

# EXOTIC ANIMAL PRODUCTS AND CHINESE TRADE WITH BORNEO

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## Summary

The paper will describe trade contacts between China and Borneo and then examine three consequences for the indigenous societies of Borneo. The first is the manner in which the trade items became incorporated into some of the indigenous societies as prestige property, and the second the means by which a symbiotic relationship was established in the northern part of Sarawak between the hunter-gatherer collectors of jungle produce and the farming societies which traded with the Chinese. The hunter-gatherers rarely met the Chinese themselves, they exchanged their jungle products with the settled societies for salt, tobacco and cloth. The two types of society maintained a long term association, in which each accepted the autonomy of the other, but where there was no marked tendency for the hunter-gatherers to adopt farming. The third aspect to be considered is the part played by this trade in the process whereby another group, the Iban did adopt farming.

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## Key Words

China, Borneo, Trade, Iban, Exotics

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## Introduction

Early contacts between China and Borneo may well date from the end of the first millennium B.C. Archaeological evidence in Borneo indicates trade with China from the eleventh century A.D. and tribute in exotic items is certainly clearly recorded in Chinese sources dating from the early fifteenth century A.D. The Chinese sought a variety of jungle products : gums, camphor and in particular certain parts of exotic animals. These included monkey gall stones, hornbill and rhinoceros ivory, colourful feathers, turtle eggs and the edible nests of cave swiftlets. In return they brought jars and beads which became incorporated as prestige property into the indigenous societies.

The paper will firstly describe this trade and then examine three consequences of it for the indigenous

## Résumé

Produits exotiques d'origine animale et commerce chinois avec Bornéo.

Cet article décrit les relations commerciales entre la Chine et Bornéo et en examine trois conséquences pour les sociétés indigènes de Bornéo. La première est la manière dont les marchandises sont intégrées, par certaines de ces sociétés indigènes, comme bien de prestige; la seconde concerne les modalités d'établissement d'une relation symbiotique, dans le Nord de Sarawak, entre les chasseurs-collecteurs de la jungle et les sociétés agro-pastorales commerçant avec la Chine. Les chasseurs-collecteurs ont rarement traité directement avec les Chinois; ils ont échangé les produits de la jungle avec les sociétés sédentaires contre du sel, du tabac et des vêtements. Les deux types de société ont maintenu une association à long terme, au sein de laquelle chacune acceptait l'autonomie de l'autre, sans qu'il y ait de tendance, de la part des chasseurs-cueilleurs, à adopter une économie agro-pastorale. Le troisième aspect envisagé est le rôle tenu par ce commerce dans le processus par lequel un autre groupe, les Iban, a adopté l'agro-pastoralisme.

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## Mots clés

Chine, Bornéo, Commerce, Iban, Produits exotiques

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expansionist, aggressive society which developed in a manner in which many former hunter-gatherers became incorporated. New areas of primary forest were cleared and planted with rice. In the time between the planting and the harvest, and after the harvest, young men went to other parts of Sarawak, working to collect jungle produce which they traded for jars and beads, and engaging in head-hunting and warfare with those groups which opposed their expansion.

## Chinese influence in the ethnic art of Borneo

It has been argued that early contact between China and the indigenous societies of Borneo had a powerful effect in the stimulation of certain designs and motifs in the art of these Borneo societies. Audrey McBAIN (1981) argues that a number of Borneo designs seem to relate to Western Chou (eleventh century to 770 BC) and even Shang (sixteenth to eleventh century BC). McBain does not attempt to speculate on the manner in which the relationship came about, but rather her emphasis is on an analysis of the similarities of style, detail and conception.

