

tion consists in the establishment on a fixed grammatical basis. There are many sub-divisions in Samskr̥t also, but, as said before, they are all subordinate to and form parts of a unity.

system'. The Samskr̥ta, or as now familiarly written, Samskr̥t, mentioned here is not exactly what is now meant by the word, but that and much else besides, as will appear from what follows in the text immediately. There are two ways in which we can conceive of a universal language and its operation, both apparently equally true and effective in their respective times and places. (1) We may regard the universal language as consisting of the totality of all languages. It is obvious that no two words are exactly synonymous in the same language; no more can two even apparently equivalent words of two different languages express exactly the same shade of meaning, the same aspect of the same thing. Consequently, only all the words of all the languages taken together of any one world-system can exhaust all the expressible or utterable 'meanings,' all the objects, of that world-system. And the grammar and the dictionary of such a language would be to all the languages of the world-system, as the grammar and dictionary of one language are to all the dialects and technical glossaries of it. (2) With reference to the basic metaphysical principle of unity in diversity and the fact that the various races of men and their languages, however widely differentiated now, must have had a common ancestry, and still have a 'group-soul,' a

This Samskr̥t tongue, the universal language, the chief of all languages, the mahābhāṣhā, the 'great speech,' wholly consecrated and holy,¹ all grows out of the single sound AUM.

Hence too is it called the language of the gods and is used by them. The gods meant here are the hierarchs, the rulers and office-bearers of our world-scheme of succession and evolution, viz., the ṛṣhis, maharṣhis, brāhmaṇas,

thread of continuity, running through them in the innermost layer of their constitution, we may regard the universal language as that primeval language which belongs to this deepest layer; and we can then easily imagine that a highly evolved being, a ṛṣhi, who could work on and touch this layer, supra-consciously, would be able to make himself understood by any or all individuals of the world-system, if, at the same time, he so stimulated and vitalised 'the thread of connexion and continuity' between the inner and the outer layers of the sheaths of his hearers, that the latter could consciously respond to the vibrations of the former.

Of course, it is obvious that here the words 'universal,' 'unity,' 'deepest layer,' 'common origin,' are all relative to one world-system. It should also be remembered that from a sufficiently high standpoint, even the most radically-different-seeming languages will be seen to have a common stock.

¹'Wholly' and 'holy' have the same root (Skeat). He who ever thinks of the Whole is alone holy.

Īshvaras, Parameshvaras, Mahā-Viṣṇu, etc. That they communicate their wishes and ideations by means of the Samskr̥t language may be gathered by direct observation or by inference or from *Itihāsa*, history.

This, the consecrated language, evolved out of the *Praṇava*, is, in turn, the fount and origin of all other languages whatsoever. It is true that the work or purpose of all languages is but one and the same, and it may well be asked therefore why there should be many derivative languages at all. The answer lies in the fact that the relation or relativity between them is similar to that which exists between the *aṇus*, atoms, and Mahā-Viṣṇu. Thus, though it is true that even above our Mahā-Viṣṇu there is a higher being who stands to him as he to our atom, this does not in any way lessen our Mahā-Viṣṇu's position with reference to our atoms; all our atoms must continue to look up to him with reverence. So again, each of our atoms, because of the transcendental law of relativity pervading all, is also a Mahā-Viṣṇu in turn within his own sphere of work; yet it or he has also to accept, of necessity, his position in the universal gradation, as only an atom in comparison to his or our Mahā-Viṣṇu. (The case is the same with languages too; each performs the same or similar work within its own sphere, relatively; yet they are

all graded together also, or, in other words, the reason for a multiplicity of languages arising out of a common language is the same as that for the manifestation of a multitudinous manyness within the Eternal Unity). For such reasons Samskr̥t is to be regarded as the primal universal language (of our world-system) in which the ideation of the whole *samsāra* is executed.

Etymologically, too, that whereby *saṃ*, all, or all together, *kriyate*, is done, is Samskr̥t. Because all is one, therefore the language of that all-one should also be one.

