

enne and Micmac, while by no means inconsiderable, are of comparatively little moment when set by the side of analogous differences obtaining between two such Penutian languages as Yokuts and Miwok. The fact that Cheyenne and Micmac were understood to be clearly related at a time when Yokuts, Costanoan, Miwok, Wintun, and Maidu¹ were looked upon as mutually independent linguistic stocks, in itself indicates that the differentiation exhibited by the latter languages cuts deeper into the historic past than that found in the Algonkin languages. There can be no doubt, then, that the distribution of Penutian-speaking tribes antedates, as a whole, the scattering of Algonkin peoples from a comparatively restricted centre. If under the term "Algonkin" we include the remotely related Yurok and Wiyot of California, a comparison with the Californian Penutian group as to relative age of linguistic differentiation might well favour the former. However, too little is known of the details of either problem to enable us to answer such a question as yet.

LINGUISTIC DIFFERENTIATION OF EARLIEST MAN IN AMERICA.

One corollary of great historical interest follows from our argument as to the chronological significance of linguistic differentiation. If the apparently large number of linguistic stocks recognized in America² be assumed to be due merely to such extreme divergence on the soil of America as to make the proof of an original unity of speech impossible, then we must allow a tremendous lapse of time for the development of such divergences, a lapse of time undoubtedly several times as great as the period that the more conservative archaeologists and palæontologists are willing to allow as necessary for the interpretation of the earliest remains of man in America.³ We would then be driven

¹ Gatachet's surmise of the genetic relationship of Costanoan and Miwok was the first step towards the recognition of the Penutian stock.

² In spite of the reduction in American linguistic stocks which we have of late years been witnessing, there is no reasonable prospect, as far as I can see, of our ever getting beyond the assumption of a quite considerable number of isolated linguistic groups in North and South America.

³ While it is absurd to juggle with specific figures, it may be interesting to note that at a recent scientific meeting a well known American palæontologist, who is at the same time conversant with the problem of early man in America, expressed himself as believing ten thousand years an ample, indeed a maximum, period for the human occupation of this continent, as far as the geological evidence is concerned. This was only a somewhat reluctantly given personal opinion, but it very likely represents the general consensus of conservative opinion on the subject. Ten thousand years, however, seems a hopelessly inadequate span of time for the development from a homogeneous origin of such linguistic differentiation as is actually found in America.