

ISOLATED HOMOGENEOUS GROUPS IN NUTRITIONAL STUDIES*

REPORT ON A PILOT SURVEY ON THE HIMBA AND TJIMBA OF THE BAYNES MOUNTAINS

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At the invitation of the State Museum in Windhoek, South West Africa, two members of the National Nutrition Research Institute (NNRI) joined an expedition of the museum to visit the OvaTjimba¹ of the Baynes Mountains in the northern part of the Kaokoveld in South West Africa.

The prime interest of the NNRI in investigating this tribe was the alleged primitive living conditions and homogeneity of eating habits. Their geographical isolation, as well as previous information gained,¹ suggested that they had been little influenced by contact with outsiders, and were therefore still more completely adapted to their physical and social environment. This impression was reinforced by the knowledge that they still largely used stone implements. Persistence of this practice can act to some extent as a barometer of the degree of outside influence.

The purposes of the expedition were mainly to reconnoitre the area and to do a pilot survey in order to assess the approachability of the tribe and their value for nutritional research purposes. At the same time the opportunity had to be grasped to measure as wide a range of parameters as possible, even on a small sample. The NNRI, therefore, undertook to investigate the eating habits, die-

tary patterns and the nutrient intakes, to carry out clinical examinations and anthropometric measurements and to collect blood specimens for the determination of serum lipids and for serum genetic studies. Some relevant social anthropological data were to be collected at the same time. It was also planned to carry out, for the purposes of comparison, similar investigations on groups of Himba and Tjimba-Herero who live in the same region.

SUBJECTS AND ECOLOGY

The investigations took place from mid-September to mid-October 1967. Altogether 5 different small groups of people were contacted in 4 localities:

1. Tjimba at the Kunene River: 7 males, 5 females and 6 children.
2. Himba at Otjipemba: 3 males and 5 females.
3. Himba at Otengua: 4 males and 1 female.
4. Himba at Orumana: 2 males and 1 female.
5. Tjimba-Herero at Orumana: 4 males.

A full set of anthropometric measurements were done on everyone in accordance with the standard procedure of the Department of Anatomy of the University of the Witwatersrand, as well as a full clinical examination with emphasis on epithelial signs of malnutrition. The blood pressures were also recorded. From each subject, except

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the Himba at Otjipemba and some at Otengua, 40 ml. of venous blood was collected.

Only the findings on the males will be discussed since female groups were encountered at only 2 centres.

Eating Habits and Living Patterns

The Tjimba. During and up to 2 months after the rainy season, which normally lasts from November to the end of April, the Tjimba depend solely on wild, edible plants. In October they have a good supply of berries from the *Corda ovalis* and the *Salvadora persica* bushes. The supply, however, does not last long, since the birds compete avidly with the Tjimba for these berries. The dominant supply of vegetable foods consists of tubers and bulbs, which contain mainly carbohydrates. They dig for them with wooden digging sticks.

