Chapter IV

Suniti Kumar Chatterji – The Linguist

‘Where the mind is led forward by thee,
Into ever widening through and action….’
‘Where tireless striving stretches its
Arms towards perfection……..’

[‘Where the mind is without Fear’
- Rabindranath Tagore]

Let us remember these lines of Tagore before saying a few words on Suniti Kumar Chatterji – The Linguist, as we have little capacity to fathom the depth of his knowledge as a linguist. Like his wide range of interests, the fields of linguistic studies that he traversed were also vast and ever widening. We have so far discussed the historical background, Prof. Chatterji’s early life and training and his range of interests. In studying these we have already seen that when Suniti Kumar appeared in the linguistic scene, his training had fully equipped him to introduce this new science to India. This was an age of philological studies when the great sound laws had been discovered and the foreign Indologists as well as the Indian scholars engaged themselves in the study of the Indian languages.

But till then the scholars engaged themselves in the philological studies which were mostly related to the discovery of new facts regarding the intellectual achievement and the culture of a nation. Suniti Kumar Chatterji’s works too, besides presenting linguistic analysis threw light on interesting socio-cultural facts.
A classification of Dr. Chatterji's works will show how he worked as a social scientist and applied the techniques of linguistics to the study of different stages of development of Aryan languages in India. Since Suniti Kumar's major contribution is related to the Indian languages, emphasis has been given here in this chapter, especially on *The Origin and Development of the Bengali Language* (1926). A brief statistics of Dr. Chatterji's works as shown by Prof. Bh. Krishnamurty has already been presented in the introduction. (pp.1-2)

The total number of his published works including books, articles, and papers will be more than thousand and the scholars have differed in opinion regarding the broad classification of his works. Here we may also note the point that, though Dr. Chatterji did not write any separate book on Indo-European, his wide and extensive study of IE is reflected in almost all of his major works. It appears that he had keenly studied the works of Karl Bruggman and Berthold Delbruk the two chief exponents of Indo-European linguistics and had followed their line. Whenever he made any comparative study of languages or literatures, or solved out linguistic equations he always had in his mind the basic principles of Indo-European philology. So it may be said that Indo-European for him served as a sound base without which he could not have carried out the researches on the Indo-Aryan Languages particularly Bengali or Hindi or the comparative studies as Balts and Aryans, India and Ethiopia, India and China and so on. As the languages spoken in India belong to four language families, Dr. Chatterji could not have studied the mutual influences of the languages or the cultural intermixture so well, without a thorough knowledge of IE. One of Dr. Chatterji's papers on Indo-
Here we have presented a detailed classification of his major and selected works. It has been arranged in three main heads with respective sub heads:

Classification of Suniti Kumar’s Works

I. Indo-Aryan Linguistics
   • General Study of Indo-Aryan.
   • Works on Eastern Magadhan languages – Bengali, Oriya and Assamese.
   • Works on Phonetics – Bengali and Sanskrit.
   • Works on other Aryan languages of India and Aryan culture.
   • Observation on Indian Linguistics and Language problems.

II. Researches on Language Families

III. Comparative Studies of Aryan and Non-Aryan Languages and Culture

I. Indo-Aryan Linguistics

Prof. Chatterji’s contribution to Indo-Aryan and Indian Linguistics may be briefly summarized as follows –

• Dr. Chatterji was the scholar who first linguistically proved the language of Caryā songs as ‘Bengali’. Mahamahopadhyay Haraprasad Shastri discovered these texts in Nepal (1907). Shastri’s research
works on Caryā songs and the other older texts (Dohākoṣa and Dākārnava) was published in 1916 in a single book under the title Hājār Bacharer Purāṇa Bāṅgalā Bhāṣāy Baudda Gān O Dohā ‘Buddhist Songs and Couplets in Bengali Language One Thousand Years Old’. Md. Shahidullah another great Indian linguist had suggested that these texts were probably Bengali. These texts had linguistic features which were characteristic of S’aurasenī Apabhraṣṭa. Dr.Chatterji used the methods of comparative studies of the dialects and came to a conclusion that the language of the Caryā songs is ‘the genuine vernacular of Bengal at its basis.’ In his analysis he has taken metrical considerations into account also. (Sen, 1990: 19). Now-a-days Radio-Carbon-Dating method of Applied Linguistics is used to calculate the age of older texts. During the period when Dr.Chatterji studied the older texts no such modern facilities were available. So, it was Dr.Chatterji’s depth of knowledge, clear conception and intuition which helped him to identify the language of the Caryā songs as Bengali. (Majumdar, 2011).

- A complete, elaborate, scientific account of Bengali Language, which was much required at that time and which greatly, inspired the later research works.
• Study of Bengali phonology – framing of phonological rules such as ‘apinihiti’ (epenthesis), ‘abhis’ruti’ (umlaut) and explanation of these rules with ample examples.
• Study of Bengali morphology – study of the formative elements, nominal stems, structural and formal classification of verbal roots, compound verbs and compound tense, study of ‘aspect’ in the conjugation system.
• Explanation of phonological and morphological characteristics of Sanskrit and some other Indian Languages.
• Etymological studies of Bengali (words like biṭala or biṭle ‘a term of abuse for a Brahmin’, ābchā from abhrachāyā ‘hazy’); comparative etymological studies of Indo-Aryan and other Languages as Sanskrit ‘Govinda’ and old Irish ‘Boand’.
• Scientific account of some Indian Languages such as Hindi or Rajasthani.
• Explanation of some OIA, MIA and NIA problems as that of Inner and Outer Aryans, expansion and working of Fortunatov’s Law in the development of IA.
• Study of the development of Hindi as the National Language in India.
• Study of Dravidian influence on Indo-Aryan and the presence of Austric elements in Indo-Aryan place names and culture in general.
• Suniti Kumar Chatterji’s A Bengali Phonetic Reader (1928) presented a scientific method of teaching the pronunciation of Bengali sounds.
• His Bhāṣā-Prakāś’ Bāṅgālā Vyākāraṇ (1939) reflects a brilliant pedagogical approach to Bengali grammar and language teaching.
- Study of the language problems in 20th century India and suggestions for solution of the problems.
- His discussion on the various aspects of Aryan and Non-Aryan languages presents important guidelines for Language Planning and Language Policy in India.
- The study of the common features of the Aryan and Non-Aryan languages is related to the concept of India as a Linguistic Area.

I. (a) Works on general study of Indo-Aryan

Papers and Articles

- Some more Austric Words in Indo-Aryan. Translated by P.C. Bagchi, University of Calcutta, 1929.
- Recursives in New Indo-Aryan, January 1929.
- The Tertiary Stage of Indo-Aryan, Patna, December 1930.
- Polyglotism in Indo-Aryan, Baroda, 1933.
I. (b) Works on Eastern Magadhan Languages and Culture – Bengali, Oriya and Assamese

Bengali language is Dr. Chatterji’s main subject of study and so works on Bengali and its sister languages of Eastern Magadhan group may be listed separately.

Books and Monographs

- The Origin and Development of Bengali Language (ODBL).
  Parts I and II First Edition – Published by the University of Calcutta, 1926.
- The Place of Assam in the History and Civilization of India.
  University of Gauhati, Assam, 1955.
- People Language and Culture of Orissa.
  Orissa Sahitya Academy, Bhubaneswar, 1966.

Papers and Articles

- The Passive in Bengali.
- Rise of Vernacular Literature.
- Buddhist Survivals in Bengal.
❖ India Literature: Bengali
❖ Bengali Origins: Linguistic and Literary to 1200 AD.
The New Review, June 1937 (pp.546-559)./ July 1937. (pp.40-55).
❖ The name “Assam-Ahom”
❖ The Bengali Language.
IAC, July 1962, pp.54-62.
❖ Assam and India
Gauhati, Assam, December 1958.

I. (c) Works on Phonetics

Books and Monographs
❖ Bengali Self-Taught,
   London, 1927.
❖ A Bengali Phonetic Reader
❖ Phonetics in the Study of Classical Languages in the East.
   Published by the University of Bangalore, 1967.

Papers and Articles
❖ A brief Sketch of Bengali Phonetics
   BSOS, Vol. II Pt.1 1921.
❖ Phonetic Transcriptions from Indian Languages
❖ A Phonetic Transcription from Toda, (1930).
❖ A Phonetic Transcription from Mewari of Udaypur. (1930).
❖ The Pronunciation of Sanskrit.
   K.B. Pathak Commemoration Volume BhORI, Poona., 1934, pp.330-349
❖ Evolution in Speech Sounds
❖ Phonetic Transcriptions in the Historical and Comparative Study of Indian Languages.
❖ The Correspondence between Sound and Phoneme in the light of Modern Linguistic Theories. Rosetti Birthday Celebration Volume, Bucharest, 1966, pp.31-42.
❖ Orthography and Phonetics
   Pronunciation and Traditional Spelling in Language particularly in India. Study of Sounds, XV 1969, Phonetic Society of Japan.
❖ Glottal Spirants and the Glottal Stop in the Aspirates in New Indo Aryan.

I. (d) Works on Languages of India and Indian Culture

Books and Monographs
❖ Indo Aryan and Hindi.

- The National Flag: A Selection of papers – cultural and historical. 
  Mitra and Ghosh, 1944.

- Scientific and Technical Terms in Modern Indian Languages: Address 
  at Poona 1953. 
  Vidyoday Library, Calcutta, 1953.

- Indianism & Indian Synthesis: The Kamala Lectures delivered before 
  the University of Calcutta, 1947, published in 1962 by University of 
  Calcutta.

- Languages and Literatures of Modern India 
  Prakash Bhavan, Calcutta – 12, 1963. (Italian version Le Lingue e le 
  Letterature del Subcontienento dell’ India was published in 1956 
  from Rome as part of the second volume of Le Civilta del Oriente).

- Religious and Cultural Integration of India. 
  Atombopu Research Centre, Imphal, Manipur, 1967.

Papers and Articles

- Hindu Proselytisation and the Place of the New Converts in the 
  Varnasyama Samaj.

- The Foundations of Civilization in India. 
  Batavia, Java, September 30, 1927.

- Hindu Culture and Law it spread abroad. 
  The Searchlight Anniversary Number 1929.


- Hindu Culture and Greater India. 

- The Oldest grammar of Hindustani.


❖ The Indian Renaissance in Mexico (illustrated) MR, January 1934, pp.10-16.

❖ A Roman alphabet for India


❖ Kharavela


❖ What is Hinduism?

P.Bh. January 1943, pp.1-5.

❖ Indianism or the Hindu Ideal and Humanity.


❖ A National Coinage for Free India. (illustrated)

H.S.October 7, 1945.

❖ Democracy in India.

The Nationalist, Puja Number, 1945.

❖ The Indian Scene.

HS, Puja Annual, 1945.

❖ Hindi and the role of the Middle Speech in Indian History.

Sunday HS, August 7, 1949.

❖ The Internationalism of India.

Nehru Abhinandan Grantha, Calcutta, 1949, pp. 426-432.

❖ Foreigners and Indian Names: the Panjab Speech through the ages.

❖ National Language of India: how Bengal helped to evolve and established it.
   HS, August 15, 1950.
❖ Race Movements and Prehistoric Culture.
   'The Vedic Age, Vol.1 of The History and Culture of the Indian People’, 1951, pp.141-167.
❖ Hindi, the National Language of India and its Modernization.
❖ L’Hindi: dans le passé le present et l’avenir de l’historie indienne (in French).
❖ Sanskrit and the Languages of Asia.
❖ Dharmapala and the Cultural Renaissance in India and Ceylon.
❖ Sanskrit World Academy.
❖ The Basic Unity underlying the Diversity of Culture.
❖ The place of Sanskrit in Secondary Education.
   BRMTC, January 1954.
❖ Modern Indian Literatures.
   H.S. Puja Number, 1953.
❖ The Indian Synthesis and Racial and Cultural intermixture in India,
Presidential Address, AIOC, 17th Session, 1953.
❖ The Cultural Synthesis.
Tagore Centenary Volume, Visvewarananda Vedic Research Institute,
Hoshiarpur, Punjab.
❖ The Culture and Religion of India.
❖ 'Love Man and Worship God—Basis of Indian Culture'.

I. (e) Observation on Indian Linguistics and Languages problems

Books and Monographs
❖ Languages and Linguistic Problems: Oxford Pamphlets on Indian

Papers and Articles
❖ The Language Question in India of the Future.
❖ Indian Language Problems.
❖ The Study of Modern Indian Languages 10th AIOC, Tirupati, March
22, 1940.
❖ Linguistics in India
Progress of India Studies (1947-42). Bh.ORI Silver Jubilee Volume,
❖ A Pan-Indian Language and Script for Lawyears and Laymen.
❖ Language in India and Indian Unity H.S., Puja Annual, 1947.
❖ The People and Languages of India.
    HS. Congress Number, 1948.
❖ Languages in India.
    ‘Introducing India’ Part II Royal Asiatic Society of Bengal 1949, pp.7-45.
❖ India: Language Problems.
❖ Indian Languages and Literature.
❖ The Language Problem in Indian Education.
    BRMIC, January 1954, (also published as booklet from Bombay, 1954).
❖ Literature in Modern India.
    MI, August, 1956.
❖ Indian Literature.
❖ Linguistic Survey of India: Languages and Scripts’
❖ Contributions from different language – Culture Groups.
❖ Hindi vs. Sanskrit: Conflict of Languages in Secondary Education.
    (Issued as a booklet from Calcutta).
    ABP, 1959. (Issued as a booklet from Calcutta).
❖ Integration in Linguistic Pattern in India.

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❖ John Beans, the Founder of Indo-Aryan Linguistics.
❖ A Common Script for Indian Languages.
❖ Levels of Linguistic Analysis.
Cambridge, Mass, USA, august 1962.
❖ The Question of Language.
❖ Linguistic Studies in India in the Modern Age.
July 1968, for the 7th Volume the CHI.

II. Researches on Language Families and Groups other than Indo-Aryan

Books and Monographs
❖ Kirāta-Jana-Kṛti – The Indo-Mongoloids: their contribution to the history and culture of India.
Pratibha Devi Lectures, Jorhat, Assam, 1947. Published in 1951 by the Asiatic Society, Calcutta.
❖ Africanism: the African Personality.
❖ Dravidian
Annamalai University, Lectures delivered in February 1963, published in 1965.
Papers and Articles

❖ The Study of Kol.

❖ Dravidian Origins and the Beginnings of Indian Civilization

❖ An Early Arabic Version of the Mahabharata Story.

❖ Old Tamil, Ancient Tamil and Primitive Dravidian.

❖ Tribal Languages.

❖ Dravidian Philology.
Address, Annamalai University, April 1957,

❖ The African Achievement.

❖ The Russian Language and Soviet Culture in India.

❖ Iranianism: Iranian Culture and its Impact on the world from the Achaemenian Times.
World Congress of Iranologist, Tehran, Augst-September, 1966,
Published as a monograph by the Asiatic Society in 1971.

❖ Some Observations on Linguistic and Cultural Studies of Tamil and Dravidian.

III. Comparative Studies of Aryan and Non-Aryan Languages and Culture.

Books and Monographs
❖ Balts and Aryans: in their Indo-European Background Indian Institute of Advanced Study, Simla.
Lectures delivered at the Autumn Session in October 1966.,
Published in April 1968.
❖ India and Ethiopia: from the 7th century B.C.
Published by the Asiatic Society, Calcutta, Monograph Series No.15, 1968 (issued 1969).

Papers and Articles
❖ Siam and India.
❖ Polonia and India.
India and Poland, May 3, 1941, pp. 8-11.
❖ India & Polynesia: Austric bases of Indian Civilization and Thought.
❖ The Turks and India and the Turkish Renaissance.
❖ Black Africa and the World.
   Peaceful Co-existence, 1956.
❖ India and China – Story of 1000 years of Cultural Contact.
❖ India and Germanic World.
   H.S., Puja Annual, 1957.
❖ India and Arab World.
   ABP, Puja Annual, 1957.
❖ Conflict of Speeches in India and the Adivasis.
   HS, Puja Annual, 1963.
❖ India and South Eastern Asia.
   HS, Puja Annual, 1964.
❖ Problems of literature in Asian and African Countries.
   Amity, December 1964, pp. 39-46. (Read at the Conference of Asian
   and African writer in Moscow on June 8, 1964).
❖ Sanskrit Govinda: Old Irish Boand.
   Neue Indian kunde, Festschrift Walter Ruben zum 70, Geburtstag,
❖ India and France.
❖ Veda – Samhita Baltica.
❖ Arya-Dramidika
Abbreviations used in this list

ABhORI  Annals of the Bhandarkar Oriental Research Institute, Poona.
ABP    Ananda Bazar Patrika, Calcutta.
AIOC   All India Oriental Conference.
AS     Asiatic Society, Calcutta.
BhORI  Bhandarkar Oriental Research Institute, Poona.
BPhSC  Bulletin of the Philological Society of Calcutta.
BRMIC  Bulletin of the Ramakrishna Mission Institute of Culture, Calcutta.
CHI    Cultural Heritage of India, Calcutta.
CMG    Calcutta Municipal Gazzette.
CR     Calcutta Review, Calcutta University.
HS     Hindusthan Standard, Calcutta.
IAC    Indo-Asian Culture, New Delhi
IC     Indian Culture, Calcutta.
IHQ    Indian Historical Quarterly, Calcutta.
IL/BLSI Indian Linguistics (Bulletin of the Linguistic Society of India).
JAS    Journal of the Asiatic Society, Calcutta.
JASB / JRASB Journal of the (Royal) Asiatic Society of Bengal, Calcutta.
JDL    Journal of the Department of Letters, Calcutta University.
JGIS   Journal of the Greater India Society, Calcutta.
MI     March of India, Delhi.
MR     Modern Review. Calcutta.
NIA    New Indian Antiquary, Bombay.
The Origin and Development of the Bengali Language

The Origin and Development of the Bengali Language (henceforth ODBL) 1926, being on outstanding research work on Bengali language, is Dr. Chatterji's greatest contribution to the study on Indo-Aryan Linguistics. The Linguistic approach in ODBL is comparative-historical and mainly diachronic in nature. However, it also adopts instances of synchronic analysis in the description of Bengali phonology and morphology. The use of modern methods, novel ideas and dialectal studies has given ODBL a unique and superior position in the field of research works on Indian languages. We have also quoted here some of the important comments on ODBL to show his excellence in linguistic research.

In the foreword part of Chatterji's ODBL, G.A. Grierson has explained two possible lines of investigation of this subject. The one which was followed by John Beames views all the forms of speech, as a whole compares them with each other and deducts general rules. The other line of investigation which was followed by Trumpp, Hornle and Bloch, takes one particular language as the text, examines it exhaustively and compares it with what is known of other languages. The basis of Prof. Chatterji's work was Bengali language. It was profitable for him to adopt the latter procedure.
and he did so. Beames’s procedure could not be really successful unless each of the languages concerned were separately and minutely dissected under the strictest scientific rules. A comparative grammar must be based on the scientific study of each of the languages concerned. Beames’s method was not at all suitable for Suniti Kumar as there was no detailed and scientific account of Bengali Grammar at that time. Grammatical works of G.A. Grierson (1894-1928) or the works like Gaṇḍya Vyākaraṇ (1833) could not be accepted as a model.

In his article ‘Bāṅgālā Bhāṣā O Sāhitya’ (1935) Suniti Kumar Chatterji presents a list of important works by Indian authors on Bengali language. Most of these works were produced in the period between 1910-1935 and may be considered as important milestones for the study of Bengali language. We can mention a few of these works –

(i) History of Bengali Literature (in English) 1912, Raibahadur Dinesh Chandra Sen, Calcutta University.

(ii) Bāṅgālā Bhāṣār Abhidhān, 1916, Gyanendramohan Das, Prayag, Indian Press.


These works were not elaborate and detailed scientific account of Bengali. But they helped in preparing the ground for linguistic study on Bengali language. Rabindranath Tagore, while discussing the merits and
demerits of Beames work expressed his view that, Beames work on Bengali language was faulty and irregular or contradictory in many respects (Tagore, 1933: 350-358). But it is true to admit that the comparative grammar of Indian languages presented by a foreigner at the time when such grammatical works by Indian scholars were completely absent deserves praise and admiration. The demerits of this work led Tagore to a more detailed study on Bengali language. Tagore’s study being not so exhaustive Suniti Kumar was prepared to produce a modified and extensive work on this subject.

It is generally believed that S.K.Chatterji followed the model of Jules Bloch’s *Formation de la Langue Marathe* while writing his *ODBL*. Notably Prof. Satya Ranjan Banerjee in his ‘Prof. Suniti Kumar Chatterji Memorial Lecture on Indo European Linguistics’ (Banerjee, 2001: 8-10) discusses the views of different scholars on the influence of Bloch’s work on *ODBL*. Some scholars express their opinion that if *ODBL* was to follow the model of Jules Bloch it should not have been such a voluminous work. The introductory part of *ODBL* (235 pages) could have been written only on 25 pages. But here Prof. S.R.Banerjee mentions Grierson’s comment on *ODBL*, that the *ODBL* gives ‘a clear and accurate account of the origins and the growth of the Bengali language. In this respect, every one who reads it will admit that the author has succeeded and that his volume is a fine example of wide knowledge, and of scholarly research.’(Banerjee, 2001: 8).

It has been observed that Prof.Chatterji did not totally follow the pattern of Blochs work; he only accepted it as a model for his own plan of work.

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India is a vast country with many languages and dialects and the Indian languages can be grouped and sub grouped into linguistic zones, language families and language groups. So, it was a good idea for Prof. Chatterji, to show the connection of Bengali language with all others Indo-Aryan languages, ‘so that each point of development of the Bengali language would be easily understood with a comprehensive knowledge of the other New Indo-Aryan languages.’ (Banerjee, 2001: 9).

With reference to Suniti Kumar Chatterji’s own words in the Preface part of ODBL and Prof. S.R.Banerjee’s discussion on this topic it can be stated that Prof. Chatterji only followed the outward structure of Bloch’s work and not the actual contents or methods of the book.

Here it becomes necessary to study the comments by Dr. Sukumar Sen which explain very clearly how ODBL differs from Langue Marathe –

‘Sunitibabu wrote his magnum opus after the lines indicated in Jules Bloch’s Formation de la langue Marathe (1920); he did not merely produce a ‘Formation of the Bengali Language’ but a historical grammar of the Bengali language embedded in an outline of Comparative Grammar of Indo-Aryan. It was therefore not a single book but a group of many. For the student of the history of Indo-Aryan language Chatterji’s The Origin and Development of the Bengali Language is indispensable.’ (Sen S., 1978-79: 6).

The comments by other Historical Linguists like Prof. Paresh Chandra Majumdar may also be taken into consideration for pointing out the differences between ODBL and Langue Marathe.
Some notable differences can be mentioned here –

- ODBL is a much voluminous and detailed work; compared to *Langue Marathe (LM)*, The introduction of ODBL covering the diversities of Indian Language groups is an outstanding research work on Indology. The introduction begins with the position and status of Bengali and then aims to present a brief history of the related language families, the Aryan and Non-Aryan languages and dialects of the neighbouring states of Bengal and other parts of India. It explains the stages of Indo-Aryan, the similarities and differences between the language groups and their relationship with Bengali. The developments of New Indo-Aryan and Modern Bengali through Middle Bengali with the detailed description of the types of Bengali dialects and vocabulary have also been presented in detail.

- Prof. Chatterji, while studying Bengali and its related languages has presented certain innovative ideas while applying the significant methods of linguistics such as framing of Phonological rules, classification of roots and affixes (Morphology), Etymological Studies, Dialectal Comparisons, etc. Such type of diversified field of studies is not available in *LM*.

- *LM* rightly adopts the synchronic approach for the language analysis, while in ODBL the diachronic approach becomes most significant.

**ODBL: Author’s Aim and Approach**

In the preface part of *ODBL* Suniti Kumar Chatterji makes it transparent that his basic aim was to find out the origin and trace of the historical
development of Bengali Language. In the beginning the history of Indo-Aryan speeches is presented – the stages of development of Old Indo-Aryan, Middle Indo-Aryan, the transition period and the development of New Indo-Aryan. Though some scholars opine that the volume of this part of ODBL could be reduced only to a few pages, this explanation of the history of Indo-Aryan is necessary not only for understanding the origin of Bengali but also for showing the distinct positions of Bengali and Sanskrit as two separate Indo-Aryan (Old Indo-Aryan and New Indo-Aryan respectively) languages. It is also necessary for explaining how Bengali evolved as a Modern Indo-Aryan Speech.

*Inner and Outer Aryans: The theory of two-fold immigration of the Aryans in India:*

Prof. Chatterji’s view regarding the theory of Inner and Outer Aryans is another interesting feature that shows his deeper understanding of the stages of development of Indo-Aryan. According to Hoernle, the people speaking Aryan language had entered into India in two groups or bands (Hoernle and Stark, 1904: 12-13). The second band of the Aryan drove the earlier Aryan settlers to the hinter lands and occupied the central part of the country themselves. Hoernle designates the earlier Aryan Settlers in India as ‘Outer Aryans’ and the later immigrants as the ‘Inner Aryans’. Each group had their own linguistic features with which they influenced others. It was among the Inner Aryans that the Vedic Culture and Brahmanical ideas grew up. Grierson supported Hoernle’s theory and explained it by placing some linguistic features of the Outer Aryans as evidences of this distinction between the two groups. Grierson stated that ‘the ‘Outer’ Band of Aryan
invaders, who were closely connected with the Dardic speakers, and were probably but a branch of them, settled in the Panjab, in Sindh, in Gujrat and Rajputana, in the Maratha country, in the Eastern Hindi area, and in Bihar (whence their language was taken to Bengal, Assam and Orissa), and in the north, along the slopes of the Himalayas. Thus, the ‘Inner’ Aryan speech is now represented by Western Hindi; whereas the other current forms of Aryan speech developed from the dialects used by the ‘Outer’ Aryans.’ (Chatterji, 1993: 30). According to Grierson, the retention of final -i, and -u, epenthesis, simplification of the conjuncts and so on were considered to be the features of the ‘Outer’ languages only.

The Inner Aryans were the ancestors of the Punjabi’s and the Rajputs. The classical Sanskrit was believed to be related to the Inner group specially to the early Midland dialects. Western Hindi is the Modern representative of the dialects. (Chatterji, 1993: 31-34).

**Indo-Aryan Dialects: Dr. Chatterji’s View:**

Suniti Kumar argued that none of these linguistic features can be accepted as common characteristics of the so called ‘Outer’ Aryans who led to the development of Bengali or Marathi languages. With references to the views of the scholars like Rama Prasad Chanda (1916), (Chatterji, 1993: 31-32), who differed from Grierson in some points but accepted the basic two-fold theory of Aryan immigration, Suniti Kumar Chatterji presented before us a changed and more modified picture of Aryan immigration. He stated that the Aryans came into India in more than two successive bands and these groups were characterized by diachronic and dialectal differences. In *ODBL* Prof. Chatterji states –
‘Instead of regarding the Aryan dialects of Ancient India as falling into two great classes or branches, as Hoernle and Grierson have postulated, we may, with Weber and others, think of them as forming more than two groups, some of these agreeing with each other more than with the rest, by virtue either of a genetic connection, or of development along similar lines, or again of mutual influence.’ (Chatterji, 1993: 33).

Dr. Chatterji had accepted Grierson’s division of Indo-Iranian into three groups, although this division is not admitted by all. (Chatterji, 1993: 3). To show the interrelation of the various Aryan languages he has presented a table in ODBL. (Chatterji, 1993: 4).
"Paste (Pashto) is to be brought under 'east Iranian' as a separate sub-branch of East Iranian beside the Ghalchah speeches; and 'Balochi' has been suggested (by Tedesco) as being West Iranian, coming under 'Persic', with some Eastern influence. "Avestic" would then stand isolated, without any living representative." (Sunil Kumar Chattopadhyay, The Origin and Development of the Bengali Language, Part III, George Allen & Unwin Ltd. London, 1972, pp. 5-6)

"The name 'Gandhari' for the Early MIA and Prakrit of the North-West, has been suggested by Prof. Sukumar Sen and Prof. H. W. Bailey" (op. cit. p6)
English version of the previous chart showing Indo-Aryan dialects
Inter-relation of Aryan languages

(Chatterji, 1993:4)
Prof. Chatterji shows the classification of Indo-Aryan dialects which fall into the subgroups as North West, Midland, West, East and so on. To establish these dialectal variations he presents some good examples:

A form « guru » 'heavy, important' can be found in Vedic and Sanskrit, but that another form « garu », corresponding to the Greek « barus » , existed in some of the dialects and is also found in Pali and later Prakrit « garu »; cf. also Skt. « gar-iyas, gariṣṭha ».

He explains another form of dialectal variation as –

IA. « dā » occurred in the present tense both in the reduplicated and simple forms; the form, « dadāti » gives, « datta » given, were more common in the dialect or groups of dialects which form the base of Vedic and Sanskrit. But the latter, « dāti », « dita » had apparently an equally wide or even wider occurrence in the other dialects. In the NIA Language it is these latter forms which have survived (« dāti » « deti » in a Bharhut inscription, through analogy of « nayāti » « neti » takes; deti » NIA. « dei, dey »; « dita » NIA. Base « dia », as in Hindi « di-a », Bengali « di-la » etc). (Chatterji, 1993: 35-36).

IA = Indo-Aryan.
**Special Emphasis on the Eastern Indo-Aryan Dialects:**

While explaining the historical development of Bengali Dr. Chatterji treats ‘Aryan speech in the East’ with greater importance as it is the source of Bengali. He enlists the modern representatives Māgadhī Apabhṛṣṭa—Bengali, Assamese, Oriya, Magadhi, Maithili and Bhojpuriya. Here he makes an important statement that in the middle of the 7th century, as the testimony of Hiuen Tsang suggests, there was one language spoken in Bihar, Bengal and Western Assam: only in Assam there was a deviation, probably in phonetics only (Chatterji, 1993: 91). Prof. Chatterji then refers to Grierson’s ‘Seven Grammar of the Dialects and sub dialects of the Bihari Language’ (1983-87, Calcutta) and explains the similarities between Bengali, Oriya and Assamese. He also shows how Maithili differs from these three. On the basis of these findings he makes a classification of the Magadhan speeches.

2. Central Magadhan: Maithili, Magadhi.
3. Western Magadhan: Bhojpuriya with Nagpuriya or Sadani.

Dr. Chatterji’s hypothesis of Eastern Magadhan language has been strongly supported by the other scholars.

A discovery made nearly four decades after Chatterji’s hypothesis (1926) of Eastern Magadhan justified his view. According to Dr. Chatterji, Oriya, Bengali and Assamese are derived from a hypothetical Eastern Magadhan
language. In the 50s Professor H.C. Bhayani published a truncated inscription, known as Raulavela where different specimens of Early NIA language are preserved. One of these agrees in many points with Chatterji’s hypothetical Eastern Magadhan. (Sen, 1990: 18).

Dr.Chatterji points out some significant characteristics of Eastern Magadhan which are as follows –

- Full $<\text{a}>$ [ə] pronunciation of short $<\text{a}>$
- Retention of the palatal nature of Magahī sibilant
- Epenthesis of $<\text{i,u}>>$
- Pronunciation of $<\text{kṣ}>>$ (in tatsama words) as $<\text{(-k) khy}>>$
- Genitive in $<\text{-ra}>>$
- Past and Future bases in $<\text{-il, -ib}>>$
- Nominative in $<\text{-e}>>$; locative in -t (e)
- Absence of number in Verb (common to Bengai & Assamese)
- Formal differentiation between past of the transitive verb and past of the intransitive verb in the 3rd person only.
  (eg. $<\text{se di-le}>>$ he gave but $<\text{se gela}>>$ ‘he went’) is found in West and North Bengali and Assamese
- Non-initial stress.
The Stages of Development of Indo-Aryan and the Source of Bengali:

The methodology used by Prof. Suniti Kumar Chatterji for explaining the birth and development of Bengali language is described by the scholars as a ‘unique’ one. After a discussion on the groups and sub groups of Indo-European and Indo-Iranian, he attempts to show the position of the parental languages of Bengali or Marathi during the time of Vedic or Classical Sanskrit. He discusses the arrival of the Aryans in successive bands, presence of the different dialects of OIA, and states that one of these dialects or dialect groups were represented by the language of the Vedas, while the other dialects, (some of which were not much different from Vedic) undoubtedly gave birth to the NIA languages. The relationships or the differences between these dialects will, perhaps, never be understood clearly for they have become the matters of ‘remote’ past. The studies of MIA records and of OIA (Vedic and Sanskrit) can only suggest that there were marked differences between the dialects of Indo-Aryan 3000 years ago.

