

Bibliographic Section: A Bibliography of recent publications will appear in each issue of the Bulletin, and, consequently, reprints or other notices of recent publications would be gratefully received by the Editor.

Other Items: Personal news, brief summaries of research activities, recent publications, and other brief items will appear without the source specifically indicated. The Editor urges those contributing such news items to send them in the form and style in which the contributor wishes them to appear rather than leaving this to the discretion of the Editor.

All contributions should be sent to the Editor, Borneo Research Bulletin, c/o Anthropology Department, College of William and Mary, Williamsburg, Va. 23185, U.S.A.

STYLE FOR CONTRIBUTIONS

Please submit all contributions double spaced. Research Notes and Brief Communications should be limited to approximately eight double-spaced pages. Footnotes are to be avoided wherever possible. Bibliographies should be listed alphabetically by author at the end of contributions; author should appear on a separate line, then date, title of article, journal, volume number, and pages. For books include place of publication and finally publisher. References in the body of contributions should be cited by author's last name, date, and page numbers as follows: (Smith 1950:36-41). For punctuation and capitalization refer to Bibliographic Section.

Names mentioned in the News Section and other uncredited contributions will be capitalized and underlined.

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NOTES FROM THE (OUTGOING) EDITOR (D.E. BROWN)

New Editor

Vinson H. Sutlive, Jr., whose work in Sarawak will be familiar to many of our readers, assumes the editorship of the Borneo Research Bulletin immediately after this issue is mailed. From now on all correspondence should be directed to him (see the address on the cover page).

In calling for suggestions for a new editor (BRB 6,2) I inadvertently referred to myself and my wife in a context that could be interpreted as a sexist reference to the BRB's editorship. I regret the ambiguity, and hasten to assure the readers that qualified females would be entirely welcome as future editors of the BRB.

Contributions for the Support of the Borneo Research Council

The following persons made deeply appreciated contributions: Ian D. Black, J. D. Cole, William L. Collier, Philip Goldman, Barbara Harrisson, Tom Harrisson, John P. Heimann, Lord Medway, Alastair Morrison, Rodney Needham, Johannes Nicolaisen, Margaret Roff, B. W. Sandilands, William Schneider, Joan Seeler, Hatta Solhee, Robert O. Tilman, Peter Weldon, J. R. Wortman, and Leigh R. Wright.

THE BORNEO RESEARCH COUNCIL

The Borneo Research Council was founded in 1968 and its membership consists of Fellows, an international group of scholars who are professionally engaged in research in Borneo. The goals of the Council are (1) to promote scientific research in the social, biological and medical sciences in Borneo; (2) to permit the research community, interested Borneo government departments and others to keep abreast of ongoing research and its results; (3) to serve as a vehicle for drawing attention to urgent research problems; (4) to coordinate the flow of information on Borneo research arising from many diverse sources; (5) to disseminate rapidly the initial results of research activity; and (6) to facilitate research by reporting on current conditions. The functions of the Council also include providing counsel and assistance to research conservation activities, and the practical application of research results.

Support for the activities of the Council comes from subscriptions (cont. p.43)

R E S E A R C H N O T E S

FURTHER NOTES ON SARAWAK AND KALIMANTAN PUNAN (AND PENAN)

Tom Harrisson
University of Sussex

Punan Tubu and the Northern Problem

I can clarify Herb Whittier's lucid account of the Kalimantan Punan as regards the most northerly and specialised of the lot, in the Malinau-Mentarang river system--those two names are interchangeable in upriver classification. He suggests approach to these people (whom he did not visit) via the coast; but his estimate of one to five days travel up from Kota Malinau is optimistic. I first entered the area from the Sarawak side in 1946-7, coming down the Mentarang to the Tubu (Toeboe on most maps). That river was mainly controlled by settled Punans, some of them very sophisticated and acting as middlemen between the upland, walking people (Lun Daye-Bawang, Kelabit-Murut, etc.) and those on the navigable rivers near the coast (cf. Whittier's map (BRB 6, 2:43). It took five hard days to walk from Long Bawang, near the Sarawak border and then boat to the Tubu Punan, partly through wonderful, well inhabited upland country. We eventually went out of that river eastward across some of the wildest virgin rainforest I have seen, for four days, to emerge in a tributary of the Bahau inhabited only by very poor Punan, then still fully nomad.

The northerly Punan Tubu deserve special attention and seem to have been ignored (cf. Jack Stuster's useful but very British bibliography in BRB 6, 2:49-50). They struck me as "quite different" from all other Punan I have met, including those in the Apo-Kayan and Bahau-Iwan; in Sarawak in the Rejang-Balui, Baram-Akar-Tutoh-Tinjar, and the upper Limbang; and in Brunei in the Belait headwaters (to and from the Tutoh). The tubu were rich and business-like. Why do the Punans and other nomads (or ex-nomads) go no further north than that, into the Trusan river of Sarawak or anywhere in Sabah? Is there some ecological factor (e.g., sago-palm supplies) which inhibited a nomadic role up north? Or was it their need for large riverine long-house communities with which they could have some sort of commercial relationship, acting as barter-dependants, collecting hinterland produce for down-river shipment? Their absence in the upland country of the Kelabit-Murut complex is probably significant. From the great river headwaters either side of the long Sarawak-Kalimantan border the Punan trade outwards always, despite bilateral mobility (see below).

The Punan Musang-Busang

Whittier also refers to the Punan Musang of the Iwan (Apo Kayan) headwaters. This deserves elaboration, lest anyone proceed to follow his (accurate) directions for the hard trip up the (rapid-infested) Iwan. For this large Punan element is mobile to and fro, both sides of the Kalimantan-Sarawak border, according to which side favours them most; the same applies further north to Punan on the upper Bahau cf. the upper Baram in Sarawak. The

Punan Busang--as called in Sarawak--long evaded government control, dodging out of the Plieran (upper Rejang). They were first contacted this side by Dr. Huehne (1959; see Stuster's bibliography). Later, Tuton Kaboi, Sarawak Museum Research Assistant and the present writer were able to make some fuller study of them, using Special Air Service helicopters during Malaysian-Indonesian border "Confrontation" (Harrisson, 1965 and unpublished). Since then, these last fully nomadic and "wild" Malaysian Punans have moved much further downriver, settled and became heavily Christianised (Borneo Evangelical Mission). In this new state of grace they were subsequently visited by an expedition from Malaya, those somewhat unco-ordinated but useful observations are published as a cluster in the Sarawak Museum Journal, XX, 1972:235-300.

It seems probable that the remaining nomad group in the Iwan, still in close touch westward, may by now have all moved over to perhaps more comfortable conditions in Malaysia. There has indeed been a large movement of other, settled peoples in this direction since World War II, in itself only a confirmation of a process which goes back into the early folklore of the Kenyah, Kayan and related peoples. A high proportion of Sarawak's present riverine people ancestrally moved north-west across the island over many centuries, from Land Dayak and Iban in the South to the Lun Daye-Bawang (from Kerayan into Trusan and Padas) far to the north.

With massive new plans for resettlement or displacement of people in favour of timber in parts of Kalimantan, this tendency (with largely ecological roots touched on by Victor King in his remarks on the upper Kapuas biotope) may well be accelerated. In the end result, rainforest nomads are bound to suffer most from this sort of habitat destruction.

"Penan", etc.?

A word also on the terms Punan and Penan, which caused an absurdly amusing Sarawak debate in previous decades (see aforesaid bibliography under Griffin, Harrisson, Jacks, Needham, Noakes, Spurway and Urquhart!). As Whittier points out for Kalimantan, so it is--and always was--for Sarawak too: the distinction in vowel sounds is in the beholders. One and the same group may be called Penan by some (settled) group and Punan by another adjacent (settled) group. Where the Kayans dominate, Penan probably rules? Most Kenyan and others, including all earlier European writers, prefer Punan. For any serious student to base ethnic classification on such flimsy semantics is naif, if not faintly frivolous. What remains here is to determine how far, if at all, all the Borneo nomads (Penan, Punan, Ukit, Bukit, Bukatan, Bukat, etc) are originally interrelated. Are they of one stock, or do they reflect a series of separate responses to common environmental conditions and economic needs? This is one of the quite fundamental and fascinating unstudied problems of Borneo. Though difficult, and getting more so, modern transport offers a chance to tackle such a comparative study, which could illuminate the whole human process in equatorial Asia. There is a need for such studies (as Victor King's good paper also indicates).

THE CONCEPT OF MALARIA IN BRUNEI MALAY INDIGENOUS MEDICINE

Linda Amy Kimball
Ohio State University
(recently at Universiti
Kebangsa'an, W. Malaysia)

Throughout the millenia malaria has plagued much of mankind. Cultural responses to malaria have included attempts at prevention, such as draining the Pontine marshes in ancient Rome, use of drugs, such as bark of the cinchona tree among South American Indians, and ritual practices designed to make the disease leave of its own accord. An examination of various traditional techniques for the management of malaria and the rationale behind them can yield both information about the disease and insight into indigenous medical practice. This may be seen by looking at the concept of malaria in Brunei Malay indigenous medicine.

More than a thousand miles southeast of Vietnam the island of Borneo straddles the equator. On its northwest shore lies the country of Brunei, present-day survivor of a former vast empire that reached from the Philippines around most of coastal Borneo and maintained trade and diplomatic relations with similar empires of ancient Java and Malaya. Brunei is a land of tropical jungle and coastal swamps whose settlement patterns even now are oriented to the rivers which until a decade ago, served as virtually the sole lines of communication and trade.

Several distinct cultural groups live in Brunei, among them Hainam and Hailam Chinese, English and Dutch Europeans, Penan, Murut, Ibans, Kadayans, and Malays. The Malays are divided into three groups, Tutong, Belait, and Brunei, although only the Bruneis speak a language closely related to standard Malay. In the past Kadayans lived in upstream areas and farmed rice while the Brunei Malays lived downstream in houses built on piles over the water, fished, made goods of iron, brass, or precious metal, and carried on an extensive overseas commerce through which they imported luxury items. They traded all these types of goods to Kadayans in exchange for rice and other food. Bruneis also traded with more remote upstream folk, particularly Muruts, to obtain jungle produce. Various cartels and monopolies served to keep profitable trade in the hands of the Brunei Malay rulers and nobles. Kadayans and Malays sometimes intermarried, indeed, both groups are Islamic and show many linguistic and cultural similarities; but even now the Bruneis fear the Kadayans' reputed strong power in magic. Although Brunei Malay indigenous medical practitioners must deal with the supernatural in treating illnesses, they recognize their Kadayan counterparts as superior. Today the government of Brunei provides a good program of free western medical care for its citizens, although many people still consult village practitioners. But half a century ago traditional doctors, *dukun*, provided almost all professional medical care.²

Brunei Malay traditional medicine is largely indigenous although it contains elements of Arabic, Hindu, and possibly Chinese origin. A few of these elements can be pinpointed, others not. For example, amulets commonly contain Koranic passages, Arabic cabalistic signs, and Hindu-Arabic number squares. However, irruptive diseases characterized by the appearance of small red spots, as in measles, chickenpox, and smallpox, are not differentiated as they were in the Arabic tradition. On the other hand, the

"classical" infective process of wounds is known and described in great detail, including the connection between swollen lymph nodes and spreading infection. The technique of inducing pain or fuming to drive out disease may be related to Chinese theories of acupuncture, moxibation, and fumigation. The interesting lore that human anatomy parallels mammal anatomy has unknown origins but holds a key place because dukun learn their human anatomy, the name and position of the different structures, when they observe or perform butchering dissection of meat animals and hear the associated nomenclature. Physiology may have Hindu-Arab roots but from a scientific point of view is often wrong, maintaining, for example, that the liver is the seat of emotions. Of local provenience are ideas concerning patient nutrition which follow a pattern found throughout much of Southeastern and Island Asia. Similarly, most words in curing chants, and many of the beings named, such as the *hantu* spirit of the earth, also show local origins. The dukun utilize a pharmacopea whose main ingredients are local but maintain that the Kadayan pharmacopea is superior. Regardless of inferiority feelings and its own disparate origins, Brunei Malay indigenous medicine forms a logical consistent whole of considerable subtlety.

One colorful aspect of this medicine used to be mediums, *orang behantu* and *orang bemambang*, who went into trance and while possessed by a *hantu* or *mambang* spirit diagnosed illness or searched for missing objects and persons. Their role was that of specialized diagnostician, not that of "doctor". Although mediumistic sessions have been outlawed for several decades, dukun practice much as they did in the past and Brunei Malay medicine is still active, even if it now lacks the excitement that an occasional trance session once provided.

