LINGUISTICS

III SEMESTER

COMPLEMENTARY COURSE OF BA SANSKRIT

(CUCBCSS – 2014 Admission onwards)

UNIVERSITY OF CALICUT

SCHOOL OF DISTANCE EDUCATION
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LANGUAGE

Language is our most effective means of communication. The term language is derived from the Latin word Lingue meaning tongue. Aristotle says that “Speech is the representation of the experience of mind.” Language is a system of communication used by people living in the society. There is therefore a very close relationship between society and language. Language may be defined as the expression of thought by means of speech. Language is that human expression which uttered out by speech organs. It is defined as a system of conventional, spoken or written symbols by means of a social group and participants in its culture. We communicate with others through speech and writing. Communication is more effective when we speak. We can make use of variations in voice gesture and other features to reinforce what we say.

Philology is the science of language. The word philology should meant ‘love of knowledge’ in Greek. The Greek word ‘logia’ means ‘knowledge’ and the usual way that ‘logia’ appears in English is in the form the literary points of view. In ancient times the study of language was persuade chiefly in the form of the discipline called Grammar with the conduct of new people speaking new language there came a need for men to study new language which resulted in the discovery of certain group of language. This gave rise to the comparative and historical study of language.

The beginning of comparative philology was in the dawning years of the 19th century AD. The word philology was first used by the Greek scholars denoting the ‘the study of literature and ‘literary criticism’ It gives stress to a scientific approach towards literature on language.

Derivations of the term philology

The term philology is derived from two German words ‘Philos’and ‘Logos’. ‘philos’ means ‘Love ‘ ‘Logos’ means ‘speech’. Thus philology means ‘Love of speech’ and the term can be defined as the systematic study of speech or language shortly it can be called as the ‘science of language’. Regarding the word philology another derivation is that it is the union between two words ‘Phil’and ‘Ology’. The first word ‘Phil’ denotes something elementary ‘Ology’ means ‘Science’. Thus it is a science which concentrate more on the elementary and physiological aspects of a language than their physical features. Both these terms and two ways of explanation can be traced to the intended meaning of the science of language.

NATURE AND SCOPE OF COMPARATIVE PHILOLOGY

Language is the mode of expression of thought by means of articulate sounds. It is a human organism. The basic elements of language are sounds and meanings attached to them. Each man masters one or the other language from early childhood as a natural part of his mental heritage and goes on using it through his life.

“Language may be defined as the expression of thought by means of speech sounds” (Henry Sweet) every sentence or word by which we express our ideas has a certain definite form and more or less, a definite meaning. ‘This duality of form and meaning constitute the physical and physiological aspects of speech. When we produce a word, we are not merely producing a sound
but are also conveying a certain physical process of arranging and denoting a thought material that preceded the sound.

In ancient times the study of language was reached chiefly in the form of the discipline called grammar. With the contact of new people speaking new languages there came a need for man to study new languages which resulted in the discovery of certain resemblance in the structure of certain groups of language. This gave rise to the comparative and historical study of language. Which was given a fillip by the discovery of the Sanskrit language and its scientific grammar by European scholars in the nineteenth century? This discipline of comparative and historical study of language is called comparative grammar or comparative philology. The word philology means the science of the structure and development of language. The modern scholars prefer to call this discipline by the name linguistics. Languages follow three methods of enquiry, descriptive, historical and comparative

**Historical language:**

The historical studies the fact about a language for the purpose of describing the development of that language for a period of time. It traces language change and the cause and results of such changes that occurred from time to time.

**Descriptive language**

It deals with the description and analysis of the ways in which a language operates and is used by a given set of speakers at a given time. It is based on a structural approach to language.

**Comparative language:**

Comparative language is concerned with comparing two or more languages with a view to finding out similarities in sounds, in word building, in sentence structure. The language like Sanskrit, Persian, Greek, Latin, Keltic, Teutonic, Slavonic, Armenian etc., show the similarity in grammar and vocabulary. In the same way, Hebrew, Assyrian, Arabic, Syria, etc. appear to form a group in themselves. The south Indian languages like Tamil, Telugu, Kannada and Malayalam resemble one another and form a separate group.

A study of these languages enables us to recognize several groups of families of languages such as Indo-European, Semitic, and the Dravidian. Similarity it is possible to arrive at several other groups such as the Bantu group of certain African language, the Mongolian, the Finnish, the South American, etc.

**AIM AND OBJECT**

The aim and object of Comparative Philology is to find out and explain the similarities in the vocabulary and structure of a particular group of languages. It is not merely concerned with the facts of a particular period of time like grammar, but it has to do with the facts of a language in the past as well as the present and give its history by comparing those facts at various periods in its life.
It has to deal with the various phenomena of speech –viz- the production of sounds their combination in to syllables into words and finally putting them into sentence It also includes larger questions like the origin of language, how the language is constructed, how it varies through space, how it change through time, how it is related to other language, the causes of its change and how to used. Hence the linguist studies the origin the nature and development of language Descriptively, Historically, Comparatively and formulates general rules related to language. The comparison of the language like Sanskrit, Greek, and Latin etc. is only the extension of the historical investigation of a single language through its deferent stage. Quite to quite -E Spaire –“Language is a purely human and non instinctive method of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols”

The Main Branch or division of Comparative philology

To study language in an analytical and systematic way, linguists have categorized the subject matter of the language .Thescience of language or comparative Philology is divided into four main branches. They are –

Phonology

Morphology

Syntax

Semantics

Phonology

Phonology deals with sounds and their changes from one period of a language to another period and dialect to dialect. In this branch is included the study of phonetics is the scientific study of the production, transmission and reception of speech sounds. The study focuses on how sounds are articulated by the human speech mechanism and received by the auditory mechanism and also with the rules of sound changes. The study of the effect of accent upon sound change is an important item in phonology.

