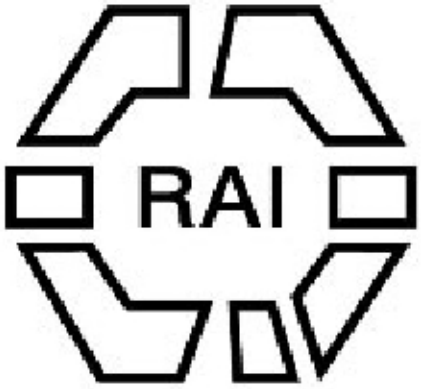

[2] Field research was supported by grants from the U.S. National Institute of Mental Health and from the New Zealand Universities Research Grants Committee, to both of which grateful acknowledgments are made.

[3] I follow the classification of low montane forests adopted by Robbins (1960), but my application of this in the Kaironk Valley region must remain provisional until such time as this area is surveyed by professional botanists.

[4] Mr. J. S. Womersley, Chief, Division of Botany, Department of Forests, Lae, T.P.N.G., was most helpful in identifying herbarium specimens which I sent to him. I am also indebted to Dr. J. A. Rattenbury and Dr. R. C. Cooper of Auckland, and Dr. R. G. Robbins of Canberra for information and advice on a number of botanical points.

[5] Spelling of Karam terms follows the phonemic orthography of Biggs (1963), with the exception, introduced in conformity with the policy of MAN in regard to use of phonetic symbols, that *q* is here used for the dorso-velar nasal sometimes written *ng* in English.

[6] *Cf.* Burkill, 1935, Vol. II, pp. 1849–59. Following correspondence with Dr. Brass I had hoped to experiment with acorns in the Schraders, to see if these were edible either unleached and merely ground into meal, or leached by soaking either before or after grinding. However, newly ripening acorns of the local *Pasania* oaks were not available in sufficient quantity in the months when I was present to make these experiments possible.

[7] From publications and from unpublished collections which Susan Bulmer and I have examined or have had described to us, we have recorded 127 mortars from the three Highlands Districts and the immediate fringes, 35 from other parts of mainland New Guinea (of which at least 20 appear to come from altitudes above 3,000 feet), and 21 from the Bismarck Archipelago and Schouten Islands.

[8] I am grateful to the Rev. Peter Robin of the Anglican Mission, Simbai, Mr. R. A. Rappaport of Columbia University, and Mr. Lyle Scholz of the Summer Institute of Linguistics, for information on mortars which they have recovered.

[9] Information from Mr. T. B. Buckle of the Methodist Overseas Mission and from Mr. Fred Riley of the Public Works Department, both of Tari.

[10] In fact the only mortars which to our certain knowledge have been recovered from Highland areas where *Castanopsis* is at present positively absent are two obtained in 1964 by J. M. A. Chappell and myself in the upper Aunjang Valley of the Schrader Mountains. These had been dug up by natives in a garden recently cleared from forest at 7,000 feet at a place where there were no oaks or *Castanopsis* for several miles. However, *Elæocarpus* species were plentiful in the immediate locality.

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SHORTER NOTES

Notes on Pottery-Making in Antigua. *By Jerome S. Handler, Southern Illinois University, Carbondale, Ill.*

184 The following comments are based upon notes recorded during a brief stay in August, 1962, on the Lesser Antilles island of Antigua, British West Indies. The general similarities of pottery techniques found here with those of West Africa might afford an interesting example of an African 'survival' on this island. However, despite the known connexion between Antigua and West Africa I have no historical information about the island's pottery industry, so whatever presumed connexions exist with respect to this industry must at present remain speculative.

Pottery-making was observed in the small village of Seaview Farm which is at the approximate centre of the island about 3½ miles south-east of St. Johns, Antigua's capital. According to informants, Seaview Farm is the only village on the island where pottery is made on a cottage basis.[1] At the time of my visit there were approximately 20 potters in the village, all of whom were females. Although children from a potter's household might aid in various phases of production such as clay-collecting and firing, adult males apparently have little to do with either production or distribution. The central position of women is not an unusual feature where the potter's wheel is absent, and in rural Antigua cottage potters do not use the wheel.