The dukun often was and is the intellectual of the community. People respect his knowledge and skill, but also fear his close contact with the supernatural and ability to deal with spirits. A dukun must be literate in Jawi, Malay written in the Arabic script, in order to read medical manuscripts and write amulets. Although in theory any man or woman with the requisite intelligence, interest, and means to pay the expenses of training may become a dukun, in fact the art tends to be handed down within families. This limitation of transmission has several causes, not the least of which is the reluctance to teach outsiders trade secrets. Perhaps a more important consideration is that a teacher, knowing the total personality and behavior of family members as one can never know that of outsiders, is able to select as a student only an individual who possesses the requisite probity and discretion. For dukun point out that in the knowledge of how to cure, be it Malay or Western, lies also the knowledge of how to kill. Another factor is the need for clinical training. The student accompanies his teacher on house calls or sees him at work when patients come for consultation. Since such occasions are usually haphazard and often in the middle of the night, only someone living in the same extended-family dwelling as the teacher, and only family members do, is likely to be present to gain the necessary practical experience.

The formal body of knowledge a dukun student masters resembles in outline that studied by Western medical students. It comprises anatomy, physiology, etiology, diagnostics, therapy, midwifery, physiotherapy, psychiatry, and preventive medicine, but contains

subjects outside the western curriculum, such as philters, amulets and good-luck talismans, rites for planting, growing, and harvesting, selection of advantageous dates and marital partners, techniques of enticing or repelling people, and methods of dealing with the spirits. One of the most important subjects is diagnosis of different conditions, their etiology and probable prognosis. The dukun utilizes both clinical signs and case history in diagnosis but, like western physicians in the eighteenth century, has no instruments save the bare hand with which he feels temperature and palpates. Each disease has a specific which is some combination or incantation, ritual action, therapeutic manipulation, and medication. In addition to the requisite specific a dukun also administers broad spectrum treatment utilizing any cures that might possibly affect the condition favorably, on the theory that if one does not work another might. They point out that western doctors use a similar procedure when giving several medications simultaneously. Here "western doctor" means any physician trained in the mainstream modern western tradition of scientific medicine. Dukun stress the responsibility that devolves on them and the importance of bedside manner. Normally they do not tell relatives when death seems imminent. Only at home or in complete privacy will two dukun or a dukun and student hold a professional discussion examining in detail the case at hand, experience with similar cases, and alternate avenues of treatment. Once a person has mastered basic medicine such conversations assume primary importance in continuing education.

Yet despite the differences between Brunei Malay and western medical theories, both schools have the same aim: cure or at least alleviation of illness. The dukun distinguishes mental from physical illness, but maintains that *hantu* or *mambang* spirits inside a person cause both. Consistently following out this etiology, the dukun applies therapies designed to remove the offending spirit from the patient and drive it away so that it neither reinfests the patient nor molests other people. He perceives that western doctors do the same thing for the same reason, but call the spirits "germs" or some long unintelligible name. Local patients also know the generalized "bad spirits cause disease" theory and believe that part of the efficacy of injections lies in the physical pain caused which makes the body an unpleasant place for the disease spirit who often departs forthwith. Dukun see vitamin therapy as somewhat analogous to those parts of their own practice which consist of administering spells and potions to make people "strong" against supernatural harm or administering philters for "strength." Nor do preventive inoculations appear strange; for dukun all have ritual precautions to prevent themselves from being harmed by the diseases they drive out and find it perfectly understandable that western doctors take the same precautions. Similarly, protecting people and homes against supernatural harm falls within the purview of the indigenous practitioner who consequently sees mass preventive inoculations as sensible, differing only in technique from his own practice. But dukun and most patients feel that western doctors are woefully ignorant about proper feeding of the sick and need some good instruction concerning the types of food which patients with certain conditions should not eat. For example, chicken must be categorically forbidden to anyone who is ill because chicken is a "harmful" food which will invariably lead to worsening. The belief that a person who is denied a food he craves is liable to become ill, hurt, or sicker, somewhat tempers

food restrictions. But conflicting theories of patient nutrition divide dukun and patients from western doctors. Yet the dukun's diagnosis of disease entities is similar to that found in western medicine during the early nineteenth century.

One major disease entity dukun recognize is malaria. They subdivide it into childhood and adult malaria, recognizing the two as related conditions; whether or not this was true in the nineteenth century prior to the introduction of the common European word *malaria* is a moot point. But because indigenous diagnosis depends upon the clinical picture and case history only, native practice mis-diagnoses both non-classical malaria and diseases that mimic malaria symptoms. Of the two recognized classical syndromes childhood malaria is the worse.

Childhood malaria, *sakit sinudong*, presents as an enlarging spleen. Other symptoms include: eyes everted upwards even in sleep; a mouth so locked that the child does not cry but rather sobs through his teeth; tight fists; and a stiff but straight back. Dukun stress the importance of differential diagnosis to distinguish this malarial rigor from bow-backed tetanic rigor. To treat childhood malaria the dukun places the thumb of his right hand on top of and pressing down against the enlarged spleen. This in and of itself constitutes a treatment whose object is to reduce the spleen and likewise the illness. The dukun also uses a brief curing chant, "neutralizing turtle sinudong", in conjunction with the gentle thumb pressure:

In the name of Allah, the Gracious, the Merciful,
A handleless hoe is carried returning to the rapids
Neutralizing the turtle illness sinudong.
I pinch with my thumb.
Done! Neutralized!

Supplementing this specific the dukun also uses broadspectrum curing chants and amulets. But prior to the advent of modern drugs childhood malaria had a poor prognosis and was a major killer.

By contrast, adult malaria is described as a debilitating condition but not really a disease because once the fever passes the person is well, can get up, moves about, and eats. The indigenous names for adult malaria are *dingin kura*, turtle coldness, a reference to the hunched-up turtle-like position a patient assumes; and *rahmat bigi*, seed mercy, a reference to splenic enlargement. A classical case of adult malaria presents with alternate chills and fever. Chills last about two hours, during which time the patient curls up hugging a large pillow, and buries himself in numerous pillows and cloths for warmth. During the ensuing feverish episode the patient feels a hurt as though he were being cut. Afterwards he sleeps and upon awakening feels well, drinks water, and wants to eat much tamarind.

According to the homeopathic theory which pervades Brunei Malay medicine, a person who has malaria should avoid eating foods traditionally classed as "cold"; because like brings on like and eating "cold" foods causes the onset of malarial chills.¹⁰ Among the forbidden items are sugarcane, bananas, beans, sweet potatoes, okra, and certain greens. But locals say that man is the "slave" of malaria because patients crave forbidden foods and eat them despite the near certainty of consequent relapse. However, an

outsider sees that the reason for this supposedly foolhardy eating is probably sheer hunger. Bananas and sugarcane are often the only snack foods readily available, while sweet potatoes and the proscribed vegetables are among the few foods cooked bland enough to appeal to an upset hungry stomach. Western medicine, far from attributing relapses to such forbidden snacks, sees them as beneficial. Regardless of this variance, dukun concur with western doctors on the need to treat both new cases and relapses.

Treatment of adult malaria takes several forms. The first approach is chanting the "neutralizing turtle sinudong" into a quantity of water which the patient then drinks until full or even nauseated. The specific is an infusion of *buta-buta* wood to be taken right at the onset of chills. Alternatively, a patient drinks infusion of chalkbrush grass.¹¹ If these measures fail the case is a difficult one which will recover slowly and calls for different therapy. One alternative treatment is an infusion of *marbani* wood, cumin, red onion, and seven times seven decorticated pepper seeds decocted daily in a pottery crock with new water being added as needed until the patient has taken the prescription for a week.¹² Or, to make a compress, use the four ingredients but prepare them differently. First, split the marbani wood lengthwise and set aside the left-hand side piece for the compress to be applied to the patient's left-hand side, and reserve the right-hand piece for his right-hand side. To each piece of wood add the red onion, cumin, and forty-nine decorticated pepper seeds. Mix in enough water to make each powder a paste, put the two wet masses on the appropriate sides of the patient's abdomen, and tie on a stomacher. Treatment of children involves the same compress minus pepper seeds. The dukun who described these malaria treatments admitted that in her own case nothing worked until her husband obtained some quinine tablets which cured her frequently recurring severe malaria of more than two years duration.

Today the Brunei government runs an anti-malaria program that has eliminated the disease in many areas and keeps the incidence low elsewhere. A spraying campaign suppresses the carrier mosquitoes, although there is some apprehension that dengue carriers may take their place; and quarterly bloodchecks of all residents combined with free medication to any found harboring the parasite reduces the sources of infection.

This greater efficacy of western medicine does not conflict with the traditional medical theories. After all, said one dukun, "We know that hantu and mambang spirits still cause all illnesses even if doctors call them 'germs'. But doctors' medicines are often faster and more effective than ours."

The astute dukun is far from naive concerning western medicine and realizes quite clearly where its advantages and drawbacks lie. He recognizes that western therapy is superior in treating severe or acute illnesses, severe traumata, many birth complications, and some chronic ailments. He prefers traditional techniques for massage, reducing minor dislocations, and in general for any mild condition warranting physiotherapy or the simple hydrotherapy of sitting a person in the river and manipulating; but realizes that many major conditions, such as fractures and hip dislocations have a better outcome under

western treatment. Although the traditional massaging lubricant is cooking oil with or without a little garlic in it, for muscular aches and pains dukun often use western deep-heat rub or Tiger Balm, a proprietary Chinese concoction of menthol, camphor, and petroleum jelly. Most local people, practitioner and layman alike, emphasize that cases of mental illness taken for western treatment become hopeless. Dukun insist that with their methods they can often alleviate or obtain remissions of mental cases, but point out that some mental patients do not respond to local treatment in which case the only recourse is confinement and custodial care in a relative's house. The dukun's professional opinion may well be correct here when one considers the importance of total environment on mental health and that mental patients under indigenous treatment remain more or less functioning members of the community in between acute episodes. For in the treatment of all mental and physical illness, the dukun deals with both the patient and his family, striving to achieve accomodation to incapacity where necessary in addition to seeking cure.

The modern dukun has established a *modus vivendi* with western medicine and often refers patients to the physician when that seems the better course.¹⁵ Frequently the patient continues to receive indigenous treatment as well and not uncommonly asks the local practitioner to examine the doctor's medicine to see if it is correct. Some patients will not take prescription medication without such approval and even then want the dukun to chant over it first. In practice the dukun is syncretizing some western treatments and concepts of illnesses, for example malaria, with his own indigenous medicine which itself has multiple origins. Nor is the local practitioner's role minor, for villagers want both the efficacy of the new medicine and the comfort of the old. Quite clearly, the dukun still holds an important place in the total health care delivery system.

Notes

1. This paper (which was read at the 1975 meeting of the American Anthropological Association in Mexico) is based on information gathered in spring, 1973, while on vacation from Fulbright teaching at Universiti Kebangsaan, West Malaysia. The village visited then had been the site of my fieldwork in 1969-71.

The standard work on Malay indigenous medicine is Skeat's *Malay Magic* (original edition published by Macmillan and Co., Ltd., London, 1900) which treats of Malays in the Malay Peninsula (now West Malaysia and Singapore). However, despite the similar name and many shared features their culture and language differs from that of the Brunei Malays.

2. Malay does not gramatically distinguish singular and plural. Hence dukun is both singular and plural.
3. Their substantive content is, of course, quite different from that in modern western medicine.
4. There are many types of hantu and mambang. Hantu are said to be white with long hair, glowing red eyes, and are believed to lurk about in the darkness at night. Village people, Malay and non-Malay alike, always keep their sleeping area dimly lit

so that no hantu will enter there. Villagers state that mambang linger about mostly in the daytime and are usually merely mischeivous; but hantu are always malicious.

5. The Malay word for "germ" is *kuman*. "Long unintelligible names", *nama luan basar*, *nda dapat mrati*, refers to scientific nomenclature.
6. The term for this "harmful" food category, or any of its members, is *bisa*.
7. The age of this chant in its present form cannot be proven because chants and their mode of application are often altered or made anew in response to dreams. Hence this line and chant are not usable as arguments that childhood and adult malaria were equated prior to the introduction of the term malaria. Nor do the compresses mentioned later substantiate such an argument; because they are a common treatment also used for other conditions.
8. A *bigi*, seed, is any palpable subcutaneous medium to hard mass, such as cysts or swollen glands.
9. Villagers usually sleep on the floor draped against a long cylindrical pillow or "Dutch mother". They surround themselves with pillows for warmth and protection against drafts.
10. Many foods are classed as "hot", *panas*, or "cold", *sajok*. This traditional categorization is too large for more than mention here.
11. In Brunei Malay the term is *rumpit kapor barus*. Brunei Malay and Kadayan pharmaceutical ingredients should receive expert botanical and pharmacological study. Until then, no satisfactory description will be available.
12. This "seven times seven" is a bit of number magic; "seven" occurs often in ritual and magic contexts. More generally, odd numbers are associated with life and even numbers with death.
13. Some older dukun have not established a *modus vivendi* with modern medicine. The shift from exclusiveness to accomodation in indigenous medicine is part of an ongoing cultural change.

