

# BORNEO RESEARCH BULLETIN

Vol. 3, No. 1

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Notes from the Editor: Special Issues BRB;  
Contributions Received;  
New Member of Board of Directors.

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- Carved design from Bajau boat.



regional, or ethnic groups mediated; and to what extent were these groups able to act independently of the paramount head of the state or his administrative representatives; and how were diverse ethnic groups incorporated into the state.

The contributors for this Special Issue to date include E. Casiño on the Jama Mapun; D. Brown on Brunei; I. Black on Sabah in the 19th century; J. R. Wortmann on Kutai; and C. Sather on the Bajau Laut.

Anyone else interested in contributing to this Special Issue should contact Dr. C. A. Sather, Department of Anthropology and Sociology, Vassar College, Poughkeepsie, New York 10921.

#### Ordinary Research Notes

It is also planned to publish as usual in these Special Issues other Research Notes that do not deal with the special topic being covered. These should be sent as in the past to the Editor of the BRB.

#### Future Special Issues

The Editor would welcome any suggestions from readers as to what topics or areas of research might be usefully covered in future Special Issues, and he would welcome as well volunteers for Guest Editor of such issues.

### CONTRIBUTIONS RECEIVED

As we have moved to a subscription basis, one of the most rewarding and encouraging experiences has been the unexpected contributions that have come in towards the costs of publishing the BRB. These will certainly help make the BRB the kind of publication the readers desire and enable it to cover developments in Borneo research more adequately. Such contributions are very greatly appreciated indeed, and on behalf of the Borneo Research Council, I would like to thank the following individuals for their kindness and thoughtfulness:

J. Ralph Audy; I. D. Black; British Museum (Natural History); John Elliot; Peter Goethals; Jack Golson; John Heimann; M. A. Jaspán; Ernest Le Vos; David W. McCredie; Alastair Morrison; John K. Musgrave; Rodney Needham; John Henry Pfifferling; Anthony J. N. Richards; the Rev. Gerard Rixhon; Margaret Roff; Jérôme Rousseau; Ronald G. Russell; Heather Strange; Peter Weldon, Leigh R. Wright; and James L. Deegan.

At this point I should add that we are now receiving so many interesting Research Notes that for lack of space under our current budget, we may have to forego temporarily publishing the list of

contents of Borneo journals. However, we will of course reinstitute this section as soon as our budget permits us to do so. In the meantime, I would welcome comments from readers as to what sections of the BRB they find the most useful or what areas we should perhaps cover in the future. I encourage those interested in Borneo research to let me please know what their thoughts are on the direction the BRB should take in the future to make it more responsive to the needs of the readers and more useful to those engaged in research or otherwise interested in Borneo.

Finally, we hope that by the means of subscriptions, supplemented by contributions, we shall have the BRB established in the next eighteen months on a sound financial footing so that it can provide a permanent service to those interested in Borneo research. Readers' thoughts and comments on the problems of financial planning for the BRB would also be very gratefully appreciated!

#### NEW MEMBER ELECTED TO THE BOARD OF DIRECTORS

The Board of Directors of the Borneo Research Council takes great pleasure in announcing the election of Professor Frederick L. Dunn, M.D., to the Board. Dr. Dunn is Professor of Epidemiology and Medical Anthropology, Department of International Health, University of California, San Francisco Medical Center; Chairman of the Graduate Group in Anthropology at the University of California, San Francisco; and a member of the Malaysian Project of the International Center for Medical Research and Training, Hooper Foundation, San Francisco Medical Center. His fields of interest include the epidemiology of parasitic diseases, medical anthropology, ecological-anthropology, and archaeology. He has carried out extensive field work in Malaysia including two years of field work among the Temuan of Malaya during which time he conducted ecological, medical-anthropological, and general ethnographic investigations. Two of his recent publications are: 1967, The Current Status of Ethnographic, Genetic, and Other Biomedical Research Among the Primitive Ethnic Groups of Southeast Asia, in P. T. Baker and J. S. Weiner (eds.), The Biology of Human Adaptability, Oxford, Clarendon Press; 1968, Epidemiological Factors: Health and Disease in Hunter-Gathers, in Richard B. Lee and Irven DeVore, Man the Hunter, Chicago, Aldine.

Dr. Dunn will bring to the Board coverage in the fields of both medicine and medical anthropology, which to date have not been sufficiently represented. His address is: Department of International Health, University of California, San Francisco, California 94122, U.S.A.

R E S E A R C H   N O T E S

MILESTONES IN THE HISTORY OF KUTAI, KALIMANTAN-TIMUR, BORNEO

J. R. Wortmann\*

Borneo is the first among the islands in the Indonesian Archipelago with a known history. In fact the oldest known inscriptions in the Archipelago were found in Kutailama in Kutai. These consist of four stone sacrificial poles (sanskrit: yupa) dating from about 400 A.D., on which in Pallawascript, metrical sanskrit, King Mulawarman's generosity towards the Brahmins is commemorated. King Mulawarman's father, Acwawarman, was the founder of the royal dynasty and it seems likely that the Brahmins referred to in the inscriptions were Agnihottrins, followers of the Veda, a branch of the Hinduism. (As a comparison it is worth noting that the oldest dated inscriptions in Java are only from the year 732 A.D.)

