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The Borneo Research Bulletin is published twice yearly (April and September) by the Borneo Research Council. Please address all inquiries and contributions for publication to Vinson H. Sutlive, Jr., Editor, Borneo Research Bulletin, Department of Anthropology, College of William and Mary, Williamsburg, Virginia 23185, USA. Single issues are available at US$2.50.
NOTES FROM THE EDITOR

There are clear indications of interest in and openness to research by administrators of the four political units of Borneo. Despite the universality of bureaucratic mazes through which researchers—and non-researchers—must find their ways, there appears to be an awareness that there is more to be gained through research into actual conditions and circumstances, than through preventing it. This is a fundamental change from restrictions which were imposed from the mid 70s to the early 80s, and we applaud the vision and courage of those responsible.

Consistent with openness, one of the policies of the Bulletin has been publication "of all the news that's fit to print." There appears in this issue a lengthy research report reprinted from Kukila. The material in the report is of importance, but probably would not be seen by most readers of the Bulletin, hence, its inclusion. The Bulletin is not copyrighted, and we encourage the use of material in other scholarily publications with permission of authors.

On a much more mundane level: Payments for subscriptions and orders must be in pounds sterling sent to the Council's account in the Midland Bank (Blackfriars Branch, 22 Stamford Street, Blackfriars, London SE1 9LJ) or in dollars drawn on a U.S. bank, sent to the Editor. Please do not send checks or money orders in any other currency, and do not send pounds to the Editor or checks in U.S. dollars to Midland Bank. We have just received a remittance with a note from the Assistant Manager, Midland Bank, that "the collection of Foreign Bank charges . . . would exceed the amount of the cheque." Your cooperation will be appreciated.

We are indebted to the following persons for their contributions which have kept us solvent and enabled us to continue the work of the Council. (If our records are inaccurate and anyone's name is omitted, we lay the blame on our computer system—excluding processors—and ask that you notify us.) Contributors are: Gale Dixon, W. R. Geddes, P. Blon Griffin, Linda Kimball, Ronald Provencher, A. J. N. Richards, Anne Schiller, and Wilhelm Solheim.

ENDOGAMY AND SECTION MARRIAGE IN LABUK

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My own research among Kadazan of the lower Labuk, which entailed six visits between 1970 and 1986, fully supports the suggestion made by Dr. Appell in the September 1986 BRB concerning Kinabatangan kinship there are definitely in this east coast region groups which while not 'lineal' in the classic African mode, are not 'cognatic' as that has been understood hitherto in Sabah.

There are two points I wish to comment upon here, picking up on Appell, and these concern endogamy and section marriage in people of the central Kinabatangan and the central Labuk, the two areas forming one cultural, demographic and economic cluster, for the minimum distance between is less than one day's easy walk. Before dealing with these specific issues, I must give a summary of kinship, based on Chartered Company records and other literature, and my own work in lower Labuk villages, residents of which migrated from the length of the Labuk, and from various pockets on the Kinabatangan, Sugut, and Paitan/Benkoka during the last sixty years. Far from this mobility destroying a real system, the contrary appears more valid; provided the researcher sorts out over time details of movement and the complexity of interrelationships, such dynamism can expose the living roots of what may otherwise seem an immutable (and I would suggest dead) system.

Outline of Lower Labuk Kinship.

Some features in the kinship patterns of the Labuk and Kinabatangan suggest that lineal as much as cognatic modes of categorizing and organizing relationships are present: skewed marriage prohibitions, the levirate, firm virilocality with paternal filiation, endogamy or group-controlled exogamy and in one area, marriage sections. Cutting across this is the bilateral kindred, a named isolate with the usual rights and associated obligations. In modern times, it is the kindred which is more relevant than any aforementioned
lineal tendencies, yet lineality is the essential cultural underpinning, and any understanding of the classification system or of local dispute settlement, to take just two spheres, is dependent on that fact.

Taking the Labuk as our example, it is clear that the valley was divided amongst separate named local groups with a degree of corporateness not apparently found elsewhere in Sabah. These bangsa sabanar were endogamous, the fine for infraction being paid in pig's blood, and being thus similar to that for marriage with a parallel second cousin. Entry to them was gained by parentage and by residence. Each formed a fighting group, involving a complex and labile pattern of allies and enemies, which fought mainly about land in the upper Labuk and mainly over products of the land, rattans etc. in the lower. Each bangsa sabanar was seen by others as corporate and therefore responsible for the delicts of members.

Endogamy

Exchange marriage between particular bangsa sabanar did exist, though the behaviour of the man was watched carefully by the girl's side, any shortcoming restricting further exchanges. Sibling exchange marriages between families in the endogamous unit did take place, with the exchange of the basic legitimating burrian rather than of any larger sums of money. Such marriages had an almost built in fragility, as problems in one spilled over to the other early in this century, for example, one of a pair of brothers married to a pair of sisters who drank and beat his wife, which caused friction in the other family and affected their whole segment of the community. Size of these units is of course hard to estimate and the smallpox epidemic of the 1860's, which threatened the system long before the fleeting visits of Colonial officers began, adds to the problems. One unit was composed of 5-7 villages, the lesser predominating. Hatton (among others) posits a village size of about 35 adults, and so there would have been about 200 adults spread over the territory of each group in the post-smallpox period, higher densities being found in the upper region.

As an endogamous group amongst whom cousin marriage was ideally banned, such a reduced unit allowed little choice, or even chance, of a marriage partner if rules were kept. The rate and pattern of infraction suggests that it was either not possible to keep both sets, or that one set was rather unimportant, even inapplicable. Marriage between first, second and third parallel cousins, was only allowed on payment of a fine, the most expensive being that paid for FBD: any first cousin alliance, apart from being limited to richer people, caused disquiet for the community and the threat of sterility and grief for the couple. Second cousin marriage however, while officially tabu, was in much of the Labuk encouraged, even preferred. The people's assumption that parallel cousins are closer than cross, and father's closer than mother's while not reflected in nomenclature (c.f. Casino 1976:139) does differ from the ideal cognatic model.

The requirement of endogamy within the group of villages making up the bangsa sabanar took precedence over the cousin ban, and was part of parental expectations for children. In 1970, for example, parents questioned in one village were more liable to opt for a bangsa sabanar member as the most suitable spouse for their child than any other, irrespective of where they, or their children, were born. Bangsa sabanar affiliation aside, co-villagers (it was a community with 11 bangsa sabanar in common with a good many in this region of heavy in-migration over this century) were more acceptable as spouses than non-residents, and while no fine was then paid for exogamy at either village or bangsa sabanar level, out-marriage was effectively sanctioned by the exacting of a higher bridewealth, or more commonly by the insistence on full payment, for outsiders.

Since 1970, the idea of the bangsa sabanar has fallen away completely in the main village studied, though retained to an extent elsewhere. In the mid-1970's, a time of considerable stress in the region, the cohesion of the cluster of Kadazan villages in contiguous territory as a unit of security and of marriage was evident in speech and in action. The fact that these covered many different bangsa sabanar was totally unimportant, the fact of common residence in one territory being paramount. Marriages were between villagers or between villages of the area.

In my last visit to Sabah in 1986, it was clear that the village could not provide acceptable spouses for educated
girls. Any thought of endogamy within a defined territory is gone; the hope now is that these girls marry a Kadazan from anywhere in Sabah. The country, rather than the village cluster or even the valley, is thus becoming the endogamous circle, although not without much discussion; a local boy, a known set of parents, is still preferred. I cannot say whether the same sanction against out-marriage, the exaction of higher bridewealth, still prevails as so many of the educated girls have married Muslims, and figures are thus skewed due to the extra payment due on conversion.

Section System

Members of those bangsa sabanar originally based in the northern rivers, or in the headwaters of the Labuk, each belong to a single named unit, there being no finer sub-divisions. (It is true that Bundu Tuban had two named groups, but these clearly derived from the migration of one segment to the upper Sugut; the parts remained allies, and intermarried, but this does not make a section system.) Bangsa sabanar from the middle Labuk, between Telupid and Tampias, who moved easily in the past between the two rivers, had either sections, or shallow descent groups. I will discuss the former, taking the Puteh as our illustration, and leave the latter, typified by the Segilitan, for another paper.

Puteh people appear regularly in records of the Chartered company officers; they were strong fighters, based in the Tampias district. A large group, they were divided into four sections: Puteh Tampias, Puteh Lomom, Puteh Kitaring and Puteh Puteh (see C.O. 855/2, 1886). These sub-sections were residentially based, and exogamous, but this exogamy was clearly stated, and was not the 'exogamy' which derives merely from the fact of common residence of a number of closely related families.

Residence was strongly virilocal, brides living in the house of their in-laws for two years, before a separate home was made. This contrasts with the strongly uxorilocal pattern of the lower Labuk, where such residence lasted for only one year, during which time the virgin bride accustomed herself to the new life; virginity in the middle and upper parts of the river was not expected. Ties between brothers-in-law (ipag) were strong, and had certain be-

havioural expectations not shared by langu, sisters-in-law, or by a woman's brother-in-law langü.

It is the case that patrilocal residence; it is usual, and expedient, to belong to the group with whom one lives. I suspect that patrilocal with uxorilocal residence caused no real tension that could not be solved by re-assigning parents because it occurred at a time when the whole system had lost its raison d'etre. Systems are reflectors of social situations as well as suggestors of action, and as such change and evolve with varied pace and direction.

There are difficulties in comprehending the working of the Puteh section system at this late date, though these are not insurmountable. Clearly if ego does not marry into the group of either parent or male grandparent, who share the name of a parent, he will have to marry into the group of a grandmother. This means he will have to marry a second cousin who, as we have seen, is by one reckoning banned but by the other preferred in the recent past. In using the word 'preferred,' I mean just that; were a girl to be offered to her second cousin and his parents reject her, that angered the potential donors, and where a girl married of her own account, spurning an available second cousin, some informants felt ashamed and uneasy lest the spurned one's parents be resentful.

The Kindred

I have outlined some aspects of what may be a lineal system in this region, noting that of course much more work must be done. Lest the reader feel it is all too
uncomfortable, even bizarre to talk of lineal tendencies in Borneo, let me now turn briefly to a more usual element of cognatic systems, though one more evident in lineal systems than earlier writers, fearing muddles in pristine models, cared to allow. It is the kindred. Villages in this area were composed of linked kin living in separate houses. Children lived with the parents (molloing) and maintained close ties with cousins, for there was a kindred sulud in this area. Misulud is "my own personal band of dependable people, good for aid, support, bridewealth assistance," and so on. Sulud do molloung kusai is my father's set of siblings and cousins, sulud do molloung tsogondu my mother's; unless the context warrants it, sulud do molloung suffices. Members of the sulud are sibling, first second and third cousins in decreasing order of surety, with siblings and first cousins making the tightest group. Affines are not included in the sulud. Their exclusion is noticed more strongly in attitude and expectation than in words; sulud members are part of the aid group, their affines are not. If the speaker wishes to include spouses, then the term misusulud is used.

Close sulud members are abused if they fail to turn up for a life-cycle ceremony; this is not, or is far less, the case if other-generation relatives absent themselves. Sulud members are conscious of their obligations, just as the mother of a bride is conscious of hers when she distributes a tiny portion of the omphit money to her second and third cousins to re-emphasize her tie. It is unusual for a woman to borrow rice from another who is not her sulud; when this happened, the lender was very wary, explicitly wondering why the borrower had not gone to her own sulud. Moral obligation and group responsibility is neatly illustrated by the following exchange between a husband, broadcasting his feelings for his wife and her family, and his MZS, who was present. "She's too hot, too keen on lying down; I can't stand living with her. Not surprising, for she's the child of a whore."

The cousin yelled, "Shut up. Don't shame our sulud by using disgusting words."

The sulud does fulfill Appell's (1966:143) definition of the kindred as having a "native term, similar norms and sense of normal obligation." It is an ego-centered group of people, with distinct ideas of obligations, albeit tempered by distance and by inclination, and definite hopes of aid and security.

Conclusion

In this short working paper, I have set out some of the issues and possible points of further interest in Labuk kinship and, by the extension which I noted above, in central Kinabatangan kinship. While it is reasonable to say that the bangsa sabanar was definitely endogamous, and that this was later translated into village endogamy which is now becoming ethnic endogamy, I cannot say that the Puteh section system indicates patrilineral kinship. For I am not satisfied with a concept of lineality which implies exclusivity of recruitment, ignoring residence, or inflexibility of affiliation. The section system existed, and with sufficient people flourished in that cultural milieu, for it afforded clear regulation of marriage, maintenance of group assets and security in an area of constant skirmishes. Preferential second cousin marriage coupled with an ostensibly incompatible ban on cousin marriage is understandable if we accept that two systems operate more or less together, one based on the middle Labuk - Kinabatangan and the other on the Rungus/Sugut/Labuk delta. With the passage of time, and the upheavals of the last century, which element was prime, which quietly continued, and which was dropped as irrelevant, depended on the perceived situation, the relationship of the various groups to the particular piece of land of which they lived or to which they moved, and the estimation of each other, and thus of kin ideology, held by the various groups.

NOTES ON THE KEBAHAN OF WEST KALIMANTAN

B.J.L. Sellato

This article is a follow-up to a paper that appeared in the Borneo Research Bulletin some time ago (vol. 18, no. 1, 1986), entitled "An Ethnic Sketch of the Melawi Area, West Kalimantan". It is intended to deal with one of the ethnic groups listed and briefly described in 1986, the Kebahan of the Kayan river basin, and altogether to stress again the need for ethnographic research in this area.

I shall first list the various Kebahan sub-groups, their villages and population, on the basis of the data I collected during several quick survey trips in 1984 and 1985. Then I shall tentatively give a glimpse of their history and ethnic connections, relying on a skin-deep review of the bibliography. Finally, I shall provide some brief ethnographic field data concerning a few interesting features of their culture. It should be emphasized that all data provided below are not perfectly reliable.

1 THE KEBAHAN SUB-GROUPS

There are over 7500 Kebahan living in the Kayan river drainage. About 6000 of them reside in the Upper Kayan District (kecamatan Kayan Hulu, district seat at Nanga Tebidah) and some 1400 more in the Lower Kayan District (kecamatan Kayan Hilir, seat at Nanga Mau). In the following, underlined place names are names of desa, as listed in official documents, whereas other names either stand for hamlets or are alternative names of desa. As a number of villages have moved to new sites and are known under new names, while still carrying their old desa name, and as no reliable map is available, some difficulties have arisen in identifying existing villages and hamlets, and desa. Numbers in bold type refer to maps 2 and 3. Population figures were obtained from camat and police offices in Nanga Tebidah and Nanga Mau and deal with the year 1984.

1a Kebahan Kayan Ulu

This group includes five sub-groups, each with a high adat officer (temanggung).

1a1 Kebahan Kayan Ulu

This consists of ten desa, located on the upper Kayan and on the Lemasau, under the adat authority of Temanggung Rindang (recently deceased) at Nanga Lemasau.

- on the Lemasau:
  1. Menalou (214)
  2. Melaban Pedini (171)
  5. Nanga Lemasau (169); also living here are Ensonang (74), and part of Nanga Bawai (116), Nanga Peranai and Nanga Bedau

- on the uppermost Kayan:
  6. Nanga Bedau (226); neighbouring Nanga Bawai burned in 1975 and part of its population came here.
  7. Gurung (20 doors); a hamlet of Nanga Bedau.

- on the Kayan below Nanga Lemasau:
  8. Mendinding (5 doors), a hamlet of Merah Arai.
  9. Merah Arai (300)
  10. Kerotau = Pandau (65)
  11. Pintas = Bonkai (124)
  12. Ubai, small longhouse belongs to Labang Linang (below)

1b Kebahan Kayan Tonga

It includes 8 desa, on the "middle upper" Kayan, under Temanggung Bujang Bandi of Lintang Tambuk.

- on the Kayan river:
  13. Ransah = Labang Linang (45); includes Ubai (above).
  15. Bangau (110).
  16. Mengkoka' = Jemuring (120).
  17. Tanah Merah (253).
  18. Lintang Tambuk (257).

- on the Menayan (or Mendayan):
  20. Pelai' Menayan (126).
  21. Gurung Panjang (110); includes a hamlet, Pamai.
c Kebahan Coneh

It includes 18 desa under Temanggung Abang Anoi of Tanjung Lalau.

* on the Kayan:
  22 Tanjung Lalau (232).
  26 Terus, a hamlet of Empakan 1.
  27 Keluwih (191).
  28 Empakan 1 (221) and Empakan 2 (224).
  29 Tanjung Lio, hamlet of Empakan 2.
  30 Nampon, hamlet of Empakan 1.
  31 Terotong (90); also called Kedomu.
  32 Jabai, belongs to Terotong.
  33 Topan 1 (89).
  34 Topan 2 (181).
  35 Nanga Libu (126); includes hamlets Nanga Rangung and Buhing.

* on the Ungai:
  23 Jelai 1 (130) and Jelai 2 (157).
  24 Pelai (80); also living here is Kajang Laban (49).
  25 Nanga Tongloi (46) = Engkabang; includes some Limbai.

* on the Goneh and inland:
  36 Jungkau (96).
  37 Tonang Coneh (166) and Gunung Berangkat (109).