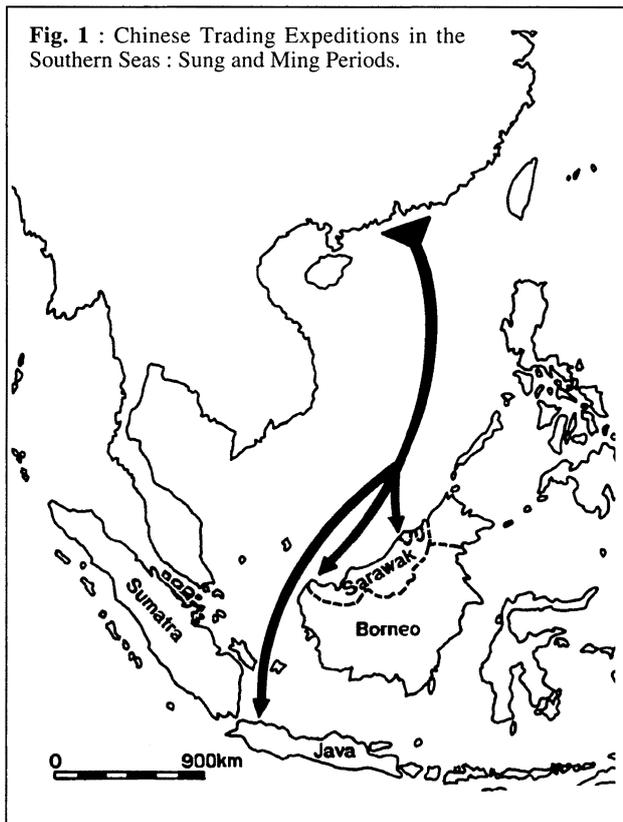
The main similarities are to be found in the creations of monstrous animals through the common use of a central exaggerated eye, with the main body parts detached and arranged geometrically around the eye. The background is filled in with small spirals. Pairs of such in both areas are found joined together to form a single mask design (fig. 2). For the Shang these have been described as “a kind of one-legged tiger with a large eye and ear, and a curling nose” (WATSON, 1974). In the Borneo societies such designs are often referred to as dog designs although there are references in oral accounts that indicate it “is not a dog but an animal now extinct...that lived in the jungle, was very big and ate people”.

The purpose of this discussion is not to push back as far as possible the earliest dates for contact between the two societies, but rather to show possible common ideas around which the later trading relationship developed. To the Chinese the lives of people in the Borneo societies appeared to be closely bound up with the forests and exotic animals. From the Chinese the Borneo societies obtained jars which frequently depicted mythical animals.

## Chinese trade with Borneo

It is not my purpose here to examine this trade in detail ; rather I wish to consider some of its consequences for the peoples of Borneo. From archaeological evidence (CHENG TE-K'UN, 1969) we assume this trade to be well established by the eleventh century A.D. Ships from China passed through the South China sea en route to Java, Sumatra (McKINNON, 1977) and Peninsular Malaysia.

In China during the Southern Sung period (1127-1270) there was an expansion in maritime trade and a development of China's eastern coastal ports. There was in China at this time a change in orientation towards the outside world which moved away from the north-west corridor to Central Asia in favour of the South East Asian and Indian maritime trade (fig. 1). There were improvements in navigation which enabled huge sea going junks carrying hundreds of men to sail with the monsoons as far as the eastern coast of Africa. Chinese exports included metals, silks, and porcelain (celadon and white glazed wares were a major export item at this time) and imports were largely luxury items, gems, spices, ivory and fine woods. Within China the expansion of a money economy stimulated the growth of a domestic market which increased the production of ceramics and widened the market for the luxury items



obtained through the overseas trade in ceramics. Many of the early Sung, Yueh and white ware ceramics survive amongst the Melanau, one of the coastal peoples of Sarawak, and have been excavated in archaeological sites in the Sarawak river delta. Small jars and plates from the later Sung and early Ming periods are found amongst the interior peoples, but are particularly concentrated amongst the Melanau who value them highly. These green wares, or Lung Chuan celadons, were produced on a large scale for export to the Middle East and South-East Asia (CHIN, 1988a) in specially constructed kilns which enabled large quantities of ceramics to be produced in a single high temperature firing (approx. 1200 C). Attempts were made during this period to produce a glaze which resembled jade.

Chinese trading expeditions continued into the Ming period 1368-1644 but had waned by the sixteenth century, although through Chinese emigration to the southern seas a sea faring and trading population was established and maintained. The famous voyages by the eunuch Admiral Cheng Ho in the early fifteenth century marked the culmination of an epoch in Chinese trade. After this period Arab, Portuguese, Dutch and finally British traders came to dominate what had been China's Southern Seas. The ceramics found in Borneo indicate that the trade undoubtedly continued, albeit in a different form.

Within the Ming period exotic animals were a major item of tribute from the southern empire. An ambassador from Egypt brought lions, tigers, oryxes, zebras and ostriches for the Celestial Zoo (HOOKHAM, 1969). HARRISON (1956) argues that it may have been in this period that large quantities of rhinoceros "horn" were taken to China, although the product was known in China before this time (SCHAFER, 1967). Harrison notes the lack of rhinoceros trophies amongst the interior peoples but stresses the great value these people attach to Chinese ceramics of the middle and late Ming, many of which he argues, must have been obtained through the trade of rhino horn. He suggests that "although edible nests must now be the most costly food, by weight, in the world, and although *ho-ting* (hornbill ivory) was once more valued than ivory or jade, the rhino was the Borneo equivalent of a great diamond in Africa or a gold nugget in Australia'. Rhinos were until recent times fairly common in Upland Borneo. The curator of the Sarawak Museum in 1931 reported that thirty six rhinoceros trophies had recently been traded in Belaga (an inland town on the Rejang river). (Quoted in HARRISON, 1956 : 265).



