Unraveling and reading the past in Borneo: an archaeological outline of Kalimantan

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In this paper, I would like to briefly describe some recent discoveries which have just been made in a large area which although situated to some extend just west of the west of the Pacific, would be strongly concerned by the subject proposed in this conference.

The most part of oceanian is linked to an austronesian origin whose still controverted and at least imprecise roots, would be situated between south inland China and/or Taiwan and would anticipate slightly our 5 000 BP deadlined dates.

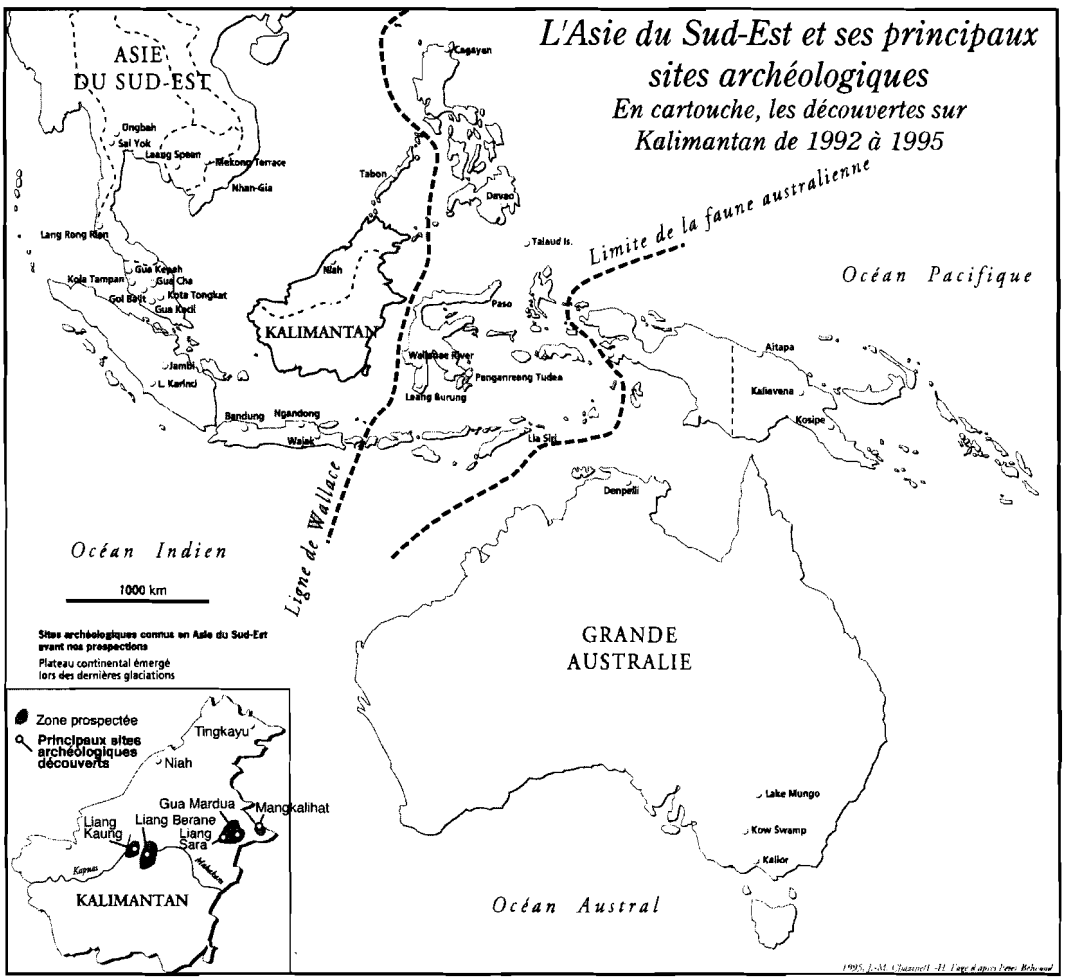
It is nevertheless that influential vector which is involved and will spread with a regular continuity until present times, pulling with it a large number of socio-cultural and technical elements which are used as determining parameters.

Although often and practically disclosed from the remaining island Oceania mostly due to geographers early discriminating demarcations, the median islands archipelagoes south-south-east of continental China have been and maybe are still more than others, undisconnectedly linked to the austronesian world. They correspond to a middle or transitional area whose importance is growing on as investigations spread around.

