yuddhe $m\bar{a}r\bar{a}$ yān. It remains, therefore, for those who hold that $\bar{a}m\bar{a}ke$ $m\bar{a}r\bar{a}$ yāy is the correct construction to give examples from their reading. It is not a matter of much practical importance, except for people who have to answer grammar papers, but it may serve as another instance of the fact that foreign students may sometimes call attention to a construction whose nature may have escaped the notice of natives from sheer familiarity of use.

J. D. A.

ACCENT IN INDIAN LANGUAGES

At the risk of seeming importunate and presumptuous, may I add a brief postscript to some recent notes on Bengali accentuation? My thesis was that Bengali. possessing an Indo-European vocabulary similar to that of other languages of Northern India, has nevertheless a characteristic phrasal accent tonique which so dominates over word-stress as to make it almost inaudible. I suggested that this vocal peculiarity might be an inheritance from the language spoken by the bulk of the people in Bengal in pre-Hindu days. It differs from the French tonic accent in being initial and not final, in following and not preceding a pause or cæsura. might therefore be a survival of the anacrusis accent necessary for the enunciation of the long agglutinative verbs in the Bodo languages still used in North-Eastern Bengal. It might, on the other hand, be descended from some Dravidian habit of speech, and might thus give some support to the ethnologists in their conclusion, based on physical characteristics, that the Bengalis are a "Mongolo-Dravidian" type of humanity. Anthropologists rightly attach little importance to language (meaning vocabulary) as a test of race. But a foreign tone of voice is less easily borrowed than foreign words.

Among English-speaking peoples, for instance, we can trace a speaker's habitat by what we call his "accent", and a "brogue" will show that a man is either an Irishman by descent or has spent his life among Irishmen. Put thus, the case seems too obvious to be worth detailed examination. But the aboriginal elements in Bengali are so few and faint that the Tibeto-Burman and Dravidian features of the language have not been commonly recognized, even by indigenous scholars (I resist a temptation to say "more especially by indigenous scholars").

This being so, I may be pardoned for saying, with a sense of some relief and satisfaction, that Mr. R. W. Frazer has been so good as to tell me that his friend Rao Sāhib Rāma Mūrti has been working at the accentuation of Dravidian languages, and has come to the interesting conclusion that these languages possess what seems to be an initial, or anacrusis accent. The Rao Sāhib does not say that this accent is a phrasal accent, perhaps because he has been studying the pronunciation of separate words, which of course carry a phrasal accent when said alone.

The following quotations from Mr. Frazer's letter will, I hope, interest students of accentuation:—

"In his Memorandum on Modern Telugu, published at Madras in January, 1913, Rao Sāhib Rāma Mūrti refers to the well-known law of vocalic harmony in Telugu, and gives examples of how a final vowel has assimilated to itself every vowel in the word except the first, which remains unaltered because it has the stress." In the Rao Sāhib's own words, "the shifting of the stress towards the beginning of a word has affected not only the pronunciation of a word but the forms of words."

Further, Mr. Frazer quotes from Pope's standard Tamil Grammar (p. 18): "Tamil scarcely admits of accent [stress?] upon individual syllables. . . . The root syllable will,

however, be distinguished by something akin to accent."1 May I suggest that this last sentence may show that Dr. Pope felt that the initial accent he heard was not a stress-accent, but an accent of pitch, or rather that rise of pitch was more predominantly audible than the (possibly) accompanying stress. One difficulty of discussing accentuation is that we are apt to assume that the dominant audible quality of a syllable is its sole quality. In Bengali, for instance, we are tempted to say that the word-stress is faint or non-existent, and hence those who can hear the word-stress in spite of the dominant initial rise of pitch are tempted to assert (and have, indeed, asserted) that stress is as marked a feature of pronunciation in Bengali as in any other language. Exactly the same thing has been said of French accentuation by authorities so distinguished as M. Paul Passy. Perhaps the point to bear in mind is the fact (if it be a fact, as I suppose) that in every language the three qualities of length, pitch, and stress are existent and audible, but that in any given language one (or even two) of these qualities may be dominantly audible. Perhaps metre may be a good test to show which is the dominant quality. Where stress is dominant, you seem to get a prosody of recurrent stresses without any (necessarily) fixed number of syllables. English verse is a good example of this. Where pitch is dominant you find a cæsura marked by a high-pitched syllable preceding or following the cæsura, the remaining syllables (fixed in number) being more or less atonic. As for quantitative verse in the modern languages of India, I can only say that I have consulted friends who know languages in which quantitative verse is used, but am not yet sure how quantity is made audible in spoken or recited verse. In verse that is chanted (and most verse

¹ I think most Bengali students will admit that Dr. Pope's statement is equally true of Bengali.

is chanted in India) the feat is obviously easy. But I have not yet been able to discover whether the quantity audible in quantitative verse is a quality audible in prose. In stress-verse and pitch-verse (if I may be allowed to coin these convenient terms) the poet uses, and perhaps exaggerates, what is quite audible in current prose. I have not yet learned whether, in languages which still have a quantitative versification, quantity is a dominant audible quality in spoken prose, or whether it is an added quality imposed on verse by chanting it or otherwise altering the pronunciation from that of everyday speech.

I hope readers of this note will believe that I make these rather crude suggestions very diffidently, not as statements of fact, but merely with the wish of drawing attention to what in more competent hands may prove a fruitful subject of study.

J. D. A.

EARLY USE OF PAPER IN INDIA

The use of paper in India was introduced by the Muhammadans after the twelfth century A.D., according to Bühler (Indian Paleography, § 37 ff.). In two copies, however, of an ancient Sanskrit text, the MSS. of which are ascribed to not later than the eighth or ninth century A.D., in the Stein Collection from Central Asia and in a Nepalese version of the same in the Hodgson Collection in the Society's library (No. 75), there occurs in the enumeration of materials upon which the text should be written the word $k\bar{a}yagate$, which Dr. Hoernle translated as "paper", in the belief that "it is clearly identical with the Arabic word $k\bar{a}ghadh$, or, as it is pronounced in India, $k\bar{a}ghaz$ (Ūrdu) or $k\bar{a}gad$ (Hindī)" (JRAS. 1911, 476). Moreover, in an Uigur version of the same text (the $Sit\bar{a}tapatra$ $Dh\bar{a}ran\bar{n}$), Dr. F. W. K. Müller came