Morphology

Morphology deals with word building by the union of the several constituent parts of the word such as the root, stem, suffixes, affixes, case, and personal ending etc. Modifications involved in what is called declensions of nouns and conjunctions of verbs also come under this branch.

Syntax

Syntax is sentence construction; deal with the manner in which the words are arranged in a sentence and relationship of one word with the other so as to the express a complete thought. It is the grammar of sentence.

Semantics
Semantics deals with the level of meaning in language. It is concerned with the changes and the development of meaning and includes in its ultimate aim the discussion of the way in which the earliest meaning came to be attached to the words.

Origin and development of language

Language is the mode of expression of thought by means of articulate sounds. The sounds like *ah, sh* and other interjections express certain emotions and convey definite ideas but they cannot be called language because they lack logical articulation. The interjection *sh* may express the meaning of a sentence like “*don’t make so much noise*” but it express the meaning unpermently and hence it is neither a sentence nor word but is something between the two.

There are other ways besides spoken language such as gestures through which certain ideas can be clearly communicated. When such gestures are consciously combined to express combinations of ideas as in *Bharatanatyam or Kathakali of Kerala*, we have true gesture language. In its simpler from, the gesture language is practically the same all over the world and it is easier to find out appropriate gesture symbols than findings out appropriate phonetic symbols, bit the scope of gesture language is very limited.

In the early stages of the development of language, ideas must have been expressed by a combination of gestures and sound. As gesture could be used only when there is light and the speakers are face to face, there was from the beginning, a need to develop the more convenient sound sign and extend their use as much as possible. Thus the majority of words must have come to be used for communication. This natural language which at first could be learnt easily must have become in course of time, a complex traditional language of greater convenience and wider range of expression.

Theories about the Origin of Language

In the early of Philology, the minds of scholars were much exercised to find out the way in which the first sounds of speech originated. Various theories were advanced to explain the reason why a particular sound was chosen to express a particular concept. Ancient people believed that human speech was the gift of God. We call Sanskrit a divine language re-produced by great sages.

Earlier philologists and scholars have advanced the following theories about the origin of language viz – how a particular sound becomes to be associated with a particular meaning.

The Bow-Wow Theory

Or

Onomatopoeic theory

According to the theory, Primitive words were imitative of sounds. For instance, man copied the marking of dogs and there by obtained a natural word Bow-Wow meaning *dog or bark*. The word *Kaka –Crow, Pika –Cuckoo ctc*. may be cited as other examples to justify this theory which nicknamed the Bow-Wow theory. This can explain only a very small portion of the vocabulary of a language and hence Max mullet remarked this theory goes smoothly so long as it deals with *cockling-hen* and *quacking ducks*, but around that poultry yard there is a dead wall, and we soon find that it is behind that wall the language really begins.

Interjectional or Pooh –Pooh Theory
According to this theory, language is derived from instinctive ejaculations called forth by pain or other intense sensations or feelings. The feeling of contempt or disgust for example, is accompanied by a tendency to produce the sound *pooh or pish*. Again when one is startled by a loud noise or astonished suddenly by something wonderful or strange, there is an instantaneous tendency to open the mouth widely and produce sounds like *ha, hanta, alas 0, oho*.

The main objection to this theory is that the interjections are abrupt expression of sudden sensations or feelings which lack logical articulation that is expected of a speech sound. Yet many interjections are now more or less conventionalized and are learned like any other word. This theory too explains the origin of very few words, even fewer than those explained by the bow –wow theory.

**Nativistic or Ding-dong Theory**

According to this theory, language is the result of an instinct a faculty peculiar to man in his primitive state by which every impression from without received its vocal expression from within. There is a law which runs through nearly whole nature that everything that stuck, rings. Each substance has its peculiar ring. In that ring of the human mind, there is the perfect harmony between the sound and the sense and that is language. This theory is only an extension of the interjectional theory. Words like sing-sag, dazzle, jazz etc. can be cited as examples to justify this theory.

**Yo-he-ho theory or muscular theory**

This theory is based on the principle that under any strong muscular effort, it is a relief to the system to let breath come out strongly and repeatedly and by that process, to let vocal chords vibrate in different ways. We find the laborers when engaged in doing a heavy bit of work uttering loud sounds in unison such as ho-ho, ho-ha etc these sounds come to the associated with the idea of the act performed and stand as a name for it. Thus the first words uttered would mean something like haul or heave. This theory started by Noire explains the origin of the speech without sound imitation. Sailors while hauling the anchor shout together ho-he-ho and this has been cited to explain the first syllable heave. According to this theory which is named Yo-he-ho theory, the action is indicated by the sound accompanying the action.