Subsequent to these inscriptions nothing is known about Kutai for nearly 1000 years. Then, in 1365, we find the name Kutai mentioned in the old-Javanese historical poem Nāgarakrtāgama, verse 14.I. It is also around this time that the saga-period of the Kutai-dynasty begins and the Kingdom of Kutai begins to take shape. The mythical origin and genealogy of this royal house are described in the Salasilah of Kutai. There are five known manuscripts of this genealogical register, which is written in literary Malay, showing traces of the language of Kutai and including Javanese words and phrases.

The original Salasilah was probably written, at least partly, during the reign of the eighth Sultan, Pangeran Sinum Pandji Mendaping Martapura, ca. 1600-1635. Kutai evolved most likely from the joining of four regions, Djahitan-Lajar, Hulu-Dusun, Sembaran and Binalu, presumably settlements of Hindu-Javanese. Especially after the introduction of Islam, ca. 1606 by Tuan Tungging Parangan, the Sultanate expanded more inland, annexating three small countries Markaman (on the Mahakam, 15 miles above Samarinda), Kota Bangun (near Markaman) and Pahu (37 miles above Samarinda). From that time on the Sultans of Kutai have borne the royal insignia of Kota Bangun.

The genealogical line of the Kutai dynasty begins with Batara Agung Maharadja Dewa Sakti as first Sultan of Kutai and ends with Adji Mohammed Parikesit, the 20th Sultan, who still lives at Tenggarong.

On November 7, 1635, Gerrit Thomassen Pool was the first Dutchman to sail up the river Mahakam. Kutai was again visited by Dutchmen in 1671 and 1673, but after that it had no further contact with

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\* This is a very brief synopsis of the history of Kutai that I am currently writing and intend to publish in an illustrated book.

the Dutch, although it was indirectly, via the Kingdom of Bandjermasin, tributary to the East-India Company. This remained however a dead letter because they did not live up to the contracts.

Samarinda was founded ca. 1730, and in 1825 the Dutch, in the person of Georg Müller, made their first direct contract with the Sultan of Kutai. This contract also did not last.

The first half of the 19th century brought to Kutai the presence of several English merchant-adventurers: Dalton, Murray, King, Carter, and Morgan. There was a busy trade at that time between Kutai and Singapore, and proas from Kutai took rattan, gutta-Percha and beeswax to Singapore and returned with, among other things, cotton, textiles, and arms. During the last quarter of the 19th century the Scotsman Gray played a role in the development of navigation on the Mahakam and also within the native Community of Samarinda. It was not until 1846 that Dutch rule was established with the arrival of H. von Dewall, first civil administrator of the east coast of Borneo. From that time on the Sultans of Kutai comported themselves as loyal vassals of the Dutch. This was especially obvious during the War of Bandjermasin (1859-1863). The extent of Dutch power was enhanced gradually through supplementary treaties.

In 1888 the mining-engineer J. H. Menten began, with the exploitation of coal along the Mahakam, the Steenkolen Maatschappij Oost-Borneo with its first mining venture at Batu Panggal, some miles up the river past Samarinda. Menten also laid the foundation for oil exploitation in East Borneo by leasing his concessions to Samuel & Co., of London, founder of the Shell Company. This is also the time of the abolition of slavery in Kutai (1895) and of Dr. A. W. Nieuwenhuis' famous expeditions across Borneo.

The first Roman Catholic mission was established at Laham in 1907. One year later Kutai ceded the district of Upper Mahakam to the Dutch government in exchange for a yearly compensation of 12,900 guilders "for the sultan and his princes of the Kingdom."

By the end of the 19th century trade and industry were being developed by small trading companies. But it was in the beginning of the 20th century that the economy of Kutai flourished as a result of the establishment of the Borneo-Sumatra Trade Co., with offices along the whole archipelago. In these years the capital of the "landschapskas," or regional treasury, grew at a steady pace through annual surplus. By 1924 the Kutai treasury held a reserve of 3,280,000 guilders--for those days a tremendous amount for this self-governing territory with a size of 45,190 square kilometers and a population of only ca. 179,000.

NEW RADIO-CARBON (C-14) DATES FROM BRUNEI

Tom Harrisson

Little work has been done on dating open sites or the metal age generally in Southeast Asia. This does present special difficulties, owing to rapid decay of exposed materials, flooding, contamination by roots, animal and later agricultural disturbance. Thus while there are many cave dates in Borneo--back 38,000 years in Sarawak and 10,000 in Sabah (T. & B. Harrisson 1971)--hitherto only the terminal phase at the extensive Santubong open sites in the Sarawak River delta has been determined by a single result: 1315 A.D. ( $\pm 95$  years; Harrisson & O'Connor 1969, 1970).

Through the cooperation and support of Pengeran Shariffuddin, Curator of the Brunei Museum, a series of fifteen C-14 dates have now been obtained from prehistoric vegetable materials at Kota Batu, Brunei's old capital, where they were excavated in 1952-53 (T. & B. Harrisson 1956). Kota Batu is extraordinary in that ancient cut wood, charcoal, dammar resin, coconut and other fruits remain well preserved in an acid deposit with a high water table.

These results will be reported in detail, with several necessary qualifications, elsewhere. Meanwhile, they do provide the first at all comprehensive picture of its kind, however inadequate. They also confirm the previous view that this is an exceptionally important site, with long human continuity. All other published metal age sites in this part of the world were occupied for shorter periods, with sharp interruption.

The basic information is summarized in the following table, which uses depths as a rough index, although clearly absolute depth is of itself no final standard under these conditions.

