

morphology of both Aryan and Semitic roots, drawn up without reference to any harmonizing of the two systems, either in their principles of structure or in individual forms. Criticism from competent judges upon these attempts is earnestly desired, especially upon the Semitic investigation which necessarily contains much more that is new than appears in the discussion of Aryan roots.

(2) In regard to the other element of language with which etymology is necessarily concerned, namely the *meanings* of the roots, I am of the firm conviction that there is such a thing as a science of meanings. Speaking more definitely, there is a possibility of showing a development, according to certain general laws, in the train of ideas represented by any given word whose history may be accurately traced. This is the same as saying that the comparative *usage* of words is not a matter of utter uncertainty. Schleicher is the only glottologist of eminence who has maintained the contrary opinion; and he was almost forced to hold it in consequence of his doctrine of the purely physical nature of language, which necessarily makes phonology and morphology the main departments of comparative philology. But it is hard to see how etymology can be more than a plaything if, in tracing the history of words, we are not guided by observed analogies of usage in the case of kindred ideas; and this implies the possibility of discovering empirical laws. The principles which I believe to have prevailed in the development of meanings are these: First, the stock of ideas in the possession of primitive men was small. Second, these ideas were of the most simple and primitive kind. Third, the main part of every language was built up from a small number of roots, the rest (whether few or many) having perished in the struggle for existence. Fourth, with the growth of civilization came the development of thought; but thought and language go hand in hand, and with new objects and ideas there came a development of meanings in words as well as the formation of new vocables. Fifth, this growing potency and versatility of language naturally followed the line of advancing civilization; if the same word, for example, means