I am not far to think that the concept and limits of Oceania have to be adapted themselves. If the grounds upon which it has been elaborated derive from knowledge and classifications established during the 19 th century, it has been appropriated and reacted in other disciplines. Present anthropology including one of its peripheral discipline, the "Prehistoric Ethnology", have mostly kept those bases.

On one side, a delimited Oceania, set upon its three quasi-semantic foundating neologisms; on the other, a world, foreign enough, and mostly considered as a clearly and directly emanation issued from Asia.

Between these two areas, very few interdisciplinarity, unless for justifying origins or common but distant descendances.



I Figure 1
Localisation of recent discoveries in Indonesian Borneo (East-Kalimantan).

We owe some regards to our anglo-saxon colleagues for having been less sensitive to these most often geographically created divisions and for having been more interested in finding the cultural inasmuch as chronological unity between island south east Asia and the many islands scattered over Oceania.

Of course, the restrained number of ancient, Pleistocene and early Holocene sites, but-mainly the elapsed time to let them appear, have left a free field for interpretations based

upon the sole accessible data. The numerous blanks remaining on the oceanian archaeological map, were crossed from a "fetiche" site to another, just the same way the Pacific would have been by "its" well-known so called argonauts.

Those Sunda islands, whose some shores apart Java and Sumatra, are themselves boarded by the Pacific Ocean, have not yet been investigated as deeply as the remaining Oceania. Plenty of them have only seen a limited investigations number, and even none until the last few years. Among these, a completely surprising discovery for me, is the huge Indonesian part of Borneo island, mostly a tropical forest spread upon half a million square kilometers.

Mostly known and used as a unavoidable reference, land marking and featuring the next long roving of Oceanians, the Niah's Big Mouth in Sarawak, has alone and for a long time, represented not only the whole Borneo island but, more indirectly and insidiously, the necessary and implicit junction between the Oceanian world and the Asiatic block. Although the Tom Harrisson's controverted methods, the agreed antiquity of that Pleistocene site and its long and dense human occupation going on until pre-contemporary times, has filled alone the still lacking space-time.

From the very moment a Pleistocene site appeared in that geographically segmented space, and that at the same period in Philippines at Palawan, the Tabon Caves, provided the same clues, the bridge was created by itself. For the 15 following years, the successive investigations carried on the same level have almost not changed the old representation of peopling sketches. It was thus evident from this moment that successives Austronesian waves, would have been following the same routes some ten thousands years later.
The importance given to Niah, has in fact been invertedly proportional to the number of work which seemed necessary to better define the modality of occupation, appropriation and usage of this intermediate space. A quasi-eponymous sole site would have been each time sufficient concerning Borneo as much as Palawan to establish and confirm probably used trajectories for the human settlement of this part of the world.
In fact, during these periods, the Palawan area where the Tabon Caves are situated, was related during these glaciation times to the Asiatic continent, distinctly separated from the rest of Philippines. What kind of influence the absence of geographic discontinuity would have had, first during the Pleistocene, then on the following scattering process of the Austronesians?
Should we have to think that on a same space, differences and even cultural differenciations began to occur or even went on in occurring or developing themselves?

Is the extreme diversity of cultural and linguistic diversities, although they are linked to a same phylum, found in Borneo inasmuch as more slightly in Palawan, corresponding to the self-development of these communities, to a succession of autochtonous and endogenous adaptative changes or to the resultant of previous accumulated and pre-inscripted effects?

During the decades following Niah's cave investigations, a large number of sites have been studied in the sole north-north-west part of Borneo, mostly thanks to T. Harrisson's impulsion and P. Bellwood's works, but nothing upon the huge Indonesian area.

It won't be before the quite chance discovery made almost right in the center of the island as late as 1988 by a French caving team and particularly thanks to Luc Henry Fage's observations, of charcoal designs on the ceiling of the entry of a large cave, that prehistory could later in 1992 be eventually thought of and appear as a consistent feature.