KOTA BATU, BRUNEI C-14 RESULTS  
--arranged by approximate age.\*

<u>Date</u> <u>(Approx.)</u>	<u>Material</u>	<u>Depth</u> <u>(inches)</u>	<u>Geochron Laboratories</u> <u>Serial No. (GX/-)</u>
B.C.			
95	Charcoal	72-78	1807
A.D.			
595	Charcoal & Wood	48-54	1802
605	Charcoal	66-72	1806

\* The last four and latest in the tabulated dates have been published and discussed in Brunei Museum Journal 2:186-197, 1970; the other eleven are here reported for the first time.

<u>Date</u> (Approx.)	<u>Material</u>	<u>Depth</u> (inches)	<u>Geochron Laboratories</u> <u>Serial No. (GX/-)</u>
690	Wood ( <u>Instia palembanica</u> )	84-90	1801
805	Wood ( <u>Instia palembanica</u> )	66-72	1799
820	Charcoal	72-78	1808
875	Wood and Charcoal	48-54	1803
940	Wood ( <u>Shorea</u> spp)	54-60	1798
1030	Wood & Charcoal	54-60	1805
1090	Ironwood ( <u>Eusideroxylon</u> )	78-84	1800
1300	Wood ( <u>Koompassia</u> )	54-60	1797
1300	Charcoal	24-30	1543
1415	Charcoal	24-30	1541
1695	Charcoal	24-30	1540
1815	Charcoal	24-30	1542

The sigma varies between  $\pm$  85 to  $\pm$  125 years. Further samples from sectors and materials not yet tested will bereported in due course.

Bibliography: Harrisson, Tom and Barbara, 1956, Kota Batu in Brunei, Sarawak Museum J. 7:283-319; Harrisson, Tom and Barbara, 1971, The Prehistory of Sabah, Kota Kinabalu, Sabah Society; Harrisson, Tom and S. J. O'Connor, 1969, Excavations of the Pre-historic Iron Industry in West Borneo, Southeast Asia Program, Ithaca, Cornell U., 2 vols.; Harrisson, Tom and S. J. O'Connor, 1970, Gold and Megalithic Activity in Prehistoric and Recent West Borneo, Southeast Asia Program, Ithaca, Cornell U.

#### THE ESTABLISHMENT OF A RESIDENCY IN BRUNEI 1881-1905\*

Colin Neil Crisswell  
University of Hong Kong

In granting a royal charter to the North Borneo Company in 1881 the British Government was strengthening its claim that northern

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\* The writer has recently submitted a Ph.D. thesis on this topic to the University of Hong Kong. His findings are outlined here-with.



Borneo was a British sphere of interest. This was another step in the process begun by the acquisition of Sarawak by James Brooke in 1841. The intention of the British Government was to exclude foreign powers from the area, for strategic and commercial reasons, while keeping its own direct involvement to the minimum. The sphere of influence policy did not prove sufficient to guarantee the exclusion of foreign powers. By 1885 the rapid colonial expansion of Germany and France and their policy of ignoring prior claims not backed by occupation or treaty had outmoded it. Moreover the establishment of a rival to Sarawak for the dominance of northern Borneo created new local problems. The area from Kimanis to the Sarawak frontier remained nominally under the rapidly weakening control of the Sultan of Brunei. Rajah Charles Brooke disliked chartered companies on principle and was inclined to regard Sarawak as the natural successor to the decadent sultanate. Accordingly, when the Company began to seek the extension of its territory southwards, he resolved to bring as much as possible of the Sultan's territory, south of the Padas, under the Sarawak flag. A bitter struggle ensued between the Company and Sarawak for the remains of Brunei. The instability of the area and the growing colonial rivalry between the powers led the British authorities to decide, in 1887, to establish protectorates in the three territories. There was no intention that Britain should assume responsibility for the internal administration of the protectorates, nor did the grant of protectorate status to Brunei mean that the British officials envisaged that the sultanate would survive for long. On the contrary, in order to end the feud between North Borneo and Sarawak and at the same time remove a possible source of international embarrassment, it was decided that Brunei should ultimately be divided between its two neighbors.

When this decision was taken the British officials did not consider that Brunei would make any serious effort to resist absorption. However Sultan Hasim, who had succeeded the senile Sultan Mumin in 1885, was a proud man who did not want to see the extinction of the ancient sultanate. His opposition to the absorption of his remaining territory became more determined, almost obsessive, when Britain accepted Rajah Brooke's annexation of the Limbang River in 1890. His efforts to retain what remained of the sultanate were regarded with some sympathy by the governors of the Straits Settlements who, after 1888, were also high commissioners for Borneo. Moreover the official attitude to North Borneo and Sarawak was changing. The North Borneo Company was never strong financially and by the mid-1890' it seemed probable that it would not survive for long. There had always been some doubt about the future of Sarawak after the death of elderly Rajah Charles, and opinion in the Colonial Office, which hitherto had favored the Brooke regime, began to regard Sarawak as an anachronism.

As early as 1887 Sir Frederick Weld, Governor of the Straits, had suggested that a residential system, similar to that in the Malay States of the peninsula, should be established in Brunei, but the question of finance had been the major obstacle. The changing attitude to the colonies, summed up by Chamberlain's vow to assist

the "undeveloped estates" of the empire, made this difficulty seem less insurmountable. In addition the discovery of oil and the existence of some other minerals in Brunei made it seem possible that a residency in the sultanate might be self-sufficient. The officials in London had accepted the opinion of the high commissioners that it would be unwise and unjust to force the Sultan, the ruler of a protected state, to cede his territory. Hasim maintained his obstinate opposition to further cessions to Sarawak, but at the same time conditions within the sultanate were becoming increasingly anarchical. Accordingly, in 1905 the Foreign and Colonial Offices agreed to install a resident. Sir Charles Lucas, Assistant Undersecretary at the Colonial Office, the principal advocate of a residency, saw this as the first step towards the creation of a British colony of northern Borneo which would consist of the residencies of Brunei, North Borneo and Sarawak.