Clay is collected from pits located within relatively easy walking distances from the village. After having been excavated the clay is 'headed' to the potter's house where it is doused with water, broken up and kept damp. When wares are to be made a lump of clay is extracted from this damp pile and placed upon a wooden board which measures roughly between 12 and 18 inches wide, and between 18 and 20 inches long, and is about a ½-inch thick. In order to increase its plasticity, the moistened clay lump is rapidly pounded with a small wooden pestle. Informants agree that clay is neither hand-kneaded nor trampled in bare feet, activities which are performed by the technologically more sophisticated cottage potters in, for example, Barbados (Handler, 'Pottery-Making in Rural Barbados,' *Southw. J. Anthrop.*, Vol. XIX, No. 3, 1963). When these methods were described to the female potters of Seaview Farm they seemed unfamiliar with them.

The prepared clay is set aside and a small ball is extracted from it. This ball is then placed on the working board which rests upon the ground. Primarily using her thumbs and index fingers, which are kept moistened, the potter begins to model the clay by creating a depression in the ball and forming the sides with her hands. As the sides are built up, the vessel is rotated on the board, which is kept stationary. No moulds are used nor are coils prepared. As the walls emerge out of the first clay ball, another small lump is taken out of the prepared clay and shaped on to the emerging vessel. This process is repeated using the same techniques with fingers and hands until the sides are completed. The sides are then patted smooth and further shaped with the hands. To smoothe and scrape rough edges the potter then employs a piece of a broken calabash. After

being planed with this tool the vessel is further smoothed by wiping with a damp piece of rag.

There is no glazing, the main form of decoration apparently being a red clay slip which is applied before firing.

Although I did not have the opportunity to observe a firing, I was shown some firing spots. The Antigua potters do not use kilns. Firing takes place in the open on a level and circular clearing of about 10 to 15 feet in diameter adjacent to the potter's house. The ash of former fires is left in this clearing which is covered with wood. Wares are placed on top of the wood layer, and are then covered with layers of green grass. Informants say that firing usually commences in the late afternoon and is completed within an hour or so.

Pottery is made for a local cash market. The female potter usually transports her wares to the St. Johns marketplace on Saturday, the island's main marketing day. Sometimes she will go into town on a week day, but rarely every day. Potters usually remain in the marketplace, but occasionally, I was told, they will walk about hawking their wares.

Wares are usually household utilitarian ones, the most common type being the 'coal pot,' a tall wide-mouthed pot with a narrow cylindrical base which is used as a charcoal-burning cooking brazier. Also made are globular teapot-shaped water jars which are called 'monkeys' in other areas of the British Caribbean such as Nevis and Barbados. Undecorated shallow bowls and plates are also manufactured.

In a number of significant details, *e.g.* firing procedures and lack of kiln, absence of the wheel and modelling techniques, ware types and the prominent role of women in both production and distribution, the Antigua pottery industry closely resembles that found in the neighbouring island of Nevis.[2] The origin of these two rural industries is apparently obscure, but if they were derived from Africa their perpetuation through the days of slavery poses an interesting problem which can be contrasted with the small cottage pottery industry in Barbados whose historical roots lie in that island's plantation-slave economy, but whose wheel and kiln technology apparently derive, with some modifications, from England (Handler, 'A Historical Sketch of Pottery Manufacture in Barbados,' *J. Barbados Mus. and Hist. Soc.*, Vol. XXX, No. 3, 1963).

Notes

[1] There is a privately owned pottery works elsewhere on the island. This employs modern production techniques and local and imported clays for the manufacture of moulded decorative items and modelled figurines. These are sold in local shops and are oriented towards the tourist trade and exported to other West Indian islands, Canada, the United States and the United Kingdom.

[2] The Nevis industry was described to me by Mr. Richard Frucht in a personal communication. Also W. Grigsby ('The Potters of Nevis,' *Craft Horizons*, March–April, Vol. XXII, No. 2, 1962) has published some clear and illuminating photographs of the Nevisian industry. These show coal-pot-making and firing techniques and with these photos the similarities between Nevis and Antigua potters are even more apparent.

