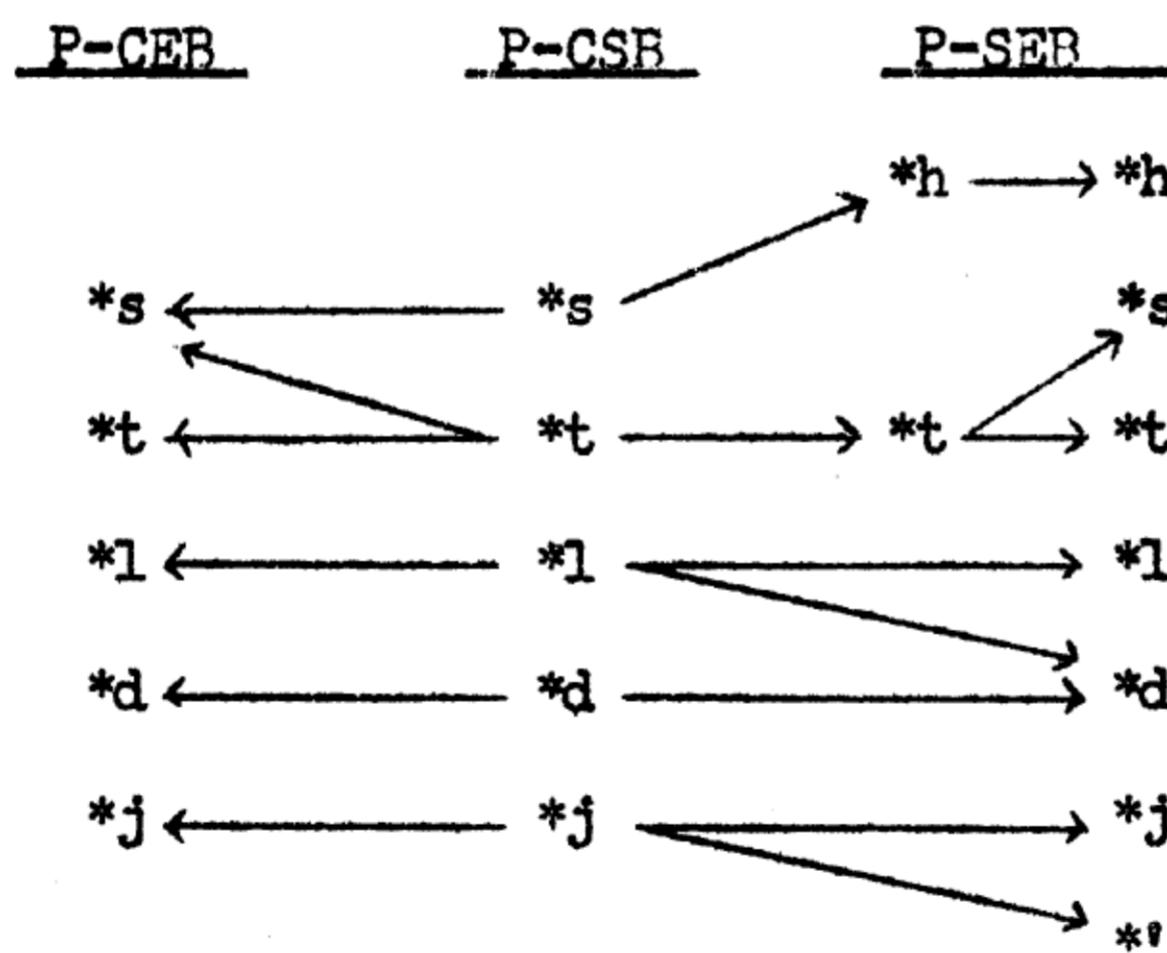
See Exs. 24, 39, 43, 75 and 76.

The CSB isolects also contrast with those of NEB in regard to their respective reflexes of *t(P-EB). *t(P-EB) < *t(P-B). *t(P-EB) continued as *t in P-NEB, but split in CEB and P-SEB. However, evidence from SEB indicates that this latter split took place independently in CEB and P-SEB after these two groups had diverged from P-CSB, so that I will treat this phenomenon in the following section.

Correspondences reflecting the Central East Barito; Southeast Barito split.

The evidence reflecting the divergence of P-SEB and CEB from P-CSB is derived from the reflexes of P-CSB *s, *t, *l, and *j. *s(P-CSB) continued as *s in CEB but was replaced by *h in P-SEB. After the latter shift took place in P-SEB, *t(P-CSB) split in P-SEB with one former allophone, occurring before *i (i.e. */_i/) being replaced by *s(P-SEB) in the phonemic slot vacated by the *s(P-CSB) > *h(P-SEB) shift, the other, occurring elsewhere, continuing as *t(P-SEB). CEB also exhibits the split of *t(P-CSB) to *t-*s(CEB) under the identical environmental conditions governing the parallel split in P-SEB. The parallel splits in CEB and P-SEB either took place independently, or took place first in P-SEB, where there was a temporary /s/ gap in the phonemic system, and then diffused to CEB. The fact that the *s(P-SEB) reflecting *t(P-CSB) was not affected by the *s(P-CSB) > *h(P-SEB) shift, indicates that this latter shift took place first, and, since CEB does not exhibit the effects of the *s(P-CSB) > *h(P-SEB) replacement, both shifts must have taken place after P-SEB and CEB had diverged from P-CSB, al-

though the allophonic conditions prerequisite to the *t(P-CSB) split were undoubtedly present in P-CSB. *l(P-CSB) continued as *l in CEB but split in P-SEB, with one former allophone, occurring before *i (i.e., */_i/), merging with *d(P-SEB) and the other, occurring elsewhere, continuing as *l(P-SEB). It will be noted that the allophonic conditioning factors governing this latter P-SEB split were identical with those governing the *t-*s split in P-SEB. *j(P-CSB) continued as *j in CEB but split in P-SEB, with one former allophone, occurring either finally, or as the initial consonant in a final syllable terminated with a voiceless stop (i.e., */_#/), */_V^{T^{V1}}/, being replaced by *(P-SEB), and the other allophone, occurring elsewhere, continuing as *j(P-SEB). It may be seen that in most of these shifts that CEB retains conservative reflexes of the P-CSB proto-phonemes, while P-SEB is quite innovative.



Examples of reflexes of *s(P-CSB).

*s(P-CSB) > *h(P-SEB, *s(CEB):

- | | | | |
|-----|--|---|-----------------|
| 26. | <u>hungei</u>
<u>sungei</u>
<u>sunge</u>
<u>ungoi</u>
<u>ungai</u> | (Mal, Sam, Wit, Ma)
(Dej; Kap, Kat)
(Tab, Law)
(Doh, Mu2, Si)
(Tun) | SWL 130 'river' |
|-----|--|---|-----------------|

Note: The final diphthong in the Dej form is irregular. See the section below on the e/ei correspondence.

27.	<u>tahu'</u>	(Mal,Wit)	SWL 96	'dog'
	<u>antahu'</u>	(Ma)		
	<u>antahu</u>	(Pak)		
	<u>asu</u>	(Dej)		
	<u>asu'</u>	(Kap,Ba,Kat;Doh,Mu1,Mu2)		
	<u>asut</u>	(Si)		
28.	<u>pahu</u>	(Sam,Wit,Pak,Ma)	SDL 2	'cheek'
	<u>pagu</u>	(Dej)		
	<u>pagu'</u>	(Tab,Law)		

Note: See also Exs. 38 and 44.

Examples of reflexes of *t(P-CSB).

*t(CSB)/_i/ > *s(P-SEB, CEB):

29.	<u>wisik</u>	(Dej,Mal,Sam,Pak,Ma)	SDL 77	'ant'
	<u>usik</u>	(Wit)		
	<u>bitik</u>	(Kap,Ba;Mu2,Si)		
	<u>bihtik</u>	(Doh)		
	<u>betik</u>	(Kat)		
30.	<u>punsi</u>	(Dej;Mal,Wit,Pak,Ma)	SDL 91	'banana'
	<u>puti'</u>	(Tab,Law;Doh)		
	<u>punti'</u>	(Mu2)		
	<u>punti</u>	(Si)		

*t(CSB)/elsewhere/ > *t(P-SEB,CEB):

See Exs. 5, 6, 11, 27, 35, 41, 46, 53, 54, 56, 60, 71 and 72.

Examples of reflexes of *l(P-CSB).

*l(P-CSB)/_i/ > *d(P-SEB), *l(CEB):

31.	<u>tadi</u>	(Sam,Wit,Pak,Ma)	SWL 65	'rope'
	<u>tali</u>	(Dej;Tab,Law;Ba,Kat;Mu1,Si)		
	<u>tali'</u>	(Kap;Doh,Mu2;Tun)		
32.	<u>ngadi</u>	(Ial, Sam, Wit, Pak, Ma)	SWL 90	'to dig'
	<u>ngali</u>	(Dej)		
	<u>ngali'</u>	(Tab, Law; Doh, Mu2, Si; Tun)		
	<u>mangali'</u>	(Kap, Kat)		
33.	<u>kudit</u>	(Sam,Ma)	SWL 16	'skin'
	<u>kulit</u>	(Ba;Tun)		

Note: The original conditioning environment for this correspondence was probably *l/_i/ > d(SEB), l(NEB,CEB). However, there are SEB forms that now show l in the environment /_i/, e.g., Ex. 43 below.

*l(P-CSB)/elsewhere/ > *l(P-SEB, CEB):

See Exs. 14-16.

Examples of reflexes of *j(P-CSB). *j(P-CSB) < *j(P-EB) < *h(P-B)

*j(P-CSB)/_#/ > *^{v1}(P-SEB), *j(CEB):

34.	ira'	(Sam, Wit, Pak, Ma)	SWL 26	'blood'
	raja'	(Dej)		
	daja	(Tab, Law)		
	daha'	(Kap, Ba, Kat; Doh, Mu1, Mu2, Si)		
	raha'	(Tun)		

*j(P-CSB)/VT^{v1}#/ > *^{v1}(P-SEB), *j(CEB):

35.	we ^{v1} at	(Sam, Wit, Ma)	SWL 147	'heavy'
	bojat	(Tab)		
	bahat	(Tun; Doh, Mu2, Si)		
	babe ^{v1} hat	(Kap, Ba)		
36.	ri ^{v1} et	(Sam, Pak, Ma)	SWL 181	'near'
	rijet	(Dej)		

*j(P-CSB)/elsewhere/ > *j(P-SEB, CEB):

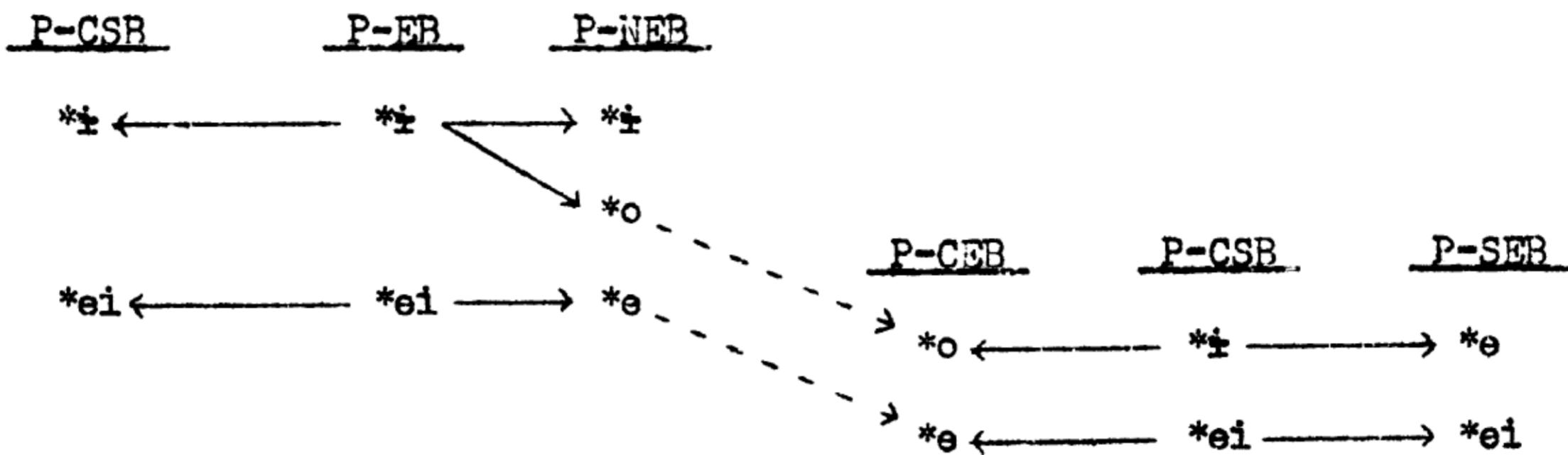
See Exs. 17 and 18.

Correspondences in which Northeast Barito : Central East Barito : Southeast Barito Contrast

NEB, CEB, and SEB isolects contrast, at least partially, in their reflexes of *i and *ei. *i(P-EB) continued as *i in P-CSB but split in P-NEB, with one former allophone, occurring before final consonants (i.e., */_C/#), continuing as *i(P-NEB), and the other allophone, occurring elsewhere, being replaced by *o(P-NEB). Later, *i(P-CSB) became backed in P-CEB to become established as *o(P-CEB), and became fronted in P-SEB, to become established as *e(P-SEB). The *i(P-CSB) > *o(CEB) shift may have been influenced, through diffusion, by the earlier *i-*o split in contiguous NEB isolects. *i apparently had not split in P-CSB, since it furnished the conditioning environment for the *i(P-EB)/i#/ > Ø(P-CSB) shift

reflected in isolects of both CEB and SEB (cf. pp. 43-45 above).

*ei(P-EB) seems to have followed a sort of parallel development. *ei(P-EB) shifted to *e in P-NEB but continued as *ei in P-CSB. Then, *ei(P-CSB) continued as *ei in P-SEB, but shifted to *e in CEB, this latter shift, again, perhaps being influenced by diffusion from contiguous NEB isolects.



Examples of reflexes of *i̯(P-EB).

*i̯(P-EB)/C#/ > *i̯(P-NEB), *o(CEB), *e(SEB):

37.	ut <u>i̯</u> k uto <u>k</u> ute <u>k</u>	(Tab, Law) (Dej) (Hal)	SWL 27	'head'
38.	as <u>i̯</u> k aso <u>k</u> ehe <u>k</u>	(Tab, Law) (Dej) (Mal, Sam, Wit, Ma)	SDL 35	'dibble stick'
39.	um <u>i̯</u> ' umo ume	(Tab, Law) (Dej) (Mal, Sam, Ma)	SDL 29	'swidden field'

*i̯(P-EB)/elsewhere/ > *o(P-NEB, CEB), *e(P-SEB):

40.	b <u>olum</u> w <u>olum</u> we <u>olum</u>	(Tab, Law) (Dej; Pak) (Hal, Sam, Wit, Ma)	SWL 76	'to live'
41.	t <u>olui</u> t <u>elui</u> at <u>elui</u> un <u>telui</u>	(Tab, Law; Dej) (Hal, Wit) (Pak, Ma) (Sam)	SWL 98	'egg'
42.	p <u>otan</u> sim <u>potan</u> pe <u>tan</u>	(Tab, Law; Pak) (Dej) (Hal, Sam, Wit, Ma)	SDL 45	'blowgun'

Note: /i/ has full phonemic status in current NEB languages, for in SWL 96 /koko/ 'dog' we find /o/ in the environment /_Co/. /i/ also enters into diphthongs as in SWL 17 /bangkii/ 'corpse' and SWL 38 /ngotiu/ 'to cut padi.' It is possible that the NEB phoneme /i/ represents the phonetic quality of PB *i, becoming fronted in SEB, and backed in CEB and in some environments in NEB. NEB /i/ also occurs as a reflex of PB proto-phonemes other than *i, generally in polysyllabic words, a vowel in any syllable preceding the penultimate syllable is represented by i, as in the following examples:

- | | | |
|-----|---|-----------------|
| 43. | <u>kilingi'</u> (Tab, Law)
telingo (Dej)
kilinge (Mal) | SWL 45 'ear' |
| 44. | <u>kisapang</u> (Tab, Law)
kesapang (Dej)
kahapang (Mal, Pak, Ma) | SDL 11 'thigh' |
| 45. | <u>tingkalaga'</u> (Tab)
tangkalaga'ang (Mal) | SDL 72 'spider' |

Examples of reflexes of *ei(P-EB).

*ei(P-EB) > *e(P-NEB, CEB), *ei(P-SEB):

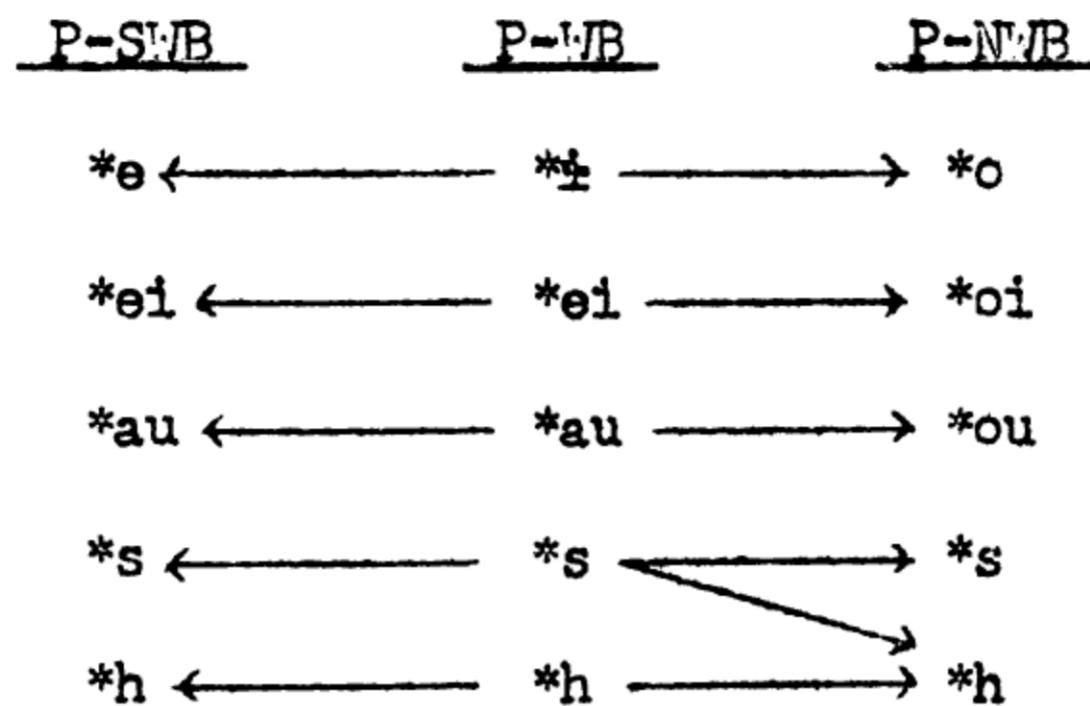
- | | | |
|-----|--|----------------|
| 46. | <u>ate</u> (Tab, Law; Dej; Pak)
<u>atei</u> (Sam, Wit, Ma) | SWL 21 'liver' |
| 47. | <u>bawe</u> (Tab, Law)
<u>wave</u> (Pak; Dej)
<u>wawai</u> (Mal, Sam, Wit, Ma) | SWL 55 'woman' |
| 48. | <u>pare</u> (Tab, Law; Dej; Pak)
<u>parei</u> (Mal, Sam, Wit, Ma) | SDL 30 'padi' |

Note: In Exs. 40, 42, 46, 47, and 48, Paku (SEB) agrees with Dusun Dejah (CEB) rather than with the other SEB isolects in its reflexes of P-EB *i and *ei. This is probably due to diffusion from contiguous NEB isolects or from CEB isolects into Paku after the latter had diverged from P-SEB.