* on the upper Langgai:
  44 Berundai (87).
  45 Tempayang (50).

d Kebahan Coneh Nangah

This group, now considered a branch of the Kebahan Coneh, lives at the confluence of the Tebidah and the Kayan. Nowadays probably engulfed in the precincts of the small town of Nanga Tebidah (38), their number is not known. They are within the adat jurisdiction of the temanggung of the Kebahan Coneh.

e Kebahan Kayan Ill or Kebahan Semadai

This group includes 5 desa, under Temanggung Pelangka of Semadai.

f Territory and neighbours

We have been dealing so far with the Upper Kebahan living within the limits of the region perceived as being their ethnic territory. This situation has been ratified by the Administration, by giving several adat officers a jurisdiction over a number of villages and hamlets.

While the territorial boundaries to the Southeast with (the Limbai) and to the East (with the Melahui) are marked by natural limits and raise no question, to the South, however, it appears that the Limbai have been encroaching on Kebahan land and populating part of the Ungai river area.

These Limbai are called Limbai-Kebahan or Limbai-Kayan, and it is said that seven Limbai villages in this area have historically fallen under Kebahan adat, that is, in return for the land they have requested and obtained from the Kebahan, they accepted conformity to Kebahan adat and to be considered Kebahan. After the intervention of the modern district administration, a confused situation remains. The territorial limit between Limbai and Kebahan is now the Ungai river: the left bank belongs to the Kebahan, with such mixed Limbai-Kebahan villages as Nanga Tongloi (25) under Kebahan adat; and the right bank belongs to the Limbai, with another mixed village (Meranti, 47), and even a reportedly fully Kebahan village (Gurung, 48), under Limbai adat. These Limbai are said to speak a language heavily influenced by the Kebahan. It must be noted that a Kebahan village, called Meropa, is reported on the upper Man river, among Limbai settlements.

Some Kebahan, coming from Semadai, moved into the Payak before World War II and built a village at Rambun (50; pop. 142) and a small longhouse at Gerungang (51). They were granted permission by the Payak to settle in their territory, without having to pay for the land, but...
under the condition that they "become Payak". Therefore, they are now within the Payak adat jurisdiction of Temanggung Amat of Toran.

It is not clear to which group (Undau, Payak, Papak or Kebahan) the right bank of the Kayan between Nanga Tebidah and Nanga Langgai belongs. One should note that all Kebahan settlements are on the left bank.

Two Tebidah villages, Gamari 1 (130), and Gamari 2 (45) are to be found on the uppermost reaches of the Kayan river, above Gurung, and it is not quite sure whether they are within the jurisdiction of the temanggung of the Kebahan Kayan Ulu. It must also be reported that a number of Kebahan families live in the small Undau village of Ransa (49), downstream from the limit of Kebahan territory.

2 The Lower Kayan Kebahan (Kebahan 'ulak). (See map 3).

They live on the lower Mau and Ungai-Mau rivers, on the left bank of the Ingar, and inland in-between, in 13 desa. They number about 1400 and have only one temanggung, by the name of Pinyang, residing at Bongkal.

* on the Mau river:
  52 Lundang 1 (103) = Mabang.
  53 Lundang 2 (52) and Kelangau (112).
  54 Pagh Bora (83).

* inland:
  55 Belimbing (148).
  56 Keranijak (74); part of its population has moved to the Lebang village of Nyangkum (61).
  57 Sungai Lajau (48).
  58 Mawang (66); part has moved to Nyangkum.

* on the Ingar river:
  59 Semukau (92).

* on the Kayan:
  60 Bongkal (150).

Three desa have not been located: Subai (116), Semampai (106), and Obak (223). Part of the latter village is said to have moved to Nyangkum. Besides, it is not known whether the area around Bongkal is part of the traditional territory of the Lower Kayan Kebahan or has been acquired, since it lies in a region occupied by the Barai.

3 Other Kebahan.

Although the Kebahan say they came originally from the Kebahan Indu' and Kebahan Mantu' rivers. farther down the Kayan (see map 3), it seems that no Kebahan village has remained in that area, now populated by the Barai.

Besides one Kebahan village on the upper Man (mentioned above), informants report two villages, Kelaki (63) and Tanjung Pauh (64), on the Melawi near Nanga Pinoh, as being populated by Kebahan long ago turned Muslims.

In the Pinoh area, two groups are found, called Kebahan Arai (or riverine Kebahan) and Kebahan Darat, respectively along the banks of the Pinoh river and some distance inland from the left bank of the Pinoh. The former are now Muslims. Other Kebahan are reported on the Belimbing river, a left tributary of the lower Melawi (see map 1).

II THE SOURCES AND A GLIMPSE OF HISTORY

As has been said above, only a superficial review of the main bibliographical sources has been carried out before completion of this paper.

One of the earliest references to the Kebahan seems to be found in von Kessel (1849-50:179), who reports that the Kabahau (sic) inhabit the Pinoh, Kenyikap (Penyikap), Penanie (?), Mankabau (?), Kayan and Melawi rivers, totalling 3000 people. Kuhr (1896:63) also mentions the Kebahan. Then Enthoven provides a list of tribes (1903:453), reporting the Kebahan to be living (as of 1895) on the Kayan, Ingar, Man and Pinoh, and totalling 1550 people in 25 villages. To this, he adds (p. 454) other Kebahan, turned Muslims, living on the Melawi and the Pinoh, and totalling 1923 people in 18 settlements. It is not clear whether the two categories overlap. It is worth remarking that the Muslim Kebahan were in any case more numerous, and that part of them are probably nowadays considering themselves as simply Melayu.
Enthoven, in his list, also mentions the Cunih, Kayan and Nangah Dayak (all living on the Kayan), and the Jampal, inhabiting the Menayan river. All of the groups above (with the exception, perhaps, of the Muslim Kebahan) were, along with the famous warlike Tebidah, among the Mardaheka (or free) tribes, that is those who did not pay tribute, as the Serah (or serf) tribes did, to the Panembahan (the Sultan and his relatives) of Sintang. These Mardaheka tribes of the Kayan basin remained free until the "Excursion" of the Dutch against the Tebidah in 1891 (see Enthoven, 1903:425).

So it appears that our Kebahan, at the end of the 19th century, were inhabiting the Kayan, Man and Ingar areas. Prior to that, according to their own tradition, they were living in the area of the two Kebahan rivers, on the lower Kayan. Then why did they move? One possible reason is that they wanted to escape the Sultan's influence and his relatives' exactions on the lower reaches of the Kayan and get closer to the fiercely independent Tebidah (upstream the Kayan) or to the free Limbai (across to the Man). Another reason that can be considered is that they had to abandon their exhausted land (see Enthoven, 1903:241; today this area is almost exclusively covered by alang-alang grass) and get better. We should note that all the western and northern neighbours of the Kebahan (the Barai, Undau, Payak, Lebang) were Serah tribes.

It is not clear whether the Kayan, Gunih, Nangah and Kebahan were distinct ethnic groups. However, it is clear that the Gunih (see Enthoven, 1903:241; Bouman, 1924:195) are our Kebahan Goneh; and that the Nangah are those Kebahan Goneh Nangah living around Nanga Tebidah.

Enthoven's Kayan tribe, as opposed to the Kebahan, may well have been the people called today Kebahan Semadai, living only on the main Kayan river. Then the Kebahan proper (as listed by Enthoven) would be our Lower Kayan Kebahan, those who really come from the Kebahan river. Possibly, those Kebahan proper, living between the Kayan and the Melawi, west of the Man, moved toward the Belimbing, the Penyikap and the Pinoh, as well as to the Ingar and the Man, when they abandoned their wastelands, in a centrifugal movement.

Now, who are those Jampal people? Living on the Tebidah and the Menayan, and at the same time distinguished from the Papak, the Tebidah and the Kebahan, they may correspond to the present-day Kebahan of the upper Kayan. They would have, for some reason (the Dutch expedition against the Tebidah ?), retreated from the Tebidah or at least from the Oran to the Menayan, and settled on the upper Kayan, above the Kebahan Goneh.

Subsequently, the Kayan, Gunih, Jampal, and Nangah may have aggregated to the Kebahan, although former subdivisions persist to date. The high population figure obtained for the present-day Kebahan (8400), compared to the mere 1550 given for 1895 for the Kebahan proper, must be accounted for by the merging of the various groups above. Considering the homogeneity of the present Kebahan language, it may be reasonable to think that all these groups were anyway closely related.

The Kebahan who moved to the Man area may have either joined the Limbai of this area or, like some Limbai villages, settled on the banks of the Melawi and become Muslims. According to von Kessel (1849-50:181), the Kabahann (sic) were then already "half-Muslim".

As for the Limbai, we know that they have been living since long ago on the middle Melawi (Enthoven, 1903:419 and 452) and the Keruab (von Kessel, 1849-50:178). But Bouman reports Limbai settlements on the Kayan drainage area (1924:194). This suggests that their presence in the Ungai area is not recent.

So probably, Limbai and Kebahan have been carrying on a close association since long ago in these flat lands between Melawi and Kayan, and this accounts for the fact that the language of the Kebahan of the Ungai and that of the neighbouring Limbai are closely akin.

What can be said of this report by Enthoven (1903:418) that the Dayak of the Gilang used to belong to the group of tribes of the Kayan river and fled to join the Ot Danum? Nowadays, the people of the Gilang seem to be just one sub-group of the Ot Danum of the upper Melawi, speaking the same Ot Danum language. However, the Gilang are very close to the upper Tebidah and, as we shall see, there are
some cultural features common to the groups of the Kayan and to the Ot Danum.

As it has certainly been noticed, much of the above is rather speculative. A thorough review of the Dutch sources (including colonial archives) concerning the area of the Kayan, from 1850 onward, will allow for a better and more complete reconstruction of ethnic migrations and a better understanding of local ethnic identities.

III A BIT OF ETHNOGRAPHY

In the following lines, I shall briefly describe a few characteristics of the Kebahan, relying on my meagre field notes.

One first striking fact is in the habitat: dozens of small scattered settlements, as can be seen on map 2, for instance. One meets a small longhouse or a cluster of small houses every now and then along the river, or along the path inland. The average desa gathers 100 to 200 people, the smaller ones consisting of little more than 50; and some hamlets have hardly more than 20 or 30 inhabitants. Bigger villages (up to some 400 souls) are either those where several desa have regrouped or those that have schooling facilities, and were individual families from smaller neighbouring hamlets chose to settle.

This is a common feature among quite all the ethnic groups of the Kayan area, as among the Ot Danum of the upper Melawi. Current local administrative policies consist in tentatively regrouping the desa into bigger villages (e.g. the kecamatan Kayan Hulu will reduce the number of desa from 111 to a mere 14; total population of the district: 17,519 in 1984).

Kebahan society seems to have no system of ranks or classes, and no hereditary leadership. The temanggung are usually old and much-respected men, chosen or elected among elders of a number of villages (5 to 18 desa) as the holder of adat authority for a sub-group and to represent the sub-group at the district level. Whereas the title of temanggung may have been introduced by the colonial administration, it is probable that the corresponding function (settlement of local conflicts, maintenance of adat, ... ) used to be held by one or several wise elders in the same conditions as today. When a temanggung dies (as Temanggung Rindang of Nanga Lemasau did recently), a man from another village is usually chosen to replace him. Now, the choice must be agreed upon by the camat (district chief).

Besides, each desa has a kepala desa, or village mayor, elected by the population and accepted by the camat. Considering the high degree of population movement from one desa to another, of community splitting into various hamlets, it appears that the local group has a rather weak level of social integration.

Another interesting feature of the Kebahan is in their rituals. They used to carry out either cremation of the dead or secondary funerals. Under normal conditions, the corpse is cremated and the ashes and/or pieces of bone are gathered into a small jar or bottle and placed in a mausoleum or ossuary (sandung) erected on a post. If, however, the paddy has already begun to spring up in the fields when a person dies, cremation is forbidden (since the smoke may be harmful to the young paddy) and the corpse is buried in the ground with a coffin. After harvest, the bones are picked up and placed in the sandung. Superb sandung are still to be seen in many Kebahan villages (Lintang Tambuk, Semadai and others), often flanked by anthropomorphic statues (kejahan).

This type of funerary practice is very similar to that of the Ot Danum, except for the fact that the Kebahan apparently do not erect those long poles (toras) and the jar-and-dragon posts (sekaran or sengkaran). It may be that the Kebahan version of the sandung (one very high post with the ossuary or ash-box on top of it, with a carved dragon or deer) is a blend of the short, massive Ot Danum sandung, built on several posts, and the sekaran. The erection of the Kebahan sandung was accompanied by an animal sacrifice and, it is said, a human head had to be buried underneath the post. It must be noted that the head of the carved animal (dragon or other) is, in Kebahan sandung, always turned toward downstream, reflecting specific notions of cosmogony about the travels of the soul and its final resting-place.
So it seems that the Kebahan are part of the same cultural area as the Ot Danum and other peoples of Central Kalimantan, at least insofar as the funerary practices are concerned. In West Kalimantan, this area extends as far downstream the Melawi as the Limbai country, and at least as far North as the Tebidah group. It should be noted that there are remains of hinduist or brahmanist presence in the upper Melawi and Kayan area.

As far as is known, the Kebahan have abandoned almost completely their traditional type of funerals, but the existing sandung are still the objects of ritual concern today, and I am quite sure that much can still be learned on the subject from elderly people (like the temanggung).

In some villages, a special ritual of shamanistic curing (called belian or sentama) is still carried out, using a swing (pedodu; this also exists among some groups of the lower Mahakam). This can be witnessed at places where people are still sticking to their traditional religion (Pintas, Nanga Lemasau, for example).

As can be understood from the scantiness of the information provided above, the Kebahan, like all the ethnic groups of the Kayan area and of the Melawi at large, badly need some basic ethnographic work and my opinion is that they largely deserve scholars' attention.

RECENT NOTES ON THE AVIFAUNA OF KALIMANTAN*


by
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(First draft received August 1, 1986)

INTRODUCTION

In the introduction to his Annotated checklist of the birds of Borneo, Smythies (1957) outlines the history of ornithological study of the island. A notable lack of field studies in Kalimantan (Indonesian Borneo) is apparent over the past fifty years. In the previous century, there had been some two dozen individuals collecting or studying, especially in the Banjarmasin area, but faunal studies virtually ceased after the outbreak of the Second World War. Pfeffer (1960-1961) took part in a French expedition to East Kalimantan, and Pearson (1975) published a brief list of birds in the Kutai reserve, the site of a field research station until it was destroyed by fire in 1983. Their data, and some unpublished records of a few others in the 1970's (J. T. Marshall, K. V. Thompson) are incorporated into the third edition of Smythies' The Birds of Borneo (1981).

The purpose of the present paper is to publish notes on Kalimantan birds to cover the period from those included in the latest edition of Smythies' work up to the present time, and thus to update the record in expectation of an increase in ornithological activity in the near future. There has been very little further study, and in acknowledgment to Smythies' third edition, the Earl of Cranbook writes: "I regret only that the book still retains such a strongly northern and north-western bias. The four provinces of Kalimantan encompass the greater part of the island of Borneo. Up-to-date ornithological knowledge of this area is sadly deficient. Perhaps this edition .......... will find its way into Indonesia and stimulate interest and comment". The present paper contributes a little to redress this imbalance.

As was already apparent early in this century, the chances of finding new species in Kalimantan are now probably remote, although wide areas of the submontane interior remain utterly unexplored ornithologically. Furthermore, most Bornean endemics are montane, and although they are well described from the northern portion of Borneo, their distribution through the higher mountain ranges that extend into Kalimantan is imperfectly known. Not one sighting of a montane endemic has been reported in Kalimantan in recent decades.

However, the lowlands carry a few endemics and some apparently very rare species, while the south-eastern corner of Kalimantan is especially interesting, with its Pleistocene affinities with the fauna of Java. There are also some small but intriguing affinities with Sulawesi. Regional variations and races, sometimes with clearly recognizable differences in song, would provide a fertile field for study.

The senior author (DAH) has made brief visits to each of the four provinces of Kalimantan (West, Central, South and East) in 1974 and 1981-85, while engaged on official duties with the Government of Indonesia as a land use planner. These duties, however, did not permit time to be spent in resolving problems of identification or in the preparation of comprehensive site lists. Sites visited are listed in Appendix 2, Kenneth Burton (KB) was resident in Palangkaraya from July 1984 to May 1986, he also visited the upper Barito in August-September 1986. We also gratefully acknowledge the extensive records that were freely supplied by Tom Gula (TG) who was resident in Banjarmasin from March 1983 to April 1985. Acknowledgment is also due for the incidental site lists provided by Syarifin Gardiner (SG) and David Wall (JRDW), mostly from Central Kalimantan.

The Snowy Mountains Engineering Corporation team on the Pade Hydroelectric Project in the upper Sambas region of West Kalimantan have published a bird list (SHDC, 1983) based on specimens brought to the base camp by villagers. These were identified at site using standard reference works.
or in some cases skins were purchased and identified in the "Australian museum". As the author of the bird list is not stated, it is not possible to give credit to the records, but those of interest are quoted in the text with the appropriate source.

The records of all these observers are incorporated in the species list in Appendix 1. Figure 1 shows the main geographical features of Kalimantan, and a glossary of locations is given in Appendix 2. Appendix 3 lists the main conservation reserve in Kalimantan.