FURTHER PROBLEMS IN BORNEAN LAND TENURE SYSTEMS: COMMENTS ON AN ARGUMENT

Victor King
Department of South-East Asian
Anthropology and Sociology
The University of Hull

During fieldwork among the Maloh complex of peoples, particularly in the rivers of the Leboyan, Embaloh, Palin and upper Kapuas, I collected a large amount of data on Maloh land tenure. Some of this information may throw some light on the fairly recent discussion by Appell (1971:17-21) and Dixon (1974: 5-15) in the BRB on factors relating to differences in Bornean land tenure systems. I should point out that at this stage I am not offering any solutions to the problems already posed. What I hope to do is comment on and seek clarification of what has gone before.

First let us briefly consider Appell's tentative explanation of the circumstances under which Iban and Bidayuh Land Dayak as opposed to Rungus Dusun have developed a system of permanent use rights in swidden areas. He hypothesizes that

"...the increased rainfall in the Sarawak areas in conjunction with more productive soils tends to encourage the growth of weeds in comparison to the Rungus area. Thus, because of fewer weeds invading the swidden after the first year's harvest; and because young forest has a better chance for a good burn than primary forest in the Iban and Land Dayak areas, there is greater economic value in secondary forest which results in the development of permanent use rights over swidden areas" (1971:19).

Dixon, however, doubts that "...differences between the Dayak system (i.e., Iban and Land Dayak) and the Rungus Dusun system can be explained by differences in the physical environment" (1974:13). For example, he points out that type of terrain, and presumably soil type, are not correlated with variations in Dayak land tenure in Sarawak's First Division. Nevertheless he later includes Appell's criterion of rainfall differences within his explanatory framework. He suggests that lower rainfall in the Rungus area coupled with "...a greater pressure on available food producing land..." (1974:14) and a subsequent shortened fallow period may have led Rungus to make changes in their land tenure system. I shall return to Dixon's alternative explanations later.

At this point some additional information can be presented in the light of Appell's hypothesis. Broadly speaking the Maloh people inhabiting the Leboyan, Embaloh and Palin rivers in particular exhibit the main land tenure features of Iban and Bidayuh Land Dayak. Here I am extracting a few summary characteristics of Maloh land tenure. The situation in detail is complex and subject to significant variation. However, in general, rights to land in Maloh are initially acquired by felling virgin jungle. These rights are ideally passed to all the original clearer's male and female descendants and provide the basis for what I have called 'property-based descent categories', termed in Maloh *kapulungan*. These have many similarities with the Bidayuh Land Dayak *turun* and the Padju Epat Ma'anyan *bumuh*. However, while Geddes and Hudson prefer to call these units 'descent groups', and Dixon follows this nomenclature, I feel this term gives a mistaken impression of corporateness which these units do not possess. Geddes, in fact, provides evidence to support my argument when he says of Bidayuh Land Dayak,

The descent groups are important only in respect to the land they own. They are groups of people linked together by sharing rights in particular areas, and they have no reality apart from those areas.

This very fact makes them of little value as a basis for the organisation of other social relationships of a more permanent order... (1954:59).

The Baleh Iban as described by Freeman do not possess such descent units. The various mechanisms in Maloh for regulating the actual use of land between a large number of related people within these kapulungan generally follow those outlined for other peoples by Geddes, Hudson and Dixon. The important point is that Maloh recognize the existence of permanent rights in swidden areas.

Appell has suggested an interesting correlation between this 'permanent right' system and certain ecological factors, namely "increased rainfall" and "more productive soils". Now in the Maloh areas which I visited the greater part of dry rice cultivation on a shifting basis is confined to the flat, fertile alluvial banks of rivers. Occasionally there is the risk of flooding, but in most years fertile rice-lands and Maloh care and diligence in rice-farming secure a surplus. Maloh success in agriculture, their reputation as good farmers and their resultant wealth in terms of heirloom property is frequently referred to in the Dutch literature. This is not to suggest that all Maloh farming is carried out in low-lying fertile areas. They also cultivate lower hill-slopes and there is evidence to suggest that in the past some Maloh communities utilized an appreciable area of hill-land. However, Appell's hypothesis that there is some relation between permanent land rights and relatively fertile soils seems to be borne out by my Maloh material.

There are problems, however, if we now turn to Hudson's Padju Epat Ma'anyan data (1967). The Padju Epat of the Barito Basin also recognize permanent use rights in swidden lands. Again as with Maloh, etc., rights are secured by a 'pioneer' who first clears virgin jungle. Ideally these rights are then passed on to all his male and female descendants (1967:375-376). Unfortunately Appell's hypothesis with regard to soil fertility does not appear to hold here since Hudson indicates that soils are of poor quality in Padju Epat (1967:106, 305).

Additional data on rainfall is more problematic. I have no reliable rainfall statistics for the Maloh area. It would appear that the sheltering effect of the upland ranges bordering the upper Kapuas basin limits the amount of monsoonal rain. On the coast at Pontianak mean annual rainfall is approximately 125 inches and this decreases somewhat towards the interior. Therefore rainfall in the Maloh region is lower than that in the Iban and Bidayuh Land Dayak areas chosen by Appell (1971:19). On the other hand it is greater than rainfall levels in Rungus. In the Barito Basin Hudson mentions rainfall amounts ranging from 100 to 140 inches per annum. Again the annual rainfall is higher than that for the Rungus, but in Padju Epat, in particular, rainfall level is probably lower than that recorded for Iban and Bidayuh Land Dayak. However, for Appell's hypothesis the critical statistics for rainfall relate to the period during which swiddens are burned. Appell argues that "...slash from virgin jungle is much less likely to produce a good burn, particularly under adverse weather conditions..." (1971:18). For this reason higher rainfall in the Iban and Land Dayak regions, particularly at the time of burning, may have led to a greater value being placed on secondary jungle which requires only a brief period of dry weather for a good burn. Thus, greater likelihood and frequency of using secondary jungle in Iban and Bidayuh Land Dayak may have given rise to permanent use rights among these peoples. Lower rainfall and less problems of achieving a good burn in Rungus have, on the other hand, discouraged utilization of secondary jungle and the development of permanent land use rights.

If we take the Maloh and Padju Epat material in this light then perhaps we can be a little more definitive. In the Maloh area rainfall amounts during the burning period (Aug.-Sept.) appear to be higher than in the Rungus region. Certainly Maloh are just as concerned as Iban about the problems of achieving

a satisfactory burn. This would therefore tend to support Appell's hypothesis. But again we encounter a problem with the Padju Epat material. Because of the location of the Meratus Hills in relation to the Barito Basin very little rain falls in this area during May to October when winds are blowing in from the south-east. Hudson points out that rainfall amounts average between 2-4 inches a month at this time, and this period of low rainfall coincides with the July to September burn (1967:14, 112).

What can we conclude from this additional data? It would appear that the Maloh material in terms of ecological factors and the existence of permanent use rights supports Appell's hypothesis. Yet the Padju Epat material does not. On the contrary, ecological factors there, which are very similar to those reported for the Rungus region, coincide with permanent use rights, whereas in Rungus tenure is of limited duration. This leads me to suggest that although one or both of the ecological factors mentioned by Appell may indeed have some bearing on the nature of land tenure systems, their exact relation and influence are indeterminate. The problem is, of course, that ecological factors are operating along with socio-economic and cultural variables in different degrees and in different ways in time and space. It therefore seems to me, although a possibly interesting line of enquiry, a peculiarly difficult, perhaps an impossible one to isolate ecological elements and relate them to such things as land tenure system.

We also encounter an additional problem in the actual data which Appell presents. If I am not mistaken he argues that permanent rights in swidden areas may have developed by a more frequent and intensive use of secondary jungle. The Iban material appears to support this argument since Freeman indicates that in the Baleh a tract of land initially cleared of virgin jungle may be farmed three times in the first five or seven years following its clearing. Difficulties are encountered with the Bidayuh since Geddes does not provide much material on the frequency of reuse of swiddens. Appell says "...there is some indication that the Bidayuh domestic family cuts a swidden in a new area each year" (1971:18). In addition, Dixon mentions that in the First Division of Sarawak land tends to be used for two to three years. Rice is planted in the first year along with a variety of secondary crops, and a second rice crop is also planted in the succeeding year with additional non-rice plants (1974:7). Despite variations the Bidayuh rotation period is usually from ten to twelve years although the period may be lower (Geddes 1954:68). Turning to the Rungus data it appears to differ little from the Bidayuh. We are told that Rungus cut a new area of jungle each year and although there is no mention of a second rice crop other crops such as maize and Manioc are planted. Particularly with manioc the occupation of a tract of land by a Rungus domestic family may still cover "several years" (1971:17). In addition, the Rungus rotation period is ideally ten years or more but in certain areas it has fallen to seven years (1971:17-18). To my mind Bidayuh and Rungus patterns of land use are not very different and so it is doubtful whether one can use this argument in explaining the reasons for the existence of permanent use rights in the one and temporary use rights in the other.

The Rungus situation also accords well with the Maloh. Maloh usually take only one rice crop from a particular tract of land. In the case of clearing virgin jungle they do occasionally plant a second rice crop. After the harvest a part of the swidden is planted to sugar cane and other crops and is therefore occupied for at least another year. Although subject to considerable variation the people in the Embaloh and Palin rivers in particular consider the best rotation period to be ten years or more. However, because of population pressures and the encroachment of other peoples such as the Iban and Kantu into Maloh areas the fallow period has now dropped to as little as five to seven years in certain places. Here again Maloh do not appear to use their land differently from Rungus yet they both have different land tenure systems.

One of the key difficulties in our correlations so far is that we have not considered the possibility of change through time. Here we enter a problematic, yet very necessary area of enquiry if we are to make positive statements about ecological relations. For example, although Hudson's material on soil fertility tends to disprove part of Appell's hypothesis we have not allowed for the fact that edaphic factors may have altered. Hudson tells us that the Padju Epat area has been subject to "centuries of intensive swiddening" (1967:106). There has presumably been some deterioration in the soil and, therefore, if we take Appell's suggestion that permanent land rights are related to more productive soils than Padju Epat, in the past at least, may not be an exception to the rule. The main problem with this kind of enquiry is to establish the significance of the correlation.

Let us now turn to Dixon's attempt at explanation since he does attempt to take into account the temporal variable. Like Appell Dixon points out that his suggestions are tentative and, in addition, that his argument is "extremely vulnerable" (1974:14). I suggest that his explanatory framework is vulnerable because he is concerned with hypothetical historical reconstruction. Dixon's alternative explanation as to why Rungus do not establish permanent use rights in swidden areas after clearing virgin jungle is revealed in the following passages:

Perhaps the Rungus system once was more similar to the Dayak system, but has changed to accommodate different land use demands (1974:14). Given increased pressure on the land, the Rungus may have changed their land tenure system to allow a more equitable distribution of the scarce land resource at the beginning of each clearing season.... The Rungus may have recognized that a segment of the community, less well endowed with land rights than other segments, was being forced to cultivate its land far too frequently, yields were declining, and that the entire community was in jeopardy (1974:14).

The implication is that permanent use rights in the past may have been relinquished so that all sections of the community could have equal access to village land after the cycle of cultivation, reversion to secondary jungle and its subsequent availability for recultivation. As Dixon has indicated this kind of explanation relies on a significant degree of "community cohesion". In fact, to suggest that there was a conscious decision in the past by certain members of the community to achieve a more equitable distribution of land begs so many questions. For one thing it involves the whole problem of land rights in their relation to status, prestige and wealth in the village, and this unavoidably involves an investigation of the social relationships consequent upon these status arrangements. We have to ask, "Are more privileged people willing to give up their privileges and under what circumstances are they willing to do so?" The problem with Dixon's explanation is that it depends on hypothetical reconstruction, and although I am uncertain about the nature of historical materials relating to Rungus I doubt that such a reconstruction can be undertaken. Even if we can establish that there has been a change in Rungus land tenure, can we then say that this change has been caused by or is related to increasing pressure on the land? On the other hand to support Dixon's explanation we might be able to take a present-day Bornean society which recognizes permanent use rights in swidden lands and is at the same time faced with increased demands on available land to see what path it is taking. It might therefore serve as a test-case for Rungus. But again this attempt to find supporting evidence for Dixon's explanation is problematic since in Dixon's own data it would appear that Bornean societies are responding to the process of modernization by increasing and intensifying the permanency of rights in land with the growth of cash crops, rubber and the introduction of wet rice cultivation. In addition, the Government is providing alternative solutions with resettlement programmes.

Therefore, it would seem that Dixon's attempts at explaining the nature of Rungus land tenure cannot be tested. The problem is compounded when Dixon himself points out that his framework also depends on the Rungus having "...a greater ability to recognize what must have been a relatively slow decline in productivity than is fair to expect of preliterate tribal society" (1974:14). I would not quarrel with this, and I would also agree with one of his earlier statements that "In the past the traditional response of shifting agriculturalists faced with a need for increasing food production has been to shorten the rotation period" (1974:11). To my knowledge this has indeed been the response in a number of cases. Maloh, for example, are engaged in this very process because of increasing pressure on land. More recent solutions have been Government-sponsored schemes to introduce high-yielding varieties of wet rice. Further to this, according to the available evidence it would appear that the Rungus solution has been to shorten the fallow period. If we are to accept Dixon's suggestion that Rungus have also consciously introduced changes into their land tenure system then it would appear that pressure on resources in the Rungus area must have been extreme.