**Dialects and Cognate Languages**

The language spoken by individual’s shows variations in vocabulary, grammar and pronunciation. The variations that characterize a group of persons is called a dialect. Dialect was a regional basis and a class basis. The speech variations in a geographical area with in the boundary of a language are called regional dialect. Examples southern English, northern English. Variations are noted chiefly in pronunciation, vocabulary and grammar. A society is characterized by different classes of people culturally, educationally, or by other influences. Each class may prefer certain words, pronunciation, or grammatical variations that mark it from others. Such various are called class dialect. The study of dialect is called dialectology.

Latin- *frater* (brother), French- *frère*, Italian- *Fratello*, German- *bruder*, English- *brother*. When a group of dialects further split up to historical, geographical and other causes and develop into separate languages, each not intelligible to the speakers of other languages of the same
group; but at the same time, all bear signs of common parentage, they become a group of cognate languages. The most instructive words that show common parentage of cognate languages are the numerals, pronouns and words denoting family or immediate relationship, for example:-

Skt. - Dvau  Gk -duo  Latin - duo  Eng. - Two

"aham"  "ego"  "ego"  I

"Pitar"  pater  " pater"  father.

Classification of Language

Philologists classify the language of the world in a systematic manner according to certain broad principles. They have used a twofold system of classification one based on the manner of building words and grammatical devices and the other based on the roots and formative elements that in the language. The former is called morphological or Syntactical classification and the latter is called Genealogical or historical classification.

A more logical classification of language based on morphologically is first to make a twofold division into Inorganic and Organic language. Organic language are into divided three types as Incorporating, Agglutinating and inflectional. Incorporating language classified two types completely incorporating and Partially Incorporating. Agglutinating language is four fold divisions there are Prefix Agglutinating, Suffix Agglutinating Prefix and suffix Agglutinating and Partially Agglutinating. Inflexional language are divided into two types dynamically varying and dynamically in n varying.

Inorganic Language

In the inorganic language are the relation of words in a sentence is expressed by the position of the words without any internal or external modification of any word. The best example for such a language is Chinese. Here the word is a noun, a verb, an adverb, or an adjective according to the position it occupies in the sentence.

Organic Language

Organic language are those in syntactical relation are indicated by internal modification of the word itself, or by external prefixes and suffixes added to it. To this group belongs the majority of the language of the world.

Sub division of organic language

Incorporating language

In many American language a sentence is regulated a long single word in which most significant sound elements of several words are interwoven. Thus practically always the object and subject are incorporated in to the verb and they do not occur separately. For example Greenlandish a sentence word aulisariratorasuarpo – he hastens to go fishing to the meaning.
This word is made up of three parts a) aulisar - To fish,b) peator - To be engaged,c) pinneasuarpok- He hasten to fishing

**Agglutinating language**

The principle of agglutinating implies that the element of the word is glued on or joined one after the other. This type of language is agglutinating language. For example the Turkish infinitive form sev- mek (to love) the negative sev-me-mek (not to love) and passive sevilmek (to be loved)

Agglutinating languages can be divided in four types such as Prefix Agglutinating, Suffix Agglutinating Prefix and suffix Agglutinating and Partially Agglutinating

**Prefix Agglutinating**

The Zulu and other language of Bantu family of South Africa language belong to prefix agglutinating. The prefixes governed by elaborate laws of concord eg; umuntu’ with the man ‘abuntu’ with the men ’pronoun incorporation is also used here ; eg –si-ba-tanda ‘ we they love ’( we love them) : s-im-tanda ‘ we him love’ ( we love him ).

**Suffix Agglutinating**

The Dravidian language of south India belongs to the suffix agglutinating type. These language are profoundly influenced the Indo-Aryan language.

**Prefix and suffix Agglutinating**

These languages are wide spread in pacific Islands.

**Partially Agglutinating**

Partially agglutinating type includes a lot of miscellaneous language. The exact relationship of which is not quite clear.

**Inflexional or Amalgamating Language**

Inflecting language are distinguished from the other types of language in one important respect,namely the relation of the words to each other in a sentence are indicated by the additions of syllables or letters mostly suffixes which show no sign of having been independent words even when traced back as they can go .Here the suffix is amalgamated with the word in such a way that it becomes an essential and integral part of the word, as it were. Inflecting language allow a twofold division. *Dynamically varying* - the flexion is mainly internal. Semitic family of language belongs to this group. *Dynamically in varying* - the flexions mainly external of suffix variety. Indo European family belongs to the group.
Genealogical or Historical Classification

Classification of language into families based on the material of expression is called genealogical classification. We find that certain languages are related to each other both in the material they possess such as words, roots, formative, etc. and the method by which they express themselves. Such languages possessing common materials and following similar method of
expression can be traced to a common ancestor. Thus the obvious similarity of the Aryan language of India such as Hindi, Marathi, Panjabi, etc. points to a common ancestor which may be called Germanic or primitive Germanic. French, Italian and Spanish, are traceable to a common ancestor called Latin. Going one step further back, we can trace each of the above three ancestor to a still ancient common ancestor which may be called primitive Indo-European or primitive Indo-European. All the language that has branched from this great ancestor can be treated as Indo-European Family. In the manner, may families of language can be noticed. This kind of classification of languages can be noticed. This kind of classification of languages is known as genealogical classification. It must be remembered that the parent languages arrived at by such process are simply hypothetical reconstructions. There are documents to prove them.

