

ARCHAEOLOGICAL RESEARCH ON NOMADIC PASTORALISM IN THE CENTRAL NAMIB DESERT

J. KINAHAN, Senior Curator of Archaeology, State Museum, P.O. Box 1203, Windhoek, Namibie.

Domestic animals and ceramics appeared in the Namib Desert and elsewhere in the drier western parts of Southern Africa during the first few centuries of the Christian era. When European penetration of the subcontinent began in the seventeenth century the agrarian economy of the region was dominated by powerful herding alliances which had arisen in the previous millennium. Within little more than a century, however, the pastoral economy began to falter, and in Namibia the last independent nomads were crushed in the colonial uprising of 1907.

The rise of nomadic pastoralism represents the only *a priori* transformation in the Later Stone Age prehistory of Southern Africa : domestic stock are exotic to this region and their adoption by hunter-gatherers as the principal basis of production entails a fundamental change in economic and social organization. Curiously, this process has received little attention until now and prehistorians generally view the shift to pastoralism as a technological change (DEACON, 1984), and subsume under this the herds themselves (SMITH 1983). The difficulty with this view is that pastoralism is insufficiently specified and its presence can only be inferred from the occurrence of relatively scarce artefacts. More rigorous definition must go beyond the artefacts of technology, for without progress in this field it is not possible to understand the economic background to historic contact and the rapid decline that marks the colonial period.

With the object of resolving this problematic sequence for a single area I began work in the Central Namib during 1980 and have now temporarily suspended field research to assemble the evidence at hand. Initially my research concentrated on the Hungorob Ravine in Western Damaraland, where I was able to construct a reliable sequence for the last 4 500 years from excavation and surface collections on 129 sites. During the past three years I have complemented this with a detailed survey of the !Khuseb Delta to construct a comparative sequence for the last 1 800 years with observations from a further 220 sites.

Although ceramics occur in the Hungorob sequence at the beginning of the Christian era more than a millennium elapsed before a distinctive local style arose, accompanied by evidence of domestic sheep. Until this time few changes are apparent in the sequence; the faunal remains were consistently dominated by small antelope and rodents, and in the stone tool assemblages changes were so subtle as to be apparent only from advanced attribute comparison (KINAHAN 1984). Only in about 1 200 AD is there a noticeable change in the pattern of settlement, and minor alterations to the material assemblage. Thus it appears that the conventional data fields of Stone Age archaeology provide an imprecise reflection of the transition to pastoralism, for changes in economic organization need not correspond to changes in technology.

Fortunately, these observations do not exhaust the variety of data available from the Hungorob. The ravine contains an unusual wealth of rock art and though they cannot be dated with any great precision the paintings are known to refer to a specific system of belief based on the hunting and gathering

economy (LEWIS-WILLIAMS 1982). These beliefs centre around the ritual curing of social maladies that threaten the egalitarianism of hunting society. It follows from this that the rock art should change or be abandoned altogether as hunting was superseded by the contrary system of property relations necessary to the maintenance of pastoralism. In effect, a conceptual shift is apparent in the rock art with a consistent superimposition of complex polychrome figures upon simple depictions of ritual curing. I believe the more recent figures refer to the rise of shamanism immediately prior to the full establishment of herding. This view is more specific than the claim made by Lewis-Williams (1984) to the effect that all the art is shamanistic. My interpretation finds support in the art and in the excavated material, and allows for a dynamic change within the hunting economy (KINAHAN, in prep.). The shaman takes the first necessary steps toward dissolving the communal economy and by restricting access to the means of production he forms the social nucleus for the multiplication of wealth in herds.

Once herding became established in the Hungorob the focus of settlement shifted away from the distribution of large painted sites. A system of vertical transhumance developed to exploit seasonal pastures at the foot of the ravine and allow some respite for the perennial high altitude grazing to recover. This simple alternation was accompanied by densely aggregated settlement on the summer pastures, where water is scarce, and a dispersed pattern on the high pastures where water is more plentiful. Other than the stone foundations of huts and stock enclosures these sites are poor sources of material remains since their occupation was never sustained and seldom repeated. However, I found the layout of the summer camps followed a peculiar and consistent order, while those on the high pastures appeared relatively informal. The formality of aggregation I perceived as a reflection of the domestic autonomy otherwise conferred by distance between dispersed homesteads. Aggregation camps contained several clearly recognizable nuclei in the form of complex huts with enclosures for small stock; these were greatly outnumbered by more simple huts associated with stones for milling wild grain. Each nuclear group composed in this way appeared to express a simultaneous distinction of gender and status, which combined with the autonomy of domestic units, also expressed the fundamental economic relations of the pastoral economy (KINAHAN 1986). This pattern persisted until early in the present century despite some changes in herd composition and the several additions to the material assemblages that followed contact with Europeans.

