

FOREWORD

On October 4, 1935, Palaeolithic stone implements were found by W. M. F. Tweedie and G. H. R. von Koenigswald in the dry course of the small River Baksoko which flows towards the south coast of Java. Tweedie was curator in the Raffles Museum in Singapore, while Von Koenigswald was palaeontologist with the Dienst van den Mijnbouw at Bandung.

At that time these two scientists were travelling around in the Gunung Sewu (literally: thousand mountains) in East Java, following the instructions of the prehistorian Van Stein Callenfels to collect Neolithic artifacts (adzes and arrow-heads) for the Raffles Museum. Already at that time the Gunung Sewu had a certain renown for its wealth of Neolithic stone tools.

During a reconnaissance expedition, while crossing the then dry bed of the Baksoko, Tweedie and Von Koenigswald found crude hand-axes. The find of these unmistakably Palaeolithic stone artifacts still lives on in the memory of some old people in the eastern Gunung Sewu, particularly because Tweedie and Von Koenigswald celebrated this joyous occasion by organising a wayang party which lasted for seven days and seven nights.

In 1936 Van Koeningswald's publication concerning the newly-found implements appeared in the Bulletin of the Raffles Museum. The assemblage is described by Von Koeningswald under the name Patjitan culture or Patjitianian, this name being derived from a small town on the south coast of Java. Although this town is some ten kilometers away from the sites in the Baksoko valley, it is nevertheless the nearest town of any size.

The modern Indonesian spelling of the name of this town is Pacitan. In these studies, however, the traditional spelling is maintained in the archaeological context, thus: Patjitan culture and Patjitianian; only in the purely geographical context is the name spelt in the modern way (the same principle is applied to other names, e.g.: the River Oyo, but Ojo Beds).

The use of the word Baksoko also deserves some explanation. Actually it is only the upper course of this river which is called Baksoko, while the middle course is called Kladen, the lower course Maron, and the mouth Sambi (Blad (Sheet) XXXVIIg, Java. Res. Madioen; opgen. 1917-1920; schaal (scale) 1 : 25.000; on the geological map attached to 't Hoen's article, 1929, the old name kali Groedjoegan Sewoe is used). For the sake of simplicity the entire river will from here on be referred to as Baksoko (And not Baksoka; the Javanese å-sound is written as o (like telogo : lake)).

I shall not dwell on the discussion concerning the significance of the concepts culture and industry. A justification for adhering to the traditional terms Patjitan culture and Patjitianian is that they seem to be too deeply entrenched in the literature to make a change profitable.

Henceforth the terms Palaeolithic and Neolithic will be used repeatedly. I call Palaeolithic those assemblages, for which there is firm evidence (from faunal remains, chronometric dating, etc.), or for which there is a high probability (e.g. on the basis of a combination of typology, patination and morphology) that they belong to the Pleistocene, while assemblages which do not fall into the above-defined categories will be called Neolithic. I am very much aware of the vagueness of these definitions; on the other hand, at this stage of research nothing better can be suggested.

The Patjitanian appears on the location maps in all the textbooks on prehistory probably as the most frequently marked spot in East Asia. Through the years the term Patjitanian has become as familiar to prehistorians as Abbevillian or Acheulean in Western Europe. But what exactly is known about this Patjitanian?

Much has been written about it: to begin with, the first announcements by Von Koenigswald (1936a and b), followed by the well-known studies of Movius (1944 and 1948), and later by reports of new discoveries by Van Heekeren (1955) and Soejono (1962). All these publications, however, deal in the first place with the artifacts themselves, analysing the Patjitanian assemblage. The direct geological framework of this assemblage, in particular the river terraces, did not receive the same degree of attention. It is clear, however, that the problems of the so-called "river-drift" Palaeolithic, to which the Patjitanian belongs, can only be solved by a thorough geological and geomorphological analysis. Admittedly De Terra (1943b) has described terraces in the Baksoko valley but in a rather superficial manner, as a consequence of too short a visit. Furthermore, the existence of a terrace system is denied by Sartono (1964), which raises several questions regarding the date of the Patjitan culture.