The language of the world can be grouped in to a large number of families some of the most important families are:

1. Indo-European or Indo Germanic.
5. Ural Altic
7. Mono-Syllabic or South East Asiatic – Chinese, Tibetan, Bermiese, and Siamese.
8. Hamitic – Ancient Egyptian, Libiyan etc.

Indo-European Family of Language

The Indo-European family has, within it; several groups of language. They are:

1. Aryan or indo Iranian. This includes Sanskrit, Avestan and Prakrits.
2. Armenian.
3. Greek. This includes Ionic, Attic, and Doric etc.
4. Albanian
5. Italic. This includes Latin, Oskam, and French.
6. Germanic. This includes Gothic, Danish, Sweedish, Anglosaxon etc.
7. Balto-Slavonic. This includes old Purssion, Lithunion, Russion, Lettic, Bulgarian, and Slavonic.
8. Celtic. This includes Irish, and Scotish.

Branches of Indo-European Family

1. The Keltic-Branch-

At present this Branch is confined to the extreme west of Europe. Irish and Welsh belong to this branch. Some language of this branch has developed a strong stress accent resulting in the dropping of vowels. The noun declension too has been released by prepositional analysis.

2. Germanic or Teutonic Branch
Germanic or Teutonic Branch is the most widely spread branch of the Indo-European and one of its language. Gothic, Danish, Swedish, Dutch, English, Icelandic, etc. belong to this branch. The English has almost become the world language. The history of this branch shows the progress from synthetic to analytic structure.

Most of this language has developed a stress accent on the initial syllable only the Swedish has a pitch accent these language also show a set of consonantal sound shifting as will be seen later under Grimm’s low.

3. Italic Branch

Latin is the most important language of this branch. The history of Latin is closely bound up with the history of Rome. With the fall of Roman Empire, Latin was neglected and each Roman province developed the language difficulty and then gave race to the Roman language of Europe such as Italian, France, Spanish, Portuguese, and Rumanian.

4. Greek or Hellenic Branch

The geographical conditions and political division of ancient Greece led to the formation of a large number of dialects. In its ancient form, Greek is a very elaborate grammatical structure in the language. Greek has got its vowel system close to the Indian European parent language, and it is rich in diphthongs. The language has possessed the pitch or musical accent. Greek shows only a few case forms like the instrumental and the locative and large number of prepositions adverbs and verbal nouns. The verbal system have parasmaipada and Atmanepada. Tense system and derived conjunctions are richer in Sanskrit and duel number in the language. Attic and Doric are the chief Dialect of the Greek branch. Doric preserved the indo European *a-sound while the attic changed it into e for fix.

5. Hittite Branch

Hittite is a later discovery as a resulted of excavations at Boghasukuci a place about ninety miles east of Ankara in Asia Minor several inscriptions in Sumerian and Akkadian cuneiforms scripts. The time covered by is forms the nineteenth to the twelfth century B C Hittite revealed itself as an Indo European, but did not fit in with the other Indo European language. Sanskrit Gothic, Greek are the sister language of Hittite.

6. Tocharian Branch

This is a new branch recently added to the Indo European family. As the result of French and German expeditions to Turfan in Central Asia from where a large number of manuscripts written in an ancient Indian script were discovered. These manuscripts, when their writing were deciphered, revealed a new language of the Indo European Family belonging to the Centum group.

7. Albanian or Illyrian
This group of dialects is spoken in Albanian and part of Greece. There are no literary monuments of this branch except of inscriptions the vocabulary of this language is largely mixed with Latin, Turkish and Modern Greek.

8. Armenian Branch

Earliest available materials for the language is form the cuneiform inscriptions discovered by I Van it is the language used by American priests and just on Brahmins the old type of this language is still cultivated use Sanskrit in India.

It is the language of the religion, while Nio- Armenian is the popular language of this family. The whole history of Armenian has been intimately connected with that of Iran and more than 2000 pure Iranian words are borrowed in to Armenian.

9. Letto or BaltoSlavi

The Latto or the Baltic group is represented by three languages Old Prussian, Lithunion and Lettic. The Bible was translated in to this language in the ninety century A D. Great Russian, White Russian, Little Russian, Czech, Polish and other many languages

10. Aryan or Indo Iraniyan

The word Aryan is now confined to that group of languages the speakers of which called themselves Aryas in ancient times. This group possesses literary records (regveda) Zend, Avesta etc. Which are older than any other I E language. The two main groups of Aryan branch Indian and Iranian one most closely connected among the Indo-European language? The Iranian language had an extensive religious literature the greater portion of which was lost, when Persepolis was burnt by Alxander the great.

The oldest record of the Indian group is the Vedas, Which represented the oldest literature of the I E family. Dardic is a branch of the Aryan standing between Iranian and Indian. Iranian language are divided in three types ancient Iranian Middle Iranian and Modern Iranian. Old Person and Avesta are the ancient Iranian language, oldPerson is known through a serious of Cuneiform inscriptions. Avesta language is closely connected with Rigveda Language. The Middle Iranian language is Pahlavi, the language is very important in Aryan language. The modern Iranian language Person or Irani is most important Afghan and Kurdistan are other important language of this branch.