As is apparent from the above discussion I have not presented any solutions to the problems which Appell and Dixon have posed. I have merely tried to point out the difficulties inherent in each approach. Nor am I saying that their suggestions are necessarily wrong. I have indicated that in certain contexts Appell's correlations appear to hold and that, following Dixon, explanation also depends on the adoption of a historical perspective. What I am more worried about is our ability to determine whether these correlations are significant and the manner in which relations of cause and effect are operating, and, in addition, our ability to muster adequate historical data to support or reject Dixon's hypothesis. However, for those interested in correlations etc., I have a further interesting one which is brought to light in Dixon's paper. At one point he says, "First Division Ibans (more sedentary Ibans than the group Freeman studied), do not appear to have varied the land tenure system to any greater degree or in a way differently than the First Division Land Dayaks" (1974:13).

In other words it seems that more sedentary Iban have what Dixon terms 'descent groups' and what I have called 'property-based descent categories', unlike the more mobile Baleh Iban studied by Freeman. I was also struck by the fact that in the upper Kapuas region Maloh and Iban live in close proximity to one another but whereas Maloh are more sedentary and have descent categories, Iban prefer to migrate and, like Freeman's Iban, do not have descent categories. Perhaps this interesting phenomenon would produce more fruitful results than the lines of enquiry which have occupied the greater part of this present paper.

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A PRELIMINARY SURVEY OF SEVERAL MAJOR MUSICAL INSTRUMENTS AND FORM-TYPES OF SABAH, MALAYSIA

E. M. Frame
Universiti Sains Malaysia

In a world full of change, the music of Sabah provides the ethnomusicologist with an interesting area of study, since most of the traditional musical forms persist with unimpaired vitality, although influences from the outside world

are slowly finding their way into the state. New forms are often used side by side with the old (as seen in a Bajau wedding celebration where one may find the traditional *batitik* used or a modern 'western rock group' with electric guitars, amplifiers and drum set), but fortunately for the ethnomusicologist, traditional and modern forms are rarely blended nor does there seem to be an attempt to substitute instruments from outside the culture for traditional ones. This tends to keep the traditional tunings and styles of playing extant.

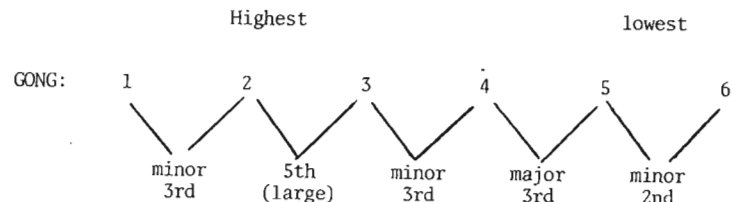
What is presented here is a survey of some of the main types of traditional musical instruments and music form-types in use among Bajau, Dusunic and Murutic communities in Sabah. Each community has its own distinctive musical culture, but there are also unifying features shared by all communities.

1) GONGS - This group of idiophones forms the backbone of Sabah's music. They are found among all the native groups although the number of gongs used in performance varies from district to district and from group to group. The very large suspended and knobbed gongs are by far the most common and these have a high monetary value among all the peoples of Sabah. In most cases these are used as one form of payment for the bride when a young man wishes to be married. All the larger gongs have concave sides and are struck with a mallet made of wood. This wood is wound with twine with an additional layer of rubber added which protects the knob of the gong from being damaged.

Among the Kadazan peoples the usual number of suspended gongs is 6 or 7 with the latter number particularly common in the Penampang and Papar areas. Among the Dusunic peoples of Kenignau and Ranau there are often up to 8 suspended gongs used. The Murutic peoples often limit the number of gongs to 2 or 4 while it is most common to find the Bajaus using a fewer number of gongs but in combination with other instruments. A common set of gongs in the Penampang area would have the following dimensions:

	Diameter across top	Height
1)	15"	3½"
2)	15½"	3¾"
3)	20"	4¾"
4)	19½"	8½"
5)	22"	10¾"
6)	23½"	12¾"

Although there is no set pitch for each gong it was found that the note F (located below the first line, bass clef) was often the pitch of the lowest pitched gong and in relation to this pitch the following intervals were formed:



(note that 6 is the largest)

These tunings vary from district to district and it should be noted that the pitches are often doubled at the octave and that the combinations using the intervals of the 4th and 5th are quite important to the music. Due to the concave sides, all these gongs are slightly smaller across the bottom than across the top. The larger gongs are extremely heavy and are suspended on very thick rope. The gongs tend to go out of tune and the performer will often add a bit of bee's wax to the back inside of the knob in order to alter the pitch slightly.

A smaller and flatter suspended gong is also found in Sabah called the *bandil* or *banang*. These are referred to as female gongs and are most often played by women while the larger gongs are played by men. The *bandil* is often used in combination with other instruments and not found in groups where only the larger gongs are played.

2) *GENDANG* (DRUMS) - Next to the gongs, this is probably the most common instrument of Sabah and is most often played in combination with other instruments or with vocal music. Almost all these membranophones of Sabah are of the large double headed variety constructed from a hollowed-out log. This hollow log is then fitted with a skin (usually goat) on each end with rattan, string or wire securing both ends simultaneously. The rattan is passed back and forth between the two skins and tightened to produce the desired tension. The single headed drum (*rebana*) is seldom found in the kampongs but is used in connection with certain Muslim functions and as an import from Brunei.

The drums are played with the hands or with sticks and sometimes a combination of the two with one side being beat with the hand and the other with a stick(s). It is often the case that two smaller split sticks are used rather than one larger stick. A drum of average size in Sabah would have the following dimensions:

- Height: 24½"
- Diameter of drum heads: 10½"
- Circumference at widest part: 39"

The drums all tend to be slightly smaller around each end than around the middle.

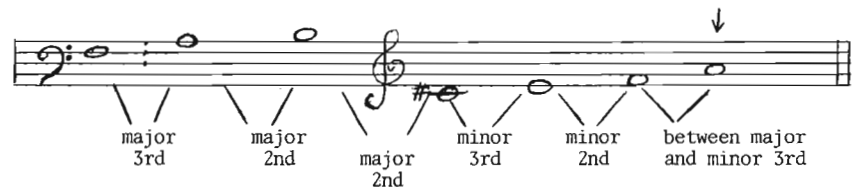
3) *SULING* (FLUTE) - As in much of the world, this aerophone is found throughout Sabah in various forms. The term *Suling* generally refers to an end blown flute or to a side blown instrument (transverse flute) both of which are played with the lips. The other type of flute is called the *turali* and is a nose flute. Both the end blown flute and the *turali* are quite long with an approximate length of 34" and a diameter of 3/4". Each has four holes with either 4 on the top or three on the top and one on the bottom. The air hole (blowing hole) of the *suling* is located on the back side just below the closed end of the bamboo while the blowing hole for the *turali* is located in the center of the 'closed' end. The nose flute is played with the 'closed' end placed next to the left nostril at about a 60 degree angle while the end blown *turali* is held with the far end pointing almost directly towards the ground. The third type of flute found is the transverse flute and appears to have been copied from the Chinese traditional bamboo flute (*Ti*). This horizontal flute has six holes for pitch change but is never used in the native traditional forms. It may be played for personal relaxation but is mostly manufactured for sale to the tourists.

The art of flute playing in Sabah seems to be on the decline and it is extremely difficult to find a person capable of performing on the instrument. This is particularly true of the *turali* which requires a lot of breath control on the performer's part. Most of the performers I talked with knew

how to play the instrument but were quite old and claimed they didn't have enough 'wind'. It is nearly impossible to find a young person capable of playing the *turali*.

4) *KULINTANGAN* - This instrument is found among the Bajau and Kadazan groups of Sabah or in rare cases may be played by a Murut who has been influenced by Dusun groups living nearby. The instrument is an ideophone and consists of from 7 to 9 small knobbed gongs suspended horizontally on a bamboo or wooden frame. These small gongs are suspended on the frame by means of two strings which run the length of the frame. Each gong is placed on the strings and separated from the next gong by means of a small piece of bamboo placed on the frame (under the string) and between each gong. This bamboo stick (7") keeps the gongs from sliding together during a performance.

The instrument is seldom played individually but rather in combination with other instruments. It is most often found together with a number of suspended gongs and drums. Men may play this instrument but it is much more common to find a woman player and the function of the instrument is to provide melodic interest in the music. The beaters used are of a very soft wood (like balsa) and are about 12" long. This soft wood protects the small knobbed gongs from damage. There is no fixed pitch found in Sabah's music although many of the *kulintangans* use a base tone of 4th line F (bass clef) or 4th space G (bass clef). A sample tuning from an instrument found in Kota Belud (Bajau) is giving below to show the relationships of the tones. It should be stressed that although Western notation is used the tones may vary slightly from the actual Western pitch since we are not dealing with a tempered system. The important thing to note here is the relationship between the intervals:

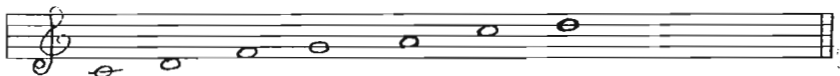


5) *TONGKUNGON* - This is a Kadazan instrument made completely of bamboo. It is a string zither and according to Curt Sach's definition would be classified as idiochordic, i.e., the string is formed from a strip split from the same piece of bamboo of which the instrument is made, but still attached to it at either end. The *tongkungon* has from 4 to 8 strings depending on which district it is from and produces a sweet, mellow tone similar to a horizontal wooden zyllophone. The bamboo tube is large with the following measurements representing an instrument of average size: Diameter across top: 3-3/4". Length of tube: 19½". Length of strings: 17".

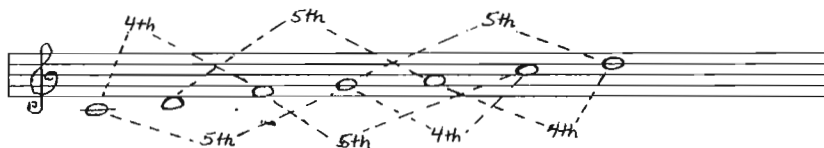
The 'strings', which are cut from the side of the bamboo tube are forced away from the tube by means of small bamboo pegs which are also used for tuning purposes. The strings are plucked by the fingers while the performer is in a seated (*yoga*) position. In some cases this instrument is used for a substitute when the gongs are not available but is generally used for personal enjoyment. One may find up to three persons playing on a single instrument with one playing in the normal manner, one keeping the rhythm by striking the side of the bamboo tube with a small bamboo stick and one using a similar stick to hit a single string which provides a drone-like effect and reinforces the rhythm. The tube is closed at both ends (by means of the natural nodes of the bamboo) and a large slit is made which runs from one node to another.

This slit is approximately 1/4" in width and functions as a means of allowing the sound to escape from the tube and making it louder. This in fact makes the entire tube a sounding box.

A sample tuning taken from an instrument in the Keningau district shows a pentatonic scale often used in Sabah and related to the ancient Chinese scale called anhemitonic (which contains no half steps). The tuning below is based on a starting pitch of C in order to show the scale clearly. In actual practice the starting pitch would be nearer F (4th line, bass clef):



6) *SOMPOTON* - This Aerophone is called the 'bagpipe of Sabah' and is related to the sheng of ancient China and the khaen of Thailand. Eight small bamboo pipes (which vary in length from 14 to 30 inches) are fitted with their ends inside a gourd. All except one of these pipes (which is a dummy pipe) has a single reed on the end placed inside the gourd. These reeds are cut from the tube itself and are not added. The gourd in which the pipes are placed will measure approximately 10" in length with only the blowing (stem) end open and the side where the pipes are inserted closed and sealed with bee's wax. Each pipe is also sealed with this wax on the end placed in the gourd with the seal placed below the reed which vibrates freely. The gourd functions as a wind chest and with nasal breathing the performer is able to keep the gourd continually full of air and maintains a continuous sound. By use of holes in the pipes and by placing the fingers over the tops of certain pipes, the performer can control all the pitches except one. This one drone pipe sounds continuously. It is interesting to note that the intervals of the 4th and 5th are most important to the instrument and it is these intervals we hear most often on the instrument. The notes also form a pentatonic scale and are related to the tunings of the tongkungon. The following scale (from an instrument found in Keningau) shows the many 4th and 5th relationships:



The starting pitch of Western middle c was the actual pitch of the lowest note on this instrument. The sompoton is not played in groups or in combination with other instruments. They are found throughout the West Coast and Interior areas of the state and are one of the most common instruments seen and heard in Sabah.