Prof. Chatterji then explains how the process of development of the source language of Bengali goes on through the different stages of MIA –

- The early stage: 600 BC – 300 BC
- The transitional stage (200 BC – 200 AD),
- Second MIA stage (A.D. 200 – 600 AD ), till it comes to the third MIA stage or the Apabhraṃśa (600 AD – 1000 AD) from where it gets diversified into the Northern Indian languages ranging from Marathi in the West to Bengali and Assamese in the East. So, a
scholar who attempts to study the Indo-Aryan languages of India belonging to MIA stage will find that this stage has a wide range both diachronically, where it covers more than 1500 years and synchronically, where it covers various dialects from West to East. In this connection the languages of Ashokan Inscriptions (Early stage), of other inscriptions and different Prakrit dialects like Māhārāṣṭrī, S’auraseni, Māgadhī, Ardhamāgadhī, Pais’ācī etc. all should be discussed. Prof. Banerjee in his *Indo-European Linguistics* (2001) draws our attention to the fact that it was Prof. Chatterji who first explained a linguistic phenomenon by using proper phonetic techniques to represent the pronunciation of a particular language at a particular stage. Otherwise it would have become very difficult for a scholar to explain a linguistic phenomenon in a period which has very wide range of languages and linguistic changes.

Some comments in *ODBL*, presented below will clarify this fact.

**MIA Period: 600 B.C. – 1000 A.C.**

(i) Early stage: 600 B.C. – 200 B.C. (Asokan Prakrit and Pali as types).

Phonetic changes: \(r, l\), lost; diphthongs \(āi, āu\), also dissyllabic \(aya, ava\) > e, o; simplification of consonant groups; cerebralisation of dental stops and aspirates in connection with \(r, r', s', s\); reduction of \((s', s, s)\) generally to one sibilant, \(s\) or \(s'\); intervocal single stops retained.
Morphological changes: Some of the morphological changes of this stage are considerable simplification of the declensional system, standardisation of the -a declension; loss of the dual number; merging of the dative into the genitive; extension of the pronominal declension forms to the nouns; Some changes in the conjugational system like wider use of participles and fewer occurrences of prepositional particles can be observed.

(ii) Transitional stage: 200 B.C. - 200 A.C. (The Prakrits of the earlier inscriptions, - Kharoṣṭhī and Brāhmī - as types). Changes mainly phonetic: single intervocal unvoiced stops and aspirates became voiced, and fell together with original voiced stops and aspirates; these, except d (h)-, became open consonant, and came to be lost entirely in the next period.

(iii) Second MIA. Stage: A.C. 200 - 600 A.C. (Dramatic Prakrits - S’aurasenī, Māhārāṣṭrī and Māgadhī, and Jain Ardha-Māgadhī as type). Phonetic changes: the process of turning original single stops to zero completed during this period; original intervocal aspirates (-except- th-, -dh->dh-) became spirants aspirated, probably, and then weakened to -h-: (the above process were carried on in all the dialects, but seem to have been completed first in the southern speeches, e.g., Māhārāṣṭrī - while in some of the northern dialects - S’aurasenī and Māgadhī - the voiced (and spirant) stage was maintained longer; Ardha-Māgadhī in this seems to have agreed
with its neighbours \( -p- \), however, commonly found as \( -v- \); intervocal \( -s- \) becomes \( -h- \) in some cases; sandhi between udvṛtta vowels.

In this stage the language changes are mainly phonetic changes.

(iv) Third MIA. Stage (Apabhraṃśa): c. 600 A.C. – 1000 A.C. (Type – Western or S’aurasenic Apabhraṃśa). Phonetic changes: in the main, the state of things as in second MIA., but there was further decay: weakening of final vowels – \( \tilde{a} > a, e, \tilde{o} > i, u \); in many dialects, \(-s- \rightarrow -ss-\) of earlier periods became \(-h-\); intervocal single \(-m->\) nasalised \(-v-\) or \(-w-\); nasalization of vowels commences. (Chatterji, 1993: 18-19.)

Prof. Chatterji has pointed out some significant morphological changes of this stage. The changes in the number system and case system can be noted. Some of the moods and tenses were lost.

The hypothesis of ‘Māgadhī’ as the common source of Eastern dialects Bengali, Assamese and Oriya has also been explained by Prof. Chatterji by showing the phonetic characteristics and changes.

Some of the phonetic characteristics of Māgadhī, e.g. \( << s' >> \) for \( << s' s >, << l >> \) for \( << r >> \), noticed from a very early period, are preserved or can be treated in its descendants; and some time before its break-up into Bhojpuriya, Maithili and Magahī; Oriya and Assamese-Bengali, which
continued along their own lines then, it developed certain morphological features and syntactical tendencies. (Chatterji, 1993: 21).

**ODBL : Phonological Observations**

Some of the Abbreviations used in this section.

OIA = Old Indo-Aryan
MIA = Middle Indo-Aryan
NIA = New Indo-Aryan
OB = Old Bengali
MB = Middle Bengali
NB = New Bengali
Skt.= Sanskrit.

A study of the *Phonology* part of *ODBL* shows how successful Dr.Chatterji was in his application of the knowledge of phonetics that he had acquired from Daniel Jones. Some of his main phonological observations in *ODBL* are as follows —

- **History of Indo-Aryan Sounds:**
  This section starts with a tabular representation of OIA sound system. The table in his *ODBL* (Chatterji, 1993:239-240) shows the tongue-positions of the OIA sounds and it is based on the study of the Vedic speech.
## Vowels

<table>
<thead>
<tr>
<th></th>
<th>Back</th>
<th>Central</th>
<th>Front</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close(High)</td>
<td>u:</td>
<td>u</td>
<td>l:</td>
</tr>
<tr>
<td>Half-Close(High-Mid)</td>
<td>o:</td>
<td>(ə)</td>
<td>e:</td>
</tr>
<tr>
<td>Half-Open(Low-Mid)</td>
<td>(?0 : ?ʌ)</td>
<td></td>
<td>( :)</td>
</tr>
<tr>
<td>Open(Low)</td>
<td>α:</td>
<td>α</td>
<td>3l(= ? aː)</td>
</tr>
<tr>
<td>Diphthongs</td>
<td>α: ːu</td>
<td></td>
<td>[ɾ : ɾː]</td>
</tr>
</tbody>
</table>

## Consonants

<table>
<thead>
<tr>
<th></th>
<th>Glottal</th>
<th>Velar</th>
<th>Palatal</th>
<th>Cacuminal (Retroflex)</th>
<th>Alveolar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td></td>
<td>k g</td>
<td>c j</td>
<td>t d</td>
<td>t d</td>
</tr>
<tr>
<td>Aspirate Stops</td>
<td></td>
<td>kh gh</td>
<td>ch jh</td>
<td>th dh th dh</td>
<td>th dh</td>
</tr>
<tr>
<td>Nasals</td>
<td></td>
<td>ṃ</td>
<td>ṃ n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Laterals</td>
<td></td>
<td>(l l h)</td>
<td></td>
<td>l</td>
<td>r</td>
</tr>
<tr>
<td>Flapped</td>
<td>h h</td>
<td>(x)</td>
<td>Ç</td>
<td>s</td>
<td>(F)</td>
</tr>
<tr>
<td>Fricatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-vowels</td>
<td></td>
<td>ḷ(j)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Phonetic description of these sounds has been presented in this section. The development of these Indo-Aryan sounds (the vowels, consonants, the diphthongs, the semivowels etc.) has been traced from the OIA stage up to MIA and than to NIA stage and Bengali. Some developments which are particularly significant for the study of Bengali draw the attention of the scholars. To take an instance the change of OIA palatal stops to affricates in some of the dialects and then to the whole of Indo-Aryan is such an important development. Prof. Chatteiji explains that the OIA palatal stops might have kept their stop pronunciation in the Midland and in the Western tracts of Aryavarta at a time when these became pronounced affricates in the East. In the period when Vararuci wrote his grammar (second MIA stage) Māhārāṣṭrī and S’aurasenī presented, at least dialectally, the old stop values initially and medially they were dropped or reduced to a << y >> like sound. From the evidence of the Greek transcriptions it becomes clear that the affricate sounds seems to have developed dialectally probably in the S’aurasenī and other Western areas in the second Transitional MIA stage. In the late MIA period, the change of the stops into affricates became universal. The palatal affricate pronunciation of << c; j >> had widely spread over all the Indo-Aryan languages. This new condition brought about another phonetic change – the palatal affricates further were dentalised in some of the NIA dialects as Assamese, East Bengali, Southern Oriya, Marathi and dialectal Gujarati. Other instances: such as treatment of OIA stops and spirants may be considered here.
• **Percentage of Frequency of New Bengali Sounds:**

Dr. Chatterji in his discussion on the phonetic history of Indo-Aryan sounds has thrown light on the Percentage of Frequency of each sound in the Standard Colloquial Bengali. He has referred to a similar type of research work presented by William Dwight Whitney (1827-1894) in his Sanskrit Grammar (1879). Dr. Chatterji selected six passages from the writings of Bankim Chandra Chattopadhyay, Kaliprassana Singha and some other eminent writers. He transcribed the passages phonetically and calculated the percentage of frequency of the sounds. Prof. Chatterji presented his chart showing the percentage of frequency of each of the vowels, consonants, semivowels etc. The Bengali diphthongs were split up and were included under the simple vowels making them up. Whitney’s chart showing the frequency of Sanskrit sounds was presented side by side for comparison. To take an instance the percentage of frequency of Bengali vowel ‘a’ has been recorded as 6.63; that of Sanskrit vowel ‘a’ is 19.78. The percentage of frequency of the Bengali consonant ‘k’ is 4.15 while that of Sanskrit ‘k’ is 1.99.

• **Accent in Bengali:**

Regarding the development of stress and accent system of Bengali, Dr. Chatterji has made a detailed study in *ODBL*. It becomes clear from his comments that in the oldest form of Indo-Aryan as it is preserved in the Rgveda and other Vedas, ‘pitch’ or musical accent (which according to the Indian Grammarians, involved raising or
lowering of voice in different syllables) was predominant. This pitch or musical accent was generally of three types: 'udāṭta', 'anudāṭta' and 'śvarīta'. There was no indication of stress. During the formative period of Bengali two types of accent system had developed in this language –

(1) The Pan Indian system which by preference placed the stress on a long penultimate syllable and
(2) The peculiarly Bengali system in which there was the tendency to place all stress on the head of the word.

Dr. Chatterji gives many examples from New Bengali, Middle Bengali to show that both the types of accent system developed side by side. The New Bengali forms as āñāgonā ‘coming and ‘going’ (from āgamaṇaka-gamaṇa, Caryā-7) show the common NIA stress system. The Middle Bengali and New Bengali forms as bāsar ‘chamber in which a wedded couple retire’ (bāṣara) show the signs of initial stress which is a peculiarity of Bengali. Chatterji shows many other New Bengali forms showing initial stress as āmrā ‘hog plum’, parsī ‘neighbour’, ākhṛā ‘institution/gymnasium’, kumrā ‘pumpkin’ etc. He concludes that the Pan-Indian system of stress which existed in Proto-Bengali finally had to surrender to the initial stress system which Bengali had peculiarly developed on its own. This initial stress habit was an indigenous one, which might have been imposed on
Bengali as it became the language of the masses, who were originally of the Non-Aryan races.

- **Origin of the Bengali Syllabic Metre:**
  The development of Bengali syllabic metre is an interesting part of Bengali phonology, which needs to be studied in details. As it has been explained in ODBL, the modern colloquial Bengali language has developed from the West Bengali dialect of Old Bengali. The sentence accent of Old Bengali (West Bengali dialect) can be guessed from the development of Bengali verse. The development of Eastern Magadhan verse was again, different from that of the Central Magadhan or West Magadhan and other Indo-Aryan languages. The Eastern Magadhan verse system substituted a syllabic cadence for one on a moric basis. So, Old Bengali, which is considered to have developed from Eastern Magadhān, developed its own style of verse.

  During the formative period of Bengali and other Eastern Magadhān dialects the Upper Indian mātrā-vṛtta metres were probably introduced to these languages. But these mātrā-vṛtta metres were never naturalized in the eastern languages. During the 15\textsuperscript{th} and 16\textsuperscript{th} Centuries, Hindi and Maithili influenced Bengali verses to some extent but, the local speeches of Bengali, Assamese and Oriya had by that time developed their own forms of verse and refused to accept the mātrā-vṛtta metres. It has been suggested by Dr.Chatterji, that as Bengali had developed its own accent system due the influence of the
masses of Non-Aryan origin, this language (Bengali) might have also developed its indigenous system of versification. This versification was probably based on Proto and Pre-Bengali speech rhythm and was possibly of Non-Aryan origin. The Payār metre, which is entirely a syllabic metre, surpassed the Dohā and Caupāi of North India in popularity. The Payār as a perfectly developed syllabic metre can be found in the 14th century, in the Early Middle Bengali of S’rī-Kṛṣṇa-Kīrtana, in the 15th century remains of Assamese and in the 16th century remains of Oriya. The Old Bengali specimens of the Caryāś do not show the development of Payār but show the existence of a 16 moric metre as the popular metre of Bengali Verse. This 16 moric metre, called Pādākulaka, agreed with Payār in its pauses and often in the number of syllables too (14). The songs of Gītagovinda show this metre. It is suggested that this metre was introduced to Bengali during the late MIA period and it became the ‘Caupāi’ of Northern India.

- **Effects of Stress and the development of Bengali language:**

  Chatterji notes that the suprasegmental features may also affect the segmental structure of a word form. For instance, the peculiarities in the development of Bengali stress system often becomes responsible for doubling of consonants Prof.Chatterji gives examples of doubling of consonants due to heavy stress – ‘kakkhano na’ (kakhana na)

- **Vowels in Contact:**
  While discussing the phonology of the Native Elements Dr.Chatterji has explained how in the OIA and MIA stages the vowels of the words which existed or came in contact with each other have undergone different types of phonological changes as the following –

(i) *Insertion of Euphonic Glides:* It has been shown by Dr.Chatterji that this type of change is more prominent in the NIA languages as Western Hindi.

OIA *dīpa* > MIA. *dība,*

*dība* > NIA (Hindi) *d yā* ‘oil lamp’

OIA *kātara* > MIA *kādara, kā(y)ara*

> NIA (Hindi) *kāyar* ‘coward’

(Insertion of Euphonic glide’y’)

Prof. Chatterji’s researches further show that forms with glides were inherited by Old Bengali from the Magadhi Apabhransa. But as seen from the early Middle Bengali of *Sṛī-Kṛṣṇa-Kīrtanā* (SKK), these forms were diphthongised, or contracted, by the beginning or middle of the 14th century at the latest. So in Modern Bengali words as *khāwā, khāoā* ‘eating, eaten’, *mowā, moā* ‘a type of sweetmeat’
showing the Insertion of Euphonic glide ‘w’, can give some hints regarding the development of these euphonic glides.

(ii) **Diphthongisation of the Vowels in Contact:** Regarding Diphthongisation Dr. Chatterji informs us that in the development of Bengali, diphthongisation on a large scale took place from early times. The examples may be found in the Bengali words as Middle Bengali *paithān* ‘foot of bed’ which developing from OIA *padasthāna* can show the presence of a diphthongisation in Magadhi Apabhṛṣṭa or Old Bengali. Some other examples diphthongisation by epenthesis are New Bengali *neye* ‘ferryman / ferrywoman’ which developed out of *nāiyā* and OIA *nāvika*, New Bengali *rāt* ‘night’ < *rāti*<OIA *rāti*.

(iii) **Contraction of Vowels in Contact:** In this phonological process a longer word with many syllables having same type of sounds (vowels) in them is shortened by the dropping of one or two syllables. This phonological process may be seen in the Bengali words as semi-tatsama *laṅg* ‘a dry flower used as spice’ from *lavaṅga*, *nadhar* ‘healthy-looking’ from *navadhārā*, *purāna* ‘old’ from *purātana*, *egāra* from *ekādās’ā* etc.

- **History of Bengali Consonants:**
  In *ODBL*, the discussion on the phonology of native elements shows the development of the consonants, consonant-clusters and some
important phonological changes such as consonant assimilation, metathesis haplology etc. The phonological changes undergone by the Bengali sounds will be discussed separately. The history of the Bengali consonants – the Gutturals (stops and affricates), Palatals, Cerebrals, and Dentals – form a significant part of this discussion. Reference to the OIA forms, ample examples from MIA and NIA languages, Old Bengali, Middle Bengali, New Bengali forms selected from the important texts as Crepar Xaxtrer Orthbhed (Assumpcam, 1734) have enriched this part of research work.

- **Phonological Changes of the Consonants in Contact:**
  
The consonants which existed or came in contact in the different periods of development of Bengali language underwent phonological changes as (i) assimilation, (ii) metathesis and (iii) haplology.

(i) **Assimilation:** Assimilation may be of two types – progressive and regressive. Dr. Chatterji remarks that in Bengali language instances of progressive assimilation are very rare. This change may be found in the few words as New Bengali *jabda* 'punishment from Persian [zabt], *bhāna* 'to pound, (as rice)' from [bhāṅgā < bhagna]. Many examples of different types of regressive assimilation have been cited – (i) *ḍāk + ghar > ḍāgghar* 'post office', [The first sound 'k' gaining voice due to presence of an adjacent voiced sound 'gh']. Here the voiced sound 'gh' becomes the source for establishment of assimilation. (ii) *megh + korecche > mekkorecche* 'it is cloudy' [The first sound 'gh' losing
voice due to the influence of the second unvoiced sound ‘k’],
\[ p^{\text{̃}}\text{āc} + s^{'a} > p^{\text{̃}}\text{ās}'s^{'a} \] ‘five hundred.’ It is known from Dr. Chatterji’s explanations that the dialect of Chittagang is most advanced in the matter of progressive and regressive assimilation e.g. \( d^{\text{̃}}\text{ātgun} \) ‘teeth’ (from Standard Bengali \( d^{\text{̃}}\text{ātguli} \), \( d^{\text{̃}}\text{ittāri} \) ‘I can give’ (from Standard Bengali \( d^{\text{̃}}\text{ite pārī} \), \( b^{\text{̃}}\text{iusṣut} \) ‘Thursday, Jupiter’ (from Standard Bengali \( b^{\text{̃}}\text{ṛhaspatī} \)).

(ii) *Metathesis*: In this type of phonological change, the sound segments interchange their positions in a word. In Bengali such changes may be found in the words like New Bengali \( b^{\text{̃}}\text{ahin} \) or \( b^{\text{̃}}\text{on} \) ‘sister’ from \( b^{\text{̃}}\text{haginī} \), \( h^{\text{̃}}\text{ālkā} \) ‘light’ (from MIA \( h^{\text{̃}}\text{alukkā} = l^{\text{̃}}\text{aghukā} \) ‘light’) Metathesis may also be found in the foreign words in Bengali such as \( d^{\text{̃}}\text{eksa} \), \( b^{\text{̃}}\text{āska} \) (from English box, desk) beside the popular forms \( d^{\text{̃}}\text{eska} \), \( b^{\text{̃}}\text{āksa} \) etc.

(iii) *Haplology*: Haplology indicates a phonological change which involves the loss of one sound segment (syllable) within a word when two similar sound segments or syllables exist side by side. The loss of sound segment makes the pronunciation of the word easier. Most common examples of Haplology in modern Bengali are \( d^{\text{ā}} \) ‘elder brother’ for \( d^{\text{ādā}} \), \( d^{\text{i}} \) ‘elder sister’ for \( d^{\text{i}}\text{idi} \) etc. Some other examples
are pādok < pādodak ‘water used for washing the feet of a God or Saint and accepted by the devotees as holy water’; mukhāni < mukhkhāni ‘the face’; chotkā < chotokākā ‘youngest uncle’ etc.

- Some other important Phonological Changes related to Bengali Language:

  *Epenthesis, Umlaut, Vowel Harmony, Vowel Mutation and Bimorism:* Dr. Chatterji was the first among the twentieth century Indian scholars who have explained the phonological changes of Bengali so clearly and elaborately. Some of these changes have already been discussed. Some other important changes related to the development of vowels and consonants need to be discussed separately. The study of the sound changes like epenthesis, vowel harmony, weakening and loss of vowels which occurred in the different periods of development of this language and how these changes influenced the behaviour of the sounds in the native speech of Bengal, constitutes the interesting sections of ODBL. The forms such as kariyā, baliyā, hāriyā are found in Middle Bengali and are still preserved in Sādhu variety of Modern Bengali. Here Dr. Chatterji explains the standard colloquial forms as ‘kore’, ‘having done’, ‘bole’, ‘having said’, ‘āj’, ‘today’, ‘kele’, ‘the black one’, ‘here’ ‘having lost’, ‘jele’, ‘fisherman’ etc. in terms of distinct sound changes like Epenthesis (Apinihiti) and Umlaut (Abhisruti) or a combination of both, Diphthongisation from
epenthesis, Vowel Mutation etc. Thus in ODBL, one can find – caliyā
‘having walked’; cailiyā > caliyā > calye > cole; basite ‘to sit’;
basite> boiste > boste; (Chatteiji, 1993: 378-384). Prof.Chatteiji has
studied some phonetic changes which are called Umlaut. These were
first observed in the Germanic languages.

Primitive Germanic <<*satjan = satian >>
>OE << settan >> set; <<*gudini >> OE << gyden >> goddess etc.

It is often said that Suniti Kumar’s early training in Old English stood
him in good stead. The comments on Suniti Kumar’s study of umlaut,
by one of the Indian scholars may be considered here. Umlaut has
played a major role in the development of the English language,
particularly in Old English. Examples may be cited here. Modern
English bench and Modern German bank are cognates derived from
Primitive Germanic *bänkiz. Umlaut of the stem vowel causes the
difference between the English and the German forms. English rightly
reflects the umlauted vowel.(Sen, 1990).

Regarding the umlauted forms of Modern Bengali, Prof.Chatterji
reminds that, the Sādhu bhāṣā is approximating more and more to
Calcutta Dialect. Many of the umlauted forms of Calcutta Dialect are
being fully established in the literary language. The forms like theke
‘staying’, ‘since’ or ‘form’ (as an ablative post position) instead of the
full form thākiya, chele ‘son’, meye ‘daughter’ instead of chāliya,
maiya etc. could explain this process more distinctly. Some interesting examples of Harmonic Vowel Mutation may be found in ODBL—

(i) a + i > o + i, as in the words [noni] (from nanī), ‘cream milk’, [kori] (from kari) ‘I do’. The mutation such as a > o is left unnoticed in spelling.

(ii) a + u > o + u, as in the words [modhu] (from madhu), ‘honey’, [koruk] (from karuk), ‘let him do’.

Dr.Chatterji uses the techniques of phonetics and phonology to show some of the special features of Bengali language. One of these is Dimetrism or Bimorism. Standard Colloquial Bengali shows this feature. In modern Bengali a tendency has developed which drives the native speakers to pronounce most of the words in two morae. Most of the Bengali words have two metrical units of pronunciation. Under the influence of this feature all the earlier forms which were polymeric have been reduced to bimoric forms. Thus we find that ‘aparājitā’ becomes ‘aprā-jitā’; ‘pāgali’ becomes ‘pāg-li’; haludiya ‘yellow’ > halude > holde. Bengali metrical system is also related to this tendency.

Cerebralisation: Cerebralisation is an important phonological process affecting the development of IA languages. The cerebral sounds entered into the Aryan language in the earliest period of its development probably from the Non-Aryan sources. The Cerebral sounds like ṭ, ḍ, ṇ, ḍ are considered to be peculiarly Dravidian sounds. Cerebralisation refers to the phonological change in which a non-
cerebral sound becomes a cerebral due the influence of other cerebral sounds or spontaneously. In the discussion on cerebralisation in OIA, the working of Fortunatov's law has been mentioned. This law showed that IE 'l' + dental was cerebralised ('l' + cerebral) in OIA, but IE 'r' + dental was retained intact (except in the case of *rn, *rs which were changed to rṇ and rṛ). The different types of changes occurred in the OIA sounds as 'r' and 'l'. Cerebralisation took place in the different dialects of OIA and MIA. This process again relates one to the theory presented by Dr.Chatterji that the Aryans came to India in successive bands.

In the case of Cerebralisation too, the Eastern Magadhan speeches have their own course of development. ODBL shows that in Early MIA of the east the OIA << rt, rd >> became cerebralised to << t, d d >> by the 3rd century B.C., but << rt, rd >> remained intact in the North-West in the same period. In some other dialects of the Midland and South-West these were assimilated to << tt, dd >> without cerebralisation. The Western speeches kept on resisting this cerebralisation of the East for sometime. The Ashokan inscription, the Kuśāṇa and other inscriptions in the Western areas show that the forms with cerebrals were imposed on the Western speeches by the Eastern languages. As the results of this phonological process the forms in New Bengali as bhatta, bhaṭ (from bharta) 'a bard' originally = a Brahman (a genuine Magadhi form) and bhattā, bhatta
existing as bhattāra and Bengali bhātār ‘husband’ (a non Magadhi form) may be found. Bengali bura (from vrddha), māṭi (from māṭia, mṛttikā) are some other examples.

Spontaneous Cerebralisation: In this phonological process cerebrelisation takes place without the influence of the cerebrals like r, s or r, or without any explicable cause. In Sanskrit forms < di, ut + di > uḍḍi ‘a water bird’ show spontaneous cerebralisation. In Bengali such examples are ḍās’ ‘type of insect’ (from dams’a-) pare ‘reads’ (from patati) etc.

Nasalisation: The study of Bengali phonology will show that the process of Nasalisation played a significant role in the development of the Bengali sounds. The history – how the OIA nasals and nasalised sounds developed into NIA class nasals has been clearly presented in ODBL. The peculiar way of the nasalisation of OIA vowels by bringing in the nasal glide ‘anusvāra’ after a pure vowel and development of the ‘nasalised vowel’ into Bengali and other NIA languages have also been explained. (ODBL, 1993: 244). As the Indo-Aryan dialects came up to the New Indo-Aryan stage, many of these languages throughout India experienced some phonological changes. The double stops (of MIA) were simplified and there was compensatory lengthening of the preceding vowels.
In MIA, where there was a consonant group with a nasal, the vowel preceding the group was short. When such a consonant group with a nasal was simplified, the nasal as an independent sound was lost in NIA. As an effect of the dropping of the nasal, the preceding vowel was nasalised. The Moraic Rule again brought about the compensatory lengthening of the preceding vowel. This process was highly prevalent in the Proto Bengali stage.

Sanskrit candra > Prakrit canda, camda > Old Bengali canda > New Bengali c\text{\textlig}d ‘moon’.

Reduced Nasalisation: There was possibly a stage in this process of nasalisation, when the nasal of a consonant group which comes after a vowel, was not completely absorbed. This nasal was fully retained by the languages like Oriya, partially by Assamese. This nasal was partially retained by Old Bengali and by the eastern dialects of Modern Bengali. In the Caryās the forms like chānda ‘style or manner’, bāndhā ‘bind’, kāndha ‘shoulder’ etc may be found. Before its final absorption this nasal was pronounced very short. It became a reduced nasal. It has been explained by Ėr. Chatterji that a similar stage of reduced nasals was obtained by the Indo-Aryan languages of the mainland, probably during the Late MIA period and certainly during the period of transition between MIA and NIA. The reduced
nasals are represented by (n, m, n,) written above the line. In some of the Magadhan speeches of Indo-Aryan, for example in Oriya, the nasal sound was not completely absorbed. The preceding vowel was lengthened, (probably due to partial absorption) but the preceding vowels were nasalised in some cases (tatbhava words) while in some others (Sanskrit) the preceding vowels were not nasalised. These nasals remained in Oriya as reduced sounds. In Sanskrit words the nasals were fully pronounced while in tadbhava words these sounds were not so prominent. In Oriya words with reduced nasals as kādāṇa (<OIA krandana) pāṭca (from OIA paṇca), dāṭīa (< OIA danta) may be seen. The nasal sounds were fully absorbed when consonant clusters were simplified in Standard Colloquial Bengali, West Bengali, North Bengali and Assamese. But some speeches of East Bengal still retain the traces of the reduced nasal, mainly in connection with the voiced consonant followed by a vowel. Thus in West Bengal, one can see, the forms like cāḍ, ‘moon’ chāḍ ‘style’ bāḍh ‘to bind’ pāṭc (OIA sources are respectively candra, chanda, bandhana, paṇca etc). Besides these there are forms like cāḍḍ, ‘moon’, bāḍḍha ‘bind’, boḍḍhu (instead of bāḍhu) ‘friend’ (from Skt. bandhu), which show the traces of the East Bengali reduced nasals.

Spontaneous Nasalisation: In a word a sound (generally a vowel) is often nasalised spontaneously even without the influence of a nasal
sound. In Bengali many such forms may be found and most of these have been inherited from Prakrit tradition. Some of these are \( \text{iṭṭaka}, \text{ūcu} \) ‘high’ from \text{ucca}, \text{bākā} bent’ from \text{vakra}.

(Majumdar, 1977:221-222). Spontaneous nasalisation has been described by Dr. Chatterji as an old tendency in Indo-Aryan which was imposed upon it by other speeches probably Non-Aryan. It was a conditional change. It was due to the habit of articulating through both the mouth and the nose, thus bringing in nasalisation.

**Spontaneous Denasalisation:** Spontaneous denasalisation may be found in the Bengali words as \text{mācā} (<\text{maṇcaka}), ‘stage ’\text{ālpanā} (<\text{ālimpana}) ‘pattern’, \text{sāsū} (<\text{simsapū}) ‘a gregarious tree’. Such denasalisation process took place even in the old Bengali stage. Both spontaneous nasalisation and spontaneous denasalisation are identified as dialectal features in \text{ODBL}.

- **Foreign sounds in the loan words of Bengali:**

  In \text{ODBL} discussion on the foreign sounds in loan words of Bengali language may be found. The results of the phonological contact between Bengali and the language of the foreign settlers in India namely the Persians, the Portuguese and the English have been discussed in the three chapters of \text{ODBL} (1993) – chapter VI, VII, VIII.

  (i) **Persian Influence:** Chapter six discusses the contact of Bengali with Persian phonological elements – how the Arabic words entered
into Bengali through Persian. These Arabic words were first absorbed into and naturalised in Persian. The Turki loan words were borrowed by the Indian languages during the early years of Mohamedan Conquest in the 12th and 13th Centuries. One who conducts a research work on this subject will be interested to make a study of the sounds of Persian presented scientifically in ODBL. A table showing the articulation of the consonants has been presented. The description of each of the vowels gives a more clear picture of the sound system. Prof. Chatterji comments that ‘A large percentage of the Persian words in Bengali has been borrowed from Hindostani, including many of the hybrid forms, half-Persian, half-Indian, or Persianised Indian, like <<kotwāl>> with dental << t >> = Indian << kotwāl >> ( in Hindostani ), <कोताल > ( in Bengali ) = head of city police, which sprang up in Northern India during the Mohammedan rule. But it would be a mistake to suppose that most Persian words in Bengali came through Hindostani. Persian was brought to Bengal before Hindostani had developed into a lingua franca, much less as a culture language, after becoming the home-language of the Mohammedan ruling houses and town people of Northern India.’ (Chatterji, 1993:560). This comment explains the fact that Persian words entered into Bengali and not through Hindusthani. Persian became a prestigious subject of study throughout India and particularly in Bengal. So, Persian elements had wide influence on Bengali. Many words as dewāl ‘wall’ (from Persian diwār, with the change of ‘r’ to l ) surki, ‘brick dust’, sadar ‘head quarter’, sai ‘signature’, sarbat ‘soft
drink', golāp 'rose', jami 'land', jakham 'wound' etc. have entered into Bengali. The phonetic influence of Persian sounds as 's’ 'z’ 'z', 'l' 'y' or 'w' on Bengali sound system have also been explained elaborately in *ODBL*.