Vedic Sanskrit is the oldest dialect of the Aryan language in India. It was preserved some of old features of the original of Indo European language. It consonant system is almost the same as the old I E system. Prakrit show certain distinguishing peculiarities in contrast to Sanskrit. The large number of case and the wealth of verbal forms of Sanskrit tend to disappear in Prakrit.

PHONOLOGY

Phonology is one of the main divisions of the science of language. It deals with the sounds of speech and their formation in each language with special reference to their parent speech. Phonology is the organization of sounds into patterns.
Mechanism of speech

For a proper understanding of the production of sounds and their changes it is necessary to have a clear idea of the mechanism of speech sound. In the production of articulate sounds, the chief factors are the breath and the organs of speech such as- larynx, glottis, vocal cords, pharynx, uvula, palate, tongue, teeth, lips and nose.

In the throat, in the region of what is called ‘Adam’s apple’ there is slight bulging in the wind pipe. This is the Larynx where the chief vocal mechanism called the Vocal Cords, is situated. It consists of two thin, but strong elastic bands joined in the front but not at the back. During ordinary breathing, the two bands remain separated, thus leaving an opening like \( ^\wedge \) through which the breath (air) could pass without any obstruction. It is also not interfered with by the action of the muscles of the throat, mouth etc. The same air is interfered with on its way by the vocal cords and the muscles of the throat, mouth etc. when it is converted into speech sound. When air possess through the glottis, the vocal cords may be drawn towards each other by muscular tension and the breath passage may become quite narrow. Then the breath rushing out of the narrow passage causes the vocal cords to vibrate and the vibration is heard as a distinct sound which is technically called voiced - Ghosha

When the passage is wide open, the air passes without being obstructed in the Larynx but produces an audible sound being obstructed somewhere in the mouth and thus we get what we call the unvoiced sound-Aghosha.

The obstruction in the mouth may be partial or complete. When it is partial the breath stream passing through a narrow passage produces a hissing sound, and thus we get the Spirants or Sibilants or Fricatives (Ushmanah). When the obstruction in the mouth is complete, the breath stops for a while and then being released, sounds like an explosion and thus we get the explosives- Vargapanchakam. They are also called ‘Mutes’ or Stops’ and in Sanskrit sparsa or contact sounds. The contact may occur in any part of the mouth and hence it is possible to have an infinite variety of sounds. Of the five classes of explosives in Sanskrit, the three- kavarga, ta varga and pa varga are primary classes while the remaining two- ca varga and ta varga are derivative classes. The old names Gutturals and Linguals for ka varga and ta varga respectively have replaced by the more scientific names- the velars and cerebrals. The cerebrals are also called retroflex sounds.

From what we have said so far, we get four varieties of sounds.-

(1)Voiced stops, (2) Unvoiced stops, (3) Voiced spirants and (4) Unvoiced spirants. In Sanskrit and Greek there is a further variation of stop caused by the addition of a breath or whisper to the stops. This addition is called ‘Aspiration’. Thus the stops could be ‘aspirate’(Mahaprana) or ‘non aspirate’(Alpaprana).

We get nasal sounds when the contact is made in the mouth and, at the moment of releasing the contact, the breath is emitted through the nose. These are called ‘Nasals’ (anunasika) and are necessarily voiced. At other times Uvula closes the nasal passage.

Sonant and Consonant
Speech sounds are of two types- Vowels and Consonants. The sounds which are no obstruction to the flow of air as it passes through the mouth are called sonants or vowels and all of them are voiced. The sounds that are produced by the complete or partial obstruction of the breath in such a way as to give rise to an explosion or an audible friction are called consonants.

Classification of vowels

Vowel sounds may be in two ways-(1) according to the quantity and (2) according to quality.

(1) According to quantity- It depends upon the time taken to utter the vowel sound. Usually the time is measured in terms of a matra which the time is taken for uttering a short vowel. On this basis we get two kinds of vowels-short vowels of one matra and long vowels of two matras. Sanskrit grammarians have also recognized extra long vowel of three matras known as plutha. Modern linguistics recognize an extra short vowel of half matra (ardhamatrika) which is written as

(2) According to quality- it is the nature of the vowels itself, is more important. The nature of the vowels varies with the size and the shape of the mouth opening. The fundamental vowel is (long) and starting from that position where the mouth cavity is wide open. We may make the mouth opening smaller while, at the same, rising the front vowels – a, e, i, and semi vowel i. Similarity by the gradual shutting of the mouth accompanied by the gradual raising of the back of the tongue, we get the back vowels, a, o, u and the semi vowel u. All these sounds are simple sounds are simple sounds (not diphthongs) and all of them are different in quality.

Classification of Consonants

Consonants can be classified on various principles. They may be classified from the points of:

1. The kind of articulation ie. In respect of voice, breath or aspiration.

2. The degree of openness of the vocal passage during their production – sprints, mutes, explosives, or stops, nasals, and liquids.

3. The place of articulation –i.e. the point in the passage at which stopping, friction etc., like take place such as- soft palate, hard palate, dome of the palate (murdhas), teeth and lips. The sounds produced at these points are known as Velars or gutturals, palatals, cerebrals, dentals, and labials respectively.

Sanskrit vowel

ा आ ा इ ई उ ऊ ऋ ः ठ ड ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज झ ञ ढ ण त थ ध ज

Of these a I and u are simple short vowels.

