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SEXUAL DIVISION OF LABOUR IN TONGA DURING THE DARK AGES:
SOME EVIDENCE FROM THE 'ATELE MOUNDS, TONGATAPU

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Reconstructing the internal relations of prehistoric societies is always a painstaking business, since the available evidence is generally restricted by the state of archaeological preservation and recovery.

If one tries not to involve recent traditions, patterns and analogies in the analysis, the reconstruction of social patterning, stratification, marriage circles, ritual exchange systems etc. is to some extent possible. Reconstructing the sexual division of labour, however, is almost impossible. It is hardly necessary to dwell upon these problems in detail.

The purpose of this short note is to indicate a possible line for further research, which enables the assessment of data directly from the material itself, without making detours via analogies.

Phil Houghton (1980:115-118) working on New Zealand skeletal material was able to point out, that the clavicles and humeri of many male individuals showed clear evidence of over-extensive use of the arm in a highly indicative manner, i.e. a strong, forcefully conducted downwards and backwards directed movement of the upper arm. He was as well able to point out, that this evidence goes hand in hand with a high percentage of osteoarthritis in the neck-region, the cranial vertebrae.

When working on a Tongan Lapita skeleton from J. Poulsen's site To.1 (now numbered TO-Pe-1) this arthritis could be documented as well, coinciding with definitely much less arthritis in the lower spine region (Spennemann, ms). When correlating this evidence with the other known and properly published skeletal material from Tonga, an interesting observation turned up.

In 1984 two burial mounds on the grounds of the 'Atele College of Tongatapu, Tonga, were excavated by Janet Davidson (1969), and the recovered human remains studied by Michael Pietrusewsky; (1969). Pietrusewsky was able to document that the male vertebral columns showed a high intensity of osteoarthritis in the neck region, and almost no arthritis in the lower spine region (thoracic and lumbar vertebrae), the female skeletons, however, showed a high percentage of arthritic

vertebrae in the lower spine, but almost none in the lower neck region (Pietrusewsky, 1969:324-325). Pietrusewsky noted this difference but could not explain it. In the light of Houghton's more recent findings, however, the following picture can be drawn.

The severe arthritic changes in the females' backs are almost certainly due to carrying heavy loads and bending up and down. It is likely that this was caused by gardening work (hoeing, preparing planting holes, etc.) and by carrying the food stuff back to the living place. On the other hand, the complete lack of such arthritis among the male spines shows that they were not generally involved in such labour.

Their spines show the 'paddler's neck', thus indicating frequent use of paddle and canoe. As trading/exchange voyages as well as voyages in case of war were most likely not the daily reason for going by canoe, the only possibility offered is fishing. Due to the lack of excavated sites, there is currently no definitive evidence for fishing during the Tongan Dark Ages, though it could be inferred theoretically. The analysis of the vertebral spines gives further strength to that assumption.

However convincing this solution may be in the light of current evidence, one has always to keep in mind that osteoarthritis may originate from different causes. The correlation of the 'paddler's shoulder' with the 'paddler's neck' has to be put on a more secure basis, probably by modern forensic medicine. However, this small example shows that more and detailed data can be gathered from various sources, thus steadily completing the mosaic of social patterns and daily life of prehistoric societies.

References

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