(ii) **Portuguese Influence:** This chapter (chapter VII) begins with the history of Portuguese settlement in India. According to Dr. Chatterji, the Bengali language began to be influenced by the Portuguese elements from the latter part of 16th century down to middle part of 18th century. The literary activities of the Portuguese missionaries in Dacca, Chittagong, Hugli and other places of Gangetic Delta, brought the Portuguese people in contact with language and culture of Bengal. In the same way Bengali literature also recorded the activities of the Portuguese people. The words like hārāmada, harmād ‘the Portuguese Pirate’ = Portuguese << armada >> could be found in *Candimāṅgal Kāvyā* (1580 AD) of Mukundaram Chakraborty. Other Portuguese loan words in Bengali may be suggestive about phonetic and phonological influence of Portuguese on Bengali. This chapter contains a description of Portuguese sounds; followed by the explanation how these sounds were adapted to Bengali sound system. Regarding the nature of Portuguese words in Bengali Prof. Chatterji comments 'A number of the Portuguese words in Bengali are not native Portuguese (Latin), being themselves loan-words from different languages, but so far as Bengali is considered, they are Portuguese, and nothing else'.(Chatterji, 1993:621). In Bengali the most common
Portuguese words are anaras ‘pineapple’, jānālā ‘window’, pharmā ‘from in printing’, tāmāk ‘tobacco’, kedrā ‘chair’, toāle ‘towel’ etc.

(iii) English Influence: English has undoubtedly the deepest impact on Bengali language. The English people first came to Bengal as traders in 1651. The city of Calcutta was founded in 1689 and as it became an important trade-centre, the English people came in closer contact with the aristocracy and the elite class of Bengal. English language established itself as the ‘prestige’ language and the language of education and world culture. Bengali has a long history of intermixture with English language in the different periods of British rule in India. Very few English words like kompānī ‘company’ had entered into Bengali language before 1757 (Battle of Plassey). After British Government firmly established itself on the soil of India (1765) many official words as gabarnar jandrāl ‘governor general’, kōusuli ‘counsel’, lāt ‘lord’, pulis ‘police’ etc. started entering into Bengali language. Among the job-seeking Bengali people, ‘education’ meant English education. At this stage an unending stream of English words found its way into the innermost layer of Bengali language. A process called ‘Bengalisation of English loan words’ developed among the ignorant or half-educated people of Bengal who came in contact with the English words but failed to pronounce them in a proper way. These people pronounced the English words according to their own habit of pronunciation. Therefore, English ‘hospital’
became hāspāṭāl, English 'doctor' became dāktār English 'office'
became āpis etc.

The description of English sounds, their characteristic features, the changes suffered by these sounds when they were admitted to Bengali and such other relevant topics have been discussed elaborately by Prof. Chatterji in ODBL. This discussion shows the process of 'naturalisation' of the English loan words in Bengali. Some examples from ODBL will clarify the point. Some common English words naturalised in Bengali: āpel ‘apple’, āb ‘tub’, āstābal ‘stable’, išţis ‘an ‘station’, iskul ‘school’, inci ‘inch’, uto pensil ‘wood pencil’ etc. The phonological changes are sometimes simple or plain, sometimes these are complicated due to Folk Etymology. Extreme folk etymology often has made the Bengali words much different from the original English words. While discussing the pronunciation of English in different parts of India Prof. Chatterji makes interesting comments regarding 'extreme types of Indian provincial pronunciation.'

'A hundred years of English schooling in Bengal has established a current Bengali pronunciation of English. .......Extreme types of Indian provincial pronunciation of English, e.g. East Bengal pronunciation and Tamil pronunciation, are at times mutually difficult to follow.' (Chatterji, 1993: 634).
ODBL: *Morphological Observations*

According to some scholars the morphological part of *ODBL* is even more interesting than the phonological part. Here the chapters have been broadly divided into two parts –
(I) The Nominal System and
(II) The Verbal or Conjugational system.

The Nominal system has again been divided into two parts:
(i) Formative Elements and
(ii) Nominal Stem.

**Formative Elements:**

The Formative Elements have been considered both form structural-functional and semantic point of view. The functional point explains the role of the affix in the expression of the purpose or function of the word in the sentence. The Formative Elements (or affixes) are basically of two types –

(a) The prefixes or the elements occurring before the stems and modifying the meaning of the stem.
(b) The suffixes or the formative elements occurring after the stems and changing the stems into meaningful units or words.

The affixes have been classified into prefixes and suffixes. These have different types of semantic functions and lead to the formation of words as meaningful units. So such a formal classification has no doubt a semantic justification.
The affixes have been classified into three types depending on their source and the nature of diachronic change.

(i) Tatsama
(ii) Tatbhava
(iii) Foreign.

The discussion on formative element starts with the classification of the point that due to phonetic decay or assimilation most of the OIA affixes have either been lost or these remain in a disguised form in the NIA languages. But some of these OIA affixes still exist as living forms and in their present forms these affixes are much distant from the original OIA affixes.

(A) Suffixes:

(I) Tadbhava Suffixes: The Sanskrit Suffixes which have entered into the NIA stage in a changed or modified form through Prakrit (MIA) are termed as tadbhava. The section on tadbhava suffixes is the largest section of the chapter on formative element in ODBL. Here fifty-nine groups of tadbhava suffixes having different types of functions have been presented. Dr. Chatterji has not only explained function of each group of suffixes with ample examples, he has also traced their sources and their development. Few examples may be cited here –

(i) The suffixes -atī, tī (ati, ti) form abstract nouns of action or manner as in the words uthati ‘rise’, cukti ‘settlement, fixing up’ kamti ‘decrease’, guṇati ‘counting’, ghāṭati ‘shortage’ etc.
(ii) The development of «-an» suffix which has originated from OIA «-ana>> has been shown in an interesting manner. The suffix is used to form abstract verbal nouns, some of which have acquired a concrete sense. This suffix can be found in the New Bengali words as k'ādan ‘to cry’, khāon ‘to eat’, jhāran ‘dusting, duster’, jhulan ‘swing’, dharan ‘manner’, nācan ‘dance’ etc. Prof. Chatteiji comments that this suffix is becoming archaic in Standard Colloquial Bengali. The suffix «-ā>> instead of «-an>> is becoming more popular as k'ādā, nācā, khāoā etc. This «-ā>> is a living form in the East Bengali dialects. This «-an>> suffix has two specific extensions –

(a) anā

   anā > nā

This «-nā>> affix can be found in the words as kānnā ‘cry’, khełnā ‘toy’, jharnā ‘fountain’, dolnā ‘swing’, denā ‘debt’, paonā ‘receiving dues’ etc.

(b) ani, uni (It has developed due to vowel harmony).

   ani > ni

These suffixes were originally used as feminine forms to indicate a little thing, a petty matter. But this grammatical connection is now lost. The suffix has been preserved only in the words which indicate a woman.


It is now used in Bengali to indicate feminine, masculine, common or neuter forms. There are forms like nācuni ‘dancer’ (pejorative), ghūte-kuruni
‘the woman who picks up dry cowdang cakes,’ ṛādhunī ‘cook’ (both masculine and feminine), kādunī ‘one who always cries’ (used to indicate a boy or a girl who cries even for little things), chenī ‘a cutting instrument,’ chāknī ‘a small strainer,’ ċhāknī  ‘a small lid’ etc.

(II) Tatsama and Semitatsama Suffixes: Many tatsama and semitatsama suffixes are there in Bengali. These have come down to NIA stage from Sanskrit without any change or with a slight change (phonetic). In the late MIA and NIA stage many of the Sanskrit affixes became common and were adapted to the language. The process of naturalisation of these suffixes could be realised from the formation of hybrids with tadbhava or foreign roots. Some of the suffixes and their word formation are shown below

(i) -imā: from OIA -imān; ‘-ness in English’ as in lālimā, kālimā, nīlimā.

(ii) -ka: bāla-ka, sahāya-ka, sāgni-ka.

(iii) -ta, > -ita: kathi-ta, nibedita.
A number of wrong words created by Bengali writers with this suffix have no doubt become inseparable parts of the language as namita, āharita, anubādita etc.

(iv) -maya ‘full of’ as in jalāmay ‘covered with water’, des’may ‘all over the land’, kalpanāmay ‘full of imagination’.

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III. Foreign Suffixes:

**Persian Suffixes**

Some Persian suffixes and some Persian words used as suffixes have become most common in Bengali:

(i) -ān, -wān, ‘possessing or keeping, maintaining’: gāri-ān ‘cabman’, dārwān ‘gate-keeper’.

(ii) -ānā, with extension as anī, anī, ‘pertaining to, having the nature of’: bābu-ānā, bābu-ānī ‘the ways of a gentleman (rich), luxury and dressiness’.


(v) -dār ‘doer, performer’: couki-dār ‘watchman’, bājan-dār ‘musician, instrumentalist’.

(vi) -sai ‘suitable or matching with; this suffix is used to indicate efficiency or quantity’: mānān-sai ‘maching with’, calan-sai ‘able to, serve the purpose’, fēk-sai ‘durable’.

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It has further been noted by Dr. Chatterji that some of the Persian words are cognate with the Sanskrit ones. They are so much similar to each other that the Indian or Indianised forms of these Persian elements are employed to make words. Few examples have been presented here –

(vii) (a) Persian -istant = Sanskrit (Skt.) sthāna ‘land’ as in the names of countries – Hindusthan, Afghanithan, Turkistan.
(b) Persian -mand = Skt. manta ‘the quality of being or having something’.
Examples:– *daulatmanta*, ‘rich’, *s’rī manta* ‘good or beautiful’, *paymanta* ‘lucky’.

Bengali words with the suffix -nāmā (from Persian -nāmāh) have been naturalised to such an extent that they are hardly felt to be foreign in Bengali. Examples – *Bābarnāmā, Akbarnāmā* etc.

(B) Prefixes:
The Bengali prefixes have been classified into –
I. *Prefixes of Native Origin: Tadbhava and Tatsama.*
II. *Foreign Prefixes.*

I. *Prefixes of Native Origin* –

(i) OIA <<a->> prefix became <<ā>> prefix in Bengali but the influence of Sanskrit restored the <<a->> in most cases. This prefix generally indicates a
‘negative’ or opposite sense. In Bengali words as a-bujh ‘not understanding’, a-gochalo ‘untidy’, a-jānā ‘not known, unknown’ this prefix is found.

Prefixes in ă: ă-luni ‘not salted’, ă-dhākā ‘not covered’, ă-dhoā ‘not washed’ can be found in Bengali.

(ii) sa- ‘along with’: This prefix is often used to make the meaning of the word more intensive. There is the word sa-thik ‘absolutely correct’, beside thik ‘correct’. Some other words are sa-jore ‘with great force’ (beside jore ‘forcibly’), sa-s’abde ‘with sound’, sa-paribāre ‘with family’ etc.

(iii) su- ‘good’: su-nām ‘good name’, su-khādyā ‘tasty food’, su-khabar ‘good news’ etc.


II. Foreign Prefixes –

(i) Persian Prefixes: gar- ‘without’: gar-mila ‘disagreement’, gar-hājir’ absent’ etc.
be- ‘without’ this prefix is also used pejoratively. Examples – *be-hāt* ‘getting out of reach’, *be-cāl* ‘evil ways’, *be-time* ‘wrong time’, *be-hed* (slang) ‘off one’s head’.

(ii) English Prefixes: The English words like half, full, head etc. are used as prefixes with Bengali words to form compounds – *hāph-dajan* ‘half dozen’, *hāph-pāuruti* ‘half of a loaf of bread’, *hāph-kilo* ‘half kilogram’, *phul-bābu* ‘a fop’, *phul-hātā* ‘full sleeves’, *hed-bābu* ‘the chief Indian clerk in an office’, *hed-paṇḍit* ‘the chief scholar’ from Anglo-Indian ‘head-pundit’.

**Nominal Stem or Declension of Nouns:**

Prof. Chatterji’s discussion on the declension of Nouns has been presented in *ODBL* under five subheads. These are as follows –

[A] Stems.

[B] Gender.

[C] Number.

[D] Case and Case Inflexions.

[E] Enclitic Definitives or Numeratives.

[A] STEMS

Bengali language has preserved only a small part of OIA declensional system. This language has absorbed only the few inflexions which have been generalised in other NIA languages. The elaborate system of declension of
Old Indo-Aryan had already been curtailed and simplified at the Middle Indo-Aryan stage. In the OIA stage, in the Vedic language, the vowel and consonant stems were more than a dozen. In Early MIA, the number of these stems were reduced to six – «-ā, -ī, -ū; -a, -i, -u». In this stage «-r» became «-a, -i, -u>>, the final consonants were lost, few traces of other stems (older ones) could be found. So, it can be stated that Bengali language acquired many new elements from other sources that led to the development of its stems, (and to the development of Bengali morphology as a whole). In the late MIA stage, the long vowels in the word final position were shortened; a tendency to bring all other stems to the short a (-ā) type could be noticed in the languages of the late MIA period. The stems in short i and short u (-ī, -ū) were sometimes leveled to the short a (-ā) type, sometimes words with -i, -u declensions were extended to «ia, -ua>>. The short ā which was added due to this extension developed from -ka, -kā. These changes may be found in the words like –

rāsā (<rāsī); muna (<muni); dhunā (<dhvani); gurā (<guru); rasiā (<rasi-ka); badhu/badhua (<bandhu-ka) etc.

Such words were inherited by early NIA from late MIA. In most cases the short word final a was dropped, the endings in -ia, -ua were assimilated to i, e, o, u etc. and often to-ī or -ū.
The Bengali Stems have been divided into two classes depending on the phonological shape:

(i) **Consonantal Stems:** These stems of New Bengali developed mainly from -a bases of Early Middle Bengali, Old Bengali, late MIA and partly from OIA bases with -i, -i, -u and -u. The foreign words ending in consonants should also be considered for such development of Bengali stems. Some examples of Bengali consonantal stems are – ḍm ‘mango’ (<amba, āmra), nayan ‘eye’ (<nayana), dhār ‘edge’ (<dhārā), parakh ‘test’ (<parikṣā), marad ‘man’ (<Persian ‘mard’), sawār ‘rider’, an Early Middle Indo-Aryan borrowing from Old Persian asa-bāri and New Persian suwār.

(ii) **Vowel stems, simple and diphthongal:** This type of stems in New Bengali developed from various sources as -a, -o, -ō stems in tadbhava forms, -a stems in tadbhava nouns, -i, -ī stems, -u, -ū stems of some tadbhava forms of Middle Bengali, -e and -o nouns in tadbhava forms representing the contracted -a bases of Late MIA and so on. The examples are lok-e (<Skt. loka), ‘on, by, or with a man’; mā-e (<Skt. mā-te), ‘on, by or with a mother’; khāru (<MB. khāḍḍua), ‘bracelet’; chātu (<MB. s’attua), ‘gram-dust’; lāru (<MB. lāḍḍua), ‘a type of sweetmeat’; New Bengali sai ‘girl friend’ (<MB sa(h)i <Skt. sakhi), nandāi ‘husband of sister-in-law’
(<nanandr-pati), bonāī ‘sister’s husband’ (<bhaginī-pati), bou ‘wife’ (MB ba(h)u <Skt. vadhu), nāiyā, neye ‘ferryman’ (<Skt. nāvika) etc.

[B] GENDER

The history of development of Bengali gender system shows that a tendency had developed in the Apabhraṃśa stage of OIA to cast wards with different inflexions into the inflexions of the masculine -a stem. This tendency of generalising the masculine -a stem to all words, started leveling the grammatical distinction between masculine and feminine forms. In OIA gender distinction of the words followed a grammatical system. Gradually this system was weakened and finally it was completely abolished in Bengali. But many other NIA languages like Hindi preserved the grammatical gender system of OIA. Grammatical gender system was not preserved in the Magadhan languages. The adjective which are used to qualify the feminine nouns, take the inflexions like -ā, -kā, -i, -ī, -ni, -nī etc. But these suffixes are used for tatsama, semitatsama and tadbhava words only. So according to the scholars, this grammatical way of forming feminine adjectives is against the spirit of Bengali language. This grammatical feminine gender may be found in few words (in literature). There are words like taruṇī strī ‘young wife’, sundarī nārī ‘beautiful woman’, (-ī inflexion is used with adjectives ‘taruṇ’ and ‘sundar’ to indicate that these adjectives qualify women).
It is found that in Old Bengali and also in Middle Bengali there are many forms in -i, -ī <īkā, and in -ā which show the influence of grammatical gender. Some examples are stated below –

\( '\textit{tu}t\textit{i} \textit{ge}l\textit{i} \textit{kā}nkhā 'the desire was destroyed' \) (Carya 37)

\( lāgelī \textit{ā}gī 'the fire caught' \) (Carya 47)

\( \textit{bār}a\textit{nē} \textit{u}j\textit{ā}lī \textit{k}a\textit{n}a\textit{k} baulī 'a floret of gold shining in its lustre' \)

(Kavi Kaṅkaṇa Candī, p. 64).

Here the forms denoting non-living objects or any state or quality, like \( kānkhā \) (desire) \( āgī \) (fire) \( kana\textit{k} baulī \) (floret of gold) etc have taken feminine verb forms with -i as \( '\textit{tu}t\textit{i} \textit{ge}l\textit{i}', \ 'lāgelī', \ 'u\textit{j}a\textit{lī}' \).

According to Dr.Chatterji, the rejection of grammatical gender which became a common feature of the Eastern languages had developed due to the influence of the Non-Aryans. This can be related to the Tibeto-Burman language forms which do not show grammatical gender. It is found in the Eastern Aryan speeches of Ashokan times, that the neuter affix <<-am>> was dropped for the masculine affix <<-e>> which was derived from OIA <<-aḥ>>.

[C] NUMBER

Some New Bengali inflexions showing number distinctions (singular, plural) can be found in the words such as \( l\textit{ok}-\textit{e} '\textit{p}e\textit{ople}', \ s\textit{a}b\textit{-e} '\textit{a}ll, by \textit{a}ll', \ mā\textit{n}u\textit{s}-\textit{gul}ān '\textit{m}en, \textit{f}olk', \ p\textit{a}\textit{s}'u\textit{-gul}ī 'the animals' etc. Many of the OIA
inflexions have been lost due to phonetic decay (loss of final vowel). Only some of the original Nominative plural inflexions were preserved in the languages like Marathi in the feminine and neuter forms.

Examples – Sanskrit *mālā* (singular feminine) > Prakrit *mālā* > Marathi *māl*;

Sanskrit *mālāh* (plural) > Prakrit *mālāo* > Marathi *mālā*;

Sanskrit *sūtram* (singular neuter) > Prakrit *suttam* > Marathi *sūt*;

Sanskrit *sūtrāṇi* (plural) > Prakrit *suttāṃ* > Marathi *sūtē*;

In some of the other NIA languages, the instrumental or genitive cases preserved the OIA number inflexions. Mostly, these inflexions were extended to the Nominative.

Western Hindi (nominative plural) *ghore* < *ghorāhi* < *ghoṭebhīḥ*, (OIA instrumental plural); Instrumental > nominative plural.

So, it can be said that the NIA languages developed three types of inflexions to indicate number.

(i) The original OIA Nominative inflexions.
(ii) The instrumental inflexions.
(iii) The genitive inflexions.

In the NIA stage, the original OIA Nominative inflexions were being lost. In the modern NIA languages, developments of the genitive inflexions or the instrumental inflexions may be found.
In modern Bengali the OIA number expressions as -ahi, (*<-ai) -e (instrumental) etc have not been preserved. The sister language Oriya and Bihari speeches on the other hand have preserved these forms. Here the possibility of New Bengali -e forms, as in lok-e bale ‘people say’, sab-e mili kari kāj ‘we all work together’, das’e mili kari kāj ‘we, ten people have united to do the work’ etc, developing out of the singular instrumental-nominative number expressions as -e <ē <ena, has been suggested by Dr.Chatterji.

The Nouns of Multitude in Bengali: The original OIA Nominative number markers, as well as the instrumental extended to the Nominative markers have not been preserved in Old Bengali. In the Early Middle Bengali stage, restricted use of the genitive plural marker for the plurals of other cases could be found. After this stage, some new devices entered into Bengali language in order to distinguish the singular forms from the plural ones. The most suitable device was the method of using the noun of multitude with singular noun to make its plural form. The Caryās show this method – as pañca vi dālā ‘(with) five branches indeed’ (Caryā 1), cauṣaṭṭi pākhudī ‘sixty four petals’ (Caryā 10), batis’a tānṭi ‘thirty two strings’ (Caryā 17) and so on. There were also expressions like maṃḍala-saela ‘all the mandalas’ (Caryā 16), kulīṇa-jana ‘people of good family’, bidujana-loā < vidvajjana-loka ‘all the wise men, group of many learned men’ (Caryā 18).
From the Old Bengali stage, the words like dui ‘two’ tini ‘three’ pañca ‘five’ and also the words like saela (sakala) ‘all’ jaṇa (jana), loa (loka) ‘all the people’, became the plural forming words in Bengali. The source of New Bengali -gula, -guli, -gulan, etc is Middle Bengali -kula. The literary New Bengali preserves the ‘kula’ plural forming word in the words as pakṣi-kula ‘birds’ ali-kula ‘bees’.

In New Bengali other plural markers are diga (śādhubhasā) -der, -ra etc can be found. ODBL explains elaborately the history of development of these forms. Some interesting examples are found here. These examples show that the <<-rā>> plurals for the pronouns were well-established in the 15th century. For instance << tomarā ‘you all’, tārā ‘they’, ihārā ‘these people’, morā, āmarā ‘we’>> etc. are quite frequent in the 1580 and 1602 MSS. of the Uttara and Ayodhya-Kandas of Krittivas’aśa’s Rāmāyana. Probably, during this century the <<-rā, -erā>> affixes were extended to nouns. In Vijaya-gupta’s Padmā-purāṇa ( last quarter of the 15th century: edition by Pyari-Mohan Das-Gupta, Calcutta, 1318, from late MSS, modernized to a great extent), some forms as <<chele-rā>> (for <<chaila-rā>> ‘children’, <<kaṭirā>> ‘the Qazis’, <<bāpurā>> ‘good men, fathers’ (a term of address), <<kāmarerā>> ‘black-smiths’, <<Sīberā bāpe jhi >>

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they together, S'iva the father and (Padmā or Manaśā) the daughter, lit. the S'ivas, father and daughter etc. may be found. These forms exist beside «tā(hā)rā>>, «morā>>, «torā>>, etc. (Chatterji, 1993: 736).

[D] CASE AND CASE INFLEXIONS

Bengali language is said to have seven cases or eight including the vocative. These case distinctions are indicated either by inflexions or by post positions. Some of these case-affixes have been inherited from Middle Indo-Aryan and some are newly created. A list of the case affixes which are attached to New Bengali nouns for each of each of the cases – Nominative, Accusative, Instrumental, Locative, Oblique-locative, Genitive and Dative have been presented in ODBL. The history of development of these case affixes have been discussed elaborately.

According to Dr. Chatterji, the case affixes as -ra, -er(a), -gā, -go (genitive), -k-e, -r-e, -er-e (dative), -ta, -te (locative) have developed from the late MIA stage. These one not developed from OIA inflexions, but from the combinations of help words and the stems or inflected forms of the nouns. Such developments of Bengali case affixes occurred just before entering the NIA stage. The other affix -e is the main characteristic affix of the Nominative Case in Bengali and is also found in the Instrumental Case, Oblique-locative and Accusative Case. This -e affix has developed in Bengali as the only representative of OIA case inflexions and into this affix many of the OIA case inflexions have merged.
Examples: (i) Nominative -e affix

*Kumbhīre khāi* ‘the crocodile eats’ (Carya 2).

*nā chāre Nāndera poe* ‘Nanda’s son does not leave’ *Sṛi-Kṛṣṇa-Kīrtāṇa* (SKK: p.38).

*xadhue eq crux bhanaia boner moidhe raqhiło* ‘the saint made a crucifix and kept it within the forest.’ (*Crepar Xaxtrer Orthbhedh*).

(ii) Instrumental -e or -ē affix

This -e affix in Bengali has developed as the only pure Indo-Aryan suffix from OIA -ena, the instrumental singular.

Example: New Bengali (NB.) *hāte māre* ‘kills with hand’ comes from early MB hathe mare (-e with nasalisation). The OB from is *hāthē mārai* (OB still retained nasalised e).

(iii) Accusative or dative e, ē affix

Old Bengali (OB.):- *sahaje kahei* ‘describes the sahaja’ (Carya 27).

Middle Bengali (MB.):- *deha more sarasa bacane* ‘give me a pleasant reply’ (SKK: p.46).

NB.:-* hāte kore* ‘with the hand’

*jhorāy kore* ‘in the basket’ etc.
**Help-Words for the Genitive:** The OIA singular affixes for the Genitive case have not developed in most of NIA languages including Bengali. It is found that in the transitional MIA period many affixes and helping words as -ka, -kera, -kela, kara, kāra, kaṇṇa etc. came to be used for the genitive case. These help words were used either with the genitive forms of the words pleonastically or these were compounded with the base to indicate the genitive case. Later, these words developed into the genitive affixes and other affixes in the NIA languages. The following examples from the New Bengali may be studied –

- *sakāl(a)-kār(a)* 'of the morning'  
- *bachar-kār* 'of the year'  
- *sabā-kār, sabbāi-kār* 'of all'  
- *mor(a), amār(a)* 'my'  
- *āmā (ra)go* ‘our’ [East Bengali] >āmāgo.

**Post-Positional Words in Bengali:** Dr.Chatterji’s discussion on post positional words in Bengali becomes another interesting subject of study. The postpositions for indicating the cases have developed in Bengali since MIA stage. Some post-positional forms have developed in Bengali as conjunctive and participle postpositions and these have retained their phrasal character. These have always existed in NIA stage as detached words. In addition to the verbal postpositions there are nouns (the tatsama, semi-
tatsama and tadbhava words) which exist as separate words and are used as postpositions. Such important postpositions in Bengali are the following –

\textit{sange} instrumental or locative-oblique of the tatsama \textit{saṅga} ‘company’: used in MB and NB. With the genitive, but in OB. with the stem, to mean ‘along with’;

Example – MB – \textit{barāyir(a) sange} ‘with the old dame’ SKK, p: 169.

\textit{binā} > \textit{bine} (by vowel harmony), bini ‘without’, from OIA \textit{vinā} ‘without’;

Examples – NB – \textit{binā anumati} – te or \textit{anumati binā} ‘without permission’

\textit{bini sūār hār} ‘a necklet without a cord’, [\textit{bini} is a rare form in New Bengali, it is found both as a preposition and as a postposition].

Verbal postpositions


Nominal postposition

\textit{chārā} ‘leave, without, in addition to’, as in \textit{hūkā-chārā} ‘without the hookah’, \textit{e-chārā} ‘without this, except this’, \textit{tā-chārā} ‘in addition to this’.

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ENCLITIC DEFINITIVES OR NUMERATIVE

Rabindranath Tagore in his philological works had commented on these enclitic definitives. Dr. Chatterji in his *ODBL* (Chatterji, 1993:777-781) has studied their use, origin and history of evolution. He has observed that Bengali like most NIA languages uses some post-positional affixes or words which are added to nouns and numerals to show the nature of the object or article referred to. The post-positional affixes that developed in Bengali showed different types of characteristic features and performed various functions. There are post-positional affixes, which, when attached to nouns or pronouns other than first or second person, show the nature, number or quantity of the objects (or persons) that they refer to. These post-positions become a part of the nouns or pronouns with which they are attached and generally take the case inflexions after them. In case of singular nouns or pronouns, the definitive comes after as in the New Bengali forms *lok + ŧi = lokti* 'the man', *mānuṣ + ū = mānuṣṭā* 'the person'. Such forms take the case affixes after them as *lokti + ra = loktir* 'of the man, belongs to the man' (Genitive case), *mānuṣṭā + ke = mānuṣṭa-ke* 'to the man', *se-će + ke = seći ke* 'to that thing' (Accusative case).

When the noun is not a singular one it takes a numerical after it and with this numerical the postposition is combined – *chele + du + ŧi = cheleduṭi* 'the two boys'. Very often the numerical precedes the noun and then this numerical-cum-enclitic becomes an attributive adjective and case affixes are not attached to the adjective but to the noun itself.
das'-jan-mānuṣ ‘ten people’ (Nominative).

Du(i) + ți + chele + ke = duti cheleke ‘to the two boys’ (Accusative).

The definitives can be used with nouns having qualifying genitives with them and where the nouns may or may not be mentioned. When the nouns are not mentioned the definitives and the case affixes come directly after the qualifying genitive.

pās’er-ṭā-ke. ‘to the one beside…’

uparer-ṭā-theke ‘from the one above…’

The enclitics like -ṭā, -to, -ṭe, -ṭi, -ṭuku, -ṭu etc. never precede a numerical in such a type of word formation. These are not separate words. But the definitives like jana, jana, gōṭā, khān, guṭi etc. can precede a numeral. Some most common numeratives and their uses are shown below –

-jana: du-jan-mānuṣ ‘two persons’

jan-dui-mānuṣ

mānuṣ-jan-dui ‘about two / three persons’, the number of persons is not shown exactly.

du-cār-jan-lok ‘few persons’, the number of persons may be two, three, four or more.

jana: jana-das’ek-lok ‘about ten people’.
khān: duī-khān hāt ‘the two hands’, (East Bengali dialect), du-khānā bai ‘the two books’.

khāni: hāt-du-khāni ‘the two hands’ (originally used for/with feminine words) mukh-khāni ‘the face, (especially of a woman)’.

gāch, gāchi used for ‘a tree’ long or large pieces. Lāṭhi-gāch, lāṭhi-gācha ‘a long piece of stick’.

ghūch (diminutive) dari-gāchi ‘a piece of rope’.

gota gotā-dui-ām ‘few mangoes’. Number not exactly mentioned.

ghūti (diminutive) ghūti kayek mohar ‘few gold coins’.

According to Dr. Chatterji, the enclitics ūa, to, te. and ĭi have Sanskrit origin. -ūa. The -ūa enclitic, which, often becomes -to or -te due to vowel harmony are used with larger objects. -ūi refers to smaller, delicate, beautiful or favourite objects. These are often used to express the tender feelings of human mind. The relationship between -ūa and -ūi may be similar to that of -khānā and -khāni. ‘-khāni’ is generally used in the same way as ‘-ūi’ is used. The following lines by Rabindranath Tagore may be studied –

Tomār arūpa mūrtikhāni ‘your divine image’. [Rabindranath Tagore, Gītabiṭān Part II, Song No.222]. 241
"Labe tuli mālākhāni lalāte ‘she will keep the garland on her forehead’. [Rabindranath Tagore, Gitabitan Part II, Song No.137].

.....sei bī ṇāti gabhūr tāne āmār prāne bāje temni dhārā ‘in the same way that lyre in my heart sings a deeper melodious note’. [Rabindranath Tagore, Gitabitan Part I, Song No.35].

In Modern Bengali the use of ‘-ti’ is related to the expressions of sympathy, pity or love for a person or any other creature. The following examples will clarify this—

chele-ṭā khub pāji ‘the boy is very naughty’.

mānuṣṭī khub bhālo ‘the person is very good’.

poṣā pākhiṭir mato piche piche ese.... It follows like a pet bird’.

