The new chronology for Sri Lanka: the identification of new culturalphase "Postmesolithic"

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Introduction

The Mesolithic Age of Sri Lanka starts about 37,000 years before present and continues up to about 1800BP according to archaeological evidence (Deraniyagala 1992). But the view of archaeologists about its end is very much bleak. Therefore an attempt is made in this paper to present a new view about the end of the Mesolithic Age of Sri Lanka based on the soil stratum where potsherds and stone implements were discovered in the prehistoric settlements excavated so far.

So far sufficient attention has not been directed towards the potsherds exposed through the excavations of prehistoric settlements in Sri Lanka though they have been found in most of the prehistoric excavations. These cannot be regarded as of low value or ignored, as has been done so far.

History of Research

In 1990-1991 a large quantity of potsherds were found along with prehistoric stone implements when the Potana cave near Sigiriya was excavated. Though some scholars were inclined to show this as the mixture of two ages or two strata from an archaeological point of view, it was discovered that the phosphate distribution in the third and the tenth strata which were overlapping were the same (fig. 1& 1.1). Thus it was identified that human activities with respect to phosphate in the third and the tenth strata had not been very different from each other. That is the third stratum has been considered as a continuation of the tenth. (Adikari and Thantilage 2006, a). At this stage the archaeologists have not shown much interest to accept this view (Adikari 1998). But as this situation appeared in the prehistoric excavations serious attention was drawn towards it. Accordingly the attention of the archaeologists was drawn to the soil stratum containing stone implement found in the excavation jointly conducted by the PGIAR and the Department of Archaeology during the year of

2005-2006 (fig. 2 & 2.1) (Adikari and Thantilage 2006, b). It can be shown that this situation has been directly and indirectly reported from other prehistoric excavations too.

It has been mentioned that along with artifacts found in the prehistoric excavations at Bellanbendipelessa potsherds also have been found. (Deraniyagala 1958) Here it has been reported that potsherd were found about four inches above the bed rock



and about three and half feet from the surface (fig 3). Also pot sherds have been found in the excavations in the Alugalge cave Telulla in the Uva province. (Deraniyagala 1958). Further it has been reported that with the stone implements and bone implements in the prehistoric excavations in the Maniyamgama Belilena Atula (inner cave of Belilena at Maniyamgama in Kegalle District) potsherds also were found (Gunaratne 1971).

fig. 1: Potana cave excavation is being progress

As a result of the above data a very important idea has been presented about a separate period and culture, having directed the attention towards the potsherds among the remains from the prehistoric excavations in Sri Lanka (Deraniyagala 1958). Soil strata containing stone implements along with potsherds have been reported from the excavations at Asmadala in the Avissawella

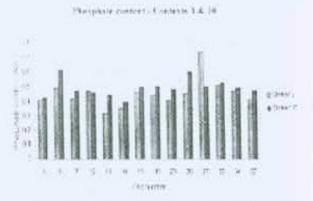


fig. 1.1: Carrelation of phosphate values in Context 10 and context 3 of Potana cave at Sigiriya

area (PGIAR) and the Potana and Aligala caves in Sigiriya (Adikari 1998). In the prehistoric excavations in Dorawakakanda (in Kegalle District) potsherds have been found along with stone implements (Wijayapala 1992).

New Approach to the Mesolithic in Sri Lanka

How should we interpret this existence of soil strata containing potsherds and stone implements in prehistoric excavations? There are two possibilities

- 1. Is it a soil layer mixed due to a physical occurrence?
- 2. If not is it a special cultural period?

When we refer to this stratum as a mixed layer, have we scientifically proven that it has been mixed? If not, is it based on any model because of the confused state according to the existence of stone implements along with potsherds. In the



excavations we came across soil strata where potsherds and stone implements were mixed. But in any of these cases we did not get any evidence to believe that these were mixed due to any physical reason. But according to the models that existed at that time we were inclined to refer to them as mixed strata.

fig. 2: Excavation is being progress at Varana

But we had no scientific or archaeological evidence to support it. But in the second stage we were more careful. During excavations we could not see any evidence to confirm that this soil stratum containing stone implements and potsherds have been mixed in any way.



fig.2.1: North-South profile drawing of Varana excavation

It is a reality that potsherds are found along with stone implements. But at present the beginning of this special cultural age is not clear. But time has dawned to arrive at a conclusion about its end. The theory presented by the archaeologists according to research done so far is that the Mesolithic ASge ended, and the potsherds and iron technology along with the Megalithic Age which came from outside (Deraniyagala 1972, Senaviratne 1985 1990). But it is necessary to consider whether the dawning of the Iron age was a sufficient cause for the abrupt disappearance of the stone implements. Our opinion is that for a new technology to emerge above an existing technology several factors are necessary. They are;

- 1. The new technology should be more sufficient than the existing technology
- 2. It should be easy to handle
- It should be more economic.
- 4. It should be easily available/ wide spread

According to what we know stone implements are very efficient in every day use.