Correspondences in which Northwest Barito and Southwest Barito Contrast

The evidence reflecting the divergence of P-NWB and P-SWB from P-WB is derived from the reflexes of P-WB *i, *ei, *au, and *s. *i(P-WB) became *o(P-NWB) and *e(P-SWB). *ei(P-WB) continued as *ei in P-SWB but

became *oi in P-NWB. *au(P-WB) continued as *au in P-SWB but became *ou in P-NWB. *s(P-WB) continued as *s in P-SWB but split in P-NWB, with one former allophone, occurring in final position (i.e., */#/) merging with *h(P-NWB), and the other allophone, occurring elsewhere, continuing as *s (PNWB).



Examples of reflexes of *ɛ(P-WB).

*ɛ(P-WB) > *o(P-NWB), *e(P-SWB):

- | | | | | |
|-----|------------------------------|-----------------------------|--------|-----------|
| 49. | <u>lowu'</u>
<u>lewu'</u> | (Doh,Mu2, Si)
(Kap, Kat) | SDL 24 | 'village' |
|-----|------------------------------|-----------------------------|--------|-----------|

Note: These forms are obviously cognate with the CEB and SEB terms for SDL 18 'house': lowu' (Dej;Pak); lewu' (Wit, Ma).

- | | | | | |
|-----|--------------------------------|---------------------------------|--------|------------------|
| 50. | <u>bonji'</u>
<u>benji'</u> | (Doh,Mu2)
(Kat) | SDL 34 | 'padi seed' |
| 51. | <u>nuwo'</u>
<u>manuwe'</u> | (Doh,Mu2)
(Kap, Kat) | SDL 51 | 'to fish-poison' |
| 52. | <u>boruk</u>
<u>beruk</u> | (Doh,Mu2, Si)
(Kap, Ba, Kat) | SDL 60 | 'kind of monkey' |

Examples of reflexes of *ei(P-WB).

*ei(P-WB) > *oi(P-NWB), *ei(P-SWB):

- | | | | | |
|-----|---|--------------------------------------|--------|----------|
| 53. | <u>at_{oi}</u>
<u>at_{ei}</u> | (Doh,Mu2, Si)
(Kap, Ba, Kat) | SWL 21 | 'liver' |
| 54. | <u>mato_{oi}</u>
<u>mahto_{oi}</u>
<u>mate_{ei}</u> | (Mu1,Mu2, Si)
(Doh)
(Kap, Kat) | SWL 75 | 'to die' |

55.	<u>uo<u>i</u></u>	(Doh,Mu2,Si)	SDL 87	'rattan'
	<u>ue<u>i</u></u>	(Kap,Kat)		

Examples of reflexes of *au(P-WB).

*au(P-WB) > *ou(P-NWB), *au(P-SWB):

56.	<u>koto<u>u</u></u>	(Doh)	SWL 3	'right'
	<u>kat<u>o</u>u</u>	(Mu2)		
	<u>kat<u>o</u>u</u>	(Mu1)		
	<u>kont<u>o</u>u</u>	(Si)		
	<u>gantau</u>	(Kap,Kat)		
	<u>tau'</u>	(Tun)		
57.	<u>balou</u>	(Doh,Mu1,Mu2,Si)	SWL 29	'hair'
	<u>balau</u>	(Kap,Ba,Kat)		
	<u>alau</u>	(Tun)		
58.	<u>lingkou</u>	(Mu2,Si)	SDL 1	'forehead'
	<u>likou</u>	(Doh)		
	<u>likau</u>	(Kat)		
	<u>lingkau</u>	(Kap)		

Examples of reflexes of *s(P-WB).

*s(P-WB)/_h/ > *h(P-NWB), *s(P-SWB):

59.	<u>mipih</u>	(Mu2,Si)	SWL 161	'thin'
	<u>mihpih</u>	(Doh)		
	<u>banipis</u>	(Kap,Kat)		
	<u>tipis</u>	(Ba)		
60.	<u>-katuih</u>	(Doh)	SWL 215	'hundred'
	<u>-ratuh</u>	(Mu2,Si)		
	<u>-ratus</u>	(Kap,Ba,Kat)		
61.	<u>barah</u>	(Mu2,Si)	SWL 121	'sand'
	<u>baras</u>	(Kap,Kat)		

*s(P-WB)/elsewhere/ > *s(P-NWB,P-SWB):

See Ex. 26, SWL 31, SWL 145, SDL 7, SDL 49, SDL 69.

Correspondences in which Katingan : Kapuas-Ba' amang Contrast, and in which Dohoi-Kurung-1 : Siang-Kurung-2 Contrast

Further subgrouping within the SWB and NWB groups can be made on the basis of evidence derived from the contrastive sound correspondences reflecting P-WB *tj, and *NT^{v1} clusters (i.e., clusters composed of a

voiceless stop preceded by a homorganic nasal). *tj(P-NWB) > *tj(P-NWB, P-SWB); *NT^{V1}(P-NWB) > *NT^{V1}(P-NWB, P-SWB). In the SWB group, Kapuas and Ba'amang form a subgroup in opposition to Katingan; in the NWB group, Dohoi and Murung-1 form a subgroup in opposition to Siang and Murung-2. See p. 479 above for definitions of "env-1" and "env-2" in relation to *tj allophonic conditioning environments.

Examples of reflexes of *tj(P-SWB, P-NWB).

*tj(P-SWB)/env-1/ > *dj(P-KB), tj(Kat); *tj(P-NWB)/env-1/ > *tj(P-IM1, P-SI2):

62.	<u>idje'</u>	(Kap, Ba)	SWL 204 'one'
	<u>itje'</u>	(Kat)	
	<u>ihtjo'</u>	(Doh)	
	<u>itjo'</u>	(Mu2)	
	<u>itjo</u>	(Si)	
	<u>tja'</u>	(Tun)	
63.	<u>kedjau</u>	(Kap, Ba)	SWL 182 'far'
	<u>ketjau</u>	(Kat)	
	<u>mahtju'</u>	(Doh)	
	<u>matjo'</u>	(Mu2)	
	<u>otju</u>	(Si)	
	<u>ntjo'</u>	(Tun)	

Note: See also Exs. 1 and 2.

*tj(P-SWB)/env-2/ > *dj(P-KB, Kat); *tj(P-NWB)/env-2/ > *dj(P-IM1), *tj(P-SI2):

See Exs. 3 and 4.

Examples of reflexes of *NT^{V1}(P-SWB, P-NWB).

*N(P-SWB)/T^{V1}/ > \emptyset (Kat), *N(P-KB); *N(P-NWB)/T^{V1}/ > * \emptyset (P-IM1), *N(P-SI2):

*m 64.	<u>lampang</u>	(Kap)	SWL 126 'to float'
	<u>-lampung</u>	(Mu2, Si)	
	<u>lapang</u>	(Kat; Doh)	
65.	<u>sampit</u>	(Ba; Tun)	SWL 163 'narrow'
	<u>sepit</u>	(Kat)	

*n 66.	<u>hantu'</u>	(Kap)	SDL 17	'corpse'
	<u>ontu'</u>	(Mu2)		
	<u>hatu'</u>	(Kat)		
	<u>otu'</u>	(Doh)		
67.	<u>buntal</u>	(Kap, Ba)	SDL 54	'blowfish'
	<u>butal</u>	(Kat)		
68.	<u>lonting</u>	(Mu2, Si)	SWL 87	'to swell'
	<u>loting</u>	(Doh)		
*ng 69.	<u>tengkuk</u>	(Kap, Ba)	SDL 6	'nape'
	<u>tekuk</u>	(Kat)		
70.	<u>lungkung</u>	(Mu2, Si)	SWL 107	'worm'
	<u>lukung</u>	(Doh)		
	<u>lukeng</u>	(Kat)		

See Ex. 58 also.

*N(P-SWB,P-NWB)/elsewhere/ >*N(Kat,P-KB,P-IM1,P-SM2):

*m See Exs. 17, 54, 75, and 77.

*n See Exs. 1, 12, 14, 25, and 51.

*ng See Exs. 6, 8, 9, 10, 18, 20, 26, 32, and 73.

Correspondence in which Dohoi Contrasts with all other Barito Isolects

Dohoi is distinctive among all the Barito isolects for its medial preaspirated voiceless stops and affricate. Whether this is a Dohoi innovation or the vestige of a proto-phoneme that has been lost in that environment in all other Barito isolects is indeterminate at the present time. If it represents an innovation, it would appear that *T^{V1}(P-IM1) (i.e., voiceless stop and affricate proto-phonemes) became preaspirated in medial position (i.e., /V_V/) in Proto-Dohoi. This holds true for the vast majority of Dohoi forms that can be shown to represent P-B forms. However, Ex. 53 presents an exception to this. It is quite true that in contemporary Dohoi both preaspirated and non-preaspirated voiceless stops occur. The Dohoi forms atōi 'liver' (Ex. 53) and mahtōi 'to die' (Ex. 54)

provide sub-minimal pairs in this respect.

Examples illustrating the distinctive medial preaspirated voiceless stops of Dohoi.

*T^{V1}(P-DM1)/V__V/> *hT^{V1}(Dohoi):

71.	oh <u>pat</u>	(Doh)	SWL 207	'four'
	op <u>at</u>	(Mu2, Si; Tab, Law; Dej; Pak)		
	ep <u>at</u>	(Kap, Ba, Kat; Mal, Sam, Wit, Ma)		
	pa <u>t</u>	(Tun)		
72.	ma <u>hta'</u>	(Doh)	SWL 47	'eye'
	ma <u>ta'</u>	(Kap; Mu2)		
	ma <u>te'</u>	(Ba, Kat)		
	ma <u>ta</u>	(Si)		
	ma <u>tam</u>	(Mu1)		
	ma <u>ti'</u>	(Tab, Law)		
	ma <u>to</u>	(Dej; Pak)		
	ma <u>te</u>	(Mal, Sam, Wit, Ma)		
73.	uht <u>jang</u>	(Doh)	SDL 65	'deer'
	ut <u>jang</u>	(Mu2)		
	ot <u>jang</u>	(Si)		
	ba <u>tjang</u>	(Kat)		
	ba <u>djang</u>	(Kap)		
74.	i <u>hkuh</u>	(Doh)	SWL 105	'tail'
	i <u>kuh</u>	(Kap, Kat; Mu1)		
	i <u>kui</u>	(Tab, Law; Mal, Wit)		
	u <u>kui</u>	(Dej; Sam, Pak, Ma)		
	u <u>koi</u>	(Mu2, Si)		

Note: See also Exs. 11, 19, 20, 29, 54, 59, 62 and 63.

Barito-Mahakam Correspondences

Barito-Mahakam is represented by only one isolect in my sample, Tundjung, and unfortunately the Tundjung list is not complete, being limited to the items of the Swadesh list only. Therefore, there is not as much EM material available for comparative purposes as we have for the other isolects of the Barito family. However, on the basis of the main diagnostic sound correspondences distinguishing EB isolects from WB isolects, it seems clear that Tundjung has closer affinities with the latter.

The Tun reflex of P-B *h is /h/ (Cf. Exs. 34 and 35). The Tun reflex of P-B *tj is reflected by /tj/ in both /env-1/ and /env-2/ (cf. Exs. 1, 2, 3, 62 and 63), a characteristic shared with the Siang and Murung-2 isolects of NWB. The Tun reflex of P-B *au is /au/, a characteristic shared with SWB isolects. Tun contrasts with both SWB and NWB, as well as the EB isolects, in the reflex of P-B *i that occurs before a final consonant. This is the same environment where *(P-B) is reflected by *i in P-NEB (cf. Exs. 37, 38 and 39).

Examples of reflexes of *(P-B)/C#/.

*i(P-B)/C#/ > *a(B-M), *e(P-SEB,P-SWB), *o(P-NWB,CEB), *i(P-NEB):

75.	lim <u>a'</u>	(Tun)	SWL 208 'five'
	lime <u>'</u>	(Kap,Ba,Kat)	
	limo <u>'</u>	(Doh,Mu2,Si)	
	lim <u>i'</u>	(Tab,Law)	
	limo	(Dej)	
	dime	(Mal, Sam, Wit, Ma)	

76.	nipa <u>'</u>	(Tun)	SWL 106 'snake'
	handipe <u>'</u>	(Kap, Kat)	
	njipo <u>'</u>	(Si)	
	nip <u>i'</u>	(Tab, Law)	
	nipo	(Dej)	
	nipe	(Mal, Wit)	

Note: Remember that *(P-B)/i#/>Ø(CEB,SEB).

77.	kalam	(Tun)	SWL 171 'night'
	hamalem	(Kap, Ba, Kat)	
	mamalom	(Mu2, Si)	
	malim	(Law)	
	kamalem	(Sam, Ma)	
	nihimalem	(Wit)	

Tundjung appears to contrast with the WB isolects in other characteristics. For instance, the Tun reflex of P-B *d is /r/, a characteristic shared with the CSB isolects of the East Barito group (cf. Exs. 24, 34, and SWL 112). However, the evidence is still too sketchy to afford us a clear view of the details. More data are needed from Barito-Mahakam iso-

lects. In the meantime, since Tun shares some characteristics with NWB, some with SWB, and contrasts with WB in others, I prefer to classify Barito-Mahakam as a separate major subgroup within the Barito family, coordinate with EB and WB. The approximate distribution of the subgroups of the Barito family has been indicated above on Map 2, p. 12. See Table 3 below for a list of Proto-Barito phonemes and their reflexes in the various isolects of the Barito family.

TABLE 3 : REFLEXES OF PROTO-BARITO PHONEMES

Pro-to Bar- ito	Barito Subgroups											
	P-EB	P-NEB	P-CSB	P-CEB	P-SEB	P-WB	P-SWB	Kat	P-KB	P-NWB	P-DM1	P-SM2
*b	b	b	w	w	w	b	b	b	b	b	b	b
*d	d	d	r	r	r	d	d	d	d	d	d	d
*dj	dj	dj	dj	dj	dj	dj	dj	dj	dj	dj	dj	dj
*p	p	p	p	p	p	p	p	p	p	p	p	p
*t	t	t	t	t/s	t/s	t	t	t	t	t	t	t
*tj	r/l	r/l	r/l	r/l	r/l	tj	tj	tj/dj	dj	tj	tj/dj	tj
*k	k	k	k	k	k	k	k	k	k	k	k	k
*m	m	m	m	m	m	m	m/∅	m	m	m/∅	m	m
*n	n	n	n	n	n	n	n/∅	n	n	n/∅	n	n
*ng	ng	ng	ng	ng	ng	ng	ng/∅	ng	ng	ng/ng	ng	ng
*w	w	w	w	w	w	w	w	w	w	w	w	w
*s	s	s	s	s	h	s	s	s	s/h	s/h	s/h	s/h
*h	j	j	j	j	j/'	h	h	h	h	h	h	h
*l	l	l	l	l	l/d	l	l	l	l	l	l	l
*r	r	r	r	r	r	r	r	r	r	r	r	r
*i	i	i	i	i	i	i	i	i	i	i	i	i
*ɛ	ɛ	ɛ/o	ɛ	o	e	ɛ	e	e	o	o	ɔ	o
*u	u	u	u	u	u	u	u	v	u	u	u	u
*a	a	a	a	a	a	a	a	a	a	a	a	a
*ei	ei	e	ei	e	ei	ei	ei	ei	oi	ɔi	oi	oi
*au	au	o	au	o	u	au	au	au	ou	ou	ou	ou

PART II: LEXICOSTATISTICAL ANALYSIS

A subgrouping of the Barito isolects based on lexicostatistical analysis of cognate percentages generally corroborates the subgrouping based on the comparative method. However, in several instances, notably those involving Ba'amang in Southwest Barito and Dusun Malang in Southeast Barito, extensive lexical borrowing from languages of non-immediate relationship has tended to obscure the classification based on phonological comparison. Where the lexicostatistical and comparative methods yield conflicting results, my own classification gives stronger weight to the comparative method.¹

I will omit Ba'amang and Dusun Malang from consideration in the following discussion because the former shows evidences of heavy borrowing from Bandjar Malay,² the latter from the contiguous Northeast Barito isolects.³ In a strict lexicostatistical classification

¹ My classification, thus, emphasizes older, "genetic", rather than more recent "diffusional" historical relationships. However, this is not to deny the important cultural implications to be drawn from cases where an isolect has borrowed heavily, even in its "basic" vocabulary, from another isolect not in immediate genetic relationship. For a critical discussion of the relative value of the lexicostatistical and comparative methods where the two give conflicting results, see Gudschinsky 1955 and 1958.

² Ba'amang shows 58 per cent homosemantic cognition with Kapuas and 54 per cent with Katingan, its coordinate Southwest Barito isolects, on the basis of sound correspondences. It shows 60 per cent with Bandjar and 57 per cent with Tamuan, two coastal Malay isolects spoken in the Ba'amang region.

³ Dusun Malang's highest cognate percentage within the Southeast Barito group is 61 with Samihim, significantly, the Southeast Barito isolect farthest removed geographically from the Dusun Malang area. Dusun

disregarding considerations of comparative phonology, Ba'amang would have been grouped with Bandjar and the coastal Malay languages, and Dusun Malang would have been grouped with the Northeast Barito isolects. However, it must be borne in mind that lexicostatistical subgrouping techniques have been developed for use in situations where, for one reason or another, the operations required by the classical comparative method are deemed impracticable. Pure lexicostatistical classifications are not meant to be inflexible and should always be considered open to amendment when reliable, non-statistical evidence indicates the need for revision. In the present cases, the phonological data strongly suggest the inclusion of Ba'amang in the Southwest Barito group and Dusun Malang in the Northeast Barito group.

Keeping these two exceptions in mind, I will start from the smaller units of the classification and review the lexicostatistical relationships exhibited within each of the minor Barito subgroups. The cognate percentages linking members of the Southeast Barito group range from 83 (Ja-Pak) to 61 (Sam-Pak).⁴ The highest percentage that a Southeast Barito member shares with a non-Southeast Barito isolect is 53 per cent. This gives a "critical difference"⁵ of 8, so that the

Malang shows 63 per cent cognation with Tabojan, the contiguous Northeast Barito isolect.

⁴ Dusun Malang-Paku show only 54 per cent cognation.

⁵ The "critical difference" of a language group is the amount of difference between the lowest cognate percentage within the group and the highest percentage of any member of the group with a non-member.

Southeast Barito forms a "genus"⁶ whose statistically determined discreteness is significant at the 10 per cent level.⁷ Cognate percentages within the Southeast Barito group are shown in Figure 3.

