AN ANCIENT BEAD NETWORK

Beads made from ostrich eggshells are considered the world's oldest handmade jewelry. Jennifer M. Miller and Yiming Wang of the Max Planck Institute for the Science of Human History in Jena, Germany, have compared 1,500 beads discovered in East and South Africa dating from various early historical phases and made a surprising discovery: about 50,000 to 33,000 years ago, the people in those regions were using nearly identical beads — even though they were living about 3,000 km apart. The similarities are so extensive and unique that they can only be explained by a cultural exchange between the two distant populations.

The oldest bead finds from southern Africa are more than 43,000 years old (above). Younger specimens from the region tend to be much smaller like these 1,100 to 11,000-year-old beads (center). On the other hand, the size distribution of beads from the East did not differ over the millennia — here are finds from Tanzania (below) that are about 10,000 years old.

PRODUCTION

Even today, beads are handcrafted from ostrich eggs in Africa:

1. Ostrich eggshells are broken into small pieces.
2. A hole is drilled in each piece from the inside.
3. The blanks are still quite unevenly shaped.
4. For further processing, the beads are threaded onto a string.
5. Each bead is rounded individually using tools such as an animal horn.
6. The edges of the threaded beads are polished smooth using a specially shaped stone.
… the climate changed – as in many regions of the Earth – about 33,000 years ago. Rainfall increased considerably, and flooding occurred. The river became an insurmountable obstacle for the people who had previously roamed between East and South Africa, and exchange ceased. As a result, there were apparently no more ostrich egg beads in southern Africa for thousands of years (Phase II). Only from the period beginning 19,000 years ago have bead finds been documented again (Phase III).