[Here ‘-ti’ in the words as mānuṣ-ṭi, pākhi-ṭi-r expresses sympathy for a good person, or shows the loyalty, obedience of a pet bird.]

-ṭuku: This post-position is generally used in Modern Bengali to refer to smaller objects or a very small quantity (for uncountable nouns). This also refers to the tender qualities as childishness, innocence, etc. Examples are as follows:

jami-ṭuku ‘the small piece of land’.

oi-ṭuku-meye ‘that tiny girl’.

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**Verbal System**

**Dr. Chatterji’s Study of Aspect:**

Dr. Chatterji’s study of ‘Aspect’ in Bengali Verbal System must be mentioned in this connection. In this discussion on the Verbal System of Bengali, Prof. Chatterji started with the explanation – how the Indo-European verbal system was reflected in Sanskrit and how it developed in the NIA languages as Bengali. While discussing this he was struck upon by the idea of ‘aspect’ but he did not fully develop this idea in his *ODBL* (1926). He only mentioned that Indo European verbal system was characterized by Tense and Stem formation. This stem formation actually shows ‘aspect’. This aspectual idea in Bengali was developed 16 years later, when he published his *Bhāsā-Prakāś’ Bangālā Vyākaraṇ*. Linguistic traditions of the Western Countries and Ancient India show a long history of the study of aspect in the verbal system. But in modern times (20th century) Suniti Kumar is considered by the linguists as the first scholar who has dealt with the concept of ‘aspect’ in the verbal system of a modern Indian language as Bengali. (Banerji, 2001: 48-49).
The discussion on Bengali verbal system in *ODBL* draws our attention. The chapter begins with an explanation of Indo-European system of conjugation which developed into OIA and from OIA it passed through MIA and then came to NIA and Old Bengali.

Dr. Chatteji’s detailed discussions on almost all the aspects of Bengali verbal system can give the scholars a very clear idea of the source and the development Bengali verbal forms. Only some of the major and most important observations have been presented here. This part strongly bears the impression of Prof. Chatterji’s depth of knowledge regarding studies on Indo-European as also on Indo-Aryan.

This Chapter on Verbs has been divided into seventeen sections of these, only the following points have been discussed here.

- Conjugation of Verbs in Indo-European, in Old Indo-Aryan and in New Indo-Aryan.
- Classification of Bengali Roots.
- Compound Verbs.
- Passive Voice in Bengali.
- Tense

**Conjugation of Verbs in Indo-European, in Old Indo-Aryan and in New Indo-Aryan:**

Old Indo-Aryan (Vedic) did not obtain its elaborate conjugational system from Primitive Indo-European. At the oldest stage Primitive Indo-European
had a very simple system of conjugation. The conjugation of the verb fell mainly into two parts or systems (i) the Present-Aorist and (ii) the Perfect. These two systems of Primitive Indo-European did not show the exact time of action (or the tense-aspect). It only indicated action in the present, incomplete or perfected. Any action taking place in the past was indicated by the use of an adverbial particle «<e>» which was the augment. Later, this augment was loosely attached to the verb. The combined form «<*e>» (>Indo-Aryan = «<a’>») and the verb form became the source of imperfect and aorist tenses of Vedic and Sanskrit. In Primitive Indo-European There were ‘themes’ or syllables like «-*o-, -*nu-, -*so-, -*sko-, -*dho- »etc, each having its own special force or meaning. These were added between the roots and the personal affixes and served as the link between the two. The purpose of these thematic affixes was to indicate the aspect or the nature of the action – whether the action was progressive or transitory or iterative or intensive or indefinite.

In the later stage of Indo-European many of these thematic forms were lost. But several forms acquired distinct and well-defined values. The -s-theme came to indicate the past tense in Celtic and Slav languages and aorist tense in Greek and Sanskrit while the -so- and -syo- theme developed as the marker of future tense in Greek, Sanskrit and Baltic.

Example – IE* drk ‘to see’ With a strong grade * do’rk (reduplicated *de-dork) and with personal affix «<-ā>» becomes *de-do’rk-a, a present tense form, meaning ‘I am after completing the act of seeing’, Sanskrit dadarsa,
Greek *dedorkā*. From these expressions developed the sense of past – ‘I saw’ and the sense of perfect – ‘I have seen’. Dr. Chatterji has presented two charts showing the development of different tenses from Indo-European present-Aorist system and from Indo-European Perfect system. He then explains the development of tenses and moods in Vedic verbal forms.
Indo-European Present -Aorist System
(Athematic and Thematic classes)

Athematic Roots

Present Tense
('ad' class in Sanskrit)

Imperfect
with '-syo-' theme

Aorist with '-syo-' theme

With Augment
conditional Tense

Future Tense

Thematic Roots
(with affixes like '-o-, -so-, -syo-, -sko-', etc.)

With other themes
(> 9 classes other than 'ad' in Sanskrit)

Present

With Augment

Imperfect
Classification of Bengali Roots:

HISTORICAL CLASSIFICATION

This section starts with the discussion on historical classification of Bengali verb roots. The following chart shows the detailed classification of the verb roots as presented in ODBL. If all the different types of roots – original primitive roots, the causatives and the denominatives, onomatopoetic roots, compounded or suffixed roots are taken into account, nearly 1500 roots may be found in Bengali.
The Bengali verb-roots can be broadly divided into two groups —

(1) Primary Roots

(2) Secondary Roots

The Primary Roots in Bengali are about 300 in number. There are mainly 200 roots in Bengali which can be said to have originated from the primary

The primary roots have been classified into –

- Primary Roots inherited from OIA (tadbhava).
  These are of two types –
  (a) Simple roots (as the unprefixed ones mentioned above).
  (b) Prefixed roots.


- Primary roots from causatives in OIA. Examples – gale ‘strains, causes to flow off’, (galayati) cale ‘causes to move’ (calayati) tare ‘saves’ (tarayati).

- Primary Roots reintroduced from Sanskrit (tatsama and semitatsama) from Middle Bengali times tatsama roots or bases like garja ‘to roar’, kirtta ‘to praise or to sing’ nirmā- ‘to make’ (semitatsama niramā),
  banda ‘to worship’ tiṣṭha- ‘to stop, to stay’ can be found.

- Primary Roots of doubtful origin (des’i ?)

These are some roots in Bengali which do not appear to be secondary formations. There origin cannot be found in the OIA forms. Some of
these roots recall the Dravidian forms of similar meaning. So these forms may have originated from Dravidian languages. Some of the roots of obscure origin are ṣāc ‘guess’, ṣāṭ ‘tighten’, kāc ‘to dress or wash (clothes etc.)’, ghir ‘surround’, chut ‘run’, jhūk ‘lean out’ etc.

Secondary Roots or Derivative Roots

The secondary roots of Bengali have been divided into five sub groups.

• Causatives in ā:

Some causative verbal roots with a affix are to be found in Bengali. Prof. Chatterji shows the development of this affix from OIA stage through first and second MIA stage. Many of the causative with a endings have become obsolete in Bengali and some causative formations without causative meaning have occupied their place.

Examples – ṣākarā ‘embrace, hold with both hands’, causative extension *akṛāe; ukhār(a) ‘up rooting’, causative extension – *ukhārāe > ukhray, ukhāre ‘roots out’; ujār(a) ‘desolate’ ujārāy, ujroy ‘make desolate’. These are nearly 400 proper causative verb roots with a affix in Bengali.
Denominatives:
These are verbal roots having their origin in nouns and participate adjectives. The nouns and adjectives are used as verbal roots. In this process the final vowel ending of the noun or the adjective is generally dropped. The Indo-Aryan languages have developed the tendency of forming verbal roots out of the nouns and adjectives with the help of denominative-forming affix << -āya- >>. This tendency has developed from the MIA stage. Thus the OIA forms like sṝṇotī, sṝuta > MIA sūṇai, suda > sua etc. are found.

The creation of a new form 'suni' has made the 'suo' form obsolete. Hindostani (NIA) has developed sune (present) and suṇa (past participle). The simple << a >> verbal noun could have supplied the babes for the new type of verbal forms.

According to Dr. Chatterji, such formations might have been possible due to the influences of Dravidian or Kol speeches. In the NIA languages like Bengali, this denominative formation in << -a >> has become a free and natural process. The denominatives are formed even from foreign nouns and adjectives. Dr. Chatterji has spoken of three types of denominatives

(i) Native
(ii) Tatsama
(iii) Foreign
It has been pointed out by the scholars that absence of literary records prevent us tracing when the tadbhava or denominatives of native origin (des'ī) came to be used in Bengali. The forms without -ā- appear to be the earlier formations.

Examples – uge ‘rises’

MB unāe ‘get hot’ (unha, uspa)

kahe, kay ‘says’ (kahei, kathayati)

ghanā ‘deepen’ (ghana)

ghāme ‘sweats’ (gharma)

dāta ‘gnash teeth, show teeth’

The common Bengali roots belonging to this class are about 200.

The examples of tatsama denominatives are agrasara, ādara, ādes’ā, uccheda, uddhāra, dāna, dīpa, citrā, etc. Some of the foreign denominatives (Persian) in Bengali are dāg ‘mark’ (dag), phaskā ‘slip from hold’ (fasx), kulupā ‘lock up’ (qufl ‘lock’), badalā ‘change’ (badl).

The English words as manage quote, note are compounded with Bengali roots like kar, de etc. to form verbs. This tendency may be seen in the speech of the educated persons.
• Compounded or Suffixed roots:
Over 125 Compound and Suffixed roots are found in Bengali. These are derivations from formed either by the combination of two roots or a root preceded by a noun or an adverb, or in most cases a root (primary or denominative) modified by a suffix. In Bengali gā (<giyā) ‘to go’ is commonly used after kara ‘do’, khāo ‘eat’ etc. to form compounded forms like kara-gā ‘go and do (it)’ khāo-gā ‘go and eat’.

Another interesting example may be the Bengali word roso ‘wait’ formed from raha ‘stay, remain’ and saha ‘endure’.

\[ \sqrt{raha} + \sqrt{saha} > roso \ 'wait' \]

Some of the common suffixed roots with ‘-k’ affix indicating suddenness of action are \[ \sqrt{camkā} \ ‘be bright’, \sqrt{tapkā} \ ‘jump over’ \sqrt{mackā} \ ‘break with a noise, sprain’ etc.

• Doubtful Roots (Roots of other origin):
A few roots different origin (probably formed due to influence of Non-Aryan languages) can be found in the NIA languages as Bengali.

Examples – \[ \sqrt{ātkā} \ ‘be filled with sudden fear’, \sqrt{jāptā} \ ‘embrace’, \sqrt{jhāptā} \ ‘struggle’, \sqrt{ciptā} \ ‘press down’ \].
Onomatopoetic Roots:
These roots have been classified into two main groups and subgroups.

[A] Onomatopoetics Proper
(i) Simple
Examples – \(\sqrt{c}i\)lā ‘shout’, \(\sqrt{t}upa\), \(\sqrt{t}usa\) ‘drip’, \(\sqrt{h}\)āk ‘shout’ (MIA hakka).
(ii) Duplicated
Examples – \(\sqrt{\text{k}a\text{t}k\text{a}t}\)a ‘sense of biting or breaking pain’, \(\sqrt{\text{j}h\text{amjham\text{a}}}\) ‘make a hollow ringing noise’, \(\sqrt{\text{s}a\text{p-sap}\text{a}}\) ‘sense of being wet or uncomfortable’.

[B] Roots Repeated
(i) Complete Repetition
Examples – \(\sqrt{\text{jal-jal}\text{a}}\) ‘be brilliant’ (jival), \(\sqrt{\text{tan-tan}}\) ‘sense of binding pain’, \(\sqrt{\text{dhuk-dhuk\text{a}}\text{a}}\) ‘pant’.
(ii) Modified Repetition
In these cases other roots of similar sense echoes the preceding ones.
Examples – \(\sqrt{\text{cul-bul}\text{a}}\) ‘wander about’ \(\sqrt{\text{dal-mal}\text{a}}\) ‘shake and pat’, \(\sqrt{\text{tal-bal}\text{a}}, \sqrt{\text{tal-mal}\text{a}}\) ‘be shaky and move about’.

FORMAL CLASSIFICATION
A Formal Classification of the Bengali roots have been presented in ODBL. The roots have been classified according to root-vowels in their modified forms – Roots in a, ā, i, e, u, o. and Causatives Denominatives in
These seven classes of roots have again been divided into sub-groups.

Some of these classes with their subgroups and an example of each have been shown below –

Class I (a) Roots in 'a' closed by a consonant.
Examples – \(\sqrt{kar}\) 'do' – kore 'having done', korbe 'will do’, korte ‘in order to do, while doing’ etc.

Class I (b) Roots in 'a' originally in ‘ah’
Examples – \(\sqrt{rah}\) 'remain' – ray ‘remains’, raiba ‘I shall stay’, raite ‘in order to stay’.

Class IV(a) Roots in ‘e’ (irregular).
Examples – \(\sqrt{de}\) ‘give’ – dile 'if (he) gives', debe '(he) will give', \(\sqrt{ne}\) ‘take’ – nite ‘in order to take’, nile ‘if (he) takes’, nebe '(he) will take’.

Class IV (b) Roots in ‘e’ ending in consonant.
Examples – \(\sqrt{khel}\) ‘play’ – khele ‘after playing’, khelbe ‘will play’, khelte ‘in order to play’.

Class VII Causatives and Demominatives in a
Examples – \(\sqrt{karā}\) ‘cause to do’ – karāe ‘causes to do’, karāte ‘if (he) causes to do’, karābe ‘will cause to do’.
ROOTS AND VERBAL NOUNS IN BENGALI

The formal classification of Bengali vowels (according to root vowels) is followed by a discussion on roots and verbal nouns. Prof. Chatterji explains what can be called ‘root consciousness’ among the speakers of an inflected language. He also status how in the modern Indo-European languages like English, French, Persian, Hindi, Bengali what was originally a root + affix combination has been reduced to a bare root due to Phonetic decay. In Bengali such phonetically decayed ‘Root Nouns’ are commonly used as

\( \text{\textasciitilde}s\text{o\textasciitilde}n\text{\textasciitilde} \) ‘cause to listen’ – \( s\text{o\textasciitilde}n\text{\textasciitilde}e \) ‘causes to listen’, \( s\text{o\textasciitilde}n\text{\textasciitilde}be \) ‘will cause to listen’, \( s\text{\textasciitilde}n\text{\textasciitilde}le \) ‘if (he) causes to listen’.

\( \text{s\textasciitilde}j \) ‘dress or make up’ forms the expressions like – \( \text{s\textasciitilde}j \text{\textasciitilde}k\text{\textasciitilde}r\text{\textasciitilde}a \) ‘array’.

\( \text{ph\textasciitilde}t \) ‘crack’ in expressions like – \( \text{ph\textasciitilde}t \text{\textasciitilde}dh\text{\textasciitilde}r\text{\textasciitilde}c\text{\textasciitilde}e \) ‘it has got a crack,

Some of the Root-Nouns that have developed in Bengali are –
\( \text{t}\text{\textasciitilde}l\text{\textasciitilde}a-p\text{\textasciitilde}r\text{\textasciitilde}a \) ‘raising and felling’ turning upside down, agitating’.
\( \text{m\textasciitilde}r \text{\textasciitilde}k\text{\textasciitilde}t \) ‘striking and seizing’.
\( \text{h\textasciitilde}k\text{\textasciitilde}d\text{\textasciitilde}k \) ‘shout and yell’ etc.

Compound Verbs

Compound Verbs are formed in Bengali by adding a verb to another verb of a different meaning, on by adding a verb to a noun of different root
(meaning). The noun and the verb or the two verbs taken together, will have a meaning that is different from the meanings of the individual verb or the noun. So, the Compound Verbs are of two types.

(i) Compounds Verbs are formed by adding a verb to a noun.
Examples – *uttar deoya* ‘to answer’, *lāph mārā* ‘to jump’, *ghurpāk khāoyā* ‘to move about in a circular way, to lose ones way and move about in the same place’.

(ii) Compound Verbs can also be formed by adding a verb to another verb of different meaning as *kare nāo* ‘do it (yourself)’, *cale jāo* ‘go (immediately)’, *bale dāo* ‘tell (now), inform immediately’.

The Compound Verbs formed with a verb and a noun does not show any ‘aspect’ of the Compound Verb. But the compound verb which are the combination of two verbs, clearly show this ‘aspect’. It indicates the ‘time’ of the action or the ‘manner’ of the action. In this case the first verb carries the meaning and the second one completes the ‘sense’ by showing the ‘aspect’ – how or when the action takes place. In the examples mentioned above, the sense of the aspect is shown by words given in the brackets. When the compound verb is formed by adding verb to a noun, the verb cannot be considered as the ‘auxiliary verb or the ‘helping verb’. This verb functions as a dependent ‘conjunctive’ or a ‘complement’ for completing the action. The finite verbs follow fixed rules for their attachment with the noun,
i.e. there are particular sets of noun + finite verb combination. The following examples will explain this –

*dokān korechi / dokān diyechi / dokān khulechi* ‘I have opened a shop’,

*garam karche / garam hacche / garam lāgche* ‘feeling hot (heat)’.

In case of verb + verb combination the second verb is a helping or an auxiliary verb. If the first verb is considered as the ‘pole’ the second one is the ‘vector’ and it is not dependent on the meaning of the first verb.

Examples –

*pare dekha* ‘read and find (it) out’,

*pare nāo* ‘read the whole or part (of it) in a short period of time.

*pare sonāo* ‘read it loudly’,

*pare jāo* ‘continue reading it’,

*pare esa* ‘come after reading it.’

Here more ‘free’ or ‘independent’ verbal combinations modify the meaning of the verb *pare* ‘to read’

As it is explained by Dr. Chatterji this formation of Compound Verb or Group Verb is actually a compensation for the root modifying prefixes that were characteristic features of Sanskrit and other Indo-European languages outside in India. In the languages like English these affixes which modify the verb are placed after (sometimes before) the verb and thus they show the
'aspect'. The formation of these compound verbs may also show the non-Aryan influence on Indo-Aryan languages.

Examples – English: to sit down,
   to lie down,
   to put off,
   to look forward,
   to bring up,
   to give away etc.

The older forms as ‘with stand’, ‘for-give’, ‘for-get’, may also be found.

In ODBL, the classification of the Compound Verbs draws our attention.

Types of Compound Verbs in Bengali
- Nominals.
- Verbals.

NOMINALS

These nominals are of four types and these four categories of nominals can again be divided into subgroups. A type of these nominals, with subgroups and examples has been shown below.

Compound with locative verbal noun (or indefinite) in «-ite-»
(i) Inceptives (with « lāg » ‘to be attached’

- korite / korte lāgā ‘to set to do’,

(ii) Desideratives (with « cā, cāh » ‘to want’

- dite cāoyā ‘to wish to give’. (iii) Acquistive (with « pā » ‘to get’)

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-dekhite > dekhte pāoyā ‘to be able to see’.

(iv) Permissives (<< de >> ‘to give’)
-basite > baste deoyā ‘to allow to sit’,

(v) Potensials (<< pār >> ‘to be able’)
-calite > calte pārā to be able to walk’.

VERBALS

The verbals show two broad classifications

(a) with the conjunctive (in << -iyā, -e >>

Examples – ese pārā ‘to arrive, to come along’, diye deoyā ‘to give away’,
sore pārā ‘to escape’, muche phelā ‘to rub off’, bose pārā ‘to sit down’,
lege thākā ‘to be fixed or working at something’, boke jāoyā ‘to talk
continuously’ etc.

This class of compound verbs has been divided into other types like
Intensives, Intensives and Completives, Staticals, Continuatives,
Miscellaneous.

(b) With the Present Participle in <<-ite->>. These verbals are of two types:

(i) Continuatives and Frequentatives

Example – dite thākā ‘to continue giving’, karite > karte thākā ‘to continue
doing’, hasite > hāste thākā ‘to remain smiling’(continuative); bār bār
balte thākbe ‘(he) will keep on saying (it) repeatedly’ (frequentative).
(ii) Staticals

Examples – « karite karite jāoyā ‘to go while doing’, « gāite gāite calā>> ‘to walk while singing’ etc.

Dr. Sukumar Sen in his Bhāsār Itivṛtta (1939, 1993) has classified the compound verbs into five categories. This classification is based on the structure of the compound verbs.

- Combination of two Finite Verbs of equal status. Example – aše jāy ‘comes and goes’.
- A Finite Verb followed by an Infinite Verb. Example – khāo giye ‘eat after going; go and have your meal’.
- A Finite verb + Infinite Verb + Finite verb. Example – bāla ge jāo ‘go and tell immediately; go and inform; I do not care if you do and tell (it)’.
- An Infinite Verb followed by a Finite Verb. Example – diye dāo ‘give it (for ever)’.

But according Dr. Paresh Chandra Majumdar such a classification becomes possible only when the infinite verbs end in -iyā. Compound verbs
formed by the combination of infinite verbs ending in -ite- cannot be classified in this manner.

A semantic classification of the compound verbs has been suggested by Dr. Majumdar. (Majumdar, 2012: 402-405).

• Compound verbs in which the two parts of the verbs (either finite verb + finite verb, or infinite verb + infinite verb) will have the same semantic significance. Examples – balte kaite ‘to speak fluently and smartly’; nāce gāy ‘dances and sings’.

• Compounds verbs which have a noun followed by a verb belong to another category. In this case the noun part of the compound verb will have a greater semantic significance than the verb. The verb will be dependent on the noun and it will only complete the action suggested by the noun. The meaning of the verb is insignificant in this case. Examples – dhākkā deoya ‘to give a push’; jamā karā ‘to deposit’.

• Compound verbs formed by combining two verbs (one must be an infinite verb) often show that one of the verbs has a greater semantic significance. Some examples will clarify it – khey e nāo ‘have your meal’. Here the verb khey e ‘to eat’ is semantically more important and it suggests the main action; chūre dāo ; throw (it) and give it’. Here the verb chūre ‘to throw’ is the more important verb and the meaning of the verb dāo ‘to give’ becomes insignificant.
The common speech habit of the Bengalese people generally places the more significant verb (semantically) in the initial position.

**Passive Voice in Bengali**

The study of the formation of passive in Bengali comprises an important section of *ODBL*.

The discussion on passive begins with the development of Aryan (Indo-Iraninan) Inflected passive out of middle or reflexive (voice) which was confined to the present stem and to the third person singular of the aorist only.

**THE INFLECTED PASSIVE**

These inflected passives can be of three types –
(a) Passive Indicative
(b) Middle or Reflexive Voice and
(c) Passive Imperative.

Old Indo-Aryan had developed the distinctive affix -ya- in the present stem and in the formation of the inflected passive personal termination of middle voice was employed. In the Middle Indo-Aryan period the OIA conjugational system was decayed to a great extent, but still, the passive was retained. In MIA, the passive formation can be found in the present indicative and optative imperative. The few forms like passive aorist and the future were formed in the second MIA stage.
The main affixes of the passive formation in the first MIA stage were -ya-, -iya, -iyya, iya; in the second or third MIA stages the affixes -ijja, ia could be found.

The passive forms with these affixes ( -ijja, -ije- etc) are still retained by the Western Indian languages as Sindhi, Rajasthani, Western Punjabi and even in Old Southern Marathi. The polite forms in Hindi as kijiye ‘please do (it)’, lijiye ‘please take (it)’, may also bear the impression of this type of passive formation.

In Bengali these passive forms with -ijja-, -ija-, -ije- are not found. Only one or two exceptions may exist. In Old Bengali, the passive forms (nearly twenty) with ia > i can be seen –

Examples – kariai (< kriyate) ‘is done’

\[ pābiai \ (< \text{prāpyate}) \text{ ‘is to be got’}. \]

Till Middle Bengali many forms with -ia-, -ie- > i may be found

\[ \text{As karie, kari ( <kari-ai, kriyate) ‘is done’} \]

\[ \text{dekhie ( <dekkhiai, drs’yate) ‘is seen’} \]

All these inflected passive forms have commonly not survived in Modern Bengali. There are only some dialectal uses.

In Modern Bengali, the use Middle or Reflexive voice is quite common. In such formations the subject of the verb is not indicated clearly. It appears
that the object itself is performing the action or the result of the action on itself.

Examples – *kalsi bhare* ‘the pitcher fills itself’,

*kapor chēre* ‘the cloth tears itself, (the cloth is torn)’.

### Analytical & Periphrastic Passive

The inflected passives have become ‘fossils’ in Modern Bengali and the only living way of forming passives in Bengali are ‘analytical’ and ‘periphrastic’. The analytical process of forming passives has become a characteristic feature of the Eastern Aryan languages. This analytical process may be seen in the Bengali forms as *karā holo* ‘It is done’, *dekhā jāy* ‘It is seen’. Here the verb has two parts (i) a participle or a verbal noun which forms the main verb. (ii) An Auxiliary verb. So, in Bengali the main passive formations are analytical or periphrastic in nature.

Examples – *āmi dekhā jāi* ‘I am seen’.

Here the object *āmi* is not inflected. But Bengali sentences are not formed in such manner. So the above example does not reflect Bengali speech-style.

Passive formations where the object is without inflection, are used generally when the object is an animal or a lifeless thing as

*ghar pāoya jāy* ‘rooms are available’,

*goru bādhā āche* ‘The cow has been tied’.

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In the example

\textit{āmāre dekhā jāy} ‘I am seen’.

The meaning of the sentence should literally be ‘with regard to me it is seen’. Here the verb expressing the ‘state of being seen’ is actually a \textit{passive participle adjective} and the whole construction is \textit{impersonal}. Such constructions are characteristic of Western and Southern Indo-Aryan languages.

Such constructions are some of the oldest constructions in Bengali. Some of these are found in the Caryās and more evidences may be seen in the Middle Bengali texts.

Examples – \textit{dharāṇa nā jāi} ‘cannot be held’ [Caryā 2].

<< \textit{lalāṭa-likhita khaṇḍana nā jāe}}>> ;that which is written on forehead cannot be averted’ [S’KK p.38].

<< \textit{prāṇa dharana nā jāe}}>> ‘life cannot be endured’ [S’KK p.58].

PASSIVES IN -ā-

Passive constructions with distinctive a affix are found in abundance in Middle Bengali and Modern Bengali. Some common instances of Modern Bengali are

<< \textit{bes’ mānāy}}>> ‘fits well, looks nice’.

<< \textit{kathāṭa cārāiyāche}}>> ‘the news has been spread’. (Sādhu Bengali).
"etā tato kharāp dekhābe na" 'this will not show (look) so bad'.

This ā affix occurs in other NIA languages as Magadhan Maithili and Bhojpuriya, in Eastern Hindi and in Western Hindi. This suffix is often used in passive constructions to express the sense of Causative or Potential and is regarded as an extension of the denominative "āya" of OIA.

Tense

The discussion on Bengali tenses like many other interesting sections of ODBL, must be regarded as a great contribution of Dr. Chatterji to the study of Old Indo-Aryan, Middle Indo-Aryan and New Indo-Aryan; in a wider sense to the study of Indo-European too.

CLASSIFICATION OF BENGALI TENSES

According to the form and meaning the tenses in Bengali has been studied under two main sections –

- Simple Tenses
- Compound Tenses

The simple tenses fall under four subheads

(a) Simple / Indefinite Present.
(b) Simple / Indefinite Past.
(c) Conditional / Habitual Past
(d) Simple Future.
The Compound tenses can be classified into two main groups –

(a) The Progressive Tense which can be indicated
   (i) Present Continuous or Present Progressive
   (ii) Past Continuous / Progressive
   (iii) Future Continuous or Progressive.

(b) Perfect Tense which indicate
   (i) The Present Perfect
   (ii) The Past Perfect

If the origin of the tenses in Bengali is considered, the tenses can be divided into three classes –
[1] Radical Tense
[2] Participial Tense
[3] Periphrastic Tenses

Some of the interesting parts of Prof. Chatteji’s researches on tense system of Bengali and NIA languages have been discussed in details.

THE PAST BASE

The history of development of Bengali ‘past base’ from OIA through MIA has been discussed elaborately. It has been observed that the past base in << -il >> in Bengali, Assamese and Oriya, in << -al- >> in the Bihari speeches and in << -il , -al >> in Marathi and similar << -l- >> forms in other NIA speeches have developed from OIA << -ta, -ita >> plus (+) the
OIA diminutive or adjectival affix «-la» in the extended forms «-ila, -a-la, -illa (ella), -alla >>. The scholars have presented different views regarding the origin of these Bengali past (and NIA) bases. The forms in the NIA speeches showing these past bases are –

Bengali «gela, calila ‘went, started going,
Oriya «galä, calilä>>,
Bihari «gail, calal >> etc.

In Old Bengali there were some non-1 past tense forms which showed the suffixes as «-a», «ia». These forms did not develop in Middle Bengali and New Bengali.

Examples – «païtho ‘enters’ (<praviṣṭa) [Carya].

THE PAST CONDITIONAL OR HABITUAL

The forms for this tense can be found in most of the NIA languages. In Middle Bengali, forms like

«jānitō ‘I would know, (if I had known)’.

«nāsitō ‘I would not come’.

«jāitō ‘I would go’ etc may be found.

Examples from other Indian languages –

Oriya: calant-i, calant-u;
Maithili: dekhit-i;
Bhojpuriya: dekhāt-i, (feminine) dekhat-yu.
THE FUTURE TENSE

The Future Tense in the NLA languages is indicated mainly by two ways
(i) By developing or retaining the OIA Sigmatic or Inflected Future.
(ii) By means of the «-itavya > -b-» Future Affix.

In OIA the future tense was indicated by the «-syava-» affix. This
sigmatic or inflectional future may be seen in many of the NIA languages. It
was once present in the Eastern (Aryan) languages and traces of sigmatic
future may be found in Middle Bengali –
<< suniā ki bulihe Balabhādra bhāi >> ‘what will brother Balabhadra say on
hearing (this)?’ (SKK, p.323).

The «-itavya > -b-» Future developed as the characteristic suffix of
the future base in Bengali as well as in Assamese, Oriya, Bihari and Eastern
Hindi. The MIA future suffixes as «-(i)avva-, -(i)abba-, -ebba-» have
their origin in the «-tavya-» or «itavya-» of OIA (future passive
participle gerundive). There are future forms like standard colloquial
Bengali: «karmu, karum, karam»
Oriya: «dekhimi, dekhibi» ‘I shall see’,
Magahi: «calmā, calbā» ‘you will go’.

THE COMPOUND OR THE PERIPHRASTIC TENSES

Progressive

In New Bengali, the main form of progressive in the Sādhu variety of
Literary Bengali, shows the affixes -ite with the main verb +(plus) the
This substantive verb «ach» is conjugated and used as an auxiliary verb. The resultant forms are karite-che ‘is/are doing’, karite-chila ‘was/were doing’, karite-thākibe ‘will be doing’. In the East Bengali dialects the forms like chalite-āche ‘is/are going’, calite-āchila ‘was/were going’ can be found.

The West Bengali (including the Standard Collquial Bengali) the present and past progressive forms are –

Present: calche ‘is/are walking’, karche ‘is/are doing’;
Past: calchila ‘was/were walking’, karchila was/were doing’;
Future: calbe ‘will walk’, karbe ‘will do’.

Perfect

The expression of the perfect tense with the affix «-iyā-» + (plus) the substantive verb «-āch>> in the present, past and «-thāk>. in future) has been the most common way of forming the perfect in Bengali. In Middle Bengali the «-iyā> affix occurs also in the nasalized forms «-īyā, -iā>> etc.

These perfect forms occur widely in New Bengali. Different forms of this perfect occur in the dialects of Bengal. The Standard Colloquial forms are –

Present: caleche ‘has/have walked’,

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Past: *calechila* 'had walked',

Future: *calte thākbe* 'will have walked'.

The European and Indian scholars have observed that the Compound Verbs lie at the root of this Compound Tense.