In Northeast Barito, Lawangan and Tabojan exhibit 70 per cent cognation, while the highest percentage with an outside isolect is 62 (Tab-Pak). This yields a critical difference of 8, and "genus" status for the Northeast Barito group.

On the basis of their reflexes of Proto-Barito *b, *d, and *t, Central East Barito and Southeast Barito form a subgroup in opposition to Northeast Barito. This subgrouping receives some support from the lexicostatistical data, but not at a significant level. The highest cognate percentage within the CSB group is 53 (Dej-Sam); the lowest is 45 (Dej-Pak). The highest percentages with outside isolects are 47 (Wit-Law) and 45 (Dej-Law), giving a critical difference equal to less than 0 and no statistical significance.

The cognate percentages linking pairs of Northwest Barito isolects range from 64 (Si-Mu1) to 81 (Si-Mu2). The highest cognate percentage with a non-Northwest Barito isolect is 58. Northwest Barito thus forms a "cluster". The lexicostatistical evidence pre-

⁶ See Dyen 1965, 6-7 for a discussion of the principles and terminology used by one school for lexicostatistical subgrouping. In Dyen's terminology, a critical difference of more than 9.5 is diagnostic of a "subfamily," between 8 and 9.5 of a "genus," between 5 and 7.9 of a "cluster," between 2.5 and 4.9 of a "hesion," and below 2.5 a "linkage." A group is called a "subgroup" if the size of critical difference is unknown or uncertain.

⁷ Dyen uses the appellations "subfamily" (5%), "genus" (10%), "cluster" (10-30%), "hesion" (30-60%) to indicate the confidence levels at which the discreteness of the denoted language groups are statistically significant.

FIGURE 3: INTRAGROUP COGNATE PERCENTAGES AND CRITICAL DIFFERENCES OF BARITO FAMILY SUBGROUPS

Intragroup Cognate Percentages	Highest Outside Percentage	Critical Difference	Subgroup Appellation																								
Southeast Barito: <table border="1"> <tr> <td>Pak</td><td>Wit</td><td>Sam</td><td>Mal</td></tr> <tr> <td>Na</td><td>83%</td><td>73%</td><td>70%</td><td>57%</td></tr> <tr> <td>Pak</td><td>68%</td><td>61%</td><td>54%</td><td></td></tr> <tr> <td>Wit</td><td>66%</td><td>59%</td><td></td><td></td></tr> <tr> <td>Sam</td><td>61%</td><td></td><td></td><td></td></tr> </table>	Pak	Wit	Sam	Mal	Na	83%	73%	70%	57%	Pak	68%	61%	54%		Wit	66%	59%			Sam	61%				53%	8	genus
Pak	Wit	Sam	Mal																								
Na	83%	73%	70%	57%																							
Pak	68%	61%	54%																								
Wit	66%	59%																									
Sam	61%																										
Central East Barito: Dusun Dejah	53%	--	subgroup																								
Northeast Barito: Tabojan-Lawangan 70%	62%	8	genus																								
Northwest Barito: <table border="1"> <tr> <td>Mu2</td><td>Doh</td><td>Mu1</td></tr> <tr> <td>Si</td><td>81%</td><td>66%</td><td>64%</td></tr> <tr> <td>Mu2</td><td>68%</td><td>66%</td><td></td></tr> <tr> <td>Doh</td><td>75%</td><td></td><td></td></tr> </table>	Mu2	Doh	Mu1	Si	81%	66%	64%	Mu2	68%	66%		Doh	75%			58%	6	cluster									
Mu2	Doh	Mu1																									
Si	81%	66%	64%																								
Mu2	68%	66%																									
Doh	75%																										
Southwest Barito: <table border="1"> <tr> <td>Kat</td><td>Ba</td></tr> <tr> <td>Kap</td><td>74% (59%)</td></tr> <tr> <td>Kat</td><td>(54%)</td></tr> </table>	Kat	Ba	Kap	74% (59%)	Kat	(54%)	58%	16	subfamily																		
Kat	Ba																										
Kap	74% (59%)																										
Kat	(54%)																										
East Barito: Lowest cognate percentage 43%	43%	0	linkage																								
West Barito: Lowest cognate percentage 47%	43%	4	hesion																								
Barito-Mahakam: Tundjung	41%	--	subgroup																								

sented in Figure 3 also corroborates the Dohoi-Murung-1 and Siang-Murung-2 opposition within the Northwest Barito group. Siang-Murung-2 is rated as a "subfamily," and Dohoi-Murung-1 as a "cluster."

Cognate percentages within the Southwest Barito group are shown in Figure 3. Excluding Ba'amang from consideration (see above), the highest cognate percentage with an outside isolect is 58 (Kat-Doh), giving Southwest Barito the status of a "subfamily."

Having established the lexicostatistical status of the minor subgroups of the Barito family, I will now move on to a consideration of the major subgroups: West Barito, East Barito, and Barito-Mahakam. The lowest cognate percentage among pairs of West Barito isolects is 47 (Kap-Si), and the highest percentage with a non-West Barito isolect 43 (Kap-Dej). Thus, West Barito is rated as a "hesion." Among the East Barito isolects, the lowest cognate percentage is 43 (Ma-Law), while the highest with an outside isolect⁸ is also 43 (Dej-Kap). East Barito, thus, forms a "linkage" with no statistical validity. The coordinate position, vis-a-vis East and West Barito, assigned to Barito-Mahakam on the basis of comparative phonology seems to be supported by the lexicostatistical evidence. The highest percentage shared by Barito-Mahakam with East Barito is 41 (Tun-Tab), with West Barito 40 (Tun-Mu2). Figure 4 gives the highest cognate percentages among coordinate major subgroups of the Barito family.

⁸ Excluding Dusun Jalang, which shows cognate percentages with West Barito isolects ranging from 45 (Kap, Kat) to 48 (Mu2).

FIGURE 4: HIGHEST COGNATE PERCENTAGES LINKING MAJOR BARITO SUBGROUPS

	WB	BN
EB	43% (48%)	41%
	WB	40%

It is difficult to evaluate the statistical discreteness of the Barito family in relation to non-Barito isolects. I do not have enough comparative material at hand to carry this classification further at this time,⁹ and such an extension would be beyond the scope of the present study. It might be pointed out, in passing, that the highest cognate percentage shared by Dyen's "Dayak Subfamily" with an outside group is 33.4 with the "Malayan Subfamily" of the "Java-Sumatran Hesion."¹⁰ Since the lowest cognate percentage obtaining within East-West Barito is 34.5 (Ma-Kat),¹¹ the critical difference between the "Malayan Subfamily"¹² should be reduced to 1.1. This, in effect, demotes the "Dayak Subfamily" to the status of a linkage.

⁹ Professor Dyen has not yet published the raw data on which his lexicostatistical classification of Austronesian languages is based.

¹⁰ Dyen 1965, 17.

¹¹ If Barito-Mahakam is included, the lowest percentage is 28.7 (Ma-Tun).

¹² Katingan and "Ngadju" (the latter probably equal to Kapuas taken from Hardeland's Ngadju Dictionary) are members of Dyen's "Dayak Subfamily."

In considering the analysis just presented, I get a lexico-statistical subgrouping of the Barito group which, when translated into Dyen's terms, appears as:

I. Barito Linkage: 33% (Malayan Subfamily).

A. Barito-Mahakam Subgroup: Tundjung 41% (Northeast Barito Genus, Tabojan).

1. Tundjung 41% (Tabojan).

B. West Barito Hesion: Kapuas 43% (Central East Barito Subgroup, Dusun Dejah).

1. Northwest Barito Cluster: Dohoi 58% (Southwest Barito Subfamily, Katingan).

1. Dohoi-Murung Cluster: Dohoi 68% (Siang).

1. Dohoi 75% (Murung-1).

2. Murung-1 75% (Dohoi).

2. Siang-Murung-2 Subfamily: Murung-2 68% (Dohoi).

1. Siang 81% (Murung-2).

2. Murung-2 81% (Siang).

2. Southwest Barito Subfamily: Katingan 58% (Northwest Barito Cluster, Dohoi).

1. Katingan 74% (Kapuas).

2. Kapuas 74% (Katingan).

3. (Ba'amang 60% (Bandjar Malay), 59% (Kapuas).)

- C. East Barito Linkage: Dusun Dejah 43% (Southwest Barito Subfamily, Kapuas).
1. Northeast Barito Genus: Tabojan 62% (Southeast Barito Genus, Paku).
 1. Lawangan 70% (Tabojan).
 2. Tabojan 70% (Lawangan).
 2. Central East Barito Subgroup: Dusun Dejah 53% (Southeast Barito Genus, Samihim).
 1. Dusun Dejah 53% (Samihim).
 3. Southeast Barito Genus: Samihim 53% (Central East Barito Subgroup, Dusun Dejah).
 1. (Dusun Malang 63% (Northeast Barito Group, Tabojan), 61% (Samihim).)
 2. Samihim 70% (Ma'anjan).
 3. Ma'anjan 82% (Paku).
 4. Paku 82% (Ma'anjan).
 5. Dusun Witu 73% (Ma'anjan).

Thus, this lexicostatistical classification agrees on every major point with the classification based on the analysis of sound correspondences.

APPENDIX II
COMPARATIVE WORD LISTS

Introduction

This appendix contains the comparative word lists upon which the analyses offered in Appendix I are based. The word lists are divided into three subsections: the first subsection (SWL) contains the 215 items of the earliest Lees-Swadesh list, among which are the 196 items used by Dyen. The second subsection (SDL) contains 104 items of Dajak terms not found in the SWL list. This is by no means a "basic" Dajak word list, although some of the individual forms on it may be considered basic. The third subsection (KTL) contains 52 kin term glosses. On this list, the entry "nst" indicates that there is no special term for the gloss in question.

Lists representing 16 Barito and 5 non-Barito isolects are presented in this appendix (see Map 2 for the locations of the respective isolects). Because of the large number of languages involved, they have been broken up for presentation into three parts. The East Barito isolects are given in Part I; Tundjung and the West Barito isolects in Part II. Of the non-Barito isolects presented in Part III, four (Indonesian, Bandjar, Delang and Tamuan) are Malay languages.

Since the Malagasy language of Madagascar has been hypothesized to have an extremely close connection with Ma'anjan (cf. Dahl 1951, Dyen 1953, Dyen 1965), I include a Swadesh list representing the Merina isolect of Malagasy for comparative purposes. My informant, a Princeton undergraduate named Rajaona Andriamanjara, was 21 years old and was born in Ambotomena, Madagascar. He and both his parents were native speakers of Merina. Using an incomplete Ma'anjan list, Dyen obtained a Ma'anjan-Malagasy cognate percentage of 43.5. However, Dyen indicated

that this percentage was probably inflated and anticipated that the true cognate percentage for these two isolects might turn out to be five to ten percentage points lower (cf. Dyen 1965, 43). This latter supposition seems to be borne out by my analysis using a complete Ma'anjan list. In a preliminary lexicostatistical comparison of Ma'anjan and Malagasy, I have obtained a minimum cognate percentage of 33 per cent with an outside maximum of 40 per cent, with even the latter figure lying somewhat below Dyen's score.

The approximate articulatory values of phonetic symbols used in the lists are given on the following page.

ARTICULATORY DEFINITIONS OF PHONETIC SYMBOLS USED IN WORD LISTS

Vowels:

	Front Unrounded	Central Unrounded	Back Rounded
High	i r	ɨ ε	u o ɔ
Mid	e	ʌ	
Low	æ	a	

Consonants:

p	voiceless bilabial stop	z	voiced alveolar spirant
b	voiced bilabial stop	š	voiceless palatal spirant
t	voiceless interdental stop	ž	voiced palatal spirant
č	voiceless alveolar stop	h	voiceless glottal spirant
d	voiced alveolar stop	m	voiced bilabial nasal
k	voiceless velar stop	n	voiced alveolar nasal
g	voiced velar stop	ñ	voiced palatal nasal
'	glottal stop	ŋ	voiced velar nasal
č	voiceless palatal affricate	l	voiced alveolar lateral
đ	voiced palatal affricate	λ	voiced palatal lateral flap
β	voiced bilabial spirant	r	voiced alveolar flap
f	voiceless labiodental spirant	w	bilabial semivowel
s	voiceless alveolar spirant	y	palatal semivowel

Special Symbols:

c ^y	palatalized consonant (e.g., k ^y)
c̚	vocalic consonant (i.e., m̚, n̚, ŋ̚, r̚)
v̚	voiceless vowel (e.g., i̚)
v̛	nasalized vowel (e.g., i̛)

PART I: EAST BARITO ISOLECTS

Tabojan
Lawangan
Dusun Dejah
Dusun Malang
Samihim
Dusun Witu
Paku
Ma'anjan

SIL	Gloss	Tabojan	Lawangan	Dusun Dəjah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
1.	hand	kam̩i	kami	kayaŋ	tajan	tajan	tajan	loŋun	tajan
2.	left	sei'	sei'	kei	sei'	kaβi'	kaβi'	keβi	kaβi'
3.	right	sanan	sanan	kanan	sanan	kaßan	kaßan	pakaßana	kaßan
4.	leg	pœ'	pœ'	pœ	pœ	pœ'ε	pœ'ε	pœ'ɔ	pœ'ε
5.	foot	pœ'	pœ'	pœ	pœ	pœ'ε	pœ'ε	pœ'ɔ	pœ'ε
6.	to walk	alantana	malan	malan	malan	nomalan	takia	bajalan	takia
7.	road	alan	alan	lalan	alan	lalan	lalan	pasiar	lalan
8.	to come	sawi	sulət	aßi'	haßi'	haßi'	haßi'	haßi'	haßi'
9.	to turn	m̩impaŋ	kitar	linsian	belok	suliah	kule'	ikolə'	m̩elok
10.	to swim	silaŋi	silaŋui	sanraŋui	salanui	baranaj	katamah	katambah	katamah
11.	to wash	bipahuk	pahuk	simpupuk	bajɔjɔh	itapas	sampupuk	ituhun	ituhun
12.	to wipe	- -	p̩ijawuh	ŋisu'	- -	ŋdusut	ñanawuh	muhut	muhut
13.	to rub	ŋärigɔsu	ŋusuk	gɔsɔk	mangɔsɔk	ŋgɔsɔk	ŋusuk	muhyt	isuhu
14.	dirty	awe' buñ	daai	daat	daat	berɛ'	ra'at	m̩orun	m̩irun
15.	dust	abu'	bilənur	habu'	abu'	ɛtɛ' tanɛ	habu'	dabu	ɛbuŋ
16.	skin	upak	upak	upak	upak	kudit	upak	upak	kudit
17.	back	rutuk	lutuk	lötək	likut	ßuku	lutuk	punjur	punjur
18.	belly	butuŋ	butuŋ	Buntuŋ	sanai	Buntuŋ	Buntuŋ	Buntuŋ	Buntuŋ
19.	bone	tulaŋ	tulaŋ	tulaŋ	tulaŋ	tu'ulan	tulaŋ	ta'ulan	ta'ulan
20.	guts	suaŋ butuŋ	atik butuŋ	sana'j	ihi' sanai	isi Buntuŋ	sana'j	sana'j	sana'j
21.	liver	ate	ate	ate	hati'	atci	atci	atci	atci
22.	heart	lipusu	kesoŋ	lumpusu'	Ȿantuŋ	Ȿantuŋ	dampuhu'	Ȿantuŋ	Ȿantuŋ
23.	to know	kitɔan	tɔan	tau	tanau	pandai	karasa	karasa'	karasa
24.	to think	m̩imikir	pikir	pikir	sehu	pikir	kɔno'	pikir	bafikir
25.	to fear	awe' rɔno'	takut	takut	takut	takut	takut	takut	anhe'εi
26.	blood	daya	daya	raya'	raha'	ira'	ira'	ira'	ira'
27.	head	utik	utik	utək	utək	ulu'	ulu'	ɔlu'	ulu'
28.	neck	diuŋ	biuŋ	diuŋ	diuŋ	diuŋ	tenru	papale	diuŋ
29.	hair	balɔ	balɔ	Balo	balɔ	Bulu	Bulu	Bulu	Bulu
30.	nose	uruj	uruj	uruj	uruj	uruj	uruj	uruj	uruj
31.	breathe	m̩isiŋat	b̩isəŋat	maseŋɔ	baseŋat	miheßuk	haheßuk	maheßuk	miheßuk

SWL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
32.	smell	ŋewo	ŋewo	ŋeñeo	tunuh	ka'ẽßau	ñiuk	ŋeñuh	ñiuk
33.	mouth	bəwa	bəewa	βaßa'	βaßa'	βaßa'	mulut	mulut	arußaßa'
34.	tooth	kukut	kukut	kukut	dipen	dipen	dipen	dipen	dipen
35.	tongue	lola	lola	lela'	lela'	lela'	lela'	lela'	lela'
36.	laugh	koka	koka	kisi'	kimihî'	kakihi'	kamihi'	kakihi'	kakihi'
37.	cry	najis	najis	ñoñar	najis	najis	najis	nuñau	nuñkau
38.	vomit	ŋuta	ŋuta	ndua'	nua'	ndoа'	nua'	nua'	nua'
39.	spit	ñura	ñuras	ñdura'	ñura'	ñdora'	nurak	irura'	irura
40.	eat	kuman	kuman	kuman	kuman	kuman	kuman	kuman	kuman
41.	cook	ŋisak	nsak	muluh	nihak	ŋanro'	mihak	ŋanro'	nandrük
42.	drink	isip	isip	minum	kinum	minum	ŋo'qt	ŋo'qt	ŋo'qt
43.	bite	ŋikit	kikit	ŋikit	mañkit	ŋikit	ŋikit	ikikit	ŋikit
44.	suck	tete'	tete'	nete'	potomo'	ŋomo'	omo'	umu'	umu'
45.	ear	kálinjá'	kálinjá'	telinjø	kiliñc	silu'	silo'	silu'	silu'
46.	hear	ŋidinjá'	diŋa'	kərəŋɔi	ŋiriñc'	kareŋei	reŋei	kareŋei	ñandrenjai
47.	eye	mati'	mati'	matø	mate	mate	mate	mato	mate
48.	see	neau	teau	kotau	neau	nantau	ini'	kite'	ŋini'
49.	sleep	turui	turui	turui	manre'	manre'	manre'	surui	manrt'
50.	lie	mái	loku'	umbis	kadıñ	uñkadıñ	mañkadıñ	tumban	mankadıñ
51.	sit	tuwát	tuwut	tuŋø'	maharun	humarun	maharun	maharun	mahařun
52.	stand	jakat	jakat	skənron	minri	huminri	minri	minri	minri
53.	person	ulun	ulun	ulun	lun	ulun	ulun	ulun	ulun
54.	man	soŋ	upo	upo	laki	laki	laki	ɔpø	upu
55.	woman	baße	bawø	βaße	βaßei	βaßei	βaßei	βaßei	βaßei
56.	child	ŋikiik	tia'	anak	anak	ia'	anakia	pea'	ia'
57.	husband	bani'	bani'	harau upo	øhe	darajan laki	ßanc	ßaßen	matue'i upu
58.	wife	sau'	sau'	harau	ßanc	daraŋan	harau	hɔŋ	matue'i
				ßaße		ßaßei			ßaßei
59.	mother	ine'	ne'	ine'	inai	ine'	ine'	ine'	ineh
60.	father	uma'	ma'	uma'	amai	ambah	amah	umba'	amah
61.	sibling+	tukán	tukán	tata	kaka'	tata'	tata'	tata	tata'