Fig. 2 : Animal designs in Chinese and Borneo art.

- A. A "monster" design on the handle of a bronze vessel of the Shang Dynasty of China.
- B. A Kayan (Central Borneo) tattoo based on a "dog" design.
- C. These "dog" designs are paired to form the "monster" mask painted on to a Kayan war shield.

(Drawings by Deborah Miles)

HARRISON (1951) suggests that the Chinese first realised the potentialities of hornbill ivory after seeing it used as ear ornaments by some of the lowland peoples of Borneo. These peoples do not work the ivory themselves, but rather obtain it from upland peoples who are the craftsmen, although not the hunters. The hunters are mainly the Penan and Punan hunter gatherers.

The source is the Helmeted Hornbill, *Rhinoplax vigil* and one of its attractions is its colour, yellow in the centre with reddish sides. CAMMANN (1951) argues that Chinese words for this ivory, *ho-ting*, are derived

from the Malay term for it, *gading*. He suggests that whilst the pronunciation of both words in Mandarin is almost identical, the characters used for its transcription were *ho* meaning crane and *ting*, crest. This led to the confusion in both Chinese and European accounts that these Chinese objects were derived from crane crests rather than Bornean hornbill.

Cammann suggests that the first mention of *ho-ting* in Chinese records dates from 1371 when the first Sultan of Brunei sent hornbill ivory as one of his tribute gifts. By the end of the Ming (1644) Chinese merchants from Kwangtung and Fukien were buying the ivory directly from Borneo and Malaya. The Ming tribute regulations indicate its high value : a single piece, weighing at most a few ounces, was worth twice as much as a pound of elephant ivory. It was used to make the belt facings and buckles which indicated the rank of officials, for thumb guards for archers and for the plume holders for the peacock feather awards of merit worn by Manchu officials.

## Animal products in chinese medicine

The information on modern Chinese medicine in Borneo which is included in this section was collected during fieldwork in Sarawak and Brunei in 1989. Approximately one third of the present population of Sarawak are Chinese. The majority of this population is descended from migrants from China who work as traders, farmers and fishermen. Many adhere to traditional Chinese religions and culture and for these people Chinese medicines are still popular. Those sections of the Chinese population employed by the Government Bureaucracy would tend, at least in the first instance, to use western medicines.

There were in 1989 in Carpenter Street in Kuching at least five shops selling Chinese medicines made from various animal products. The edible nests of the cave swiftlet (the base ingredient of birds' nest soup) is the most common. Birds' nests as a medicine are taken for a number of respiratory conditions, particularly coughs and catarrh. It was sold in 1989 for M\$85 (c. £21) per kati (600gm). The main source of the medicinal birds' nest in Kuching was said to be the caves at Bau, some twenty miles away. There are also caves at Niah in the north of Sarawak where birds' nests have been collected on a massive scale for sale to Chinese traders (SMYTHIES, 1960).

The collectors are largely Punan ; the ancestors of this particular group would presumably once have been

nomadic forest dwellers, although for many generations they have been settled and now are converted to Islam. Attempts are made by the Government to control collecting in order to protect the swiftlets ; licences to collect from March to April and from August to September are issued to a limited number of collectors. Two main grades of nest are recognised, red which is purchased by traders in Pankalang Lobang at Niah for M\$200-300 (£50) per kilo and white for M\$400 (£100) per kilo. In 1989 no licences were issued and a three year ban was imposed because of a serious depletion of the swiftlets. In 1969 huge flocks of swiftlets were seen flying into the caves at dusk ; such flocks were absent in 1989. However, despite the Government ban, the nests were still being collected, not by the licensed collectors, but rather by immigrant workers from Indonesia who found birds nest collecting more profitable than their legitimate work on the oil palm estates, some forty miles from the caves. These collectors placed themselves in great danger, not being familiar with the caves or the techniques of collecting. Twenty deaths had been recorded in the first eight months of 1989, after collectors had fallen from the fragile poles, hundreds of feet high, on which they balance while they dislodge the nests. Despite the ban, and the Police Field Force operation to deter the illicit collection of nests, there were apparently still opportunities to sell birds' nests in the small nearby town of Batu Niah. The licensed collectors were obtaining their livelihood from the collection of guano - bird and bat droppings - from the floor of the caves. This is also controlled by licenses ; Licence A enables the collectors to sell to the official agent at Pankalang Lobang and Licence B permits collection for the collector's own use, to fertilise crops of pepper and cocoa. Guano collection is certainly less dangerous than nesting, but it is much harder work and also less profitable. Three or four round trips of eight kilometres each can be made a day, in which sacks of guano are carried from the caves on a plank- walk and sold for M\$12 (£3) per sack to the official collectors.