Although on the general principle of endlessness prevailing everywhere, there are always languages within languages sub-divided *ad infinitum*, yet three main sub-divisions of Samskr̥t are commonly recognised: *laukika*, 'of the world' or secular, *vaidika*, scriptural or religious, and *dhvani*, musical resonance, inarticulate sound, connecting the other two. The second is connected with cognition and constitutes the *Veda*; the first is concerned with action and forms the *loka*, the world, that is to say, the speech of the world; the third is the definite but inarticulate sound which corresponds with desire and the Negation.¹ All words that

¹ Hence the 'mysterious' power of the 'elemental' sounds of nature and of music, of cries, roars, wails, laughs, to arouse 'elemental' and most powerful emotions.

bespeak knowledge only and indicate the unity of all things are of the first class; those that indicate separateness within that unity are of the second; the third class dwells immanently in both the others. In other words, that which is born or existent in the *Veḍa* is *vaiḍika*, and *Veḍa* or *veḍa* is knowledge, and knowledge (the true and complete knowledge) is universal, *i.e.*, it is to the effect that all is transcendental and triune; so, that which is born or existent in the *loka*, the world, is the *laukika*, and *loka* is 'seeing' diversity in unity; and finally *ḍhvani* is *pra-ḍhvamsa* or destruction, negation (of definiteness), which again is universal to all.

We have seen that *shabḍa*, word-sound, is born from (arises in the endeavor to pronounce, utter, manifest, define) *akṣhara*, the letters, the alphabet, (also the Imperishable), etc. This word-sound is of two kinds, *varṇa*, articulate, and *ḍhvani*, inarticulate but definitely audible, like *pata patā*, etc. The sounds that arise in seas and rivers, in conches and drums, in musical instruments like the *vīṇā* and the *ṭanṭrī*, etc., are all *ḍhvani*. Human speech, on the other hand is *varṇa*. Beyond the two is soundlessness and dumb silence, known as *mūka-ṭva* or *mauna-ṭva*. This also is dealt with by grammar. For *ākāsha* exists everywhere, nothing is without it,

and sound also must therefore exist everywhere. Silence can then mean only absence of manifestation of sound, or unmanifested sound. And this would be due only to the absence of a reason or necessity requiring expression (of wishes, etc.), or to some other cause. The consideration of such cause is the work of grammar. When such a cause exists, the power of uttering word-sounds is in abeyance, hence the silence.

By the permutation of these three divisions, *viz.*, *vaiḍika*, *laukika* and *ḍhvani*, scriptural, secular and musical, there arise seven, languages, modes of manifestation of consciousness in terms of sound: (i) *Sāmpratikā*, connected with *mahā-nirvāṇa*, the 'great peace'; (ii) *Chākṣhikī*, with *parā-nirvāṇa*, the 'superior peace or liberation'; (iii) *Sāmvartikā*, with *nirvāṇa*, 'peace, deliverance, extinction'; (iv) *Parā*, with *ṭuryā*, the 'fourth' state; (v) *Pashyanṭī*, with *suṣhupṭi*, 'sound sleep'; (vi) *Madhyamā*, with *svapna*, 'dreaming'; and (vii) *Vaikharī*, with *jāgrat*, 'the waking condition'. There are seven sub-divisions within each of these again. The three states, *nirvāṇa* and the higher, are known only to *brāhmaṇas* and *yogīs*. The other four are recognised 'here' *i.e.*, by ordinary human beings. At the time of pronunciation or utterance of speech, action takes place in the body in the order of the seven;

only after successively passing through the stages or conditions of the first, second, third, etc., does it appear in the seventh or *vaikhari* or uttered human speech. All this is to be learnt from grammar.¹