SWL	Gloss	Tabojan	Lawangan	Dusun Dəjah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
62.	sibling-	ani'	ani'	andi'	ani'	andi'	ani'	adi'	ani'
63.	name	aran	aran	ŋaran	aran	aran	aran	ŋaran	ŋaran
64.	say	ŋulek	ulek	əntuh	uhui	bara'	ŋiaŋ	ka'εau	ŋeŋ
65.	rope	tali	tali	hunçi	tadi	tadi	tadi	tadi	tadi
66.	tie	ñuruk	ñuruk	ñiret	ñuru'	məteh	nuruk	ñuruk	nuruk
67.	sew	ŋɔsot	ŋɔsot	məlit	ŋɔsot	numpaq	ŋamit	ikamit	ikamit
68.	clothing	pakayan	karut ulap	pakayan	pakayan	pakayan	pakaian	pama'	pama'
69.	hunt	kasu'	miresi	mamburu	kanup	mburu	muru'	ŋanup	muka'
70.	shoot	nembak	nembak	manembak	nemak	nembak	nemak	nembak	nimak
71.	stab	nəßut	təßuk	mañədək	neßek	neßik	ñuduk	ñuduk	ñuduk
72.	hit	matampar	sədər	babur	batampar	ŋɔntau	batampar	panampar	nampar
73.	fight	bulə	bulə	babur	bulə	bakalahi'	palakat	babur	babur
74.	kill	munu	munu	ŋampate	munu'	munu'	munu'	munu'	munu'
75.	die	mate	mate	mate	matei	matei	matei	mate	matei
76.	live	bəlum	bəlum	βəlum	βəlum	βəlum	βəlum	βəlum	βəlum
77.	scratch	ŋakap	ŋakap	ŋukut	ŋakap	ŋeqk	ikukut	ikukut	ikukut
78.	cut	mətik	mətik	nətək	nətək	məç'	ŋetek	itatas	netik
79.	stick	bataŋ	bataŋ	Bataŋ	Bataŋ	Bataŋ	Bataŋ	Bataŋ	Bataŋ
80.	split	moka'	moka'	ŋika'	nuhj'	nuhj'	nuhj'	ŋußen'	nuhj'
81.	sharp	tarim	tarim	tarom	meet	kumat	makumat	makumat	kumat
82.	dull	kalir	kalir	bətul	kalət	butul	tumpul	lelau	paləlep
83.	work	bıgaßi'	məŋkəs'	bagaßi	bagaßi'	bagaßi'	bagaßi	bagaßi	bagaßi
84.	play	bırıck	gıkah	pamusik	gaßi' ayam	imain	ma'usik	toli	tuli
85.	sing	mıñañi	bitına	mañañi	mañañi'	ñañi'	batinja	nomet	numet
86.	dance	nuyə'	nuyə'	nanrik	nanrik	nanrik	matanrik	nanrik	nanrik
87.	swell	buŋkak	buŋkak	bənsulət	buŋkak	baŋkak	buŋkak	baŋkak	bakah
88.	squeeze	mičk	mičk	marah	ŋahamis	mi'ən	mičk	mičk	--
89.	hold	nıkın	megə'	neger	ñaput	megut	negei	itege	negei
90.	dig	ŋali'	ŋali'	ŋadi	ŋadi	ŋadi	ŋadi	ŋadi	ŋadi
91.	give	ŋokoi	ŋokoi	ŋumi	ŋokoi	ŋami'	ŋami'	ŋaňu'	ŋami'
92.	pull	ñujut	ñujut	ŋoret	narik	mbatak	ñujut	ñujut	jujut

SWL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Jitu	Paku	Ma'anjan
93.	push	nulak	ñələr	nurunj	ŋuŋjuŋ'	nɔŋjul	ñu'un	ñu'un	ñu'un
94.	throw	mantɪŋ	ŋəbit	ŋumpe'	mantɪŋ	naßut	mantɪŋ	naßut	naßut
95.	fall	lətu	lətu	latu'	ratu'	latu'	laßu'	lotu	laßu'
96.	dog	koko'	koko'	asu	tahu'	duyu'	tahu'	antahu	antahu'
97.	bird	pipulu'	timpulu'	pəmpulu	pupulu'	ßurunj	ßurunj	ßurunj	ßurunj
98.	egg	təlui	təlui	təlui	təlui	untəlui	təlui	atəlui	atəlui
99.	feather	bulu'	bulu	Bulu	ulu	Bulu	Bulu	Bulu	Bulu
100.	wing	ekap	ilar	kaləkəp	ekap	kalekəp	kaləkəp	əlat	əlat
101.	fly	misilm̩	silm̩	sambilim̩	minsidiŋ	sumidiŋ	samidiŋ	samiliŋ	sumidiŋ
102.	animal	situa'	situa'	kərik	əha'	əha'	satua'	satua'	satua
103.	meat	dagm̩	lunik	isi	ihi'	lunch	lunek	lunek	lunek
104.	fat	- -	dawun	ləmpu	ßenok	taße'	taße'	mənuk	taße'
105.	tail	ikui	ikui	ukui	ikui	ukui	ikui	ukui	ukui
106.	snake	nipá'	nipá'	nipo	nipe	undiþe	nipe	adipe	anipe
107.	worm	čaćin̩	ləkuŋ	ləkuŋ	luŋkuŋ	sasiŋ	kaŋkan	sasiŋ	sa'asim̩
108.	louse	kutu'	kutu'	kutu	kutu	kutu	kutu	kutu	kutu
109.	fish	esa'	esa'	esa	kenah	kenah	kenah	kenah	kenah
110.	tree	pōon	tōnar	kakau	Bataŋ	kakau	pa'uŋ	kakau	kakau
111.	rotten	məßo	daai	bontut	botok	buruk	buruk	buruk	buruk
112.	leaf	daun	daaun	raßen	daun	daun	raßen	raun	raßen
113.	bark	upakayu	upa'kayu	upakkayu	kudit kayu	upakayu	upa'	kudit kayu	kudit kayu
114.	root	ßakat	wakai	ßakai	ßakat	purukat	ßakat	ßakat	ßakat
115.	seed	nčoi	insci	bigi	insci	diki	insci	liki/diki	diki
116.	flower	bunj̩i'	bunj̩i'	ɔŋye	uŋe	ßuŋe	uŋe	ßuŋe	ßuŋe
117.	fruit	bua	bua	ua'	bua'	Bua'	ua'	ua'	Bua'
118.	grass	rikut	ikut	rikut	rikut	rikut	rikut	rikut	rikut
119.	earth	tana	taana	tana'	tane'	tane'	tane'	tane'	tane'
120.	stone	batu'	batu'	Batu	Batu	Batu	Batu	Batu	Batu
121.	sand	jõne	jõne	krosik	jõne	karasik	tarasik	karasik	karasik
122.	water	danum	danum	ranu'	ranu'	ranu'	ranu'	ranu'	ranu'
123.	freeze	- -	- -	- -	- -	- -	- -	- -	- -

SIL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
124.	ice	es	es	es	es	es	es	es	es
125.	flow	mepes	mepes	mandor	tapin	mareh	ma'arch	march	march
126.	float	gälampun	gampen	kampun	galampun	ŋampun	timul	kamampun	gumapun
127.	ocean	laut	laut	tasik	tahik	laut	tahik	tahik	tahik
128.	salt	sirau	sirau	sira'	hau'	daŋi	sira'	sira'	raŋi
129.	lake	dano	dano	baruh	danau	danau	danau	guntun	danau
130.	river	suŋe	suŋe	suŋei	huŋei	huŋei	huŋei	kambatan	huŋei
131.	mountain	sain	gunun	gunun	gunun	gunun	gunun	gunun	gunun
132.	woods	pulau jiwit	alas	jubut	alah	taun alah	haket	jmpun	jmpun
133.	sky	laŋit	laŋit	laŋit	laŋit	laŋit	laŋit	laŋit	laŋit
134.	sun	mateŋolo	mate'olo	matə'ɔnə	mateanrau	mateanrau	mateanrau	mateanrau	mate'anrau
135.	star	bintan	sintomoi	bintan	bintan	bintan	bintan	BiBihian	BaBahiay
136.	cloud	mbun	jaaun	jaaun	aßan	aßan	rakun	rakun	rakun
137.	fog	mbun	jaaun	ambun	jaun	ambun	amun	ßeßeanrau	amun
138.	rain	uran	uran	uran	uran	uran	uran	uran	uran
139.	snow	--	--	--	--	--	--	--	--
140.	wind	rißut	enus	rißut	rißut	rißut	rißut	barat	rißut
141.	blow	siniup	siuk	rißut	ajin rißut	--	maleßus	isißui	ñiBui
142.	warm	milaiin	layin	layen	malayen	malaiŋ	malaiŋ	malayun	malaiŋ
143.	cold	riŋin	riŋin	riŋin	mirŋin	marinjın	marisak	marisak	marisak
144.	dry	meyaq	meyaq	meyaq	meyaq	ma'caŋ	miaŋ	kariŋ	kariŋ
145.	wet	biso'	bosa'	bosa'	biso'	ßechu'	ßechu'	ßechu'	ßechu'
146.	smooth	rata'	rata'	rata	rata'	datar	rata'	rata	rata'
147.	heavy	boyat	doyat	boyat	ßeyat	maße'at	ße'at	maßeat	maße'at
148.	fire	apui	apui	apui	apui	apui	apui	apui	apui
149.	burn	ñuru	nuna'	nutun	ñuru	ŋjuju	nutun	nutun	nutun
150.	smoke	utut	ötut	atuk	atuk	atuk	atuk	atuk	atuk
151.	ashes	abu'	bilənur	leßənun	abu'	Bulenun	habu'	εßun	εßun
152.	black	metim	metim	Buyuŋ	mintem	ma'intem	ma'intem	ma'intem	ma'intem
153.	white	bura	bura	Bura'	bura	mahilak	mahilak	mahilak	mahilak
154.	red	meya'	mega'	meyaq'	meyaq'	mca'	mariŋ	mariŋ	mariŋ

SWL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
155.	yellow	žiriau	lemit	kunij	milintaj	madintaj	madintaj	madintaj	madintaj
156.	green	- -	žiriau	hijau	brinilu	hijau	karado	kakurij	kakurij
157.	small	kidit	idis	idik	kadik	ampi'	odik	halus	halus
158.	big	gaya	solai	olai	gaya	hante'	hante'	hante'	hante'
159.	short	udok	udok	idok	udok	imbe'	ime'	ime'	ime'
160.	long	pañan	panjan	atah	amau	ambau	amau	ambau	amau
161.	thin	lipis	lipis	lipis	lipis	mariris	mariris	mariris	mariris
162.	thick	kapar	kapar	tabal	kapan	makapan	makapan	makapan	makapan
163.	narrow	solit	solit	halus	helet	kiput	hipit	hipit	hipit
164.	wide	gaya	lchoi	luas	gaya	laga'	buka'	hante'	hante'
165.	straight	bujur	minkorin	lenuh	bujur	bujur	maßitu'	maßitu'	maßitu'
166.	old	tuha'	tuha'	tuo	tuha'	matu'ch	matu'ch	matu'ch	matu'ch
167.	new	biyo	kado'	ßau	ÿapo'	ßa'u	bio	ßayu	ßa'u
168.	good	buñ	buwun	mañh	asuh	ma'çh	buñas	ma'asus	ma'çh
169.	bad	awe' buñ	daai	daat	daat	pa'ara	ra'at	murun	murun
170.	correct	bujur	bine'	tuu	bujur	bujur	tu'ul	ßua	kapinu'ü
171.	night	doyin	malim	malom	miyen	kamalem	nihimalem	kamalum	kamalem
172.	day	olo	olo	konro	anrau	anrau	kanrau	ka'unro	andrau
173.	year	taun	taun	taun	taun	ta'un	ta'un	taun	ta'un
174.	when	ŋkarme'	kide'	lau'onc	- -	humbian	hantekaße	hatekui	hantekaße
175.	at	ntai	taai	ba	tei	ha	ta	haŋ	haŋ
176.	in	suaj	suaj	suaj	huaj	huaj	huaj	lalum	haßuan
177.	here	ntai ihi'	taibih'i	baitu	teiti	ha'ina'	ta'iti	gi'itu	hayiti
178.	there	aruh	tayaruh	bayo	tei'aro	ha'ari	ta'aro	gi'aro'	hanyaru'
179.	this	ihi'	ihi'	itu	ti	ina'	iti	itu	iti
180.	that	iro	aruh	iyo	hiyO	ari	iro	iru'	iru'
181.	near	dini'	dani'	riyet	dini'	ri'Et	rite'	ri'et	ri'et
182.	far	oro'	oro'	oro'	oro'	laßit	laßit	oro'	laßit
183.	where	ntaimε'	taitame'	baøne	tei'aße	ha'aße	ta'aße	gihaße'	hañaße
184.	I	aap	aap	aku	ku	aku	aku	uki'	aku
185.	thou	iko	koo	iko	nu	hañu'	kayo'	iko'	hañu'

SWL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
186.	he	ič'	da'	ise	ne	hayε	ayε	ikə'	hañε
187.	we(incl)	taka	taka'	ta'am	taka	takam	takam	takam	takam
	we(excl)	kain	kain	kain	kamin	kami	kami	kain	kita
188.	ye	takadəo'	kam	ikəm	kənkonoren	naun	kaun	- -	naun
189.	they	ali	dali	reɔ	ire	hire	hire	here	here
190.	what?	ən	se'	ñənε	hiε'	aßε	inun	inun	inun
191.	who?	ńče'aran	dase'	ise	hiε'	hi'aßε	hiε'	hiε'	hiε'
192.	other	lain	lain	lain	lain	lain	lain	lain	lain
193.	some	pire	senu'senu'	sesenu	sipire	pipire	papire	papire	pirepire
194.	many	deo'	deɔ'	deɔ'	deyo'	hadi'	hadi'	Bahai	hene'
195.	few	dəho	dis	didik	dəho	hi'unti'	dətik	butit	butit
196.	all	ulundeo'	kaßus	ənəŋ	huras	sigala'	kaluhan	katoloh	katuluh
197.	and	lawan	ali'	ali'	lukun	andi	nəlaŋ	dan	anri'
198.	with	sama'sama'	senra'	sinrah	dadaya	sasama'	papire	sasambε	same'same'
199.	because	sabap	ləka'	kəε'	kuno'	sabap	ulah	daya'	inun ńulah
200.	if	kalu'	aka'	amun	amun	amun	amun	amun	amun
201.	how?	ńitme'	ńitme'	sara'one	ńunau'aßε	kala'aßε	kala'aßε	kala'aßε	kala'aßε
202.	not	awe'	sa'	deyah	mə'	puan	bakəi	kəi	puan
203.	count	ńituj	ńirəken	bareken	ńituj	ńituj	ńareken	barəken	nanreken
204.	one	erai	erai	erai	isa'	isa'	isa'	erai	isa'
205.	two	dui'	dui'	rueh	rueh	rueh	rueh	ruɔ	rueh
206.	three	təlu'	təlu'	təlu	təlu	təlo	təlo	təlu	təlo
207.	four	opat	opat	əpat	əpat	əpat	əpat	əpat	əpat
208.	five	limi'	limi'	dimə	dime	dime	dime	limi	dime
209.	six	onəm	onum	ənom	ənəm	ənəm	ənəm	ənum	ənəm
210.	seven	turu	turu	təru'	pitu	pito	pitu	pitu	pitu
211.	eight	walo	walo	ßalu'	ßalu'	ßalu'	ßalu'	ßalu'	ßalu'
212.	nine	sic	sie	sie	suci	soci	suei	suei	suei
213.	ten	sipuluh	sepulu	spulu	pulu'	pulu'	sapuluh	spuluh	sapuluh
214.	twenty	dui'pulu	dui'pulu	duɔpulu	ruəmpulu'	ruampulu'	ruampulu'	ruɔpulu	ruampulu'
215.	hundred	jatus	jatus	jatus	jatuh	jatuh	saratus	jatuh	jatuh

SDL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
1.	forehead	kənat	kənat	rai	rai	ra'i	ra'i	rai	ra'i
2.	cheek	pasu'	pasu'	pasu	kiliipihiŋ	pahu	pahu	pahu	pahu
3.	lip	bißi'	bißi'	bißi	mulut	bißi	bißi	bißi	bißi'
4.	chin	døyam	bəam	raŋ	bəyam	ra'aj	ra'aj	raŋ	ra'aj
5.	face	ße	waaι	ße	rai	ße'c	ra'i	ße	arußeße'
6.	napo	lələk	lugɔ'	tənru	diŋ	tənru'	tənru	lepuŋ	tənru
7.	chest	dada'	dada'	dada	dada'	dada'	dada'	dada'	dada'
8.	shoulder	piluki'	piluku'	paluko	papale	papale	papale	paluko	papale
9.	armpit	kilopa	kilopa	kəlek	kəlek	kəlik	kəlek	kəlek	kəlek
10.	buttock	popoi	popoi	laßut	pəpəi	kaßaj	para'	kətut	para'
11.	thigh	kisaapan	kisapan	kəsapəŋ	kahapan	ßeŋ pe'c	lurur	kahapan	kahapan
12.	knee	tikal	tikal	utəkatuk	takalo	ulu'katuk	ulaləp	ulək katək	ulu'alep
13.	calf	jakir	jakir	bontət	jakor	ßeih	pe'c	sui	su'i
14.	ankle	mai'pəo	- -	matəmambij	matepees	burakah	matepe'e	bakulaliŋ	bakulaliŋ
15.	digit	kiliŋkiŋ	timuru	garigi	ŋkiŋ	kiŋkiŋ	kiŋkiŋ	kiŋkiŋ	kiŋkiŋ
16.	nail	šiwei	sißi	kuku	kuku	kuku	kuku'	kuku	kuku
17.	corpse	baŋkai	baŋkai	baŋkai	baŋkai	baŋkai	baŋkai	baŋkai	baŋkai
18.	house	bilai	blai	loßu'	blai	lampau	leßu'	leßu'	leßu'
19.	longhouse	bilai pañaj	blai betəŋ	loßu'atah	betəŋ	- -	leßu'aməŋ	betəŋ	betəŋ
20.	field hut	laladaŋ	blai	pəndək	suruap	pəndək	rampa'	daŋau	daŋau
21.	kitchen	bliku'	ataŋ	baliko	biliku'	dapur	dapur	dapur	suŋkiŋ
22.	post	beñem	ori	ori	tiaŋ	ari'	ari'	ori	ari'
23.	steps	tukar	tukar	tukat	taŋkilaj	tukat	tukar	tukat	tukat
24.	village	jaa	jaa	jaa	leu'	kampuŋ	tumpuk	tumpuk	tumpuk
25.	betel	sambai	laur	sambai	luat	lu'at	sambai	samai	luat
26.	lime	kapur	apo	kapui	kapoi	kapui	kapoi	kapui	kapui
27.	gambir	gambar	amis	gambar	amis	gambar	gambar	amis	amis
28.	areca nut	sipon	sipon	pinaŋ	pinaŋ	pinaŋ	pinaŋ	pinaŋ	pinaŋ
29.	swidden	umə'	umə'	umə	ume	ume	alah	umu	ume
30.	padi	parc	parc	parc	parci	parci	parci	parc	parci
31.	rice	biyas	bəyas	ßeyah	ßeah	ßeah	ßeah	ßeah	ßeah