It is ironic that most of the animal products used for Chinese medicines now on sale in Sarawak come from China. Most of these are used in the treatment of Sarawak's Chinese population, although sometimes the direction of the earlier trade is completely reversed and the indigenous peoples of Sarawak are treated with animal medicines from China.

A number of these medicines are still widely available. Pairs of dried lizards, one male and one female, stretched on wood, hang on display in the

Carpenter Street pharmacies. They sell for M\$18 (£4.50) per pair and are boiled and the resulting soup taken for kidney ailments. Dried frogs, snakes, seahorses and sea dragons are also similarly prepared, sometimes with the addition of certain herbs and are said to be good for a number of skin complaints. Deer horn is said to be effective in the treatment of kidney complaints and back pain ; rhinoceros horn reduces body temperature and consequently is used in the treatment of a variety of fevers. The pharmacists prepare the horn for customers by making shavings with a sharp knife. The resulting material looks rather like wood straw, it is weighed, and in the case of rhinoceros horn, sold for M\$100 (£25.00) per tahl (36gms).

A further medicine, apparently still available, but only on receipt of a firm order is a preparation derived from the gall stones (*bezoar*) of monkeys, in especially the red langur (*Semnopithecus rubicundus*). On receipt of such an order the pharmacist would use his inland contacts to obtain a suitable stone. In 1989 the cost of even the smallest stone would have been \$400 to \$500 (about £100). Monkey gall stones are thought to be efficacious in the treatment of cancers. Bezoar are also highly valued as magical charms amongst the native peoples of South East Asia (GIMLETTER, 1929).

In one shop in Bandar Seri Begawan, Brunei, visited in 1989, a number of animal medicines were sold. Most of the descriptions of the appropriateness of the various animal products tallied with the accounts obtained in Kuching. The one exception was that monkey gall stones were said to be recommended in the treatment of a variety of lung diseases, although it was emphasised that these could no longer be obtained in Brunei. It was interesting, though probably no more than coincidental, that one of the people who worked in this Brunei pharmacy was a Sarawakian ; he had migrated from Serian, a small inland town about 40 miles from Kuching.

A number of fossil species have been observed in Chinese drug stores ; in some cases the presence of certain fossils in various parts of S.E. Asia led to considerable confusion, before it was appreciated that they had been imported from China. A number of brachiopod fossils from Central China were reported by G.H.R. von KOENIGSWALD (1958) as abundant in Kuching's Chinese drugstores and purchased as a medicine against eye diseases. He also describes a number of fossils sold as "dragons teeth", these include the fossil teeth of horses, rhinoceros, giraffes, antelopes and pigs. Von Koenigswald argues that for at least the last hundred years these were always imported from

China, although some writers (HANBURY, 1976) have suggested that certain caves in Borneo were extensively worked for teeth for the Chinese market.

There is some evidence from the excavations at Niah that rhinoceros and pig teeth may have been valued as charms two thousand years ago. No rhinoceros bone as food remains was reported by MEDWAY (1958) but eight fragments of teeth were identified, one of which was clearly associated with a burial, and one possibly.

## The incorporation in jars and beads into indigenous cultures in Borneo

The items which the Chinese brought mainly to the coastal areas of Borneo have become incorporated as prestige property into most of the settled societies of the northern half of Borneo. CHIN (1988b) describes the manner in which beads and jars, called *pesaka* in some of the local languages, have been traded into Central Borneo. Such wealth is usually prominently displayed and is the accepted measure of the wealth and status of the families who make the display.

The Melanau use the word *meligun* to describe the celadon ware (NOAKES, 1949). The celadon ware items were thought to bring good fortune to the families which possessed them and it was considered bad luck to disperse them. They were used as containers of valuables and were used in marriage ceremonies, although were not a part of the bride wealth. Ethnographic records of the bride wealth for the highest ranking girls (NOAKES, 1949) show it to have been a quantity of gold on a *Meluku* plate (Ming Dynasty blue and white ware dish), covered with a silk cloth.