Our observations are almost totally confined to the lowlands and swamps, with very few coastal visits and none to the mountains. The mountain chains through the northern parts of Kalimantan remain a wide open field for study for those who have the resources to mount the expeditions needed to reach them. The lowland plains range from undulating to hilly and carry the richest forests. However, sandy terraces with acid heath forest surround the plains widely, reaching a width of 100 km in Central Kalimantan. Outside the terraces lie extensive peat swamps that in turn border the tidal flats. At the longitude of Palangkaraya, sands and peat occupy a zone 250 km wide.

There are extensive swamps in Kalimantan. Those inland on the Kapuas River (West Kalimantan) are believed to be very acid, and may lack faunal variety, although this awaits confirmation. Many of the riverine swamps in the south of Central Kalimantan are also acid, though acidity decreases towards the coast. Two small lakes in Tanjong Puting reserve have good potential for birds (Galdikas et al. 1985), as has a larger unexplored lake by the Seruyan River (Lake Sambuluh or Balejau). The Mahakam lakes of East Kalimantan are historically quite well known, though visits to these in 1984 were disappointing ornithologically. Probably they were still recovering from the very severe drought of 1982-83, at which time most of the surrounding peat swamps were destroyed by fire. The richest swamps appear to be those adjoining the most densely populated rural area of Kalimantan in the Barito drainage lying northeast of Banjarmasin (these lie across the border of Central and South Kalimantan).

Logging has now extended to most regions of the lowlands and hills and has been intensive locally. Shifting cultivation has destroyed the forest over wide areas, especially in West Kalimantan where huge expanses of the Kapuas basin have been totally deforested, except for remnants on swamps, sandy terraces and bordering mountains. New settlements such as those under the Government's transmigration programme are spreading but so far their impact has been of minor importance compared to that of shifting cultivation. The most important reserves and national parks on the mainland are listed in Appendix 3. The total area established or proposed for conservation is quite extensive, but in practice adequate policing of many of these reserves has not yet been implemented, and in several instances the natural forest cover has been damaged. Nevertheless, with the inclusion of large areas in the mountains and along the coast that have official status as Protection Forest, a reasonable degree of protection is afforded. The greatest threats come from shifting cultivation and the risk of forest fires in logged areas.

Parts of Kutai National Park have been logged, and the park was severely damaged by the forest fires of 1982-83, with almost total destruction in the logged areas. The fire is reputed to have damaged 3.5 million hectares in East Kalimantan, making it one of the most calamitous environmental tragedies of the century. The extent of damage is variable, being most extreme in logged areas and peat swamps, 800,000 ha of primary unlogged forest were affected but the damage was less severe and eventual full recovery might be expected. A visit to a burnt-out logged area by DAH at Muara Wahau in 1985 was extremely depressing, with frugivorous birds in particular being almost entirely absent.

There are several areas of limestone karst in the eastern half of Kalimantan, with a spectacular concentration in the central eastern area around Sangkulirang. Many are difficult to reach and to our knowledge they have never been studied systematically. The Talisayan area on the edge of this region is developed on a limestone platform at only 50 metres AHS). And a brief visit indicated significant variations in the avifaunal composition, with hill elements predominating.
We cannot hope to produce checklists of the standard of that for Sabah [Gore, 1968], where the records of some dozen observers over several years are given covering an area about one-sixth that of Kalimantan. Instead, the more significant observations are presented below. Appendix 1 lists all the species we have recorded, with province. Dates are not given in the text except where relevant, in many cases they can be derived from author and locality. The majority of our observations are being recorded on the data sheets of the Atlas of Oriental Birds, organized by the Department of Zoology, University of Malaya.

Our discussion shows that the study of birds is once again active in Kalimantan, and it should form a baseline for the more detailed checklists that we hope will be prepared for such reserves as Gunung Palung, Tanjong Puting and elsewhere.

Systematic Notes

CORMORANTS AND DARTERS

Anhinga melanogaster is local but widespread in small numbers on lakes and along rivers. It is moderately common in the Mahakam swamps (DAH) and breeds at Tanjong Puting (Galdikas et al. 1985). Apart from one unidentified Phalacrocorax sp. at the bird lake in Tanjong Puting (op. cit.), there appear to have been no records of cormorants since P. niger and P. sulcicrurus were obtained in 1981 in the Barito swamps.

Smythies failed to specify any records from Indonesian Borneo. About 25 Fregata arial were present off the mouth of the Berau River on November 15 and 19, 1985 (DAH).

FRIGATEBIRDS

Smythies failed to specify any records from Indonesian Borneo. About 25 Fregata arial were present off the mouth of the Berau River on November 15 and 19, 1985 (DAH).

HERONS, EGRETS and BITTERNS

Ardea purpurea is reported to be one of the six breeding wetland species at Tanjong Puting (Galdikas et al., 1985), and occurs in small numbers in the Barito and Mahakam areas and along rivers in Central Kalimantan. Elsewhere it appears to be rare, with one record from the Pawan River. We have no records of A. cinerea and only one A. sumatrana, three single birds in the Sesayap and Sekatak deltas.

Butorides striatus is common along rivers in all areas. Ardeola sp. is very common in the Barito swamps, with a roost of up to 500 birds in December near Blunang and smaller numbers on the Mahakam lakes in April and July (DAH). Birds in breeding plumage were confirmed as A. speciosa by TG in the Barito region in February and August, and it seems likely that there is a breeding colony somewhere in the area.

Egrets are generally not common in Kalimantan, Galdikas et al. (1985) infer that Egretta alba and E. garzetta breed at the lake in Tanjong Puting but numbers of each species are not given ("the nesting site of one to two thousand birds of at least six species"). We have scattered records of Bubulcus ibis, E. alba and E. garzetta from the GE quadrant of Kalimantan, including a few birds in breeding plumage, U. ibis at Batu-batu in April (KB, TG) and E. garzetta near Muara Ancalong in April (DAH). Most records of DAH concern E. intermedia; on April 15 a total of 100 was counted along the Talan River between Huara Ancalong and the confluence with the Mahakam, but only one was seen on the Mahakam lakes in July. A distant roost of over 1000 egrets near Amuntai in November may have been this species. At present E. intermedia is assumed to be a winter visitor, but the possibility exists that there is an undiscovered breeding colony.

There are a few records of mostly white phase E. sacra along the NE coast. The presence of a pair of dark phase birds on the Telen River but below Muara Wahau on April 11 is unusual (DAH); the site is 100 km from the coast by direct flight, but 300 km by river. The birds were feeding on a sandbank in the river when first disturbed.

Galdikas et al. quote Nycticorax nycticorax as one of the six breeding species on the lake in Tanjong Puting, but the species is evidently rare and the only other record we have is of one near Kuala Kurun in October 1985 (KB).

Ixobrychus cinnamomeus is assumed to be resident, though apparently breeding is yet to be confirmed in Borneo. We have records only from the Barito swamps and
Pleihari, including the months of April and August. I. sinensis occurs in the same region, and the presence of one of the Mahakam lakes on July 17 (DAH) adds support to the possibility that some are resident. In November 1978 DAH recorded a total of nine Dupetor flavicollis at different localities in the Barito swamps.

STORKS

Although Ciconia stormi may still be widespread, it is evidently a rare bird, with only a few recent records from East and Central Kalimantan. In Central Kalimantan, one was seen on the Beruyan (DAH), and others on the Kapuas, Kahayan and Rungan Rivers (KB). In East Kalimantan, DAH saw six but probably up to 12 birds along the Telen river below Muara Ancalong, an encouraging record only two years after the great fire which devastated the adjacent swamp forests.

Small numbers of Leptoptilos javanicus occur widely in open areas of lowland rivers especially near the coast (up to seven along the Pawan, and also the Alalak River in the Barito). Galdikas et al. state that there may be a breeding colony at a second unvisited bird lake at Tanjong Puting.

IBISES

Recent records of Pseudibis davisoni on the upper Mahakam in 1973 and upper Barito in 1979 are included in Smythies (1981), DAH has the following records of ibises:

December 9, 1974
Single dark ibis seen in flight in distance over open country near Binuang.

December 15, 1974
Three ibis-like birds flew across the main road between Banjarmasin and its airport.

April 7, 1984
Single ibis flying at dusk in ladangs by small tributary of Seruyan River at 112° 15' E, 2° 12' S. The following morning, another or the same bird was soaring above a small open swamp 3 km downstream.

July 21, 1984
Three in flight over the Kedangpahu River one km upstream from its confluence with the Mahakam at Muara Pahu.

Not one of these records could be positively confirmed by a detailed description, being either distant, seen in twilight or against the sun from an unstable dug-out canoe, or seen briefly from a moving car or speedboat. Any of these birds might have been Plegadis falcinellus though this is less likely, with only one previous record from the Banjarmasin area in 1851.

At present, the distribution, habitat and remaining population of this species are unknown. There are no records from DAH along other rivers traversed by boat, nor from KB and TG in the Palangkaraya and Banjarmasin areas. If the identity of the four birds in 1974 is correct, it suggests that a few may still have been present in the Barito swamps in the last decade. Most recent records, particularly the confirmed records quoted in Smythies (1981), are from sandbanks in the forested upper reaches of the Barito and Mahakam, a very different habitat from that used elsewhere in its range on mainland Asia. Has human disturbance driven this species to a shy and non-viable relict population in the interior? Surveys are required urgently, but outside this core region, we cannot propose any single area in which to conduct them.

DUCKS

Treeducks are surprisingly rare. Small parties of Dendrocygna javanica were seen on the middle Mahakam (DAH), but those around Binuang and Amuntai were all D. arcuata (DAG, TG). We have no other records.

Small numbers of Nettapus coromandelianus were seen on swamps north of Amuntai in November (DAH), and the species is presently assumed to be a visitor only.

The only other species recorded is a drake Anas querquedula at Muara Wahau on April 13; the river was in spate and the bird was drifting on logs, repeatedly flying upstream to find a new log when it neared the village.
KITES, HAWKS and EAGLES

While Elanus caeruleus is apparently rare and of uncertain status in northern Borneo, it is a widespread bird in Kalimantan, with records north to Ketapang in the west and Tanjong Radeb in the east. It is common in the open country of the Barito and Mahakam regions.

A probable adult Spizaetus alboniger was seen over the hills south-east of the Riam Kanan reservoir on August 16, 1984 (KB). Although unconfirmed, this species should be looked for, according to Smythies all existing records are from northern Borneo.

Aviceda jerdoni appears to be widely distributed and resident, with records from Nanga Merekai, Pawan River, near the Kumai River and Talisayan, in April, October and November (DAH). Usually, birds were seen in pairs.

There are scattered records of Ichthyophaga nana along inland rivers (Cempaga, Sekonyer, Murung, Kedangpahu and Telen), but the only records of I. ichthyaeus are from the Barito swamps.

FALCONS

Microhierax fringillarius is widespread. A pair was seen feeding an immature near Binuang on December 12. Unfortunately it was not possible to confirm the specific identity of one by the Sekatak River in the NE, but the possible occurrence of the endemic M. latifrons of Sabah should be looked for (cf. Copsychus malabaricus stricklandi).

QUAIL, PARTRIDGES and PHEASANTS

Coturnix chinensis is common in grasslands, and appears to be a fast colonizer, being present on a new agricultural settlement, cleared from forest about three years previously, 15 km upstream from long-established settlements at Tanjong Redeb.

The only record of Rollulus rouloul is a flock of seven (two males) seen twice at the same location in Tanjong Puting (KB). Lophura ignita was seen in the upper Barito (KB); the only other records of firebacks is from a survey team near Sukamandang that reported several sightings; a colour photo of a captive bird revealed the red facial skin of Lophura erythrophthalma.

A call heard by DAH on December 1, 1981 appears to be the only record of Polyplectron malacense in Borneo in recent decades. The call was at once recognized from a tape of the Malayan race held by K. Scriven in Kuala Lumpur, and consisted of a quacking chuckle, emphasized on the first note, the prolonged phrase being repeated four times. The site was in flooded alluvial forest between Sandai and Nangatayap in West Kalimantan. On the following morning there may have been a second bird heard in dryland forest nearby, but the call was not confirmed. Both sites have now been cleared for an agricultural settlement, but it should be noted that they lie only about 20 km from the eastern boundary of Gunung Palung National Park.

Argusianus argus is common generally, with voice records from dryland forest in all areas, except heath forest. It appeared to be especially common at Talisayan.

CRAKES and RAILS

Rallus striatus is common in the swampy areas of the Barito, where it was also seen in dry Imperata cylindrica grasslands (alang-alang), a habitat where DAH has seen it also in Java and, commonly, South Sumatra.

A tiny, all-dark crake with deep red legs seen in dry grassland near Binuang on December 20, 1974 was tentatively identified as Porzana fusca, as was a second bird at Amuntai in November 1978 (DAH). Porzana cinerea is common in the Barito swamps.

Gallinula chloropus is common in the Barito swamps. It was found to be very common at Rawa Negara in November, but DAH was unable to identify a single G. tenebrosa among them. The latter species has not been seen since it was reported breeding at Bangkau Lake in the last century. No moorhens were seen on the Mahakam lakes in July 1984, perhaps as a result of the 1982-83 drought.

Two freshly trapped female Gallicrex cinerea were seen near Binuang on December 18, 1974 (DAH). Porphyrio
porphyrio is present in the Barito swamps, with records from Amuntai and Binuang (DAH) and the southern Barito-Kapuas area (TG).

JACANAS

Irediparra gallinacea is a striking bird that was found to be common in November 1978, in open swamp at Alabio Polder, Rawa Negara and near Binuang (DAH). One of the birds at Rawa Negara was an all-white albino. We have no records of Hydrophasianus chirurgus, and the statement in Smythies that it is resident would appear to require reappraisal.

PAINTED SNIPES

A female Rostratula benghalensis, with three probable males nearby, on Rawa Negara on November 23, 1978 appears to be the second record for Kalimantan (DAH).

PLOVERS

Two Charadrius dubius near Palangkaraya on August 18, 1984 is an early record (KB).

CURLEWS, GODWITS, SANDPIPERS and SNIPES

At present we have no information on the presence of wader wintering or transit grounds in Kalimantan. The few visits we have made to coastal or deltaic habitats, principally Tarakan, the Berau estuary, Banjarmasin, Takisung and the Katingan estuary, have produced only a handful of records, with the species in Appendix I.

Scattered records of Tringa nebularia in the Barito swamps in November-December, with up to eight at Pegatan and one at Tarakan in March, appear to be the first documented records from Kalimantan. KB has a record of an unconfirmed Calidris canutus seen with Xenus cinereus and Arenaria interpres at the south of the Katingan on March 29, 1985.

Departure of Actitis hypoleucos from winter quarters was observed at Muara Wahau in April. On April 12, six calling birds flew off west from the river at dusk. On the following evening, six birds flew down-river calling, then returned with two more and likewise flew off west into the dusk.

PRATINCOLES

Our only record is of a single Glareola maldivarum at Pontianak Airport on August 19, 1981. This is only three days later than the earliest recorded date in winter quarters in Malaya (Medway & Wells, 1976).

TERNS

Recent records of Chlidonias hybridus indicate significant migrations. On a visit to the Barito swamps on November 20-24, 1978, they were abundant at Amuntai and Alabio Polder, with a few at Rawa Negara and Bangkau lake. About a third were in breeding plumage and readily identified, although the possibility of C. leucopéterus in winter plumage also being present cannot be ruled out. It is perhaps significant that none had been seen during two weeks along the swamp edges at Binuang in December 1974. At present, status must be considered uncertain, but it is most likely that these would be migrant javanica during the southern winter (see Mees, 1977), and that those seen in November would have been ready to return south. Other records are of one in breeding plumage with Sterna albifrons on the Mahakam on July 21, but none were seen there in April, and KB & TG saw many at Bati-bati on April 7 and several at the mouth of the Sebangau on March 29.

Some 15-20 Sterna hirundo off the Berau river mouth on November 15 and 19, 1985 (DAH) and one at Bapinanghilit laut on March 30, 1986 (KB) appear to be the first documented records for Kalimantan.

There are records of Sterna sumatrana from Banjarmasin in June and Sebangau Bay in March (KB) and of at least 15 Sterna bergii with the other terns off the Berau in November (DAH).

Sterna albifrons in both breeding and winter plumage was common along the middle Mahakam River, from Tenggarong to Muara Pahu, in mid-July 1984, though none was seen there in April 1985. This appears to be the first
documented inland record for the island of Borneo. In early March, birds in winter plumage were common along the lower Sesayap' and Sekatak rivers (DAH).

PIGEONS and DOVES

The most abundant green pigeon in wooded areas of the Barito region and southern Central Kalimantan appears to be Treron fulvicollis, but we do not have records of this species from either West or East Kalimantan. In contrast, T. curvirostra and T. olax are widespread in forested areas and T. vernans in open country. T. capellei was fairly common at Tumbangmarikoi in October and it was also seen at Pendahara in March and on the Joloi River in September (KB).

Geopelia striata appears to be scarce, with records only from Martapura, Palangkaraya and Pegatan. While these may all be feral populations (see Smythies, 1981), it seems more likely that this species is indigenous to the SE, along with other Javanese elements in this region.

A flock of four Macropygia phasianella was seen over the Kahayan River near Sepangsimin in October and one at Teluk Jolo in September (KB). Columba livia is widespread, and feral populations undoubtedly exist.