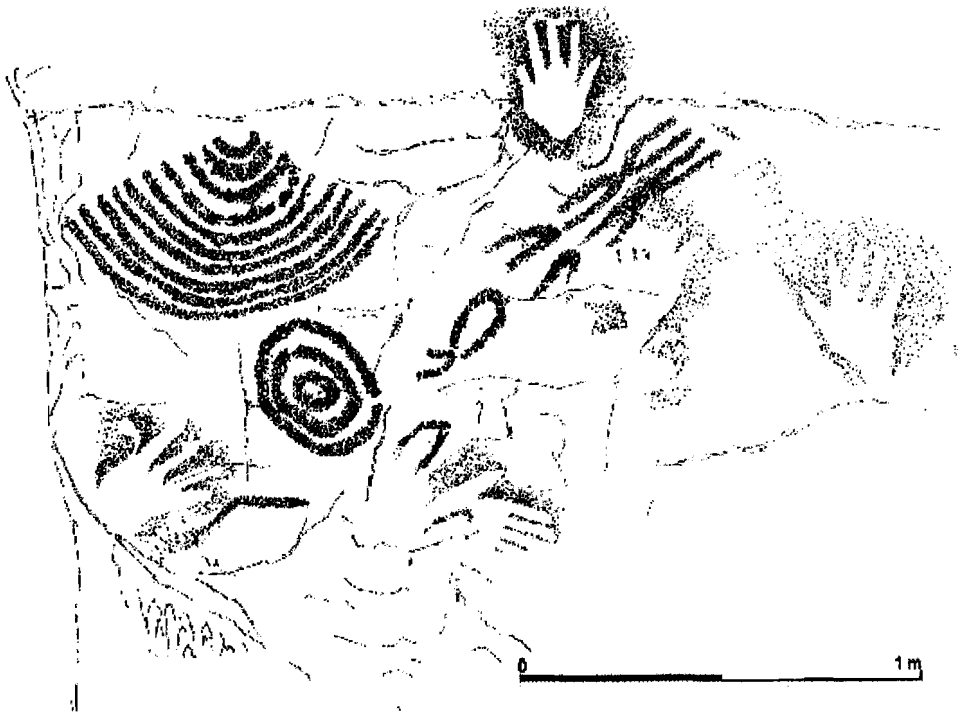


Figure 2
One of the painted pannels discovered in Gua Mardua (Sangkullrang area East-Kalimantan) showing different kind of hand-prints associated with paintings.

In the vicinity, in a very difficult in access gallery, archaeological remains comprising small chert industry, crushed bones and decorated paddle impressed potsherds appeared to correspond to the very and undisturbed last occupation level, providing a 14C uncalibrated datation as ancient as 3.000BP (3030 BP+/-180, ANU8570).

Some test investigations have been conducted later on the eastern side of the Mûller Range on the upper Mahakam. They have provided a wider serial of decorated or plain ceramic potsherds, some of them having correspondences with geometric incised Sulawesi's style. Stone flake and tool industry appeared also, confirming that caves would have played an important role in human activities at least since the Neolithic period.

A visit into the far eastern Mangkalihat area, carried out during 1994 summer in a cave visited more than ten years ago by a Franco-Indonesian speleological team, has then permitted the totally unexpected discovery of some rock-art paintings. These ones appeared to be the very first ever observed over the whole island Borneo itself. These paintings comprising hand prints stencils, animal inasmuch as human and symbolic features looked at first glance rather archaic and presenting some formal similarities with other paintings already observed more Eastward, across the Makassar Strait, through the Indonesian archipelago until the North East Australia.

Added to that discovery attesting the presence of a larger display of rock art samples, a lot of surface archaeological remains have been observed in the vicinity. That kind of discovery was quite unexpected because Borneo was even the only part of South East Asia which was presented as totally missing of cave paintings by current literacy. That lack was moreover explained and justified since decades through some hypothesis linked with the Wallace Line limits. The apparition of rock art paintings in that area was a strong incitation for revising the earlier established process frame concerning chronology and the orientation of the main drift of stylistic or technico-cultural influences between Australia, at least its northern territories and the riverine Indonesian archipelagoes which took place some thousands years ago, during the supposed elapsed time relating rock-art periods through Sundaland.

