

new industries or migrated to America. Less industrious individuals found their way into urban slums, as in Trier. A residue left by these genetically selective movements remained under primitive conditions in the depopulated countryside. Dr Arnold is concerned to make out what happened to these people and how they are connected with the present population of Hunsrück.

Arnold has made two earlier studies of the language and customs of the vagrant groups in this area (cf. *Heredity*, 13, 533). In these he combined linguistic, and literary evidence with that from church and police records. He does the same in his new study. Again he concludes that a selective process, the choice of occupation, has split up the original shifting population into many groups which have diverged in location and have probably also diverged by hybridisation. For example poachers have sometimes moved into thorough-going banditry, notably in the Napoleonic period; pedlars, having to mix with Jewish traders, picked up Yiddish speech; tinkers picked up Romany words. So "Rotwelsch" the secret alternative language or thieves' speech, developed with innumerable local variations.

To-day apparently this primitive population survives as shack dwellers living, by occupations similar to those of gypsies, on the outskirts of villages of the Hunsrück. Like the untouchables of India they live on the outskirts of the peasant settlements but they do not interbreed with the peasants nor even with the travellers. They form a distinct caste at the bottom of the social scale, sometimes harmless, sometimes difficult, occasionally dangerous.

Dr Arnold's opportunities for the study of evolution in isolated human societies have been extremely favourable for disclosing the interaction of genetic, environmental and selective processes. If he continues to exploit them as thoroughly in the future as he has done here we may look forward to the early publication of the more comprehensive volume which he promises us on vagrants and migrants in the larger field of Central Europe as a whole.

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PSYCHIATRIE DER GEGENWART. Ed. H. W. Gruhle, R. Jung, W. Meyer-Gross and M. Müller. 1, 1B, Grundlagenforschung, Springer, Berlin, 1964. 85 figs. 529 pp. DM84.

This book sets out to deal with fundamental research in psychiatry and five of the six articles come close to expounding some genetics. Waelsch and Weil-Malherbe refer to Garrod but they do not quote his book. Ploog deals with Lorenz and Tinbergen and refers to Jacob von Uexküll with his environmental distinction (which we ought not to forget) between *Merkwelt* and *Wirkwelt*. Riebeling, less happily, thinks that Mongolism is due to having an extra X chromosome. And Bleuler describes the Klinefelter type as having two "female" and one "male" sex chromosome. Giljarowsky (of Moscow) pays the expected large tribute to Pavlov and adds a smaller one to Michurin and the inheritance of acquired characters. Other kinds of inheritance, he notes, are not now thought to be important in Soviet—or, he might have added, Western—psychiatry. Twin research is not referred to by anyone.

It is perhaps fortunate that the writers of these articles do not come any closer to expounding genetics for the result could only have been distressing to all parties.

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