PARROTS

Paittacula longicauda and Loriculus galgulus are widespread and common, but Paittinus cyanurus appears to be rather scarce or local. A large roost of parakeets at Sukadana on the west coast is reported to persist and requires further confirmation; another roost is suspected somewhere to the NE of the Sekatak River (DAH). KB reported huge concentrations of Psittacula longicauda and Paittinus cyanurus along the middle Sebangau River in March.

Paittacula alexandri persists in the Barito region and there seems no reason to believe that it was introduced from Java (see Smythies, 1981). However, it is uncommon. One was seen near Binuang in December 1984, with a voice record from the same area in November 1978 (DAH). KB and TG have records from Kembang Island, Lupak Dalam where it was locally common, and west to Pegatan.

CUCKOOS

Cuculus micropterus, Cacomantis merulinus, Chrysococcyx xanthorhynchus and Surniculus lugubris are common generally, and Cacomantis sonneratii occurs widely but may be rather scarce. All records of Cuculus micropterus are from riverine habitats. The only record of Cacomantis varlolosus is from the upper Barito where KB recorded it as common in riverine forests; elsewhere in the lowlands, the lack of records of this species, whose song is well known to DAH, is significant and suggests that it is confined to the hillier terrain of the interior. Hawk-cuckoos with a song that fits precisely the description of Cuculus vagans in Medway & Wells (1976) were heard at Talisayan in November and two or three localities at Nangatayap in April and November. The calls were always heard from the upper canopy, in contrast to C. fugax which was heard from the middle storey, of pole forest by the Cempaga River in December and at Talisayan in November (DAH).

DAH has more records of bronze cuckoos in the Chrysococcyx "malayanus" group from South and East Kalimantan than from anywhere else in the Sunda region. In December 1974 it was common in the savanna lowlands around Binuang in the Barito region, with the clear carrying "kiri kiri kiri kiri" call being heard most days from the canopy of open woodland. Birds flying freely over several hundred metres at tree-top height might be indicative of breeding behaviour.

Elsewhere, the same call was heard from hillside ladangs on the outskirts of Samarinda in July, and from logged hill forest near Tidung Pala on the Sesayap in March, with two birds calling in an adjacent newly cleared ladang where the calls were interspersed with the high-pitched descending trill. Finally in November, two were heard in dense forest at Talisayan, one giving the same "kiri kiri" call and the other a tinkling "ti ti ti ti ti" slightly down the scale.

It serves no value to speculate on relations between C. minutillus and C. russatus (see Parker, 1981), but the
relative abundance of bronze cuckoos in the eastern area of Kalimantan, and range of habitats, appears to be significant and would justify detailed study.

Our observations of malkohas support the comment in Smythies (1981) that Phaenicophaeus javanicus is the least common. Our only record is of one nest-building near Palangkaraya in April 1983 (SG).

The only sight record of Cantropus rectunquis is from Seigohong on the Rungan River (KB), and there are several voice records from the same region. DAH also has voice records from swampy forest near Nangatayap and Tidung Pala, but absolute familiarity with coucal calls is necessary before voice records of this species can be accepted. C. sinensis is common and widespread, and its habitat includes primary forest. C. bengalensis is abundant, and is another species with rapid colonizing ability, being present for example in a ladang of some 60 ha near Sukamandang, of not more than three to five years age, and 8 km from the nearest open river bank.

In Brunei in 1968 (Holmes, 1969), a call was commonly heard in hilly forest, described by Ibens as "tuck-tor", which was the name later given to a specimen of Carpococcyx radiciculus which they trapped. Similar calls were heard in lowland forest near Nangatayap, where there was a brief unconfirmed sighting. The call consists of two loud notes, of dove or barbet quality, the first rising and the second falling.

**OWLS**

Two Phodilus badius were heard calling from one site in forest at Sukamandang in April (DAH).

Otus rufescens was heard calling in the upper Barito region (KB) but not elsewhere in the lowlands.

**FROGMOUTHS**

A frogmouth seen in secondary growth in grassland beside the swamps at Binuang in December was identified as either Batrachostomus javensis or B. cornutus (DAH). Frogmouth whistles were heard at two sites near Sukaman-
dang in January and April, the first in a mature riverside village with fruit trees, the second in riverine forest, and one was heard in March in riverine forest at Sekatika. The identity of the whistled calls is unestablished but is believed to be javensis s.; they were clear, descending plaintive or mournful whistles, wavering slightly at the bottom of the scale. The calls at Sekatika were each of about one second duration, repeated at frequent intervals.

**NIGHTJARS**

Eurostropodus temminckii was heard in most forested areas inland except Talisayan (DAH). KB did not encounter this species in the sand and peat forests of Central Kalimantan, although J. T. Marshall (pers. comm.) has records from Tanjung Puting.

Mees (1977) discounted all the earlier Kalimantan records of Caprimulgus macrurus except those from the north-western half of West Kalimantan, and the only recent records are of one calling at Masau on the Barito in Central Kalimantan on August 1, 1979 (quoted in Smythies, 1981 and confirmed by J. T. Marshall), and up to four birds calling on three consecutive nights in October 1985 at Mandomai (KB). Nightjars seen by KB at Palangkaraya and by KB and TC at the Riam Kanan reservoir were tentatively identified as this species.

The distribution of C. macrurus in Borneo remains something of an enigma. The statement by Smythies (op. cit.) that it is "a common resident throughout the lowlands of Borneo in open country" is clearly incorrect. It is common in open country in Brunei (DAH, pers. obs.) and presumably through Sarawak and Sabah. However, although Gore (1968) also described its status in Sabah as a common resident, it is significant that Thompson (1966) noted it as "an abundant bird on the Jesselton - Tuaran road but was not seen at any of the other collecting stations in North Borneo". Although it is common locally in West Malaysia and Java, DAH has found it scarce in Sumatra and does not have a single record from Kalimantan.

Despite recent records from Sabah (see Smythies, 1981), there is no evidence that Caprimulgus affinis is spreading its range in Kalimantan outside the Banjarmasin...
region. Our only record is from Pegatan (KB), and its present distribution requires investigation.

J. T. Marshall (pers. comm.) states that the record of Caprimulgus concretus attributed to him from the upper Barito region and quoted in Smythies (1981) is merely a guess at a distant caller at dusk. Because the voice of this species is still completely unknown, any such guess has no validity and must be deleted from the record. The only record we have is of one specimen from the upper Sambas in West Kalimantan (SMEC, 1983).

SWIFTS

Apus affinis is common in towns and villages including inland villages such as Nanga Merekai, Rantau Pulut and Muara Wahau. It is abundant in Pontianak, Palangkaraya and Banjarmasin. Two Apus pacificus were seen over Rawa Negara on November 23, 1978 (DAH) and up to 50 near the Katingan mouth on March 29-30 and several at Teluk Jolo on September 8, 1986 (KB).

Among the swiftlets, only Collocalia esculenta was identified widely. KB has records of Collocalia maxima at a number of sites in Central Kalimantan, suggesting that it may range widely away from limestone caves.

TREE SWIFTS

Over 200 Hemiprocne longipennis gathered on dead trees at Talisayan in November following a storm in the afternoon. They dispersed later in the afternoon, not remaining to roost, and no such gatherings were seen on subsequent days.

TROGONS

Calls of Harpactes kasumba, H. diardii and H. duvaucellii were heard in forests in all areas except Talisayan, where it may be significant that only H. duvaucellii was heard. SMEC (1983) report H. oreskios from the upper Sambas.

KINGFISHERS

The calls of Lacedo pulchella heard at Nangatayap, Sukamandang and the Cempaga River (DAH) appeared to be delivered at higher speed than those heard in the Malay Peninsula and Sumatra, but this impression requires controlling by recordings. One or possibly two Halcyon sancta were seen feeding in cleared flooded peatswamp near Palangkaraya on May 16, 1985, and another perched along the tidal reaches of the Sekonyer River on June 15, 1985 (KB).

There are three records of Halcyon coromanda, one crossing the Barito near Banjarmasin (DAH), one crossing the Kapuas near Basungkai (KB), and a captive bird for sale in Mandomai (KB). DAH also has voice records from mangroves above Kumai, on the Cempaga River, and a distant bird heard in the mangroves from Tarakan Airport. SMEC (1983) report one specimen of H. concreta from the upper Sambas.

Halcyon pileata is seemingly a scarce winter visitor with only six widely scattered recent records, all between October 17 and March 8. The scarcity is unexpected in view of the abundance implied by Smythies (1981) at least in northern Borneo.

All recent records of Alcedo atthis are between September 3 and March 5 and presumably involve winter visitors. A. surymana was seen only in the upper Barito (KB).

On April 10 a pair of Ceyx rufidorsus had dug a nest-hole in the sides of a soil inspection pit, in sandy soils in poor quality dryland forest near Sukamandang. The pit had been dug a month or two previously and was one metre deep. The hole was bored at 30 cm depth into the vertical side of the pit.

Pelargopsis capensis is widespread and common, extending even up small inland tributaries. In July, 29 birds were counted along 33 km of the Kedangpahu River between Peninggir and Muara Pahu.
BEE-EATERS

A small roost of up to 50 Merops viridis was located near Sukamandang in January. The status of Merops philippinus in Smythies (1981) is not clear, but, all records are indicative of winter or passage visitors. For example, KB has only a single record, from the upper tidal reaches of the Sebangau in March, where it was abundant.

HORN'BILLS

The commonest lowland species appear to be Anthracoceros malayanus, A. convexus and Buceros rhinoceros, with several records each of Rhyticeros corrugatus and R. undulatus and small parties of Anorrhinus galeritus. KB reports that R. undulatus is the most common hornbill of the peat swamps around Palangkaraya. Rhinoplax vigil was heard in hills near Nangtayayap and Sesasayap and in the upper Barito, and this species with A. galeritus were those most in evidence on the limestone plain of Talisayan.

We have no records of Berenicornis comatus, a bird not known to either author, although J. McKinnon (pers. comm.) reports it from Gunung Palung.

BARBETS

Megalaima rafflesii and M. australis are the commonest lowland species generally. M. mystacophanos and M. henricii are widespread but less common, and may be absent from the peat swamp and sandy terrace forests of the south.

M. chrysopogon was heard in hilly areas but only once in the lowlands (at Sukamandang), in contrast to Sumatra where it occurs widely in the lowlands. However, the two common species on the limestone plain of Talisayan are this species and M. mystacophanos, with only a few M. australis and no other Megalaima barbets.

Calorhamphus fuliginosus is widespread and common.

HONEYGUIDES

There is one record of Indicator archipelagicus, a bird that called several times on disturbance at midday by a survey party on a low hillock in alluvial forest at Nangatayap (DAH). This forest has now been cleared for an agricultural settlement, but the area is close to the Gunung Palung National Park. SMEC (1983) also report one specimen from West Kalimantan, in the upper Sambas.

WOODPECKERS

Sasia abnormis was mist-netted by TG and KB in flooded riverine scrub near Tanjong Puting, and singles were seen in dead brush in the upper Barito (KB).

Picoidea canicapillus and P. moluccensis are sympatric in the Banjarmamin - Palangkaraya region (KB, TG), although habitats probably do not overlap. P. moluccensis appears to occur mainly in open habitats towards the coast, while canicapillus was seen only in forest clearings inland and along the Murung River in the upper Barito.

Mulleripicus pulverulentus is widespread in the lowlands of Kalimantan and can be heard on most days inland, in striking contrast to its apparent absence in Sumatra.

BROADBILLS

Eurylaimus ochromalus is the most widely heard broadbill in lowland forest, while E. javanicus appears to be slightly less common. The latter species was sometimes heard in heath forest where the former was absent.

Cymbirhynchus macrorhynchus is widespread along riverine forests where it appears to be more common than it is in lowland Sumatra. Both Calyptomena viridis and Corydon sumatranus are widespread though probably less common; on November 18 a pair of the latter species was observed building a nest at Talisayan, in full view of a logging track. The nest was a bulky affair, hanging in the open on long creepers suspended from a middle-storey branch.

PIT'TAS

Birds of Pitta moluccensis type were heard in riverside forest near Sambas in March, and one in November called from a forested limestone slope at Talisayan in the after-
noon gloom following a storm. Probable *P. granatina* were heard in lowland and alluvial forest at Sambas and Nangatayap. We have no information on either of the endemic species *P. arcuata* and *P. baudii* perhaps due to lack of familiarity with their calls.

**LARKS**

The only records we have of *Mirafra javanica* are of songs heard over Banjarmasin Airport in January and April (DAH) and at nearby Banjar Baru (SG). Possibly this species has been overlooked, but nevertheless it does not appear to be common in the SE region. In 1976 W. G. Harvey (in Harvey & Holmes, 1976) recorded it at Pontianak Airport, suggesting a substantial extension of range, but this record has not been subsequently controlled. None could be heard at dawn there in 1981.

**SWALLOWS**

The resident and widespread *Hirundo tahitica* is greatly outnumbered by migrant *H. rustica* in winter, urban roosts of which number several thousand birds in Pontianak, Sampit and Banjarmasin, and many hundreds in Sintang, Singkawang and Palangkaraya. Large numbers arrived at Pontianak in mid-August 1981.

A single Sand Martin *Riparia riparia* was seen perched with other swallows on September 25, 1984 in open tidal swamp along the Kapuas near Mantangai (KB). Good comparative views were obtained, and the record is the first for Kalimantan.

**CUCKOO - SHRIKES, TRILLERS and MINIVETS**

There are recent records of *Coracina fimbriata* at several localities in South and Central Kalimantan, and KB has recorded *C. striata* from Tanjong Puting.

*Lalage nigra* is common in the open country of the Barito region, with other records from Nangatayap, Ketapang, Talisayan, Basarang, Lupak Dalam and Pegatan.

*Pericrocotus igneus* and *P. flammeus* have general distribution through the lowlands, although records are rather scarce. However the relationships of these two species in the open country of the Barito region require close study. Minivets of the *igneus* type were seen commonly in the open savanna around Binuang in December 1974, with a juvenile being fed on December 19 (DAH). However the possibility exists that *P. cinnamomeus* has been overlooked, as it was not known at the time that one specimen of this exists at the British Museum, apparently from this region (Smythies, 1957).

The habitat is atypical for *igneus* and much more similar to that of *cinnamomeus* in Java. However habitat might not be very significant, as unexpectedly a party of six *P. flammeus* was seen once in patchy scrub in open savanna at Binuang.

**BULBULS**

The species listed in Appendix I have general occurrence in appropriate habitats, although *Pycnonotus melanoleucus*, *P. cyaniventris*, *Criniger bres*, *C. finschii* and *Setornis criniger* were recorded only in the upper Barito (KB). SMEC (1983) also reported *P. melanoleucus* and *P. cyaniventris* in the upper Sambas. Small parties of *P. aurigaster* at Palangkaraya in October 1984 and subsequently are presumably feral.

**JAYS, MAGPIES and CROWS**

*Corvus enca* occurs widely in the forest. Smythies (1981) describes *C. macrorhynchos* as a mystery bird in Borneo. It might have been expected to occur commonly in the Barito region but we have no records and indeed saw no crows in open country. This species should be looked for.

*Platylophus galericulatus* was seen at Nangatayap, the upper Barito and Talisayan, and *Platysmurus leucopterus* at Sukamandang and Sesayap.

A careful search should be made in the SE for *Cryptsirina temia*. Mees (1966) shows that specimens in Leiden Museum were probably collected in this region, and in view of the other Javanese elements present, further evidence of this species is now required.
TITS

The first record of a Great Tit Parus major in Kalimantan was made by DAH, who heard one calling briefly from mid-stream, during a speedboat breakdown, in the undisturbed mangroves that line the Kumai River above Kumai town on January 27, 1983. The single voice record, so far from previously known range, would not have been accepted if the species had not later been confirmed in the Banjarmasin region.

On June 27, 1983, TG saw a party of three foraging in low trees near houses in the town of Lupak Dalam, beside the Kapuas River about 10 km from the coast. Later on the same day he observed a single bird feeding low in coconut palms in a rice field nearby.

On January 19, 1984 near Sungai Pinang, about 25 km NE of Banjarmasin, TG saw a single bird low in coconuts in a rice/coconut plantation. Finally on August 17, 1984, TG and KB saw a pair on the edge of mangroves on Pulau Kembang, a small island in the Barito River opposite Banjarmasin.

Those records indicate a substantial extension of the species' known range, and it can no longer be considered Smythies' "mystery bird of Borneo". The mangrove and coastal habitat suggests that this is part of the typical range of this species in Borneo, and it is not a remnant of the open country fauna of Javanese elements. It will be interesting to observe whether Great Tits gain a foothold in the varied habitat now being formed on the island, and they should be looked for anywhere around the coast.

BABBLERS

The babblers listed in Appendix I are mostly widespread and common in the appropriate habitats. There was one sight record of Pomatorhinus montanus in song in lowland forest near the Cempaga River, and a voice record near Sesayap. In both cases, the song was the triple hoot that is characteristic of this rather secretive and solitary bird of lowland Sundanese forests, quite unlike the noisy, varied calls of the active parties that are found in montane Java and probably also Sumatra. These differences in character and voice may indicate the need for taxonomic review.

There was one record of Napothera atrigularis from a riverside thicket at Nangatayap. On the basis of song it would appear that this form is very similar to N. macrodactyla.