Bibliography: The principal primary sources used were: C.O. 874/1-323, F.O. 12/50-130, C.O. 144/55-81, C.O. 145/1-3, C.O. 146/1-59, C.O. 573, F.O. 572/1-39, located at the P.R.O., London; and the Letter books of the 2nd and 3rd Rajahs and Sarawak District Reports 1881-1905 in the Sarawak Museum, Kuching.

#### BAJAU POTTERY-MAKING IN THE SEMPORNA DISTRICT

C. A. Sather  
Vassar College

In the June 1970 Bulletin the editor called attention to the scarcity of data describing the current provenance of native pottery-making in Sabah. In this regard, it is notable that pottery was--as of 1965--still being produced by local Bajau potters at Kampong Danawan in the Semporna District. To my knowledge the people of Danawan are the only villagers in the Semporna District who still engage in pottery-making. Their output is restricted exclusively to earthenware fireplaces or hearths called locally lapo'an. These hearths are similar to those described by Alman (1960:596) for Kota Belud and consist essentially of a box- or basin-like stove, open at the front to receive firewood, with three prongs at the top to support a metal cooking vessel, such as a kuali. My only knowledge of this pottery is based on the trade relations that existed between Danawan potters and the people of Kampong Bangau-Bangau with whom I lived in 1964-65. According to the Bangau-Bangau people, all Danawan hearths are made of river clay collected on the Semporna coast, although at least some firing is done on Danawan Island.

It is interesting to note that trade in pottery is part of a much wider network of inter-village commercial ties based partly on local specialization. Other items traded by means of this network, in addition to lapo'an, include fruit, boats, gravemarkers, kajang matting, sea products, and a wide variety of metal utensils, including knife blades, fish spears, harpoon heads, spatulas, and

coconut graters. Although it is possible to purchase some craft products directly from a producer's available stock, or from other owners, the supply of such goods is limited, owing to the part-time nature of craft production, and most local buyers find it advisable to enter directly into agreements with a particular craftsman--specifying in advance the quantity and type of item desired and agreeing to purchase the goods requested at a set price upon delivery. Most local goods are thus produced on order for specific buyers.

Craft production in the Semporna District appears to have diminished markedly during the last two or three decades. In addition, some items, especially metal work, are increasingly being marketed by local dry-goods shops, even though, in most cases, both producers and buyers are Bajau villagers. In the interest of assuring these people a supplemental source of incomes, as well as maintaining the viability of local craft production, the State Government might consider the possibility of establishing a market stall in Semporna town for craft products similar to those that currently exist for fish and local farm produce.

Bibliography: Alman, John, 1960, Bajau Pottery, Sarawak Museum J. 9:583-602.

#### BAJAU VILLAGES IN THE LESSER SUNDA ISLANDS, INDONESIA

C. A. Sather  
Vassar College

Professor James Fox, Department of Social Relations, Harvard University, reports the presence of two Bajau villages on the island of Roti in eastern Indonesia. These communities are of considerable interest, since geographically they are located further from the Sulu-Celebes center of Bajau settlement than any other villages yet reported in the ethnographic literature. The main Bajau settlement on Roti is located at Oe-Nggae, on the northeast coast, in the domain of Korbaffo. The second village is said to be situated at Cape Tongga on the far northwestern tip of the island. Professor Fox was unable to visit this latter settlement and is uncertain of its relation with the Oe-Nggae community. However, he was told that the village was once the larger of the two and that a number of Tongga people moved to east Roti in recent times, presumably to Oe-Nggae. Off the coast of west Roti, visible from Cape Tongga, is a tiny island called Ndao which has a separate non-Rotinese population. The Bajau figure prominently in Ndaonese folklore and historical traditions which describe the Ndaonese as waging war against Bajau raiders. Curiously enough, in light of these traditions, Oe-Nggae is near, and actually interpenetrated with, a Ndaonese settlement. According to Professor Fox, the two groups are quite distinct, although some intermarriage has occurred. Ndaonese assimilated over a generation or two to a Rotinese way of life; they speak Rotinese, tap trees, and wear Rotinese clothes; whereas the Bajau do not, but remain socially isolated and keep to themselves.

Recently Peter Hollinger, a former Harvard student, visited a Bajau burial island between Flores and Komodo where he photographed Bajau gravemarkers. Currently Professors Fox and Sather, with Mr. Hollinger's assistance, are preparing a brief report comparing these markers with those of the Semporna District of Sabah.

JAMES BROOKE AND BRITISH POLITICAL ACTIVITIES IN BORNEO AND SULU

1839-1868: LOCAL INFLUENCES ON THE DETERMINATION OF IMPERIAL POLICY\*

J. E. Ingleson  
Monash University

This study investigates the activities of James Brooke and local British officials in Borneo between 1839 and 1868, and it attempts to assess the relative importance of the influence of local interest groups on the modifications in Britain's Borneo policy in this period. It considers the establishment of Brooke in Sarawak and his development into the dominant ruler of the northwest Borneo coast, assisted by British naval forces.