Within this language (the *vaikhari* Samskr̥t?) there prevail other and opposed or differing languages, the local vernaculars and dialects, and thus we have a series of languages. The universal Samsāra-bhāṣhā is the 'chain of Samskr̥t'. Then there are the Jagad-bhāṣhā, Vishva-bhāṣhā, Loka-bhāṣhā, Brahmānda-bhāṣhā, and countless Desha-bhāṣhās, because there are many *ḍeshas*, countries, within each *brahmānda*, 'world-egg'. According to the needs and necessities of each place and in accordance with the component elements and natural sound-qualities of things (taken together with the constitution of the organs of the speakers of that place), do these different languages arise, for the

¹ All this seems to mean that before any word can be uttered, can come to the birth, its soul or the thought that is behind it has to pass through the seven states of consciousness enumerated in the text. The connexion between language and reason should be kept in mind; the two are inseparable and indeed one. The analogy of the ego incarnating and ex-carnating, as described in modern theosophical text-books seems to be closely followed in the life of the words we utter. (E. H. B.)

mutual communication of desires. There is a grammar for each language; and as there is a special one for each, so there is a universal grammar also by the study of which all languages can be mastered.

The composition and proportion of the *vāyu* and other *ṭaṭṭvas* or elements changes with every *gavyūṭi*, (two miles square); hence language changes with every *gavyūṭi*, also. The whole of creation is governed in its manifestation by (this principle of the proportion of) the elements. The various *yoni*s, wombs, matrices, types, kingdoms, races and species of creatures also depend on it. Beings in whom such and such elements predominate enter into such and such *yoni*s and such and such corresponding appropriate countries, habitats or regions of life. And every *yoni* has its own separate *bhāṣhā*, language. Thus we have the Preṭa-language, the Paishācha-language, the Gāndharvikī, the Yākṣhikī, the Lāvāṇakī,¹ and so on. The necessity for and the causes of all these are stated in grammar.

The primal, universal *Vyākaraṇa*, the *Varn-ārṇava*, was promulgated by Shiva and consists of sixty-four hundred thousand aphorisms. Many *bhāṣhyas*, commentaries, have been written

¹ Some of these are spoken of in the current *Kaṭhā-sariṭ-sāgara*.

thereon by the office-bearers of Shiva's line of administration. By means of these, knowledge of all the languages and all the elements of this world may be obtained. But higher than this, relating to the summation and connected with the *Mahā-Veḍa*, is the *Vyākaraṇa* of Mahā-Viṣṇu, sixty-four crores (six hundred and forty millions) of aphorisms in extent; and it also has got its commentaries. Thus infinite is the science of language.

(But all this is beyond our reach; coming back to what is more within our means, we find that) the whole ideation of this *samsāra* is contained in the *Veḍas*, because ideation is possible by means of a few words comparatively, the full details being endless. And the *Vyākaraṇa* of the *Veḍas* is similar and deals with scriptural words only. This grammar, the *Vyākaraṇ-ārṇava*, has also been formulated by Shiva.¹ An

¹ By one of those nature's 'freaks' of preservation of isolated traces of things past, of which we meet with examples in other departments of life, learned memory, for a wonder, publicly retains the name of this single one out of all the old and inextant works named by Pt. Dhanrāj, in a solitary scholastic shloka that is often on the lips of the modern youthful student of Samskr̥t grammar in India:

यान्युज्जहार माहेष्वाद् व्यासो व्याकरणार्णवात् ।
तानि किं पदरत्नानि भान्ति पाणिनिगोष्पदे ॥

ārṇava, an 'ocean,' is that which expounds essential and universal principles. Because the *Veḍas* embody universal ideation, the ideation of 'all' (things), therefore their grammar also deals with 'universal' words, expressive of universal concepts and unifying laws. Shiva is the author of the grammar because he deals with desire; and language and grammar, as explained before, are concerned with the expression of it; and the head of any department of work is, directly or indirectly, the guide and administrator of all work subsidiary to it also (even though it may appear on its face to belong to another department). The *Māheshvariya-Vyākaraṇa* arises simultaneously with the *Veḍas*, for the sake of their being duly understood. All have need of it; for without knowledge of it, the power of creating a *samsāra* is not possible, and without such creation, the infinite estate of Brahman is not achieved. To accomplish that Infinity, understanding of the Universal Ideation is needed; and for that, grammar.