Stachyris rufifrons was heard commonly on a 500 metre hill near Sesayap. This isolated record may reflect merely the lack of opportunity to study in the foothills. Similarly, there are only two records of S. poliocephala, in bamboo thickets and rubber plantations below 1000 m in the Meratus Range near Loksado (KB), and two of S. leucotis. Wells (1985) notes that the latter species in Sarawak is a slope specialist, in contrast to its habitat in the Malay Peninsula and Sumatra; one record was in foothills at Nangatayap and the second on a short bluff in the lowland limestone plateau of Talisayan, an area noted earlier as having predominantly hill elements.

Finally, once the call of Eupetes macrocercus is known and safely distinguishable from that of Pita granatina, it is found to occur widely. Voice records were obtained from Peninggir, Sesayap, and probably Nangatayap, and several from Sukamandang where the species was confirmed by sightings, while at Talisayan up to six birds were heard calling along 1600 metres of track.

THRUSHES

A white-rumped Shama beside the S. Sekatak near Talisayan had the white cap of the Sabah race Copsychus malabaricus stricklandii, considered a full species by some authorities. This is the first record of this distinctive race from Kalimantan, extending its known range southwards by about 100 km. The southern limit needs to be established, and the possible occurrence of intergrades, perhaps in the region of Tanjung Selor; a bird seen at Talisayan had the concolorous blue-black crown of the typical race. Smythies (1981) notes that the ranges of the two races overlap, but Gore (1968) did not differentiate between them.

Copsychus pyrropygus was heard and confirmed commonly at S. Cempaga and Sukamandang, and one was
heard unexpectedly in the burnt alluvial forest at Muara Wahau. The typical habitat at the first two locations was rather inferior forest, though not heath forest. Although immediately recognizable, it was noted that the song varied from those heard in Sumatra by the single prolonged whistle tending to be broken into two to four separate notes.

There were several records of Enicurus leschenaultii from Nangatayap, one from Sukamandang, (DAH), and one from the upper Barito (KB). Most records were from wet or slightly swampy forest, not always associated with running water, a habitat that is typical of this species in the lowlands. E. ruficapillus was recorded twice in the upper Barito along small clear streams (KB).

WARRBLERS

Most records of Acrocephalus sp. are, perhaps incidentally, from the winter period November to April, and resident A. stentoreus was not differentiated from migrant forms. Records are from the Barito swamp area, Nangatayap and Muara Kaman. Full song presumably of A. stentoreus was heard in November at Alabio Polder, where it was very common, and at Muara Kaman on April 10.

Songs of Locustella sp. were heard in the Binuang area in November (1974 and 1978), but the one good sighting was inconclusive, L. certhiola or L. lanceolata.

KB has records of Phylloscopus borealis from riverine forest at Bukitsua and Pendahara in March and Tumbangmarikoi in October.

There is one record of Abroscopus superciliaris in a bamboo clump on a steep riverbank along the Marikoi River near Tumbangmarikoi (KB).

We have not further records of Cisticola exilis since the first recorded by W. G. Harvey at Pontianak in 1976 (Harvey & Holmes, 1976).

FLYCATCHERS

Rhinomyias umbratilis was recorded only at Marang in peat swamp forest (KB).

Cyornis rufigastra was seen in scrub at the swamp edge at Binuang (DAH) and in mangroves on Pulau Kembang (KB, TG), while C. turcosa was observed at several locations at Nangatayap, the Cempaga River, Seigohong, Tanjong Puting and the upper Barito.

A record of Ficedula dumetoria by KB at Tanjung Puting on 2 February 1985 seems unlikely on this flat coastal plain, but the species has subsequently been confirmed in the hand at the same locality by A. D. & S. V. Nash (pers. comm.).

Philentoma pyrhopterum was observed at Nangatayap and Sekatak, but this species is easily overlooked unless the observer is already familiar with it. P. velatum was recorded only at Talisayan (DAH) and in the upper Kahayan region (SG).

WHISTLERS

Pachycephala cinerea is not confined to coastal districts as given in Smythies (1981) as it occurs well inland in areas of inferior forest on sandy terraces, and it was heard commonly at Tanah Merah near Nangatayap and at Sukamandang.

WOOD-SHIRKES

We have three records of the Bald-headed Wood-Shrike or Bornean Bristlehead Pityriasis gymnocephala. This unusual endemic may be quite widely distributed in a variety of lowland forest habitats, but records appear to be rather incidental. When present, it is quite tame and obtrusive, and the variety of chortling calls are sufficiently distinctive to attract attention. DAH saw a loose party of 8 birds in the middle storey alongside a logging track near Sukamandang on April 10, 1984, and KB saw 4 to 5 in similar habitat in September 1985 near Palangkaraya, and in lightly logged forest near Muara Jolo in September 1986.

SHIRKES

Both Lanius tigrinus and L. cristatus were recorded widely in winter. However L. schach which appears to be
only a vagrant in northern Borneo, is now confirmed to be an abundant resident in the open country of the south, with records west to the top of the Kumai River and north to the Samarinda region. These birds fit the description of the unnamed race recognized by Mees (1966), with black crown and grey nape. A bird seen from a speedboat between Muara Ancalong and Muara Kaman on April 15, 1985 may have had the all-black crown and hindneck of the Philippine race nasutus, but was not confirmed.

STARLINGS and MYNAS

Our observations confirm Aplonis panayensis as a predominantly coast species, with large numbers of roosting birds for example at Talisayan and Mandomai. It ranges inland at least to Nangatayap, Palangkaraya and Muara Ancalong.

Single Acridotheres sp. near Banjarmasin Airport in November 1978 and February 1983 (DAH), A. tristis at Nanjalipan in September 1981 (JRDW) and a Sturnus contra at Palangkaraya in August 1984 (KB) are all assumed to be escaped birds.

Flocks of between 6 and 10 starlings were seen on several occasions between December 14 and 18, 1974 in the Binuang area, usually flying south or east in direct flight at moderate elevation. Confirmation could not be obtained but the description of pale head and bodies, white rump, and confirmed black upper wings with white bars in some birds, tallies well with Sturnus philippensis, the species most likely to be encountered in eastern Borneo although not yet recorded from Kalimantan. On March 7, 1985, up to 50 starlings seen in early morning silhouette from a speedboat between Tidung Pala and Sesayap may have been the same species.

SUNBIRDS and SPIDERHUNTERS

Anthreptes malacensis and Nectarinia jugularis are the commonest open country species of the lowlands. A. singalensis is common in the forest of the south (KB). Most records of N. calcostetha are from coconut palms and sometimes gardens and other cultivation, with few records from mangroves (KB). Aethopyga siparaja was recorded at numerous localities in the south (KB, TG), and in the upper Sambas (SMEC, 1983).

FLOWERPECKERS

Dicaeum trochileum was seen only in the Barito area where it is not uncommon, with records from Alabio, Barambai (DAH), Rian Kanan reservoir and Mandomai (KB, TG). The limits of its range need to be established, as well as its relationships with D. cruentatum, in view of the probable hybrid specimen from Samarinda in the Zoological Museum, Bogor. KB has a record of D. concolor from the foothills at Loksado.

Priophichus percussus occurs widely in the southern lowlands, where there were no records of the endemic P. xanthopygius, possibly indicating a degree of allopatry. However KB recorded the two species both occurring in the upper Barito in September 1986, and the relationships of these should also be studied. The only other record we have is of three specimens of P. xanthopygius, and none of P. percussus, in the upper Sambas (SMEC, 1983).

WHITE-EYES

Zosterops flava, which is known in Borneo from four specimens in the south and one from Kuching, was seen in and around Lupak Dalam in June 1983, in low waterside trees in the town and wet coconut groves nearby (TC), and commonly in mangroves and gardens around Banjarmasin in December 1985 and Pegatan in March 1986 (KB).

SPARROWS and MUNIAS

The only records we have of Passer montanus are from Tanjong Redeb Airport, Samarinda and Balikpapan. While western observers over-familiar with sparrows in their home countries might easily overlook this species in urban environments, it is nevertheless apparent that it has not yet become widely established in Kalimantan. Sparrows should be looked for in urban environments elsewhere in the region.

The feral Padda oryzivora has only a very local distribution, with records confined to the south (Amuntai,
Binuang and Lupak Dalam), and there are no reports of large flocks as quoted in Smythies (1981) for the last century.

The common widespread munia of inland clearings is the endemic Lonchura fuscans. L. malacca seems to be common locally only in well-established agricultural areas, with a few records of L. leucogastra.

Small parties of Lonchura punctulata were seen by TG at Binuang, Martapura and Sungai Pinang, following the first record of this species in Borneo at Binuang by DAH in December 1974 (Harvey & Holmes, 1976).

Conclusions

This paper summarizes the recent avifaunistic observations from lowland Kalimantan, high-lighting features of distribution and some apparent anomalies, giving details on some species for which little information was previously available, and indicating some taxonomic problems. In conclusion, we present some fields of survey and research for future study:

1. Faunal surveys

Faunal surveys are required throughout Kalimantan. Obviously any surveys of the mountainous interior, and of the reserves listed in Appendix 3, would be very valuable. However, possibly the greatest urgency lies in surveys of lowland areas under threat, particularly from pressures of logging, shifting cultivation and new agricultural settlement. Such surveys would complement the studies for the Atlas of Oriental Birds, and assist in establishing priorities for conservation. One of the main objectives of Kukila is the publication of site lists.

2. Endemics

Depending on taxonomic definition, there are up to 32 endemic species on the island of Borneo (K. D. Bishop, in litt), but the majority are montane. Less than half of these species have been recorded from Kalimantan. It is several decades since scientific expeditions have reached the higher montane regions of Kalimantan, which must form one of the most fertile potential study areas in the Sundanese islands of Indonesia. In addition to the endemics, there are many species that are either rare or very poorly known. In the lowlands, we look forward to further information on such species as Polyplectron malacense, Carpococcyx radiceps, Caprimulgus concolor, Batracostomus spp., Pitta spp., Pycnonotus nieuwenhuisi, Trichastoma perspicillum, Ptilocichla leucogrammica, Cyornis superba, Pityriasis gymnocephala and Prionochilus xanthopygius.

3. Endangered large waders

Species such as Pseudibis papillosa, Ciconia stormi and Ardea sumatrana require study. The White-shouldered Ibis is perhaps the most endangered species on the island of Borneo, yet very little is known even of its habitat requirements. The usual habitat appears to be inland rivers of the forested lowlands, but there is the possibility that this is an atypical habitat of a relict population.

4. Alien elements

The south-eastern corner of Kalimantan has two elements of Australasian affinity unknown elsewhere in the Sundanese region: Gallinula tenebrosa and Irediparra gallinacea. The latter is still common locally but the former has not been seen since it was recorded breeding on Bangkau Lake a hundred years ago. The origin of these two species in Kalimantan is not readily explained, although it may be related to the complex evolutionary history of the island of Sulawesi during the Tertiary area.

More readily explained are the large number of species of presumed Javanese origin that must have become isolated in the region after the final Pleistocene lowering of sea level over the Sundanese continental shelf. They are nearly all wetland or monsoon savanna forms that are adapted to survive in this corner of the island. Some of those recorded only in the last century may have been migrant or vagrant individuals (species such as Phalacrocorax sulinrostris, P. niger, Plegadis falcinellus, Falco moluccensis and Himantopus himantopus). Others are presumed resident but their ranges are poorly known, eg. Ardeola speciosa, Dendrocopacos arcuata, Porzana pusilla, P. fusca, Porphyrio porphyrio, Rostratula benghalensis, Psittacula alexandri,
Caprimulqus affinis, Dicaeum trochileum, Zosterops flava and Lonchura punctulata. The following species may be awaiting rediscovery: Podiceps sp., Streptopelia bitorquata, Pericrocotus cinnamomeus, Saxicola caprata and Crysirina temia.

5. Wetlands

Our own experience shows that the wetlands of the Barito drainage in the south may be one of the richest wet areas of the Sundanese region, and almost certainly the richest in Borneo. However, they lie close to the most densely populated rural area in Kalimantan, if not the whole island. Conservation priorities must be established here immediately. The Mahakam swamps in the east have been recorded historically as being rich, though no such impression was obtained on a brief visit by DAH in 1982/1983. This may have been an effect of the 1982/1983 drought, when it was reported that the lakes dried out completely, and the surrounding peat swamps were very severely damaged by fire. The remaining wetlands, and this is believed to include most of the lake region of the Kapuas basin in West Kalimantan, are mostly acid and may be faunistically poor: Little is known of the wetlands near the coasts, but KB notes that the Sebako River in the south is acid and carries very little sediment. An inventory of the wetlands of Indonesia is currently in progress, but in Kalimantan this may serve only to illustrate the inadequacy of our knowledge.

6. Wader grounds

Our own experience has not identified any important wader feeding or resting sites, though we have little experience of the coasts. We have the impression that important wader grounds may not exist, but the current interwader programme should perhaps look at both the SW and SE corners of the island, and the deltas of the major rivers draining the mountainous interior.

7. Limestone

We are not aware of any surveys that have been made of limestone karat in Kalimantan. Karat blocks occur locally in Central and South Kalimantan but the main concentration lies in the Sangkulirang area of the East. It is reported that edible-nest swiftlets breed and are harvested in a cave here, but we have not been able to ascertain the location. The brief visit to a level coastal limestone plain at Talisayan by DAH indicated a number of variations from the normal lowland avifauna which require study, with a view to recommending representative areas for conservation. The karat cliffs may not be seriously threatened at the present time but the lowlands are at risk.

ACKNOWLEDGEMENTS

We are especially grateful to Tom Gula for his valuable contributions to this paper, and we have pleasure in acknowledging records freely given by Sjarifin Gardiner and David Wall. Dr. D. R. Wells made useful comments on a first draft of this manuscript, and we also thank Dr. Somadikarta for his review of the final draft.

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APPENDIX I

Species recorded in Kalimantan by the authors. Those marked * are discussed in the text. Province is indicated by a suffix: West, Central, South and East.

Anhinga melanogaster*  |  Oriental Darter | WCSE
Fregata ariel*       |  Lesser Frigatebird  |  E
Ardea sumatrana*     |  Great-billed Heron | WCSE
Ardea purpurea*      |  Purple Heron       | WCSE
Butorides striatus*  |  Little Heron       |  SE
Ardeola speciosa*    |  Javan Pond-Heron   |  S
Bubulcus ibis*       |  Cattle Egret       |  SE
Egretta sacra*       |  Pacific Reef-Egret |  E
Egretta alba*        |  Great Egret        |  CS
Egretta intermedia*  |  Plumed Egret       |  CSE
Egretta garzetta*    |  Little Egret       |  SE
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Brown-capped Woodpecker CS
Gray-and-Buff Woodpecker C
Maroon Woodpecker WCE
Orange-backed Woodpecker WC
Dusky Broadbill WCE
Black-and-Red Broadbill WC
Banded Broadbill WCSE
Black-and-Yellow Broadbill WCSE
Green Broadbill WCE
Blue-winged Pitta WE
Carnet Pitta W
Singing Bushlark S
Sand Martin S
Barn Swallow WCSE
Pacific Swallow WCSE
Bar-winged Flycatcher-Shrike E
Black-winged Flycatcher-Shrike CSE
Bar-bellied Cuckoo-Shrike C
Lesser Cuckoo-Shrike CS
Pied Triller WCSE
Flery Minivet C
Scarlet Minivet CS
Green Iora WC
Common Iora WCSE
Lesser Green Leafbird WCE
Greater Green Leafbird WC
Straw-headed Bulbul WCSE
Black-headed Bulbul WCE
Sooty-headed Bulbul C
Puff-backed Bulbul WCE
Yellow-vented Bulbul WCSE
Olive-winged Bulbul WCSE
Black-and-White Bulbul WC
Grey-bellied Bulbul WC
Cream-vented Bulbul C
Red-eyed Bulbul CS
Spectacled Bulbul C

Yellow-bellied Bulbul WC
Grey-cheeked Bulbul C
Finsch's Bulbul C
Hook-billed Bulbul C
Buff-vented Bulbul C
Ashy Drongo W
Bronzed Drongo WCE
Greater Racket-tailed Drongo WCSE
Dark-throated Oriole WCE
Asian Fairy-Bluebird WCE
Crested Jay WCE
Black Magpie WCE
Slender-billed Crow WCSE
Great Tit CS
Velvet-fronted Nuthatch C
Black-capped Babbler WC
Short-tailed Babbler WC
White-chested Babbler WCE
Ferruginous Babbler WCE
Abbott's Babbler CSE
Moustached Babbler C
Rufous-crowned Babbler WCE
Sooty-capped Babbler WCE
Scaly-crowned Babbler WCE
Chestnut-backed Scimitar Babbler CE

Black-throated Wren-Babbler W
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White-necked Babbler WE
Black-throated Babbler WC
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Chestnut-winged Babbler WC

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Brown Fulvetta CE
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Introduction
Vinson Sutlive


George Peter Murdock insisted that social analysis begin with the description of residence patterns. Many contemporary analysts would insist that social analysis begin with a description of occupations. Analyses of "where one lives" and "what one does" are not antithetical. On the contrary, as the papers in this session indicate, settlement patterns are significantly correlated with people's jobs.

Concerning the International Year of Shelter for the Homeless, although most if not all the people described are not "homeless," nonetheless all are in process of changing their settlement patterns. Many likely will become landless, as George Appell and his fellow authors describe in Modernization and the Emergence of a Landless Peasantry, and some doubtlessly will join the world's homeless.