The term "local interest groups" as used here comprises not only the local men, such as Brooke and the local British naval officers, who were active in the Borneo area, but also people working on Brooke's behalf in England and promoting his ideas to the British Government, the public, and organizations in Britain, such as the Chambers of Commerce, which had or hoped to have interest in the Borneo area. Thus, a broad distinction is made between local interests, comprising men on the spot and pressure groups in the Metropolitan country with interests in Borneo, and, on the other hand, the wider factors influencing British policy, the considerations of diplomatic rivalry, and naval strategy.

Brooke's attempts to make Sarawak a protectorate or a Crown Colony are discussed with particular emphasis on the methods used by him and his supporters in England. Attention is also focused on the activities of the local naval officers and, after 1846, of the Consuls-General in Borneo and the Governors of Labuan.

Although there was a gradual growth in Britain's involvement in the area throughout the thirty years of Brooke's presence in Sarawak, the Government modified its non-interventionist policy only reluctantly. This was largely because Britain's basic interest was not in Borneo itself but in the security of the China trade routes. While the British Government was determined to prevent other European nations acquiring territory on the northwest Borneo coast because it flanked these trade routes, it was

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\* This constitutes an abstract of Mr. Ingleson's M.A. thesis for the University of Western Australia.

equally determined not to be drawn into permanent commitments in Borneo which might eventually lead to annexation of the whole of the northern coast.

The main conclusions are that local interest groups were an important factor in the three significant modifications in Britain's Borneo policy: the appointment of a Consul-General to Borneo and the annexation of Labuan in 1846, the promise of naval protection to Sarawak in 1860, and the appointment of a Consul to Sarawak in 1863. Between 1839 and 1868 James Brooke laid the groundwork which led to the subsequent protectorates over Sarawak, Brunei and North Borneo in 1888.

#### HISTORY OF MISSIONARY ACTIVITY IN BORNEO: A BIBLIOGRAPHIC NOTE

Jay B. Crain  
Sacramento State College

Some of the most significant influences on the native populations of interior Borneo in the twentieth century have been the activities of Christian missionaries. While missionary activities, mission-inspired native churches, and educational systems and institutions are significant features of the social landscape of Borneo, little scholarly attention has been paid to them. Churches and societies which carry out these activities have left few records of their history, although the oral traditions of some interior peoples contain references to the impact of initial missionary contact.

One source I examined in the course of my Lun Dayeh research concerns the activities of the Christian and Missionary Alliance, an American evangelical group which has worked extensively in East and South Kalimantan. This group contributed notes and articles to The Pioneer, a missionary newsletter published by the Alliance Press in Wuchow, China. This began in November 1929 and was published two or three times a year up until 1945. It resumed after the war, but I have not seen these. The Pioneer succeeded The Borneo Pioneer (this only had two issues, written between July and November 1929).

The Pioneer was apparently published to provide Christian and Missionary Alliance congregations in the United States with an account of the progress of the mission (which was dependent upon donations). The general tenor of the writing is "evangelical."

Each issue contains a report of activities and the entire corpus, taken together, provides a good deal of information about the personnel and events of this mission's work in South and East Kalimantan during the period 1929-45.

In the various articles are descriptions of visits to regions and villages, baptism statistics, the initiation of religious and educational institutions, mention of the influential converts, etc. Even the sections not amenable to historical use gives us insight

into the ideas and personalities of such individuals as Fisk, Clench, Post, Presswood and Michelson--some of whom are folk heroes in inner Borneo and all of whom played a role in the transfiguration of native life in this area during this period.

Aside from the importance of such sources as The Pioneer for studying the very significant historical processes of culture change, they also provide cross dates as remembered temporal significata in some instances.

## REPORT ON ANTHROPOLOGICAL FIELD WORK AMONG THE

### LUN BAWANG (MURUT) PEOPLE OF SARAWAK

James L. Deegan  
University of Washington

Introductory. From November 1969 to November 1970 I conducted research among the Lun Bawang (Murut) people in the Lawas District of Sarawak.\* This is a brief summation of my research and the data collected.

Language. During the initial stages of research, language study was necessarily my most important project, and it remains an important part of the ongoing research. A Lun Bawang-English dictionary was constructed and to date it contains some 8,000 entries. These entries are marked in reference to the various texts in which they occur. An English-Lun Bawang dictionary was also made to facilitate my learning to speak and use the language. It is our hope, several Lun Bawang and myself, to eventually cooperate in the publication of these dictionaries under the auspices of the Borneo Literature Bureau. Out of necessity I have done an informal analysis of the grammar as well. Though I do not expect to publish this material by myself, it is my desire to work jointly with a linguist and eventually publish a grammar.\*\*

Census. I completed a sociocultural census of the entire Lun Bawang community in the Lawas Dammit Basin; it included eight village clusters with a total population of about 900. We, my two Lun Bawang assistants and myself, conducted a total of 166 interviews and gathered information on approximately 1600 people. While most of this information still needs to be processed, some

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\* I would like to express my gratitude for the Fulbright-Hays Fellowship, to the Wenner-Gren Foundation, and the Department of Anthropology, University of Washington for funding my field work.