**Pronouns**

In his description of the Bengali Pronouns – their roots and affixes Prof. Chatterji has not only given the paradigms of the standard colloquial and the sādhubbhaśa forms of Bengali but also the dialectal forms of the different parts of Bengal. He has studied South West Bengali, West Rādhā and East Rādhā (standard colloquial); Varendra (North Central), East North Bengali (Dinajpur), North Bengali, West and South West Banga (Chittagong). Cognates of the Bengali forms from Assamese, Oriya, Magahi, Maithili, Bhojpuriya and Nepali have also been presented. The tabular representation of the 1st personal pronoun, 2nd personal pronoun and so on, with an explanation of their uses in the dialects and other languages will give a very accurate picture of the development of these pronouns.

In Modern Bengali the Standard Colloquial form for the first person singular pronoun is *āmi* 'I' which was originally the plural form for <<*haū*, *maī* >> This again, developed from MIA <<*amhe*>> and OIA (Vedic) <<*asme*>>.

<<*āmhe dehū*>> ‘I give, lit. We give’ [Caryā 19].

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The forms for the first person in other Indian languages are –

Western Hindi: singular «hau» (Brajbhākhā), «mai» (Hindostani and Brajbhākhā), plural «ham».

Gujrati: singular «hu», plural «ame»;

Punjabi: singular «maï», plural «as(s)î»

Marathi: singular «mî», plural «amhi».

East Rāḍha (Standard Colloquial),
also Varendra (North Central)

<table>
<thead>
<tr>
<th></th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative: āmi ‘I’</td>
<td>āmrā ‘We’</td>
</tr>
<tr>
<td>Genitive: āmā-ra ‘mine’</td>
<td>amādera ‘ours’</td>
</tr>
<tr>
<td>Dative: āmā-ke ‘to me’ āmāy</td>
<td>āmāder-ke, āmā-di-ke (āmādigake) ‘to us’</td>
</tr>
</tbody>
</table>

North Bengali

<table>
<thead>
<tr>
<th></th>
<th>Plural</th>
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<tbody>
<tr>
<td>Nominative: mui, mai, mô, hāmi ‘I’</td>
<td>hāmā, hāmāra, hāmā-gulā ‘We’</td>
</tr>
<tr>
<td>Genitive: mora, hama ‘mine’</td>
<td>hāmā-gular ‘our’</td>
</tr>
<tr>
<td>Dative: moka, hama-ka ‘to me’</td>
<td>hāmā-ka ‘to us’</td>
</tr>
</tbody>
</table>
Number System in Bengali

Words for Bengali number system – their history of development and the differences in the uses of cognate forms or the synonyms like ‘kuri’ and ‘bis’ for ‘twenty’ have been explained in an interesting way. One can use the word ‘ek kuri’ to mean ‘one score’ but ‘ek bis’ cannot be used in the same position.

Prof. Chatterji has presented a detailed picture of the development of Cardinal and Ordinal numbers used in Bengali. He has also explained the sources and phonological changes suffered by each of these in comparison to the numerical forms of other Indian languages. For instance it may be said that the numerical [2] in Bengali (<dui>) is expressed by many words and forms in this language. Prof. Chatterji has explained the development of all these forms, their sources, their cognates in other Indian languages and also their uses.

Sources and Development of different forms of Dui ‘two’ –

- Sanskrit dve (Feminine, neuter), > Pali dve, Prakrit duve > Proto Old Bengali dui, Old Bengali dui, Middle Bengali dui, doyi, Modern Bengali dui.

- Sanskrit dvau > Prakrit do > Proto Old Bengali do; this form may be found in the Modern Bengali words as do-phalā ‘with two blades’,

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• Sanskrit dvā > Prakrit dvā, dbā, > Proto Old Bengali bā. This form exists in the Modern Bengali words as bāis’ ‘twenty-two, bāhānna ‘fifty-two’, bāhāttar ‘seventy two’, batris’ ‘thirty-two’ etc.

• Sanskrit dvi . Apabhramsa di, bi > Proto Old Bengali bi, the forms like, biyāllis’ ‘fortytwo’, birāśi ‘eighty-two’ are found in Modern Bengali.

Such clear and elaborate explanations of the ordinals as paylā, pahelā ‘first’, dosrā ‘second’, tesrā ‘third’ and also the fractions as ādhā, ādha ‘half’, deṛa ‘one and a half’, paune ‘a quarter less’, etc. form an important section of ODBL.

Etymology and Lexicon:

Chatterji’s classification of Bengali Verb roots reflects his profound insight in Lexicography R.A. Singh, while speaking of Chatterji as a Lexicographer, comments, ‘Specially interesting and useful too is the classification of Bengali roots with a large number of examples of each
class. He included 300 primary roots of which 200 could be traced to OIA.’ (Singh R.A., 1997: 64). The Indian linguist further explains that the real thrill of the lexicographer begins when he screens the etymological details of words given in ODBL and other writings. In this portion, every page of ODBL seems to be a page from an etymological dictionary of Bengali. Dr. Chatterji has discussed all the type of words, which form the part of speech in Bengali – the nominal forms, pronouns, numerical, verbs, adverbs, verbal endings and affixes. These forms have been presented with discussions on the history of development of the forms, their nature and use. While discussing the history of development of these forms Prof. Chatterji has also given numerous examples from other Indian languages to support or explain a linguistic phenomenon.

It becomes very difficult to give some examples from ODBL in a selective way, but here we may attempt to quote a few words – ābchā ‘hazy’ from abhra-chāyā, abhra ‘thin cloud’ chāyā ‘shadow’; biṭala ‘term of abuse for a Brahmin, generally from MIA. viṭṭ(h)ala ‘polluter’ which again is from OIA. viṭthā-; jhāp(a)sā, jhup(a)sā ‘hazy’ from jhopa ‘wood’, ‘grove’; pānse ‘watery’ from pāni-sā, pāni-sā > pānse; and so on.

In the analysis of lexicon another great contribution of Prof. Chatterji must be mentioned, i.e. the study of onomatopoeic words. Tagore first spoke of this wonderful feature of Bengali (Tagore, 1900; ‘Dhvanyatmak sabda’, In: Sahitya Parisat Patrika, part VII, Kolkata). Suniti Kumar, in ODBL,
studied the nature of the sound based words and the phonetic tendencies related to their formation. He not only studied the Bengali Onomatopoeic words, but also such words from other Indian languages as Maithili, Gujrati, Marathi and Hindostani.

The Newness of approach in ODBL

In the Epilogue added to the second edition of ODBL which came out in 1971, nearly half a century, i.e. 45 years after the appearance of the first edition, Dr.Chatterji expressed his opinion regarding the application of the Older Diachronic and Historical Comparative methods linguistic analysis and the newer are, i.e. Synchronic method. He describes the gradual emergence of the new method of Synchronic linguistic (Descriptive and Structural) as the ‘most natural thing’. He remarks that the older process, the diachronic and historical-comparative one, if it is ‘scientifically conceived at the basis’ can attain its fulfillment in the synchronic analysis. In other words it may be said that the diachronic or historical comparative methods of study of a language may serve as a sound and ideal base for the synchronic study of the language. This is exactly what we find in ODBL (1926) and Bhāṣā-
Prakāś’ Bāṅgālā Vyaṅkarāṇ (1939). It has been mentioned earlier that ODBL is mainly based on Diachronic Historical-Comparative approach incorporating some instances of synchronic studies in the phonology and morphological explanations. Dr.Chatterji’s Bhāṣā-Prakāś’ on the other hand presents mainly a synchronic method of linguistic analysis, which is based
on the diachronic and historical-comparative study of the language (Bengali).

In this Epilogue, Dr. Chatterji hints at the ‘trenchant criticisms’ of the new synchronic method. (Chatterji, 1993, Additions and Corrections: 110-111). However, he prefers to avoid the ‘war of methods and ideologies or controversy or discussion or dialogue.’ Instead, he suggests a harmonious combination of the old and the new.

It has been discussed how the scholars as Haraprasad Shastri or Rabindranath Tagore once felt the need of a good Bengali grammar and how the publication of ODBL in 1926 succeeded in filling up this gap. It has also been mentioned that the important and the most attractive features of ODBL – the phonological, morphological and etymological studies and explanation of roots, prefixes and suffixes with reference to the variations in the dialectal forms and with other NIA languages, gave ODBL a distinct position. Pabitra Sarkar in his article ‘Bhāṣāchārya Suniti Kumar Chattopadhyay’, states that very few of the scholars of the world have succeeded in writing such a great historical grammar of a language. (Sarkar, 2009:232).

Prof. Bh. Krishnamurty (Formerly Vice-Chancellor of the University of Hyderabad and Professor of Linguistics, Osmania University) in his article ‘Prof. Suniti Kumar Chatterji: A Centenary Tribute’ (1997) comments that Prof. Chatterji’s major work ODBL, gave him a lasting reputation in Indian Linguistics. This work has served as a model for other Indian scholars to work on historical grammars of the other Indian languages. Katre’s work on
the *Formation and Development of the Marathi language*, Banikanta Kakati’s *Assamese, its Formation and Development*, Uday Narayan Tiwari’s *The Origin and Development of Bhojpuri*, Subhadra Jha’s *The Formation of Maithili*, K. Mahadeva Sastry’s *Historical Grammar of Telegu* bear the direct or indirect impression of *ODBL*. (Singh *et al*, 1997: 10).

Prof. Suniti Kumar Chatterji’s linguistic approach in *OBDL* shows the influence of the linguistic genre established by Bopp, Rask, Grimm, particularly the Neogrammarians as Karl Bruggman, Herman Paul, the scholars as Ramakrishna Gopal Bhandarkar, John Beams, John Abraham Grierson, Jules Bloch and others. Dr. Chatterji’s explanatory attitude in showing the phonological changes surely reflects the Neogrammarian spirit.

In the ‘Foreword’ of *OBDL* Grierson wrote about two possible lines of investigation of an Indian language as Bengali – One possible line is that laid down by Beames, i.e. to examine all the forms of speech as a whole, comparing them with each other and then deducting general rules. Suniti Kumar adopted the other line of investigation, which attempted the detailed study of a particular language and comparing of these forms with the forms of other languages. He did not find the model of Bengali language studied separately and dissected under strictest scientific rules. Therefore, a diachronic approach to a language based on the synchronic study was not possible for Suniti Kumar. Since his aim was to study the origin and development of his mother language for *ODBL*, he chose a historical-comparative method closer to that of the Neo-grammarians.
New approach: Bhāṣā-Prakāśa'Bāṅgālā Vyākaraṇ

Chatterji's Bhāṣā-Prakāśa'Bāṅgālā Vyākaraṇ (1939) had many dreams to fulfill and many problems to solve. This work reflects Prof. Chatterji's pedagogical approach to the study of Bengali Grammar. The article of Prof. Pabitra Sarkar in his article 'Suniti Kumar Chatterji: as a Grammairian' (1977) has appreciated these two works on Bengali grammar. He wonderfully explains how Dr. Chatterji's ODBL and also Bhāṣā-Prakāśa'Bāṅgālā Vyākaraṇ was meant for study of language from different angles and how these failed to become a 'genuine grammar' according to the established criteria or tradition of writing grammars.(Singh et al, 1997: 22).

Chatterji's Bhāṣā-Prakāśa'Bāṅgālā Vyākaraṇ first come out in 1939 from University of Calcutta and after its publication Rabindranath Tagore wrote to the Registrar of the University of Calcutta –

Registrar,
Calcutta University,

We have been waiting long for a comprehensive Grammar of Bengali language. Our expectation has been amply fulfilled by the appearance of ‘Bhasha-Prakash Bangala Vyakaran’ by Dr.Suniti Kumar Chatterji for which I offer him grateful blessing.

24.10.39 Rabindranath Tagore
This book went through many editions in 1942 and 1945 and the author took eight years to complete his *Bhäṣā-Prakāś ś Bāṅgālā Vyākaraṇ*. The book was written with careful attention. *ODBL* served as a base for his work. It was meant to be a school grammar and it was probably the first school grammar on Bengali where linguistic techniques were applied for the description of the language. In the preface of the 1st edition the author writes.

"बाङ्गालী ভাষার ব্যাকরণ" বলিয়া যাহা বুঝি, বহুবিংশতি তাহারই আলোচনা করিবার চেষ্টা করিয়াছি। বাঙ্গালী ভাষার "সাদু" ও "চলিত" উভয়রূপই ইহাতে আলোচিত হইয়াছে। সাধারণতঃ বাঙ্গালী ব্যাকরণে ভাষাগত সত্ত্ব-মূলক শব্দ লইয়াই বৈশিষ্ট্য কথা ধারে। আমি যথার্থ-বীতি বাঙ্গালী সত্ত্ব শব্দবিশেষের বিচার করিয়াছি, এবং সংক্ষেপে শব্দ, ধর্মীয় ও উচ্চারণ এবং ব্যাকরন-বিভিন্ন বাঙ্গালী বিশিষ্ট বা ব্যক্তির নিম্ন বা পাদ্ধারা বিষয় নিবার করিয়া নির্মাণ চেষ্টা করিয়াছি। উচ্চারণ ও বর্ণ-বিন্যাস এবং ব্যাকরণ-বিষয়ে বীতি বাঙ্গালী ব্যক্তির বীতির নির্দেশ না থাকিলে, বাঙ্গালী ভাষার ব্যাকরণকে সম্পূর্ণরূপ কল্প চলে না। প্রস্তুত পুস্তকে বাঙ্গালী ভাষার ঐতিহ্যগত আলোচনা নাই, তথ্য ঐতিহ্যগত বিচারের আধারেই আধুনিক বাঙ্গালী ভাষার ব্যাকরণ-গত বিশ্লেষণ ইহাতে করিবার চেষ্টা যথার্থ করিয়াছি।

In this book I have discussed what I understand by the term Bengali grammar. Both the 'Sadhu' and 'Calit' forms of Bengali have been discussed here. In Bengali grammar, generally the Sanskrit-based words of the language are considered. I have explained, as far as possible, the Sanskrit words of Bengali language and along with this I have discussed the special rules and processes of Bengali itself, related to sound system, words, pronunciation and grammar. A Bengali grammar will not be complete without a discussion on the special laws governing genuine Bengali pronunciation, sound pattern or grammar. This book does not contain the
history of development of Bengali language, but grammatical analysis of the modern Bengali forms is based on the historical study.’ [Translated by me], (Chattopadhyay, 1988: Preface to the First Edition, 1939).

To define the object of this book the author further states—

‘This book has been written for the school and college students. Matriculation students will take two-three years to discuss and learn this type of grammar. They take a much longer period to learn English grammar. While reading the book for the first time, the reader may leave out the portions printed in smaller letters. If these portions are discussed later, the reader can have a complete and more matured concept of his mother tongue.’ [Translated by me], (Chattopadhyay, 1988: Preface to the First Edition, 1939).

In this book, the author has applied the linguistic techniques to teach ‘genuine Bengali grammar’ to the students. Phonetics and phonology and morphology are discussed elaborately with examples from literary texts. Same words with different spellings, pronunciation of a word in the different dialects, comparison of Bengali forms with the similar forms in other languages have been wonderfully presented. Diagrams showing the
articulation of Bengali Vowels and consonants, tabular representation of the sounds for example voiced and voiceless sounds, morphological tables explaining the declension of nouns etc. make this book much suitable for the language learners as well as the teachers and scholars. In the beginning, the author explains the types of Bengali speech – the differences between literary language and spoken forms, Sadhu and Calit forms, development of writing systems. This work on Bengali Grammar begins with brief discussions or General Linguistics. It aims to give the reader of a basic idea of ‘word’, ‘inflected word’, ‘definition of language’, ‘expressions in writing’ and such other topics.

In this work, the author’s treatment of the Bengali grammatical items has taken into account the special linguistic features that have developed in Bengali. The comparison of the standard colloquial Bengali forms to the similar forms in the dialects, in the other Indian and foreign languages has supported and clarified the explanations. Some of Dr.Chatterji’s observations may be mentioned below.

Phonological observations

- Pronunciation of long and short vowels and how it is related to meanings of words.
- Treatment of Nasals and Nasalized vowels.
- Bimorism or Dimetrisrn as special features of Bengali.
- Laws of sound changes in Bengali – Epenthesis, Ablaut, Vowel gradation etc.
- Study of Stress and Intonation.

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• Transliteration.
• Study of Punctuation.
• Study of clicks in Bengali.
• Pronunciation of Foreign words in Bengali.
• Study of the rules governing the use of s', ş and s; use of n & ñ; the study of phonetic laws related to these.
• The rules of sandhi and ablaut according to phonetic laws.

Morphological observations

• Classification of Bengali roots.
• Study of Bengali affixes and formation of words.
• Analysis of Bengali Case system.
• Study of Bengali Samāsa.
• Study of Bengali Gender and Number system.
• Classification of Adjectives as falling into two main groups from functional points of view – (i) words describing Nouns. (ii) Words modifying Verbs.

According to meaning, the words describing the Nouns have been minutely classified into subgroups.

• The classification and description of Pronouns also show some new aspects. The pronouns have been classified and explained on the basis of their meanings and uses. This presentation follows the style of English grammar. Near Demonstrative Pronouns and Far Demonstrative Pronouns, Inclusive Pronouns, Correlatives,
Interrogative Pronouns, Simple and Compound Indefinite Pronouns, Reflexive and Reciprocal Pronouns have been explained accordingly with examples from all forms (language of different social classes; Sadhu, Calit and Mixed forms) of Bengali language.

- Analysis of Bengali Verbal system showing the minute differences of tenses and showing the use of the verbal Adjectives or Participles are other attractive features of this grammatical work.

Some of the syntactic observations can also be mentioned here. The new aspects in Dr.Chatterji’s treatment of Bengali Syntax in Bhāṣā-Prakāś’ Bāṅgāḷa Vyākaraṇ differentiate his work from those of his predecessors. The author begins with a discussion on the factors which play a vital role in the formation of a sentence – the subject-predicate relation, the order or sequence of words, the agreement of words, and the conditions which a sentence formation depends on. This discussion is followed by explanation of the forms of narration and types of sentences that can be classified structurally and semantically. The word order in a sentence has been explained elaborately with reference to the different forms of narration in both Calit and Sādhu variety of the language.

An example (with English translation) will clarify it.

In a Bengali sentence an adverb of time generally comes before the adverb of place as the ‘time-factor’ is considered to be more important than the ‘place-factor’. 

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tumi pars' u āmāder bārī āsbe to?

'Will you come to our house day after tomorrow?'

Here pars' u 'day after tomorrow' is the adverb of time and it comes before bārī 'house' which shows the place.

Prof. Chatterji discusses the kinds of sentences with appropriate examples.

Example: Conditional Sentence in Sādhu variety of Bengali showing rules, condition, hints etc.

man diyā nā paŗile kichui s'ikhā jāy nā 'if one does not read attentively he will not be able to learn anything' (Chattopadhyay, 1988:369).

Dr. Chatterji's approach to the grammatical categories has been explained with examples, later in this section. The discussion on Bengali Rhetoric and Prosody, study of alphabet of different languages, comparative study of grammars of languages like Sanskrit, Pali, Hindustani, English and Arabic have greatly enriched this work.

Linguists express their view that a prefect grammatical work on a language should discuss phonetics and phonology, morphology, syntax and semantics of that particular language. Grammars may be of different types – Historical Grammar, Comparative Grammar, Philosophical Grammar and Psychological Grammar. About this various types of grammar Prof. Chatterji explains that a descriptive grammar generally tells about the 'Art of
language’ or Regulations of a language’. Historical and comparative grammar is what we call ‘Science of language’ and the other type of grammar presents ‘Philosophy and Psychology of language’. (Chattopadhyay, 1988:9-12).

Prof. Chatterji states that this was written according to the norms of descriptive grammar. But due to deep and serious scientific studies, the details of grammatical explanations with reference to Sanskrit, NIA languages and Bengali dialects, this book was considered to be ‘too heavy’ for the school students. Dr.Sarkar in his article (1997) mentions the comments of Sunitibabu’s most beloved disciple Dr.Sukumar Sen. In a note of self-criticism Dr.Sen says,

‘No one except Rabindranath has come forward to correct or redress the shortcomings of Bengali (School) grammar demonstrated by M.M.P. Sastri. Even Sunitibabu has avoided that in his huge Bhāṣā-Prakāś Bāṅgālā Vyākaran…Like Sunitibabu, I should also share the blame. I also wrote school grammars once as he did. I confess my crime, but I must also emphasize that there was no way of expressing our own thoughts and research in Bengali grammar. The administrators of education would never have given approval to our books’ (Sen Sukumar, 1981: 603, Translated: Author).

According to Dr.Sarkar, one cannot have an idea of the greatness of Prof. Chatterji as a grammarian by reading only his grammars of Bengali. One should also read the smaller works as Calcutta Hindustani, in which
Dr. Chatterji has presented a model of how a language or a dialect should be described.

Dr. Nirmal Das in his article Bhāṣāprakāś O Bāṃlā Vyākaraṇ (Das, 2009: 339-343), throws light on the acceptability of Suniti Kumar’s book of 1939 to the present day educational environment. In the concluding part of his article he expresses his view that Sunitikumar’s Bhāṣā-Prakāś Bāṅgālā Vyākaraṇ and Tagore’s Bāṅglā Bhāṣā Paricay can serve as the ideal models for the scholars and researchers interested to study the development of Bengali language. However it is true to admit that Prof. Chatterji’s Bhāṣā-Prakāś Bāṅgālā Vyākaraṇ is a brilliant example of his synchronic approach to Bengali – a grammar mainly for the school students and learners and also for the teachers and advanced scholars. But here too, the synchronic study, as Dr. Chatterji has explained, is dependent on the historical comparative or diachronic approach.

Scholars have described Suniti Kumar a linguist who has always considered language as a human phenomenon and a discipline which must be studied following a scientific method. Describing Suniti Kumar as a Humanist, an Indian scholar has remarked –

‘Suniti Kumar was, however, too scientific in temper to reject the idea of a true science of linguistics. But he asked for a true science of linguistics and a not pseudo-science of linguistics. In a paper entitled ‘The Levels of
Linguistics Analysis' published in the Proceedings of the Ninth International Congress of Linguistics (Cambridge, Mass, 1962) Suniti Kumar ‘put a very strong plea for the need of combining both the old historical and comparative methods with their deep and wide study of the facts of particular speech and the most up-to-date methods with the help of all scientific apparatus and gadgets for recording information.’ (Dasgupta, 2009: 375).

Suniti Kumar Chatterji’s keen interest in the systematic study of language has made Bhāṣā-Prakāś ‘Bāṅgālā Vyākaran a wonderful product. Dr. Chatterji has been described by the scholars as Dr. S. R. Banerjee as a modern Indo-Europeanist who in his treatment of an NIA language as Bengali, has shifted away from the Sanskrit tradition of describing a language, by framing or following certain ‘laws’ or sutras. The methods of the Western Scholars that always begins with the description of the sounds of a language and then follow with morphology and syntax has been introduced to the grammatical studies in Bengal by Dr. Chatterji. In order to be a complete and genuine Bengali grammar the synchronic method of Bhāṣā-Prakāś ‘Bāṅgālā Vyākaran was to be based on a diachronic approach and historical-comparative studies and therefore it was to explain clearly the relation of Bengali with Old Indo-Aryan or Sanskrit. On the other hand, the connection of Bengali with MIA languages and its own special development up to the NIA stage must also be taken into account.
The name *Bhāṣā-Prakāśa Bangālā Vyākaraṇ* ‘a grammar to express Bengali language’ itself suggests that the grammar is meant for expressing the true nature of Bengali language. Dr. Chatterji’s treatment of both ‘Sādhu’ and ‘Calit’ forms, the dialectal variations, different forms originating out of the same root, the different ways of using a sentence, the idioms and comparison of the forms to other NIA languages, reveal the picture of Bengali as a *creative expression* of the people living in and around Bengal.

The scientific arrangement of grammatical items which is born out of Dr. Chatterji’s notion of language as a discipline, a natural science of the human world, is another attractive feature of this grammar. Here each grammatical item is to be treated as a separate category with its own unique features. For example, it is seen, that Dr. Chatterji has categorized the Bengali nouns as words belonging to ‘Nām Pāryāy’ or ‘class of naming words’ of different types and having features like number, gender, case. In addition to this, he has minutely classified the types of suffixes that these naming words take with them while changing their form.

Examples: (i) Sanskrit ‘कृष्ण’ pratyay

-an: Sanskrit √ कृ + an → Sanskrit karaṇ, Bengali karan ‘to do’

Sanskrit √ paṭh + an → Sanskrit & Bengali paṭhan ‘to read’

(ii) Bengali ‘कृष्ण’ pratyay derived from Prakrit.

-ata: extended as atā, atā (ati), tā, tī, ti

√ phir → Bengali: pherat, phirti, phertā ‘returning’
While classifying the nouns into two main groups and their subgroups Dr. Chatterji comments that this type of classification of nouns is not very useful for Bengali. When he discusses about gender he gives us an idea how grammatical gender can be based on the grammatical laws that indicated the gender of a word. Natural gender of a word on the other hand shows the biological form of the object referred to, whether the object is living or non-living male or a female or is either male or female (common gender). He states that Bengali gender system is based on natural selection i.e. how the living or non-living object exists in the natural world – as male, female or a lifeless object. For example, Bengali balak ‘boy’, simha ‘lion’, puruṣ ‘male’ are considered as masculine gender, bālikā ‘girl’, simhī ‘lioness’, strī ‘female’ are feminine gender, while pathar ‘rock’, kalam ‘pen’, jal ‘water’ are neuter gender. But in Sanskrit, Hindusthani, French and German the gender style is not based on such natural selection. In Hindusthani kāgaj ‘paper’, ādmi ‘man’, become masculine while kitāb ‘book’, aurat ‘woman’, bāt ‘word, talk’, nid ‘sleep’ are all feminine words. In German der Stein ‘the stone’, is masculine, die Hand ‘the hand’ is taken as feminine while das Meer ‘the sea’ becomes neuter gender.

This way considering the grammatical items as separate categories and the study of their existence or expression in different languages remind a scholar of the most modern theory of ‘linguistic universals’ supported by
Chomsky, Bloomfield and his followers and the majority of the post Saussurian structuralists gave emphasis on the structural diversity of languages, while the Generativists were more interested in what languages have in common. Dr. Chatterji’s way of comparing the grammatical categories of the Bengali forms like Nouns or Pronouns to the grammatical items of other Indo-Aryan and Indo-European languages prompts a scholar to think of the universal formal properties of language which the generativists have recently postulated. These complex formal properties present in all languages are considered as ‘arbitrary’ because they cannot be deducted from anything else that is known of the human world. But a search for these properties and an attempt to construct a general theory of language has been the most interesting engagement for the linguists in the recent years.

Bāṅglā Bhāṣā Prasaṅge

Suniti Kumar’s study of the various forms of Bengali language:

Bāṅglā Bhāṣā Prasaṅge is a collection of essays that expresses some of Chatterji’s new ideas on various aspects of Bengali language. Here a brief classification of the themes discussed in this work has been presented –

- Studies on early Bengali documents.
- Studies on Bengali Phonetics.
- Bengali words and Lexicographical studies.
- Studies on Scientific terminology.
• Some grammatical facts on Bengali like study on Imperative mood and verbs in passive voice.
• Phonological rules.
• Comparative study of Bengali grammar with Sanskrit, Pali and Hindusthani.

Some of his articles may easily be correlated with modern concept of language planning and language management – corpus planning, acquisition planning and so on. These have been discussed in details in the section Language Planning and Dr. Chatterji’s study of Indian languages.

The first article ‘Bāṅglā bhāṣār kulajī’ gives emphasis on the contribution of the Non-Aryan linguistic communities on the development of Bengali language. Dr. Chatterji explains that neither the Hindu Bengalee people can claim themselves to be true (or pure) descendants of the Aryans, nor the Bengali language is a pure Aryan one. A Hindu Bengalee Brahmin should admit that he has already surrendered the ‘pride’ or the superiority of his race and religion to the culture of the Non-Aryans (Chatterji, 1975: 3-4). In this article and also in some other works like ‘Ārya-Anārya’ (1982) Dr. Chatterji has presented many examples of Bengali words and other forms of Non-Aryan origin to support his view. There are many place-names in Bengal like Riṣṭā, Pāṇḍu, Nārājol, Sīliguri that are of Non-Aryan origin.

The author in this work discusses the history and nature of Bengali language, type of this language that existed in 12th century AD, a work by
Ray Gunākar Bharat Chandra, Bengali language as medium of school education, study of Bengali, foreign words in Bengali language, evaluation of Bengali Dictionary and Urdu-Bengali Dictionary ('Bāṅglā bhāṣār abhidhān o Calantika', 'Ekkhani Urdu-Bāṅglā abhidhān') problem of Bengali spelling, Bengali pronunciation, English words and names in Bengali Script and such other important topics. The collection includes some valuable works on Bengali grammar — on Bengali verbs, object ('Bāṅglā bhāṣāy karma o bhāb-bācyer kriya') and comparison of Bengali grammar to that of other languages. It also throws light on some earlier grammatical and literary works and study of Bengali grammar by the Europeans who settled in India. Prof. Chatterji describes his experience of discovering and reading the oldest Bengali book written and printed in Roman script by a European ('Kripār sāstrer arthabhed'). This book was printed in Lisbon in the year 1734 AD, or some years later by Fr. Manoel da Assumpcam. This book was titled 'Crepar Xaxtrer orthbhed' and it was on Christian religion. Chatterji explains why this book is of much importance to us — firstly it is the first printed book in Bengali and a specimen of Old Bengali of seventeenth-eighteenth centuries. It is an old specimen of Bengali prose and it was written when the Europeans had first engaged themselves in the study of Bengali prose and grammar. It is also that specimen of Bengali prose where one finds 'Ṣādhu' words and the dialectal words of East Bengal (Dhaka-Bhawal) and of other provinces. Secondly, this book is important because it is written in Roman scripts showing the pronunciation of the Bengali words.
according to Portuguese pronunciation. So the dialectal differences in
pronunciation could be easily understood. This book is much valuable for
the study of pronunciation of Bengali words (‘Kṛpār s’āstrer arthabhed o
Bāṅgālā uccāraṇā tatttva’). The last part of Bāṅglā Bhāṣā Prasaṅge contains
some short valuable explanation of Bengali phonetic laws like
aspirates (mahāprāṇa varṇa); comparison of Bengali grammar to that of other
languages.

Sunitikumar discusses the nature of Bengali language spoken by the
people of Jharkhand area. According to him West Midnapore and the
adjacent areas of Dhalbhüm and Singhbhüm, West Bankura and the adjacent
areas of Birbhüm and Manbhüm, Santhal Pargana and eastern region of
Hazaribag belong to the same Rādha area of Bengal and a part of greater
Bengal in language and culture. Chatterji mentions the cultural history of the
original inhabitants of this region – the Santhals, Munda, Bir, Har of Kol
Family and Oraon and Maler of Dravida family and their claim for a
separate state – Jharkhand. Prof Chatterji speaks of the contribution of these
tribes to the linguistic and cultural development in Bengali. He also explains
how the Santhals, even after becoming a part of Bengal, maintain their
separate identity. The significance of this work in the Indian context has
been discussed more elaborately in the following section.
A Bengali Phonetic Reader

It has already been discussed that Prof. Chatterji used the techniques of phonetics and phonology to trace the development of Bengali Language. Being a worthy student of Daniel Jones, Prof. Chatterji himself was a great phonetician particularly in applied phonetics. His book *A Bengali Phonetic Reader* (1928) has attracted the attention of the scholars from all over the world. R.N. Srivastava (1936-1992), an internationally reputed linguist discussed the contribution of Professor Chatterji as a Phonetician and Phonologist. Prof. Chatterji had two important objects for writing this book – the first one was to assist those who intended to learn or teach the pronunciation of spoken standard Bengali and the second purpose was to furnish new materials to those who were interested in phonetics. (Srivastava, 1997: 101). So in this way, this book became the first one written in Indian language which integrated all the three sub routines of Applied Phonetics –

- Pronunciation teaching.
- Speech training.
- Phonetic description.

