material should not be subjected to such a scheme, but rather be used to test the stratification in the light of the new evidence. Moreover, it is hardly possible to force all types of musical instruments into any such world-wide chronological system, since the instruments as well as other culture traits, whether basically connected or not, have an history of their own. The frame drum (tambour sur cadre), for instance, belonging to Sachs' stratum 16, may be a recent instrument for southeast Africa and Madagascar, but it certainly belongs to an older stratum in northern Asia and North America. How dangerous some of the author's intercontinental connections are, may readily be seen in the statement that Africa underwent "de fortes influences malaises, polynésiennes, hindous et arabes" (p. 72), a supposition which would find the support of but few Africanists.

However, in the analysis of the instruments of Madagascar the attempt to compare these instruments with those of Africa, the Malayan world, Arabia, and Europe is particularly valuable. The great majority of the instruments are similar to those of Africa, although not connected with any specific region, and among those which are non-African "one distinguishes more or less easily Malayan, Arabian, and European importations." Regarding the ethnology of Madagascar the Malayan instruments are naturally of the greatest interest, and as to the dating of these Sachs makes a few important comments. The most recent of these instruments do not go beyond stratum 19 of his classification, the date of which he believes to be the beginning of the Christian era. Stratum 20, which is dated around the second half of the first millenium A.D., on the other hand, is not represented in Madagascar. Since some of these Malayan instruments (of Java, for instance, where there is archaeological evidence) can be roughly dated, Sachs' conclusion must be correct: "les instruments malais à Madagascar sont dus à la première migration malaise au début de notre ère." This result would be in line with Linton's analysis of Madagascan cultures. Thus this study is not only an important contribution to the history of musical instruments but also to the much neglected ethnology of Madagascar as well.

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A Concise Dictionary of the Bini Language of Southern Nigeria. Hans Melzian. (xviii, 233 pp. 15s. London: Kegan Paul, Trench, Trubner and Co., 1937.)

The Phonetics of the Hottentot Language. D. M. Beach. (xv, 329 pp., 12 pls., 25 figs., map. 21s. Cambridge: W. Heffner and Sons, 1938.)

Dr Melzian's dictionary of Bini (or Edo), one of the Kwa group of western Sudan languages, should provide a useful tool for students of northwest Africa. To the ethnographer this dictionary will be valuable because of the cultural data that the compiler freely supplies to explain the meaning and reference of terms. Perhaps the major weakness of the dictionary lies in its phonetic treatment. Twelve distinct symbols, for example, are used to mark tone, but the introductory discussion fails to offer any adequate explanation of the tonetic system. A Bini grammar, which

Dr Melzian promises in the near future, would help considerably in clearing up some of the questionable phonetics employed in the dictionary.

Students of language have occupied themselves with Hottentot for nearly a century, but morphological and comparative studies have been seriously handicapped by the presence of a standardized system of orthography, in which the accumulated phonetic blunders of many missionary and linguistic workers were fixed at an early date. This orthography has acquired such prestige that natives are now sent to school to learn Hottentot the way it is written. And even such linguists as Schultze and Meinhof based their studies upon the faulty orthographic system.

Dr Beach's investigation is an attempt to make a fresh and accurate analysis of the intricate phonetic system of Hottentot. His material is largely drawn from Nama, the most widely represented dialect; a section is also devoted to the rapidly disappearing Korana. Among his special techniques Dr Beach made kymograph tracings, but he wisely restricted them to a few examples. Palatograms proved more useful, particularly for describing the Hottentot clicks. The language possesses four click elements, or "influxes:" a dental and a lateral affricative, a dento-alveolar and an alveolar implosive. As phonemes, however, each of these clicks is accompanied by five Nama or six Korana "effluxes" (n, h, k, etc.), resulting in twenty distinct click phonemes in Nama and twenty-four in Korana. Click phonemes are restricted to the initial position of "strong roots," and this fact characterizes a phonemic peculiarity of Hottentot and one of its inherent difficulties for the field worker: all phonemes tend to be narrowly limited in their occurrence by positional and morphological factors.

The bulk of Dr Beach's study is based on careful phonetic transcription, some of it taken from phonograph recordings. By means of this patient analysis he is able to present a systematic description of six tonemes in Nama and four in Korana, with a demonstration of the relationship between the two tonemic systems. But, as Dr Beach himself realizes, the tonetic problem is by no means fully solved. His analysis covers only the "inherent" tones of "strong roots," that is, the tones of Hottentot radical elements pronounced in isolation. In connected discourse these inherent tones undergo modifications, which Dr Beach does not attempt to systematize. And he is careful to avoid committing himself in any way regarding the tonetic character of "weak roots," or formative enclitic elements, which of course cannot be normally pronounced in isolation.

On the basis of his Nama and Korana evidence, Dr Beach concludes that some Nama tones have resulted from the influence of voiced initial consonants, which lowered the commencing pitch of roots; this is a tonetic development that has also been demonstrated for modern Pekingese. In addition Dr Beach attempts to show that, contrary to accepted opinion, the modern Hottentot system of monosyllabic and disyllabic roots has developed through a process of decomposition from an earlier disyllabic system.

This phonetic study of Hottentot is not and does not pretend to be a presentation of the entire phonetic structure of the language. Unlike his more adventurous predecessors, Dr Beach has chosen to be cautious and to describe only that part of the phonetic system which he can verify with sound evidence. His work offers a solid foundation, though not a completed one, for future investigators in the Hottentot language.

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OCEANIA AND INDONESIA

Ethnology of Pukapuka. Ernest and Pearl Beaglehole. (Bulletin, Bernice P. Bishop Museum, No. 150. v, 419 pp., 6 pls., 55 figs. Honolulu, 1938.)

Ethnology of Tokelau Islands. GORDON MACGREGOR. (Bulletin, Bernice P. Bishop Museum, No. 146. iv, 183 pp., 10 pls., 25 figs. Honolulu, 1937.)

These two excellent monographs, further results of the systematic survey of Polynesia conducted by the Bishop Museum, are devoted to two small and previously neglected groups of people a few hundred miles north and northeast of Samoa. In spite of proximity to the latter the culture of each is shown to be characterized by several significant variations and differences which throw important light upon many fundamental problems of Western Polynesia. The more recent trends in the latter area seem to have had little effect on these marginal tribes, with the result that they have retained many traits now found principally in Eastern Polynesia. In addition there are certain affinities with the cultures of western Melanesia and, especially Tokelau, with Micronesia (Ellice Islands), which pose new problems for further investigation.

Another important consideration well demonstrated in both studies is the vitality of Polynesian culture, as evidenced by its richness in variations under conditions of isolation, and its adaptability under stress of environmental limitation. This is shown to hold true not only for aboriginal times when distinctly local peculiarities developed from an old cultural base but also for the period of European impact which, as the result of the interplay of cultural forces and the relative lack of economic importance of these islands to the whites, has not been characterized by the same pattern of invasion and change as in other parts of Polynesia.

For these various reasons it appears that the small or isolated groups of Polynesians, if properly investigated as in the present instances, may furnish more than what at first glance would seem to be their share of important clues toward the eventual solution of many of the perplexing problems of Oceanic ethnology.

Although both reports are excellent, special attention should be called to the profound depth of interest manifested by the Beagleholes in probing many questions seldom treated by other investigators in Polynesia, or for that matter in most other parts of the world. They have recorded their findings in a most refreshing narrative manner to the end that throughout the book the reader keenly senses a feeling of intimate acquaintance with Pukapukans past and present and the problems of life with with they have been faced.

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