In 1976, when 'Habitat, The United Nations Conference on Human Settlements,' was held in Vancouver, Canada, governments collectively recognized that there was a crisis in human settlements. Despite this recognition and despite that adequate shelter has been universally recognized as a basic right for more than a quarter of a century, the number of homeless, the number of people living in squalor and the number of people living in poverty, grow steadily larger.

The major component of the IYSH program is the need for every nation to draw up a comprehensive shelter strategy that could direct activities, at both the national and international levels, towards improving the shelter and neighborhoods of all their poor and disadvantaged by the year 2000. For the most important elements of such a strategy, there are seven major considerations:

- recognizing the problem;
- establishing realistic goals and objectives;
- securing political commitment at every level;
- making financial resources available;
- taking care of the necessary institutional matters; including legislative ones;
- solving technical and structural problems; and
- choosing and developing appropriate technologies.

It is now estimated that one quarter of the world's population do not have adequate housing. Of these, approximately 100 million have no housing whatsoever... In the cities of the developing world, 50 percent of the inhabitants, on average, live in slum and squatter settlements. It is not unusual to find in these settlements 1000 or more people depending on water from a single standpipe and having no access to human waste disposal facilities.

And what of the future? If trends continue as per the most recent UN projections, then the scale of settlement issues will rapidly intensify. One of the most challenging problems will be the impact of urbanization in developing countries. It is estimated that, in developing countries, by the
year 2000, approximately one in two people will be living in cities. Put another way, this means, in 20 years a doubling of the number of people living in cities - from 1,000 million to 2,000 million. Of these 2,000 million urban dwellers, about 500 million will be living in 60 cities of more than 5 million inhabitants. Forty-five of these cities will be in developing countries and the population of some cities will reach staggering proportions. Consider for instance that, if trends continue, in the space of 16 years Mexico City will have 31 million inhabitants, Sao Paulo, 25.8 million, and greater Bombay, 16.8 million. (Ibid., p. 284).

The International Year of Shelter for the Homeless will succeed only if there is appreciation for the information and insights of the subjects—the intended beneficiaries—and planning agents. Neither can effect solution alone. The former lack resources, the latter often lack perspectives. The latter often control resources, the former, can provide perspective. Only a combination of "tenant power" and government resources can help resolve and ameliorate the problems, which while not yet extensive, nonetheless are extant and growing in Borneo.

The layout of a Kahayan village is informed by a complex system of cosmological and cosmogonic belief. This paper proposes that the relationship between cosmology and village design offers insight into Kahayan peoples' perception of the physical, social, and more boundaries of their world. Focusing upon the nexus of settlement symbology and indigenous cosmology, the paper addresses the association between village design, world view, and principles governing human relations. These principles are reinforced through rituals which utilize the village as an arena for dramatic restatement of Kahayan world view. The implications of this system of thought may not be restricted to village relations only, however. The paper suggests ways that the system is given expression through villagers' concerns about, and ultimate adjustment to, life in a large, multi-ethnic community. This raises questions regarding how, in reciprocal fashion, the Kahayan world view is likely to be affected by events related to development in the Province of Central Kalimantan.

In the Kahayan region today the conceptualization of social relations, articulated in settlement symbology and associated belief, is changing rapidly. Factors contributing to change include increased conversion to pan-ethnic religions, government policies directly affecting Dayak belief, and increased exposure to a new kind of settlement, specifically Central Kalimantan's burgeoning provincial capital, Palangka Raya, located in the middle reaches of the Kahayan River. A problematic emerges in this confrontation between settlements as ideal constructs and the reality of life in an urban center. That Kahayan villagers have appropriated Palangka Raya as a symbol of their collective identity is demonstrated, for example, by popular ballads.
which incorporate the city into a traditional paradigm of village symbology. Yet while changing attitudes toward kin and non-kin and patterns of interactive behavior in contra-
distinction to those reinforced through the symbology of village design point to an emerging sense of Ngaju-ness, the idea of a Ngaju collective identity remains debatable. This problematic has important implications for indigenous peoples' ability to draw upon settlements, village or urban, as symbolic resources through which they can invigorate and explore their identity.

I. The Village as Ideal Construct

The Kahayan Ngaju are swidden agriculturalists who live in villages along the mid-and lower reaches of a major Central Kalimantan waterway. Like other Dayak groups subsumed by the category Ngaju, Kahayan peoples identify themselves with reference to a specific river or to an even more delimited area rather than as part of a larger tribe. For Kahayan Ngaju, particularly those who adhere to the indigenous religion, Kaharingan, spatial arrangements of houses, shrines, and mortuary edifies within villages reflect key cosmological beliefs. These beliefs, in turn, hold clues to concepts and principles which inform human relations.

Kahayan peoples refer to the world generally and their village specifically as the "village borrowed by the hornbill (lewu injam tingang)," a reference to their metaphoric alterselves, rhinoceros hornbills. The village can be seen as a place where hornbills pause, resting amid the branches of the river, a metaphoric tree of life. The image is one that underscores the temporality of existence in this world. Village design is characterized by a system of dualities. A contrastive juxtaposition figures in both the construction and the location of houses. Dwellings are usually built facing the direction of sunrise (pambelum), explicitly associated in ritual contexts with life and prosperity. Ossuaries containing remains of the dead are similarly erected so that their miniature doors and windows face sunrise. The opposite direction, sunset (pambelep), is associated with death, thus houses and ossuaries transcend death by means of their physical orientation.

Other cardinal directions are upriver (ngaju) and downriver (ngawa), up (hunjun) and down (penda). Like sunrise and sunset, upriver and downriver have important associations. Upriver has positive connotations. In the past, for example, social rank may have been reflected by the location of houses upon an upriver/downriver axis. Kaharingan graveyards are usually located downriver from the village, often on the opposite riverbank. The directions up and down are associated with other realms of the cosmos, home to particular supernatural beings.

According to the religious understandings of adherents of Kaharingan, supernatural beings are thought to have access to villages. For purposes of the present discussion, supernatural beings will be broadly classified into two categories. The first, Upper and Lower World Beings (sangiang), primarily reside in other realms of the cosmos but visit the village to take part in rituals or to convey their desires by possessing persons in trance. Upper and Lower World Beings are regarded as benevolently disposed toward mankind and their visits are welcomed. Some are said to have special relationships with particular families. Another category of beings, which I refer to as "Unclean Ones" (taluh papa), are associated with the jungle. These are often said to dwell between villages in uncleared patches of scrub (pukung pahewan). Unclean Ones are characterized by amoral disposition, inhuman aspect, and sexual promiscuity. They can appear to villagers in the guise of animals or strangers. They may also manifest themselves as dreaded hantuen, horrific creatures which follow the scent of corpses or the blood of women in childbirth in order to drink that blood.

Fear of hantuen exerts a subtle yet critical influence on Kahayan social relations. It underlies notions regarding the ideal composition of village society and figures generally in concepts regarding village layout. The concern informs Kahayan peoples' attitudes toward strangers and other "outsiders." In the ideal village all inhabitants are cognatically related. There is a preference for cousin marriage as it is said that hantuen can be unwittingly incorporated into the village through marriage. Though few exist in the region today the long house (betang), celebrated in indigenous mythology, can perhaps be seen as the physical expression of this ideal social form.
When cognates inhabit the same village the world of the living approximates conditions prevailing in the realm of the dead. The "Prosperous Village of Souls" is located in the uppermost reaches of the cosmos. In that village ancestors dwell in the transported essence of bone repositories (sandung) constructed by their descendants. Only the bones of men and women cognatically related may be placed together within repositories, which often hold the remains of fifty or more persons. Affines who are not cognates are placed in individual repositories located alongside the larger structures.

The association between village design, cosmology, and social relations reaches a heightened level of articulation during the celebration of secondary mortuary rituals, or tiwah. Prior to tiwah members of the extended family make a pilgrimage home to the village to process their dead. During the celebration distinctions between kin and non-kin are emphasized through various symbolic means. One is the alteration of the village's physical aspect by construction of a long fence parallel to the river. Theoretically non-kin are permitted to enter only following interrogation by the head sponsor of tiwah. By the same token members of sponsoring families are proscribed from leaving the village until the ritual is complete. Near the climax of tiwah a log is fastened across the fence's gateway. A mock battle may ensue during which sponsors are "attacked" by non-kin visitors from other villages. These arrive on decorated ships which approach the village from downriver. The crew bring with them goods and animals to augment the celebration. These goods are explicitly for the deceased's use in the afterlife. Despite the apparently benign motive for the visit, however, the new arrivals brandish spears, don striking costumes, and wear horrific masks. They may dance obscenely and taunt the sponsors. The dancers pass through the fence only after having been vanquished by a return barrage of spears from shore. This dramatic moment strikingly portrays the dangers and rewards of association with non-kin, and depicts the relative safety of the village versus the unknown places and peoples beyond. The crew's appearance and behavior recall the features and ambiguity of hantuen, members of the second category of supernatural beings described in this paper. Sponsors of tiwah are united in the presence of dangers symbolically posed by the outside and outsiders. Yet distinctions within the family are accentuated as well. The coordinated efforts of kin are thought necessary to perform secondary mortuary rituals. Nevertheless the remains of non-cognatic affines cannot be placed in the ossuaries of individuals who are cognatically related. This precaution protects ancestors from having a potential, albeit unexposed, hantuen transported into their world.

II. Palangka Raya: The "Great and Boisterous Village"

From this brief discussion of the relationship between settlement design, cosmology, and identity, it is clear that the physical environment is a focal point of villagers' existence. It has further been suggested that Kahayan peoples have ambiguous feelings toward individuals who live metaphorically "beyond the village," that is, non-kin. Nevertheless current politics as well as villagers' growing knowledge of other regions have contributed to an emerging sense of Ngaju-ness based upon shared language and similar tradition. Given that groups need symbols of their existence in order to survive, and that settlement symbology is one vehicle for the transmission of culture, it is instructive to examine how Kahayan peoples apprehend and legitimate Palangka Raya, their provincial capital, through the paradigm of village symbology.

A useful point of access here are popular ballads, composed in the tradition of epic praise songs (karungut), which depict Palangka Raya as a "great and boisterous village (lewu hai hayak rami)." These are performed as part of various entertainments, often by people who have never visited Palangka Raya. The layout of Palangka Raya as described in the ballads does not necessarily conform to reality. A typical ballad begins by addressing supernatural beings. Upper and Lower World beings are asked to approach Palangka Raya, whereas Unclean Ones are told to go far away. It is described as a place of prosperity, swollen with beneficent rain wrought by Upper and Lower World Beings. The songs proceed to review the layout of Palangka Raya, the direction of sunrise and sunset where the airport and harbor lie, "the place birds soar and the place where they glide evenly across the face of the water." Downriver a deep pool provides a gateway for Lower World Beings. Upriver lies the seat of regional government.
What is striking about many of these ballads is not only that singers focus upon the cardinal directions, making an explicit association between upriver and the local government for example, or the singers' hope that the village is protected by some supernatural beings and avoided by others, but that the songs often emphasize boundaries, points of entrance into Palangka Raya. These may include the airport, the harbor, and the pier. According to some songs the entire village is surrounded by a protective amulet belt (penyang). This recalls the importance of another boundary discussed earlier in this paper, the fence which prevents outsiders access to tiwah and, conversely, keeps those who belong within the confines of the village.

Recognizing that the importance of controlling access to settlements, and by extension the Kahayan world, is articulated verbally through ballads and ritually through the construction of mortuary architecture suggests hidden significance to one recent event in Central Kalimantan reported by an Indonesian newspaper. One day last August, thousands of Palangka Raya's residents converged upon a building with the apparent intention of demolishing it. The crowd refused to disperse until an army officer had searched the building and declared it empty. According to the report, 'the crowd had assembled in order to expose a hantuen supposedly hiding inside. The building under suspicion belonged to the Regional Office of Transmigration, under the auspices of which more than three hundred thousand non-Dayak families will ultimately be settled into the environs of Palangka Raya and beyond. Though it is certain that others besides Ngaju were also present in the crowd, the tone of the event recalled suspicions voiced to me by townspeople that many of their neighbors, representatives of other ethnic groups, were hantuen.

III. Some Implications

Since the creation of the Province of Central Kalimantan and the founding of Palangka Raya in 1957 there has been an impression, held by outsiders and indigenous peoples alike, that Kalimantan Tengah is closely tied to Dayak identity. Today, however, members of other ethnic groups outnumber Dayaks and many positions of authority are occupied by non-Dayaks. Under Indonesia's zealous transmigration program this disparity will continue to grow.

Cultural heterogeneity is therefore one factor which figures in Kahayan peoples' quest to understand who they are and where they belong. It is not the only one, however. Others are increasing conversion to pan-ethnic religions as well as standardization and codification of the indigenous religion in response to the Ministry of Religious Affairs' 1980 decision to recognize Kaharingan as a Hindu sect. The latter, albeit indirectly, is resulting in a shift in emphasis from the family to a religious community as the sponsor of ritual, and from religious understandings focused upon supernatural beings including those described in this paper to belief in a single, omnipotent deity capable of granting forgiveness and salvation for individuals. This doctrine is being embraced rapidly by many high school and college youths of Palangka Raya.

As Kahayan peoples' notions of cosmology and social relations change, we may expect their view of their relationship to the place they live to change as well. Thus Palangka Raya itself remains a problematic symbol. On the one hand, as demonstrated through this brief examination of the content of local ballads, the realm of Upper and Lower World Beings is conceived as having been extended to this great and boisterous village. In this sense Palangka Raya "belongs" to Central Kalimantan's indigenous villagers. On the other hand, inhabitants of the Kahayan region are in the process of becoming different kinds of people, many with a new understanding of cosmology and society. It is hoped that this examination of the relationship between village layout and cosmology, as well as the legitimation of Palangka Raya through the symbolic framework of a Kahayan village, will lend insights that contribute to an understanding of how indigenous Bornean peoples construct and nurture identity in their rapidly changing world.
Acknowledgments. Research on Ngaju Religion was conducted in Indonesia from December, 1982 to June, 1984. Support for the research was provided by a Fulbright-Hays Award for Doctoral Dissertation Research Abroad, a Wenner-Gren Foundation Grant-in-Aid of Research, the Alice Palmer Award administered by Wellesley College, and a Sigma-Xi Scientific Society Grant-in-Aid of Research.

3. These remarks are intended only as a general introduction to certain aspects of Kahayan religious understanding, not as a comprehensive treatment of the complex and varied beliefs and practices which characterize Hindu-Kaharingan.
4. For a discussion of this aspect of settlement design in a different Indonesian province see Budihardjo 1986.
5. See Kompas, 7 Augustus 1986.

has resulted in some hamlets breaking off to form separate villages. In other words, the processes of population growth and growing security have led to smaller, more dispersed longhouses, more hamlets, and smaller village territories.

The longhouse is a condominium consisting of a number of domestic family apartments cojoined laterally. The membership of the longhouse is constantly changing, as member domestic families move in and out, with the average occupancy of a longhouse apartment being only a few years. Because of the lack of ironwood in the region, housing posts rot rapidly. As a result of this, and also because housing locations may come to be perceived as unlucky or causing disease, a longhouse may exist as a social entity for only seven or eight years before a new group forms to create another one.

The longhouse is not a jural unit, and is only a ritual entity for one seldom held ceremony. It is essentially a jural collectivity.

The domestic family is composed of a man and his wife, the two founders, and their children. It may also include the widowed parent of one of the two founders when he or she is no longer able to carry on agricultural activities. Marriage is uxorilocal, and a bride-price of gongs, jars, and brassware is paid to the family of the bride in a form of exchange I have termed corporate bride-price.

The human ecology of the domestic family is based on cultivation of swiddens, the raising of domestic animals, the planting of fruit trees, hunting, fishing, and gathering of wild forest produce, the manufacture of various household utensils, the weaving of cloth, and trading for jars, gongs, and brassware.

A swidden is planted with rice, maize, cassava, and a variety of vegetables. It is used usually for one year, and after all the crops have been removed, it reverts to forest. The Rungus land tenure is circulating usufruct (see Appell 1986). No permanent use rights are created by cutting the forest for a swidden. Anyone else in the village may use the secondary forest of previous swidden for their new swidden.

The Bulusu' Settlement Pattern

The Bulusu' are found along the several rivers that drain East Kalimantan from the region behind the island of Tarakan. These rivers are wide and deep, with scattered rapids. Bulusu' life is oriented towards these rivers, and most travel and transportation is done by canoe or longboat on these rivers.

The rainfall is in stark contrast to that in the Rungus area. There is no recognized dry season, and floods may occur during any month of the year. The average rainfall for the Bulusu' area is 152.52 inches and for the Rungus area 89.53. For the Bulusu', the monthly range is 10.08 inches to 15.2 inches, with a standard deviation of 1.66 inches. For the Rungus area the monthly range is 3.23 to 19.55 with a standard deviation of 4.72 inches.

The major social units of the Bulusu' are village, field longhouse (payor), village longhouse, extended patrilocal domestic family, and conjugal family. There are no hereditary social classes.