The area where this cave is situated is a 10 km long karstic outcrop more than 50 km North of Sangkulirang presenting many caves, rock shelters and fossil galleries issued from sporadic tectonic moves followed by intensive erosion during and after the Miocene period. The geomorphologic structure indicates a superposed network of caves and galleries which have been -and still are- secure dwellings for animals and humans. Other outcrops are merging all around from place to place in a 5 to 10 km distance average through the most typical tropical rain forest environment.

These natural conditions may partly explain why Borneo and particularly Kalimantan provinces remained isolated and have not yet been really surveyed in any extensive archaeological perspective. They also explain the choice in first line for us and during that scouting phase, of partners whose already acquired experience inasmuch as physi-

cal training appear especially important. Although non-scientific, these criterions have to be considered with a serious attention to allow observation of real scientific parameters to prevail even in that harsh environment.

Thus during 95' summer, thanks to our Franco-Indonesian well experienced team, we were able to discover much more paintings than previous year and painted caves could be more accurately observed.

The number of hand prints stencils arose from 11 surveyed during the first discovery to 40 the second time although some of them are already badly decayed.

New animal silhouettes and allegoric or symbolic fig. (see front cover) appeared all the same in other parts of the cave, in some small and remote hulls and on the ceiling more than 7 m. above the actual ground. Through these dispersed observations we may think that the whole wall-surface of the cave mouth would have been painted. Some superposition added to different pigment coloration and granulation let induce that some successive periods occurred in the use of the place.

As presented to the 3rd World Archaeological Congress conference last December 94, then to the 4 th Borneo Research Council conference in June 96, the first surface observations and plotting of designs and prints which had been made confirmed the well-known use of pouring colored pigments, certainly from the mouth, the hand delimiting precise contours. Analyses of these pigments just made by the "Laboratoire des Musées de France" confirmed the use of pure hematite, withdrawing any hope of direct radiocarbon datation.

The particularity of some of these hand-stencils is that they are on a single line along a small rocksptepped edge more than 4.5 meters high. Acute observation pointed out that there are in fact two specifically superimposed designs. First, the left hand, then the right one appearing only by small triangular strips corresponding to inter-digital interstices. That particular combining feature seems to be rather original and has never been yet quoted to my colleagues' knowledge.

The frieze which should have been more than 8 meters long although already naturally eroded, has luckily escaped to human depredations. The very well protected large entry where it is located gives access to an important cave, very well-known for its large birds nests productivity. The walls are thus covered by numerous graffiti whose some seem to be nevertheless ancient enough and presenting interesting to be studied similarities with other Sarawak's and SEA designs, said to be "austronesian" features, i.e. the famous "deads boat".

Scattered on the ground are to be found some paddle impressed potsherds associated with a few chert flakes probably corresponding to the late occupation period. Radiocarbon datations from the latest occupation level in a neighboring rock-shelter presenting the similar surface remains have provided an uncalibrated age around 3 300 years BP. From Bellwood's and others, excavations carried out in Sarawak and/or Sabah, generalized apparition of ceramic has been roughly dated around this period.

In a more remote outlier, around 40 km westward, a new set of painted caves and a couple of rock shelters have been discovered. They too provide a large number of hand print stencils with the same specific and characteristic signature as in the first cave. In some cases the hand stencils were those from infants which is a very seldom representation all over the world. In other cases they carry what appears to be seemingly tattoo- or scars-like prints.

A more complete display of different animals silhouettes i.e. boars, deers, monkeys, and panthers has been observed whose some seem to be associated with arrows or spears. In one case a boar feature has his back thigh doted with a hand print, which is very similar to the one from Sulawesi quoted in Heekeren's survey some 25 years ago.

Some glyphs or symbolic designs appear also, like concentric complete or non-complete circles and more or less bound lines or arachnid designs. On other panels hand prints may be associated with dots regularly spread in a rectangular shape and sometime put on curvilinear lines.

In all observed cases, caves or galleries containing paintings are mostly remote and their access more difficult to reach. They are all situated in the fossilized upper levels of steep faces or cliffs, have one or more openings and thus have a very far spread view over the forest and neighboring outcrops.

Some of these places are usually so remote and far from running waters that at first appreciation, they would not have been used as permanent dwellings for a whole and large community. Associated with this observation is the scarcity and paucity of surface remains, although that kind of parameter which will have to be precised later, may be already a preliminary fitting indicator. One would easily think to more precise magical or ritual places due to their size, situation and harsh access. From limited surface observations, activities remains are not so numerous, even this has to be checked later through a more precise and deeper observation.