7) *TAGUNGGAK (TOGUNGGU)* - This idiophone is perhaps the simplest of all the native instruments found in Sabah and is played by both the Murut and the Kadazan. It appears to have originated in the Murut kampongs and was only later adopted by the Kadazan. It consists of a single piece of bamboo cut to the desired length in order to produce the pitch needed. The bottom end of the tube is closed by the natural node of the bamboo while the upper end is open with about half of the 'face' cut away in order that the tone may escape and as an aid in tuning. This gives the instrument a very long 'lip' approximately half the length of the tube. The bottom of the bamboo tube is held with the left hand, the opposite side is struck with a wooden beater in performance and for each different pitch needed, a performer is added. It is common to find six players among the Kadazans but perhaps as many as 40 among the Murut

peoples. Where there are more than 5 players the pitches are merely duplicated at the octave or at the same pitch. The size of the tube may vary from several inches long to as much as 12 feet. As in the case of the gongs, the rhythmic patterns set-up among the players is the most important aspect of the music. Each performer has a very simple rhythmic pattern but when they are combined the rhythmic combinations may be quite complex. In a performance one player will usually begin alone and gradually the other players will join, fitting their rhythms against the player or players entering before them. In the Murut areas it is common to find the instrument used during important social events and the performers will often lead a procession while performing. The tunings of the tagunggak often follow the tunings of the gongs and particularly so in the Kadazan kampongs.

8) *TURIDING (BUNGAU)* - This idiophone is very common in Sabah and in all of South East Asia. It is commonly known as the Jaw's harp or by its misnomer, the Jew's harp. The Sabah version is made of bamboo and is the essence of simplicity. The piece of bamboo is approximately 5" long and 3/8" wide. In the center a short tongue has been cut which vibrates freely while the rest of the instrument is held firm by the fingers of the left hand. The tongue is made to vibrate by plucking it with the thumb of the right hand. The turiding is placed in the mouth of the performer and the player 'plucks' the tongue of the instrument and by changing the size of the mouth cavity is able to change the pitch and create a simple melody. The mouth cavity serves as a resonating box but even so the sound produced is very slight in volume and the instrument is used for individual pleasure and not played with other instruments. Upon the tongue of the instrument is placed two small dabs (pieces) of a pitch-like material which provide additional weight to the tongue and aid in making it vibrate. The performer sets up a basic rhythm by plucking the instrument and produces a sort of ostinato (rhythmic) effect with a very simple melody produced by changing the size of the mouth cavity. An example of the ostinato and melody is given below:



1) *BATITIK* - This is a common form type found among the Bajau peoples of Sabah and particularly those located in the Kota Belud district of the State. It is used for any important social event and particularly in connection with weddings or engagement parties. The instruments used are: (1) one kulintangar (2) two drums, (3) two small gongs (bandil) and (4) two large gongs. The kulintangar serves as the melodic instrument and guides the other instruments by playing certain melodic patterns. The sections which make up the batik are quite short (approximately one minute) but are repeated over and over. One piece might continue for several hours and then a faster tempo would be used in a piece of a different character. With each new piece the tempo gradually builds until a quite frantic pace is reached which can only be maintained for a short period. If the party is at night this will usually occur after midnight.

The gongs are suspended and serve mainly as percussion instruments which are reinforced by the drums. The drums are the most active member of the group and are played with a small split bamboo stick in the right hand (lower end of the drum) and with the bare hand (left) on the upper side of the drum.

This is very strenuous for the players and for this reason the performers often rest while their part is taken over by someone else. Since the music continues for many hours, there is a continuous change of performers.

The Batitik is pure instrumental music and never used in connection with singing. It may be used with some form of dancing particularly on the East Coast of Sabah.

2) **MAGAGGONG** - This is the term used for the playing of the gongs and is a general term for the music which includes various pieces which are seldom given individual names. The number of gongs used varies from district to district as do the rhythmic patterns and the actual tuning of the gongs. Since Sabah produces no gongs of their own, all have been imported from other areas of South East Asia with a majority coming from Brunei and Sarawak. They often enter via the Philippines as a trade item and many are ancient. The older gongs tend to be of a much better quality than the younger ones and demand a much higher price.

The term magaggong applies to the group playing of the suspended, knobbed gongs and in some cases a single drum will be used along with the gongs and in Keningau one may find the addition of a kulintangan. The use of this form is most common in the Kadazan kampongs and is used to accompany the dance known as the *sumazau*. In general the various sets of gongs found within the same area maintain the same relationship of pitches between the individual gongs and in order to be complete, a set of gongs must contain the number of pitches common to the various areas. Within one kampong there may be only two or three sets of gongs and these are borrowed on special occasions and the household borrowing them is expected to pay something to the owner and is also responsible if anything happens to the gongs.

In an actual performance all the gongs are suspended by means of long ropes from a high beam and usually there is one player to one gong (although I have seen one person play as many as four). One player begins with a set rhythm with each player entering individually with his own rhythm. Taken alone each rhythm is quite simple but combined they create a very complex rhythmic form. The sound produced when all have entered is quite loud with the larger gongs providing a sound whose vibrations are not only heard but felt.

The general method of learning to play is to listen to someone and then to imitate that person. This is particular evident with the children and one will often see the children playing the gongs during a break in the music and before or after a performance.

3) **SUMAZAU** - This is the traditional dance of Sabah's Kadazan peoples and is perhaps the most widely known of the form types in Sabah. It has a long history and originally was a dance performed only once a year. This period was the time of a special thanksgiving to the harvest gods for which *tapai* (rice wine) was made, chickens killed, and the largest pig in the village slaughtered. This thanksgiving lasted several days and everyone in the kampong was invited to attend. Today the wedding is one of the biggest occasions for which the *sumazau* is used but it is also performed at almost any special occasion and for all types of parties and get-togethers.

For a performance a social custom has been established that everyone in attendance must participate in the dance. The gongs are used to set the basic beat after which a line of men is formed facing a line of women of the same number. The dancers within each line are separated by at least two arm lengths and as the line is formed the dancers begin to keep the beat with their hands, arms, feet and entire body. The male and female facing each other will than pair off and for the remainder of the dance they will remain 'partners'. The gongs maintain the beat throughout the dance with no change

in the rhythm. The most characteristic position of the dance is when the arms and hands are held out away from the body in a horizontal position. Both partners maintain this position until the arms begin to feel tired and then lower their arms while maintaining the beat with the feet and body. There is never any contact between the dancers except for eye contact which is most important since they must follow one another. The dance in each area follows the beat of the gongs which tends to be very slow in Penampang (the most well-known area for the dance) while in other areas such as Keningau the beat and dance are much faster. Each area has slightly different interpretations of the dance but the changes are slight and due mainly to the differences of the beat. For example, one finds the basic motion of the body in Penampang as being up and down and in Keningau as a combination of up and down plus a sideward motion of the feet.

The dress worn by the female dancer is of particular interest and is called the *sinunangga*. The basic dress is black and consists of a jacket and a sarong called the *boludu*. To this basic black costume is often added silver, gold or colorful embroidery along the edges and also a belt made of brass ringlets (called a *tatangkong*) placed around the waist. The *sinpogot*, or coin belt, consists of silver coins made into a belt which is then worn on the upper part of the woman dancer's hips. Sometimes you may find the use of a red cloth around the waist to add to the colorful effect and the men make use of a head dress which is called the *siqa* and consists of an elaborately folded piece of colorful cloth formed into various shaped hats. The men usually use plain black pants rather than a sarong. In the Kudat area the brass ringlets are worn not only around the waist but also around the ankles of the women dancers.

4) **LANSARAN** - This is a dance form found only in the Murut kampongs of the interior of Sabah and is popularly known as the 'bouncing floor dance'. In its pure form no instruments are used but today one may find the use of the large suspended knobbed gongs. Traditionally only the voices are used along with the very loud percussive sound occurring when the 'bouncing floor' hits a pile of logs placed directly underneath it.

The dancing floor is constructed of wooden planks and is nine foot square. The wooden planks are bound together by rattan and no nails are used in any of the floor or its supporting structure. This floor is then placed upon eight logs which are about 40 feet in length and are supported at either end by log 'horses' approximately 4½ feet above ground level. The dancing floor is in the center of these very long logs which is the reason it is able to move up and down. Only special types of logs may be used which are 'elastic' and must be carried many miles from the jungle areas. The building in which the dancing floor is located is very large and about eight feet off ground level, supported by stilts. The dancing floor itself is only about six and a half feet above ground level and for this reason one must step down in order to reach the dance floor. When looking at the main floor of the building (which often functions as a community center) it appears that there is a nine foot square hole in the floor. The dancing floor and its support is placed entirely under the building and beneath the main logs of support are placed a pile of smaller logs which are loosely secured. These are placed on a platform directly below the dance floor and when the dancing floor is in motion it hits these loose logs with a tremendous crash which eventually creates a steady rhythmic background for the singers.

On this small area (9' by 9') thirty people may join together for the dance. During the dance the floor moves up and down perhaps by as much as 2½' and it is kept in constant motion in order to provide the desired rhythm. The dancers form an outer and inner circle on the dance floor (women in one

circle and men in another) with other, non-dancers, placed in the middle of these circles in order to add extra weight. Once the floor is set in motion the dancers begin to move. One circle moves in a clockwise direction and one moves in a counter-clockwise direction. The movement around the circle is quite slow and the feet do not move off the floor but rather the motion is accomplished by a sideward shuffling motion. During the dancing songs are sung with the tune being passed back and forth between the men and the women. The floor is kept in a very constant motion providing the rhythm needed for the songs. In fact, when I asked for the songs to be performed without the rhythm of the dancing floor (for recording purposes) I was told that this was impossible since the rhythm is such a vital part of the singing. The songs are all in the Murut tongue and many of the people in this area do not speak Malay.

5) *DALING DALING* - This is a dance form which has been imported to Sabah from the Southern Philippines and is therefore found mainly on the East Coast among the Bajau peoples. The dance is often accompanied by a *gabang* (*gabbang*) which is a wooden xylophone approximately 38" long and having a total of 17 keys. If no *gabang* is used then the singing of the dancer may be accompanied by small wooden clappers held in his hand or the percussive effect produced by his feet hitting the loose wooden floor.

In an actual performance of the dance a male and female dancer participate as a couple. The male leads the dance and the singing with the female following (or reacting to) his movements and answering each verse he sings with a verse of her own. It is a very active dance with the feet continually active and the arms usually held away from the body. The dancers never touch but the action of the hands and arms is quite suggestive and this often causes a great deal of laughter from the audience. The verses used during the dance are often improvised although the tunes used are well known to all the Bajau people and often sung by themselves in the kampongs. These tunes tend to be influenced by Western music and Western scales to a much greater extent than found in other musical forms of Sabah. In fact, the tuning of the *gabang* is related to the Western tempered system.

The dance is quite colorful with costumes used for special occasions. The male (and sometimes female) dancer also attaches long metal extensions to his fingernails in the manner of the Thai dancers. Of all the dances found in Sabah, the *Daling-Daling* is perhaps the most active and most influenced by musical forms from outside the state.

In conclusion it should be noted that all the above information comes from personal research in the State of Sabah (9 months during 1973-74) while on a Fulbright Research Grant. Many of the examples seen and recorded were made possible by the State's Ministry of Culture, Youth and Sports who were most gracious in providing contacts and other services. The above examples of musical instruments and musical forms represent only a few of the many types found in Sabah but in most cases are among the better known and more widespread forms.

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Donald H. Lambert
Anthropology Department
University of California, Berkeley

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¹ This bibliographic contribution was submitted along with the following explanation by Mr. Lambert:

For several years I have been reading and collecting bibliographic references on the hunting groups of Borneo. The articles by Victor King, Herbert Whittier, and the Punan bibliography by Jack Stuster in Vol. 6, No. 2 were highly appreciated.

Readers of the BRB may be interested in other sources not given by Stuster on Punan/Penan, the recently hunting Seru Dayak, and other hunting groups in the descriptive literature of Bornean peoples. Particularly of interest are a great number of excellent sources not in the English language. It is hoped that other readers can contribute references, and that urgently needed research on Borneo's hunter-gatherers both in the literature and the field will be forthcoming.

BRIEF COMMUNICATIONS

TOWARDS AN ETHNIC CLASSIFICATION OF BORNEAN PEOPLES

From J.B. Avé and V.T. King

Borneo has a large number of different non-Moslem ethnic groups (referred to here as Dayak and Punan) which nevertheless exhibit certain broad social, economic and cultural similarities. Located on a relatively isolated land mass with a fairly uniform physical environment this variety of ethnic groups presents something of a unique field of study for anthropologists. Unfortunately anthropological studies and other areas of research are still hampered by the absence of general, wide-ranging ethnic surveys and a comprehensive, well-founded ethnic classification.