The village is based on a territory along one of the rivers, and boundaries between territories are marked by the mouth of a tributary stream or a significant natural feature. Unlike the Rungus, there appear to be no corporate rituals for the whole village that requires the barring of the boundaries to foreign visitors for a period of time. While the jural personality of the Rungus is based on its corporate assets, both physical and ritual, the jural personality of the Bulusu' village appears to be defined more by the headman's capacity as an arbitrator of disputes.

Thus, it is reported that anyone may cut a swidden in the village territory who is not resident in it. In the past, however, this could have resulted in the individual being killed as a potential enemy who might be seeking heads. Consequently, anyone seeking to cut a swidden in another village territory usually informs the headman of his intentions. In fact, any traveller through a village territory normally stops at the headman's house to tell him of his travel intentions in order to prevent these being interpreted as a threat to the community, which could lead to an attempt on his life.
The land tenure system of the Bulusul is identical to that of the Rungus. It is circulating usufruct. No permanent rights to an area may be established by being the first to fell the primary forest. In the light of the marked difference in the rainfall between the two areas, this suggests that explanations of land tenure systems as a product of climate alone need to be reconsidered.

The Bulusul village has not experienced the increase in population and resultant pressure on its land nor the alienation of land to outsiders as have the Rungus. In other words, the Bulusul up until the time of resettlement in the 1970's and 1980's were not concerned about the status of their land resources.

The village longhouse (baloi) is a condominium of extended family apartments. And it is more usual to have the village constituted on the basis of one or occasionally two longhouses.

When a group of swidden farmers are cutting their swiddens far away from the longhouse so that it is a hardship to return each night, they may build a small longhouse (payor) while they are farming in that section of the village territory, and this is more likely to be the case if there are plans to spend several agricultural seasons in that region.

The conjugal family is the basic production unit, but the extended patrilocal family, composed of a husband and wife, their unmarried children, and their married sons and their wives is the consumption unit. Traditionally, after marriage the couple spent a year, or two, or three with the bride's natal family. Then they moved into the longhouse apartment of the husband's father. It is more usual now to move into the apartment of the groom's father immediately after marriage. A conjugal couple will stay with the groom's father until their children have reached an age to start marrying, and then the conjugal couple will build its own apartment onto the longhouse of the groom's father. However, this can occur shortly after marriage or at any stage in the developmental cycle of the conjugal family. Each conjugal family has its own swidden and field house, where much of its domestic life is enacted. When there are more than one family living in a longhouse apartment, each unit will bring food for the common pot, with the cooking being done by the owner's wife.

Marriage requires a bride-price. This is composed of various items of gongs, jars and brassware, but expressed as so many jars. It is not like the Rungus bride-price as relatives of the groom contribute items for the bride-price, and these items are in turn distributed among the relatives of the bride. It is similar to the bride-price of the Lun Dayeh (see Crain 1970, 1982). It is what I call redistributive bride-price as compared with the corporate bride-price of the Rungus. And its function is explicitly to secure the virilocal residence of the wife.

The Bulusul plant fruit tree groves in their swiddens only during those years when there has been an unusually good fruit harvest. This may be every five to seven years. They have been planting large stands of fruit trees for the past couple of decades or so because of the possibility of sale of fruit in the markets of Tarakan. Rights to these groves are held by all the descendants of the planters, with stronger rights going to males.

Development Among the Rungus

The British colonial government and the subsequent state government have ignored the land tenure system of the Rungus. They have instead pushed for individual ownership of land to be planted in coconuts, rubber, or wet rice. Several land development schemes have been attempted based on monocropping of coconuts, oil palm, or fast growing trees for pulp. These have not been an outstanding success because the members of such schemes have not been permitted to continue the human ecology of their domestic family, which includes a complex agroecology (see Appell 1985b).

The government has also discouraged the use of the longhouse, and has urged the Rungus to set up individual houses on their land or in a cluster. But one political party in an attempt to win the Rungus over built a number of longhouses in various villages, but these only superficially resemble the Rungus longhouse. They have, for example, two stories. The lower story for cooking and eating and
the upper story for sleeping. These are extremely hot, and the Rungus find them uncomfortable.

The development of individual land ownership has resulted in the loss of the village control over its reserve. Once title has been received, land can be sold to anyone resident within or resident outside the village. As a result the jural capacities of the village are being eroded.

As a consequence of population growth and taking land out of the swidden cycle for plantations, a scarcity of land has developed. There is enough land, it is stated, for this generation but not for the next. However, the government has established a successful school system, and many Rungus have gotten sufficient education to hold responsible positions in government. The expanding opportunities in working for the government and businesses in the private sector, or becoming an entrepreneur have removed some of the urgency over the shortage of land.

However, in the process of modernization the Rungus have converted to Christianity. And this has meant the cutting down of the ritual groves around pools in the river and springs that preserved the water cycle in the environment. As a result the environment has become markedly drier.

**Development Among the Bulusu'**

The Bulusu' have been moved to resettlement centers away from their village territories by the threat and use of military force. These resettlement centers include other ethnic groups such as the Punan and representatives of various Coastal Muslim groups. The tension as a result of living cheek by jowl with ethnic groups that were once considered threats is palpable (see Appell 1985a, 1985c, Appell-Warren 1985).

In these resettlement centers the Bulusu' were made to build single family dwellings which are too small to house the extended patrilocal family or to hold the usual apartment ceremonies. Then, after it was too late, the government announced that they could build longhouses.

The Bulusu' have been told that they are not to cut swiddens outside the boundaries of the resettlement area, which is too small for carrying on the usual cycle of swiddening, and the soil is less fertile than in their home territories. They have also been forced to convert to one of the major world religions, and most have become either Muslim or Christian.

The purposes of the forced relocation is to free up the forests for timber exploitation and bring the Bulusu' to government services such as schools, dressers, and administration. Most of the government personnel do not like to travel, and by concentrating the population in one area they can reside there or, if coming in from an administrative center, have only to visit one or two locations. The Sabah government to the contrary has the policy of bringing the services to the community, by building schools and clinics in the village areas. This is easier because of the more compact nature of the Rungus territory and settlements. But this approach would also have been possible and not that difficult under the traditional Bulusu' settlement pattern.

As a result of relocation, the Bulusu' have suffered an economic decline. They used to sell considerable agricultural surpluses to Tarakan. But these surpluses have disappeared under resettlement, and in some instances there are real hardships in terms of subsistence. And there are no jobs in the area or the region to alleviate the economic pressure. The educational system is also not preparing the Bulusu' for occupations, other than wage labor, which could be pursued outside the area.

**Comparison of the Development Processes Affecting the Rungus and the Bulusu'**

The Sabah government has provided better medical and educational facilities to the Rungus. And these are brought to the village. The Indonesian government has brought the Bulusu' to these services, which are in fact very primitive (see Appell 1985c). As a result, the Rungus are healthier and more able to respond to development as education has opened up a number of opportunities.
Finally, the development of the Bulusu' was done in an authoritarian manner, while the Rungus have had more say about their political and economic futures. As a result they have been able to change development policies that were clearly inequitable and get government subsidies and services.

Notes

1. Field work among the Rungus Dusun of Sabah, Malaysia, was originally undertaken by myself and my wife in 1959-60 and 1961-63. This was done under the auspices of the Department of Anthropology and Sociology, Research School of Pacific Studies, the Australian National University, which also supported the preliminary write up of data. Additional analysis of our data for publication was supported by grants from the National Science Foundation (Grant CS-923), ACLS-SSRC, and the Halcyon Fund. Field work in the summer of 1986 to assess the impact of social change was done under the auspices of Halcyon Fund.

Research among the Bulusu' of East Kalimantan was undertaken in 1980-82 and supported by the National Science Foundation (Grant BNS-79-15343) and the Ford Foundation.

See Appell (1976, 1978) for a fuller description of the Rungus sociocultural system, and see Appell (1985b) for a discussion of the social change among the Rungus. See Appell (1983b, 1985a, 1985c) for a fuller discussion of the Bulusu' sociocultural system and the impact of social change.

2. For the terminology of this section, please see Appell (1983a, 1984)


NEWS AND ANNOUNCEMENTS

Female and Male in Borneo. The organized session submitted by the Borneo Research Council to the Program Committee of the American Anthropological Association for the Annual Meeting in Chicago has been approved.

The session is scheduled for November 21, from 8:00 AM to 12:30 PM, and will be followed by the Annual Meeting of the Council, place to be announced at the session. (A business session was not scheduled in the AAA Program because the Association requires a $100 fee to list such meetings.)

Names of participants and titles of papers are:

Vinson H. Sutlive, Jr.
Introduction
William M. Scheider
Cultural and Behavioral Differentiation of Male and Female Among the Selako Dayak of Western Borneo
Laura Appell and George Appell
Courtship and Marriage Among the Rungus
George Appell and Laura Appell
Courtship and Marriage Among the Bulusu
Herbert L. Whittier and Patricia Whittier
Male and Female in Kenyah Household Formation and Composition
Allen R. Maxwell
Kadayangan Women and Men (Through Men's Eyes)
Robert H. Reece
Chinese-Indigenous Marriages in Borneo
Richard C. Fidler
Sarawak Chinese Family Identity Changes
R. Allen Drake
The Religious Significance of Weaving Among the Ibanic Peoples
Peter Metcalf
Eroticism and Headhunting
Donald E. Brown
The Penis Pin in Borneo
Jay B. Crain
Anger and the Flesh of the House: Mengalong Lun Dayeh Cosmology as Argument About Babies, Bodies and Birds

THESIS AND RESEARCH PAPERS DEPOSITED IN THE SARAWAK MUSEUM REFERENCE LIBRARY

Following are thesis and research papers currently held in the Sarawak Museum Reference Library:

Asmah Haji Omar

Austin, Robert

Awang Hasmedi Awang Mois

Awang Hasmedi Awang Mois

Bhaludin bin Saleh
Beberapa bidang sintaksis dialek Melayu Sarawak. Ijazah sarjanamuda sastera dengan kepujian, Universiti Kebangsaan Malaysia, 1982/83.

Brenan, Astrid
Tribal art in Borneo and Sarawak. 3rd year graphics, Chelsea School of Art, London, 1975.

Brouwer, Joke and others
Fishing in Belawai subdistrict, Sarawak: a socio-economic study in three selected villages (Belawai, Rajang and Jerijeh) - preliminary report. Department of Geography of Developing Countries, University of Utrecht, February, 1984.
Bujang Mohammad
The cession of Sarawak to Great Britain 1946.
University of Malaya, Singapore, 1960.

Chan, Lily Lean Chooi

Chew, Daniel
Chinese pioneers on the Sarawak Frontier, 1841-1941.

Chia, Elizabeth Jin Lan

Chong, Chin Seng

Chu, Chi-Hung
Minority representation in the Malaysian Legislature.

Daane, Jon R. V.
Internal and external co-operation of Land Dayak villages.
Department of Rural Sociology of the Tropics and Sub-tropics, Agricultural University, Wageningen, The Netherlands, 1974.

Deegan, J. L.
Change among the Lun Bawang, a Borneo people.

Dixon, Gale
Rural settlement in Sarawak.

Fidler, R. C.
Kanowit: a bazaar town in Borneo.

Fortier, D.
Culture change among Chinese agricultural settlers in British North Borneo.

Friel-Simon, Veronica M.
A Malay case study of an extended family in rural-urban migration.

Gabriel, Gumis Humen
Native land tenure protection in Sarawak.

Gerawat, Gala
A legal history of Sarawak.

Gill, Sarah
Borneo masks: collected from various European and American Museums.

Gill, Sarah
A survey of Sarawak art.

Hasan Mat Nor
Beberapa masalah klasifikasi Etnik di kalangan kumpulan minoriti di Sarawak.
Ijazah Sarjana Sastera, Universiti Kebangsaan Malaysia, 1979.

Heppell, Michael
Iban social control: the infant and the adult.

Hoekstra, Mark
Fishing in Pusa Sub-District, Sarawak: a socio-economic study in three selected fishing villages - preliminary report.
Department of Geography of Developing Countries, Utrecht, March 1982.

Hoekstra, M. and others
Fishing in Sarawak, Malaysia: a socio-economic study in three selected villages in Pusa-subdistrict (Second Division), a Sarawak (East Malaysia).
Department of Geography of Developing Countries, Utrecht, 1983.

Holthuis, Egbert
Fishing in Mukah and Oya subdistricts, Sarawak: a socio-economic study in 9 selected villages - preliminary report.
Department of Geography of Developing Countries, Utrecht, February 1984.

Hong, Evelyn
Kenyah society in transition: a Baram case study.

Hudson, A.B.
Padju epat: the ethnography and social structure of a Ma'anjah Dajak group in South Eastern Borneo: 2 volumes.

Jamalulalam bin Shani
Penetangan tokoh-tokoh Nationalis terhadap kekuasaan British di Sarawak.
Universiti Sains Malaysia, 1979.

John, Fredrick Jolis George
Juna, Gramong
The territorial expansion of Sarawak under its First and Second White Rajahs. University of Malaya, 1970.

Kahti, Galis
Adat perkahwinan masyarakat Bisaya Sarawak. Ijazah sarjannamuda sastera dengan kepujian, Universiti Kebangsaan Malaysia, 1983/84.

Kedit, Peter Mulok

Kedit, Peter Mulok

Kedit, Peter Mulok

Kedit, Peter Mulok

Kedit, Peter Mulok

Kimball, Linda Amy

Kiu, Mee-Kuok

Komanyi, M.I.

Leh, Charles Moi Ung

Leh, Charles Moi Ung
The ecology of Sesarminae with special reference to the productivity of Chiromantes Onychophorum (De Man) and C. eumolpe (De Man) in a Malayan mangrove swamp. M.Sc. Thesis, University of Malaya, December 1982.

Leigh, Michael B.

Liang, Kim Bang

Lim, Jimmy

Lockard, Craig A.

Lockard, Craig, A.

Majed-lowe, Zuraina

Malaysian Armed Forces Staff College

Maria Hj. Salleh

Masing, James Jemut
Mercer, Christopher W. L.
Studies on the forest insects of Sarawak - a terminal report. 8 volumes. Forest Department, Sarawak, April 1982.

Metcalfe, Peter

Mohamed Aris Othman

Nurmalawi, Zaman

Ong, Edric Liang Bin

Padoch, Christine

Peranio, Roger D.

Pilz, Annemarie
Manangismus in Borneo. 2 volumes. Philosophischen Fakultat der Universität, Wien, 1975.

Porter, A. F.
The development of land administration in Sarawak from the rule of Rajah James Brooke to the present time (1841-1965). Land and Survey Department, Kuching, 1967.

Pringle, Robert M.

Quisumbing, Lourdes Reyes

Radcliffe, David James

Reece, Bob

Ritikos, Evelyn

Robert, Lian

Robless, C.

Rousseau, Jerome

Sanib Said

Saptuyah Timah

Sarawak Museum
Report No. 1
Survey on the attitudes of the affected people towards the project and resettlement.
Report No. 2
Population censuses of affected longhouses.
Report No. 3
Frequency and distribution of household composition and individual members background; health opinion survey and interviewer's remarks.
Report No. 4
Frequency and distribution of household composition and socio-economic background.
Report No. 5
Frequency and distribution of household composition and socio-economic background.
Report No. 7
Frequency and distribution of the attitudes on traditional customs and values.

Report No. 8
Frequency and distribution of attitudes on modern values and development.

Report No. 9
Frequency and distribution of dietary and cultural practices.

Schneider, William

Schwenk, R. L.

Schwenk, R. L.

Seeler, Joan Dewitt

Seymour, James Madison

Seymour, James Madison

Siti Zaharah Hussaini

Sormin, H. C.

Suaco, Ignacia L.

Sulaiman Sahari

Sutlive, V. H.

Tay, Choon Nong

Tazudin Mohtar

Topping, Donald M.

Uchibori, M.

Watson, Tungko ak. Entoi

Wee, Kim Peng
Squatters in Kuching (A case study on Attap Pah squatter settlement from socio-economic and demographic aspects). B.A. Thesis, Faculty of Arts and Social Science, University of Malaya, 1981.

Weinstock, Joseph Aaron

Wheeler, Richard

Whittier, H. L.

Wiesner, Joachim

Yahta, Talla
Yaman, Josephine

Yusoff bin Haji Hanifah

Zainah Tunku Ibrahim, Tunku

Zainal Kling

NEW ADDITIONS

Abdul Rahman Sebli Sanuai

Ang Mui-Hiang

Chin See Chung

Francis Oscar Eska Rebak
Kuching road traffic study.

Jacobus E. Frans L.
Usaha-usaha penyelesaian panegasan garis tapal batas antara Republik Indonesia dengan Malaysia di Wilayah Kalimantan adalah merupakan implementasi konsepsi wawasan nasantara yang utuh dan menyeluruh di tinjau dari hukum tata negara Republik Indonesia. Fakultas Hukum, Universitas Tanjungpura, 1983.

Jarmi @ Jaraiee bin Sawal

Justin Wan

Mashman, Valerie

Maxwell, Allen Richmond, Jr.

McKeown, Francis Alexander

Nainah bt. Said Talib

Victor Luna Amen & Surik ak. Jok
An ethnobotanical study of the Iban community of Pantu sub-district, Sri Aman, Second Division, Sarawak. Project Paper submitted in partial fulfillment of the requirement for Diploma in Forestry in the Faculty of Forestry, Universiti Pertanian Malaysia, 1985.

Kong, Caroline
The Sarawak Kenyah Sape.