Some formal iconic similarities with maybe long time ago disappeared tattooing features are remarkable (periconcentric-circles, linear and geometrical dots. This would be more obvious in taking in count the importance, the social and classificatorying role of tattooing or even scaring practices correlated with shaman skills in still living communities from Borneo and some neighboring isolates scattered over the Indonesian archipelago.

Isolation and access difficulties, even related and relativised to autochtonous natural and cultural abilities, appear to be very different from other recorded rock painting sites from Wallacea and Australia. That difference once really founded will have to be confirmed and thus explained through converging observations.

It seems also that these high placed sites may be seen directly one from each others. This visual impression if confirmed by acute triangulation measures would become an interesting indicator for sketching interrelations between these communities, knowing each of these outcrops are distant of some days walk from each others.

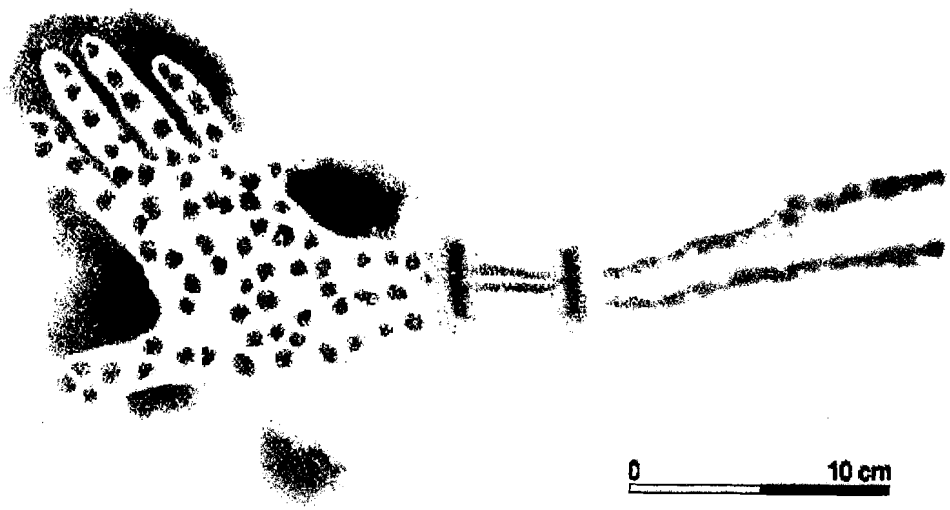


Figure 3
Tatooed (?) hand print from Liang Sara (Sangkulirang area East Kalimantan).

In most of the caves and rock-shelters, numerous fragments of ceramic and some chert flints have been observed at the overhangs feet and even on hunters and bird nest foragers bivouac places who are still using these places.

All of these potsherds are made with anvil and decorated -or not- paddle. Most of it with different sizes of the antic cord impressed paddle motif associated with the different mats designs. A lot of them are presenting some incised geometrical and curvilinear motives very similar to those which have long time ago been found in Sulawesi inasmuch Sarawak and Sabah, the Malaysian provinces boarding North-Kalimantan. In two places, features associated to decorations different from those precedently observed, appeared: punctiformal decors possibly white and red painted, upon everted necks. The thick cord decorated paddle upon careened bellies, classical cord decorated paddle ceramics are frequent but presenting in some cases a characteristically upper boarder ornated by uni- or bi-linearian punctuated lines.

The apparent age of ceramics seems to be variable, some of them having certainly been imported from Sulawesi with or for newcomers and used until some decades ago in the caves as domestic water tanks.

The number of different surface cord decorated paddle sherds, said to be amongst the most primitive ceramics from S. E. Asia, found in these caves is not very important. These appreciations are anyway only concerning surface data already fragmentary in

themselves. They have to be considered as just preliminary indicators concerning the real potential of the underground layers. In two cases, no sherd at all, but chert, was found within the surface upper layer, providing a uncalibred radiocarbon date roughly 5 500 years BP (5240+/-270, ANU9876). When confirmed and completed, this would confirm the appearance of ceramic fully within 5 500 and before 3 800 years BP in this area.