In this *Māheshvara-Vyākaraṇa* the letters are first explained, and, amongst them, the vowels and their permutations have precedence, *viz.*, अ, इ, उ, ऋ, ए, ओ, ऐ and औ.

"Those word-gems which Vyāsa drew out of the depths of the *Vyākaraṇ-ārṇava*, 'The Ocean of Grammar'—how can they be found in the little cowpond of Pāṇini!"

The first letter अ, *a*, represents the Ātman, the Aham, the Self, all-transcendent and universal. After that उ, *u*, is the Eṭat, the Not-Self, Anātmā, This. The conjunction of अ and उ (*i.e.*, ओ) is the Samsāra, the World-process. The Necessity of the two dwells *between* them as इ, *i*, the Shakti, Energy.¹ Hence the order अ, इ, उ. ऋ, *r*, and ॠ, *ṛ*, (are counted as vowels) because they are pari-sphuta, (?) definite imitations of dhvanis or inarticulate sounds; otherwise indeed they would be placed amongst consonants being pronounced like र and ॠ, *r* and *ṛ*.

¹ Why अ should stand for the Self, उ for the Not-Self, इ for Energy and so on, is not explained. Probably if the science of *Shikṣhā*, including 'the physiology of language,' had been dealt with more fully in this work it would have included an explanation of this as well as the other problems which modern comparative philology has not yet succeeded in solving, *e.g.*, the origin of predicative and demonstrative roots (see Max Müller's *The Science of Language*, Vol. I, chapter ix). It would also help us, it would seem, from the lines of thought suggested by the statements in the text, to understand the rationale of the Devanāgarī system of handwriting, why the *Praṇava* should be written as ॐ, the *a*-sound as अ etc. In the meanwhile, we may conjecture that अ is the very first and simplest of all possible sounds resulting from the first and most simple exercise of the vocal apparatus, and is present

The proper pronunciation of these three sounds, अ first, and then of इ followed by उ, or of उ followed by इ, should be mastered by children before their fifth year, and the unity of the three should also be understood. All other vowels arise out of these. अ and इ make ए, *é*; अ and उ make ओ, *ō*; repeating the process, we find that अ and ए make ऐ, *ai*; अ and ओ, make औ, *au*;

in all others in some hidden way and hence is properly indicative of the Self; it is the very manifestation of the Self in sound; that while the primal resonance resulting from the simplest vocal effort, with lips closed, is the Om-sound, as soon as the lips are the least opened, that resonance takes shape as अ, *a*; that the condition of the vocal apparatus during the pronunciation of उ is such as to involve a reference, physical as well as psychical, to another than Self; and so on. As to the written character, we may surmise, as *supplementary* to the modern theory of the gradual and unconscious development of the alphabet out of pictographs, hieroglyphs, ideograms, etc., that a *deliberate* construction of forms by the 'well-instructed,' the *śiṣṭa*, the 'remnants' of past and the guides of present evolution, would naturally follow a definite plan and symbolism. Thus, the presence of Three Factors in the Endless Whole of the World-process, is obviously expressed by the primitive way of writing the *Praṇava*, *viz.*, ॐ, which in a different position becomes the *crux ansata*, and

and so on. Next, there arise the differences of short, long and very long, hrasva, dīrgha, and pluta, corresponding to the Self, the Not-Self, and the Negation respectively. Under each of these, again, is the triple division of uḍāṭṭa, high, anuḍāṭṭa, low, and svarita, even. The anu-nāsika, the nasal sound, is the Necessity of these. There are still other sub-

seems to be also expressed in the gesture called "making the sign of benediction." The Indian abhaya-mudrā, the gesture of protection, 'do not fear,' or jñāna-mudrā 'the pose of thought' is almost exactly the same, the tips of the thumb and the forefinger being joined, and the other three fingers held apart. Various modifications of this ॐ, give us the written symbols of the अ, इ, and उ sounds. Quite possibly, it may be found on investigation that certain parts of the vocal apparatus present visible forms or appearances, during the utterance of the different letter-sounds, similar to those of the written Deva-nāgarī character in its primitive form, as first fashioned by the hierarchs; or that the 'voice-figures' or 'vibrational arrangements of particles' produced by these sounds present those shapes.