Thomas Kanyan Siam

Yasir bin Abdul Rahman
SPECIAL SCIENCE DISSERTATIONS IN BORNEO

G. N. Appell has compiled a list of Social Science Dissertations by region, author and title, and, where available, University Microfilms International order number.

BORNEO, GENERAL

Sheehy, Richard James

Weinstock, Joseph Aaron

BRUNEI

Brown, Donald Edward

Kimball, Linda Amy
The Enculturation of Aggression in a Brunei Malay Village. Ph.D. 1975 The Ohio State University. 224 pages. UMI Order #BWH76-03472

Maxwell, Allen Richard, Jr.
Urang Darat. An Ethnographic Study of Kadayan of Labu Valley, Brunei. Ph.D. 1980 Yale University. 281 pages. UMI Order #KKA81-09805

MALAYSIAN BORNEO

Roff, Margaret Florence

Wu, William Shou-Chiang
Polycommunalism and Nativization: A Comparative Study of Bureaucratic Transition in Sarawak and Sabah. Ph.D. 1972 University of Toronto. (Microfilm copy may be obtained from the National Library of Canada at Ottawa.)

SABAH

Appell, George Nathan
The Nature of Social Groupings Among the Rungus Dusun of Sabah, Malaysia. Ph.D. 1965 The Australian National University.

Black, I. D.

Crain, Jay Bouton

Fortier, Davis H.
Culture Change Among Chinese Agricultural Settlers in British North Borneo. Ph.D. 1964 Columbia University. 245 pages. UMI Order #JOK65-07353

Harrison, Robert
An Analysis of the Variation Among Ranau Dusun Communities of Sabah, Malaysia. Ph.D. 1971 Columbia University. 565 pages. UMI Order #BWH74-12723

Nisperos, Nestor Martinez

Prentice, D. J.
Reynolds, John Keith

Sather, Clifford
Kinship and Domestic Relations Among the Bajau Laut of Northern Borneo. Ph.D. 1971 Harvard University.

Sin Fong Han

Taylor, Stuart Robson

Warren, James F.

SARAWAK

Asmah Haji Omar
The Iban Language of Sarawak: A Grammatical Description. Ph.D. London.

Austin, Robert F.

Austin, Robert F.

Blust, Robert A.

Chin, See Chung
Agriculture and Subsistence in a Lowland Rain Forest Kenyah Community (Volumes I & II). Ph.D. 1984 Yale University.

Cotter, Conrad Patrick

Court, Christopher
The Phonology of the Word in Mentu Land Dayak: A Descriptive and Typological Study. M.A. Sydney University.

Deegan, James Lewis

Dixon, Gale

Fidler, Richard Calvin

Freeman, J. D.

Gill, Sarah Hall Sharplees

Grijpstra, Bouwe G.

Heppell, Michael

Hess, Doris Elaine
Reading Motives, Interests and Habits of Rural Adult Iban Literates in Sarawak: A Study to Aid in Production of Printed Media. Ph.D. 1963 Syracuse University.

Jensen, Erik Henning
Iban Belief and Behavior. D.Phil. 1968/69 Oxford University.

Kiu, Mee Kuok
Kling, Zainal  

Komanyi, Margit Ilona  
**UMI Order #BWH73-08177**

Leigh, Michael Beckett  
**UMI Order #JOK71-17104**

Lockard, Craig Alan  
**UMI Order #JOK74-09009**

Masing, James Jemut  

Metcalf, Peter Allan  

Miller, David Alan  

Padoch, Christine  
**UMI Order #KKA79-08626**

Peranio, Roger D.  
**UMI Order #KKA77-17657**

Pringle, Robert Maxwell  
**UMI Order #JOK68-044636**

Reece, Robert Harold William  

Rousseau, Jerome  

Schneider, William Martin  
**UMI Order #BWH74-26934**

Schwenk, Richard Lloyd  
*Village and Regional Determinants of Family Innovativeness among the Rural Iban of Sarawak, Malaysia.* Ph.D. 1975 Cornell University.  
**UMI Order #76-12,891**

Seeler, Joan DeWitt  
*Kenyah Dance, Sarawak, Malaysia: A Description and Analysis.* M.A. 1975 University of Hawaii.

Seymour, James Madison  
*The Rural School and Rural Development Among the Iban of Sarawak, Malaysia.* Ph.D. 1972 Stanford University. 359 pages.  
**UMI Order #72-30,697**

Sutlive, Vinson Hutchins, Jr.  
**UMI Order #BH73-16345**

Tan, Christopher  
(Microfiche may be obtained from the Canadian Theses Division, National Library of Canada at Ottawa., fiche NO. 32183.)

Uchibori, Motomitsu  

Whittington, Patricia Ruth  
**UMI Order #PRY82-02535**
KALIMANTAN

Conley, William Wallace

Dove, Michael Roger

Drake, Richard Allen

Hoffman, Carl Lewis

Hudson, Alfred Bacon

King, Victor T.

Massing, Andreas
The Economics of Bride-Pride Payments with Data from Seven East Kalimantan Societies. MSc. in AgEconomics.

McKeown, Francis Alexander

Tsing, Anna Lowenhaupt

Ukur, Fridolin

Whittier, Patricia Ruth

Weinstock, Joseph Aaron

Whittier, Herbert Lincoln


Of the swidden agriculturists of Central Borneo, only the Modang remained relatively unstudied to date. Thus, this work is a first contribution to the knowledge of this group which displays a very particular social organisation and a great number of taboos (pli) as part of the rice cycle.

The Modang live in East Kalimantan whence they scattered from the Kejin tableland (Apo Kayan area) into different drainage Basins: Mahakam, Kelinjau, Telen-Wahau, Kelai-Segah, Lower Kayan during the XVIIIth century. Now they number approximately 6,000 (kabupaten
The dispersal of the sub-groups (Long Gelat, Long Bięh, Long Way, Wehēa, Menggāl) has given rise to cultural variations according to the economic and historical background of each area.

In the first part of the work, the natural environment and the location of neighbouring groups (Kenyah, Kayan, Bahau-Busang) are specified. The linguistic and historical ties since the beginning of the migratory process in the XVIIIth century between these ethnic groups and the Modang are examined briefly. The Modang are part of the Kayan linguistic group. Then the socio-economic frame of the province of East Kalimantan is explained, especially for the two study areas: Upper Mahakam (kecamatan Long Pahangai) and Upper Telen (kecamatan Muara Wahau rivers).

Some elements of material culture are presented in their broad outlines: the smithy, the tools, the wickerwork, etc. An insight on the swidden cultivation system and agricultural rituals of the Modang Wehēa (Telen-Wahau rivers), the sub-groups on which the study has concentrated is given. The thorough-going 'ritual technology' of the Wehēa allow them to adjust their society to the milieu.

The second part is devoted to the settlement patterns and housing complex in relation to social organization. This part begins with a typological study of the long house in Borneo, the main type of settlement. Chapter II describes in a progressive way the conceptualization of space, its concretization in practice by the Wehēa, with correlations at the level of kinship and social stratification. One notes that a set of opposed dyads and a three-fold division form an all-embracing classificatory system. Chapter III is concerned with the village of Ben Has on the Upper Telen, which has been retained as a study unit. A survey of the main buildings completes the description of the rules of space utilization including the long house (teisong min), the individual house (msowl), the paddy barn (pēa plaś) and the men's house (ewēng): the latter being a distinctive cultural feature of the Modang among the Kayan-Kenyah-Kajang complex of Central Borneo. Furthermore, the importance of residence (uxorilocal) in the Wehēa' bilateral kinship system is stressed and compared with the different forms of the household.

Chapter V tries to identify principles of social organization linked with the long house in the cognatic or bilateral societies of Borneo as well as with other societies in Southeast Asia (Mentawai, Temiar, Rhades [South-Vietnam]). In this perspective, the concepts of "house" and "house-based societies" advanced by Levi-Strauss are examined and analyzed in connection with the structural features of Bornean-type societies. It seems that the long house constitutes not only a cognatic kinship grouping, the "house owning-group" described by E. R. Leach, but also a kind of structure which reflects dialectical oppositions-consanguinity and descent, marriage alliance and residence-at work in the social system. Although the stratified and egalitarian societies share some basic characteristics, they represent distinct expressions of the "house" as an institution.

The conclusion presents a number of hypotheses pertaining to the spatial and social organization of the Wehēa village. These matters are discussed in a broader context of social inequality, following Louis Dumont's analysis. In this case, dualism is part of an hierarchical inclusion, based on the logic of differentiation. There are indications that in the past the parallel rows of houses or long houses (dyā' min and lon min) forming the two named moieties of the Wehēa village, may have known a kind of exogamy in a restricted matrimonial exchange system. This is supported by the fact that the two moieties are still functional at the time of sowing. Moreover, the Zafimaniry example (Madagascar) presented by Maurice Bloch shows that an exogamic moiety system can be associated with non-unilineal descent.

Another aspect of the Wehēa social structure, namely the segmentation process of the descent lines (sot) of the small aristocrats (hepuy só') stemming from the main lineage (waē) of the hepuy pwn (the ruling strata) is compared to the Kayan and Kenyah situation. This provides some explanations relating to the dispersal of the social units ('corporate groups') formed by the long houses in Central Borneo.

Population migration caused a heterogeneity of people (based on province of birth) in several areas of Indonesia. The distribution of lifetime migrations in several provinces in Indonesia can be detected from the 1971 and 1980 population censuses. In 1971, the destination of migrants was primarily Jakarta and Lampung. In 1980, the provinces of destination became more widespread. New destinations are, for example, East Kalimantan, Riau, Jambi, Bengkulu, Central Kalimantan, and Central Sulawesi, even though Jakarta and Lampung remain the primary destination of migrants.

LUDWIN, KLEMENS, Umsiedlungen in Indonesien: das Transmigrations programm in Indonesien, Pogrom Zeitschrift fur bedrohte Volker, 122 (1986). p. 39-42: photogr. Since the United States of Indonesia were integrated into the Republic of Indonesia, there have been numerous ethnic conflicts: i.e. regional rebellions; the incorporation of new territories (Irian Jaya and Timor Timur); and a transmigration programme which threatens the indigenous peoples of the outer islands. Kalimantan was only opened up in the late sixties. This was first accomplished by the American wood industry, and later by military-sponsored Indonesian companies. The Dayak, making up about half of Kalimantan’s population, were the first victims. The transmigration programmes increase the Dayaks’ plight, since they are either pushed back into ever less fertile areas or forced to assimilate.

PADOCH, CHRISTINE, Labor efficiency and intensity of land use in rice production: an example from Kalimantan. Human Ecology, Vol. 13, No. 3 (1985), p. 271-289; bibl. The Boserup hypothesis contends that land-intensive systems of agriculture will be adopted only when high population density precludes the use of land-extensive methods. In the Kerayan district of East Kalimantan the Lun Dayeh practice permanent-field rice cultivation despite very low human densities. An examination of the relative labour efficiencies of shifting and permanent-field agriculture in the Kerayan, as well as of local environmental and historical variables, explains why this "anomalous" situation exists. It is argued that, the "environment-free" Boserup hypothesis cannot adequately explain or predict the occurrence of particular forms of rice agriculture since relative success in production of rice by shifting- and permanent-field irrigated methods depends on many natural and social conditions other than levels of population density.

DOVE, MICHAEL R., Peasant versus government perception and use of the environment: a case-study of Banjarese ecology and river basin development in South Kalimantan, Journal of Southeast Asian Studies, Vol. 17, No. 1 (March 1986), p. 113-136, map. In the author's view, to the 'top-down' planning analysis should be added analyses of planners and agents of development. This paper applies this type of analysis to a single river basin in South Kalimantan (the Riam Kanan valley), to illustrate how and why development plans have failed and how these might be remedied. The report begins with a brief description of the research site and the hydro-electric project which has dominated development planning in the area for fifteen years. Subsequent sections contain an analysis of the impact of this project on two major agroecosystems in the study area: forest-based swidden agriculture, and grassland-based permanent field farming. For each area the peasant system is examined. Governmental policy in each area is discussed, including an analysis of the empirical basis (or lack of it) for these policies. The author concludes with an explanation of why governmental policy has failed to meet so many of its stated objectives, and, in particular, why their policies have triggered negative responses from the physical and social environment.

AZIDDIN, YUSTAN, Dari Musen ke BKKNl Kalsel: from the MUSEN to the BKKNl Kalsel. Indonesia Circle; No. 39 (March 1986), p. 31-38. This paper is an account of the history of the South Kalimantan Regional Arts Council from its inception to its merger with the new National Arts Co-ordinating Body in 1979. It begins with a description of the "Manikebu" group of artists, founded in Jakarta in 1963. This anti-communist group received support from local artists in South Kalimantan. In 1981, the central government in Jakarta took the initiative for the creation of the National Arts Co-ordinating Body. This organization also had its local branches in South Kalimantan. It existed alongside the
The provincial government considered the situation a waste of money, time and energy and asked the two organizations to merge into one co-ordinating body. This occurred in February 1985.


This thesis focuses on the functions and roles of two intermediate cities in resource frontier regions within an international economic system. Samarinda, the center of timber processing, and Balikpapan, the regional petroleum refining center, experienced rapid economic and demographic growth during the 1970's as they became centers of political and economic control over regional resources. A qualitative 'urban system' model is used to analyze urban changes catalyzed by the arrival of multi-national timber and petroleum corporations and the dominant role of the national government.

**BIBLIOGRAPHY**

*Allem, B. C. S. G.*

1983 Notes on the vegetation at a variety of habitats in Brunei. Brunei Mus. J. 5/3, 200-221. 2 fig., 10 pl. Forest formation types at various altitudes each with certain characteristic species.

*Argent, G. C. G.*


*Banks, E.*

1981 Mountain birds and plate tectonics. Brunei Mus. J. 5/1, 78-91. 2 maps. Occurrence of birds on mountains of Borneo with the forest biotopes, climate of Borneo and possible influence of the Ice Ages.

**Collins, N. M., J. D. Holloway, and J. Proctor**

1984 *Notes on the ascent and natural history of Gunung Api, a Limestone Mountain in Sarawak.* Sarawak Mus. J. n.s. 33:219-234. 2 fig., 1 map. In G. Mulu National Park: notes on flora and fauna; plant list; zonal vegetation types and dominants; the upper mountain zone (1200-1710 m) with Dacrydium, Leptospermum, Pandanus and Phyllocadus facies.

**Ko, Tee Hock**


1985 'A Note on Socioeconomic Indicators from Census data in Sarawak,' in Sarawak Gazette, Vol. CXI, No. 1493, Third Quarter Issue, October, pp. 4-11.
KO, Tee Hock

Naruhashi, N. and T. Sato
1983 A preliminary report on Rubus (Rosaceae) in Sabah, Malaysia. Tukar-Menukar 2, 9-33, 15 fig. and maps. 14 species.

Nishimura, N.

Rifai, M. A., K. Kramadibrata and T. Basuki
1985 The anamorph of Sarawakus succisus Rifai. Reinwardita 10, 265-270, 4 fig. Illustrated and detailed description of the conoidal state.

Solheim, Wilhelm G., Ill, Floyd Wheeler and Jane Allen-Wheeler

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 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 of 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 endeavors, conservation activities, and the practical application of research results.

Support for the activities of the Council comes from subscriptions to the Borneo Research Bulletin, Fellowship fees, and contributions. Contributions have played a significant part in the support of the Council, and they are always welcome.

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The privileges of Fellows include (1) participation in the organization and activities of the Council; (2) right to form committees of Fellows to deal with special research problems or interests; (3) support of the Council’s program of furthering research in the social, biological, and medical sciences in Borneo; (4) subscription to the Borneo Research Bulletin.

The Fellows of the Council serve as a pool of knowledge and expertise on Borneo matters which may be drawn upon to deal with specific problems both in the field of research and in the practical application of scientific knowledge.

Fellowship in the Council is by invitation, and enquiries are welcomed in this regard.

INFORMATION FOR AUTHORS

Research Notes: These should be concerned with a summary of research on a particular subject or geographical area; the results of recent research; a review of the literature; analyses of the state of research; and so forth. Research Notes differ from other contributions in that the material covered should be based on original research or the use of judgment, experience and personal knowledge on the part of the author in the preparation of the material so that an original conclusion is reached.

Brief Communications: These differ from the foregoing in that no original conclusions are drawn nor any data in consisting primarily of a statement of research intentions or a summary of news, either derived from private sources or summarized from items appearing in other places that may not be readily accessible to the readers of the Bulletin but which have an interest and relevance for them. They will be included with the contributor’s name in parentheses following the item to indicate the source. Summaries of news longer than one or two paragraphs will appear with the contributor’s name under the title and prefaced by “From”.

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 or 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 in which the contributor wishes them to appear rather than leaving this to the discretion of the Editor.

Working Papers: Research reports or papers exceeding 10 double-spaced pages will be published as Working Papers. Authors who submit such papers will be consulted by the Editor who, upon obtaining an author’s consent, will edit and process the paper for distribution by private order. A list of Working Papers, with the cost of each, will be included in each issue of the Bulletin.

All contributions should be sent to the Editor, Borneo Research Bulletin, c/o Department of Anthropology, 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 the 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 number 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.

Artwork is to be submitted in professionally prepared, camera-ready copy. Costs incurred by the Council in reproducing maps or illustrations will be charged to the author.

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