CHAPTER I

INDIAN GRAMMATICAL THEORY
1.0. Introduction

In a knowledge oriented society, the knowledge of language and its function has remained the area of concern through centuries. In such investigations, it has raised several issues which are still object of enquiry. The dominant issues are: (i) origin and development of language, (ii) language as a discipline, (iii) language as an interdisciplinary subject, (iv) relations among languages, (v) language in relation to reality, (vi) language in relation to mind, (vii) relation between language and knowledge, (viii) universal features of language, etc. In a broad perspective, language study relates itself to both ontology and epistemology. Both ontological and epistemological investigations have been the subject of debate and discussion in different civilizations producing a number of grammatical traditions like, Old-Babylonian tradition, Ancient Indian or Hindu grammatical tradition, Greek grammatical tradition, Arabic grammatical tradition, etc. Such traditions may not be independent but it is difficult to establish the nature of their relationship. It is noteworthy that the theoretical frameworks are developed and perfected in the culture they represent.

In the Western tradition, language study, technically called linguistics became one of subjects of prime interest and investigation since the beginning of the nineteenth century. F de Saussure known as father of modern linguistics, developed structuralism school of thought and established linguistics as a major intellectual discipline. Earlier the study of language is used to be considered as a part of philosophy, rhetoric, logic, psychology, poetics, pedagogy, religion, etc. Initially, the core issues like origin, nature and function have been the dominant features but later, considering its broader association and domain many interdisciplinary areas have emerged like sociolinguistics, neuro-linguistics, computational linguistics, etc.

In the Indian intellectual tradition, the origin of language study and its different branches are rooted in the source civilizational texts like the Vedas and the Āgamas. The centrality of language and its association with the tradition can be noted

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1 Vedas—knowledge texts which are considered the sources of Hindu religion. Basically, the number of Vedas are four—Ṛg Veda, Yajur Veda, Śāma Veda and Ātharva Veda.
2 Āgama—source text of Indian culture and thought technically texts related to Tantra, also a valid means of knowledge.
where four out of the six vedāngas\(^3\) are directly related to the language. Several language-related references and insights in physics and metaphysics of \textit{śabda} are recorded in Vedic and Upaniṣadic texts\(^4\). To maintain and interpret the vast oral Vedic verbal discourse, the Indian philosophers realized to have knowledge in different dimensions of language. Maintenance of texts in the oral tradition depended on a complete understanding of (i) the phonetics of speech, (ii) the morphology of continuous utterances that in turn depended on, and (iii) an understanding of meanings of utterances/words.\(^5\) Since oral transmission is the means to continue the tradition alive and make the knowledge accessible to others, phonetics and phonology are the first language science to have developed. Every Vedic text has a corresponding \textit{prātiṣākhya} text in order to recite the Vedic verses with the inputs of norm and variations and to keep the text intact.

Intellectual debate and discussion has not only brought Indian thoughts alive and made pertinent, but originated and developed different schools of thought leaving the tradition as continuity. The question of the authority of the Vedas is not new to the tradition which has been encountered and proved by different scholars at different point of time. To encounter the controversy raised by Kautsa, ‘Vedic words are meaningless’, Yāśka (10\(^{th}\) century B.C.) formulated \textit{Nirukta}\(^6\) and \textit{Nighaṇṭu}\(^7\). \textit{Nighaṇṭu} is the enumeration of words and \textit{Nirukta} is the exposition of words. When both the texts are put in relation, the former is the commentary of the latter. However, it is not a complete list of Vedic words, only those that are ambiguous or opaque or having interpretation problem. The methodology adopted by Yāśka, has shown the dynamic processes of words undergoing in a language. Since ‘meaning’ is the basic concern, Yāśka takes a verb root to the given word and as far as possible, in phonetic form to derive the meaning. Basically, to know the meaning, etymological derivation of words and its uses in different contexts have been employed in each entry. The linguistic

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\(^3\) \textit{Vedānga}- auxiliary sciences to the study of the Vedas. The sciences included are \textit{Nirukta} ‘etymology’, \textit{Śīkṣā} ‘Phonetics’, \textit{Vyākaraṇa} ‘grammar’, \textit{Chandās} ‘prosody’, \textit{Jyotiṣa} ‘Astronomy’, \textit{Kalpa} ‘rituals’. Out of these, the first four are directly related to the language study.

\(^4\) \textit{upaniṣad} - considered as the last section of the \textit{Veda} dealing with the philosophical issue in dialectical mode. \textit{Vedānta} a philosophical system originated from \textit{Upaniṣad}.


\(^6\) \textit{Nirukta}- a grammatical text and one of the six \textit{vedāngas} composed before Pāṇini. It is a science of fixing the meanings of Vedic words.

\(^7\) \textit{Nighaṇṭu}- the earliest attempt at lexicography, representing an effort to arrange words in sets and subsets on the basis of meaning.
terminologies, synonym, antonym, metonymy etc. used to define the relationship among words in *Nirukta* are still relevant in the semantic contexts of a language. Now such techniques seem to be simplistic but it had provided a different outlook to know something about words and its different derivational processes. While settling down Sākatayana and Gargya debate, as a grammarian, Yāska has concluded that most nouns are derived from verbs but there are some nouns that are not. Moreover, Yāska is the first vedic exegetic who developed a method for the interpretation of texts.