It may be noted that some of the extant 'minor' Upaniṣads and works on Tantra also interpret इ as Shakti; but अ is generally interpreted as Brahmā, and उ as Viṣṇu, while M is regarded as denoting Shiva, as here.

divisions, endlessly, whence the statement that vowels are infinite.¹

The consonants are born from the vowels. That which is made manifest, vyaḥjyate, by others, viz., vowels, is vyañjana, the consonant. These are ह, ha, य, ya, व, va, र, ra, ल, la; ञ, ña, म, ma, ङ, ṅa, न, na; झ, jha, भ, bha, घ, gha, ढ, dha, ध, dha; ज, ja, ब, ba, ग, ga, ढ, da, ढ, ḍa; ख, kha, फ, pha, छ, chha, ठ, tha, थ, tha; च, cha, ट, ta, त, ta; क, ka, प, pa; श, sha, ष, sha, स, sa. These are all born from vowels; it is not possible to pronounce a consonant without a vowel. Con-

¹ Max Müller's *The Science of Language*, Vol. II. ch. iii, will help the reader in understanding the many technical Samskr̥t words in these pages. It may be noted that very much reduced as current Samskr̥t is, as compared with the original universal form of it, Samsāra-parā, even so its alphabet retains 'specimens' of almost all possible 'classes' of letter-sounds, even those which are supposed to peculiarly characterise languages very wide apart; thus even the 'hisses' and 'clucks' of certain savage-languages have counterparts here. (Perhaps this is a reason why Indians whose mother-tongue is one or other of the dialects derived from Samskr̥t make, as is said, good linguists.) This is only in accordance with the principle that the seed includes all the plant; the first sub-race of the fifth Root-Race, the types of all the remaining sex sub-races; the Varṇāshrama Dharma of Manu, the types and main principles of all possible religions.

sonants in themselves have no distinctions of short, long, very long, and high, low and even, still they are so distinguished (according to the annexed vowels). They are divided into *spṛṣhta*, *iṣhaṭ-spṛṣhta*, *vivṛta* and *samvṛta*. To the first class belong क, ख, ग, घ, ङ, च, छ, ज, झ, ञ, ट, ठ, ड, ढ, ण, त, थ, द, ध, न, प, फ, ब, भ, म; and these are sub-divided into *spṛṣhta-vivāra*, *spṛṣhta-nāḍa*, and *spṛṣhta-ghoṣha*. To the second class belong अ, इ, ए, व, sub-divided into *shvāsa*, *aghoṣha*, and *alpa-prāṇa*. To the third class belong श, ष, स, and ह, sub-divided into *mahā-prāṇa*, *mahā-shvāsa*, and *mahā-nāḍa*. There are other sub-divisions, *ad infinitum*. There are different ways of primary classification also, according to which the letters are grouped into *vargas*, classes, as, for instance, the *ka-varga*, *cha-varga*, etc., in which they have been mentioned just before. The order in the *varṇa-samāmnāya*, the primal fourteen aphorisms, is that of their genesis; that is to say, the letter which is born from another is placed next after that. In the *varga*-grouping, another principle of arrangement is followed, thus, the *ka-varga* is *kantha-sṭhāna*, *spṛṣhta*, and *vivāra-para*; the *cha-varga* is *ṭālu-sṭhāna*, *samspṛṣhta*, *samvāra-para* and *nāḍa-vān*; the *ṭa-varga* is *mūrdha-sṭhāna*, *spṛṣhta* and *ghoṣha-vān*; the *ṭa-varga* is *ḍanṭa-sṭhāna*,

spṛṣhta, *nāḍa-vān*, and *vivāra-vṛta*; and the *pa-varga* is *oṣṭha-sṭhāna*, *samvāra-niṣṭha*, and *ghoṣha-vān*. Within each *varga* the order is that of genesis. अ, इ, ए, व, (अ, इ, ए, व, ?) are born from and in the order of इ, उ, ऋ, ॠ, and श, ष, स, ह, from the *visarga*, aspirate, which resides in the अ.¹

The permutations and combinations of these make the world of words.