Beads are of particular significance to the highly stratified interior upland peoples, such as the Kelabit, Kayan and Kenyah. They served as currency, were exchanged on marriage and were used as grave goods in the burial of aristocrats. They are worn by both women and men and serve as a ready indicator of status. Chin describes the manner in which certain beads, known as *Lukut Sekala*, have a value acknowledged as the equivalent of an adult male slave.

Jars too have agreed values within indigenous cultures, and again are widely distributed throughout the farming societies of the interior. They are particularly valued by some of the more egalitarian societies, such as the Iban, where they were the object of long distance expeditions to work jungle produce.

Iban in the south western part of Sarawak, particularly those in the Saribas and Kalaka river systems often explain that the jars were important because they could stand for the value of a person. In these times, it was said a person guilty of murder, adultery, theft or debt would automatically become a slave of the person wronged if he or she could not pay the fine imposed on them. Payment of a jar of appropriate value would free the offender from the debt. The Brooke Government also took on the same penalties and collected fines in jars. Those who could not pay the fines were imprisoned. Jars were ranked in value and in Iban values of fifty or one hundred years ago, a captive had a value equivalent to a Rusa jar. The acquisition of jars was one part of the means by which status was acquired in Iban society (see below).

### Hunter gatherers and farming societies

An ethnographically documented illustration of inter-relationships and symbiosis between hunter gatherers and farmers may be seen by examining the trade in hornbill casque ivory. In the 1950's the carvers of the ivory were the upland *Kelabit* and upriver *Kenyah* people. For them hornbill ivory was a valued material for ear ornaments and belt and sword toggles ; hornbill feathers were valued for ceremonial costumes. Helmeted hornbills are found in tall virgin jungle in the foothills of Borneo (200-600 metres). This is the terrain occupied by the nomadic hunter gatherers, Punan and Penan, who eat wild sago as their staple, supplemented by food hunted using blowpipes and poison darts.

The Penan derive both food and exchange goods from hunting hornbills. Most hornbill are hunted whilst nesting. The male hornbill walls up the female in the nest so that she is incarcerated there whilst she incubates the young. The male brings her food. Penan, having observed a nest, shoot the male with a blowpipe dart, then fell the tree to obtain the female and young. They thus obtain a good meal (the body of the birds being some 40cm in length) a small "casque" from the female and a large one from the male, together with the highly valued tail feathers. The "casque" and feathers will be exchanged with the settled upland peoples (Kayah, Berawan, Kelabit and Kenyah farmers) for such goods as iron, tobacco, cloth and salt. These peoples in turn exchange hornbill ivory, along with other animal and jungle produce with lowland peoples for goods which have been obtained from the Chinese. An early twentieth century account (FURNESS, 1902 : 176)

describes this trade and emphasises the value to the Punan of rhinoceros horn :

"Most valuable of all these articles is rhinoceros horn ; in fact, the killing of a single rhinoceros places the wealth of a Punan village almost "beyond the dreams of avarice" ; there is no scrap or portion of the animal that is not prized ; the flesh is coveted food ; the horn, nails, hair, skin and even the contents of the stomach are traded at the highest rate of exchange to the Chinese who use them all for medicinal purposes".

Through such trade long term stable relationships were established and maintained between the hunter gatherers and the settled peoples. Some of the leaders of the settled peoples would describe particular Penan groups as "my Penan" and the Penan would acknowledge their own association and attachment to a particular group of farmers.

To the South and West are found the Iban who, unlike the Kayah and Kenyah, were very much an egalitarian society in which access to status was open to all. There were two major prerequisites of status, the first was through the taking of heads, or captives in war and the second through acquisition of jars and brassware. The term "raja brani" (rich and brave ; FREEMAN, 1981 : 14, 38) indicates that the Iban are different from many of the more northerly farming societies, such as Kenyah, Kayah or Kelabit in that access to status for the Iban was not a consequence of birth. For a man to be accorded respect he must himself achieve certain things. Warfare was important and the organisational ability to plan a successful head-hunting raid would be reflected in the taking of a head or captive. The jars reflected success in farming, although the rice itself was often not the means of acquiring the jar. Good harvests were necessary to free the Iban males from the agricultural cycle for long enough to allow them to work the forests for the collection of jungle products which were then traded for jars. Expeditions to collect jungle produce could only be mounted when Iban men could be spared from rice cultivation.