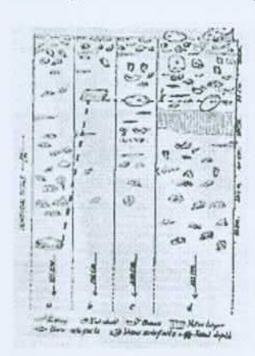


fig.3: Prehistoric chronology of Sri Lanka by P.E.P. Deraniyagala

But this would not have been so efficient in agriculture. Further iron produce from a bloomery extraction process is not hardened iron. To harden this iron, so that it could be used, a more developed technology is needed. When this is taken into consideration it is seen that stone implements are more efficient for certain purposes. To make efficient iron implements they should know the technology of making steel. Along with the progress and the spread of technology anyone will have the facility of obtaining items of high quality. But this needed time. Our opinion is that the emergence of the use of iron is not the reason for the abrupt cessation of the use of the stone implements. This means that the technology of stone implements would have coexisted with the use of metal some time. For this purpose several examples can be given. One

is the urn burial of Pomparippu where stone implements are found with metal. Begly who discusses the proto-historic finds of Pomparippu reports that there were copper items and iron, quartz and chert tools in the urn burial (Begly 1974). This Protohistoric burial cist can be shown as a good example of the trend of the flow of technology.

Also the finding of small stone implements and potsherds along with the human remains in excavating the deposit of shell midden at Pallemalala in Hambantota district is the best example of a mixed technology of the Mesolithic Age (Deraniyagala 1999). Use of grinding stones (mirisgala) at present in Sri Lanka households even after electric blenders arrived is the best example from present day for the idea of continuation of technological trends. When considering the development of tool technology, this is not an unusual situation at all. According to the Gordon Childe, "Even though metal further encouraged the specialization of tools the general spread of its influence was limited by cost, thus flint sickles were in use until the late Bronze Age" (Forbes 1971). These cultures existed for a long time together with technological variations. It is seen that stone implements of the Stone Age have been continued some time in the historic age while being subjected to progress:

Results

According to the above evidence it is seen that the Mesolithic Age of Sri Lanka was a culture that existed for a long time but did not end abruptly.

Constructing the long term Mesolithic Age of Sri Lanka in the above manner can be justified by showing that the findings from the excavations in Sri Lanka fit into this pattern. It can be shown that people entered ages of new technology without completely giving up a previous one. Thus the people who used fine microliths would have entered to metal and clay technology gradually. Taking these into consideration we felt it is reasonable to interpret this particular period as the "Postmesolithic phase of Sri Lanka". According to the excavations done at Varana and Potana the potsherds confirm that stone implements existed with some intensity in the historic age continuously some time.

But as the knowledge we have about the beginning of this era is meager, more studies should be conducted in future. If we re-examine the above sites with thorough scientific investigation of pottery and proper dating, we should be able to get some idea of the end of the Mesolithic age, the beginning of the Proto-historic age and the pottery industry of Sri Lanka. It is seen that pottery was used in Sri Lanka about 6300BP according to data obtained from the excavations of Dorawakkanda in the Kegalle district (Wijayapala 1992). Begly who expresses her opinion about the stone implements found in the excavation of Pomparippu mentions that this situation is found also in India (Begly 1974).

Conclusion

What we are trying to show in this paper is that the use of stone implements existed in Sri Lanka to a certain degree until the historic age. The ending of this particular age would have occurred with the development and the expansion of iron technology. Our feeling is that it is too early to state dates about this period. For this purpose it is necessary to do a scientific study of this soil stratum where stone implements and potsherds exist in parallel as mentioned above.