SDL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
32.	cooked rice	nahj'	nahj'	nahj'	nahj'	nahj'	nahj'	nahj'	nahj'
33.	rice (glut.)	pulut	pulut	dite'	pulut	dite'	dite'	dite'	dite'
34.	padi seed	bini parc	bini	Bini'	umanj parci	Bini'	usi parci	Bini'	Bini'
35.	dibble stick	asik	asik	asok	ehék	ehék	ehék	ahuk	ehék
36.	to dibble	ŋasik	ŋasik	ŋasok	ŋehék	ŋehék	ŋehék	ma'ahuk	mi'ehék
37.	to sow	ñañis	moyas	miyah	mias	mu'au	mu'ay	miah	mu'ay
38.	to cut padi	ŋotiu	ŋotiu	ŋani	masi'	masi'	masi'	masi'	masi'
39.	<u>palas</u>	--	palas	pilah	saki'	palas	sakipilah	pilah	pilah
40.	shaman	bilian	bilian	balian	bidian	Badian	Badian	Badian	Badian
41.	knife	ladij	isau	ladij	turi'	turi'	ladij	ladij	ladij
42.	machete	odak	odak	anra	eke'	taroh	pisau	otak	taruh
43.	war sword	odak mandau	mandau	mandau	manau	mandau	mandau	ama'ŋ	amaŋ
44.	spear	doha'	bilokorj	bunjok	lamin	lamberj	lamin	duha'	duha'
45.	blowpipe	pötan	pötan	simpötan	pötan	pötan	pötan	pötan	pötan
46.	ax-blade	Base	wase	bliuŋ	əhai	Badiuŋ	Badiuŋ	Badiuŋ	Badiuŋ
46a.	ax	perawase	pera	pera'	pera	rayan	pera'	pera'	rayan
47.	canoe	žukun	žukun	žukun	žukun	biduk	žukun	žukun	žukun
48.	fish net	lunta'	jala	žala'	žala	žala'	lunta	tabŋ	tabŋ
49.	fish hook	bɔbit	bɔbit	Bißit	bɔbit	pamuha'	Bintan	Bintan	Bintan
50.	to fish	mɔbit	mɔbit	mißit	mɔbit	ŋutuŋ	mintan	mintan	mintan
51.	to fish-poison	ŋui'	ŋuwŋ'	nuq	nuße	nußę	noq	nuq	nußę
52.	pike	tiwelen	bilikawak	pöra'	--	luŋu	taßelen	taßelen	taßelen
53.	catfish	baŋ	tinikin	sindikun	baŋ	pasi	Ba'ŋ	baŋ	ba'ŋ
54.	blowfish	bítana'	bírintana'	buntal	bantana'	buntal	buntana	buntana	buntana
55.	to fight cocks	ñaŋ	ñaŋ	ñaňuŋ	sauŋ	ñaňuŋ	ñaŋ	ñaňuŋ	ñaňuŋ
56.	wild pig	baui	baui	Baßui	Baßui	Baßui	Baßui	Baßui	Baßui
57.	pig (domes.)	unek	upe	unek	ißek	Baßui	ißek	onik	ißek
58.	bear	biyanj	biyanj	bißan	biyanj	Bøyuanj	biyanj	biyanj	Bøyuanj
59.	monkey	bodau	uyar	Barik	Barik	Barik	Barik	Barik	Barik
60.	monkey(<u>beruk</u>)	boruk	boruk	Beruk	Beruk	Beruk	Beruk	Beruk	Beruk
61.	gibbon	kilaßit	kilaßut	klaßot	kalaßot	u'ua'	--	kalaßut	tulumpiau

SDL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
62.	porcupine	tetunj	tetunj	tetunj	aŋkis	tetunj	tetunj	tetunj	tetunj
63.	deer(<u>kantjil</u>)	pilanu'	pilanuk	planduk	palanuk	palanuk	palanuk	palanuk	palanuk
64.	deer(<u>kidjang</u>)	tilaus	tilaus	talauh	--	tula'uh	paraj	talauh	paraj
65.	deer (<u>rusa</u>)	tikayu	tikayo	takayo	paraj	kuaße'	kaßeße'	kaßeße'	kaßeße'
66.	water buffalo	kircwau	kircbau	kareßbau	kareßbau	kareßbau	kareßbau	kareßbau	kareßbau
67.	crocodile	buah	buah	bahaya'	buah	buhaya'	u'a'	bahaya'	bu'ah
68.	chicken	piyak	piak	piak	piak	manu'	manu'	manu'	manu'
69.	cat	usinj	usinj	usinj	usinj	usinj	usinj	usinj	usinj
70.	caterpillar	iyii	iyii	ulər	ulet	ulet	ulet	ulet	ulet
71.	centipede	liliapan	liliapan	lalipan	lilipan	didipan	lalipan	lipan	anilipan
72.	spider	tinkilaga'	ayutlaa	laßa'	taŋkala-	ganraŋ-	ganraŋ-	ganraŋ-	ganraŋ-
				ga'aj	laßa'	laßa'	laßa'	raßa'	laßa'
73.	bumblebee	tentihuyunj	sintuyunj	səleßoyunj	tuntuhuyunj	kansißuyunj	sansahuyunj	sunsuyunj	duyun
74.	mosquito	piyঞ্জো	kiyঞ্জো	kiঞ্জো	ñamuk	mamu'	mamu'	payunu	mamu'
75.	fly	sorau	siwakanj	səßakanj	lalet	lalet	lalet	saßakanj	lalet
76.	butterfly	bilemanj	blimanj	kələmbanj	kalabamanj	kukupu	kakupu'	taßirip	laluŋ
77.	ant	bitik	bitik	ßisik	ßisik	ßisik	usik	ßisik	ßisik
78.	<u>tjitjak</u>	sasak	sasak	sasak	taŋkalasak	sasak	čačak	sasak	sasak
79.	rat/mouse	leso'	leso'	bleso'	leso'	balcsu'	leso'	aleŋket	alimęket
80.	<u>toke</u>	tok'pk	miya	mpok'pk	tokq	teke'	maňua	tok'pk	tok'pk
81.	locust	bililawir	anjo	anjo	lampajanu	biraru'	lampajanu	alaŋanre	halajanre
82.	anteater	aŋkis	ayam	ayəm	ayen	muŋkun	ayem	ayum	ayem
83.	leopard	timaj	kuli	simaj	harimau	rima'unj	rama'uj	harimaunj	harimaunj
84.	buffalo	bantəŋ	limui	ləmbu'	--	lambu'	bantəŋ	lamu'	lamu'
85.	primary forest	--	alas	žubut	alah	katu'an	lasi'	katuan	katu'an
86.	rattan	ue	ue	uei	ußei	uei	uei	ue	uei
87.	bamboo	porm	tolanj	ßane	telanj	simbuluh	telanj	ßulu'	ßulu'
88.	coconut	niuj	niuj	niuj	niuj	niuj	niuj	niuj	niuj
89.	durian	duyan	duyan	ruyan	royan	ruyan	royan	ruyan	ruyan
90.	banana	puti'	puti'	punsi	punsi	pisanj	punsi	punsi	punsi
91.	pineapple	tirincinj	tirinjsinj	kanas	lamaka'	nanas	kanas	tariňšinj	melaka'

SDL	Gloss	Tabojan	Lawangan	Dusun Dəjah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'arisan
92.	<u>sahu</u>	sau'	sau'	sau'	sau'	sau'	sau'	sau'	sau'
93.	<u>tjempedak</u>	linakan	lenakan	nakan	lanakan	nanakan	lanakan	nakan	nanakan
94.	rambutan	rambutan	militi'	rambutan	ramutan	rambutan	rambutan	maliti'	maliti'
95.	cassava	ayakayu'	dampukayu'	dəmpukayu	ʃaußau	tambun kayu	aya kayu	dəŋkut	dəŋkut
96.	eggplant	təyŋ	təyŋ	təyŋ	teuŋ	teuŋ	teuŋ	təyŋ	təyŋ
97.	<u>kaladi</u>	tinayan	burct	buran	tadis	kaladi'	tadis	ɔpi'	upi'
98.	honey	βani'	lioßani'	riɔßani	riu'βani	pananu'	riu'βani	riußani	riußani
99.	<u>tuak</u>	tua'	tuak	tuak	tuak	tuak	tuak	tuak	anŋ
100.	river mouth	əliŋ	əliŋ	naŋɔ	naŋɛ	naŋɛ	naŋɛ	naŋu	naŋɛ
101.	rapids	kiham	doyam	rɔyam	riam	ranu'mitun	kareh	riam	kiham
102.	river bank	taŋkiŋ	təŋkißan	pɔmpaŋ	tebiŋ	pampaŋ	hirŋ huŋci	pɔmpaŋ	pampaŋ
103.	afternoon	ŋirirɔyŋ	doyŋ	nayap	ʃeʃekißa	kariße'	saña	nañap	kariße
104.	orangutan	keu'	keu'	ɔraŋutan	lunhutan	ulun taun	keo'	keo'	kahiu'
						alah			

KTL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma'anjan
1.	Sb	erai butuŋ	erai butuŋ	crai ß untuŋ	pluksanaj	pehuna'j	pulakna'j	pulutsana'j	pulaksana'j
2.	Sb+	tukān	tukān	tata	kaka'	tata'	tata'	tata'	tata'
3.	Sb-	ani'	anni'	andi'	ani'	andi'	andi'	adi'	andi'
4.	Co	nst	nst	crai ß untuŋ	pluksanaj	nst	pulakna'j	pulutsana'j	pulaksana'j
5.	Co 1	písindai	ñinnai	ñinrai	sahinra'	sihinra'an	sahinra'	sinra'an	sahinra'an
6.	Co 2	píduž'	ñenduž'	ñanruč	sunruč	sinročhan	sanruč	sunruč	sanručhan
7.	Co 3	pítolu'	ñentolu'	ñantolu	sutelu	sintcluan	santelu	santcluan	santcluan
8.	Co 4	pí'opat	nst	ñanjkópat	nst	nst	nst	nst	nst
9.	Co 5	(pálimi')	-nst	ñandimo	nst	nst	nst	nst	nst
10.	Fa	uma'	ma'	uma'	amai	ambah	ambah	uma'	ambah
11.	Mo	ine'	ne'	ine'	inai	ine'	ine'	ine'	ineh
12.	PaBr	tamu	tamo	nst	tamo	mama'	tamu	mama'	mama'
13.	PaBr+	nst	tuo	matuo	nst	nst	nst	nst	nst
14.	PaBr-	nst	tamo	mama'	nst	nst	nst	nst	nst
15.	PaSiHu	tamu	burok	nst	tamo	mama'	tamu	mama'	mama'
16.	PaSi+Hu	nst	nst	matuo	nst	nst	nst	nst	nst
17.	PaSi-Hu	nst	nst	mama'	nst	nst	nst	nst	nst
18.	PaSi	bujan	burok	nst	ine'	tutu'	bujan	mēna'	tutu'
19.	PaSi+	nst	tuobawę	ine'tuo	nst	nst	nst	nst	nst
20.	IaSi-	nst	burok	mēna'	nst	nst	nst	nst	nst
21.	PaBrWi	bujan	tamo	nst	ine'	tutu'	bujan	mēna'	tutu'
22.	PaBr+Wi	nst	nst	ine'tuo	nst	nst	nst	nst	nst
23.	PaBr-Wi	nst	nst	mēna'	nst	nst	nst	nst	nst
24.	Ch	ŋíkiák	tia'	anak	anak	ia'	anak	pēa'	ia'
25.	So	anakiəsoŋ	tia'upo	anakupo	anak laki	ia'laki	anak laki	pēa'upo	ia'upu
26.	Da	anakiabaße	tia'bawę	anakbaße	anakbaßei	ia'baßei	anakbaßei	pēa'baße	iaBaßei
27.	SbCh/CoCh	aken	aken	aken	aken	aken	aken	aken	aken
28.	PaPa	nst	takkakah	nst	nst	nini'	nst	nst	nst
29.	PaFa	kakah	kakah	kakah	kakah	nst	kakah	kakah	kakah
30.	PaMo	itak	tak	itak	itak	nst	itak	itak	nini'

KTL	Gloss	Tabojan	Lawangan	Dusun Dejah	Dusun Malang	Samihim	Dusun Witu	Paku	Ma' anjan
31.	ChCh	čuču'	čočo'	čompu	čočo'	umpu	čočo'	čočo'	umpu
32.	SbChCh&	čuču'	čočo'	čuču	čočo'	umpu	čočo'	čočo'	umpu
33.	PaPaPa	mɔyaŋ	datu'	datu	datu'	datu	datu'	datu'	datu'
34.	ChChCh	buyut	piyut	piyut	piyut	piyut	buyut	buyut	buyut
35.	SbChChCh&	buyut	piyut	bue'	piyut	piyut	buyut	buyut	buyut
36.	Pat aPara	nst	mɔyaŋ	nst	mɔyaŋ	alau	nini'	muñan	muñan
37.	ChChChCh&	nst	alep	nst	alEp	buyut	εntah	- -	εntah
38.	Sp	nst	nst	harau	nst	darajan	nst	nst	daraŋan
39.	Hu	banɛ'	banɛ'	harau upo	əhe	darajan	Banei	haŋŋ	matue'upu
40.	Wi	sau'	sau	harau	Bane	darajan	harau	Baße	matueBa-
				baße		baßei			bei
41.	SpSb/SbSp	ayu	nst	ißan (*F)	nst	nst	nst	nst	ißan (*F)
42.	SpBr/Si Hu	nst	ayu	daup (*M)	ayu	daup	ayu	daup	daup (*M)
43.	SpSi/BrWi	nst	ɔŋan	ißan (*M)	ißan	ißan	ißan	ißan	ißan (*M)
44.	ChSpPa	saŋet	- -	bulau	nst	bulau	saŋit	bulau	bulau
45.	SpSbSp	anrui	sanrui	anrui	anrui	anrui	anrui	sanrui	sanrui
46.	SpPa	umpu'	nst	ampu'	umpu'	kasian	umpu'	kasian	kasian
47.	SpFa	nst	tuhamama'	uma'	tamo	nst	umpu'laki	kasian upo	kasian'upu
48.	SpMo	nst	nemene'	ine'	ine'	nst	umpu'baßei	kasian	kasian
							baße	baßei	
49.	SpPaSb	nst	nst	ampu'lam-	umpu'	kasian	umpu'lam-	kasian	kasian
				buŋ		lambuŋ	buŋ	lambuŋ	lambuŋ
50.	SpPaBr	nst	mamalambuŋ	nst	nst	nst	nst	nst	nst
51.	SpPaSi	nst	məna'lam-	nst	nst	nst	nst	nst	nst
			buŋ						
52.	ChSp	aken	dəkəŋ	nantu	nantu	Binantu	nantu	nantu	nantu

*F = female speaker

*M = male speaker

PART II BARITO-MAHAKAM AND WEST BARITO ISOLECTS

Barito-Mahakam

Tundjung

West Barito

Kapuas
Ba'amang
Katingan
Dohoi
Murung-1
Murung-2
Siang

The Tundjung list includes only SWL. Murung-1 is represented by an incomplete SWL and KTL and does not include SDL. For Siang, SDL and KTL are incomplete.

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Murung ¹	Murung ²	Sipora
1.	hand	aŋa'	lēne'	lēŋe	lēŋe'	λəŋe'	λəŋəm	silu'	silu'
2.	left	ulai	sambil	kiri	sambil	κəməlɔi	kambuloi	kamuloi	kəməlɔi
3.	right	tau'	gantau	kanan	gantau	κətɔu'	katou	katou'	kəntou
4.	leg	unəŋ	pai'	pai'	pai'	paa'	ba'am	paa'	paa
5.	foot	unəŋ	pai'	pai'	pai'	paa'	ba'am	paa'	paa
6.	to walk	čalan	mananjuŋ	manaju	mananjuŋ	ñalaŋ	ñalaŋ	ñalaŋ	ñalaŋ
7.	road	loroŋ	ÿalan	ÿalan	karatak	karatak	- -	timbuk	čalan
8.	to come	məet	dumah	duma	dumbah	λəmbut	λəmbut	ləmbut	dəmbut
9.	to turn	nənčaŋ	mambelək	belək	meñipan	ηελək	- -	ñimpāŋ	məlisəŋ
10.	to swim	karaŋoi	hanaŋoi	hanaŋui	hanaŋci	naŋui	hanaŋci	naŋui	naŋci
11.	to wash	mupuk	mampukan	bahampu'	mupuk	mupu'	mopuk	mupuk	mupuk
12.	to wipe	musaas	mampuas	- -	- -	- -	ŋindi	- -	ŋusu
13.	to rub	ŋɔsəok	misut	maŋgɔsəok	maŋgɔsəok	ŋisut	meŋgɔsəok	ŋisut	ŋusu
14.	dirty	marɔta'	papa'	harise'	halike'	jaat	- -	luse'	λuse'
15.	dust	dabu	habu'	debu	kaßu'	karaßu'	- -	abu'	abu
16.	skin	kuliit	upak	kulit	upak	upak	upa'	upak	upak
17.	back	puŋjuŋ	likut	balikat	likur	likut	pupuh	likut	λikut
18.	belly	nai'	kanai'	tanai'	ɛlem	butui	butui	ɔləm	ɔləm
19.	bone	lah	tulaŋ	tulaŋ	tulaŋ	tulaŋ	tulaŋ	tulaŋ	tulaŋ
20.	guts	usi' nai'	huŋ kanai	isi tanai'	suaŋ ɛlem	tanci'	isi butui	tanci'	tanci
21.	liver	limpa	atei	atek	atei	atoi	- -	atoi	atoi
22.	heart	asaŋ	bua'	ÿantuŋ	ÿantuŋ	ÿantuŋ	ÿantuŋ	soŋa'	soŋa
23.	to know	toga'	katawan	katauan	tañaŋ	taa'	ta'am	karaui'	boraui
24.	to think	pikir	bapikir	pikir	niruk	tiruk	tiru'	tiruk	tiruk
25.	to fear	bihin	mikəh	takut	mikəh	mihkuh	mikəh	mikəh	takut
26.	blood	rahaa'	daha'	daha'	daha'	daha'	daha'	daha'	daha'
27.	head	kuhun	takuluk	tokołe'	takuluk	kuhun	kuhun	kuhun	kuhun
28.	neck	ləhəŋ	uyat	buŋu'	uyat	učat	uʃat	kəra'	kəra
29.	hair	alau	balau	balau	balau	bałou	bałou	balou	bałou
30.	nose	uruŋ	uruŋ	hiduŋ	uruŋ	uruŋ	uruŋ	uruŋ	uruŋ
31.	to breathe	ŋasəŋ	nahasəŋ	manahansəŋ	nahasəŋ	nahasəŋ	nahasəŋ	moſəŋan	busəŋan