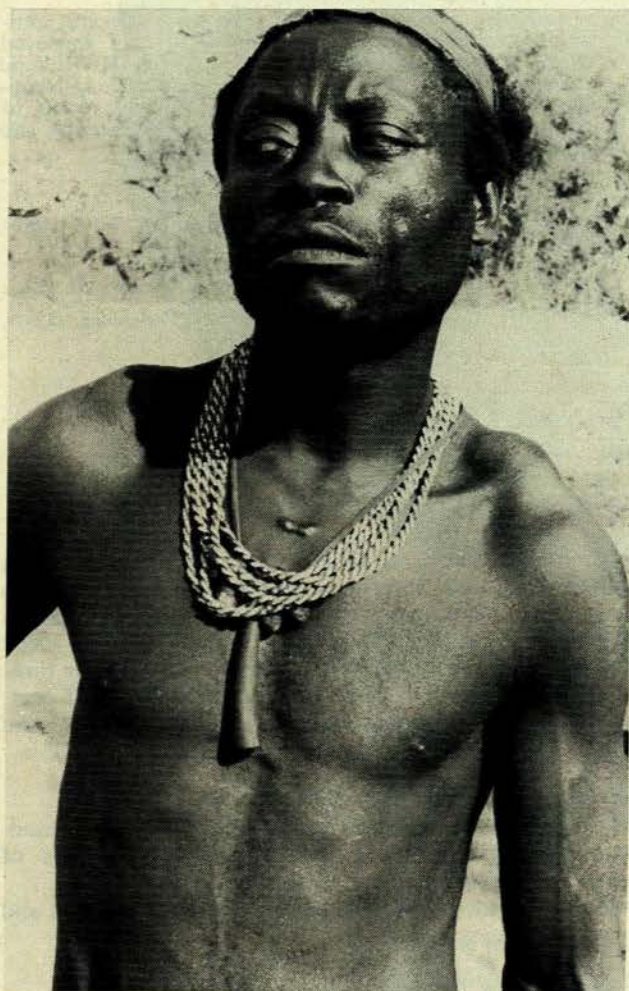


Fig. 1. A Tjimba of the Baynes Mountains.

For animal proteins they rely on zebra, kudu, impala, rock rabbits and birds, which they hunt with bow and poisoned arrow, spears and stone traps. Furthermore, they collect breeding Monteiro's Hornbill (*Lophoceros monteiri*) females, eggs and young from their enclosed nests.

In season, honey forms a common variation in the diet and was until recently also used as an instrument of barter with other tribes for utensils, which they do not produce or manufacture themselves, e.g. calabashes for carrying water and baskets for the collection of food from the veld.

During exceptionally dry periods they subsist on maize meal, distributed by the SWA Administration for maintenance of a bushroad to the Kunene River.

Owing to the increasing scarcity of game, their intake of animal protein is irregular. For periods of 2 weeks up to even a month they may obtain none. They do not practise any form of agriculture nor do they keep domestic animals. Therefore, they have no supply of milk. Except for maize meal, sometimes supplied by the Administration from August to October, they have no access to any other commercial type of foodstuff.

Their daily life consists of the gathering of veld food by all members of the family, of hunting by the men when they have not had a recent substantial kill, and setting and inspecting their stone traps.

The Tjimba are organized in family groups, and are not subordinate to a tribal chief. They are unhurried, placid people, keen observers of their environment, and share all food among themselves and their visitors. Visitors also contribute to the food supplies by their own efforts.

The Himba of Otjipemba. The Himba of Otjipemba keep cattle and goats. The milk is soured in wooden vessels and taken every day. At times they slaughter an animal for domestic use. They hunt with dogs and assegai, bow and poisoned arrow, and with spring traps. They maintain that they no longer use stone traps, but that their ancestors did.

Although they also still eat veld foods, they practise agriculture in some measure, producing vegetables, millet (*Pennisetum typhoides*) and maize. They also collect and use honey. Like the Tjimba they are self-providing and do not normally use any commercial food products.

The possession of domestic animals and the practice of agriculture ensure that they have a fairly regular supply of food, especially sour milk of which they are very fond and of which they consume substantial amounts daily.

The daily life of the middle-aged is sedentary. They occupy themselves with the weaving of dishes from grass and the chiselling-out of soft tree trunks to provide wooden containers.

The cattle and goats are herded by the older boys, male adolescents and the Tjimba when good grazing is only far afield. Both women and men till the small lands. The veld foods are collected mainly by the women. They are slow and suspicious, and do not appear to possess the keen powers of observation of the Tjimba. They also share all food among themselves on an even basis, but not necessarily with visitors.

The Himba of Otengua. The Himba of Otengua eat and live basically as the Himba of Otjipemba, but on the whole seemed to be more opulent. The kraal of the one chief, Nangoro Tjambiro, is situated in this locality. His presence may have contributed to the apparent opulence.

The Himba of Orumana. The Himba of Orumana were patients in the Dutch Reformed Mission Hospital. The 3 males who were examined there were all recovering from