There are striking correspondences in the sequence of settlement in the !Khuseb. Here, a fine ceramic ware arrived in the first century of the Christian era and remained quite scarce until about 1 200 AD when domestic sheep became common and a local ceramic style arose. The pattern of settlement changed as the number of sites diminished but their individual size increased more than tenfold. Finely made bone knives are associated with the development of ceramics and the two artefacts were combined in the processing of wild melons. This innovation clearly parallels the use of wild grain in the Hungorob and suggests that in both areas herding may have promoted more intensive use of existing resources. The presence of marine foods in the !Khuseb area seems also to have promoted a more sedentary pattern of settlement; stock and marine products appear to have circulated across the extensive desert pastures controlled from relatively fixed camps at the coast. However, comparison of site layouts shows that the same principles of property relations as obtained in the Hungorob also applied in the !Khuseb. When European merchants began to

visit the Namib coast in the eighteenth century the traffic in glass trade beads another goods was channelled through the large fixed camps. From a study of the historical circumstances surrounding European settlement and the materials present on more recent sites it became apparent to me that static accounts of the early colonial economy were inadequate. It now seems that the exchange of stock for trade goods gradually arrested normal circulation in the pastoral economy. Whereas previously the labour demands of the herds might outstrip the capabilities of domestic units, who would then take on impoverished herders and so regenerate natural stock losses, in historic times surplus production was translated into hoards of trade goods. Opportunities for assistantship declined and inequalities in herd production could not be successfully mediated. Trade goods induced reliance on the colonial cash economy and wage labour supplanted pastoral dependence. By the end of the nineteenth century when German colonial conquest began, Namib pastoralism was already severely weakened.

Few of these insights can be gained from the conventional perspective on the rise and fall of pastoralism in southern Africa. Descriptive models for artefact assemblages reduce the hunting economy to a series of trait lists, which alter under environmental compulsion and admit no plausible evolutionary potential from within hunting society. Although more progressive, the study of rock art has not taken adequate cognisance of changes in the sequence that may inform interpretation of the paintings. Pastoral archaeology, the most poorly developed field by far, has been limited by a severe lack of material evidence and this position is unlikely to improve without considerable revisions to the premises of research. At the moment pastoral archaeology in southern Africa may be fairly likened to the first impressions of European visitors several centuries ago : faced with a strange and incomprehensible people and an economy seen only in part rather than in the round, observers retreated - and still retreat - into bold general statements illustrated by objects and practices entirely removed from their proper context.

References

- DEACON (J.), 1984, *The Later Stone Age of southernmost Africa*. Oxford : British Archaeological reports,
- LEWIS-WILLIAMS (J.D.), 1982, The Economic and Social Context of southern San rock Art. *Current Anthropology*, 23, 4, p. 429-449
- LEWIS-WILLIAMS (J.D.), 1984, The rock art workshop : narrative or metaphor? in HALL, et al. eds *Frontiers : southern African archaeology today*, Oxford : Cambridge Monographs in African Archaeology 207, p. 323-327
- KINAHAN (J.), 1984, The stratigraphy and lithic assemblages of Falls Rock Shelter, Western Damaraland, Namibia. *Cimbebasia*, B 4, 2, p. 13-27.

KINAHAN (J.), 1986, The archaeological structure of pastoral production in the central Namib Desert in HALL, M. & SMITH, A.B. eds *Prehistoric pastoralism in southern Africa*. South African Archaeological Society, Goodwin Series No. 5, p. 69-82.

SMITH (A.B.), 1983, Prehistoric pastoralism in the southwestern Cape, South Africa. *World Archaeology*, 15, 1, p. 79-89.