\*\* The Borneo Evangelical Mission had previously worked out the Lun Bawang orthography, for which I was thankful, for publishing biblical materials in Lun Bawang. Two of their members have also published a phonemic analysis in the Sarawak Museum Journal.

things are readily apparent. First, the bulk of our interviewees (more than 80 percent) were either first or second generation migrants, principally from Kalimantan (Indonesian Borneo). This indicated that Lun Bawang presence in the valley is of a relatively recent date--a fact confirmed by the genealogies of the landholders and the agricultural pattern of the valley. The reasons for migrating out of the other areas is somewhat obscure, but is probably in part a result of pressure on the land. The Lawas Dammit Basin, on the other hand, is relatively lightly farmed. Another interesting observation that can be made is the relative stability of village association, while the building sites and structures are quite mobile indeed. While this may reflect current government policy, it probably also represents Lun Bawang tradition.

Oral Literature. There are many types of Lun Bawang oral literature, and I have divided them into four somewhat arbitrary categories, each composed of several more or less related types. With the exception of a very few of which I am aware, I have gotten extensive examples of all the types (or genre) of Lun Bawang oral literature; in some instances I have many examples. In total, I have accumulated perhaps fifty hours on tape, of which we have already transcribed perhaps fifteen hours. Adequate translation of these will require considerable time in the future. I have already sent for publication (to the Sarawak Museum Journal) an article on spirit chants which contains five Lun Bawang chants and their translation. I have also spent a great amount of time on comprehending the MUMUH--these are Lun Bawang mythological histories which take eight or more hours to tell and the telling is usually spread over three or more days. It is my wish to publish these with a translation and analysis sometime in the future. I have already arranged with the Borneo Literature Bureau to publish some LABA', or folk tales, and their translations sometime this year, if possible.

Ethnography. As most anthropologists, I tried to gather as much information as I could about all aspects of Lun Bawang society and culture. I was particularly interested in Lun Bawang cosmology and religious practices both before and after 1890. After further analysis of the oral literature, it is my intention to do a comparative analysis of early Lun Bawang beliefs and their conversion to Christianity. I have gathered extensive information on kinship terminology and genealogy using a system developed by Professor John Atkins of the University of Washington. It is my hope to publish this data sometime this year or next. I investigated the various economic activities, particularly agriculture and the relationship of economics to the socio-political networks among the Lun Bawang. This data will be the basis for my dissertation which will be concerned with analyzing changes in the social and political areas of Lun Bawang life which have occurred during the past 100 years.

SABAH TIMBER EXPORTS: 1950-1968\*

LOH Chee-Seng

Part I consists of an introduction to Sabah's timber exports--both saw-logs and sawn timber. In it the initial development of the timber industry is briefly traced to 1949.

In Part II, the patterns of growth in timber exports are presented with deeper analysis. In Chapter 1, we show how the distribution of timber exports changes from a Western geographic concentration in the 1950's towards an Asian market in the 1960's. For example, there was a rise in the coefficient of geographic concentration of timber exports to Japan from 32.8% in the 1950-59 period to 76.8% in 1960-68, whereas the coefficients for Australia, South Africa, the United Kingdom and United States have declined considerably. We also discuss the role of timber exports in Sabah's economy, indicating the progressive coefficient of the commodity concentration in Sabah external trade. A computation shows the trend: 7.1% in 1950 to 20.6% in 1955, 40.8% in 1960, 60.5% in 1965 and 77.3% in 1967/68. In addition, we compute the "competitive effect" of this commodity exports' performances, which indicate a declining ratio-effect, for instance, of 66.18% and 47.12% in the boom years of 1959 and 1960 down to 21.00% and 4.16% in 1967 and 1968, respectively.

In Chapter 2, we probe the issue of labor allocation and discover the slow growth rate in the agricultural sector compared to the commercial sector. We also point to the close correlation between increases in timber exports and the rise in timber workers' wages. Further, we obtain a finding that the average labor productivity is higher in the timber industry than in the rubber industry during the 1960-66 period using 1951 as base year in calculation.

In Chapter 3, we lay out the problems of a timber industry in a developing economy: the increasing indigenous ownership of saw-mills and the control of timber concessions at pace with economic nationalism; the tariff-barriers to manufactured wood products; the lack of wood-processing industries; and the constraints of a less-developed infrastructure. We also point out that the increasing freight rates have an anti-trade bias that divert market preferences. We even try to assess the ratio of value added in the timber industry, with a result of 0.34% - 0.40% value/capital ratio in 1963, comparable to a similar developing industry as in the Philippines which scored at 0.7%.

In Chapter 4, we take an excursion reviewing the patterns and trends of timber consumption in various regions to appraise the potential demand for timber.

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\* This is a summary of Mr. Loh's M.A. thesis for the University of London.



Lastly, in Part III, we look at the prospects for timber exports in Malaysia and compute a projection of the growth path of Sabah timber exports. The computation indicates that with a low growth rate Sabah will assume a decreasing share in Malaysian timber exports, from 48% in 1968 down to 45% in 1975, though the value of timber exports will increase from M\$334.6 million in 1968 to projected value of M\$925 million in 1975. With a higher growth rate Sabah will become a major contributor, assuming 60% of Malaysian timber exports with a projected value of M\$1,245 million by 1975. The trend indicates a dynamic growth path in future Sabah timber exports.

## SYSTEMS OF LAND TENURE IN BORNEO: A PROBLEM

### IN ECOLOGICAL DETERMINISM

G. N. Appell  
Brandeis University

In comparing the indigenous systems of land tenure of the Baleh Iban and the Bidayuh Land Dayak of Sarawak with the system of land tenure practiced by the Rungus of Sabah, I was struck by the possibility that the differences in these systems might be explainable in large part by differences in ecological factors. The hypothesis that I present here, however, is only tentative, and the problem it presents for ecological explanations of cultural phenomena is one that will have to be further investigated by agricultural scientists who can provide the basic ecological data.