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Murung ¹	Murung ²	Siang
32.	to smell	karak	mañium	mančium	mañimak	ŋarək	buən	marək	marək
33.	mouth	ənčəŋ	ňama'	ňame'	ňaßç'	bau'	baum	bau'	bau
34.	tooth	kasiŋ	kasıŋa'	gigi	kasiŋa'	ňipu'	ňipəm	kəsiŋ	kəsiŋ
35.	tongue	čela'	jela'	žela'	žela'	žəla'	žola'	čola'	čola'
36.	to laugh	taga'	tatawe'	tatawe'	tatawe'	ŋatau	katau	kɔtau'	kɔtau
37.	to cry	naŋi	mananis	mananis	mananis	naŋih	naŋis	naŋis	naŋih
38.	to vomit	notaa'	muta'	muta'	ŋuta'	ŋuhta'	ŋuta'	ŋuta'	ŋuta'
39.	to spit	mačuh	maluža'	maluža'	maluča'	ŋaluča'	ŋaluča'	ŋiňuh	ŋiňuh
40.	to eat	kumaan	kuman	kuman	kuman	kuman	kuman	kuman	kuman
41.	to cook	ńčak	barapi'	barapi'	masak	muňuh	ŋumuh	ŋu'an	ŋuan
42.	to drink	muru'	mihyp	mihyp	ŋihyp	ŋɔrih	ŋɔrih	ŋɔrih	ŋɔrih
43.	to bite	ŋeket	maməŋkit	mangigit	maməpct	maňak	ŋota'	ŋotak	ŋotak
44.	to suck	məso'	manusu'	maňusu	manusu	məsu'	- -	pəkəsu'	məsu
45.	ear	neneŋ	pindŋ	taliŋa'	pindŋ	taliŋa'	taliŋam	teliŋa	teliŋa
46.	to hear	kliheneŋ	mahiniŋ	mahindiŋ	heniŋ	ŋənih	ŋəneh	ŋəneh	ŋəneh
47.	eye	uee	mata'	mate'	mate'	mahta'	matam	mata'	mata
48.	to see	neau	nampayah	mangite'	ňite'	ŋohto'	noto'	noto'	noto
49.	to sleep	tiroo	batiruh	mantiruh	tiruh	- -	tirui	tirui	tirui
50.	to lie	tempoŋ	menter	barabah	galŋ	kalŋ	baluŋkaŋ	kalŋ	kaľŋ
51.	to sit	dačuŋ	muduk	munduk	munduk	tuɔt	tuɔt	tuɔt	tuňt
52.	to stand	tegec	mendəŋ	mendəŋ	mendəŋ	tɔmbək	tɔmbo'	tɔnjoč	tɔnjoč
53.	person	ulun	uluh	uluh	ulun	kəlunən	- -	ulun	dułun
54.	man	liha'	hatue'	hatue'	hatue'	bahkəh	bakah	bakah	bakah
55.	woman	wawę'	bawi'	baui'	baßi'	baßi'	baße'	baße'	baße'
56.	child	tuhi'	anak	anak	ňanak	naiňnam	ana'	daja'	daja
57.	husband	wana'	banam	bane'	banai	bɔsai	bɔsai	bɔsai	bana
58.	wife	sagan	sawam	istri	sawai	ɔruh	ɔruh	ɔruh	ɔruh
59.	mother	me'	indu'	uma'	ındaŋ	inai	inai	inc'	tinai
60.	father	ma'	bapa'	bapa'	ňapaŋ	amai	amai	amai	tamai
61.	sibling +	tuňkan	aka'	kaka'	kakak	ɔka' (br)	ɔŋka	ɔŋka'	ɔŋka

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Kurung ¹	Murung ²	Siang
62.	sibling -	garin	andi'	adi'	ariŋ	bohtou(Si)	are'	arc'	tari
63.	name	nama	aram	nama'	ŋaran	aran	arai	aran	aran
64.	to say	bagaha'	kuan	basaruman	kuan	nuhtui	--	mantun	nisi
65.	rope	talii'	tali'	tali	tali	tali'	tali	tali'	tali
66.	to tie	məčat	manjarat	ma'ikat	meten	ñuhkau	mətəŋ	meten	məbut
67.	to sew	ŋabet	mitur	manjahit	manjahit	nusuk	ŋusu'	nusuk	nusu'
68.	clothing	pakaian	pakayan	pakayan	talun	pakačan	bałun	pakayan	λembən
69.	to hunt	mahau	maharak	bagart	maŋandup	ŋandup	--	ŋanup	ŋanup
70.	to shoot	nemak	manembak	manembak	manembak	nembak	mənemba'	manembak	nemba'
71.	to stab	mančak	maňuduk	maňodok	maňuduk	məŋoh	taňudu'	neßek	nečip
72.	to hit	bajagur	manampar	batampar	hakalahi'	hatapar	--	nampar	hotampar
73.	to fight	kalahi'	kalahi'	bakalahi'	hakalahi'	hatapar	hira'	kohojat	kohojat
74.	to kill	pakate'	mampatei	mambunuh	mapatei	munu'	taŋan patoi	ŋompatoi	ŋompatoi
75.	to die	matec'	matei	mate'	matei	mahtoi	matoi	matoi	matoi
76.	to live	blum	lelum	belum	belum	bolum	bolum	bolum	bolum
77.	to scratch	ŋaręgęt	mangajau	mangaru'	mangayu'	nakačo	tanuuusu'	ŋankajou	ŋęnkajou
78.	to cut	motek	manetek	mamangal	manetek	nəhtək	nətə'	nətək	nətək
79.	stick	lenjan	bataŋ	bataŋ	bataŋ	bahtəŋ	bataŋ	bataŋ	bataŋ
80.	to split	maka'	maňila'	maňila'	mameťa'	məlah	niла'	niňa'	niла
81.	sharp	masuk	batajim	tajam	baňehi'	maňočot	maňa'ot	ňo'öt	ňo'öt
82.	dull	kačar	dia'batajim	tumpul	bakačil	nahčin	ňatin	tampak	ňaton
83.	to work	bakrja'	bagawi'	bagawi'	bagaři'	bagaři'	bagaři'	bogaři	bogaři
84.	to play	kilau	horeh	barusik	ŋuanusik	barasa'	ŋuananakusi'	bočuri	bočuri
85.	to sing	brňaňi	maňaňi'	maňaňi	maňaňi'	maňaňi'	--	maňaňi	məňaňi
86.	to dance	ŋančar	manari'	manari	manasai	ŋiňah	--	manari	ŋaraŋ
87.	to swell	baňkak	kembaŋ	baňgak	kembaŋ	λətriŋ	--	ləntiŋ	λəntiŋ
88.	to squeeze	pras	ihamis	mamarah	hames	naheňuk	--	ňariŋ	--
89.	to hold	neňkat	mimbiŋ	ma'imbiŋ	manatu'	namit	nabit	nantət	nantət
90.	to dig	ŋali'	maŋali'	manabuk	maŋali'	ŋali'	ŋuan lubaŋ	ŋali'	ŋali'
91.	to give	načoo	maneňa'	maneňa'	maneňa'	nəňja'	nəňja'	mihi'	mihi'
92.	to pull	nepoook	manjičit	manarik	manunda'	ŋuhut	ŋuhut	ŋočet	muhyt

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Murung ¹	Murung ²	Siang
93.	to push	nulak	mangian	manjuhul	manula'	nuhčur	nantuču'	nulak	ŋəñuhun
94.	to throw	noak	mamantin	manawak	maňakah	muhkah	ňakah	mantin	mantin
95.	to fall	tatui	manjatuh	jatuh	balabu'	ŋaňahtuh	batahak	takak	tahak
96.	dog	koko'	asu'	asu'	asu'	asu'	asu'	asut	
97.	bird	mpulu'	buruŋ	buruŋ	buruŋ	očinan	buruŋ	belei	belelai
98.	egg	taloo	tanteluh	hanteloh	kate'	kotoluh	katorluh	kotoloh	tələh
99.	feather	bulu'	bulu'	bulu'	bulu'	bului	bului	bulu	bulun
100.	wing	ekaap	palapas	halar	yaku'	iłat	palapas	ilat	ilat
101.	to fly	trbaŋ	tarawaŋ	tarawaŋ	tarawaŋ	naaŋ	naaŋ	ňiliŋ	ňiliŋ
102.	animal	binataŋ	m̥etu'	binataŋ	m̥etu'	očin	dəlaŋ očin	očin	očin
103.	meat	usii'	isi	dagiŋ	esi'	usi'	dagiŋ	usok	usok
104.	fat	loa'	eňak	lama'	eňak	oňak	oňak	oňak	oňak
105.	tail	ŋkoet	ikuh	buntut	ikuh	ihkuh	ikuh	ukoi	ukoi
106.	snake	nipa'	handipe'	ular	handipe'	lohi'	- -	kako'	ňipo'
107.	worm	halan	handalai	handalai	lukęŋ	lukųŋ	čačin	luŋkuŋ	luŋkuŋ
108.	louse	kutuu'	guti'	kutu'	guti'	kuhtu'		kutu'	kutu
109.	fish	m̥atuu'	lauk	lau'	lauk	očin		očin	očin
110.	tree	laŋan kaju	opun	pəhən	bataŋ kayu'	pəčən		pə'čən	puun
111.	rotten	buruk	maram	buruk	maram	maram		karam	karam
112.	leaf	rəun	dawen	daun	dawen	daun		daun	doun
113.	bark	kulit kayu	opak kayu	kulit kayu	upak kayu'	upak kaču'		upak kayu	upa' kaju
114.	root	akar	uhat	akar	uhat	uhat		uhat	akat
115.	seed	ular	bawak	bawak	bawak	luan		luan	luan
116.	flower	uŋan	kamban	kamban	kamban	kamban		kamban	dołak
117.	fruit	ugan	bua'	buah	bua'	bua'		bua'	bua
118.	grass	uruu'	uru'	rumput	ruput	uru'		uru'	uru'
119.	earth	tanaa'	petak	petak	petak	tana'		tana'	tana'
120.	stone	batuu'	batu'	batu'	batu'	bahtu'		batu'	batu
121.	sand	pasiir	baras	pasir	baras	baras		barah	barah
122.	water	anum	danum	danum	danum	danum		danum	danum
123.	to freeze	--	--	--	--	--		--	--

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
155.	yellow	kuniŋ	bahena'	kuniŋ	bahenda'	bahenda'	bahenda'	bəhenda
156.	green	nahuum	bahijau	hijau	hijau	bahijau	bahijau	bohija
157.	small	itiit	kurik	kurik	kɔik	kɔik	kɔlik	kɔli'
158.	big	haja'	hai'	datuh	haε'	haʃo'	haʃu'	bahai
159.	short	idək	pandak	pandak	pandak	iʃak	iʃek	diʃik
160.	long	mə'	panjan	panjan	panjan	ombu'	mahaŋka'	ombu
161.	thin	tipii	banipis	tipis	banipis	mihpih	mipih	mipih
162.	thick	kapaar	bakapal	tabal	bakapal	kahpan	kapan	kapan
163.	narrow	sampit	sekə'	sampit	sepit	sihki'	sikəŋ	sikəŋ
164.	wide	lajah	lumbah	luas	lumbah	haʃo'	blauh	bəlamba'
165.	straight	trih	bujur	lurus	bučur	bujur	bujur	təŋkoləŋ
166.	old	pilega'	bakas	tuε'	bakas	əko'	batuo'	popa
167.	new	isaai	taheta'	baharu	taheta'	bahua'	boju'	baa
168.	good	pajik	bahalap	baik	lamus	piəs	piyo'	piyo
169.	bad	kahe' pajik	papatutu'	buruk	karam	jaa'	je'st	čeet
170.	correct	kanaai	tutu'	bujur	buah	mərəŋ	bujur	bujur
171.	night	kalam	hamalem	hamalem	hamalem	ŋəlomi'	mamaləm	mamaləm
172.	day	nau	andau	andau	andau	əndou	əndou	ondou
173.	year	taaun	ñelu'	ñilu'	ñelu'	toun	toun	toun
174.	when?	pinaan	hamparea'	parəa'	hamanən	mira'	siran	mindaiomah
175.	at	de'	intu'	di	ŋjuŋ	aŋ	ñan	ñan
176.	in	de'lam	huŋŋ	dalam	suaŋ	aŋŋ	pənah	pənah
177.	here	ditih	intuhetuh	sihetun	ŋjuŋ situh	aŋɔhtoi	ñantoi	ñantoi
178.	there	ditə	intukanih	sikanih	ŋjuŋ sic'	aŋanai	ñan'intin	ñantin
179.	this	itih	tu'ich	etun	jituh	ihtu'	tuh	tuh
180.	that	aneh	tekanih	itu	jiε'	ahtu'	di'	nən
181.	near	toto'	tokəp	gapi'	dani'	dəni'	dəni'	dokin
182.	far	ŋčo'	keʃau	keʃau	kəčau	mahču'	mačo'	oču
183.	where?	diňa	huŋkuəh	sikuch	ŋjuŋsuʃei	aŋamuh	ñanməh	ñamuh
184.	I	ap	aku'	yaku'	iyaku'	ahku'	aku'	akuh
185.	thou	kɔ'	ikau	ikau	ikau	ihku'	iko'	iko'

SWL	Gloss	Tundjung	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
186.	he	isa'	iyc	iya	iye'	iyo'	arep	aree
187.	we (incl.)	taai	itah	kita	ita'	ihtoh	ikai	kaih
	we (excl.)	kami'	ikei	ikei	ikci	ihkai	ito'	kitan
188.	ye	kaam	ketun	ikei	ikam	iro'	ikam	ikam
189.	they	ara'anəh	ewən	sida'	luse'	iro'	irəh	iruh
190.	what?	ñamaa	narai	narai	narai	inən	ome'	ome'
191.	who?	uñaa	ewəh	yauəh	ɛβei	iai	ome'	ome'
192.	other	laain	bekən	lain	bekən	buhkən	bəkən	bəkən
193.	some	bəbrapa	papire'	bararapa'	pirəpirə	pirapira'	pirapira	pirapira
194.	many	adi'	are'	are'	are'	aro'	ərəŋ	ərəŋ
195.	few	kaliit	isut	gisut	isut	ñahiyut	isut	diit
196.	all	səmuə	uras	samua	uras	urəh	uras	kəkəi
197.	and	dən	tuntəŋ	dan	tutəŋ	tutəŋ	təŋ	hintəŋ
198.	with	bəsamaa'	hayak	hayak	hayak	həmbəh	həmbəh	həmbəh
199.	because	səbap	buhən	karana	sabap	kabain	buah	tułui
200.	if	kalau	amun	kalau	amun	amun	amun	amun
201.	how?	ŋəməñaa	mačamkuch	pədakuch	ənaraka	inunkəlau	kəbədeci	mainisai
202.	not	kahə'	dia'	bare'	dia'	əyam	dəkə'	aro
203.	to count	miləŋ	barekən	ma'ise	maningap	ñiyap	nitəŋ	ŋitəŋ
204.	one	ča'	ičə'	ičə'	ičə'	ihčə'	ičə'	ičo
205.	two	rəga'	duə'	duə'	duə'	duə'	duə'	duə
206.	three	təlu	təlo'	təlu'	təlu'	təlu'	təlu'	təlu
207.	four	paat	epat	əpat	əpat	əhpət	əpat	opat
208.	five	lima'	lime'	lime'	lime'	limə'	limə'	limə'
209.	six	hagan	žahawən	žahawən	žahawən	ənəm	ənəm	onəm
210.	seven	tujuu'	oju'	uju'	uču'	pihtu'	pitu'	ritu
211.	eight	kaluuŋ	haña'	haña	haña'	žalu'	žalu'	žalu
212.	nine	sətian	žalatiən	žalatiən	žalatiən	sioi	suoī	suoī
213.	ten	sawəŋ	sapuluh	spuluh	sapuluh	pulu'	spuluh	səpuluh
214.	twenty	rəga'pulu'	duəpuluh	duəpulu	duə'pulu	duəpulu'	duəpulu	duanpulu
215.	hundred	čahatuu	saratus	saratus	saratus	sakatuih	soratuh	soratuh

SDL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
1.	forehead	liŋkau	dahi'	likau	likou	liŋkou	liŋkou
2.	cheek	piŋi'	piŋi	piŋi	tapa'	sobia	sobia
3.	lip	biwih	bibir	bißih	bißih	beßeh	beßeh
4.	chin	iŋan	dagu	jan	jaŋan	čaa'	čaa
5.	face	bau'	muha'	bau'	paun baui	matabau	matam bau
6.	nape	teŋkuk	teŋkuk	tekuk	puhkut	pukut	pukət
7.	chest	usuk	dada	usuk	husuk	usuk	husuk
8.	shoulder	bahu'	bahu'	bahu	bahai	bahai	bahai
9.	armpit	katiak	kalaṭia'	kalakap	kalchpa'	kələpa'	kəlipa
10.	buttock	para'	buriṭ	para'	pulus	para'	para
11.	thigh	sapak	paha	sapak	sahpak	sapak	sapak
12.	knee	otət	lantuhut	tuut	karɔp	kalɔp	kałap
13.	calf	- -	batis	bətis	bətih	bətih	botih
14.	ankle	bukulalŋ	matepai'	kalalŋ	tadałŋ	tələpəhək	tələh pəhək
15.	digit	tunjuk	žari'	tinjuk	ikŋ	braßai	nst
16.	nail	siluk	silu'	silu'	λuhkap	lukəp	λukəp
17.	corpse	hantu'	baŋkai	hatu'	ətu'	əntu'	- -
18.	house	huma'	huma'	pasah	λɔhpə	ləpə	λopow
19.	longhouse	betaŋ	huma' panjan	betaŋ	behtəŋ	betaŋ	betaŋ
20.	field hut	punduk	pəndək	puduk	tikap	tinjkap	- -
21.	kitchen	dampuhan	dapur	tikah	aßu'	dapur	- -
22.	post	tihan	jihi'	žehi'	žohi'	žohi'	žohi
23.	steps	taŋga'	taŋga	hečan	həŋjan	hučan	kučan
24.	village	lewu'	kampuŋ	leßu'	λəßu'	ləßu'	λəßu
25.	betel	sirih	sirih	daßei	λout	luat	luat
26.	lime	kapur	kapur	tußar	εhtuk	apuh	apuh
27.	gambir	gambir	gambir	gambir	kambin	kambin	ambin
28.	areca nut	pinaŋ	pinaŋ	gehat	kahat	pinaŋ	pinaŋ
29.	swidden	tana'	sahaŋ	tana'	umə'	umo'	umo
30.	padi	parci	parci	parci	parci	parci	parci
31.	rice	behas	behas	behas	bočah	božah	božoh