Prof. Chatterji in the introductory part of the book, explains his main objectives in this book –

‘The present work seeks to present, as accurately as possible, the pronunciation of one form of the Bengali language. Its object is to assist those who wish to learn the spoken language, as well as to furnish new
material to those who are interested in Phonetics in general.’ (Chatterji, 1986: 7)

*A Bengali Phonetic Reader* was written by Chatterji under the influence of his teacher Sir Daniel Jones and by 1928, Jones’ main works on phonetics – *Phonetic Transcriptions of English Prose* (1907), *Intonation Curves* (1909), *An Outline of English Phonetics* (1919), etc. had already been published. During his writing *A Bengali Phonetic Reader*, Dr.Chatterji not only followed the models of Daniel Jones’ work, he also accepted the notations, transliteration, definitions etc. which his ‘S’ikṣāguru’ had presented.

Some Observations in this work:

Some important observations made by Dr.Chatterji in the field of Bengali Phonetics may be found in *A Bengali Phonetic Reader*. These will show Dr.Chatterji’s deep linguistic insight.

- Adoption of the structural term ‘Phoneme’ in the study of Bengali language
- Analysis of Bengali Phonemes.
- Symbolisation of Bengali Phonemes in International Phonetic Alphabet (I.P.A.).
- Observations regarding the nature of Bengali Phonemes.
- Comparative study of Bengali Phonemes with the Phonemes of other languages.
- Use of Speech Sounds: Intonation.
Adoption of the structural term 'Phoneme' in the study of Bengali language:

The structural term ‘Phoneme’ as a ‘family of related sounds’ has been introduced to the study of Bengali sounds in Bengali Phonetic Reader. A Phoneme is said to be class of sounds in a language. These are the most basic elements in the expression system, the sound features which are common to all speakers of a given speech form and which are exactly reproduced in repetition. In any language, there is definite number of phonemes. The concept of phoneme is one of the basic concepts which defy exact definition. H.A.Gleason, Jr. has presented a ‘working characterization’ of the term ‘phoneme’ that may be presented here.

A phoneme may be defined ‘as a minimum feature of the expression system of a spoken language by which one thing that may be said is distinguished from any other thing, which might have been said. Thus, it two utterances are different in such a way that they suggest to the hearer different contents, it must be because there are differences in the expressions. The difference may be small or extensive. The smallest difference which can differentiate utterances with different contents is a difference of a single phoneme.’ (Gleason Jr.,1968:9).

In his A Bengali Phonetic Reader Dr.Chatterji explains the concept of phoneme with examples. The [k] sound in English words ‘keel’ and ‘call’ are acoustically two different speech sounds (k-sounds) – one sound cannot take the place of the other in any word of English. The [k] sound which occurs before [i] will never have the same acoustic quality as the one occurring before [a]. As these sounds cannot replace each other in words,
these can be grouped together and represented by a single phoneme /k/ in English. The same may be said of the Bengali [l]s written before the dental sound in the word āltā [alta] ‘lac dye’ and the alveolar sound in the word ultā [ulta] ‘upside down’. The latter [l] will only occur before [t] (or [d]).

As a result of this grouping of speech sounds under the term ‘phoneme’, the speech sounds belonging to the same phoneme cannot make any difference in the meaning, if one is pronounced instead of the other. For example, if a foreigner pronounces the [l] sound of the word ‘āltā’ with a foreign accent and not in the way as it is pronounced by the native speakers of Bengali, his word will be easily understood and such pronunciation will make no difference in the meaning of the word. But if any foreign learner gets confused with one phoneme and another he will definitely confuse one word with another in the language concerned and will fail to make out the right meanings of the word.

*Analysis of Bengali Phonemes:*

The total number of phonemes according to Prof. Chatterji in Standard Colloquial Bengali is 40(forty). According to Dr. Chatterji, there are 35(thirty five) essential phonemes and 5(five) non-essential phonemes. The non-essential phonemes are those which are not commonly used by all speakers. These are occasionally used as variants of other sounds or in borrowed foreign names and words.
Formation of Bengali Phonemes:

The author explains the formation of Bengali sounds with the help of diagram and chart. In one diagram, the tongue positions of the Bengali vowels with reference to the Cardinal Vowels have been illustrated. Another chart shows the consonantal arrangements. The author comments, that those who are familiar with the Cardinal Vowels will be able to understand how the Bengali vowels were formed - what was their nature and tongue position.
Diagram showing the tongue position of Bengali vowels with reference to Cardinal vowels

(Chatterji, 1986: 11)
Bengali Consonants

<table>
<thead>
<tr>
<th>Nature of Bengali sounds</th>
<th>(Chatterji,1986: 10)</th>
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Symbolization of Bengali Phonemes in International Phonetic Alphabet:

Bengali phonemes have been symbolised by the letters in the notation of International Phonetic Alphabet (IPA). These letters for the Bengali phonemes are the following –
Essential Phonemes:-

/p/, /b/, /t/, /\d/, /\t/, /q/,
/k/, /g/, /\c/, /\d/, /\m/, /n/ /\n/,
/l/, /r/, /\t/, /l/, /s/, /h/,
/s/, /\s/, /\l/, /\l/, /\l/, /l/, /l/, /\l/,
\i/, /\i/, /\i/, /\i/ /\i/ /\i/ /\i/ /\i/,

Non-essential Phonemes:- /v/, /l/, /\l/, /\l/, /\l/, /\l/,

Though the ten aspirated stops and affricates /p\h/, /b\h/, /t\h/, /\d\h/,
/t\h/, /\d\h/, /\k\h/, /\k\h/, /\k\h/, /\k\h/, are essential sounds of the language,
they are compound sounds (with glottal fricatives). So these sounds should
not be regarded as separate phonemes.

Observations regarding the nature of Bengali Phonemes:

Dr. Chatterji’s significant observations regarding the nature of Bengali Phonemes have made *A Bengali Phonetic Reader*, an outstanding work.
Aspiration:

The voiceless Bengali plosives /p/, /t/, /tʃ/, /k/, are not aspirates when they are not written with /h/ i.e. written as /ph/, /th/, /tʃh/, /kh/ etc. These sounds or aspirated plosives are treated as separate compound sounds with glottal fricatives and these have important positions in the language. The voiceless plosives /p/, /t/, /tʃ/, /k/ are not the same as the English phonemes /p/, /t/, /k/ in the stressed syllables. The English sounds /p/, /t/, /k/ become well aspirated in the stressed syllables and are pronounced as [pʰ, tʰ, kʰ]. The English voiced plosives /b/, /d/, /g/ become slightly aspirated in the stressed syllables.

Compound Sounds:

The aspirated stops and affricates of Bengali have been described as compound sounds and such a description will help us to understand the nature of the Bengali sounds as /ph/, /th/, /tʃh/, /kh/, /bh/, /jh/, /dh/, /qh/ etc.

Nature of Sounds in a Phoneme:

Description of the nature of the different members of /l/, /r/, /n/, and /h/ phonemes has been presented.

The /n/ phoneme of Bengali constitutes of four types of sounds. The principal member is an alveolar sound like the English /n/. Before /t/, /d/,
this phoneme produces a dental sound, before /t/, /d/, it is slightly retroflex and before /c/, /ɟ/ it becomes a palatal sound.

The aspirated voiced sounds as [bh], [dh], [çh], [jh], [gh], take voiced [h] after them.

Use of Essential Phonemes and some Phonological changes:

[A] CONSONANTS

(i) Under-articulation and elision of consonants

The intervocalic sounds as /bl/, /dl/, /gl/, (and in few cases /kl/) show the tendency to be pronounced in a light or open manner in unstressed syllables when the words are uttered carelessly. In unstressed syllables, these syllables sounds are pronounced without the proper contact with the articulating organs. As a result, weak fricatives like – [ʊ], [Ø], [ʒ], [ʊ], (or [u]), with very little audible friction are produced. In some cases the weak fricative is reduced to zero eg: dadathakur > daðathår > daاثår ‘revered elder brother’. This elision of consonants can be avoided if the words are pronounced carefully. Such utterances which can result into elision of consonants are mostly found among the uneducated rural people.
Another important phonological change related to the consonants is assimilation. Assimilation may be progressive or regressive. This type of change may result into voicing or devoicing of consonants.

Examples – $b\tilde{a}dh + \tilde{a}ke > b\tilde{a}tt\tilde{a}ke$ ‘bind thou him’ (devoicing);

$h\ddot{a}t + dhore > h\ddot{a}ddhore$ ‘holding the hand’ (voicing).

[B] VOWELS AND DIPHTHONGS

Standard and dialectal pronunciation of the Bengali vowels with reference to the cardinal vowels and English sounds have been shown in this section. Explanations regarding the special behaviour of the Bengali vowels as nasalisation of a vowel in contact with a nasal draw the attention of the scholar. The pronunciation of diphthongs and vowel combinations has also been explained.

Nature and Use of non-essential phonemes:

The phonetic characters of the non-essential phonemes and their pronunciation in the foreign words have been presented in a very interesting way. /f/, /v/, /F/, u and /z/ are the non-essential phonemes in Bengali. The pronunciation of /f/, /v/ is like the pronunciation of the initial sounds of the English words fix, vex. /F/ is like a sound which is heard in blowing out a candle and u is the voiced counterpart of F. The /z/ phoneme is used mainly in foreign words and proper names. According to Dr.Chatterji, in
some of the native Bengali words the pronunciation of the /z/ phoneme may be found. But this pronunciation is considered only as variant of the /ʒ/ phoneme and is written as [j]. Such pronunciation of /ʒ/ (as [z]) may be found in the word-medial position of the words as bhajte [bhzte] ‘to fry’, mejda [mezda] ‘the second (elder) brother’. ODBL shows that /z/ phoneme in the foreign words borrowed in Bengali, is mostly changed to Bengali /j/ phoneme and is written as [j]. So the Persian zabt ‘punishment’ becomes jabda in Bengali.

Sound Attributes:

This section of A Bengali Phonetic Reader discusses the length of the consonants and vowels, the nature of vowels in monosyllabic words, word stress, sentence stress and intonation. The length of consonants is taken as ‘doubling of the consonants’ and this feature of Bengali creates a difference in meaning when the same-sounding words are pronounced with long and short consonants. There are the words as /ātā/ [a:ta] ‘flour’ and /āttā/ [aṭṭa] ‘eight pieces’, /mālā/ [ma:la] ‘garland’ and /mālā/ [mal a] ‘crew’ and so on.

The vowel quantity according to Dr.Chatterji is not very important sound attribute in Bengali. The quantity of vowels will be adjusted to the rhythm of the sense-group. It is almost impossible to distinguish vowel quantity by human ear. There are can be infinite shades of length. Only three types of vowels as long, half-long and short are generally recognised for the purpose of study.

a: (long), ā (half long) and a (short).
Word Stress and Sentence Stress:

According to Dr. Chatterji, in Bengali language as far as an individual word is concerned, stress does not become an important matter as it is in English. Bengali people generally follow the word initial stress system and this habit has resulted into many phonological changes as loss of vowels, consonants and even syllables. The word stress generally surrenders itself to sentence stress when a sentence is uttered. This sentence stress normally falls on the initial syllable of the first important word in a Sense Group in Standard Colloquial Bengali.

Comparative study of Bengali phonemes with the phonemes of other language:

While studying the features of Bengali sound-system, Prof. Chatterji has often compared the Bengali phonemes to the English phonemes, the Cardinal Vowels and phonemes of some Indian language as Tamil.

Use of Speech Sounds: Intonation:

The ‘intonation’ of A Bengali Phonetic Reader part explains the use of these speech sounds with abundant and appropriate examples.

“When a particular idea in a query is specially emphasized, there is a low pitch or high-falling pitch at the end, and the word emphasized by stress also has low pitch.” (Chatterji, 1986: 25) The way of indicating intonation by a system of dots and lines placed between two horizontal lines has been followed in A Bengali Phonetic Reader.
Nilmadhab Sen, an eminent Indian scholar suggests some modifications in Prof. Chatterji’s list of Bengali Sounds in *Bengali Phonetic Reader* (Sen: 2009: 33-34). In the earlier system of categorization sounds in a language were not divided into segmental and suprasegmental. Prof. Chatterji has presented a separate list of the nasalized sounds. In the modern system nasalization has been treated as a separate phoneme. So a list of nasalized sounds becomes irrelevant.
D.P. Pattanayak, another Indian linguist, has enlisted some of the major contribution of S.K.C. in the study of NIA languages. He gives stress on the study of phonetics and phonology as an essential means of studying Indian languages. Chatterji’s *A Bengali Phonetic Reader* is an important landmark in this field of study.

‘A proper training in phonetics is now becoming recognised as an essential equipment for a linguist; and this attitude is bound to improve the quality of our work in the study of Indian languages, while it will open up new vistas in development of speech in India, where phonetics takes its proper place in recording the facts of the spoken languages and dialects......None other than Chatterji, who had published the Bengali Phonetic Reader in 1927-28, was better qualified to make the assessment.’ (Pattanayak, 1997: 57-58).

Dr. Chatterji published some valuable articles where he discussed the pronunciation of the Indo-Aryan phonemes (*Aspirates*) [bh], [dh], [gh], [jh], [dh] etc. in the New Indo-Aryan languages and also the presence of [h] in the Chittagong dialects of Bengali. His ‘Glottal Spirants and the Glottal stop in Aspirates in New Indo-Aryan’ (1964), published in the collection entitled ‘In Honour of Daniel Jones’ and his ‘Recursives in New Indo-Aryan’ (1929), are some of his wonderful works.
Dr. Chatterji has also spoken of the glottal stop and aspirates in Indo-Aryan and Hindi. Here Dr. Chatterji writes –

‘In East Bengali, the ‘h’ becomes a glottal stop, and the unvoiced aspirates when initial alone retain their proper aspirate character; the initial voiced aspirates are invariably turned to recursives with the aspiration changing to an accompanying glottal closure modifying the voiced stop sound forming the basis of the voiced aspirate: and the interior unvoiced and voiced aspirates are both turned to recursives, and then the glottal stop element (or, rather, the glottal closure as the substitute for the h in pronunciation) in the these newly formed interior recursives is transferred, to the initial syllable, affecting the quality of the consonant in that initial syllable.’ (Chatterji, 1960:112).

In a paper ‘Phonetic Transcriptions in the Historical and Comparative Study of Indian languages’ (1957), Dr. Chatterji stressed the need for a single standardized system in the representation of the sounds of language, a sort of ‘Universal Phonetic Script’ that might be accepted by the linguists all over the world. He presents examples from Sanskrit and other Indian Languages to explain this problem. (Srivastava, 1997: 110-114).

‘The Pronunciation of Sanskrit’

This brilliant essay on Sanskrit phonetics and phonology is another significant contribution of Dr. Chatterji. He explains his purpose of writing this essay –
'I am trying to give a consideration of the Sounds of Sanskrit according to the old Paninian Standard (with certain inevitable modifications in modern times). I am also attempting to give an indication of the various present-day types of pronunciation for each of these sounds, particularly to guard those, who have local forms of articulation, against deviation from what may be described as the old Paninian norm, as adopted for present-day pan-Indian uses.' (Bhattacharya, 2006:45).

Here Dr.Chatterji’s writings will remind a scholar of the higher level of phonetic studies in Ancient India during the time of Panini and other great scholars. Dr.Chatterji has studied the Sanskrit sounds according to Paninian norm and the development of these sounds in different centuries, in the languages throughout India. He has not only classified the Sanskrit sounds into vowels and consonants but also has spoken of the ‘sound attributes’ i.e. length (of the sounds in words of one syllable and many syllables and the sounds in the different word positions), stress and intonation. The dialectal variations in the pronunciation of Sanskrit sounds have also been considered. The Assamese (Ahamiya) people pronounce the Sanskrit word ‘Basudeva’ as ‘Baxudew.’ (Bhattacharya, 2006: 46).

Dr.Chatterji’s Bāṅglā Bhāṣā Prasaṅge contains discussions on Bengali and Indian spellings. Here also Dr.Chatterji shows the development of some Old Indo-Aryan sounds. He points out that according to Panini ‘Antastha’ ‘b’ or ‘},' is a labio-dental sound. It is generally represented by English ‘V’ sound. But European phonetics shows that ‘V’ is a labio-dental spirant. On the other hand Sāmveda Pratisākhya Rktantra Vyākaraṇa shows that ‘Salir' is a
bilabial sound, it has no connection with dental articulation. So this sound is similar to English ‘w’ which is a bi-labial semivowel. Dr. Chatterji explains that the instances from Gothic, Anglo-Saxon, Greek, Latin and such other languages indicate that in the early stage of OIA ‘उ’ (antastha ‘b’) was pronounced as a semivowel bilabial ‘w’. Later, another sound, the labiodental ‘v’ found its place beside ‘w’. Both of these sounds ‘v’ and ‘w’ were used in different places and the linguistic communities used either v or w, whichever was convenient for them to pronounce. The Greek way of writing the Indian names support this view –


devpalli = Deopalli, iravati = Hudratis.

Here ‘उ’ is pronounced or spelt a ‘w’ (‘eo’ or ‘ao’) indicates bilabial semivowel. But in the words as kaveri = Kaveri b = v this indicates the presence of labio-dental sound in the word. Prof. Chatterji further states how in Modern Bengali the sounds both ‘w’ and ‘v’ have taken their respective positions. He comments that if in Modern Bengali ‘v’ is used instead of ‘w’ in spelling then one must be imposing Sanskrit pronunciation of the sounds forcefully on Bengali. (Chattopadhyay, 1959:122).

Prof. Chatterji’s discussion on the development of Bengali language very often goes back to the history of development of Old Indo-Aryan sounds.

From the comments of an eminent Indian linguist one can form an idea of Dr. Chatterji’s greater qualities in making observations on phonetic phenomena of Indian Languages and in using strict phonetic terms to describe these observations. The Indian scholar rightly speaks of Chatterji’s
concept of using phonetics as an ‘instrument’ and ‘apparatus’ in service of linguistics ‘engaged in analysing and describing the dynamics of language’. The approach, according to R.N. Srivastava, prompted Suniti Kumar to write another important paper ‘Phonetic Transcription in the Historical and Comparative Study of Indian Languages’ (1957). Here Dr. Chatterji stressed the need for a single standardized system in the representation of the sounds of language, a sort of Universal Phonetic Script, which could be adopted by phoneticians and linguists all over the world. He presents examples from Sanskrit and other India languages to explain this problem. (Srivastava, 1997: 112-113).

According to Nilmadhab Sen, Prof. Chatterji’s essays on the pronunciation of voiced aspirates (‘pha’, ‘dha’, ‘jha’, ‘dha’, ‘gha’) on the presence of ‘h’ sounds and the ‘aspirates’ in the New Indo-Aryan languages and the Bengali dialects of East Bengal were the most valuable, (Recursive in New Indo-Aryan, Glottal Stops and Glottal spirants in the Aspirates in New Indo-Aryan). These explanations regarding the presence of ‘h’ sounds in the East Bengal dialects were not accepted unanimously by the scholars and some expressed a different view. But Nilmadhab Sen is more inclined to accept Chatterji’s views, because Prof. Chatterji had once told him about the presence of glottal stops and aspirants in the speech of the eminent persons like Acharya Hemchandra Roychowdhury, Surendranath Sen who were residing in the Faridpur – Barishal area of East Bengal. Nilmadhab Sen himself noticed the presence of glottal stop phoneme instead of ‘h’ sound in the word initial position, in the dialect of Srihatta. He feels the need of more research works in this field. (Sen; 2009, 33-35).
Dr. Chatterji's views on the development of Hindi

The major contribution of Dr. Suniti Kumar Chatterji to the study of New Indo Aryan is his study of the variety of Hindi or Hindusthani. An important paper is the one entitled *The Oldest Grammar of Hindustani*, the Grierson Commemoration Volume, Part IV, published in 1935. Here Dr. Chatterji comments that the formation of Hindustani was one of the unsolved problems of New Indo Aryan. He refers to Ketelaer's grammar which according to him 'is a rare document giving an early observer's record of a current form of language while it was still in a fluid stage.' The language that Katelear spoke of was not 'Standard Hindustani Language' but a popular lingua franca of Lahore-Delhi-Agra area. In an address before the Tirupati session of Oriental Conference in 1940, Dr. Chatterji described the simplified form of Hindustani as the common language of conservation among the Aryan speaking masses of Northern India who cannot use English. He further states that the power of this Hindustani is restricted by two facts - the language can be 'a circuit language' or a widely understood colloquial speech or it can be a language of common intercourse or exchange but the language cannot be the one which brings higher culture with it; or its speakers do not come from a culturally superior class. In literature too, the language could not give any output that can be superior to, or more extensive than that in other languages of that time. Secondly Hindustani had been split up into two forms - Hindu form and Mohammedan form. This split in the Hindi speaking Indian Circle has given rise to a great controversy among the leading political figures and social
reformers of the time. The difference in opinions has become the source of a major language problem in India.

**Indo-Aryan and Hindi:**

Dr. Chatterji’s brilliant piece of work *Indo-Aryan and Hindi* contains eight lectures presented before Gujrati Vernacular Society Postgraduate and Research Department. This book was published from Ahmedabad in 1942. The first four lectures throw light on the evolution of Aryan speech in India—the Indo-European, Indo-Iranian (Aryan), background, history of Indo-Aryan, Development of middle Indo-Aryan and development of New Indo-Aryan in its Sounds, Inflexions and Vocabulary. The next four chapters deal with Hindi as the representative speech of Modern India and with the development of Hindustani. Dr. Chatterji’s views regarding the status of Hindi in India seem to be more matured and modified in this work. He states ‘Hindi or Hindustani is thus a very great heritage for Indians of to-day. It is a very important expression, and can become a good symbol, of Indian unity and Indian nationality. Hindi (Hindusthani) is the Representative Language of India.’ Regarding the character of Hindi he further states ‘Hindusthani is now arriving at what may be called ‘the encyclopedic stage’, when it can absorb foreign words as necessity arises, and can absorb them ‘in the raw’ as it were. Unlike poor, ultra-provincial language, it is not affected by the vice of “don’t-touch-ism” with regard to foreign words that are expressive and necessary. In its spirit Hindusthani may be described as one of the most liberal and reasonable languages—so far as enriching itself with foreign words is concerned. But recently this natural trend in Hindusthani has been suffering from a great check. In standard Literary High Hindi, a very
influential school of writers are dreaming of filling Hindi with Sanskrit words to saturation. Some Urdu writers are still in the clutches of a Persianising and Arabicising tendency, which runs counter to the native and Indian character of Hindi. A few want to have only folk-words.’(Chatterji, 1960 b:145-147).

Prof. Suraj Bhan Singh, formerly Chairman of the Commission for Scientific and Technical Terminology (CSTT). Government of India discusses the views of Suniti Kumar Chatterji on Indo-Aryan and Hindi. He points out that Chatterji, rejecting Grierson’s concept of Inner, Outer and Mediatic sub branches of the Indo Aryan languages, postulates a four directional classification with Western Hindi placed at the centre.

- Udīcya (North)
- Prațicya (West)
- Prācyya (East)
- Dākṣiṇātya (South)
- Madhyadesīya (Midland).

Suraj Bhan Singh in his article ‘Perspectives in the Studies of New Indo-Aryan’ (Singh S.B., 1997: 48-49) presents the classification of five forms of Hindustani made by Dr. Chatterji.
‘Chatterji enumerates five forms of Hindustani:

1. The Urdu language written in Perso-Arabic script.
2. High Hindi written in Devanagari, having identical grammar with Urdu, employing the native Hindi or Hindustani (Prakrit) elements to the fullest, but for words of high culture, going to Sanskrit.
3. Hindustani proper that represents the basic Khari Boli with vocabulary holding a balance between Urdu and High Hindi.
4. Vernacular Hindustani, representing regional dialects of Western UP and the neighbouring areas including Delhi which supplies the bases on which the grammar of Khari Boli, Hindustani and Urdu developed, and
5. Bazar Hindi/Hindustani of the masses, which is just a simplified form of (i) and (ii) above (Chatterji 1942, 1960).’

According to Prof. Singh, Dr. Chatterji considered Hindi to be a part of a great historical process in which it had a very specific role to lay in the development of NIA languages.

The Status of Hindi:

In Indo-Aryan and Hindi Dr. Chatterji has presented a clear and impartial outlook in explaining the position of Hindi as the Representatives language of India. Hindi has been described as the unifying or binding force among the Indian as the language has developed some great qualities –

- Hindi has been recognized as the literary vehicle, either in its Sanskritic High Hindi form, or in its Perso-Arabic Urdhu form, of some 150 millions of people.
If the number of people using, speaking and understanding Hindi is concerned, Hindusthani is one of the greatest languages of the world. With its rich heritage it becomes a ‘good symbol of Indian Unity’.

Flexibility is another great quality. Hindi has attained ‘an encyclopedic stage’ and it becomes capable of absorbing foreign words and other linguistic forms when necessity arises. Dr. Chatterji speaks of a tendency among the influential school of writers to fill standard Literary High Hindi with ‘Sanskrit words to saturation’. Some Urdu writers too, dream of Persianising or Arabicising Hindi. Such influences can affect the natural course of development of Hindi.

Hindi has been described as a ‘vigourous manly speech’. It has developed a system of using a noun with an equivalent form of verb to create the verb form of the noun as – biswās (noun, ‘belief’), with karnā (verb, ‘to do’) – biswās karnā ‘to believe’. In the same way sāf karnā ‘to clean’, be-wukf bānānā ‘to befool’ etc. can be formed. This system, which is also present in some other Indian Languages and in Persian, has given Hindi powerful but easy expression.

The sounds of Hindi have a clear and precise character. The vowel and consonantal systems which have no complicated sound laws are easy to understand.
• The grammatical forms of Hindi are few in number in comparison with Bengali, Marathi, Tamil, Telegu and Eastern Punjabi. The grammar of Common or Colloquial Hindusthani which can be described as ‘Bāzār Hindi’ can be written on a postcard. (Chatterji, 1960: 149).

Dr. Chatterji discusses the views of the great Indian personalities — the writers, scholars and the social reformers — Bankim Chandra Chattopadhyay, Bhudeb Mukherji and Maharsi Dayananda Saraswati, regarding the status and study of Hindi in India.

In spite of having some great qualities Hindi had some limitations. These problems with Hindi stood in its way of becoming the sole representative speech of India. These problems have been discussed separately in the latter sections.

*Dr. Chatterji’s study of Indo-European*

Nearly all the major works of Dr. Chatterji bear the impression of Dr. Chatterji profound knowledge of Indo-European. Some of the facts regarding Indo-European or development of Indo-Aryan that Dr. Chatterji presented in *ODBL* and *Indo-Aryan and Hindi* were discovered by the European scholars like Rask, Bopp, Grimm, Saussure, Bruggman, Edger. H. Sturtevant and others. Dr. Chatterji has keenly studied these theories and successfully applied these in his analysis of Indo-Aryan and Non Indo-Aryan speeches in India. He has also made the necessary additions or
alterations of the theories and suggestions of his predecessors before accepting them for his study of Indian linguistics.

In *ODBL*, Dr. Chatterji presents an idea of how Bengali language developed as New Indo-Aryan member of the Indo-European family of languages. He presents descriptions of other branches of the Indo-European family and shows the division of centum and satem languages. Here Dr. Chatterji has often presented the Indo-European forms to explain the source of the OIA forms phonologically or morphologically. The development of Bengali (or NIA) forms from OIA, on the scales of time and space became the main subject of research in this work.

In *Indo-Aryan and Hindi*, Dr. Chatterji presents a clearer and more detailed picture of Indo-European. The Hittite language, which has taken the Indo-European scholars to a much-advanced world of study, was discovered in the first decade of twentieth century. When Dr. Chatterji started his research on the origin and development of Bengali language, the study of Hittite was in its embryonic stage. So Dr. Chatterji did not get any scope to comment on Hittite or the newly observed facts regarding Indo-European. After the works of Bedrich Hrozny (1917, Die Sprache der Hethiter, Leipzig), C.J.S. Marstrander (1918, Caractere indo-europeen de la langue Hittite, Christiana, Oslo), Johannes Friedrich (1922, Die Hethitische Sprache, Leipzig) were published, the study of Indo-European reached a more matured stage. The greatest contributor in this field was Edgar H. Sturtevant who, in a cluster of his works – A Hittite Chrestomathy, 1935; A Hittite Glossary 1936; The Indo-Hittite laryngeals, 1942; A Comparative
Grammar of Hittite Language, 1951; etc. showed the relationship of Hittite with other branches of Indo-European.

Dr. Chatterji studied these works and in the second edition of his *Indo-Aryan and Hindi* (1960) [the 1st Edition came out in 1942], he included his writings on Pre Indo-European.

In *Indo-Aryan and Hindi*, Prof. Chatterji's discussions on Indo-European and Primitive Indo-European include the following topics –

- The Indo-European family.
- The Primitive Stage of Indo-European.
- Features of Indo-European and Racial Intermixture.
- Home of the Indo-Europeans: Views of different Scholars.
- History of Indo-European settlement and development of the descendant languages.
- Postulation of Indo-Hittite Family.
- The advent of the Aryan tribes into India and the influence of Aryan culture.
- Indo-Hittite Sound System.
- Ablaut or regular Vowel Gradation
- Declension of Nouns – Gender, Number, Case.
- Compounds in Indo-European.
- The Verbal-system in Indo-Hittite.
Of these observations on Indo-European, Primitive Indo-European, Indo-Aryan, the first few topics have already been discussed or will be discussed in the sections like ‘Inner and Outer Aryans’ and Aryans-Non Aryans: Racial, Cultural and Linguistic Intermixture. Only the topics on language of the Indo-Europeans have been presented in the following section –

*The Primitive Stage of Indo-European*

In Lecture I of Indo-Aryan and Hindi, Prof. Chatterji gives an elaborate description of the Primitive Indo-European language family as the source of the great and most important language families of the world.

*Postulation of Indo-Hittite Family*

The Primitive Indo-European was considered to be the language of the people whom the philologists called wiros ‘man’ (Sanskrit vira, Latin vir, and Germanic wer). It was the source language of all IE language including Hittite and Tokharian. He then refers to the discovery of Hittite as a great landmark in the narrative history of the Indo-Europeans.’ In the first decade of twentieth century, due to successive excavations (1905-1907) in Turkish village of Bogaz-koi, ninety miles east of Ankara in Asia Minor, a mass of inscriptions in Sumerian and Akkadian cuneiform script were discovered by Hugo Winckler. These inscriptions show treaty records which belong to the period about 1400 BC. These speak of the Mittani people, of which the ruling class called themselves Marya-nni (Vedic marya ‘man’) and worshipped the Gods – In-da-ra, Mi-ti-ta-ra, U-ru-wan-a (or Aruna) and Na-
sa-at-ti. These names correspond to the names of the Gods in Rig-Veda — *Indra, Mitra, Varuṇa* and the two Nāsatyas or Asʿvins (Written in Babylonian syllabic writing).

There were some other documents from Bogaz-koi and other places. These inform the scholars about the tribes living in 2nd millennium BC. Some names of the kings and other persons of this tribe show similarities with both the Sanskrit (Vedic) names and Old Iranian names. These people probably spoke a dialect which was much similar to Vedic, as well as Old Iranian dialects. These tribes also involved themselves in the political and cultural matters of the Mesopotamian kingdoms including Babylon.

The name Hittite is derived from the name of a capital which was known as Hatti or Khatti. (Banerjee, 1987: xxii). Hittite presented features which were older than any other Indo-European languages like Sanskrit, Greek or Latin. Hittite could no longer be considered as the oldest branch of Indo-European as it does stand in the same position as that of Latin or Greek. It presented a much older language stratum having certain linguistic features that did not develop among the other branches of Indo-European language.