The Le Moustier Mandible: An Explanation for the Deformation of the Bone and Failure of Eruption of a Permanent Canine Tooth. *By Alexander B. MacGregor, M.A., M.D.(Cantab), F.D.S.R.C.S.(Eng.), Professor of Dental Surgery and Director of Dental Studies, University of Birmingham. With four figures*

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In 1909 Hauser described the skeletal remains found by him in a cave near Le Moustier in the Dordogne on 10 August, 1908. These remains are now referred to as '*Homo neanderthalensis* (*H. mousteriensis*, Hauser et Klaatsch).' Unfortunately, during the last war in 1944 the collection housed in the Museum für Völkerkunde in Berlin was destroyed by a bomb, but plaster casts of some of the original bones are still extant.

While sorting through some specimens of mandibles of types of ancient man most kindly provided by Dr. Eric Ashton, Reader in Comparative Anatomy in the University of Birmingham, I could not help but be struck by the very curious shape of the Le Moustier mandible. On turning to Hauser's original publication, I found that his remarks on the mandible (in translation from the original journal) were as follows:

> 'The Le Moustier mandible is remarkable for its extraordinary asymmetry, which is partly the result of pressure differences in the different soil layers and represents only part of the whole cranial skeleton. Apart from this, there are certain inequalities which occurred during life. The left canine has not erupted; it is fully developed in the jaw deep to a small and markedly worn milk canine. The remarkable differences in the rami, of which the left is higher than the right, and of the condyles is possibly due to an *intra vitam* disturbance.'

From this description it is not quite clear whether he has assumed that the distortion of the mandible was mainly due to earth pressure or if he felt that this could not account entirely for the deformity. Keith (1925), describing the skeleton later, stated: 'The skeleton was that of a lad of perhaps 16 years of age; his canine teeth and third molars were not fully erupted; the growth lines of the long bones were unclosed; there could be no question: he had been deliberately buried.'

These remarks of Keith were somewhat inaccurate as the right lower canine tooth is fully erupted but the left lower canine tooth is not, though part of the crown is visible on the buccal side of the mandible approximately half-way down. The left lower deciduous canine is still present, though at a lower level than the other teeth (fig. 1). From the state of eruption of the teeth, though this cannot

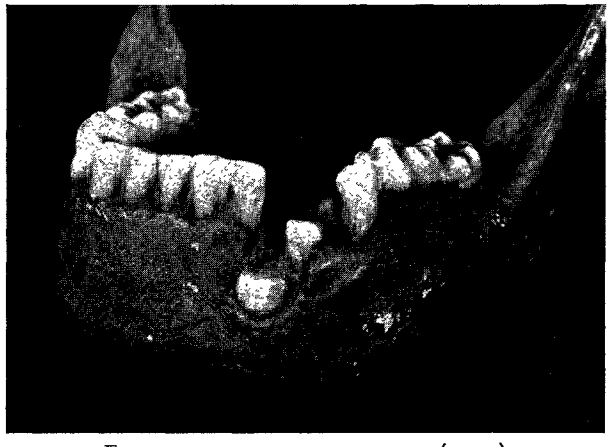

FIG. 1. LE MOUSTIER MANDIBLE (CAST)

This view shows $\overline{3}|$ *erupted and in place, but* $|\overline{c}$ *still retained and* $|\overline{3}$ *misplaced and unerupted.*

be gauged with accuracy owing to the impossibility now of getting radiographs of the roots of the teeth, I would assess the age of the individual at approximately 18, though when comparing the state of eruption to African mouths, where the third molars appear to erupt rather earlier than in the European, the age might be a few years less.

The really striking point about this mandible, however, is the deformation of the mandible in the area of the lower left canine tooth and the raised level of the premolar and molar teeth on the left side compared to those on the right. This most strongly suggests that the individual sustained a fracture of the jaw in this area during life before the age of approximately 12 years (fig. 2). This fracture later healed in a bad position, with the left side on a higher plane than the right and would also account for the subsequent failure of eruption of the lower left canine and the failure of absorption and extrusion of the lower left temporary canine. It is also quite clear on looking at the inside of the mandible on the left side that there