Lithic flakes found on the ground are usually not numerous, around 10 to 15 for each cave or rock shelter site. Most of them are random or intentionally step-flaking blades and more or less used as tools. Some rather small flakes, between 1,5 to 2,5 cm in size, triangular shaped could correspond to arrow-heads or sharp cutting blades. Very few cortical flints appeared, which would indicate at first view that tool workshop happened elsewhere. A preliminary comparative observation let them look very similar to the same lithic periods which have previously been mostly quoted for the Wallacea by Bellwood's and Glover's works.

This hypothesis seems to be reinforced by other findings we made upon an ancient and abandoned logging track we had to walk along over almost 10 km. That track, open by bulldozers and left five years ago has just been superficially bloomed on the upper surface on a few dozens of cm. Rains have then washed that surface, letting artefacts appear clearly on the naked ground. Even their mean concentration is light, less than one flake by square meter. Our survey-walk covering around one hectare permitted to have an idea of the distribution of more or less highly concentrated places. One of these, around 3M in diameter, has provided around 50 flakes which did not came from the same nucleus and could not be re-constructed. A more acute observation indicated later that 80 % had been more or less used for cutting, scraping or drilling.

Cross-cuts on the track boarders have not let see any charcoal or occupation layer, although the mean thickness of natural and organic soil barely overpasses 20 cm. Followed tracks in the primary rain forest have not yielded any stone remain or charcoal, even inside upset roots of fallen trees. The large dispersal of flakes with some variable concentration would induce a largely spread and scattered occupation, indicating also that at least one "first" primary forest or low coppice had been sporadically cleared for any technical or practical reason, would it be for hunting or food resources production practices.

If what remains may be considered as a "real" primary forest, it would mean and confirm at first view from paleo-ecological deductions that a couple of thousands years already spanned since that time.

Flakes appear to be more scattered upon the top of hills than in swampy bottoms indicating also some preferential choice settlement.

The tools distribution variety is not very large and comprises mostly flake tools more or less chipped to obtain some specific active edges or points. A lot of graduate size

cores in the well-known shape of "horse shoe" may be found from place to place. The cortical flakes have often been directly used as cutting tools with very few adaptation. On the whole, aspects of these blade tools, much less elaborated than corresponding to the literary "Mesolithic", would although eventually be as old, being very similar to those found previously by Glover in Timor Timur or more recently by Bellwood in Sabah.

The very large display would also indicate and summarize some transitional period owing the fact it may be considered that we are inland enough, more than 50 km in straight line. The dispersal of stone tool variety -correlated in that case with the absence of associated ceramic- is a clear clue of ancienty. As no fire place or combustion areas has been observed on that surveyed open-air surface we may suppose apart of the possible and even probable classical in SEA use of fires upon aerial platforms, that more permanent dwellings would have been elsewhere, maybe nearer from rivers or water resources, springs or holes accessing to sunken rivers.

Raw core materials should be exogen, provided from intermittent stream emerging at the foot of outcrops, or flat and muddy surrounding surfaces. Some unusual and yet unrecorded artefacts have also been found around some rock shelter burial site, i.e. two elliptic beads, 3 to 5 cm in length: one seems to be made of calcified lime and the other would be from marble or even Tridacna gigas shell.

Differenciations between appearing remains in caves and in open air forest places may correspond to different activities and/or environmental exploitation, and maybe too to different local communities. Distinct Dayak communities who have been dwelling on these areas since centuries were only the late newcomers. But what about thousands years ago, even before the arrival of austronesian communities who would eventually spread all over Borneo. The ancient discovery of some late Pleistocene -i.e. more than roughly 10000 years ago- sites, had already afforded some clues about the prehistory of Island South East Asia and the process of peopling that huge area. Tabon caves in Palawan are associated to South of Philippines but in geomorphologic inasmuch archaeological terms, they are much more related to North of Borneo through the early emerged large Sunda Shelf. The Niah's Big Mouth, in the North West and Sabah's sites to the North East seem to be as old. Now, thanks to P. Bellwood's more strategically investigations, pre- or maybe proto-Austronesian sites are to be found all over the Nusantarian bow eastward of Sulawesi and even Molukas.

