
Editorial

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Archaeology – A Science and an Art

There is no doubt that archaeology in recent times has evolved into one of the most captivating disciplines of learning. It is both a science and an art. It is a science because it deploys precise analytical tools to decipher and unravel the vanished trails of antiquity. It is also an art because it recreates, restores, and resurrects the pristine glory of artifacts and monuments of a bygone era.

Readers of this number of *Vidurava* are certain to be enthralled by some of the recent findings and interpretations of archaeological excavations, both in Sri Lanka and in the venerated ancient City of Lumbini in Nepal, where conclusive evidence is now surfacing of the precise time and place of the birth of Prince Siddhartha.

Recent excavations in the vicinity of the famed Fa Hien Cave (Fa Hien Lena or Pahiyangala Rock Cave) have revealed the existence of a sequence of human habitations dating back to 38,000 to 5,400 years, from fragmentary human remains. These have been considered to represent the earliest known anatomically modern human beings discovered in the whole of South Asia.

We are also informed that palaeo-climatic records based on radio-carbon dating of fossil remains of micro-organism, spores, pollen, etc found in peat and sedimentary material in Horton Plains have provided valuable clues that can revolutionize monitoring and observation of climate change phenomena.

The theme article provides interesting interpretations of the scientific and technological basis of many services and activities performed by our ancient ancestors. For instance, the author explains as to how the earliest

human being sliced and shaped chert and quartz stones into usable implements with an indigenous knowledge base that incorporated scientific principles.

It is known that the iron smelting industry had been widespread in ancient Sri Lanka. There is a detailed account of the archaeology of iron smelting in ancient Sri Lanka by an author who pioneered investigations on the iron smelting industry at Alakolavava in the vicinity of Sigiriya. Her studies had revealed from carbon-dating of slag deposits from various parts of the country, that the industry may have begun in prehistoric times possibly beyond 2000 BC. The Department of Archaeology and the Post graduate Institute of Archaeology of the University of Kelaniya have carried out independent studies on this ancient industry, but the core issue that has generated debate and discussion has been the design layout of the furnace, and the ensuing structural changes, which facilitated the attainment of optimal temperatures for smelting.

Before concluding, it would be relevant to mention that Dr, Gill Juleff, the British archaeologist who pioneered studies on the west facing iron smelting furnaces at Samanalaweve, has in an article published in *“World Archaeology”* (Vol. 41 (4), Dec. 2009), drawn parallels with comparable iron smelting furnaces discovered in Burma (Myanmar), Cambodia and Japan. Accordingly, based on chronology and progressive structural adjustments in furnace designs in the respective countries, she has articulated a philosophy of evolution in furnace design, whereby transmission of technology across South Asia from Sri Lanka to Japan is speculated to have taken place through what is referred to as “Cultural Lineage” of inheritance.