In fact, it was precisely these unsolved problems concerning the exact geological context and accurate dating which made me decide to carry out fieldwork in the Gunung Sewu in East Java. This fieldwork was done in several distinct periods. A short preliminary survey was made from May 27-31, 1972. This was intended mainly as a reconnaissance of the area on foot, so as to explore the possibilities for a lengthy investigation. Apart from a trip to the source of the Solo river, the only explorations carried out were to the sites known from the literature concerning Patjitanian artifacts, namely the bed of the River Baksoko and the beds of the small rivers around the village of Tabuhan.

The first main research period was from July 19 to October 10, 1972, with a few brief interruptions during September. During this period much of the area was explored on foot, for the purpose of checking on the sometimes conflicting observations made by former investigators on the morphology and stratigraphy of the Gunung Sewu, as well as to collect additional data. In the middle of August excavations were begun in the higher Baksoko gravels. These excavations were primarily intended to study the terrace profiles. However, they also yielded the first truly in situ Patjitanian artifacts, since former investigators had only collected in the river bed or on the slopes of the valleys.

A small research report entitled: "The Patjitan Culture, preliminary report of a new research" was prepared after the fieldwork period in 1972 and was read at a symposium held in Jogjakarta in the fall of 1972 to celebrate the ten years anniversary of the National Project of Palaeoanthropological Research in Indonesia. A slightly modified and improved paper was read at the Conference on the Early Palaeolithic of East Asia in Montreal (Canada) in August 1973 (within the framework of the IXth International Congress of Anthropological and Ethnological Sciences).

A second research project was conducted from October 1 to November 17, 1973. During this period the excavations in the Baksoko terraces were continued. Some explorations were also made by car of more distant regions along the south coast, east and west of the Bay of Pacitan.

A short report has also been written about this research period, entitled: "Short account of the 1973 investigations on the Palaeolithic Patjitan Culture, Java, Indonesia"; this was published in the *Berita Prasejarah*, the Bulletin of Prehistory of the National Research Centre of Archaeology in Indonesia, vol. 1, 1974, and also as newsletter no. 1 of the Committee on Palaeolithic Research in Southern and Eastern Asia, Montreal, 1974.

In consultation with the editor of the *Studies of South Asian Culture*, and with the thesis supervisor, it has been decided to publish a two or more-part edition of the final research report. Volume 1 will serve as the thesis, and will comprise three studies. The first study deals with the literature and has been undertaken to gain an insight into the complicated structure and the creation of the landscape of the south coast of Java, where the Patjitanian artifacts are now being found. The second study is a field study and contains some results of investigations on the terraces of the Baksoko river, in which the stone tools occur in situ. The third study can be considered as an introductory commentary on the existing typology of the Patjitanian artifacts. Coming volumes will include a description of the material from the 1972 and 1973 excavations and of material from older collections.

It is thus inevitable that volume 1 will be mainly in the nature of an exploratory empirical study, and as such can be regarded as containing a number of directives for future research. On the other hand, volume 1 may constitute the first modest answer to the ideas expressed by Mulvaney in the *Proceedings of the Prehistoric Society* of December 1971, which I quote: "Possibly the most challenging evidence for Southeast Asian prehistory may relate to earlier Pleistocene contexts. Just as intensive, collaborative research in East Africa produced complex and unexpected evidence of hominid fossil and cultural evolution, so it is probable that fieldwork in Indonesia will uncover dramatic evidence of Pleistocene human adaptations. But this remains hypothetical until systematic and large scale stratigraphic, palaeontological and chronometric projects are launched, particularly in Java" (p. 232).

The research into the Patjitan culture and the presentation of this volume has been made possible by the financial support of the State University of Groningen (Netherlands), the Netherlands Foundation for the Advancement of Tropical Research (WOTRO) and the Netherlands Organization for the Advancement of Pure Research (ZWO).