SDL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
32.	cooked rice	bari'	nasi'	bari'	bari'	bari'	- -
33.	rice (glut.)	pulut	puluṭ	pulut	pulut	pulut	- -
34.	padi seed	paŋŋ	tampang	bəñi'	bəñi'	bəñi'	- -
35.	dibble stick	- -	tugalan	tuhal	tuhkan	tukan	- -
36.	to dibble	manugal	manugal	manuhal	nuhkan	nukan	- -
37.	to sow	manugal	mahambur	mañaßar	məñi'	nimun	- -
38.	to cut padi	mangetem	mangetem	mangetem	ŋəhtəm	maroi	maroi
39.	<u>palas</u>	mamalas	mañala	mañaki	məhpas	mañaki	- -
40.	shaman	balian	nst	ÿaya'	balian	balian	- -
41.	knife	ladıŋ	ladıŋ	ladıŋ	ladıŋ	ladıŋ	ladıŋ
42.	machete	pisau	paraj	pisau	pisou	turik	ujkək
43.	war sword	mandau	mandau	pisau apaŋ	aþpaŋ	apaŋ	apaŋ
44.	spear	tumbak	təmbak	lužu'	λunžu'	lunžu'	λunžu'
45.	blowgun	sumpit	sumpitan	sipet	səhpüt	səpət	- -
46.	ax-blade	balıuŋ	balayuŋ	balıuŋ	ətak	bliuŋ	ontak
46a.	ax	pahera'	taŋkai balayuŋ	ətak	ətak	əntak	- -
47.	canoe	ÿukun	ÿukun	rakan	əlut	ÿukun	- -
48.	fish net	tabıŋ	lunta'	ÿala	ÿala'	ÿala'	ÿala
49.	fish hook	pisi'	pisi	pəsi'	pəsi'	pəsi'	posi
50.	to fish	mamisi'	mamisi	mameſi'	məsi'	məsi'	- -
51.	to fish-poison	manuwε'	manuba	manuße'	nußə'	nußə'	- -
52.	pike	bəhau	bəhau	bəhau	əra'	kəsuŋ	- -
53.	catfish	baŋŋ	baŋŋ	baŋŋ	baŋŋ	bəit	bəit
54.	blowfish	buntal	buntal	butal	manana'	məntana'	məntana
55.	to fight cocks	- -	mañaŋ	mamarap	marap	hərarap	- -
56.	wild pig	bawui himba'	babui hutan	baßui	baßui	baßui	baßui
57.	domestic pig	bawui	babui huma'	urak	urak	bulə'	bulə'
58.	bear	bahuŋ	baruaŋ	bahuŋ	bahuŋ	bəhuŋ	- -
59.	monkey	bakei	bakei	bakei	bahkai	bakai	bakai
60.	monkey (<u>beruk</u>)	beruk	beruk	beruk	beruk	beruk	beruk
61.	gibbon	kəlawət	uaua'	kalaßət	kalaßət	kəlaßət	kəlaßət

SDL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
62.	porcupine	landak	landak	tahatuŋ	təhətuŋ	təhətuŋ	tahitun
63.	mouse deer	palanduk	palanduk	palanduk	pałanuk	palanuk	pəłanuč
64.	deer (<u>kidjang</u>)	kijan̄	kijan̄	karahau	tələus	təlouh	təlouh
65.	deer (<u>rusa</u>)	bajan̄	manjan̄an	bačan̄	uhčan̄	učan̄	očan̄
66.	water buffalo	hadajan̄	hadajan̄	harajan̄	hadajan̄	krəβə	kɔrəβə
67.	crocodile	bijai'	buaya'	bae'	paču'	bažo'	bažo
68.	chicken	manuk	manuk	manək	manuk	piyak	piyak
69.	cat	pusa'	kučin̄	pusa'	pusa'	pusa'	pusa
70.	caterpillar	urət	ulat	uler	ułat	ulət	ułət
71.	centipede	halalipan	lipan	jalipan	jołipan	jalipan	ñɔłipan
72.	spider	gandalawa'	labalaba	bakaŋ	kəłəbumbuŋ	untek	- -
73.	bumblebee	kakumban̄	kumban̄	kamaβəŋ	maβuŋ	laβəŋ	maβəŋ
74.	mosquito	ñamuk	ñamuk	ñamuk	ñamuk	ñamuk	ñamuk
75.	fly	laŋau	lalat	laŋau	dałot	dalut	mənałot
76.	butterfly	kupu'kupu'	kupukupu	kabamban̄	kəłəbambar	telubamban̄	tełəbambar
77.	ant	bitik	bitik	bətik	birzik	bitik	bitik
78.	<u>tjitjak</u>	čačak	čačak	tasak	tałasak	talasak	tełəbożak
79.	rat/mouse	balawau	tikus	balawau	bałańou	blańo	bałańou
80.	<u>toke</u>	tlkət	tokə'	tasak	kańukjəčk	- -	- -
81.	locust	hampanjau	balalaŋ	lapaŋau	mahiŋou	- -	- -
82.	anteater	taŋgilin̄	taŋgilin̄	ahem	ahəm	ahəm	ahəm
83.	leopard	harimau	harimau	haramauŋ	haramauŋ	hɔrɔmauŋ	hɔrɔmauŋ
84.	buffalo	banten̄	banten̄	batin̄	bateŋ	mačan	- -
85.	primary forest	himba'	rimba'	himba'	himba'	himba'	himba'
86.	rattan	uei	pekat	uei	uei	uei	uei
87.	bamboo	humban̄	bambu	laśas	pəriŋ	toluŋ	toluŋ
88.	coconut	eňuh	eňuh	eňuh	eňu'	eňuh	eňuh
89.	durian	duhian	durian	dahuyan	dəhujan̄	kalaŋ	kalaŋ
90.	banana	pisaŋ	pisaŋ	pisaŋ	puti'	punti'	punti
91.	pineapple	kanas	kanas	kanas	žaki'	pampang	- -

SDL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ²	Siang
92.	<u>sahu</u>	sau'	sau'	sau'	--	sau'	--
93.	<u>tjempedak</u>	maŋkahai	tiwadak	makahai	makahai	təkərik	--
94.	rambutan	rambutan	rambutan	rambutan	baliti'	rambutan	--
95.	cassava	jaŋwau	kunɟui	kuɟui	jaʃau	jaʃau	jaʃa
96.	eggplant	teruŋ	taruŋ	teruŋ	ñɔrɔhun̩	teruŋ	--
97.	<u>kaladi</u>	kuɟaŋ	kaladi	talis	talih	kalih	--
98.	honey	madu'	madu'	maru'	ɔɬɪŋ	madu'	--
99.	<u>tuak</u>	andɪŋ	tuak	baram	pəhpə'	pəpa'	pəpa
100.	river mouth	tumbŋ	muara	tumbŋ	tumbŋ	ɔluŋ	ɔluŋ
101.	rapids	riam	riam	kiham	kiham	kiham	kiham
102.	riverbank	pantai	tabiŋ	teʃaŋ	kəʃaŋ	kəʃaŋ	--
103.	afternoon	haɬeŋɛ	kamarian	iʃa'andau	səhit	čəhit	--
104.	orangutan	tahiuk	uluh butan	kahiu'	kahiu'	--	--

KTL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ¹	Murung ²	Siang
1.	Sb	i̯ekalam-butān	dansana'	pahari'	haļi'	--	konduaŋ	--
2.	Sb+	kaka'	kaka'	kakak	nst	ɔŋka	ɔŋka'	ɔŋka
2a.	Br	ñaha'	nst	ñahai (* F)	ɔka'	nst	nst	nst
3.	Sb-	andi'	adi'	ariŋ	ari'	are'	are'	tari
3a.	Si	betau	nst	betau	bohtou	nst	nst	nst
4.	Co	pahari'	sapupu	nst	haļi'	nst	konduaŋ	nst
5.	Col	jetatu'	sapupu skali	ÿatatu'	ihčotahtu'	kanduaŋ	ičutatu'	ičotatu
.	ÿotatu	.	.
6.	Co2	hanjenan	sapupu duakali	hanjenan	haňenan	--	hanjenan	--
7.	Co3	telutatu'	sapupu tigakali	hararue'	haňenan	--	hararue'	--
8.	Co4	nst	nst	nst	hałarue'	--	nst	--
9.	Co5	nst	nst	nst	nst	--	nst	--
10.	Fa	apan	bapa'	ñapar	amai	amai	amai	amai
11.	Mo	umai	uma'	indaj	inai	inai	ine'	tinai
12.	PaBr	mama'	paman	mama'	mama'	mama'	mama'	amaj
13.	PaBr+	akas hatue'	nst	nst	nst	nst	nst	nst
14.	PaBr-	mama' busu	nst	nst	nst	nst	nst	nst
15.	PaSiHu	mama'	paman	mama'	mama'	--	mama'	--
16.	PaSi+Hu	--	nst	nst	nst	nst	nst	nst
17.	PaSi-Hu	--	nst	nst	nst	nst	nst	nst
18.	PaSi	mina'	ačil	mina'	mina'	mina'	mina'	inaj
19.	PaSi+	akas bawi'	nst	nst	nst	nst	nst	nst
20.	PaSi-	mina' busu	nst	nst	nst	nst	nst	nst
21.	PaBrWi	mina'	ačil	mina'	mina'	--	mina'	--
22.	PaBr+Wi	--	nst	nst	nst	nst	nst	nst
23.	PaBr-Wi	--	nst	nst	nst	nst	nst	nst
24.	Ch	anak	anak	ñanak	naiñnam	ane'	daja'	anak
25.	So	anakhatus'	--	ñanakhatus'	anak bahkəh	ane' bakah	daja'bakah	anak bakah

(* F) = female speaker

KTL	Gloss	Kapuas	Ba'amang	Katingan	Dohoi	Murung ¹	Murung ²	Siang
26.	Da	anakbawi'	- -	ñanakbañi'	anakbañi'	ane'bañe'	daj'a bañe'	anakbañe'
27.	SbCh/CoCh	aken	kamanakan	ñaken	akun	akom	akun	- -
28.	PaPa	nst	nst	hiañ	tahtu'	nst	nst	nst
29.	PaFa	bue'	kai'	nst	nst	tatu'	tatu'	tatu
30.	PaMo	tambi'	nenek	nst	nst	ajuh	ajuh	ajuh
31.	ChCh	esu'	čuču'	esu'	osu'	osum	osu'	osu
32.	SbChCh&	esu'	čuču'	esu'	osu'	osum	osu'	osu
33.	PaPaPa	datu'	datu'	umbuh	ahču'	- -	datu'	- -
34.	ChChCh	buyut	buyuṭ	buyut	osu'	- -	buyut	- -
35.	SbChChCh&	buyut	buyuṭ	buyut	osu'	- -	buyut	- -
36.	PaPaPaPa	møyəŋ	møyəŋ	nst	hiyan	- -	nst	- -
37.	ChChChCh&	əntah	nst	nst	osu'	- -	nst	- -
38.	Sp	nst	nst	nst	nst	nst	nst	nst
39.	Hu	bana	bane'	banai	bəsai	bəsai	bəsai	bana
40.	Wi	sawa	istri	sawai	ɔruh	ɔruh	ɔruh	ɔruh
41.	SpSb/SbSp	nst	ipar	sindah	sindah (*M)	- -	nst	- -
42.	SpBr/SiHu	ayup	nst	nst	sindah (*F)	- -	sindah	- -
43.	SpSi/BrWi	iwan	nst	nst	hɪjat (*F)	- -	iŋat	- -
44.	ChSpPa	saŋer	saŋer	saŋer	hasanjau'	- -	saŋer	- -
45.	SpSbSp	duɛi	- -	nst	haduɔi	- -	haduɔi	- -
46.	SpFa	əmpu'	mantuha'	əpu'	upu'	əmpu'	umpu'	- -
47.	Spra	əmpu'hatus'	nst	nst	nst	nst	nst	- -
48.	SpMo	əmpu'bawi'	nst	nst	nst	nst	nst	- -
49.	SpPaSb	əmpulambuŋ	mantuha' lambuŋ	duɛi	upu'	nst	nst	- -
50.	SpPaBr	nst	nst	nst	nst	nst	nst	- -
51.	SpPaSi	nst	nst	nst	nst	nst	nst	- -
52.	ChSp	manantu'	manantu	manantu'	manatu'	manantuŋ	manantu'	- -

(*M) = male speaker

(*F) = female speaker

PART III NON-BARITO ISOLECTS

Indonesian
Bandjar
Delang
Tamuan
Malagasy (Merina)

Standard Indonesian orthography has been used in the Indonesian list, except that "y" has been substituted for the semivowel "j". The Indonesian list does not include KTL. The Malagasy list includes only SWL.

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
1.	hand	tangan	taŋan	ləŋan	ləŋan	tanan
2.	left	kiri	kiwa'	kipa'	kiwa	haßi
3.	right	kanan	kanan	kanan	kanan	haßana
4.	leg	kaki	batis	kaki	kaki	ranžu
5.	foot	kaki	batis	kaki	kaki	tungutra
6.	to walk	berdjalan	baŋalan	boŋalan	baŋalan	mandeha
7.	road	djalan	jaŋan	jaŋan	jaŋan	lalan
8.	to come	datang	dataŋ	dataŋ	dataŋ	tunga
9.	to turn	belok	beɿok	beɿok	balŋkou	mißilyi
10.	to swim	berenang	bakuŋuŋ	bənunauŋ	maňulam	milumanu
11.	to wash	tjutji	basuh	məntəpas	bahəmpu'	manas
12.	to wipe	menghapuskan	məŋhapuskan	--	--	mamafa
13.	to rub	menggosok	məŋgoſok	məŋgoſok	məŋgoſok	mikuska
14.	dirty	kotor	rigat	kətər	diabrasih	malutu
15.	dust	debu	dəbu	dəbu	dabu	Bußka
16.	skin	kulit	kulit	kulit	kulit	huditrä
17.	back	punggung	puŋguŋ	bəlikat	puŋguŋ	lamusna
18.	belly	perut	parut	pərut	pərut	kibu
19.	bone	tulang	tulaŋ	tulaŋ	tulaŋ	təlan
20.	guts	isi perut	isi parut	isi pərut	isi pərut	tsnai
21.	liver	hati	hati	hati	hati	ati
22.	heart	djantung	jaŋtuŋ	jaŋtuŋ	jaŋtuŋ	fu
23.	to know	tahu	tahu'	təhu	tahai	mahalala
24.	to think	pikir	pikir	pikir	pikir	mirtirträ
25.	to fear	takut	takutan	gəla'	takut	matautra
26.	blood	darah	darah	darah	darah	ra
27.	head	kepala	kapala	kəpalə	kapala	luha
28.	neck	leher	gulu'	lihi'	lihir	tənda
29.	hair	rambut	rambut	rambut	rambut	Bulu
30.	nose	hidung	hiduŋ	hiduŋ	hirəŋ	uruna
31.	to breathe	bernapas	bahinak	məŋɔsih	banofas	mihaina / mifuk

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
32.	to smell	membau	mančium	mənčium	mančium	mahare / mandre
33.	mouth	mulut	muntuŋ	ňau	mulut	faß
34.	tooth	gigi	gigi	gigi	gigi	nifi
35.	tongue	lidah	ilat	lidah	lirah	ləla
36.	to laugh	tertawa	tatawa'	tatau	katawa	miumeh
37.	to cry	menangis	manajis	mənajis	manajis	mituman
38.	to vomit	muntah	muak	mutah	mumtah	mandu / mihok
39.	to spit	meludah	baludah	məigah	malujah	manžur
40.	to eat	makan	makan	makan	musəh	mihinan
41.	to cook	masak	masak	bərapi	bamasa'	mahandra
42.	to drink	minum	minum	minum	marai	misutra
43.	to bite	menggigit	maigut	məjotap	manəlan	manaiktra
44.	to suck	menetek	maňusu	məňusu	maňusu'	mitsətstra
45.	ear	telinga	taliŋa'	kəliŋakan	tiliŋa	sufan
46.	to hear	dengar	daŋar	məndiŋa'	buŋi	mandri
47.	eye	mata	mata	matə	mata	masu
48.	to see	lihat	malihat	niąt	mila	maita
49.	to sleep	tidur	guriŋ	tidu'	guriŋ	maturi
50.	to lie	rebah	bagalir	bərobah	tələŋtaŋ	mitslan / mandri
51.	to sit	duduk	duduk	duduk	duru'	mipetak
52.	to stand	berdiri	badiri	bədirin	badiri	mžur
53.	person	orang	ɔraŋ	uyaŋ	uraŋ	ulun
54.	man	laki-laki	lakilaki	ləlaki	kalaki	lelahi
55.	woman	perempuan	binibini'	bətina'	labini	ßeibaße
56.	child	anak	anak	bəbia'	babia'	anjizzi / zatuß
57.	husband	suami	laki'	laki	swami	ßeadi
58.	wife	isteri	bini'	bini	istri	ßeadi / ampla
59.	mother	ibu	uma'	indai	indai	rən
60.	father	ayah	bapa'	bəpai	əmpai	rai
61.	sibling+	kakak	kakak	anči'	žula'	zukilahi (Br+) zukiBaßi (Si+)

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
62.	sibling-	adik	andriŋ	adiŋ	unsu'	zandrilahi (Br-) zandriBañi (Si-)
63.	name	nama	ŋaran	namo	nama	Anaran
64.	to say	bilang	sambat	bəpadah	uja'	milaz / miten
65.	rope	tali	tali	tali	tali	tadi
66.	to tie	mengikat	manjarat	məŋobat	majorat	mamatutra
67.	to sew	mendjahit	manjahit	mənjohit	manjahit	manžaitra
68.	clothing	pakaian	pakaian	pakayan	pakayan	akandzu
69.	to hunt	memburu	mamburu	məŋgoyau	baburu	mihaza
70.	to shoot	menembak	manembak	mənembak	manembak	mitiftra
71.	to stab	menikaman	maňuduk	mənikam	manikam	manatsatuk
72.	to hit	bertindju	batampar	bətinju	batampar	mikYapka
73.	fight	berkelahi	bakalahi	bəkəlohi	ba'klahi	mYadtj
74.	to kill	membunuh	mambunuh	məmbunuh	mambunuh	mamunu
75.	to die	mati	mati	mati	mati	mati
76.	to live	hidup	hidup	hidup	hirup	ßelna
77.	to scratch	menggaruk	maňaru'	məngayu	bogarou	əkornə / ətrərnə
78.	to cut	memotong	manatak	mənəta'	menota'	manapak
79.	stick	batang	bataŋ	bataŋ	bataŋ	kupili
80.	to split	membelah	mambalah	məmbəlah	mambolah	mamakyi
81.	sharp	tadjam	landap	tajam	tajam	marantra
82.	dull	tumpul	tumpul	tumpul	tumpul	dumbu
83.	to work	bekerdja	bagawi'	bəkərəjo	bagawi	mYasa
84.	to play	bermain	br'main	məngaso	bakoča'	milalau
85.	to sing	menjanji	baňaňi	məňaňi	baňani	mihira / mikYalu
86.	to dance	menari	ba'egal	mənari	manari'	mandih
87.	to swell	bengkak	baňkak	bəňka'	bəňka'	mButu
88.	to squeeze	memeras	mamarah	məməyah	mamoras	manaputstra
89.	to hold	memegang	maminkut	mənjujut	mamagan	mitazuna
90.	to dig	menggali	manabuk	məngali	maňali	mihadi
91.	to give	beri	bari'	mə'oji'i	mambori	manume
92.	to pull	menarik	manarik	mənari'	mombita'	mitarkyç