Any attempt at classification should, among other things, give due recognition to the historical processes which have, in part, shaped the present ethnic situation in Borneo. Therefore it is necessary to examine in more detail these often neglected historical circumstances and influences as a prerequisite for a more comprehensive classification. The most important aspects in this historical approach are:

1. The large-scale and long-enduring indigenous migrations throughout Borneo, some of which only ceased in relatively recent historical time and which have, on the one hand, resulted in the splitting and differentiation of particular ethnic units and, on the other hand, led to the marginal inter-mixing and, in some cases, fusing of once distinct socio-cultural groupings.
2. The intensive contacts with non-indigenous populations, for example Malays, Javanese, Chinese and others, and the later penetration and influence of Dutch and British colonial administration which have led to changes not only in customs and technical usages but also in indigenous languages. In particular, various Bornean groups have had long and close contact with Malay culture, and the Malay language as a lingua franca has strongly influenced indigenous Bornean languages.
3. The various terms for Dayak and Punan groups which have frequently been externally imposed by Malays, Dutch and British. Dayak groups which have, in the course of time, embraced Islam, also present classification problems, and to add to the confusion different Bornean groups have their own, often mutually conflicting, folk-classifications. In addition, difficulties are increased because we lack detailed ethnographic accounts of the various "Islamic Dayak" communities, and indeed of the majority of nomadic groups and a large number of other indigenous peoples.

These are some of the problems we had in mind when we decided to embark on a joint project reviewing written historical information relevant to the complex ethnic picture in Borneo. However, the task of attempting an ethnic survey and classification for the whole of Borneo is immense. As we both have fieldwork experience in West Kalimantan and this Indonesian province contains a large number of different ethnic groups we thought it best initially to limit ourselves to this fairly arbitrarily defined region. The necessity for classification also seems most urgent here. A further point in favour of this concentration on Kalimantan is that we will rely on the substantial Dutch literature on the area, some of it not generally known to Bornean scholars. We have both been carrying out bibliographic and archival research and this material when translated will provide a wealth of important data on Bornean peoples.

It is intended that a volume in English setting out our findings and suggestions for an ethnic classification of Bornean peoples, based on our research into the literature on West Kalimantan will be published in the not too distant future in the series Mededelingen van het Rijksmuseum voor Volkenkunde.

NEWS AND ANNOUNCEMENTS

CENTRE D'ETUDE DU SUD-EST ASIATIQUE ET DE L'EXTREME ORIENT (BELGIUM)

This young centre is sustained by the Institute of Sociology at the University of Brussels, under Prof. D. Ellegiers, who teaches Chinese and Japanese there. The address is 44 Avenue Jeanne, Brussels 1050 (phone Brussels 648.81.58 X3452).

The Centre specialises in bringing together for discussion students of South-east Asia and the East from all over the world. It has produced an impressive list of publications, largely mimeographed separate papers delivered at their symposia, or consolidating these into volumes--the first on "Foreign Policy Making in India and China" (1968, 123 pp, \$2.50), then three volumes on China, one on "Asia in the 1970s", another on politics in the Indian ocean (1970), and again "The Economic Future of the Far East and Southeast Asia".

The emphasis is largely on political science and present trends with a lot of "China watching" experts, and a relatively smaller direct contribution from Asia itself. There is much interest in communism both in and outside China (e.g., Ruth McVey's paper on "The Social Roots of Indonesian communism"; 1970, 20pp, \$1.25). Attention is therefore often given to recent political events in Malaysia, especially Sarawak and over the border in Kalimantan, which attracted the attention of Prof. Justus van der Kroef (from the University of Bridgefort), whose paper "The Malaysian formula: model for future Sino-Southeast Asian Relationships" (1974, 28 pp) also refers to Borneo as a whole, though it is open to arguments.

Symposia sometimes tend to be dominated, in liberal Brussels, by elaborate analyses from the European communist countries, as at the latest meeting, held in the lovely old Abbey of St. Trudo, outside Bruges (November 1974). Here, contributors from the Free University of (East) Berlin, the Research Center of East-West Relations at Warsaw, the Institute of Far Eastern Studies and the Academy of Sciences of the USSR (Moscow) were heavyweight, through there was plenty of cross-fire especially from American sources, including American-Korean.

The Brussels Center is independently and very intelligently motivated, and welcomes fresh ideas and approaches. The present writer, living nearby, is contributing mildly from the Borneo end (and at Bruges gave a paper on "The Earlier Background to China's Influence Overseas"). Anyone interested in further particulars or specific participation may contact Professor Ellegiers (as above) or (on his behalf) the undersigned.

The next session (1975) is provisionally planned to take place in Brussels; and to deal with crime and other forms of social and individual breakdown in Southeast Asia. (From: Tom Harrisson, 45 Avenue Lancaster, 1180 Brussels.)

SUGGESTIONS WANTED FOR PUBLISHING A KAYAN EPIC POEM

Pastor A. J. Ding, a Mendalam Kayan who is the vicar of Putussibau, is, with the help of an elderly informant, Lii' Long, transcribing and translating into Indonesian a very extensive Kayan epic poem, the Story of Lawe' (Takna' Lawe'). Stephanie Morgan is doing a translation from the Indonesian text; much of the work has already been done. This is a text of absolutely outstanding quality, both from the anthropological and literary points of view, which must be published. However, this is difficult, because of its size: it should make approximately 1000 printed pages, including the Indonesian and English translations, which should be published together.

If anyone has any suggestion as to possible sources of funds, or institutions willing to publish this, please contact Jérôme Rousseau, Dept. of Anthropology, McGill University, P. O. Box 6070, Montréal H3C 3G1, Canada.

MALAYSIAN SYMPOSIUM ON BIOLOGICAL RESOURCES AND

NATIONAL DEVELOPMENT

In 1972 a symposium was organized to explore the effects that national development might have on the conservation of biological and natural resources. The results of the symposium have now appeared edited by E. Soepadmo and K. G. Singh (1973) and entitled Proceedings of the Symposium on Biological Resources and National Development (May 1972), Malayan Nature Society, P. O. Box 750, Kuala Lumpur \$MI2.00, 177 pp. The papers are grouped under Agricultural Aspects, Hydrology and Pollution, Forestry Aspects, Conservation and Development, and Human Aspects. (From: G. N. Appell).

NEWSLETTER OF THE CENTER FOR SOUTHEAST ASIAN STUDIES, NIU

The Center for Southeast Asian Studies at Northern Illinois University, DeKalb, Illinois 60115, U.S.A., publishes a monthly newsletter. The Newsletter carries information on the Center's publication program, on changes in staff and faculty, details of graduate student research, developments in Southeast Asian courses being offered, and general information about the activities of students and staff. (From: G. N. Appell.)

ECOLOGICAL GUIDELINES FOR SOUTHEAST ASIA AREAS

The course of development in Southeast Asia may be significantly effected by two meetings which took place in Bandung, Indonesia, at the end of May and early in June.

The first, a regional meeting to discuss ecological guidelines for development in tropical forest areas in Southeast Asia, was convened by the International Union for the Conservation of Nature and Natural Resources (IUCN) in collaboration with the Government of Indonesia and under the sponsorship of UNEP. It was co-sponsored by the Food and Agricultural Organization (FAO), UNDP, and UNESCO, and was supported by UNEP, the Swedish International Development Authority and the World Wildlife Fund (WWF). The hosts were the Institute of Ecology, Padjadjaran University, Bandung.

Representatives from six countries of the region, Australia, Indonesia, Malaysia, Papua New Guinea, Philippines, and Thailand, took part in discussions designed

to identify the ways in which ecology and the experience of ecologists could be used to advantage in the course of development work while the dangers of unforeseen side effects and irreversible damage are minimized.

Dr. J. B. Sumarlin, Minister of State and Chairman of the State Committee for the Environment of Indonesia, opened and closed the Conference, which was by Ministers, senior civil servants and heads of technical departments. A great variety and many shades of opinion were expressed in the course of the lively and constructive discussion. The countries represented have very different population densities, degrees of development, fertility of the soil and ways of life, but there was astonishing unanimity of viewpoints on the need for guidelines and the Conference had little difficulty in formulating the text of some 70 Guidelines which were approved at the final session. It was considered essential that ecological considerations should be taken into account as early as possible in the formulation of policies for land use and indeed, in formulating national goals.

The second Conference, held immediately afterwards, was for Indonesia alone. The meeting took the Guidelines as its starting point, and after three days of discussion, made recommendations for action within Indonesia. (From: IUCN Bulletin 5:27, 1974.)

ROAD NETWORK SURVEY IN KALIMANTAN BARAT

Professor R. Gerard Ward, Department of Human Geography, The Australian National University, reports that under the Colombo Plan the Government of Australia sponsored a consultancy project for the Indonesian Government on the identification of road networks in Kalimantan Barat. Professor Ward's contribution, as he puts it, was a small part of a consultancy job which has resulted in a seven volume report to the Australian Department of Foreign Affairs. The bibliographic details are as follows: Snowy Mountains Engineering Corporation, et al., 1973, Preliminary Regional Survey for Road Network Identification in Kalimantan Barat-Indonesia, Government of Australia, Department of Foreign Affairs, Colombo Plan, December 1973.

The report is part of Australia's foreign aid and a pilot road building project is already under way in the province. A brief economic survey largely based on the report will later appear in the Bulletin of Indonesian Economic Studies. (From: R. Gerard Ward.)

CANADIAN INTERNATIONAL DEVELOPMENT AGENCY FUNDS A REGIONAL

DEVELOPMENT PLAN FOR EASTERN INDONESIA

Canada is providing Indonesia with a \$3.5 million grant to prepare a regional development plan for the eastern part of the country.

Main objective of the plan, according to the Canadian International Development Agency (CIDA), is to create greater job opportunities by establishing guidelines for developing resource industries and improving the infrastructure of the three eastern provinces. Information obtained from a number of studies relating to the development potential of such industries as farming, fishing, forestry and mining and the area's requirements for ports, roads and power facilities, will be incorporated in a single masterplan. The plan will also take into account the area's needs for expanded health and medical services.

Economic growth in the east has lagged behind that of the rest of the country,

according to the CIDA. Unemployment is high and annually thousands of young workers leave for the more industrialized parts of the country, particularly the island of Java. The island is already over-populated and the influx of unskilled workers seriously taxes its ability to provide adequate social services such as housing, education and medical care.

The Government of Indonesia has given high priority to the development of the east as a means of reducing regional economic disparity. The Canadian-supported masterplan is regarded as an important first step in improving economic and social conditions in the area.

It is expected that it will take 30 months to complete the masterplan, with funds for the project being provided from allocations of the Canadian International Development Agency.

In addition to establishing the basis for long-term development of the area, the plan will identify development projects which can be undertaken in the near future.

Alberta's Department of Agriculture has been awarded a CIDA contract to prepare the masterplan. A team of 11 full-time specialists drawn from government and private industry, and others employed on a short-term basis will be involved in various phases of the project.

The team is now mostly resident at the Project Headquarters located at Denpasar, Bali. The project Director is Mr. C. J. McAndrews and he can be reached by mail through the Canadian Embassy, Jalan Budi Kemuliaan No. 6, Jakarta.

The study area will comprise all of East Indonesia including the provinces of East and West Nusatenggara and Maluku. Bali is excluded however from the project Terms of Reference and is being used as Project Headquarters for logistic reasons. At a later date a field headquarters may be established in Ambon.

The Alberta Team will be composed of the following full-time specialists:

Project Director	C. J. McAndrews
Project Manager	O. G. Bratvold
Agricultural Economists and Rural Sociologists	Dr. Helen Abell
	Mr. W. Cody
Economist	Dr. M. Lerohl
Irrigation Engineer	K. Pohjakas
Agronomist	Dr. S. Mahadeva
Land Use and Soils Specialist	T. S. Peters
Transportation Economist	Dr. A. Mohammed
Agrologist	A. Sherman

In addition, the Team will be augmented from time-to-time by short-term specialist consultants.

CIDA is currently negotiating with the University of British Columbia to undertake a similar regional development study for the Island of Sulawesi. The reconnaissance stage of the project has been completed and it is hoped that U.B.C. will be able to field a team early in 1975. (From: G. N. Appell.)

LAND DAYAK FILM, A CLARIFICATION

With regard to the film: THE FORGING OF A RITUAL KNIFE BY LAND DAYAKS IN SARAWAK by Carsten and Inge Niemitz (BRB 6.1:19), the reader should be informed

that the sale of copies of the said film shall only provide funds to prepare one or two copies for the Sarawak Museum as was stated to former editor G. N. Appell. It shall furthermore eventually help to cover the expenses of the authors. This latter item is of lower importance. The authors never intended to commercialise the film. A detailed figured report of its contents together with a description of the cultural and religious background was written for the Sarawak Museum Journal and will be going into press there. (From: Carsten Niemitz.)

RESEARCHERS ON IRRIGATION AGRICULTURE

Dr. Milton Barnett, Department of Rural Sociology, 134 Warren Hall, Cornell University, Ithaca, New York 14850, is interested in contacting scholars engaged in research and teaching related to social and behavioral aspects of irrigation agriculture. Anyone concerned with this topic or who knows students and others planning to do such work is invited to write to Dr. Barnett.

