

necessarily rest on diversities of origin. Worthlessness of the ethnological argument, 38, 39. — The proper inferences to be drawn from the facts of dialectic variations, 40-42. — Objection that the structural peculiarities of linguistic types are original and permanent; arguments to show the possibility and probability of transitions, 42-45. — Illustrations from actual changes in language, 45, 46. — Analysis of elements in inflectional forms leads to the same conclusion, 46-49. — Objection on the ground of the greater complexity of ancient forms of expressions. Misconception of the real conditions of the case, 49, 50. — Objection that since language begins with sentences and not with words the sentence-form must have differentiated each family from the beginning. Fallacies involved in the argument, 50-52.

CHAP. III. — COMPARATIVE PHONOLOGY, 53-78

Questions comprised under this subject, 53. — The first task is to reduce the Aryan and Semitic alphabets to their primary limits. Main work to be done in the Semitic department, 53, 54. — The gutturals; their probable course of development and their mutual relations in the Semitic family, 54-60. — Comparison with the Aryan alphabet, 60. — History of *v* (*w*) and *y* in Aryan and Semitic, 60, 61. — Treatment of *r* and *l*, 61-63; *ʀ* and *n*, 63, 64. — The sibilants, 64-68. — The mutes or explosives, 69-71. — Remarks on the vowels, 72. — Caution as to treatment of secondary sounds, 72.

Actual phonetic representation in Aryan and Semitic speech, and a tabular scheme, 72, 73. — Remarks on the peculiarities of the facts presented, 73, 74. — Notice of the objection that Aryan-Semitic roots, if they ever existed, would not probably have preserved their original sounds; Max Müller quoted and replied to, 74-77. — List of Proto-Aryan and Proto-Semitic consonants as a recapitulation, 78.

CHAP. IV. — MORPHOLOGY OF ROOTS, 79-116

Apparent confusion in processes of root-formation in both systems; need of showing the principles that have prevailed, 79, 80. — Definition of a true root, 80. — Apparently all roots are not primary; two-fold distinction to be made in roots, 80, 81. — Roots of the Aryan family; development of secondary roots by modification of old elements: 1. through weakening of a vowel; 2. through the strengthening or nasalizing of a vowel; 3. through transposition, 81-83. — Development through additional sounds: 1. the sounds prefixed, 83, 84; 2. the sound or sounds affixed; definition of "root-determinatives," 85. — Post-determinative *a*, 85; *k*, *g*, *gh*, 85, 86; *t*, *d*, *dh*, *n*, 86; *ʀ*, *bh*, *m*, 86, 87; *y*, *v*, *r* (*l*), 87; *s*, 87. — Prepositions did not probably enter into the development of secondary roots, 87, 88. — Classification of results of investigation, 88. — Speculations as to the relative importance of so-called determinatives or secondary formatives, 88, 89. — The fuller forms are probably later than the simple roots, 89-91. — We cannot get at the signification of the determinatives; they are probably as primary as the simple roots, 91, 92. — Any true Proto-Aryan may be compared with any true Proto-Semitic root; criterion of a Proto-Aryan root, 92; criterion of a Proto-Semitic, 92, 93. — Remarkable peculiarity of