First of all, residual rights over land in all three societies are held by the village as a jural entity. That is, only resident members of the village have the right to use village territory for the cultivation of their swiddens (i.e. their slash-and-burn fields). Nonresidents, thus, may not cut forest for swiddens without the permission of the village headman. Furthermore, in the indigenous systems of these three societies, land for cultivation was not particularly scarce.

The basic difference that exists between these three systems is that between permanent tenure and tenure of limited duration. In both the Baleh Iban and the Bidayuh Land Dayak, permanent use rights over land may be established by the clearing of primary forest. Among the Rungus, however, use rights are of limited duration. Thus, each year a Rungus domestic family cuts a new area of forest for its swidden, where it plants rice, maize, and frequently manioc as well as a variety of vegetables. In cutting this forest, however, the domestic family does not establish permanent use rights over the area but instead only uses that tract of land until the last of its crops are harvested. Where manioc has been planted, this may take several years. The area then reverts to jungle, and when the forest has grown to sufficient height, any resident family may recut the forest on that particular tract of land for its swidden. This ideally would be after ten or more years, but with the present

population pressures on the land the cycle is down in some places to seven years. Thus, after each agricultural season, the land within the Rungus village territory is redistributed among the resident domestic families for their use in the coming season. No domestic family because of earlier settlement in the community or for any other reasons has favored access to land for agricultural purposes.

The Baleh Iban, studied by Freeman (1955), however, use a different method of cultivation. They normally use a swidden for planting rice for two years in succession. In fact Freeman points out that a tract of land cleared of virgin forest may be cultivated three times in the first five or seven years following its initial clearing. And at a later period, when the forest has finally regenerated sufficiently, the land will again be put into a similar period of intensive cultivation.

However, in contrast to the Rungus, among the Baleh Iban permanent use rights for swiddens over a tract of land may be established by that domestic family (bilek family) which first clears the primary forest from it. These rights are held at least in theory in perpetuity by the domestic family, or until such time as it leaves the village community. Unlike the Rungus domestic family, the Iban bilek family is a jural entity that has an unlimited life. Among the Rungus, the domestic family has a limited jural existence that extends from its foundation by a newly married couple until they can no longer engage in agricultural activities, at which point they join the domestic family of one of their children. The Iban bilek family exists jurally in perpetuity through the process of incorporation of at least one child of the family and his or her spouse into the bilek family in each generation.

The Bidayuh Land Dayak, studied by Geddes (1954), are in many ways similar to the Iban. Permanent use rights are established over a tract of land by the act of clearing it of its primary forest. But these use rights are then inherited in severalty by all the descendents, both male and female, of the original cultivator. However, Geddes does not provide any data on the frequency of reuse of swidden areas after their initial clearing, although there is some indication that the Bidayuh domestic family cuts a swidden in a new area each year.

The critical factors in swidden cultivation, Freeman points out, are a good burning of the slash and the control of weed growth. In the Iban area, slash from virgin jungle is much less likely to produce a good burn, particularly under adverse weather conditions, while the slash from land in its second year of cultivation requires only the briefest period of dry weather for it to burn well. This factor of rainfall in swidden cultivation among the Iban, the Land Dayak and the Rungus is illustrated by Table One.

Table One: Rainfall Statistics

	<u>Rungus</u>	<u>Iban</u>	<u>Land Dayak</u>		<u>Rungus</u>	<u>Iban</u>	<u>Land Dayak</u>
Jan.	16.20	16.87	15.45	July	3.92	8.94	8.61
Feb.	7.80	12.07	12.83	Aug.	4.25	9.57	7.30
March	7.54	13.28	12.08	Sept.	4.79	11.83	11.86
April	5.31	12.54	12.86	Oct.	6.61	13.64	12.79
May	5.80	13.40	8.49	Nov.	6.99	11.72	12.55
June	5.69	8.36	7.17	Dec.	16.15	13.36	10.61
Total:					90.05	145.58	132.60

Stations: Rungus: Langkon Estate; Iban: Kapit; Land Dayak: Tabakang.

Thus, the similarity in rainfall between the Iban region and the Land Dayak region suggests that the Land Dayak, like the Iban, would also have difficulty in achieving a good burn of slash from primary forest and might therefore also find value in land growing back into secondary forest.

But in addition to the climatic factor there is also the edaphic factor. Unfortunately, I have no data available on the comparative fertility of the soils of these three regions, but from the geological information available, it would appear that the Rungus area is characterized by more sandy soil than either the Iban or the Land Dayak areas. This certainly needs further research by agricultural scientists. However, at present, I would hypothesize that the increased rainfall in the Sarawak areas in conjunction with more productive soil tends to encourage the regeneration of tree species in a swidden and discourage the growth of weeds in comparison to the Rungus area. Thus, because of fewer weeds invading the swidden after the first year's harvest; and because young forest has a better chance for a good burn than primary forest in the Iban and Land Dayak areas, there is greater economic value in secondary forest which results in the development of permanent use rights over swidden areas.

Among the Rungus, on the other hand, the problem of achieving a good burn is not as great with the amount of rainfall in their area. In fact, they are concerned with the problem of escaping swidden fires and the destruction that they cause. Also, I suspect that the poorer soils and less rainfall result in more weeds after the initial cultivation of a tract of land and result in a longer period of time for the forest to regenerate sufficiently to make it worthwhile to recultivate any given area. There would thus appear to be much less economic benefit in returning to a tract of land formerly cleared until a considerable time had elapsed. Thus, the development of permanent use rights over land might be inhibited by this extended

period between profitable recultivation, and the Rungus method of redistribution of land after each agricultural season among the resident domestic families may instead have had an adaptive advantage in their drier and less fertile environment.