āi and ē are simple long vowels

r and l are short sonant liquids
ṝ and ṭ are long sonant liquids

Sanskrit consonants

Gutturals – k, kh, g, gh
Dentals – t, th, d, dh
Labials – p, ph, b, bh
Palatals – c, ch, j, jh
Ceribals or
Retroflex sounds -ṭ ḍ ḍ ḡ

Nasals – ň ň ŋ n m
Liquids – r, l
Semi vowels – y, v
Sibilant – ś š s
Aspirate – h and visarga ḷ

Indo-European vowels and consonants

Vowels – a,ā, e, ē, o, ō, ə, i, ī, u,ū
a,ā, e, ē, o-Strong vowels
ə- Neutral vowel
i, ī, u,ū - Week vowel

Nasals – m, n, ŋ ŋ ň ŋ m
Liquids – r, l(ṝḹ)
Semi vowels – i, u
Spirants – s, z, j, v, fo, of, y

Consonants
Explosives – Tenues
Tenues – Media
Media
aspirateasperate

Velars or
Back Gutturals –q qh g gh

Middle gutturals _ k kh g gh

Dentals _ t th d dh

Labials _ pph b bh

Old Palataals or
Front gutturals _k kh g gh

PHONETICS LAWS

Most of linguistics changes are so gradual that even the speakers are not conscious of the change when they take place. Even those changes that are the result of conscious innovations must be the result of some natural tendency, as otherwise they would not be adopted by the majority of these speakers of that language. Moreover, if one speaker modifies the language differently, the change will not be intelligible to others and hence will not be accepted and adopted by the society. Thus linguistics changes are, on the whole, regular. Therefore by comparative and historical study of the languages, it is possible to formulate definite laws of linguistics change and explain the variations found in the dialects and cognate language.

Tucker defines phonetics law thus “A Phonetic Law of a language is a statement of a regular practice of that language at a particular time in regard to the treatment of a particular sound or group of sounds in a particular setting”. This definition clearly shows that phonetic laws operate only in a particular language at a particular time in a particular setting with regard to a single sound or a group of sounds.

I. The Law of Palatalisation

The law of palatalisation was discovered by several scholars at the same time and hence it was not named after any particular individual. It was Wilhelm Thomson who first mentioned it in 1895.

Sanskrit palatal sound ‘c’ and ‘j’ corresponding to western Indo-European language have the guttural sounds ‘q’ and ‘g’. Sanskrit ‘a’ and corresponded to the ‘e’ in western I.E language there is ‘c’ before the Sanskrit ‘a’ and ‘q’ or ‘g’ before ‘e’ in western language. Example-Sanskrit ‘ca’ in Latin ‘que’.Latin ‘coxa’ Sanskrit ‘kakṣa’. This change of gutturals into palatals in Sanskrit in certain places is explained by the law of the palatalisation which shows that this change is according to a strict rule.

The law of palatalisation may be formulated as follows -;
“During the Aryan period, before the change of Primitive Indo-European ‘e’ into ‘a’, the I.E. velars and middle gutturals were changed into palatal when followed by the palatal vowel and semi vowel –‘e,i’ and ‘i’ in the Aryan language (and were preserved as gutturals in any other position)”

During the Aryan period- I.E q, qh, g, gh, k, kh, g, gh followed by ĕ, ĭ, and i changed into Aryan - c, ch, j, jh before I.E ‘e’ changed into ‘a’ after change I.E ‘e’ passed into Sanskrit ‘a’.

Examples-----

<table>
<thead>
<tr>
<th>I.E</th>
<th>Sanskrit</th>
<th>Latin</th>
</tr>
</thead>
<tbody>
<tr>
<td>qe</td>
<td>ca</td>
<td>que</td>
</tr>
<tr>
<td>qerus</td>
<td>carus</td>
<td></td>
</tr>
<tr>
<td>getuōres</td>
<td>catvāras</td>
<td>quatuors</td>
</tr>
<tr>
<td>kukis</td>
<td>śucis</td>
<td></td>
</tr>
<tr>
<td>kieuetai</td>
<td>cyavate</td>
<td></td>
</tr>
<tr>
<td>peñge</td>
<td>pañca</td>
<td>quinge</td>
</tr>
<tr>
<td>auges</td>
<td>ojas</td>
<td></td>
</tr>
<tr>
<td>geretai</td>
<td>jarate</td>
<td></td>
</tr>
<tr>
<td>qid</td>
<td>cid</td>
<td></td>
</tr>
<tr>
<td>geni</td>
<td>jani</td>
<td></td>
</tr>
<tr>
<td>gmskho</td>
<td>jacchāmi</td>
<td></td>
</tr>
<tr>
<td>genu</td>
<td>janu</td>
<td></td>
</tr>
<tr>
<td>iskho</td>
<td>icehami</td>
<td></td>
</tr>
</tbody>
</table>

II. Fortunatov’s Law

Fortunatov was a French Philologist who attributed the origin of cerebrals in Sanskrit to the combination of I.E dental with the liquid ‘r’, ‘l’. The rule can be formulated by Fortunatov, who discovered the theory is Fortunatov’s law. The parent I.E. liquid (‘l’)+dentals (t,th,d,dh) =cerebrals (t th, d ,dh,) in combination with ‘l’ liquid become cerebrals(t,th,d,dh) in Sanskrit ‘l’ disappeared and the dental is changed into cerebrals but in the group ‘r’+dental=dental remained and unchanged(l+t=t).