Pleistocene sites appear eventually unto North and possibly central Solomons islands showing that multiple, irregular and differentiated phases of peopling occurred along the time. All correlation between cultures, languages and social practices as they now appear to our present or recent investigations are no but convergent. Multiple present communities are linked to austronesian speaking core even they appear to be different in many material, cultural and physico-genetically expressions. These differences may have probably been created by long autonomous developments or even side by side

contacts or influences. The fact is that there still is an important gap between the attested -let's say archaeological facts- and ethno-historical assessments. The time depth obtained through ethnohistorical and/or archives investigations even reaching a couple of centuries, is not yet enough to directly link the archaeological data which would allow to differentiate clearly cultural communities.

I just would like to say that for me it is a mere question of quantity of acquired data. That is to say a quantity of intentionally produced knowledge. Only a few sites have just been slightly observed on a blanked map and the most important task is now for the archaeologists themselves to enlarge the survey.

The late discovery of rock paintings in Borneo, apart of setting new questions is also just indicating the amount of ignorance in which we are concerning this huge area. Having considered that numerous and "professional" archaeological surveys had already been achieved all over Sarawak, Sabah and Brunei without finding any painted cave, it was enough to attest of this definite vacuity. The logical analytic consequences induced to give to the Wallace Line and Borneo a role of boarder between SEA and East Sunda. Once taped this limit, it was necessary to interpret the formal rock art resemblance between Australian aborigines and Sulawesi's representations. The explanation would be an influential cultural drift not necessarily including populations moves, backward from East to West and stopped by the Makassar Strait.

Hence this limit is no more accurate and provides new hypothesis that the main drift may simply have been inverted. In fact it could even have happened in the late Pleistocene periods, and correspond to the "natural" or chrono-geographical dispersal over the whole Indo-Pacific area. As an illustration of possible contacts reconstruction, questions about possible links between some Central and South East Borneo and Central south Sulawesi groups (see Abelaar, 1995) are becoming similar amongst archaeologists and ethno-linguists and may later succeed in converging.

Try to fix if this occurred during late Pleistocene or early Holocene periods, before, after or meanwhile a certain austronesian drift is far to be clear.

Thus a lot of remaining questions may be summarized here:

Before the 5000 BP deadline, were the communities which may be considered as already or maybe still organized in "hunter-gatherer" groups, more or less scattered, roving or dwelling space as foragers, going by themselves to change their "way of life", particularly their relations to their environment at a moment when that one was not?

When, by whom and what kind of ceramic did really occurred and what kind of self-invention has been locally involved in that practice, meanwhile the lithic industry has not much changed, not providing differentiate clues for chronological classifications?

Behind or beside this, what about the "Lapita phenomenon", which although being not present stricto sensu in Borneo seems sometimes underlined, potentially in filigran

upon some ceramics from neighboring islands or archipelagoes? How to relate that apparition to the alpha and omega points which are SEA and east Polynesia?

Ethnographic inquiries have shown the recent and rapid disappearance of ceramic tradition in Borneo, but what about before?

How happened contacts establishing or supressing continuities between early autochtonous populations, would they be residual or newly arrived?

To which groups do these paintings now appeared up-stream of Wallacea, apart classical questions upon their specific sense, use, stylistic expression or function do they have to be correlated? Is it the background anticipating any eastward influential or demographic move being to cross over the whole Wallacea unto northern Australia? Is it a spontaneous and autochtonous creation, the late impact point of influence emerged from Australia propagating westward?

Considering simply the high mobility of populations within the inland Borneo itself, which has not altered their linguistic and cultural originality, shows that mutual or reciproquial influences are not a systematic rule. Although in close spatial contact, these communities succeeded in keeping their own individuality and are still constituting overimposed isolates.

The three dimensional puzzle we are confronted with, has to deal with the prehistory of historical communities whose origins may be related to Pleistocene periods inasmuch as late Holocene migrating phases. Did this happened through a hiatus or a fade into sequence?

Are we allowed to think that on a same area, at the same period, cultural differences and even differenciations could occur and develop separately?

The extreme diversity of cultural and linguistical variations seen all upon Borneo Island, although they are seemingly all related to the same common trunk is endo- or exo-gen?

As the last conclusion, all these question at least indicate that the concept of Oceania itself has to be smoothed considering that it is mostly between 2000 and 5000 BP that changes in human settlement would have been the most exogenous.

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