The words *ām nāya*, and *samām nāya*, well-known in the *Ṛgveda*, mean respectively simple and compound words (? letters, or both).

These letters enter into coalescence with each other, and we have three kinds of such coalescence: (i) of vowels, (ii) of consonants, (iii) of the aspirate or *visarga*. The transformations that letters undergo during these are described in grammar in the proper places.

These letter-sounds are universal in their natural or simple as well as their coalescent or compound forms, being all derived from the universal AUM. The natural condition is that wherein, because of some necessity, there is no mixture of one with another.

Coming now to words and their kinds, arising out of the combination of letters, we see that

¹These technical names indicate the particular parts of the vocal apparatus, the special effort and the 'potencies' involved in uttering each letter.

the prāṭipadika (or nouns, generally) correspond to the Self; the dhātu (or verbs) to the Not-Self and action; the kāraka (or prepositional inflections) to desire (which connects nouns and verbs); and the samāsa (or compound words) to the summation. Samāsa, coming or standing or sitting together, is samāsa. That which tends or causes to do or to act, kartum, is kāraka.

That which is resolved on, praṭīyate, is believed in or accepted as basis for action—that is praṭyaya. Viḍhāna, resolution, arranging out, prescribing, planning, is due to desire. All inner praṭyayas, ideas, conceptions or beliefs on which action is based, find corresponding resolutions for action in and through desire. (Hence the terminations, inflections, affixes, suffixes, etc., in grammar, which indicate the manner, in which one thing is to be related to another, the tendency by which it is to act or be acted on by another, are called praṭyayas also).

The noun in itself does not change; hence it corresponds to the Self. Verbs, on the other hand, undergo numerous changes, as classified under the ten la-kāras, sets of conjugational terminations (in Samskr̥t grammar). And kārakas, prepositional terminations, as already said, are the producers of action.

These nouns, etc., are again sub-divided into triplets. Thus, under the noun, we have the common noun, the proper noun, the 'all-name' or pronoun. The first or prāṭipadika is general. The second or nāmika is a matter of rūḍhi or root, radix, 'that which grows, growth'; it is radical and technical, of conventional growth, sāṅketika.¹ The third is the name of all, which all and each can take refuge in.

¹ The reader may notice how the *opposing* theories of modern comparative philology, (i) that language is the work of an original compact, agreement or convention, and (ii) that it has grown and evolved unconsciously out of a few roots, are quietly merged into each other in the text; radical and conventional are practically made synonymous. To understand this, it should be remembered that truth always is in the mean; that when two views are supposed to conflict very violently they are in reality supplements to each other. As said in a previous foot-note in connexion with the question of precedence as between language and grammar, the fact that the same root-sound should appeal to a number of individuals equally and simultaneously implies an original, sub-conscious *agreement* or uniformity in their mental and physical constitution, which may in this sense be said to precede language; but when, in more elaborate matters such agreement is discovered or arrived at explicitly or implicitly, it *appears* as subsequent.

Under the verb, we have the third, the second and the first persons. Each of these is in turn the universal All, *i.e.*, the Self, the first person, from his own point of view; so that the first person is clearly the most important in the aspect of unity.

Under the preposition, we have, the nominative, the accusative and the instrumental (subject, object or predicate, and instrument).

Under the compound, we have, *avyayībhāva*, *dvaṇḍva* and *ṭaṭ-puruṣa*.

From another standpoint, words are subdivided into masculine, feminine and neuter. The cause of all these divisions and subdivisions is always the same necessity of the primal Trinity.