REQUEST FOR REPRINTS FROM THE SABAH PUBLIC LIBRARIES

Adeline S. K. Pung, Pegawai Perpustakaan Pusat, Sabah Public Libraries, Central Library, Gaya Street, P. O. Box 1136, Kota Kinabalu, Sabah, Malaysia, writes that she is at present trying to build up their collection of materials on Sabah and Borneo. Since very few of such materials are available, she would appreciate very much receiving reprints of any articles by researchers who are working in Borneo.

B O R N E O N E W S

Regional News

DR. JOHN E. D. FOX writes that he has taken up an appointment as senior lecturer in Plant Biology at Western Australian Institute of Technology. The duties will mainly be concerned with resource management studies, and he hopes to be able to do some field work in Kalimantan. His new address: Dept. of Biology, Western Australian Inst. of Tech., Hayman Road, Bentley 6102, Perth, Western Australia.

LON ALTERMAN, of the Department of Anthropology, New York University, 201 Rufus D. Smith Hall, Washington Square, New York, N.Y. 10003, writes that he is presently engaged in research concerning the serum and red cell proteins of orang-utans.

D. J. PRENTICE, of the Australian National University, writes that he has been appointed Director of the English-Malay Dictionary Project. He recently ran a workshop on lexicography in Jakarta, the members of which are compiling dictionaries from their own regional language into Indonesian.

IAIN F. C. S. CLAYRE is currently General Manager, Overseas Development, of the Conder Group Services Ltd., 75 Christchurch Road, Winchester, Hants SO23 7SJ. As a result of research grants being drastically cut, he has

returned to engineering work, and the publication of his linguistic dissertation has also been shelved until time can be found to revise it.

Brunei News

BARBARA HARRISSON writes that she was to leave in January, 1975, for Borneo to work at the Brunei Museum until August, or thereabouts, on research for her dissertation.

Kalimantan News

URANIUM ORE deposits have been discovered by a joint Indonesian-French team in the Kalan area, Ninggapino subdistrict, Sintang Regency, West Kalimantan. The percentage of uranium in the ore is above the minimum for commercial exploitation, but it may be several years before it is known if the extent of the deposits also warrants exploitation. Since the area is difficult of access and underpopulated, it was suggested that exploitation be linked to Indonesia's transmigration program. (From Indonesian Observer 9-30-74, Indonesia Times 10-1-74).

SUHARTO DJOJOSUDHARMO and JAUMAT DULHAJAH, biology students from Universitas Nasional, returned to Jakarta on November 3, 1974 after six months as research assistants to Ms. Biruté Galdikas-Brindamour at the Orangutan Project, Tanjung Puting Reserve, Kalimantan Tengah. They will respectively use their wild orangutan data for Master's and Bachelor's theses.

In late November 1974 SUGARJITO and ENDANG SOEKARA of the Universitas Nasional joined the Project for a projected period of six months or longer. They are conducting research on the gibbons and red leaf-eating monkeys of the study area.

During December 1974 - January 1975 a three-person film crew from the United States visited the Orangutan Project for a period of five weeks in order to shoot footage of wild orangutans and also released ex-captives associated with the rehabilitation program. This film will be used for an approximately half hour segment in the National Geographic Society television documentary tentatively titled "In Search of the Great Apes."

AN EXPEDITION by Oxford University to Bandjarmasin is being planned for the summer of 1975. The correspondent for this expedition is J. Q. Phillipps, 1A Allison Grove, Dulwich Common, London SE21.

Sabah News

DATUK STEPHEN D. LEE TSU THIAM, P.G.D.K. is the Curator of the Sabah Museum. The BRB (6:1) mistakenly reported that David W. McCredie had been appointed as Curator. However, Datuk Lee was gazetted as Curator on 26th August 1972. McCredie has never been the Curator. Datuk Lee was awarded his Datukship in the Birthday Honours, September 1974. The Editor regrets publishing mistaken information.

DAVID W. MCCREDIE, who was mistakenly said to have become Curator of the Sabah Museum (BRB 6:1), writes that he is now continuing service as a Soil Scientist with the Sabah Land Development Board. He now has quite a collection of antiquarian and modern books, offprints and old photos of Sabah, and is interested in extending it and communicating with anybody who may require assistance in such matters. (Address: P. O. Box 1610, Kota Kinabalu, Sabah, Malaysia).

PETER A. BURROUGH is currently teaching soil science at the School of Geography, University of New South Wales, P. O. Box 1, Kensington 2033, Australia. He and his wife, Joy Boenisch Burrough, have a joint paper on Sabah's economic development from 1960-1973 coming out in the Review of Indonesian and Malayan Studies in December, 1974, Volume 7, No. 3. They also published an article on Murut grave art which appeared in the September, 1973, issue of Arts of Asia. Dr. Burrough has also prepared a comprehensive paper on stick signs in Sabah which will appear in a forthcoming issue of the JMBRAS, and he will be delivering a paper on population changes of Sabah from 1960-1970 at the International Geographic Union Congress to be held in December at Auckland. Mrs. Burrough will also present a paper there at this Congress on the tamus of Sabah. She has also prepared a chapter on tamus for a forthcoming book entitled Internal Exchange in the Tropics: Periodic Markets in Africa, Asia, and Latin America, edited by R. H. T. Smith. Mrs. Burrough is currently Editorial Officer for the New South Wales Department of Agriculture, and further bibliographic items with regard to her work on Sabah tamus appears in BRB Bibliography.

DR. SVEN FOGH (Cand. Med. & Chir., D.T.M. & H. Liverpool), Specialist in Tropical Diseases, has opened a tropical disease clinic in Copenhagen, Denmark, at 18 Ostergade.

The IUCN BULLETIN (Volume 5, No. 10, 1974) notes that the Government of Sabah has established the Island of Pulau Gaya as a national park to protect the last remaining primary rain forest in the area. The Park has been named after the former Malaysian Prime Minister, Tunku Abdul Rahman. It contains a rich flora and also has an undisturbed beach flora, which is rare along the coast of Sabah, as well as extensive coral reefs.

PETER GOETHALS writes that his new address is c/o Langlas, 324 Kaumana Drive, Hilo, Hawaii 96720.

THE BORNEO LITERATURE BUREAU is planning a publication Old Sabah: A Pictorial Study and would appreciate photographs of early Sabah or information concerning persons who might have such photographs in their possession. Please write Mr. Charles Saong, Borneo Literature Bureau (Biro Kesusastraan Borneo), P. O. Box 1390, Kuching.

E. M. FRAME, currently a lecturer in the Performing Arts Section of the School of Humanities, Universiti Sains Malaysia, is now writing a dissertation concerned with the traditional music of Sabah for the Eastman School of Music, Rochester, N.Y. Information on Dusunic, Murutic and Bajau musical forms and tape recordings, black and white still and color slides of music performances forming the basis of his study were collected between September, 1973 - June, 1974 in the West Coast, Interior and Tawau Residencies under a Fulbright Dissertation Abroad Research Grant. Mr. Frame writes that he developed an interest in the music of the area when he served in the U.S. Peace Corps in Sabah from 1965-67 and also from a study-collection tour he made during the summer of 1970 while lecturing at the University of Wisconsin, Green Bay.

Sarawak News

ROBERT PRINGLE of the United States State Department has recently been transferred to the American Embassy, Manila, APO San Francisco, California 96528.

MR. AND MRS. RICHARD SCHWENK of Kapit, have returned to Cornell University for a year. His address is 114 Catherine Street, Apt. 4, Ithaca, New York 14850. The Institute of Southeast Asian Studies has recently published a

study of Mr. Schwenk's on longhouses in Sarawak.

RICK FIDLER is currently lecturing at the University of Hawaii, Hilo College.

PETER METCALF reports that he left Sarawak in February of 1974, and is now (August 1974) writing his thesis at Harvard. He spent a little over two years with the Berawan, a small ethnic group in the lower Baram area, with two large longhouses in the Tutoh and two in the Tinjar. One of these houses, the one that he worked in mostly, is still predominantly following the old religion. There are still a couple of Bungan houses in the area, including one of the other Berawan houses, but no others preserving the old religion in essentially unmodified form. In particular they maintain the death adat, including secondary burial, of the old way, and it is probably this that will provide the main topic of his thesis. The Berawan have usually been classified as some minor branch of the Kenyah people, but this seems unlikely now especially in view of the following features: (i) Kenyah never practiced secondary burial, and all the Berawan have some kind of extended treatment of the dead, (ii) Berawans have no kind of naming ceremonies for children, they name them at or near birth. This contrasts to the elaborate pusau of the Kenyah. Rules of residence in the longhouse are different too, although it was difficult to be sure what the traditional pattern was in Kenyah houses, since Christianity seems to have changed the pattern. There are rather clear linguistic differences too. Metcalf hopes to make a return visit to the Berawan before too long.

The ASIA FOUNDATION has given a grant to the Sarawak Museum to publish their two volume monograph on the Poems of the Indigenous Peoples of Sarawak, which has been prepared by Carol Rubenstein.

ROGER PERANIO's New address is 892 Eastern Parkway, Brooklyn, New York 11213.

BENEDICT SANDIN, the former curator of the Sarawak Museum (1966-73), has been appointed Senior Fellow at the Universiti Sains Malaysia, Penang. The Senior Fellowship program was established recently by the university for the purpose of enabling distinguished Malaysians such as Mr. Sandin, who have retired from active public or professional life, to prepare in an academic setting their memoirs or complete for publication other writings treating Malaysian topics. In addition to a number of shorter papers, Mr. Sandin is currently preparing four monographs: an Iban traditional history covering the periods before and after that dealt with in his book The Sea Dayaks of Borneo, a study of the Gawai Burong, a description of Iban adat law and custom, and a collection origin myths of the principal ethnic groups of Sarawak.

EVELYN HONG, a graduate student in social anthropology at the Universiti Sains Malaysia, has just completed six months of fieldwork at Long Ekang, Baram, Sarawak under the sponsorship of the Sarawak Foundation. Miss Hong's research treats the Kayan community at Long Ekang, primarily aspects of political leadership and social ranking, and her findings are being prepared as her MSoc. Sc. Thesis under the supervision of Dr. C.A. Sather.

TOM HARRISSON has been appointed full Professor at the University of Sussex. During 1974 he attended and gave papers elsewhere for conferences: at Groningen University, Holland ("The Palaeolithic and Pleistocene in Southeast Asia"); at I.U.C.N. headquarters, Geneva (Survival Service Commission; twice); at the University of Miami, Florida (Marine Turtle Conservation--see BRB 6(2):51) and at Bruges, Belgium, an international symposium organised by the Centre for the Study of Southeast Asia and the Far East, University of Brussels (see elsewhere in this issue). He also lectured at University of Liege (Belgium), at the Royal College of Arts (London) and at the Asia Society (New York), as well as doing a 50-minute documentary for BBC. (T.V.) in U.K.

During the year he submitted papers on Borneo prehistory and ethnology for Oriental Art (1), Antiquity (1), Asian Perspectives (3), Journal Malaysian Branch, Royal Asiatic Society (4), Sarawak Mus. J. (2), Brunei Mus. J. (4) Sabah Society J. (1); a long study of the Malayan Palaeolithic (to be published early in 1975 from the University of Groningen); and an Introduction to the Oxford University Press reprint of Spenser St. John's Borneo classic Life in the Forests of the Far East, to be published shortly. In addition, he has nearly completed a book on civilian behaviour in air-raids during World War II (for Collins).

The past November CARSTEN NIEMITZ obtained the degree of a Dr.rer.nat. (Ph.D.) at Justus-Liebig-University at Giessen after examinations in zoology, anthropology and ethnology. The title of the dissertation is (translated into English): 'Biometry of the Genus Tarsius Storr, 1780 (Tarsiiformes, Tarsiidae)'. It is a study on functional morphology as a contribution to the systematics and phylogenetics of the Tarsiers using electronical calculators; an attempt at a synopsis of morphological, ecological and ethological results. More than one quarter of the specimens used in this study were caught--and released again--in Sarawak. Literatur: Puzzle about Tarsius. Sarawak Mus.J. XX, Nos. 40-41, 329-337 (1972). A comprehensive publication for the Sarawak Museum Journal containing the results of the expedition is in preparation and shall be written in 1975. Two specialised articles on this Bornean Primate appeared recently: Early Postnatal Ossification in Tarsius bancanus Horsfield 1821 (Mammalia, Primates) and Its Relation to the Hypothesis of Nidifuguous and Nidiculous Animals. Z.Morph.Tiere 79, 155-163 (1974) (together with H.Sprankel) and: A Contribution to the Postnatal Behavioral Development of Tarsius bancanus Horsfield, 1821, Studied in Two Cases. Folia primatol. 21, 250-276 (1974).

BOOK REVIEWS, ABSTRACTS

& BIBLIOGRAPHY

BOOK REVIEW

John MacKinnon: The Red Ape London: Collins. 220 pp; illustrated (colour). £3.00 (Sterling). 1974.