The hypothetical common source of Hittite and reconstructed Indo-European was named as ‘Indo-Hittite’ by Sturtevant and the relationship was shown by a genealogical table. (Table) A more detailed table showing this relationship has been presented on the next page (Table 2).
Table I  The Indo-Hittite Family

<table>
<thead>
<tr>
<th>Primitive Indo-Hittite</th>
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</thead>
<tbody>
<tr>
<td>Pre-Indo-European</td>
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<tr>
<td>Pre-Hittite</td>
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<tr>
<td>Hittite</td>
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<td>Indo-European as reconstructed</td>
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<tr>
<td>Sanskrit</td>
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<td>Greek</td>
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<tr>
<td>Latin, etc</td>
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</tbody>
</table>

Table – II The Indo-Hittite Family (Details)

Indo-Hittite

(3000-2500 B.C.)

Proto-Indo-European

Hittite (3000-2500 B.C.)

1. Hittite
2. Hieroglyphic Hittite
3. Lycian
4. Lydian
5. Luwian
6. Palaic
7. Anatolian

Indo-European (2500-2000 B.C.)

satem
1. Indo-Iranian
2. Albanian
3. Armenian
4. Balto-Slavic

centum
5. Greek
6. Latin
7. Gothic
8. Celtic
9. Tokharian

The Indo-Hittite Family (Banerjee, 1987: xxiv)

Indo-Hittite Sound System

Dr. Chatterji makes an elaborate description of the Indo-Hittite Sound system. Hittite seemed to have only one unvoiced stop instead of four in each group, i.e. only a ‘k’ for k, kh, g, gh; a, ‘t’ for t, th, d, dh; only a ‘p’ for p, ph, b, bh and so on. The scholars noticed the absence of voiced stops and
aspirates in Hittite, but they were sure about the presence of these sounds in Indo-European, so it was taken for granted that this change (loss or absence of voiced stops and aspirates) was confirmed to the Hittite branch of Indo-Hittite family. The consonantal system postulated for Indo-Hittite (and also for Pre Indo-European) had two sets of gutturals

(i) Ordinary Velars (or Uvulars) – q, qh, g, gh

(ii) Velars with labialisation, or an accompanying w or u quality – qw, qwh, gw' gwh. The simple guttural sounds q, qh, g, gh were split up into two groups. In one group, these sounds became palatalised as a result of their more advanced articulation in pronunciation through their contact with front vowel. But these reconstructions were not perfect and three newly arranged sets of gutturals were reconstructed.

The controversy regarding the ‘h’ (or x) sound in Hittite led the scholars to develop the Laryngeal Theory. It was observed by the scholars that in many words and forms Hittite showed the existence of a guttural spirant sound ‘x’ written ‘h’, but the Indo-European languages showed nothing in the place of this sound (x), In Indo-European, Hittite ‘x’ became zero. The occurrence of schwa (ə) in IE was also found to be irregular by the scholars. In 1878, Ferdinand de Saussure in his ‘Memoire’ used the term “coefficient sonantique” to explain these irregularities. He stated that the Indo-European schwa (ə) developed in a way that was irregular, while all other corresponding members reflected the loss of a sound in the process of their development.
IE* ei > i  
IE*eu > u  
IE*er > r in Sanskrit while Ɂ developed from ē  

These irregularities in the development of schwa could not be explained unless it was assumed that some guttural sounds (=laryngeal) which Indo-Hittite or Primitive Indo-European had developed, were lost in the Indo-European branch. Saussure presented his hypothesis that something must have disappeared in long e (ē) and the final result was schwa.  

\[ e + (h) > e > Ɂ \]

Karl Brugmann (1886), in his description of Indo-European sound system, first used the term ‘laryngeal’ and suggested the addition of a ‘laryngeal explosive’ to the set of sounds for Indo-European.

Then the Danish scholar Herman Möller (1878), the Polish scholar Jerry Kurylowicz (1927) and French scholar L.M. Cuny (1927) and other worked on the Laryngeal Theory. A series of articles by Edgar H. Sturtevant came out in the period from 1927 to 1942. Finally, in 1942 in his ‘The Indo-Hittite laryngeal’ Sturtevant accepted the Laryngeal Theory and gave it a new shape.

Four Laryngeals have been postulated for Indo-Hittite. Dr. Chatterji’s explanation of the Laryngeal Theory, his discussion on the Primitive Indo-European sound system, phonological, morphological and lexical features have drawn the attention of the scholars. Different signs and symbols have been used by the scholars for these four (or three) laryngeals. The scholars differ in opinion regarding the phonetic nature of these sounds. In Indo-
Dr. Chatterji has presented his own views regarding the phonetic nature of laryngeals and the symbols used for these were also ‘in accordance with wider usage in this matter’.

1. \( x' \) - a voiceless velar spirant, advanced ('palatalised').
2. \( y' \) - a voiced velar spirant, advanced ('palatalised').
3. \( x \) - a voiceless velar spirant, purely velar (or uvular).
4. \( y \) - a voiced velar spirant, purely velar (or uvular).

Dr. Chatterji does not call \( x'y' \) as palatal spirants = [\( \mathfrak{C} \ j \)] of the International Phonetic Script, as such palatal spirants would be too early for Indo-Hittite.

According to Dr. Chatterji, researches on these newly discovered sounds, Saussure’s coefficient sonantique, have opened up a new vista in the reconstruction of the pre-history of Indo-European. He shows how Pre-Indo-European Consonantal System can be reconstructed:

- Stops and Aspirates – Velars (really Uvulars)
  - q, qh, g, gh, (\( \hat{n} \));
  - Velars with lip-rounding, or \( w/u \) quality
    - q\( ^w \), q\( ^w \)h, g\( ^w \), g\( ^w \)h, (\( \hat{n}^w \ ));
- Dentals or Alveolars – t, th, d, dh, n;
Spirants – Advanced (palatalized) Gutterals $\chi$ $\gamma$

- Gutteral Spirant (velar or Uvular) $\chi$ $\gamma$

Labials – p, ph, b, bh, m
Sibilants – s, z
Liquids – r, l (r is never initial in Indo-Hittite).
Semi-Vowels – y, w

The nasals also functional as sonants, same as in Indo-European. (Chatterji, 1960:275-279).

The Indo-Hittite Vowel System had not been satisfactorily established. Dr. Chatterji suggests a possibility – the Indo-Hittite Vowel System probably did not differ much from that Indo-European. But Indo-European Ablaut was affecting Indo-European Vowel System in the Indo-Hittite stage. The simple system of vowels was being influenced by the ‘advanced’ sounds; the normal spirants had started affecting the quality of the vowels.

**Ablaut or Regular Vowel Gradation**

This system caused a root to occur in a number of vowel gradations in derivative forms, inflected declensional and conjugational forms. The affix elements also showed this kind of vowel gradations. Scholars have made a distinction between Ablaut and Vowel Gradation. Ablaut brings about a qualitative change in the vowel while Vowel Gradation means a quantitative change in the vowel. Sanskrit Grammarians have noticed this type of changes in Sanskrit in *guna*, *vrddhi* and *Samprasāraṇa*. Dr. Chatterji has translated the term Ablaut as Apas’ruti ['apa' = ab = Greek. Apo ‘away’ and
sruti for Germanic – laut = Gk. Klutos or apophoneia (phone = sound)]. The term apasruti can be phonetically related to the term Ablaut ‘off the sound, away from the sound’.

Both qualitative ablaut and quantitative ablaut has been discussed by Dr. Chatterji. Some examples of both the types are shown below –

**Greek**

le’gō ‘I say’ : lo’gos (word)

tithēmi ‘I hold : thōmos ( = OIA dhāmaḥ ); thetōs ( OIA dhitāḥ = hitah

**Latin**

tegō ‘I cover’ : toga ‘covering, mantle’.

Qualitative ablaut can be observed in English also, as sing: song, bind: bound, see: saw etc.

Qualitative and qualitative-quantitative ablaut occurred mainly due to the loss or weakening of vowels in the unaccented syllables.

Latin dō ‘I give’: dōnum: datus (OIA dattah)

Latin datus: Gk. di-dō me = IE ḍō

Many other interesting phenomena regarding Ablaut as the four series of ablaut, influence of this phonological process on Indo-Aryan and other Indo-European languages have been explained by Dr. Chatterji in *Indo-Aryan and Hindi*. The following quotation from *Indo-Aryan and Hindi* (1960), p.22, will explain this –
‘Ablaut survived in Indo-Aryan, but because the Indo-European vowel-system was simplified, e, o, a all these three changing to a (e.g. IE. *dedorka ‘I saw’, *dedorke ‘he saw’ = Greek dedorka, dedorke, but Skt. dadars ‘a for both), Qualitative Ablaut was lost to Sanskrit; what was left was only Quantitative Ablaut, e.g. ā–ā; ī–ī, āī ; u –āu, āu ; r –ār, ār. The phenomenon in its rather mutilated form as it obtains in Sanskrit was fully noticed by the Sanskrit grammarians, who have described it in parts – as guṇa, vṛddhi, and samprastāraṇa.’ (Chatterji, 1960: 22).

**Declension of Noun: Number, Gender, Case.**

Indo Hittite declensional system is characterized by gender, number and case distinctions. Hittite shows only two genders – animate (including masculine and feminine) and inanimate or neuter gender. Absence of any separate marker for the feminine gender has led the scholars to think that the feminine gender distinction is a later development in Indo-European out of the masculine. Three number distinctions – singular, dual and plural can be found in Indo-Hittite. In some of the inflexions Hittite agreed with those of Indo-European, while in some others Hittite had developed its own peculiarities.

Six cases are to be found in Indo-Hittite. There was no vocative case indication. The locative case was either absent or had merged with dative.

Dr. Chatterji has commented on heteroclitic declension of Indo-Hittite and also on the formative elements.
**Compounds in Indo-European**

The habit of forming compounds was not common in Indo-Hittite and in Hittite. But compound formation was a distinct feature in Indo-European. This process was carried on from Indo-European to the ancient languages as Greek or Sanskrit.

Examples — *Wesumenēs* = Skt. Vasumanāḥ, Avestan Vohumanō, Greek Eumenēs.

**Verbal Conjugation**

The development of Hittite as a separate branch of Indo-Hittite is clearly manifested in the verbal pattern of Hittite. Dr. Chatterji explains that Hittite shows 'an earlier state of things than in Indo-European' (Chatterji, 1966: 283). The ‘separable prefixes’ (Skt. āpa = Greek (Gk.) apo

Skt. anta = Old Latin endo etc.)

the process of Reduplication, the two moods — Indicative and Imperative, the two tenses — present and past (preterite) show that Hittite agrees with Indo-European in many aspects. But the conjugational pattern of Hittite — the -mi conjugation and -xi conjugation shows the development of Hittite as a separate branch of Indo-Hittite. Dr. Chatterji has elaborately described the salient features of Hittite and Indo-European Verbal System and has also mentioned the points of agreements and disagreement between the two branches.

From Prof. S. R. Banerjee’s discussion on the background of Dr. Chatterji’s works one comes to know of Prof. Chatterji’s treatment of formative elements or Indo European Compounds in *Indo-Aryan and Hindi.*
It has been stated that Dr. Chatterji in his *Indo-Aryan and Hindi* had discussed, for the first time, Indo-European Compounds. Prof. Banerjee quotes a portion from *Indo-Aryan and Hindi* to support this view. He also draws our attention to another important point that Dr. Chatterji had discussed in *Indo-Aryan and Hindi* – cases and case terminations.

In Morphology, the Indo-European noun indicated case relationships in the three numbers and eight cases by means of various affixes, which also, showed vowel gradation; and these affixes were different according to the noun endings,

Examples: *deiwos* – genitive *deiweso, deiwoso, or deiwosyo*; but *sunu* – genitive *sunous*;


Dr. Chatterji makes analysis of Indo-European Nouns, Pronouns, verbal system and Prof. Banerjee quotes portions from Indo-Aryan and Hindi to show the brilliance of this research work.

*Concept of Linguistic Area & Dr. Chatterji's Contribution*

The concept of Linguistic Area is a modern Sociolinguistic idea that has become an interesting engagement for the scholars in the recent years. It is widely known that social, cultural and linguistic intermixture take place among the speech communities which exist side by side for decades and centuries. Such sharing of socio-cultural and linguistic elements can take place even among the languages which remain in contact for hundreds of years, but are not genetically related. Some common characteristics may
develop in these cases among the phonologically, morphologically, syntactically or lexically different speech systems. The two main processes through which linguistic elements are shared or borrowed by different speech communities are sociolinguistic diffusion and areal diffusion. Areal diffusion mainly leads to the development of common characteristic features among the non-genetically related languages.

The need to distinguish between the language similarities arising from a genetic relationship and those arising from convergence due to language contact, were first expressed by Jan Baudouin de Courteney in 1904. The term ‘sprachbund’ meaning ‘language union’ was used by Nicholai Trubetzkoy in 1923. In 1928, Trubetzkoy defined ‘sprachbund’ as a group of language with similarities in syntax, morphological structure, cultural vocabulary and sound systems but without systematic sound correspondences, shared basic morphology or shared basic morphology. (Nath, 1999: 219 - 225).

Murray. B. Emeneau has defined linguistic area as –

The Linguistic Area may be defined as meaning an area which includes languages belonging to more than one family but showing traits in common which are found not to belong to other members [at least] one of the family.(Emeneau,1980: 127).

In 1956, Murray.B.Emeneau published his classic paper titled “India as Linguistic Area”. In his papers (1956 ; 1980) Emeneau has observed that the different language families in the Indian subcontinent namely Indo-Aryan,
Dravidian and Mundari shared a number of features that were not inherited from a common source, but were areal features. These common features were the results of diffusion due to sustained language contact among these different language families.

Reflections of this concept of 'sprachbund' or 'Linguistic Area' may be found in the early works of Dr. Suniti Kumar Chatterji – the introductory part of *ODBL* (1926) and also in his later works as in the article ‘Integration in Linguistic Pattern in India (1959)’ and also in *Indianism and Indian Synthesis* (1962).

In Appendix B of the introductory part of *ODBL* (Chatterji, 1993), Dr. Chatterji discusses the points of similarity between Indo-Aryan and Dravidian. Though the term Linguistic Area was not used by Dr. Chatterji in either of these two works, the idea was vehement in his description of the points of similarity. In the article (Chatterji, 2008; 1st publ. 1959), the common features that developed between non-Aryan and Aryan languages particularly in the later Middle Indo-Aryan and New Indo-Aryan stages have been presented in a more detailed way. All these points have been mentioned under the following subheads –

- Phonetic and Phonological
- Morphological
- Syntactical
- Vocabulary
PHONETIC AND PHONOLOGICAL

The Phonetic similarities between the Indian languages of different origin have drawn the attention of the scholars.

**Paucity of Diphthongs**

In Vedic and Sanskrit hiatus could be avoided by the insertion of y, w between *udvṛtta* vowels, after the dropping of intervocal stops, and, rarely, of a nasal (in a compound word), in spoken MIA, down till NIA. times, although MIA. Spelling (barring that obtaining in Jaina Ardha-Māgadhī, where y was used) does not ordinarily represent it. This euphonic insertion of the palatal and labial semivowels, in connection with front and back vowels respectively, and of n, is characteristic of Dravidian. In Bengali many diphthongs have developed due to the elision of earlier euphonic glides.

Examples: Bengali: *rāy* (<rājan, rājā) ‘king’

*dhoyā* (<dhoā, dhauta).

**Comparative Absence of Spirants:**

The change of the Indo-Iranian spirant z (zh) to the stop j (jh) might have been brought about in India in Dravidian surroundings. In Bengali these sounds are treated as non-essential phonemes, which are used in foreign names and some loan words.
Examples: Persian [z] > [j] in Bengali. This change is found in the Bengali words like *jakham* (<Persian zaxm) ‘wound’; *ojan* (<Persian wazn) ‘weight’; *jāhāj* (<Persian jāhāz) ‘ship’. These loan words (Persian) through a process of naturalisation have become inseparable parts of Bengali vocabulary.

**Occurrence of Cerebrals:**

There are some sounds like t, d, n, l, l (the last = a cerebral fricative,) which are peculiarly Dravidian sounds, and are not found in any other ancient IE, speech other than Vedic and Sanskrit. But these sounds exist in the NIA languages like Bengali. The process of cerebralisation in Indo-Aryan has been discussed in connection with Bengali phonology.

**Insertion of Short Vowels**

Insertion of short vowels by anaptyxis (svara-bhakti, viprakāṛṣa) in consonant groups is a characteristic feature of MIA. and NIA. (e.g., in words like kilesa, sineha, hariṣa, ratana, sumirana, paraṇa, barāṁhaṇa). This may also be found in Dravidian (e.g., Kannada baramana, Tamil pirammanan = a Brahman; Tamil sinegam = sneha, mittiran = mitra, tiru = sri, Kiruttipan = Kṛṣṇa, sandiran = candra etc.). It is generally believed that Dravidian did not have consonant groups initially, and had only double consonant medially; and this trait was imposed upon the Aryan speech in the MIA period.
Vowel Quantity:

In the course of development of the Indian languages there has been gradual establishment of a system of vocalisation where the vowel-quantity has become genetically or semantically less important. The vowel quantity no longer remained fixed, but started to vary according to speech-rhythm. In the later Prakrit and Apabhramś'a verses vowel quantity could vary freely. The long vowels became short and the short vowels long in order to adjust themselves to the rhythm of the line. Though in some of the Dravidian languages vowel quantity of a fixed type may be found, this vowel quantity is not an imposed one or of a secondary character like the imposition of Greek vowel-quantity on Latin Verse.

MORPHOLOGICAL

There have been many instances of morphological sharing and mutual influences between Indo-Aryan and the languages of non-Aryan origin. The points of similarity are the following –

Wide use of Post-positions, Help-words:

The gradual disuse of prepositions has been a remarkable phenomenon in the development of the NIA languages through MIA. All other Indo-European languages developed the prepositions as aids to the declinational system and when the inflections died out, the prepositions took up their place, as in English and Persian, French and Bulgarian. Prefixes, or prepositions, as modifiers of the meanings of roots, still continue in the above languages. But for the Indian languages, due to Non-Aryan influence,
wide use of post-positions and series of help-words expressing different
types of relations developed. These post-positions and help-words were
nominal or verbal in nature. The post-positions through phonetic decay
became much like inflections and followed the Noun or the Pronoun. These
were often attached to the preceding Noun or Pronoun in such a manner that
they became suffixed inflections. This process of forming suffixed
inflections is common in Dravidian and in the Austric languages. In the
recent times whole words of nominal or verbal nature are being used as
Postpositional Affixes. It has been explained by Dr.Chatterji that, this
phenomenon can be considered as a tremendous deviation from the original
Indo-European habit of speech. It has led to a complete surrender of a
special characteristic of Indo-European speech to the features of Non-Aryan
habit of speech. Indo-European language has allowed its descendent in India,
the Aryan speech, to integrate itself with the linguistic pattern presented by
the Dravidian and Austric as well as by Sino-Tibetan. (Chatterji, 2008: 80).

Comparison of Adjectives:

‘Absence of affixes in the comparison of the adjectives in both NIA and
Dravidian can be found. The OIA affixes ‘-yas, -iṣṭha, -tara, -tama’ are
lost, and comparison is denoted by employing the positive form of the
adjective with the noun with which comparison is made, the latter being put
in the dative or ablative or locative with some nominal or verbal post
position.

Examples: Bengali এর চেয়ে ভালো ের চেয়ে ভালো ‘better than this’, সবার মাঝে
ভালো ের চেয়ে ভালো ‘best of all, lit. ‘Good in the middle of all’, etc.
This is also the Dravidian way to indicate comparison.’ (Chatterji, 1993: 170-173).

**Declensional System:**

According to Dr. Chatterji the Non-Aryan languages have had a strong influence on the declensional system of Indo-Aryan. The New Indo-Aryan forms with gaña, kula (>gula), sarva (>sab), mānava (>māna), loka (>log), sakala etc. and also some new post-positional affixes deriving from nouns like madhya (>mē, mā), kakṣa (>ko), sthāma (>ṭhāi), resemble such Dravidian forms. These forms were used to indicate number and other relations.

**Compound Verb:**

Due to Non-Aryan influence on Indo-Aryan, a large number of Sanskrit prepositions have been lost in NIA languages like Bengali. In most of the cases the post-positions have replaced the prepositions. It is an interesting fact that both NIA and Dravidian have developed the use of conjunctives and participles with adverbial functions. It has resulted into the formation of the compound verb.

Examples: Bengali *base para* ‘having sat down’, *muche phelā* ‘having rubbed off’ etc.

**Wide use of Participles:**

There has been ‘wholesale disuse’ of Old Indo-Aryan moods and tenses. The verb system of Indo-Aryan has been reduced to an indicative present
form (and in some cases indicative future), a past participle forming the past, a present participle, a conjunctive, some verbal nouns and a passive indicative of present. The change of normal Indo-Aryan verbal forms as so' gamat, so' gacchat 'he went' into MIA and NIA adjectival forms like so gado, so gao, se gade, (= Sanskrit sa gataḥ), NIA so gayau, gayā (Western Hindi), se gela (Bengali) have taken place due to the possible influence of Dravidian. The Dravidian tenses developed out of the participles. In Indo-Aryan, the gradual increase of the participle forms may bear the impression of Dravidian contact.

**Extensive use of the Verb 'to do':**

In the development of the Aryan languages in India, the verb meaning 'to do' came to be used widely with other nouns and adjectives. Here again, these Indo-Aryan languages deviated from their original speech habit of forming verbal forms by means of inflections. This process became a characteristic of all Indian languages whether Aryan, Dravidian or Kol. This process of forming denominatives with the help of another root caused many OIA verbal forms to become obsolete. In other words it can be said that this extension of the verb 'to do' to other roots, nouns and adjectives, simplified the verbal system in many of the NIA languages as Hindi or Bengali. The formation of Hindi expressions as – māf karnā 'I beg your pardon', sāf karnā 'you must clean' sāfai karnā 'you must clean' etc. can be studied in this context.
In syntax too many points of similarity between the languages families of India may be found.

Sentence Pattern:

The most striking similarities between the languages of different origin are to be found in the syntactic pattern. Prof. Chatterji comments that it is in Syntax that Indian Dravidiandom and Aryandom are one. (Chatterji, 1993: 176). A Dravidian sentence will be well understood by a Bengali or Hindi speaker if the Dravidian words and forms are replaced by their Bengali or Hindi equivalents without altering the word order. A Tamil sentence is much similar to an ordinary Bengali sentence in word-order. Dr. Chatterji in his work *Indianism and Indian Synthesis* (1962) has compared few Tamil sentences to the Bengali ones in order to show the similarities between the Dravidian and Indo-Aryan. (Chakraborty, 2004:135).

Tamil | Bengali
---|---
(x) ankkup patran koru (x) (tumi) amako pen dao
Subject (object) object verb subject object object verb
‘Give me a pen’.

Kannada

saroja jani baruttale anta kamalange gottu
‘Saroja would come (to) Kamala is known.’
Hindi
kamalā jānti hai ki saroja āyegi

‘Kamala knows that Saroja would come.’
(Subbarao, 1997:77).

It is the order in which a subject with its attributes comes first in a sentence and it is then followed by the object and the extension of the predicate. Finally, the verb finds its position.

Example: āmi tāke gatakāl dekhechi

Subject Object Adverbial extension Verb
‘I have seen him yesterday’.

The sentence pattern of Bengali is much different from a Persian or an English pattern. According to Dr.Chatterji, this Common Pattern of Syntax suggests that there is a common habit of thinking and this is the result of some basic racial and cultural integration. (Chatterji, 2008: 82).

Omission of the Copula:

Both Indo-Aryan and Dravidian prefer the omission of the copula in sentences.

Example: Bengali etā (hay) āmāder bāgān.> etā āmāder bāgān

‘This (is) our garden’.

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Idioms

The New Indo-Aryan and the Non-Aryan languages (as Dravidian) are remarkably similar in the use of idioms. The study of following forms will show this.

Use of Conjunctive meaning ‘having said’

Bengali baliyā, Eastern Hindi bolke, Marathi mhaṇūn, Sinhalese kiya, Tamil enru, Kannada endu, Telegu eni etc.

VOCABULARY

It has been observed that Sanskrit, MIA languages and New Indo-Aryan speeches have discarded a large number of common Vedic words. These languages have adopted many new formations created with the help of Indo-Aryan roots and affixes and have also accepted many non-Aryan terms or words related to social and cultural affairs, religious practices agriculture, framing and animal husbandry. In the earlier Chapter (chapter III), where the racial and cultural intermixture among the Aryan and Non-Aryan linguistic groups have been discussed, it has been explained how words related to the different spheres of human life and activities have been borrowed from the languages of one family to the other.

There are several hundreds of words in Sanskrit whose origins may be found in Dravidian and other Non-Aryan languages. According to the scholars these are responsible for making a Sanskrit sentence look much different from a Vedic one in vocabulary.
(i) **Echo Words:** In the Indo-Aryan languages as Bengali wide use of echo words may be found. This has been a common feature of Dravidian languages too. Echo words are formed when a word – generally noun or a verb is modified in its initial syllable by substituting a new consonant in place of the original one, or by substituting a new (consonant + vowel) unit in place of the old syllable. The Echo words which are to be found in New Bengali as *jal-tal* ‘water and other things, refreshment’, *kāpor-chopor* ‘clothes etc.’, *ghorā-torā* ‘horses’ speak of Non-Aryan influence on New Indo-Aryan languages. These Bengali forms can be compared to such forms in other languages as Maithili: *ghorā-torā*, Hindostani: *ghorā-urā*, Gujrati: *ghoro-boro*, Marathi: *ghorā-birā*, Sinhalese: *as’wyā-bas’wayā* ‘horses, horses and other animals’, Tamil: *kuḍirāi-kiḍirāi*, Kannada: *kuḍire-giḍire* etc. (Majumdar, 2005).

(ii) **Onomatopoeic Words:** Onomatopoeic words which have developed in both New Indo-Aryan and Dravidian and is considered to be the characteristic of Kol as well, present another point of similarity between Indo-Aryan and Non-Indo-Aryan languages. The onomatopoetic words, particularly in their reduplicate forms, express the intensity, plurality or lightness of an idea. (Masica, 1991). The idea represented by these words are felt or realized by the hearer sometimes through the ear and frequently through other sense organs. (Dakshi, 2001, Dutta Majumdar, 2001).
Some examples of onomatopoeic words are –

Bengali: \textit{jhar jhar} ‘sound of flowing water’,
\textit{tan tan} ‘feelings of pain or sorrow’,
\textit{jhak jhak} ‘sense of brightness or glow’,
\textit{s’an s’an} ‘sound of wind blowing, a moving arrow’.

Assamese: \textit{kher kher} ‘sound produced by wheels’,
\textit{gir gir} ‘sound of thundering’,
\textit{bak bak} ‘sound produced by boiling rice’.

Oriya: \textit{kut kut} ‘sound of cutting’
\textit{chak chak} ‘sound of moving rain’
\textit{jhup jhup} ‘sound of rainfall’.

Marathi-Gujarati: \textit{jhanjhanā} ‘jingling’.

Hindi: \textit{khaṭkhāṭānā} ‘to knock or clatter’

Sanskrit language is conservative in the use of the onomatopoetic words and it prefers to follow Vedic as much as possible. So, these words are very rare in the oldest Aryan languages. But presently these words have become a common and remarkable characteristic of the Modern Indian Languages. So the use of onomatopoetic words can be considered as one of the most significant features leading the Indian Languages to an integrated linguistic pattern.
In Dr. Chatterji’s article (1959) the term ‘Integration into a Common Linguistic Type’ has been used. This term is much closer to the terms ‘Sprachbund’ or ‘Linguistic Area’ presented by other scholars. In this article Dr. Chatterji presents a brief account the branching or expansion of Indo-European languages from their original homeland, Aryanisation in India and the response of the Non-Aryans already settled in India. The most striking feature of this article is Dr. Chatterji’s explanation of the causes of Linguistic Convergence and of Linguistic Divergence.

**Causes of Linguistic Convergence in India:**

People of three different language families – the Dravidian, the Austro-Asiatic and the Tibeto-Burman had settled in India before the advent of the Aryans. These early settlers were probably conquered by the more powerful nomadic tribes – the Aryans. After the first stage of a hostile contact, linguistic cultural and social intermixture between the conquerors and the conquered tribes was inevitable. The early inhabitants or the Non-Aryan tribes in India were multilingual; they had no common language for communication among themselves. Their conquerors – the vigorous and powerful Aryans could fill up the gap. There was a need among the Niṣādas, the Kirāṭas, the Dāsas and the Sabars to communicate with each other and with the conquerors. The Aryans formed the higher social classes, enjoyed power and prestige. So there was a general acceptance of the Aryan speech.

Some Non-Aryan tribes too, were civilized and in some respects more advanced than the Aryans. The Niṣādas or Austro-Asiatic had built up the
village agricultural civilization of ancient India and the Dravidians had set up the base of a city civilisation in the country. So these Non-Aryan tribes contributed greatly to the development of Indian civilization and culture. Chatterji’s comments on this subject have been studied in the earlier sections. In his wonderful articles as ‘Arya-Anārya’ (Chattopadhyay, 1982: 1-9), Bāṅglā Bhāṣār Kulajī (Chattopadhyay, 1989: 1-14) and in some parts of Indo-Aryan and Hindi, Dr. Chatterji has spoken of the linguistic and cultural intermixture in India. According to him a large part of Brahmanical Hinduism is not of Aryan origin but Pre-Aryan – the concepts and practices of the Austric, Dravidian and the Mongoloid people

Dr. Chatterji’s study of the mutual influences of the four language families of India can lead the scholars to the concept of India as a linguistic area. Here the comments by an eminent scholar K.V. Subbarao can be mentioned.

‘Though Chatterji did not formally propose the notion of ‘India as a linguistic area’, the notion is underlyingly present in his writings when he portrays an Indian as a synthesis of four races whose language is influenced by the languages of the other linguistic groups.’ (Subbarao, 1997: 76).

In his article ‘Chatterji’s Contribution to the Notion of India as Linguistic Area’, the eminent Indian linguist further states that Prof. Chatterji keenly studied the mutual relationship of the Indian Languages. His discussions on the linguistic convergence between Dravidian and Indo-Aryan and about the convergence of various other races like Kol (Austro-Asiatic), the Tibeto-
Burman, the Dravidians and the Indo-Aryans are of much importance. Dr. Chatterji held the view that the oldest inhabitants of the Indian subcontinent were the Negritoids who vanished or became much reduced in number probably before the advent of the Indo-European nomadic tribes in India. (Chattopadhyay, 1993 a: 9-10). So the Indo-European nomads had to encounter the Austrics (Nisadas), Dravidians and the Tibeto-Burman (Kiratas): Though the Indo-European were an energetic and highly cultured race and had a strong organisation and discipline, the inner refinement and vitality of the ancient tribes in India, in some cases proved to be too strong for the Indo-Europeans and often became the dominating factors. The languages of these tribes were an index of their mentality. The languages evidently show that these Non-Aryan races were both reasonable and imaginative.

*Languages and Literatures of Modern India (1963) and Other Works:*

In the ‘foreword’ part of *Languages and Literatures of Modern India*, C.P.Ramaswami Aiyar mentions a most important question that Dr. Chatterji puts to himself ‘How is the multiplicity of languages a problem in India?’ In *Languages and Literatures of Modern India* Dr. Chatterji aims to describe this scene of linguistic diversity and cultural synthesis. He starts with ‘The Languages’ – the languages of India when he gradually proceeds to a historical survey of the races and then to the description of the language families in India. Dr. Chatterji presents the following language divisions –
(i) The Austric (Austro-Asiatic) or Nişadā Speeches.

(ii) The Sino-Tibetan (Tibeto-Chinese) or Kirāta languages.

(iii) The Dravidian languages.

(iv) The Indo-Aryan languages and dialects.