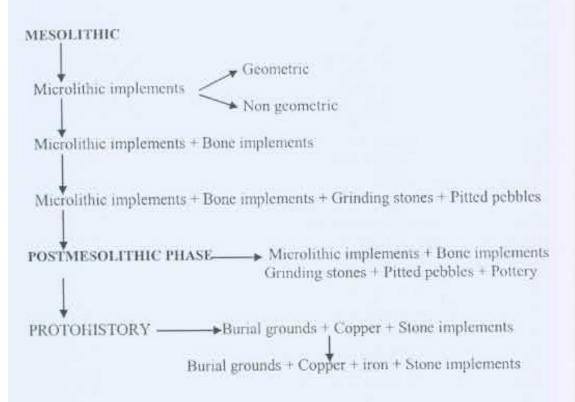


Table. 1: Suggested sub-technological phases of the Sri Lankan Mesolithic (according to material culture)

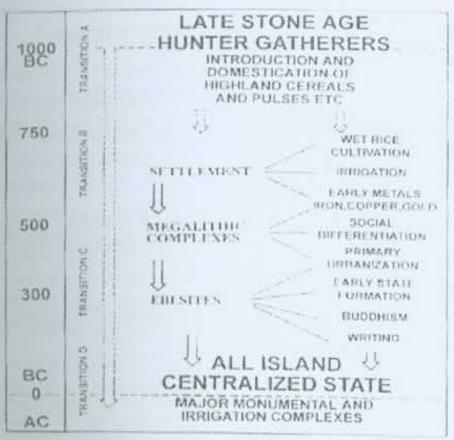


Table 2: Cronological Chart of Sri Lanka by Bandaranayake 2000

References

Adikari, G. 1998 Aspects of the prehistory of Sigiriya-Dambulla Region, Unpublished M Phil thesis, Postgraduate Institute of Archaeology, Colombo.

Adikari, G. & Thantilge, A. 2006 (a) Phosphate analysis of Potana cave (MO14), Retrospect vol. 6, (ed.) Anura Manathunga, Colombo, 25-30pp.

Adikari, G. & Thantilge, A 2006 (b) Sri Lankave Mesolithika ugaya pilibanda nava praveshayak (in Sinhala), National Archaeological Congress vol. 3, Department of Archaeology, Colombo, 27-30pp.

Bandaranayke, S. 2000 The settlement patterns of the Protohistoric - Early historic interface in Sri Lanka, in Reflection on a Heritage, Gunawardhana. R.A.L.H.; S. Padmanadan, M. Rohanadeera (eds), Central Cultural Fund, Colombo, 2p.

Begly, W. 1974 The Excavation in Iron Age burial site at Pomparippu, Ancient Ceylon, Vol. IV. Department of Archaeology, Colombo. 1-48pp.,

Deraniyagala, P.E.P. 1943 Some Aspect of the Prehistory of Ceylon part I. Spolia Zeylanica, Vol 23 part II National Museum, Colombo, 93-115pp.

Deraniyagala, P.E.P. 1955 Some Aspect of the Prehistory of Ceylon, part IV (some skeletal remains, Implements and Tool of Balangoda Man) Spolia Zeylanica Vol.27 part II National Museum, Colombo, 123-131pp.

Deraniyagala, P.E.P. 1958 An Open Air Habitation Site of Homo Sapiens Balangodensis, Spolia Zeylanica, Vol.28 part II National Museum, Colombo.223-261pp.

Deraniyagala, S.U. 1990 The Proto and Early Historic Radio Carbon Chronology of Sri Lanka, Ancient Ceylon No.12, Department of Archaeology, Sri Lanka, 251-292pp.

Deraniyagala, S. U 1972 The Citadel of Anuradhapura 1969: Excavations in the Gedige area, Ancient Ceylon No.02, Department of Archaeology, Sri Lanka, 48-167pp.

Deraniyagala, S.U. 1997 ASCAR, Department of Archaeology, Colombo, 8-9pp.

Forbes, R.J. 1971 Studies in Ancient Technology, Vol. VIII, Leiden, Netherlands, 133p.

Gunaratne, H.S. 1971 Belilena Athula -Another Stone Age Habitation in Ceylon Spolia Zeylanica, Vol.32 part I, National Museum, Colombo, I-4pp.

Wigayapala, W.H. 1992 "Doravakin labena nawa sadhaka" (in Sinhala), Svasthi Sri, Department of Archaeology, Colombo, 9-16pp.