

## Summary: 05 Ancient Shells and Gods of Clay

In 1877 American marine biologist Edward Morse discovered pottery, tools and human bones in an ancient shell midden near Omori railway station in Japan. The pottery which Morse — hailed as the father of Japanese scientific archaeology — discovered dated from ~1250 BC and was made by the descendents of the first settlers in Japan now known as the Jomon after the *cord marked* style of decoration they used on their pottery. The Jomon were among the first to invent pottery anywhere in the world and at the time of its invention (around 16,000 BC) were still Mesolithic hunters and foragers. They were also skilled fishermen. The significance of this is that archaeologists and pre-historians associate the invention of pottery with the Neolithic, along with the development of agriculture and the domestication of animals. It is perhaps important to note that the Jomon (the "most affluent foragers in the world") were so well treated by Nature they were not as mobile as other Mesolithic cultures.

There is no hominid record in East Asia between 100 and 40 KYA, but the Late Palaeolithic yields more than 5,000 sites of human habitation in Japan. The climate was mostly cool to cold with the peak of the LGM being 21–18 KYA when most of Hokkaido was covered with tundra and arboreal coniferous forest covered eastern and central Japan. In the west, from the Kanto Plain to Kyushu, a more temperate coniferous forest prevailed. Among the large animals hunted were Nauman's elephants, Yabe's elks, moose, brown bear, steppe bison and aurochs. Fish abounded. Stone appears to have been extensively traded over long distances and was fashioned into tools, the earliest of which (flake and pebble tools 35-27 KYA) while similar to those found in China appear to be indigenous innovations.

One modern theory is that the ancestors of the Jomon were Out-of-Africa emigrants who, on reaching Sundaland turned north along the beaches of South-east Asia instead of proceeding east as did those others who went to Sahul. Earlier theories had them come to Japan when climate change drove them from what had been a lush homeland in what is now the Great Gobi Desert.

Recent genetic studies demonstrate that there were two basic waves of people populating Japan, the Pleistocene ancestors of the Jomon and the Neolithic ancestors of the Yayoi, now the majority population of the islands. Three theories resulted: that the modern Japanese people are the result of a **replacement** of the Jomon by the Yayoi; that they are a **hybrid** of the two groups; or that the Jomon **transformed** into the Yayoi. Genetic studies clearly show that there was a hybridisation, leaving small pockets of the original genetic stock in Hokkaido and to a lesser extent, the Sakhalin Islands where they are known today as the *Ainu*. One of the dominant lineages among the Ainu is yHaplogroup D (75%) which shows so many mutations that it must be very ancient and born of a very long period of isolation. The only haplogroup which shows more in this way is yHg A which is found among the Khoisan of Namibia!

Curiously, Hg D is also found in high frequency (50.4%) in Tibet. This has led to speculation that there was a common ancestral homeland of the pre-Jomon Japanese and the Tibetans between the Tibetan plateau and the Altai mountains in northwestern China. Strangely, too, a high incidence of Hg D-M174\* was found in a SNP study of Andaman Islanders. The other dominant haplogroups among the Ainu, C-M8, is also associated with Indian and Central Asian men while the finding of NO\* chromosomes may be a remnant of Tibetan ancestry. Another study detected the rare mtHaplogroup M12 only in mainland Japanese, Koreans, and Tibetans, with the highest frequency and diversity in Tibet.

Modern humans appear to have entered the southern part of East Asia about 60 KYA but only made the push further north to Siberia as the Ice receded. In 2006, Yali Xue and colleagues found the genetic signatures of northernmost groups were older than southerly ones (34–22 KYA and 18–12 KYA respectively). It has been suggested this was because the "Mammoth Steppe" was cold but so rich in animal and other resources that populations expanded and migrated eastwards while more southerly latitudes were still ice-bound and uninhabitable. Some of the northern peoples kept on moving east and crossed the land-bridge known as Beringea to populate the Americas.

**Jomon and the Ainu:** The Jomon period is divided into 6 major phases ranging from Incipient (from ~16 KYA to ~11 KYA) to Final (3.5 KYA – 2.5 KYA). These are characterised by magnificent pots and ceramic *Dogu* — mostly female, ornate doll-like small sculptures thought to have been used in shamanistic healing rituals (for examples see the Metropolitan Museum of Art site at [http://www.metmuseum.org/toah/hd/jomo/hd\\_jomo.htm](http://www.metmuseum.org/toah/hd/jomo/hd_jomo.htm)).

Because Japan was isolated for so long, the Jomon culture had a very long peaceful evolution. It has been suggested that the Jomon people's closeness, indeed, dependence on Nature, led to a deep sense of gratitude, a feeling that they were beholden to the myriad of *kami* or nature-spirits for their well-being and survival and that this is reflected in Shinto, one of the three great religions (along with imported Buddhism and Confucianism) of contemporary Japan. It is further suggested that this reverence and awe for Nature is transmitted to everything the Japanese make, including pottery, because it is believed even domestic objects can be the temporary abode of a *kami*.

Ainu" in their own language means "human" but in Japanese it means "hairy". And they are indeed hairy, much more hirsute than the Yayoi Japanese. They are also fair skinned, bigger and taller, and their facial features are more rounded than those of the average Japanese. The Yayoi invasion and later developments

in Japanese history pushed the Ainu to Hokkaido, the northern-most main island. The Ainu unsuccessfully fought battles against the Japanese in 1457, 1669 and finally, in 1789 before conceding themselves as an occupied peoples. Much like indigenous peoples all over the world, they were oppressed and exploited — in their case, for their fishing and sea faring skills. In recent time, the Ainu communities have taken steps to revive their language and to preserve what remains of their culture. Nonetheless, the Ainu remain on the "endangered" list of peoples and cultures — see <http://www.mnh.si.edu/arctic/features/ainu/> and <http://www.ainu-museum.or.jp/english/english.html>.