Fortunatov’s has taken into account the comparison between the Sanskrit word ‘pata’ (cloth) old slavonic –‘palatino’,Russian-‘polotno’(lines cloth). This comparison would bring back P.I.E.form ‘palta’. Palta= liquid +dental =cerebral pata in Sanskrit.
**Indo-European l+dental > Sanskrit -Cerebral**

<table>
<thead>
<tr>
<th>Indo-European</th>
<th>Sanskrit</th>
<th>Latin</th>
<th>Gothic</th>
<th>Oslaw</th>
<th>Lithunion</th>
</tr>
</thead>
<tbody>
<tr>
<td>paltos</td>
<td>pa ḍas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kulth</td>
<td>kuṭhars</td>
<td>culter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>palnis</td>
<td>pānis</td>
<td>palma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ulāni</td>
<td>vāni</td>
<td>walus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bhulas</td>
<td>bhāsat</td>
<td></td>
<td></td>
<td>balsas</td>
<td></td>
</tr>
<tr>
<td>lals</td>
<td>laśhmi</td>
<td>lustus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ghsotu</td>
<td>h ātakam</td>
<td>gulp</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indo-European r +Dental > Sanskrit -Dental**

**Indo-European l +Dental > Sanskrit -Cerebral**

Indo European r+dental remain and unchanged Aryan language

<table>
<thead>
<tr>
<th>Indo-European</th>
<th>Sanskrit</th>
<th>Latin</th>
<th>Gothic</th>
<th>Solow</th>
<th>Lithuanian</th>
</tr>
</thead>
<tbody>
<tr>
<td>kartō</td>
<td>karthāmi</td>
<td></td>
<td></td>
<td>kertu</td>
<td></td>
</tr>
<tr>
<td>merdō</td>
<td>mardāmi</td>
<td>mardeo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uerto</td>
<td>vartaāmi</td>
<td>verto</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grimm’s Law**

Sanskrit, Greek Latin and Slavonic language have generally preserved the original I E Consonants expect in the case of local change while the Germanic languages record a wholesale change This was discovered and explained by Rasmusk Rask, but it was Grimm
who brought all such changes called ‘Sound shifting’ under a single formula and systematized the whole process citing numerous. His formula has since become famous under the name Grimm’s Low.

The low refers to the changes in the Germanic language at two distinct periods. The first stage occurred in the Prehistoric period while the second occurred about the seventh century A.D. These two stages are called the first and second sound shifting.

Indo European tenues, media, aspirate (k t p, g d b, ghthbh) were changed in to aspirate, tenues, and media (h t f, k t p, g d b) in Low German, and turn they were changed into media aspirate and tenues (g d b, kh th ph, or ch z f and k t p) in High German

<table>
<thead>
<tr>
<th>Indo European</th>
<th>1, Sound shifting</th>
<th>2 Sound shifting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>k t p</td>
<td>h t f</td>
</tr>
<tr>
<td>2</td>
<td>g d b</td>
<td>k t p</td>
</tr>
<tr>
<td>3</td>
<td>ghphbh</td>
<td>g d b</td>
</tr>
</tbody>
</table>

*Example:* - (1) k t p > h t f

<table>
<thead>
<tr>
<th>IE</th>
<th>Sanskrit</th>
<th>Latin</th>
<th>Gothic</th>
<th>High German</th>
<th>English</th>
<th>Greek</th>
<th>Morden German</th>
<th>Anglo Saxen</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>kmtom</em></td>
<td>śatam</td>
<td>hund</td>
<td>hunt</td>
<td>hundred</td>
<td>he-katon</td>
<td>hund- dert</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>kṛḍ</em></td>
<td>hṛḍ</td>
<td>hairto</td>
<td>hers</td>
<td>heart</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>ṭnus</em></td>
<td>tanus</td>
<td>tenuis</td>
<td>thin</td>
<td>tonus</td>
<td>dunn</td>
<td>thynne</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>ṭreis</em></td>
<td>traya m</td>
<td>tres</td>
<td>threis</td>
<td>drei</td>
<td>three</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>pṛter</em></td>
<td>pitā</td>
<td>pater</td>
<td>vater</td>
<td>father</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>penqe</em></td>
<td>panca</td>
<td>quinqu e</td>
<td>fimm</td>
<td>five</td>
<td>pente</td>
<td>funt</td>
<td>fit</td>
<td></td>
</tr>
<tr>
<td><em>pod</em></td>
<td>pad</td>
<td>fuss</td>
<td>foot</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
Example: 
\[(2) \ g \ d \ b \overset{>}{\rightarrow} k \ t \ p\]