A detailed description of the groups and subgroups in each of the main language families has been presented by the author. This description in each family is followed by the history of settlement of the tribes in India and the history of development of the languages. Some of the classification and descriptions that are found in *Languages and Literatures of Modern India* (1963, p.13) have been presented below —

The Austric languages can be divided into two main groups:

(a) **Austro-Asiatic,**

(b) **Austronesian.**

The Austro-Asiatic group includes the Austric languages of India —

- Kol (Kolian) or Munda group in Central and Eastern India,
- Nicobarese,
- The Mon-Khmer speeches of Assam and of Burma as well as Indo-China (Khasi, Mon or Talaing of South Burma and South Siam, Paloung and Wa of North Burma, Khmer of Cambodia,
- Some of the lesser known dialects of Indo-China like Stieng and Bahnar, possibly Cham of Cochin China and the Sakai speeches of Malaya).
The **Austronesian** languages can be subdivided into

(a) **Indonesian** or languages allied to Malay – the Malay language itself now being the official language of the Commonwealth Country of Malay and of the Republic of Indonesia (as the *Bhasa* or *Bahasa Indonesia*),

- Sudanese,
- Javanese,
- Madurese,
- Balinese,
- The dialects of Borneo (Kalimantan), of Celebes (Sulawesi), and the other islands of the Indonesian Republic;
- Tagalog, Visaya, Ilocano and other speeches of the Philippines;
- Malagasi of Madagascar.

(b) **Melanesian**: Fiji or Viti, New Ireland, New Hebrides, Solomon Islands, New Caledonia and other speeches.

(c) **Micronesian** dialects as in the Carolines, the Ladrones and other island groups.

(d) the **Polynesian** speeches – those of Samoa, Tonga, Tahiti, Marquesas, the Paumotu Islands, the Tuamotu Islands, the Hawaii Islands, New Zealand (Maori), etc.

(Chatterji, 1963:13-14).
Prof. Chatterji was most probably the first scholar who understood so well the linguistic and cultural synthesis among the races in a multilingual country like India. In most of his major works other than ODBL or Indo-Aryan and Hindi, Chatterji has spoken at least a few words on the intermingling of the races in India.

In one of his papers on Dravidian Linguistics read at Annamalai University Dr. Chatterji explains that there was considerable sharing of linguistic and cultural elements among the Aryan and Dravidian tribes. This changed the nature of the two languages and brought them closer to each other. The fusion of the races that started to miscegenate Aryan and Dravidian speakers had started even before these races arrived in India. Further sharing and intermixture of the races took place on the soil of India. The result was an Indian population with both Aryan and Dravidians (like the Nişādas of the dark-skinned Austrics and the Kirātas or the yellow-hued Mongoloids). This fusion and sharing gave birth to the Indian Man during the close of the Vedic period. Already in the Vedic speech plentiful evidences of the strong influence of Dravidian and also of Austric, in Phonology, in some aspects of morphology and syntax, in Vocabulary and Idiom may be found. (Chatterji, 1957).

Another statement of Dr. Chatterji shows the ‘imaginative’ quality of the Dravidian speakers. Prof. Chatterji mentions that when he first studied (through English translations) specimens of the oldest literature of Tamil, viz. the Sangam Literature, he was struck wonder by the novelty presented by it vis-à-vis that of Sanskrit and other Indian literature (which belong
frankly to the atmosphere or orbit of Sanskrit). It was the Tamil social-atmosphere in the oldest period which appeared to be most wonderful to him. Prof. Chatterji comments that the approach to life in Tamil literature, its romantic atmosphere showed something unique in the domain of Indian literature.

In this connection some other significant works of Dr. Chatterji, like ‘Indianism and Indian synthesis’ (1962), Race Movements and Prehistoric Culture (1951), Religious and Cultural Integration of India (1967), Hindu Culture and Greater India (1932), Non Aryan Elements in Indo-Aryan (1936), India and Polynesia: Austric Bases of Indian Civilization (1945), The Study of Kol (1923), The Place of Assam in the History and Civilization of India (1955), The People, Language and Culture of Orissa (1966) may be mentioned.

Prof. Chatterji composed some valuable monographs and articles such as Languages and Linguistic Problems (1943), The Language Problem in Indian Education (1954) etc. which reflect his critical insight related to the language problems in India.

Language Families and Comparative Studies of World Languages:

We can find many examples of interconnection and mutual influences between the language families in India in Dr. Chatterji’s other works. Kirāā-Jana-Kṛiti; The Indo-Mongoloids; Their contribution to the History and Culture of India has been described by the scholars as a wonderful product
of Dr. Chatterji’s achievement in the field of multidisciplinary research. Suniti Kumar’s linguistic studies were not restricted to the languages in India. His works like ‘Iranianism’, ‘Africanism’ and the comparative studies as Balts and Aryans, India and China, India and Ethiopia show him as a great explorer entering new worlds of Languages and Culture. We have already discussed these works while speaking of Prof. Chatterji’s range of interests. H.S. Ananthanarayana, a historical comparative linguist and formerly Professor, Osmania University comments –

‘Before I stop would like to mention a few other points mentioned by Chatterji which in my opinion are simply brilliant. In an article published in a Festschrift, Chatterji equated Skt. Govinda with Irish boind. The Sanskrit word govinda variously explained as a Middle Indic corrupt form of gopendra (*gopa + indra) ‘leader of the cowherds’ is proved to be of Indo-European provenance: Irish boind (<*boifind); Skt. govinda IE. *gou-windo– ‘a spotless white cow’.

Chatterji’s monograph Balts and Aryans and his masterly article, ‘Some Indo-European Tribal names’ published in Roman Jakobson Festschrift are extremely stimulating. In the above mentioned article he has identified OIA equivalents of the words ‘Balt’ and ‘Celt’. Taken jointly with Sten Konow’s article (published in FRAS) where he identifies two gothic personal names in Sanskrit, this paper by Chatterji not only throws new light on etymology but also opens new vista. Another area in which Chatterji has made many valuable contributions is the foreign element in vocabulary. His paper ‘Iranian words in Sanskrit’ published by A.S. Dil from Pakistan bears testimony to this.’ (Singh et al 1997:167).
Significance of Suniti Kumar Chatterji's approach to Indian Languages and Current Trends:

Dr. Chatterji's approach to Indian languages is mainly diachronic in nature. This proved for the study on Bengali in *ODBL*. Here he rightly adopts the comparative-historical method to understand the spirit of the development of Bengali and other Indo-Aryan languages. This comparative-historical approach is most relevant even today for the following fundamental reasons.

- In a multilingual country like India the diachronic study of a modern Indian language may give a proper feedback to a linguist to know the present position and status of an Indian language — how archaic a language is, what kind of literature does it have, how it differs from other genetically related languages will no doubt help one to place the language in the space-time-graph.

- Dr. Chatterji's method is greatly important from the sociolinguistic point of view. His works are significant as they may help a sociolinguist to know the position of the Aryan and Non-Aryan languages in India, the socio-cultural intermixture and to understand the notion of India as a Linguistic Area. India is a land of diverse linguistic elements. It is known to all that languages belonging to four language families are being used side by side and in contact with each other for thousands of years. These languages have faced linguistic changes due to language contact, borrowing and such other phenomena. Suniti Kumar's approach can help us to understand the relationship of one
particular language to its neighbouring languages and thus help us to trace the unifying or binding force in diversity. Though India is a vast country and is the homeland of many Aryan-Non Aryan tribes, the main languages and linguistic communities belong to Indo-Aryan family. Here the historical study of a NIA language would mean a linguistic and cultural study of all the related languages and the study of OIA or Sanskrit can be accepted as the binding force or the ‘unity’ in ‘diversity’. Prof. Chatterji discusses the question of ‘National Language’ and the ‘use of a single script throughout India’. He has often used the term ‘দেশের সকল ভাষার প্রতি সহিষ্ণুতা’ ‘tolerance for all the languages of the country’. It is a quality which, Dr.Chatterji thinks, every Indian must possess.

- A proper historical-comparative study of an Indian Language can make us conscious of the rich cultural heritage of India. This may lead us to Unity and National Integration.

- Such an approach can remind us of the great contribution and influence of the Non-Aryan races and the problems faced by the tribal people in India. The tribal communities are forming a considerable part of the Indian nation. Such questions may be raised – Are the tribal people facing any problem in learning the regional language or link language ? Are they getting scope of selecting their own mother tongue as the medium of instruction ? Does their language has proper writing system? What type of script should be used in the study of these tribal languages ? What steps are to be taken for their social cultural and educational development ?
Types of Language Planning and Dr. Chatterji's Study of the Indian Languages

Modern Linguists have presented before us the concept of language planning as a deliberate effort to influence the function, structure or acquisition of languages or language variety within a language community. The goals of language planning generally involve language planning for an effective communication and for language acquisition. The term language planning was first used by Uriel Weinreich in 1957 for a seminar in the Columbia University. (Nath, 1999: 267). Language planning can be of the following types –

- Status Planning.
- Corpus planning
  (i) Graphization.
  (ii) Standardization.
  (iii) Modernization.
- Acquisition Planning.
  (i) The education sector
  (ii) Problems.
  (iii) Multilingualism.

**Status Planning:** This involves the determination and study of the position of a language in comparison to other languages. The concept was introduced by two different linguists Heinz-Kloss and William Stewart in
the same year 1968. Both Kloss and Stewart suggested four qualities of a language that determine its status.

- **Language Origin**: Whether a given language is indigenous or imported to the community.
- **Degree of Standardization**: The extent of development of a formal.
- **Judicial Status**
  1. Sole official language (Rāṣṭrabhāṣā in India).
  2. Joint official language (Hindi & English in India).
  3. Regional official language (e.g. Bengali in West Bengal).
  4. Promoted language (e.g. Spanish in New Mexico).
  5. Tolerated language (Macedonian in Greece).
- **Vitality**: The ratio or percent of users of a language to another variable like the total population.

William Stewart (1968) has outlined ten functional domains in language planning. Here he has spoken of the language of *Wider Communication*, the *International language* or language of communication across national boundaries (e.g. English), *Group language* or language of communication among a single cultural or ethnic group (e.g. language of Tribal people of India), *School subject language*, *Literary language* and *Religious language*.

A close connection between these modern concepts and Chatterji’s linguistic approach can easily be estimated if one goes through the introductory parts of *ODBL, Indo-Aryan and Hindi*, articles such as ‘Bāṅglā Bhāṣāy S’ikṣā O Bāṅglā Bhāṣār Carcā’, ‘Bāṅglā Bhāṣār Kulajī in Bāṅglā..."
Dr. Chatterji has discussed on the position of Bengali as a State Language and mother tongue of the people of Bengal. He comments on position as well as the limitations of Hindi as the Rastrabhāṣā or the National language, importance of English as the Joint official language, Link language and Culture language should be studied in this connection. These concepts have been discussed in detail in the following sections.

**Corpus Planning:** Corpus planning involves prescriptive intervention in the forms of a language, whereby planning decisions are taken for the purpose of modification or change in the language form so that it can better serve the desired functions. The three traditionally recognized types of Corpus Planning need to be discussed here (Nath, 1999: 272-281).

- **Graphization:** This refers to the development, selection and modification of scripts and orthographic conventions for a language. When a speech community develops a system of writing, the community can have a lasting socio-cultural effect like easier transmission of materials through generations, better and wider communication at the national and international levels and maintenance of a standard against which varieties of spoken languages are often compared.

- **Standardization:** This is a process by which one variety of a language takes precedence over other social and regional dialects. The choice of this ‘standard’ language confers privilege upon the speakers.
whose spoken and written dialect conforms closest to the chosen language. The language that is selected as the standard is generally the language of the most powerful social group within the linguistic community and is often imposed on the less powerful groups. With the introduction of the printing press in 1476 by William Caxton the process of Standardization of English over other dialects of the neighbouring areas began and continued for long period of time. This was accompanied by the adoption of the South East Midlands variety of English, spoken in London, as the print language.

- **Modernization:** This form of language planning occurs when a language needs to expand its resources to meet functions. Modernization of a language takes place when a language undergoes a shift in the status. When a country gains freedom from colonial power or when there is a change in the language education policy, there may be a need for modernization in the language. Lexical expansion is the main feature of this process. The language planners concentrate on preparing new lists and glossaries to describe new technical terms. But it is also necessary to ensure that the new terms are consistently used by the appropriate sectors in the society. Often linguistic purism becomes a main issue in the process but new technical terms, irrespective of whether they originate out of the language’s own process of word formation or out of the process of lexical borrowing from other language(s), become very effective in a language. English had become the sole official language in British India. After Independence, there has been a need for new technical terms in the Indian languages which were gaining the status of the respective state
languages. As Hindi was gaining support to become the Rastrabhasa (National language) of India, it has also been necessary to create new Hindi terms for official use and other purposes. But English still retains its position as the Joint Official Language and Latin and English terms are being effectively used in the Indian languages as technical terms. (Ghosh, 2009).

**Acquisition Planning:** In this type of language planning decisions are generally taken by the national, state or local government with the purpose of influencing the different aspects of a language as language status, distribution and literacy through education. This process involves evaluation of the status of languages of languages, revision of corpuses and administering changes on a national state or local level through educational systems ranging from primary schools to universities. Such changes can take place as modification or alteration in student textbook formatting, a change in the methods of teaching an official language or the development of a bilingual language program.

These concepts of Modernization, Corpus planning and Acquisition planning can be traced back to the works of Dr. Suniti Kumar Chatterji, particularly his research based writings on Bengali, Indian languages and on the linguistic problems in the post-independence period. His articles on the suitability of a particular script for all the Indian states ‘A common script for Indian Languages’ (1961), ‘Bhārate ek lipi pracalan kāryataḥ katadūr sambhab’ can throw light on the process of Graphization in the Indian linguistic scene. The articles like ‘Rāṣṭrabhāṣā’ ‘Bhārater Rāṣṭrabhāṣā’
(Ghosh, 2009) can link us to the question of acceptance of Hindi as the standard language, and choice of English as the other link language.

In *Bāṅglā Bhāṣā Prasāṅge* (1975) a cluster of outstanding articles on Bengali language are found. These can greatly contribute to develop Corpus Planning for Bengali language. In the article ‘Bāṅglā Bhāṣāy S’ikṣā O Bāṅglā Bhāṣār Carcā’, Dr.Chatterji explains that in the pre-independence period education for the Bengali students meant English Education – study of English language and literature. In 1907 Science Education was introduced by the University of Calcutta and the ‘Science Stream’ began to develop along with the ‘Arts Stream’ of Education. The importance of modern scientific and technical education was then understood and accepted by all, and at the same time the need to select mother-tongue Bengali as the medium of instruction was also felt by the elite class of Bengali. Dr.Chatterji further explains that how, due to the constant efforts of Ashutosh Mukhopadhyay, Bengali gained its status as a medium of Instruction and Examination at the University level and how it became an important ‘subject of study’ from school level to University level. The articles like ‘Bāṅglā Bhāṣār S’abda’, ‘Bāṅglā Bhāṣāy Bidesťi S’abda’, ‘Bāṅglā Bhāṣār Abhidhān O Calantikā’ throw light on Bengali vocabulary, while the articles such as ‘Bāṅglā bānān samasyā’, ‘Bāṅglā akṣare iîtrejī nām o s’abda’, ‘Bāṅglā bhāṣāy baijīnānik paribhāṣā’ deal with other aspects of Bengali covering
Bengali spelling, orthography, scientific terms in Bengali, spelling of foreign words particularly English words in Bengali letters.

Bengali Spelling has been a major concern for the writers for nearly a century. Dr.Chatterji’s study of the process of modernization of Bengali spellings and his comments on the set of spelling rules for Bengali are some of the notable features of his linguistic speculations. In 1935 due to the enthusiastic approach of Dr.Shyamaprasad Mukhopadhyay (who became the Vice-Chancellor) and Rabindranath Tagore a committee of scholars and experts were formed for the purpose of framing rules for Bengali spelling. Tagore himself played an initiative role and suggested modification. Prof. Bijanbihari Bhattacharya was appointed to consult the scholars and work under the direct supervision of Rabindranath Tagore for the modification of Bengali spellings and formation or selection of scientific terms in Bengali. Dr.Chatterji was an active member of a central committee formed for the selection of scientific terms. (Majumdar, 2007: 7).

In his paper ‘Adhunik Bāṅglā Bānān Prasaṅge’, (Chattopadhyay, 2007: 194-195) Prof. Chatterji has keenly studied the process of modernization of Bengali language and Bengali spellings. He has quoted some wonderful lines of Tagore’s poem to show how Sādhu bhāṣā had attained its prestigious position as the cultural language of Bengal, due to the literary activities of Bankim Chandra Chattopadhyay, Iswar Chandra Vidyasagar and others. Dr.Chatterji has also mentioned how the scholars and writers as Bankim Chandra, Haraprasad Shastri, Mrityunjay Vidyalankar and Kaliprasanna
Singha have led their readers to a happy union of Sadhu bhasa, Calit bhasa of Kolkata and the dialects of Bengali.

This process of modernization is also effective for Bengali spellings. Dr.Chatterji actively supported the modifications suggested by Vidyasagar and Rabindranath. Due to the efforts of Iswar Chandra Vidyasagar the three letters ḍ, ḍh, y (ḍ ḍ ṛ) found their places in Bengali alphabet. Use of double consonants as conjuncts after the Bengali ‘reph’ ( ’) was considered by Rabindranath Tagore as irrelevant. As a result modern spellings of the words with conjuncts as ḍ (rka), ḍ (rga), ḍ (rba) were introduced in place of the older spellings of the words with conjuncts such as ḍ (rkka), ḍ (rgga), ḍ (rbba) etc.

Dr.Chatterji’s suggestion that pronunciation of Bengali words should be considered while writing the spelling of the words has been misunderstood and criticized by the scholars in different ways. It is said that he suggested the breaking up of Bengali conjuncts or ‘yuktākṣara’. The scholars like Ajarchandra Sarkar satirically pointed out the problems that might arise if the Bengali conjuncts are broken up in all positions of the words. In the presidential address delivered in the annual function of Bangiya Sahitya Parisat (1969-70) Dr.Chatterji expressed his grief saying that he had only humbly stated that it was necessary to consider the familiar pronunciation of the pure Bengali words, the history of pronunciation of some words with
'krt' and 'taddhita' suffixes – why these familiar spellings have established themselves so firmly and what was the significance of such spellings from the phonological or morphological point of view.

Dr. Chatterjei emphatically stated that a linguistic change in a living language is an Evolutionary process not a Revolutionary one (Chattopadhyay, 1989:127). This change occurs naturally and spontaneously. So if a major change such as breaking up of conjuncts is introduced forcibly, it will be difficult for the native speakers to adjust with it. So the native speakers of Bengali may not accept the pronunciation based spellings of the words like Laksmi ‘goddess of wealth’, sahya ‘tolerance’ (as lokkhi, sojjho etc.). There is not a single language in the world where there is a perfect harmony between pronunciation and script. (Chattopadhyay, 2007:194-195).

Prof. Chatterji made his views more clear as he explained that the use of conjuncts is one of the basic rules for using Bengali scripts. But the special features and the natural trends of Bengali pronunciation should be taken into account while writing the spelling of the words. Some of the natural trends are initial stress, dimetrism, epenthesis and umlaut or vowel harmony. As the words ending in two successive consonants are absent in Bengali, pronunciation of foreign words ending in two (or more) successive consonants are difficult to pronounce for the Bengali tongue. As a result there may be insertion of vowel in the last syllable of the words. The word ‘lord’ (English) will be naturally be pronounced by a Bengalee as ‘la-rad’ not as ‘lord’ if it is spelt in Bengali as ‘la-ra-d’ (লারাদ) not as ‘lord’ (লারদ). Here the use of the conjunct ‘rd’ (র্দ) is necessary. Prof. Chatterji gives many
interesting examples showing the problems that may arise if the Bengali conjuncts are broken up indiscriminately in all the positions of the words.

The true significance of Prof. Chatterji's comments regarding Bengali spellings must be understood. His suggestions should be adapted to the present socio-cultural situations and educational atmosphere. Changes may be introduced but such interference in the corpus is to be based on a deep and through study of the history of development and nature of the word formation in the language.

_Suniti Kumar Chatterji's Suggestions for the Solution of the Language Problems_

It has already been discussed how Dr. Chatterji studied the cultural intermixture and the problems of multilingualism in India. For many years there has been a trend to accept Hindi as the Rāṣṭrabhāṣā or the National Language. In _Indo-Aryan and Hindi_ he has discussed about the limitations of Hindi as a Cultural language or a Pan-Indian language. He speaks of the three-fold problem of Hindi:

- The problem of script,
- The problem of the Higher Cultural Vocabulary,
- The problem of Grammar. The third is generally ignored: yet it is quite an important factor for a language. The first two have become the main concern of the scholars and politicians.

(Chatterji, 1960 b: 230)
In his articles ‘Bhāṣā-Samīkṣa’, ‘Rāṣṭrabhāṣā’, ‘Bhārater Rāṣṭrabhāṣā’, ‘Bhārate ek lipi pracalan kāryataḥ katadur sambhab’ (recently published in Agranthita Sunitikumar, 2009, Suniti Kumar has emphasised, more serious problems as ‘linguism’. He also discusses the question of Representative language and National language, problem of official language and script for all the major languages. Here Dr.Chatterji has given some valuable advices and suggestions for language planning and language policy.

He explained that Hindi has taken shape as the Representative language of the Northern States and so emphasis should be given on the study and expansion of this language. ‘Bazar Hindi’ or the Hindusthani of the masses (Some of the High Hindi writers call it Laghu Hindi), with its simplified grammar is the common speech of North India should become the representative language of India. The grammatical Hindi (High Hindi) or the Urdu which have attained the status of Kultursprache for North Indian Hindus and Muslims respectively cannot be accepted as a Pan Indian language.(Chatterji, 1960 b: 152-153).

Dr.Chatterji stated that it is unfortunate for the Indians that no new Indo-Aryan language has naturally and spontaneously developed to be the National Language for all the Indian states. Hindi being the Representative Language for only a part of the Indian subcontinent may create linguistic divisions among the Indians states by placing the Hindi-speakers in much advantageous positions of power and prestige. This language should not be forcefully imposed upon the unwilling non-Hindi speaking states like the southern or the eastern states.
He further explains that in British India and independent India, English has continued to be used as a link language, a language of communication among the people of different states. As a world language, it is the medium of higher education, communication and culture. It served as a culture language for the educated Indians. As an official language it has an important position and is related to power and prestige in almost all the departments of the Central and state governments. Dr. Chatterji comments that even the diplomats and politicians who talk of patriotism and nationalism are sending their children to English medium schools, so that they can adjust themselves to Western education and culture. As English is not an Indian language, acceptance of English as a link language throughout India will not hurt the sentiments of any linguistic or religious group. It will not give any community a special position of superiority in the field of education, culture or administration. In this case, English may also act as a binding force.

With reference to the suggestions of Pundit Jawaharlal Nehru, Dr. Chatterji stated that English should continue to be used as the main language in the Parliamentary affairs and administrative offices (Loksabha, Rajyasabha) till all the non-Hindi speaking states accept Hindi with interest and enthusiasm. The MPs, MLAs and other important members, while delivering speeches, should preferably use English but if one fails to do so and delivers his speech in his mother tongue, his speech must be translated to English or the Regional language or any other language easily understood by the common people.
Dr. Chatterji further explains that each of the regional languages is gaining importance as the language of the state and is enjoying the same status as that of the National Language. These are being widely used as the medium of education and as official language. Even then the importance of English as the language for interstate communication must not be forgotten. Prof. Chatterji hoped that every Indian must understand the importance contribution of English to education and culture in India. An Indian should not only speak of his right to study his mother tongue, but will also want to have the right to study English. Efficient teachers for English must be appointed in the Government schools to serve this purpose.

Another great problem regarding Indian languages is the problem of script. The leaders who were enthusiastic about the acceptance of Hindi as the National language advocated the use of Nāgarī script throughout India. But Dr. Chatterji logically explains that if Nāgarī script is introduced throughout India, the South Indian languages like Tamil and the Eastern languages like Bengali, Oriya etc. will have to follow the alphabetical pattern of Hindi and this process may harm the nature and individual characteristics of these languages. He further states that it is Bengali script that holds together the language of the Hindus of West Bengal and the language of the Muslims of East Bengal or East Pakistan (Now Bangladesh). It Nāgarī is accepted for Bengali in West Bengal, then the Muslims of East Pakistan may create pressure for introduction of Arabic script for Bengal and bringing this language under the control of Urdu. As a result, the same Bengali language will be divided into two different forms.
The only alternative choice is the use of Roman Script for all Indian Languages side by side with the use of Nāgarī. Dr.Chatterji discusses how Nāgarī Script came to be used throughout India for Sanskrit Literature and Hindi Literature and how Sanskrit Literature written in his script became popular in Europe. He expressed his view that if this Nāgarī Script is introduced throughout India, it may cause dissatisfaction among the non-Hindi speakers and it may result into linguism. The non-Hindi speaker will prefer Roman Script to Nāgarī even though the former is considered as a foreign element in Indian culture. Dr.Chatterji explains the advantages and disadvantages of using Roman Script for Indian Language. Roman Script is simple and easy to learn. The new learners would take much lesser time to learn this script. The Roman Script is clear and can be read even from a distance. But this script has no signs to represent some of the sounds of the Indian Languages. Dr.Chatterji proposed the use of special linguistic signs together with the Roman letters for representing some of the sounds of Indian Language. So this extended or modified form of Roman Script would be ‘complete’ and scientific for representing the sounds Indian Language. Prof. Chatterji makes his views more clear as his states that the Indians should use their own script (script of their mother language) for their mother language and for Sanskrit. When all the states of India will be prepared to accept Roman Script voluntarily then India will be in the same rank with many other great countries of the World.

It is quite interesting to note that the language planning and educational policies for the Indians states in the recent years are following more or less
the same pattern as those suggested by Dr. Chatterji. The States Reorganisation Commission had asked the Union Government to elucidate a policy outline for education in mother tongue at the Secondary stage. The All India Council for Education recommended the adoption of the Three Language Formula (TLF) in September 1956. The endorsement for this formula came from various directions. It was adopted by the Chief Ministers' conference. The National Policy on Education of 1968 spoke about the regional languages and the Three Language Formula. The 1986 Policy reiterated the earlier stand. The National Policy on Education 1968 recommended the inclusion of the TLF ‘which includes the study of a modern Indian language, preferably one of the Southern languages, apart from Hindi and English in the Hindi speaking states, and of Hindi along with the regional language and English in the non-Hindi speaking states,’ at the Secondary stage. This was reiterated in the Education Policy 1986 and was adopted as the Programme of Action by the Parliament in 1992. These are major attempts to arrive at a language policy for education.

Nowadays, many reputed Indian schools (Government, Government-aided and Private) affiliated to the CBSE and the State Government Boards are following this three language formula. In Dr. Chatterji’s native State West Bengal this tri-language formula is being followed in most of the Government and non-government educational institutions. Hindi is being taught as a third language, so is Sanskrit. The choice between Hindi and Sanskrit is optional. In most of the schools either Bengali or English may be studied as the First or Second Language. As the concept that mother tongue should be the medium of instruction is of greatest importance, most of the Government aided schools in West Bengal are Bengali medium schools.
Some good English medium schools have also been set up throughout the state.

Dr. Suniti Kumar Chatterji suggested that the teaching of English should be of a high quality if this language is accepted as the link language as well as the language reflecting culture. Functional methods have been adopted for teaching English, but in most of the Bengali medium schools English teaching has not yielded satisfactory result. In many schools suitable Teaching-Learning Materials or audio-visual aids for teaching English are not available. Often teachers fail to use the functional methods properly. In the recent years there have been attempts to modify the English texts and learning materials. Teachers’ Training programs and seminars are being regularly held to ensure ‘joyful learning of English’ for the students.

Prof. Chatterji has drawn the attention of the scholars to the language and culture of the tribal people living in India. In *ODBL, Indo-Aryan and Hindi, Languages and Literatures of Modern India, Kirā-ṛa-Jana-kṛti*, in many of the smaller works on tribal languages and culture, in the works on Dravidian and in *Baṅglā Bhāṣā Prasaṅge* Dr. Chatterji has spoken of the influence of these tribal people and their contribution to the development of the Aryan languages in India. In many of the North Indian states, the tribal people being the linguistic minorities face social and educational problems. In Bengal for example, the tribal students of West Midnapore, Bankura or Purulia are being compelled to accept Bengali language as the medium of instruction as there is no other choice. As a result, they are facing problems related to the pronunciation of Bengali words and orthography (spelling
etc.). Recently some educational institutions are being set up as Indira Gandhi National Tribal University (IGNTU), Anuppur, established in 2007-2008, Birsa Agricultural University, Kanke, Ranchi, Jharkhand, established in 1980, Sidho-Kanho-Birsa University, Purulia, West Bengal, established in 2010. The ‘Chhou Nritya’ of Purulia are becoming popular day by day, the tribal artists from all over the country are taking part in the youth festivals and fairs, the handicrafts belonging to tribal culture are decorating the houses of the rich, elite class.

Conclusion

The main purpose of the dissertation is to present a complete portrait of Dr. Suniti Kumar Chatterji in a broad socio-cultural and linguistic spectrum. This presentation is based on the study of the works of Dr. Chatterji’s predecessors, his early life and training, his wide range of interests and his contribution to the various fields of linguistics. Here the term ‘linguist’ used in the title has been used to mean both the philological speculations of a scholar and his linguistic intuition in revealing the mystery of language.

In the first chapter, the historical background of Dr. Chatterji’s works has been presented in brief. This chapter has explained what Dr. Chatterji inherited from the linguistic tradition of the earlier Indian and European scholars and from the works of his teachers and guides. The study of the historical background has also revealed how Suniti Kumar’s works differ from those of his predecessors.
In the second chapter, it has been explained how Dr.Chatterji’s training under the western scholars equipped him as a future linguist and how the influence of his teachers and the great personalities of his time shaped his mind when he was a young scholar. This training inspired Dr.Chatterji to make a harmonious combination of the old and the New, the East and the West. This formative part of his life also helped him to develop a wide range of interests which, in turn, guided him in his study of Indian and World languages.

The third chapter of his research work will give an idea of Dr.Chatterji’s profound scholarship. Here Dr.Chatterji is presented as a scholar whose philological studies extended to many Indian languages and to other World languages. These studies served as the base of his socio-cultural and linguistic speculations. At the time when linguistic was closely connected to humanistic and cultural studies, Dr.Chatterji presented the World languages and culture before the Indians. Here Dr.Chatterji’s greatness as an Indian scholar can be realised.

As a linguist, Dr.Chatterji preferred the study of language as a discipline. The method of linguistic analysis of the Western scholars – the starting of language study with phonology and ending with syntax, was successfully applied by Dr.Chatterji in his study of Indian languages, though he did not go through the theoretical aspects of this system of analysis. His contribution to the phonological and morphological studies of Indian languages with special reference to Bengali has been discussed in the fourth chapter of this work. His researches on Indo-European and Indo-Aryan background of Indian languages have also been studied. Though he was not a Sociolinguist
in a strict sense, his socio-linguistic views that can also lead to dialectal studies and his notion of India as a Linguistic Area, have become important topic for discussions in this work. It has been observed that some of his suggestions regarding the solution of language problems in India are relevant even today, though the linguistic or socio-cultural atmosphere has changed much. His pedagogical approach in *A Bengali Phonetic Reader* has drawn the attention of the scholars.

Dr.Chatterji’s research work has always inspired the later scholars who engaged themselves in the study of Indian languages. It is expected that this work in future may help in future research work on some interesting topics. Dr.Chatterji’s contribution to Indo-Aryan Linguistics, to the study of Bengali grammar, to the study of Indo-European and language families, to the study of Dravidian, Kol and other Non-Aryan languages and above all his socio-linguistic approach can all become subjects for further study.

Linguistic theories have advanced much and many new facts have been discovered in this field of communication science. But we must remember Dr.Suniti Kumar Chatterji not only as a ‘Linguist’ engaged in the study of scientific theories, but as a ‘Culture Scientist and as a noble scholar and a humanist who taught us how to probe deep into the study of language. His works, even today, inspire a scholar in the discovery of new facts regarding Indian or World languages and Culture.