Finally, while I have posed this problem as one of ecological determination for the organization of data and research interest, I would like to make it clear that my own view is that ecological factors can only set limits within which cultural phenomena may develop. Each society then develops its own solution to the problems posed by the environment within these limits. Thus, in response to the problem posed by the immediate economic value of secondary forest arising from conditions of soil and climate in the Sarawak region, the Land Dayak developed the solution of devolving use rights on all descendants of the original cultivator; while the Iban developed the solution of corporate, perpetual social groupings of the domestic family.

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## B R I E F C O M M U N I C A T I O N S

### RESPONSIBILITY IN BIOLOGICAL FIELD WORK\*

As many nations have begun to show concern for their biotas, they have been stimulated to establish stringent restrictions on

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\* At a recent meeting of Directors of Systematic Collections (a group of U.S. and Canadian scientists) responsibilities in biological field work were discussed and guidelines drawn up. In the hope that this would be of interest to the BRB readers, the Editor asked Dr. Hairston, Director, Museum of Zoology, University of Michigan, for permission to publish the results of this meeting. In passing I would like to note that the increasing international concern in both the social and biological sciences over the ethics of scientific inquiry and the responsibilities of investigators seems to me to presage a new era of vigorous and productive scientific inquiry on the basis of international cooperation and to the benefit of all countries. I would welcome further discussions on these matters.

collecting. Much of the stimulus has come from a few collectors, most of whom are taking specimens commercially or for personal collections. In order to counteract the impression that most field scientists are irresponsible, the following Guidelines for Biological Field Studies have been prepared. Up to the present, the guidelines have been signed by the responsible officers of 29 institutions. We hope that this voluntary statement will reassure the authorities of all countries that representatives of our institutions will conduct themselves according to the highest standards of responsible scientific behavior while making collections and carrying out field studies. Other institutions with systematic collections are urged to endorse the guidelines. Copies may be obtained from Dr. Nelson G. Hairston, Museum of Zoology, The University of Michigan, Ann Arbor, Michigan 48104, who has custody of the signed copies.

Guidelines for Biological Field Studies

PREAMBLE: Organisms, habitat types, climate, and biological principles are not limited by political boundaries. Many systematic and environmental biological research programs, of necessity, become international, cooperative undertakings. The following guidelines are intended to foster this cooperation. Anthropological and archaeological studies, which may require other and different guidelines, are specifically excluded.

Section I. Each signatory institution shall:

1. accept responsibility for the professional actions related to these guidelines of those who engage in field research under its sponsorship.
2. accept the responsibility to protect and preserve scientifically valuable collections and other data deposited with it.
3. make collections and data deposited with it accessible to all qualified scientists, subject to normal restrictions required for the protection and scientific use of the collections.

Section II. Guest scientists will:

1. correspond with the appropriate scientific and other authorities in the host country, informing them of the proposed research and personnel involved in ample time to permit the development of effective cooperation.
2. include in their programs the training of qualified students and young scientists of the host country when practical and mutually desirable.
3. respect the laws and regulations of the host country, and make an effort to be knowledgeable concerning these laws and regulations.

4. collect only enough specimens to satisfy reasonable scientific requirements, including limited distribution to other systematic centers, but never for commercial purposes.

5. notify host scientists and/or other authorities in the host country of results of the expeditions or investigations by means of reports, copies of publications, and any other appropriate scientific information as soon as is practical.

6. share with scientists of the host country the results of the cooperative field studies by division of collections and by publication of research results in media accessible to scientists of both countries.

7. deposit types in accordance with the International Codes of Botanical and Zoological Nomenclature.

Section III. Host countries are encouraged to:

1. enforce and extend conservation laws, particularly those relevant to protection of rare and endangered species.

2. provide adequate mechanisms by which scientists can obtain permission to conduct studies and collect specimens.

3. make information on pertinent legislation available to guest scientists.

4. extend all appropriate assistance and cooperation to scientists representing the signatory institutions.

THEREFORE, in order to advance man's knowledge of his environment, and in the spirit of the true sharing in the tasks of study and documentation of the natural history of the world, I           (responsible officer), signify the intent of           (institution) to adhere to the foregoing principles and guidelines.

Partial List of Institutions Ascribing to Guidelines for Biological Field Studies. The Museum, Michigan State University; University Herbarium, University of California, Berkeley; National Museum of Natural History, Smithsonian Institution; Peabody Museum of Natural History, Yale University; Bernice P. Bishop Museum; Museum of Zoology, The University of Michigan; Arnold Arboretum, Harvard University; California Academy of Sciences; Museum of Comparative Zoology, Harvard University; Mammal Research Unit, University of Pretoria; Smithsonian Tropical Research Institute; Carnegie Museum; The American Museum of Natural History; Museum of Vertebrate Zoology, University of California, Berkeley; The Academy of Natural Sciences of Philadelphia; Gray Herbarium, Harvard University; The New York Botanical Garden; Field Museum of Natural History; Royal Botanical Gardens, Surrey, England; Plant Research Institute, Canada Department of Agriculture; and Ecology Division, New Zealand Department of Scientific and Industrial Research.













