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
93.	to push	mendorong	manunjul	mañuruŋ	mañuruŋ	manusik ^y
94.	to throw	melempar	manawak	mañikam	menjakah	miturak
95.	to fall	djatuh	gugur	jatu'	jatu	m̥enz̥ra
96.	dog	andjing	hidupan	kudu'	asu	alik ^y
97.	bird	burung	buruŋ	buruŋ	buruŋ	buruna
98.	egg	telor	h̥intalu'	runti	tolur	atundi
99.	feather	bulu	bulu'	bulu	bulu	bulnburuna
100.	wing	sayap	halar	sayap	sayap	elatra
101.	to fly	terbang	tarabəŋ	tərəbaŋ	tərəbaŋ	manin
102.	animal	binatang	binataŋ	bənataŋ	lau'	bib̥
103.	meat	daging	dagiŋ	isi	dagiŋ	hen
104.	fat	lemak	lamak	loma'	loma'	taßi
105.	tail	ekor	buntut	iku'	butut	rambu
106.	snake	ular	ular	ular	ular	biblaß
107.	worm	tjatjing	čačiŋ	čačiŋ	buhuŋ	kaŋkan
108.	louse	kutu	kutu'	kutu	kutu	parasi
109.	fish	ikan	iwak	ikan	lau'	trundru
110.	tree	pohon	pohon	kayu	puhun	hazu
111.	rotten	busuk	buruk	buru'	buru'	lu
112.	leaf	daun	daun	doon	daun	raßn
113.	bark	kulit kayu	kulit kayu	kulit kayu	kulit kayu	hudikyazu
114.	root	akar	akar	akar	akar	fak
115.	seed	bidji	bigi'	biži'	bigi	bu
116.	flower	bunga	kamban	komban	buŋa	BunkYazu
117.	fruit	buah	buah	buah	buah	BokYazu
118.	grass	rumput	rumput	rumput	rumput	buzaka
119.	earth	tanah	tanah	tanah	tanah	tani
120.	stone	batu	batu	batu	batu	batu
121.	sand	pasir	karajan	kɔkɔrakan	pasir	fask ^y
122.	water	air	baňu'	arai'	arai	ranu
123.	to freeze	- -	- -	- -	- -	- -

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
124.	ice	es	es	es	es	ranu mandri
125.	to flow	mengalir	məŋalir	məŋalir	məŋalir	mikrina
126.	to float	terapung	tarkapuŋ	tə'apuŋ	terapuŋ	msaßon
127.	ocean	laut	laut	loot	laut	ranu masin
128.	salt	garam	uyah	garam	garam	sira
129.	lake	danau	danau	danau	danau	farih
130.	river	sungai	suŋai	suŋai	suŋai	uni / reniranu
131.	mountain	gunung	gunuŋ	gunuŋ	gunuŋ	tendrumbuitra
132.	woods	hutan	hutan	hutan	hutan	ala
133.	sky	langit	laŋit	laŋit	laŋit	lanitra
134.	sun	matahari	matahari	matahari	mata'ari	masuandrä
135.	star	bintang	bintang	bintang	bintang	kintana
136.	cloud	awan	awan	awan	awan	raun
137.	fog	embun	ambun	ombun	embun	zaßuna
138.	to rain	hudjan	huŋjan	huŋjan	huŋjan	aßurana
139.	snow	--	--	--	--	--
140.	wind	angin	aŋin	aŋin	aŋin	rißtra
141.	to blow	bertiup	batiup	bətiup	bahumbus	mitsukä
142.	warm	panas	panas	haŋat	panas	mafana
143.	cold	dingin	diŋin	diŋin	diŋin	maŋgatsiky
144.	dry	kering	kariŋ	kəriŋ	kəriŋ	maina
145.	wet	basah	basah	bansah	basah	mandu / petsa
146.	smooth	rata	rata'	rato	rata	malama
147.	heavy	berat	barat	bərat	borat	maßesatra
148.	fire	api	api'	api	api	afu
149.	to burn	membakar	maňalukut	mənčučul	maňusul	miręatra
150.	smoke	asap	kukus	ansap	asap	setrukä
151.	ashes	abu	habu'	habu	habu	laßenuna
152.	black	hitam	hiran	hitam	titam	mainti
153.	white	putih	putih	putih	putih	futsi
154.	red	merah	habaŋ	mirah	merah	məna

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
155.	yellow	kuning	kuninj	kuninj	kuninj	mañu
156.	green	hidjau	hijau	hijau	hijau	maintsu
157.	small	ketjil	kacil	kocik	koni'	keli
158.	big	besar	ganal	besar	bakah	lehibe
159.	short	pendek	handap	panda'	ponda'	fui
160.	long	pandjang	panjanj	panjanj	panjanj	lañsa
161.	thin	tipis	nipis	nipis	tipis	manifj
162.	thick	tebal	kandal	tobal	tobal	mateñna
163.	narrow	sempit	kipit	sompit	sompit	teri
164.	wide	luas	luas	luar	luas	malalaña
165.	straight	lurus	bujur	bujur	lurus	maitsi
166.	old	tua	tuha'	tuho	tuha	antatra
167.	new	baru	hañar	baharu	baharu	ßau
168.	good	baik	baik	bøi'	bai'	tsara
169.	bad	djelek	ÿelék	ÿahai'	hontabai'	ratsi
170.	right	betul	banar	bondar	bonar	marna
171.	night	malam	malam	malam	malam	alna
172.	day	hari	hari	hari	ari	andru
173.	year	tahun	tahun	tahun	tahun	taun
174.	when?	kapan	babila'	sombilo	papan	røßina
175.	at	di-	di	di	ko	eo
176.	in	dalam	dalam	dalam	dalam	au
177.	here	disini	disini	disi'in	koti	etu / ati
178.	there	disitu	disitu	disumbo	diti	etri / ari / eni / ani
179.	this	ini	ini	ni'in	iti	itikatra
180.	that	itu	itu	numbo	iyah	irikatra / irukatra
181.	near	dekat	rupak	dampinj	dokat	akaikYi
182.	far	djauh	ÿauh	ÿooh	ÿauh	lañtra
183.	where?	dimana	dimana	dimono	manih	aiza
184.	I	saya / aku	aku	saya / aku	aku	izahu
185.	thou	kau	ikam	hulo	kolai	ianau

SWL	Gloss	Indonesian	Bandjar	Delang	Tamuan	Malagasy
186.	he	dia	iňa'	iyo	ia	iz
187.	we (incl.)	kita	kita	kito	diri	isikY ^A
	we (excl.)	kami	kami	koi	ikam	izahai
188.	ye		ketuh	kain	ikam	ianarco
189.	they	mereka	ketuh	sia'	marëka	iz
190.	what?	apa	apa	apo	apa	inuna
191.	who?	siapa	siapa	sop ^a	siapa	iza
192.	other	lain	lain	bukan	lain	af
193.	some	beberapa	babrapa	babrapa	bibrapa	sasani
194.	many	banjak	baňak	baňa'	baňa'	betsaka / marube
195.	few	sedikit	sadikit	sodikit	koči'	bitsi
196.	all	semua	samua'	somuo	uras	rehetra / dahulu
197.	and	dan	dan	dan	dan	si / ari
198.	with	bersama	barsama	bosamo	břsama	mjaraka amni
199.	because	sebab	sabap	korono	sobap	satri
200.	if	kalau	kalu'	aman	amun	raha
201.	how?	bagaimana	mačamapa	mačamapo	mačamia	aona
202.	not	tidak	kada'	čado	honta	tsi
203.	to count	menghitung	mareken	mohitun	mahitun	manisa
204.	one	satu	satu	oso	sa	isa / irai
205.	two	dua	dua	duo	dua	ru
206.	three	tiga	tiga	tigo	tolu	telu
207.	four	empat	ampat	ompat	ompat	sfatra
208.	five	lima	lima	lima'	lima	dimi
209.	six	enam	anam	onam	onam	cnina
210.	seven	tujuh	tužuh	tužuh	tužu	fitu
211.	eight	delapan	dalapan	dolapan	dlapan	Balu
212.	nine	sembilan	sambilan	sombilan	smbilan	sißi
213.	ten	sepuluh	sapulu	sopuluh	spuluh	fulu
214.	twenty	duapulu	duapulu	duɔpulu	duapulu	ruñfulu
215.	hundred	seratus	saratus	sɔratus	sratus	zatu

SDL	Gloss	Indonesian	Bandjar	Delang	Tamuan
1.	forehead	dahi	dahi	kənɪŋ	dahi
2.	cheek	pipi	pipi	piŋi	piŋi
3.	lip	bibir	bibir	iŋam	bibir
4.	chin	dagu	dagu	kaŋkam	dagu
5.	face	muka	muha'	muhp'	muha
6.	nape	tengkuk	buritundun	tundun	təŋku'
7.	chest	dada	dada	dado	dara
8.	shoulder	bahu	bahu	bahu	bahu
9.	armpit	ketiak	kalatiak	kəlipa'an	kətia'
10.	buttock	pantat	burit	butat	pupuh
11.	thigh	paha	bataŋ paha	paho	paha
12.	knee	lutut	lintuhut	kəputut	tuwut
13.	calf	betis	batis	bōtis	bōtis
14.	ankle	matakaki	mukulali'	bukuali	matakaki
15.	digit	djari	žari	žari	žari
16.	nail	kuku	kuku	silu	silo
17.	corpse	mayat	baŋkai	mayat	mayat
18.	house	rumah	rumah	rumah	daŋau
19.	longhouse	rumahpandjang	rumah panžan	- -	bətan̩
20.	field hut	pondok	pundok	məntiruŋ	pəndok
21.	kitchen	dapur	dapur	dəpur	dapur
22.	pole	tiang	tihaŋ	tihaŋ	tihaŋ
23.	steps	tangga	tanga	tango	taŋa
24.	village	kampung	banua	kampuŋ	kampuŋ
25.	betel	sirih	sirih	sirih	sirih
26.	lime	kapur	kapur	kapur	kapur
27.	gambir	gambir	gambir	ganji'	gambir
28.	areca nut	pinang	pinan̩	pinan̩	pinan̩
29.	swidden	ladang	pahu'ma'an	lakau	huma
30.	padi	padi	banih	padi	pari
31.	rice	beras	baras	bəras	bəras

SDL	Gloss	Indonesian	Bandjar	Delang	Tamuan
32.	cooked rice	nasi	nasi	ñasi'	nasi
33.	rice (glut.)	ketan	lakatan	pulut	pulut
34.	padi seed	benih	bigibanih	bənih	- -
35.	dibble stick	asak	panundan	tugal	tugal
36.	to dibble	menugal	manugal	mənugal	mənugal
37.	sow padi seed	menabur	manabur	məchampur	mənabur
38.	to cut padi	menuai	manatam	məhañi	mənuai
39.	<u>palas</u>	--	palas	məñəñkəlan	hapalas
40.	shaman	belian	balian	bəbəlin	bəlian
41.	knife	pisau	pisau	ladıŋ	larıŋ
42.	machete	parang	parang	iŋgap	pisau
43.	war sword	mandau	mandau	mandau	mandau
44.	spear	tombak	tumbak	tumba'	tumba'
45.	blowgun	petan	sumpitān	sumpitān	sumpit
46.	ax-blade	beliung	balayuŋ	bəliuŋ	bliuŋ
46a.	ax	--	paradah	pərədah	pahera'
47.	canoe	perahu	žukuŋ	pərəhu'	žukuŋ
48.	fish net	djala	lunta'	žalo	žala
49.	fish hook	kail	unjun	kəil	kail
50.	to fish	memantjing	maŋunjun	məŋɔil	mənail
51.	to fish-poison	menuba	manuba'	mənubo	mənuwa
52.	pike	gabus	ikan haruan	haruan	behau'
53.	catfish	baung	bauŋ	ikan duri	bauŋ
54.	blowfish	buntal	buntal	buntal	buntal
55.	to fight cocks	menjabung	basauŋ	məñabuŋ	mamarap
56.	wild pig	babi hutan	babi	təlimpai	bawi hutan
57.	domes. pig	babi rumah	babi	babi laman	bawi bnua
58.	bear	beruang	baruaŋ	bəruaŋ	bruŋ
59.	monkey	kera	warik	kəra	kəra
60.	monkey(<u>beruk</u>)	beruk	bakantan	bəru'	bəru'
61.	gibbon	wawa	uaua	pəŋua'	kalawet

SDL	Gloss	Indonesian	Bandjar	Delang	Tamuan
62.	porcupine	landak	landak	landa'	landa'
63.	mouse deer	kantjil	palanduk	palandu'	palanduk
64.	deer (<u>kidjang</u>)	kidjang	kičan	kičan	kičan
65.	deer (<u>rusa</u>)	rusa	mijaŋan	ruso	bajan
66.	water buffalo	kerbau	hadajan	kərəbau	harajan
67.	crocodile	buaya	buhaya	bəhayə	bahaya
68.	chicken	ayam	hayam	manu'	manu'
69.	cat	kutjing	kučin	kučin	unčan
70.	caterpillar	ulat	hulat	hulat	hulat
71.	centipede	lipan	halilipan	səŋgilipan	lalipan
72.	spider	laba-laba	gandaŋ lawa'	laau	labalaba
73.	bumblebee	kumbang	kumban	kumban	kumban
74.	mosquito	njamuk	ňamuk	rəŋih	ňamu'
75.	fly	lalat	baraŋa'	laŋau	laŋau
76.	butterfly	kupu-kupu	kupukupu	raməramo	kakupu
77.	ant	semut	samut	səmət	səmət
78.	<u>tjitjak</u>	tjitjak	čačak	čača'	čača'
79.	rat/mouse	tikus	tikus	tikus	blawau
80.	<u>toke</u>	toke	təkək	čəki	- -
81.	locust	walang sangit	bilahuh	bunta'	hampanau
82.	anteater	tenggiling	təŋgiliŋ	təŋgiliŋ	təŋgiliŋ
83.	leopard	harimau	harimau	harimau	haramauŋ
84.	buffalo	banteng	banten	bantin	banten
85.	primary forest	rimba	rimba	rimbo	rimba
86.	rattan	rotan	pa'ikat	hui	hui
87.	bamboo	buluh	buluh	buluh	buluh
88.	coconut	kelapa	ňiur	kalapo	niyr
89.	durian	durian	durian	duriŋ	duhuyan
90.	banana	pisang	pisaŋ	pisaŋ	pisaŋ
91.	pineapple	nanas	kanas	kənas	kanas

SDL	Gloss	Indonesian	Bandjar	Delang	Tamuan
92.	sahu	sahu	sau'	sau	sawu'
93.	<u>tjempedak</u>	tjempedak	tiwadak	təboda'	majkahai
94.	rambutan	rambutan	rambutan	rambutan	rambutan
95.	cassava	ubi kayu	gumbili kayu	hubi	kunjui
96.	eggplant	terung	taruŋ	təruŋ	teruŋ
97.	<u>kaladi</u>	kaladi	kaladi	kəladi	kalari
98.	honey	madu	madu	madu	madu
99.	<u>tuak</u>	tuak	tuak	tua'	baram
100.	river mouth	muara	muhara'	muaro	muara
101.	rapids	riam	riam	riam	riam
102.	river bank	tebing	pingir	kənambir	tewarŋ
103.	afternoon	sore	kamarian	babahari	halemei
104.	orangutan	orang utan	orəŋhutan	uyəŋhutan	kahiu'

KTL	Gloss	Bandjar	Delang	Tamuan
1.	Sb	daῆsanak	səmadikan	dəŋan
2.	Sb+	kaka'	anči'	čula'
2a.	Br	nst	nst	nst
3.	Sb-	adıŋ	adıŋ	unsu'
3a.	Si	nst	nst	nst
4.	Co	sapupu	sana'tuhə	spupu
5.	Col	sapupuskali	sana'tuhə skali	spupuskali
6.	Co2	sapupuduakali	sana'tuhə dučkali	spupuduakali
7.	Co3	sapuputigakali	sana'tuhə tigčkali	spuputigakali
8.	Co4	nst	nst	nst
9.	Co5	nst	nst	nst
10.	Fa	bapa'	bəpəi	əmpai
11.	Mo	uma'	indai	indai
12.	PaBr	nst	bəpəi	mama'
13a.	PaBr+(eldest)	čulak	bəpəi tuhə	nst
13b.	PaBr+(2nd)	gulu'	nst	nst
13c.	PaBr+(3rd)	aŋah	bəpəi təŋah	nst
14a.	PaBr-	pakačil	nst	nst
14b.	PaBr-(last)	busu	bəpəi buŋsu	nst
15.	PaSiHu	nst	bəpəi	mama'
16.	PaSi+Hu	13a-c	13a/13c	nst
17.	PaSi-Hu	14a-b	14a-b	nst
18.	PaSi	nst	inde	mina
19a.	PaSi+(eldest)	čulak	inde tuhə	nst
19b.	PaSi+(2nd)	gulu'	nst	nst
19c.	PaSi+(3rd)	aŋah	inde təŋah	nst
20a.	PaSi-	makačil	nst	nst
20b.	PaSi-(last)	busu	inde buŋsu	nst
21.	PaBrWi	nst	inde	mina
22.	PaBr+Wi	19a-c	19a/19c	nst
23.	PaBr-Wi	20a-b	20a-b	nst

KTL	Gloss	Bandjar	Delang	Tamuan
24.	Ch	anak	bobia'	babia'
25.	So	anaklakilaki	bia'ləlaki	nst
26.	Da	anakbinibini	bia'bötina'	nst
27.	SbCh/CoCh CoCh	kamanakan	anak səmadikan anak sanatuho	aken
28.	PaPa	nini	nst	nst
29.	PaFa	nst	abu'	buε'
30.	PaMo	nst	nini'	tambi'
31.	ChCh	čuču'	čuču	čuču
32.	SbChCh&	čuču'	čuču	čuču
33.	PaPaPa	datu'	ajki (M)/bayan(F)	umbuh
34.	ChChCh	buyut	iyut	buyut
35.	SbChChCh&	buyut	iyut	buyut
36.	PaPaPaPa	muñaq	nst	nst
37.	ChChChCh&	entah	nst	nst
38.	Sp	nst	pasakan	nst
39.	Hu	laki	laki	swami
40.	Wi	bini	bötina'	istri
41.	SpSb/SbSp	nst	ipar	ipar
42.	SpSb+/Sb+Sp	kaka'	nst	nst
43.	SpSb-/Sb-Sp	adıŋ	nst	nst
44.	ChSpPa	pawarajan	bisan	saŋer
45.	SpSbSp	miruai	ipar	ipar
46.	SpPa	m̥intuha	m̥ontuho	nst
47.	SpFa	bapa'	nst	mama'
48.	SpMo	uma'	nst	mina
49.	SpPaSb	m̥intuha lambunj	m̥ontuho lambunj	nst
50.	SpPaBr	nst	nst	mama'
51.	SpPaSi	nst	nst	mina
52.	ChSp	m̥inantu	m̥onantu	manantu'

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