The author, nephew of Malcolm Macdonald (cf. Borneo People), made several visits to Sabah (and Sumatra) studying the Orang-utan. This nicely produced book is a mixture of acute, sustained observation (of animals) and some significant insensitivity (of others). Some of the human and ethnological passages are so inadequate that one wonders for the general depth of vision. For instance, there is a grossly exaggerated account of Tapadong Caves ("Treasure Cave!!"), bearing virtually no relation to the excavations there conducted by the Sabah and Sarawak Museums, as published in The Prehistory of Sabah (1970).

Borneo seems to bring out the worst in written adventure and excitement over-emphasis. This book contains some embarrassing examples, surprising in a zoology graduate with a doctorate from Oxford University. If one can overlook this aspect and accept the rest at face value, there is much of merit and interest on life in the rainforest, representing a considerable achievement in jungle endurance. But the book should be read alongside Barbara Harrisson's earlier--and characteristically here unacknowledged--Orang-Utan (same publishers or Doubleday in U.S.A.; 1963); or Geoffrey Bourne's The Ape People (London; Hart-Davis; 1972) for wider background of primate research. MacKinnon is only one of a now considerable number who have studied the red ape; his account is too egocentric. (Tom Harrisson, University of Sussex)

ABSTRACTS*

An Analysis of the Variation Among Ranau Dusun Communities of Sabah, Malaysia

Robert Harrison, Ph.D. Dissertation, Columbia University, 1971.

This study, through the use of the comparative method, attempts to explain the variation in Dusun community organization in the Ranau District of Sabah, Malaysia. The observed differences in settlement pattern, household composition, degree of corporateness, and the degree of interdigitation with the administrative-market center are seen as varying in relation to a series of factors which, in juxtaposition, define the possible village types.

Ranau communities vary in respect to the following factors: (1) the types of cultivation practiced; (2) a series of spatial/location factors; and (3) the topography of the area in which the community is located.

A developmental approach is utilized by examining the social organization of the wet rice and cash crop communities in the light of the historically prior swidden system communities. In this respect the wet rice and cash crop communities are more complex socially in that they have undergone an increase in the number of available social identities and status positions which are not found in swidden system villages. Equally wet rice and cash crop communities, given their residential stability, location under aggregated conditions and their relation to the market have become more interdependent economically and socially.

In this study the labor necessary to meet subsistence needs is seen as central to the organization of the family and the community. In terms of the family the "division of labor" relates husband and wife in a complementary manner, such that, together they form a viable subsistence unit. The individual, with his felt inability to perform all the tasks necessary to meet daily needs, is seen as handicapped, and not "complete" until married.

At the level of the community the changing demands for labor in incipient wet rice, wet rice and cash crop communities has had important implications for the variation found in the social organization in these different forms of community. In these villages the importance of community boundaries has diminished and reciprocal labor groups are often recruited on an inter-village basis. With respect to wet rice communities maintenance of shared water channels demands such cooperation.

Equally important have been the alterations of property systems. In wet rice communities land has become private property; in swidden communities land remains in the community domain, available to members through residence. In cash crop communities the harvest must be converted to cash before subsistence can be obtained. In the wet rice communities, through the private ownership of cultivable land, such land is no longer part of the corporate domain of the entire community. Residence, as in swidden system communities, no longer makes available to the family the same potential subsistence resources. In cash crop communities each family must set up interdependent relations with a merchant who for most purposes remains outside of the village sphere of activity.

Ranau Dusun communities are "territorial" units of organization whose modes of recruitment to membership are based upon residence rather than upon consanguineal ties. The changes in property systems therefore, have important implications for the nature of community organization. Kinship rather than being determinative of membership in groups operates as the "metaphor" for the expression of norms concerned with "relating" and "interacting" regardless of the presence or absence of actual consanguineal ties. This is as true for swidden system communities as for wet rice and cash crop communities.

This study suggests that we should re-examine our phylogenetic view of social structure and organization which sees consanguinity as universally relevant to group formation and group membership in pre-industrial societies. (Order No. 74-12,723, 565 pages.)

The Southeast Asian Town in Historical Perspective: A Social History of Kuching, Malaysia, 1820-1970

Craig Alan Lockard, Ph.D. Dissertation, The University of Wisconsin, 1973.

One of the major processes in modern Southeast Asian history has been the development of ethnically heterogeneous towns and cities, yet little scholarly attention has been devoted to urban history. This study attempts to contribute to a better understanding of the Southeast Asian town by recounting the social history of an intermediate-sized urban center in Malaysia. The city selected was Kuching, the capital of Sarawak state and a settlement which grew under the auspices of European rule from a small Malay village to a multi-ethnic but predominantly Chinese city of 100,000. The study, drawn from both documentary and oral sources, traces the development of Kuching society from the pre-European village period (1820-1841) through the long rule of the Brooke white rajahs (1841-1941), the brief but important occupation by the Japanese (1941-1945), the transformation under the British crown colony authorities (1946-1963), and the period since the formation of Malaysia (1963). During this time a wide variety of ethnic groups settled in the town, established their own forms of social organization, and adapted to the growing urban environment.

In addition to such general topics as social structure, residential and occupational patterns, the changing ethnic balance, and social life, special attention is paid to certain aspects of Kuching's social history which allow comparisons with other urban centers in Southeast Asia. Among these topics are culture change and the formation of new groups, the role of indirect rule in the administration of an ethnically heterogeneous urban area, the function of Chinese speech or dialect groups, the structure of the Malay and Chinese communities, inter-ethnic relations, and the extent to which Kuching could be considered a socially and culturally plural society.

The social structure of Kuching during all phases of its history was a pluralistic one because the associations, schools, economic organizations and residential patterns which emerged were largely predicated on ethnic or sub-group membership. Major culture change involved the acculturation of a limited number of mission school-educated Chinese and Malays to a Western cultural orientation; there was little intermarriage or cultural exchange among the various non-European communities. But ethnic boundaries were never absolute, and the pluralistic institutional structure was modified by a number of integrating mechanisms. These included elite-level social clubs, Westernized individuals and groups who could act as social brokers, and an increasingly important integrated municipal political structure which operated in tandem with a modified form of indirect rule. Intra-ethnic hostilities, such as rivalries between competing Chinese speech groups, focused attention on sub-group rather than inter-group conflict. Later these sub-group differences were translated into cross-ethnic political alliances with the development of political parties and directly-elected municipal government. There was little if any overt inter-ethnic violence in Kuching. Since ethnic interaction occurred in social and political as well as economic spheres, Kuching was never a classic plural society.

The concluding chapter places the Kuching data in broader perspective through the use of comparative material from other Southeast Asian urban centers.

Many of the elements of social organization which characterized Kuching society were found to be widespread, but little correlation could be found between such processes as acculturation and inter-ethnic interaction on the one hand and inter-ethnic violence on the other. (Order No. 74-9009, 727 pages.)

Polycommunalism and Nativization: A Comparative Study of Bureaucratic Transition in Sarawak and Sabah

William Shou-chiang Wu, Ph.D. Dissertation, University of Toronto (Canada), 1972

Bornean bureaucratic nativization is a specific decolonization process which focuses on regaining administrative sovereignty. It occurs within a polycommunal ecology which is characterized by an extreme form of racial pluralism. This has significant meaning for the distribution of public resources shared by the myriad racial groups. Accordingly, in studying Bornean nativization, one is most directly concerned with the distribution of bureaucratic resources; indirectly, with the territory's total political pattern for now and the future.

The primary objective of the study is to analyze and compare the bureaucratic transition in the Malaysian states of Sarawak and Sabah. On the political level, it examines the compatibility between systemic goals and bureaucratic nativization; the appropriateness of the nativizing bureaucracy to its administrative ecology and the problems of communal participation and representation.

On the technical level, the study is concerned with the policy and execution of nativization within conditions of systemic flux. It is focused on the senior bureaucracy which is most strategic in the administrative process. First, it is at this level of the hierarchy that expatriate replacement by local candidates is focused. This centers symbolic communal competition. Second, it is at this level that the new administrative/professional elite exemplifies the meaning and function of the "modernizing" state public service. This provides an opportunity to appraise the environmental performance of the bureaucracy and the extent to which an administrative identity is developed during the temporary suspension of hierarchy.

The longitudinal focus of the study covers the period from 1961 to 1969, with particular emphasis on the 1962-1965 time span when nativization policies were developed, amended and implemented. The research design of the study is guided by two idiographic studies in a nomothetic framework. The nomothetic framework seeks generalizations or explanatory hypotheses which assert systemic similarities and differences pertaining to the idiographic, i.e., unique studies.

The study reports on several major findings. On the technical level, broad process congruency obtains in the two nativizing bureaucracies. In particular, nativization goal achievement was delayed by communal competitiveness and inadequate manpower resources. The bureaucracies are also characterized by a set of culturally induced syndromes which are inappropriate to their transplanted institutions. These frustrate the goal of racial balance. Within this, technical adaptations place increasing stress on sectoral improvement, gradually widening the service disparity among departments which are captives of communities.

On the political level, the compatibility between systemic goals and nativization logically requires that unity be achieved through separation. This condition perpetrates polycommunalism and requires that communal power brokerage be delegated to the bureaucracy. This political abdication is amplified by the preoccupation of first generation elites in administration. These and the predominant cooptation of elites by the bureaucracy create conditions of a bureaucratic polity. A bureaucratic polity describes a

political system whose authoritative and binding social values are increasingly being allocated by the bureaucracy. (To obtain a microfilm copy please order directly from the National Library of Canada at Ottawa. Not available until one year after degree granted.)

Social Organization of the Selako Dayak of Borneo

William Martin Schneider, Ph.D. Dissertation, The University of North Carolina at Chapel Hill, 1974.

The major social groups of the Selako Dayak of Western Borneo are described in terms of their structure, composition and interrelations. A detailed description of one festival in which various important social categories and groups are marked defines the significant social groups.

The multi-facted Selako concept of "biik" refers to the household, to a matrilineal corporate descent group of which the household is the expression at one point in time, and to the physical house itself. The biik is a stem-family in which one child in every generation, usually a girl remains permanently with her spouse and children to inherit the biik. The results of a census of households show the frequency of uxori-local and viri-local post-marital residence as well as the frequency of households of various sizes and structural forms. Patterns of biik inheritance over several generations and the ideology of inheritance demonstrate the matrilineal character of the biik. House architecture and use patterns explicitly and implicitly reflect aspects of Selako ideology with respect to sex, status and other factors.

An attenuated form of parento-local (uxori-local or viri-local) post-marital residence is seen to account for the basic kinship structure of longhouses and hamlets. All but one of the members of a sibling set who reside in their natal biik after marriage must eventually establish their own biik. These are usually established close to, and under the economic and ritual sponsorship of the natal biik of post-marital residence. Longhouses and hamlets thus tend to be shallow descent groups.

These descent groups are ambilineal rather than matrilineal in structure, in spite of the preference for, and predominance of, uxori-local marriage residence, because certain groups of related biik tend to retain a greater proportion of their sons after marriage than do most biik. This may be related to the retention of rights in land in the descent group rather than individual biik among certain groups of ambilineally related biik.

Longhouses and hamlets act as social entities for purposes of certain festivals. They usually have an officer who is recognized, at least in ritual, as the head of the longhouse or hamlet. Transitory work groups tend to be drawn from within the longhouse or hamlet, if it is of sufficient size. These longhouses and hamlets also compete for village office.

Villages are composed of a few scattered longhouses and hamlets with some isolated single-biik houses. An independent village ideally has eight different village offices which are ritually marked. However, any group of biik may possess one or more of these offices while remaining part of a larger group of biik, a village, with which it shares only some offices. One particular office is seen as the minimal requirement for status as a ritually independent village. Two closely related villages may thus share certain offices, while one village may comprise groups of biik owing allegiance to different holders of the same office.

The history of the fission of two still closely related villages is examined

over a one hundred-year period from the time when the parent village was first settled. The change in officeholders over this period is examined in terms of descent group and longhouse affiliations, thereby providing documentation of the gradual process of village fission.

Recent changes having to do with the integration of the village into the modern nation of Malaysia are examined. There is both change and persistence in the social organization of Selako villages under the new conditions. (Order No. 74-26,934, 285 pages.)

The Saribas Malays of Sarawak: Their Social and Economic Organization and System of Values

Zainal Kling, Ph.D. Dissertation, University of Hull, 1974.

Examines the system of beliefs (including religion), magic and custom (adat), kinship and family, processes of socialization and the transmission of values, the system of values as culturally formulated in various concepts, traditional stratification, and the organization of economic life. The entire dissertation is organized around the concept of values as the basic structure within a culture. (Address: Dept. of Malay Studies, Universiti Malaya, Kuala Lumpur, Malaysia.)

*Abstracts Harrison, Lockard, Wu and Schneider are reprinted from Dissertation Abstracts International. Copies of the dissertations may be ordered from University Microfilm, Ann Arbor, Michigan 48106, U.S.A. Thanks go to Frank Joseph Shulman, Center for Japanese Studies, University of Michigan, for bringing these abstracts to our attention.

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THE BORNEO RESEARCH COUNCIL (cont. from page 2)

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