or radical sounds; for although both Aryan and Semitic forms of speech are called 'inflective',' it should be well understood that the inflectiveness of the root in the two cases implies two very different processes.

For example, an Arabic root is generally a kind of hard tri-consonantal framework consisting of three consonants which resemble three sliding but unchangeable upright limbs, moveable backwards and forwards to admit on either side certain equally unchangeable ancillary letters used in forming a long chain of derivative words. These intervenient and subservient letters are of the utmost importance for the diverse colouring of the radical idea, and the perfect precision of their operation is noteworthy, but their presence within and without the rigid frame of the root is, so to speak, almost overpowered by the ever prominent and changeless consonantal skeleton. In illustration of this we may take the Arabic triconsonantal root KTB, 'to write,' using capitals for the three radical consonants to indicate their unchangeableness; the third pers. sing. past tense is KaTaBa, 'he wrote,' and from the same three consonants, by means of certain servile letters, are evolved with fixed and rigid regularity a long line of derivative forms, of which the following are specimens:—KaTB, and KiTaBat, the act of writing; KaTiB, a writer; makTūB, written; taKTīB, a teaching to write; mukaTaBat, and taKaTuB, the act of dictating; makTaB, the place of writing, a writing-school; KiTaB, a book; KiTBat, the act of transcribing.

In contradistinction to this, a Sanskrit root is generally a single monosyllable 2, consisting of one or more consonants combined with a vowel, or sometimes of a single vowel only. This monosyllabic radical has not the same cast-iron rigidity of character as the Arabic tri-consonantal root before described. True, it has usually one fixed and unchangeable initial letter, but in its general character it may rather be compared to a malleable substance, capable of being beaten out or moulded into countless ever-variable forms, and often in such a way as to entail the loss of one or other of the original radical letters; new forms being, as it were, beaten out of the primitive monosyllabic ore, and these forms again expanded by affixes and suffixes, and these again by other affixes and suffixes 3, while every so expanded form may be again augmented by prepositions and again by compositions with other words and again by compounds of compounds till an almost interminable chain of derivatives is evolved. And this peculiar expansibility arises partly from the circumstance that the vowel is recognized as an independent constituent of every Sanskrit radical, constituting a part of its very essence or even sometimes standing alone as itself the only root.

Take, for example, such a root as Bhū, 'to be' or 'to exist.' From this is, so to speak, beaten out an immense chain of derivatives of which the following are a few examples:—Bhava or Bhavana, being; Bhāva, existence; Bhāvana, causing to be; Bhāvin, existing; Bhuvana, the world; Bhū or Bhūmi, the earth; Bhū-dhara, earth-supporter, a mountain; Bhū-dhara-ja, mountain-born, a tree; Bhū-pa, an earth-protector, king; Bhūpa-putra, a king's son, prince, &c. &c.; Ud-bhū, to rise up; Praty-ā-bhū, to be near at hand; Prôdbhūta, come forth, &c.

Sanskrit, then, the faithful guardian of old Indo-European forms, exhibits these remarkable properties better than any other member of the Āryan line of speech, and the crucial question to be decided was, how to arrange the plan of my Dictionary in such a way as to make them most easily apprehensible.

On the one hand I had to bear in mind that, supposing the whole Sanskrit language to be referable to about 2,000 roots or parent-stems, the plan of taking root by root and writing, as it were, the biographies of two thousand parents with sub-biographies of their numerous descendants in the order of their growth and evolution, would be to give reality to a beautiful philological dream—a dream, however, which could not receive practical shape without raising the Lexicon to a level of scientific perfection unsuited to the needs of ordinary students.

On the other hand I had to reflect that to compile a Sanskrit Dictionary according to the usual plan

- As distinguished from unchangeably 'monosyllabic' like the Chinese, and 'agglutinative' like the Drāvidian of Southern India, and like the Turkish and other members of an immense class of languages, in which there are no so-called 'inflections,' but merely affixes or suffixes 'glued' as it were to the root or body of a word, and easily separable from it, and not blending intimately with it, and so, as it were, inflecting it.
- ² Of course it is well understood that there are in Sanskrit a certain number of dissyllabic roots, but I am here merely contrasting Semitic and Aryan roots generally.
- 3 The vikarana of a root may be called an 'affix,' and the verbal termination &c. a 'suffix.'
- ⁴ For other illustrations of this see I. kṛi, p. 300; I. śru, p. 1100; I. sthā, p. 1262 of this volume.
- ⁵ The number of distinct Dhātus or radical forms given in some collections is 1,750, but as many forms having the same sound have different meanings, and are conjugated differently,

they are held to be distinct roots and the number is thereby swelled to 2,490. It should be noted, too, that a great many of these Dhatus are modifications or developments of simpler elements, and this Dictionary does not always decide as to which of two, three or more roots is the simplest, although when roots are allied their connexion is indicated. Probably the real number of elementary radicals in Sanskrit might be reduced to a comparatively small catalogue—even, as some think, to a list of not more than about 120 primitive roots. Many Sanskrit roots have alternative Prākrit forms or vice versâ, and both forms are allowed to co-exist, as bhan and bhan, dhan and dhan, nrit and nat; others whose initials are aspirated consonants have passed into other aspirated consonants or have retained only the aspirate, as in bhri, dhri, dhvri, hvri, hri &c. Again, such a root as svad is probably nothing but a compound of su and root ad, and such roots as stubh, stumbh, stambh are plainly mere modifications of each other.