Vowels and consonants make up all these nouns, verbs, prepositions, etc. Those that end in vowels are expounded in one place; those that end in consonants, in another; and out of these are derived all other words whatsoever.¹

Knowledge of language and grammar includes four kinds of knowledge: of words; of the meanings of words; of sentences; of the meanings of sentences. The first corresponds to

¹ Compare Max Müller's classification of Samskr̥t roots, at pp. 372-373 of *The Science of Language*, Vol. I. (Edition of 1899).

cognition; the second, to action; the third, to desire; and the fourth, to summation.

Thus, then, an accurate knowledge of words, their roots, their derivatives and classes and sub-divisions, their component letter-sounds and colors, their order, meaning, proper form and use, their connexion with each other, their respective indication of or correspondence with the Self, the Not-Self and the Negation—all this is possible only by the study of *Vyākaraṇa*.

And without such knowledge, no business of life can be carried on effectively, no sympathetic conversation is possible, and no intelligent study of the *Vedas* can be made. Hence the primacy of the *Vyākaraṇa*.

But let it be remembered that all this is directed but towards the knowledge of the main facts of the endless details of the World-process. Otherwise, indeed, Brahman is beyond all.

Beyond all language, all unproved by words,
Untouched by speech, by knowledge and by
sense,

Imperishable, Endless, Infinite,
Itself the one deep source, the single fount
Of all the varied speech bubbling from life,
And yet nor name, nor verb, nor nexus-word,
Nor compound summing all the three in one;
Nor subject, predicate or instrument,
Nor plural, dual, or the singular;

Nor person, first, or second, or the third ;
 Nor past, nor present, nor the future too ;
 Nor mood, nor tense, nor the infinitive ;
 Nor participle, adverb, adjective ;
 Nor prefix, nor yet affix, nor the root ;
 An Undeclining indeclinable,
 Steadfast in unity of blessedness !

(ii) *Shikṣhā* 'instruction'.—Needed to master the practical employment of the *Vedas*.—The physiology of voice.—The various nerves and organs concerned with it.—Causes of differences of voice.—The regulation of it taught by this science.—The cause of deafness.—The Trinity as manifesting here.—The various topics generally dealt with by this science.

The next *Āṅga* is *Shikṣhā*, instruction. Next, because though naturally first, yet in respect of practical importance it ranks after grammar. 'Instruction' is, in a sense, the first cause of knowledge; such knowledge, in and of the world's business, must be first secured, and then only can the need arise to communicate with others, which communication is matter of language and grammar. But the utility of this *shikṣhā* or instruction appears only in its application to a language. (Hence it comes in second in the scheme of studies¹). By the study

¹ This matter of precedence and succedence has been dealt with in the previous portion on *Vyākaraṇa*; it crops up perennially everywhere in ever new references.

of *Shikṣhā*, the operation, the practical working, application or utilisation, of the *Vedas* is comprehended.

In this science, the natural origin of all *varṇas*,¹ letters; the reason of that origin; how *varṇas* arise at all in the 'universal'; by what mechanism they are pronounced in this body; the particular *sṭhāna*, places, organs, (parts of the vocal apparatus, lips, palate, etc.) and the *prayaṭna*, effort, by which each letter is pronounced; the designation of each according to its *sṭhāna* and its *prayaṭna*; the laws governing these two—all these matters are explained in this science.

There² are two *kamalas*, 'lotuses,' plexuses, nerve-ganglia, called *arṇikā*, in the human body, in the region of the *nābhi*,³ navel,

¹ This word, as noted before, means kind or caste, color, and also distinct letter-sound. The underlying etymological idea seems to be that of 'manifestation' by movement or vibration, definition in sound, color, human type, etc.

² The text here is very obscure and compressed, and the translation in consequence is very tentative.

³ Desire (here the desire to speak for the satisfaction of some other desire) seems to be connected with the 'navel' or solar plexus, as suggested before. *Corresponding* centres in the brain may also be meant.

Compare the medical fact that a violent fit of anger affects the liver seriously, also the common