During the fieldwork in 1972 and 1973 our main base was the village of Punung, situated on the road from Surakarta (Solo) to Pacitan. It is indisputable that the success of the investigations is largely due to the continuing cooperation and interest of the inhabitants of Punung, to whom I owe many thanks for the unforgettable time I spent at Punung. I particularly wish to thank the kepala desa of Punung, Mr. S. Hardjosoekarto, who so hospitably put the pendopo at our disposal. Furthermore, the names should be mentioned of my indefatigable guides in the field: the kepala dukuh of Margorejo Pak Partoredjo (Pak Wo), and Pak Katimin and Pak Sogimin. Thanks are also due to the regional authorities, in particular the kepala daerah kabupaten Pacitan Mr. Moh. Koesnan, and the kepala wilayah kecamatan Punung, Mr. R. Prijosoekanto.

The entire Patjitanian research project was carried out in cooperation with the Pusat Penelitian Purbakala dan Peninggalan Nasional in Jakarta (the National Research Centre of Archaeology in Indonesia; formerly the Lembaga Purbakala dan Peninggalan Nasional). In the first place I should therefore like to acknowledge the help given by the head of the Pusat Penelitian Purbakala: Mrs. Dra. Suleiman, and her predecessor: Dr. R. Soekmono, as well as the head of the section Prehistory: Dr. R. P. Soejono, without whom it would have been impossible even to start the project. Furthermore, Drs. H. Sukendar should be mentioned, who was part of the team during the first research period, as well as Mr. Basoeki and Mr. Suroso, who took all the measurements in the field and who drew numerous profiles, maps and cross-valley sections. They formed the hard core of the fieldwork team.

Many people have been of help in the realisation of this manuscript. In the first place

should be mentioned the late Dr. H. R. van Heekeren, who followed the progress of this research very closely and who, because of his considerable knowledge of the field around Punung, was always of great help to me. It is sad that, because of his untimely death on September 10, 1974, he will not have the satisfaction of seeing the final presentation of this volume.

I would also like to thank Dr. J. P. Andriesse and Dr. D. A. Hooijer each of whom agreed to write an appendix, on the analysis of the soil samples and the vertebrate fauna of the fissures in the Gunung Sewu, respectively.

I am much indebted to my thesis supervisor Prof. Dr. H. T. Waterbolk, and to Dr. H. J. Veenstra, Prof. Dr. H. Th. Verstappen, Prof. Dr. W. van Zeist, Mrs. M. H. A. Bartstra, and especially my wife Mrs. H. A. Bartstra-Van Bommel for suggestions and advice and for the continued support I received during the preparation of this manuscript.

Thanks are due also to Dr. R. R. Newell, who taught me the basic principles of Palaeolithic archaeology, and to Prof. Dr. G. H. R. von Koenigswald, Prof. Dr. H. L. Movius, Jr., Prof. Dr. S. Sartono and Prof. Dr. T. Jacob for the many hours spent in lively discussions concerning the problems of the Patjitanian. Furthermore I wish to mention my stimulating contacts with Dato Seri Laila Jasa Tom Harrison, whose sudden death in the beginning of 1976 was a great shock to me.

I am grateful to Prof. Dr. J. E. van Lohuizen-de Leeuw for the opportunity to include these contributions in the *Studies in South Asian Culture*, edited by her. I thank Mrs. P. de Waard-Dekking and Mrs. S. M. van Gelder-Ottway for their help with the translation of the manuscript and Mrs. M. Bierma for the typing involved in the publication of this work. The presentation of the figures in these studies is the result of the painstaking work of Mr. Jac. Klein. Especially the successful reproduction of the figs. 38, 39, 40, 41, 42 and 43 is due to his expertise. The drawings of the artifacts in the figs. 46, 47, 48, 49, 50, 51, 52 and 53 have been made by Mr. H. R. Roelink. The photographs forming plates I, II, III, IV, V, VII, IX, X, XI, XII, XIII, XIV and XVI were taken by Mr. G. W. Ording, the remaining few by myself. Finally Mr. W. Haaima assisted in the technical improvement of the photographs.