<table>
<thead>
<tr>
<th>*genu</th>
<th>janu</th>
<th>genu</th>
<th>knie</th>
<th>kniu</th>
<th>knee</th>
<th>gonu</th>
<th>knie</th>
<th>eneo</th>
</tr>
</thead>
<tbody>
<tr>
<td>*agros</td>
<td>ajras</td>
<td>ager</td>
<td>akrs</td>
<td>acre</td>
<td>agros</td>
<td>aker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*dekm</td>
<td>dasa</td>
<td>decem</td>
<td>taihum</td>
<td>ten</td>
<td>deka</td>
<td>zohn</td>
<td>zen</td>
<td></td>
</tr>
<tr>
<td>*dentos</td>
<td>dantas</td>
<td>dentis</td>
<td>tunthun</td>
<td>tooth</td>
<td>agdonto</td>
<td>zahn</td>
<td>toth</td>
<td></td>
</tr>
<tr>
<td>*lamp</td>
<td>lambat</td>
<td>e</td>
<td>stepan</td>
<td>sleep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: 
\[(3) \ gh \ dh \ bh \overset{>}{\rightarrow} g \ d \ b\]

| *ghensos | hamzas | anser | gans | goose | khonos | gans | gos |
| *medhu | madhu | anser | gans | goose | khonos | gans | gos |
| *dhugheter | duhurit | dauhter | tohter | doughter | tochter | dohter |
| *bhero | bharani | tero | haira | bear | phero | heva |
| *bhrater | bhrater | frater | phrater | bruoder | brother | burder | brother |

<table>
<thead>
<tr>
<th>Indo European</th>
<th>Ist shift</th>
<th>IIInd shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>*t</td>
<td>th</td>
<td>d</td>
</tr>
<tr>
<td>*d h</td>
<td>d</td>
<td>t</td>
</tr>
<tr>
<td>*d</td>
<td>t</td>
<td>tz z</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PIE</th>
<th>Gothic</th>
<th>Anglo Saxen</th>
<th>Morden English</th>
<th>Old high German</th>
<th>Morden German</th>
</tr>
</thead>
<tbody>
<tr>
<td>* treies</td>
<td>threis</td>
<td>thri</td>
<td>three</td>
<td>drei</td>
<td>drei</td>
</tr>
<tr>
<td>*bhrater</td>
<td>bhratær</td>
<td>frater</td>
<td>brother</td>
<td>bruoder</td>
<td>burder</td>
</tr>
<tr>
<td>*p ter</td>
<td>fader</td>
<td>foeder</td>
<td>father</td>
<td>vater</td>
<td></td>
</tr>
<tr>
<td>*medhu</td>
<td>madhu</td>
<td>medu</td>
<td>mead</td>
<td>meto</td>
<td></td>
</tr>
<tr>
<td>*dhugheter</td>
<td>dauhter</td>
<td>tochter</td>
<td>daughter</td>
<td>tochter</td>
<td>tochter</td>
</tr>
<tr>
<td>*dekm</td>
<td>taihum</td>
<td>ten</td>
<td>ten</td>
<td>zen</td>
<td>zehn</td>
</tr>
<tr>
<td>*duo</td>
<td>tvai</td>
<td>tva</td>
<td>two</td>
<td>zwene</td>
<td>zwei</td>
</tr>
<tr>
<td>*dontos</td>
<td>tunthus</td>
<td>toth</td>
<td>tooth</td>
<td>zahn</td>
<td></td>
</tr>
</tbody>
</table>

Verner’s Law
Verners discovered that the operation of Grimm’s law depended on the position of accent. He showed that Grimm’s law is true with regard to the * that followed the principal accent as in I E. * brother changed into * brother, but not true in the case of the * which preceded the accent as in * māker. Germanic * moder, Sohe formulated a law after examining many instances of the above type, as follows- In the middle or end of the I E words, if the immediately preceding vowel did not bear the principal accent, * k t p did not become h th f (according to Grimm’s law) were changed into g d b (double shift) in Teutonic language and * s is changed into r except in case of the combination * h t, h s, f s, and sp.

For Examples:

<table>
<thead>
<tr>
<th>I E</th>
<th>Sanskrit</th>
<th>Latin</th>
<th>Gothic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ivenkos</td>
<td>yuvaśas</td>
<td>juvencus</td>
<td>juggs</td>
<td>young</td>
</tr>
<tr>
<td>*kmtom</td>
<td>śatam</td>
<td>centum</td>
<td>hunda</td>
<td>hundred</td>
</tr>
<tr>
<td>*septom</td>
<td>sapta</td>
<td>septem</td>
<td>sibun</td>
<td>seven</td>
</tr>
<tr>
<td>*snusa</td>
<td>snusa</td>
<td></td>
<td></td>
<td>snoru</td>
</tr>
</tbody>
</table>

**Grassmann’s law of De – aspiration**

In 1862 Hermann Grassmann demonstrated the above correspondence is in conformity with Grimm’s Law and is perfectly regular. He gave the clue by comparing the Greek and Sanskrit Forms together. He formulated a law, which is called after his name. This law explains some instances which seemed to be exceptions to Grimm’s Law. It was presumed that the I E aspirate, media, and tenues remained unchanged in classical languages like Sanskrit, Greek, and Latin. So in the place of Sanskrit *badhnāmi and bodhāmi*, it was assumed that the P I E. forms were *bndhnomi and beudhō and in that case, according to Grimm’s law the initial *b in the above words should be represented by *p in Germanic language – Germanic *binda English bind. So it appeared as though this is an exception to Grimm’s law. In P I E when two or more aspirate occur in succession the former becomes despaired in the separate history of the Indian and Hellenic groups.

Examples:-

*bheudhō>bodhāmi*

dhidhemi>dadhāmi

ghrdhiō>grdhyāmi

gheghona>jaghāna

*bhhhrmes>bibhramā*