Iban oral accounts refer to their trading ventures of the nineteenth century, which were the source of much of the later prestige property. It would seem likely that the same kind of trading has been taking place from at least the seventeenth and eighteenth centuries from which time many Iban ceramics date. This trade with China seems to have played an important part in the process of agricultural intensification. Many hunter gatherer societies became incorporated into this dynamic and expanding population ; some tried to resist

and fell victims to the Iban quest for heads, others joined the Iban in the cultivation of rice and inter-married with Iban.

Broadly speaking in the southern half of Sarawak the dominant process over the last three or four hundred years has been one of "filling in" of primary forest land by shifting cultivators. There are almost no societies dependent entirely upon hunting and gathering left in this area, although much hunting and gathering is practised by the shifting cultivators, and in fact for some groups foraging for wild sago provides the major means of subsistence for two or three months of the year, after the rice harvest has been used up.

Further north the situation is more open, more primary forest remains although increasingly under threat from timber extraction. A number of hunter gatherer societies were certainly thriving in the 1960's and 1970's and the symbiosis, referred to above, between foragers and farmers could be observed in several areas. Even at this time, after the overseas demand for animal and other forest products had declined the two types of society were still partially articulated through trade in animals and animal products. Bears, monkeys and gibbons which were sometimes kept as pets by the settled peoples could be obtained from the hunter gatherers. Animal skins and exotic feathers which were used for the decoration of both the clothing and ceremonial objects of the settled people were obtained through this trade. Hunter gatherers could obtain those items (largely salt, tobacco, sugar and cloth) which they required from the outside world and thereby still retain their non agricultural way of life. In some cases individuals were able to move between the two types of society ; adolescent hunter gatherers sometimes marry in to the agricultural societies and sometimes farmers, possibly around the age of thirty or forty, would find that hunting and gathering offered a more congenial way of life.

ZVELEBIL (1986) summarises, from a review of the literature, a variety of explanations of the transition to farming. In the case of two of these types of explanation evidence from Borneo is of interest in that it provides good counter examples. He reports the formerly held widespread assumption that farming is always seen as a superior mode of production. This position is clearly undermined by evidence from Borneo of forager-farmer relations where hunting and gathering is practised through deliberate choice. Foraging and farming are sometimes thought to be incompatible (ZVELEBIL, 1986 : 12). The suggestion is that farming

will be adopted as a result of a dis-equilibrium between segments which develop in hunter-gatherer societies. This segmentation, it is argued, occurs either as a result of attempts to maintain social control, or in consequence of the competition for status, spouses or power. The long term symbiosis of hunter-gatherers and farmers in Borneo, particularly where individuals can move between the two types of society, provides a counter-example to this view.

A second popular perspective on the transition to farming, again summarised by ZVELEBIL (1986 : 9) is that agriculture began to be practised as the solution to a food shortage arising from population/resource imbalance, which had come about as a result of the development of sedentism amongst a foraging population. This is based on the assumption that sedentism relaxed the population controls of hunter-gatherers and the consequent population growth then required the domestication of plants and animals to feed the expanded population. The Iban example provides a case where sedentism decreased following the adoption of agriculture. Here relatively static hunters and gatherers were swept along in a process of agricultural expansion and became farmers in order to acquire a storeable food to enable migration to new areas of primary forest, where good hunting was possible, together with jungle produce for trade and potential enemies for trophy heads.

## Conclusions

This discussion of the trade in exotic animal products has described the processes whereby China and Borneo were brought into contact over a period of many centuries, forging a link that was of considerable significance in the relationship between foragers and farmers. In the northern part of Sarawak this trade contributed to processes which connected foragers with farming societies, but where interdependence between the two types of society prevailed. To the south access to prestige goods contributed to a process in which many hunter gatherers were absorbed and incorporated by a developing process of subsistence intensification. Iban genealogical reckonings seem to indicate a change from potentially identifiable real people to more mythical spirit ancestors some twenty generations from the present. MORGAN (1968) puts this change possibly in the fifteenth century, and suggests a qualitative change in the process of subsistence intensification at this time. As has been shown above, this period was

something of a high point in Chinese trading voyages to Borneo, and it is tempting to suggest that whilst in the north trade in animal products played a major part in preserving the integrity of hunting and gathering, in Southern Sarawak the Chinese demand for jungle produce, coupled with the demand by indigenous societies for prestige property, brought about a dramatic expansion in agriculture.

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