Pāṇini’s *Āstādhyāyī* (composed in the 7th century B.C.) is an explicit, rule bound, comprehensive description of both the spoken language ‘*laukika*’ and the compositional language ‘*vaidika*’. The perfection it has achieved through different grammatical devices can divide the Indian linguistic thoughts into two-fold: pre and post- Pāṇinian. As we have already discussed, various linguistic investigations had been carried out in pre- Pāṇinian phase. Besides *Śīkṣā* and *Prātiṣākhya*, Yāska’s lexicography is the only available text to us. The contribution of other grammarians cited by Pāṇini in different *sūtras* will be discussed in the later section. After Pāṇini, grammarians like Kātyāyana and Patañjali have critically examined and evaluated the *Āstādhyāyī* in order to explain the complexity of the *sūtras* and provide a better understanding of the language in general and Sanskrit language in particular. There is an elaboration of linguistic thought into areas beyond the description, for example, theory of grammar (Patañjali), philosophy of grammar and language in relation to thought and reality (Bhartṛhari), language in literature (Bharata, Bhāmaha and Vāmana). The post- Pāṇinian period is divisible into four phases:

1. From Pāṇini (seventh century BC) to Patañjali (second century BC)- the age of critical examination and evaluation of the rules of *Āstādhyāyī*.

2. From/ after Patañjali to Bhojarāja (eleventh century AD)- a rich period which saw the extension of linguistic thinking into philosophy and literary theory besides

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1 *Śīkṣā*- a grammatical term used for the work on Phonetics. There are many such works which belong to Śīkṣā but the most common referred text is Pāṇiniya Śīkṣā.
2 *Prātiṣākhya*- the term used for the phonological texts to the corresponding vedic texts. In fact as indicated by many references, there are many Prātiṣākhyas but at present, only five or six texts available- the Rk Prātiṣākhya by Saunaka, the Taittirīya Prātiṣākhya, the Vājasaneyi Prātiṣākhya by Kātyāyana, the Atharva Prātiṣākhya and the Rk Tantra by Sākatayana.

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Kapil Kapoor, *op. cit.*, Pg: 07-08
considerable exegetical work in grammar centered on Āśṭādhyāyī and Mahābhāṣya.

3. From Rāmacandra (twelfth century AD) to Nāgęśa Bhaṭṭa (nineteenth century) - the age of simplification or re-ordered texts; and

4. The modern period which began with the work of William Jones (1794), the thirty-third ‘Vyāsa’ - this period saw the renewal of texts through reconstruction from the dispersed, and, often, damaged and fragmented manuscripts.

1.1. Literature on Pāṇini

A great deal of literature exists in Indian grammatical tradition. Āśṭādhyāyī, representing the sūtra form of literature is the basis for other grammarians to carry out further examination and elaboration in different linguistic dimensions. All the grammatical literature; whether Āśṭādhyāyī or commentary on Āśṭādhyāyī, have their typical narrative style, like vārttika, bhāṣya, vṛtti, kārikā etc. In such long continuous tradition, different grammatical investigations have evolved and every text has an objective to deal with. It is interesting to point out that Āśṭādhyāyī is the source text but sometimes the commentary texts are stated to be the unit of focus for further interpretation.

A vārttika is a statement with the express purpose of examining what has or has not been stated, or has been poorly stated by a sūtra.¹¹ The texts stated to be called vārttika are of two types. One kind of vārttika, used only in grammatical texts in which sūtras are its unit of focus and commentary has been written on the vārttikas. Other types like Nyāya bhāṣya vārttika, Tantra vārttika where vārtikas follow the bhāṣya. Kātyāyana’s Vārttika (5th century BC) which belongs the former type is the most important and available text among vārttikakārās. Unlike other complete texts, it is available as part of the Vyākaraṇa- Mahābhāṣya. The number of sūtras on which Kātyāyana offers his vārtikas is 1245.¹²

Chapter-I

A *bhāṣya* is characterized as a detailed *vyākhyāna* ‘exposition’ of a *sūtra*, along with corresponding *vārtikas*: structured in the style of illustration using *udāharaṇa* ‘examples’ and *pratyuḍāharaṇa* ‘counter examples’. The basic concept of *bhāṣya* is that it treats *vārtika* as its unit of focus. Patañjali (5th century BC) has composed his *Mahābhāṣya* on the basis of Katyāyana’s *Vārtika*. It is regarded as the grand commentary and grammatical text focusing on the presentation and exposition of the *sūtras* of Pāṇini. The number of *sūtras* on which Patañjali has discussed is 1701, in addition to *atha sabdānuśāsanam* and eight *Śivasūtras*. Generally, in a discussion style of presentation, the text involves three participants: *śisya* ‘the student’, *acāryadesaśya* ‘teacher’s aide’ and *acārya* ‘teacher’. Since the objective is to expound the *sūtras*, its language is easy to understand containing small sentences. In the course of the elaboration, Patañjali has cited examples and counter examples in order to understand the *sūtras*, but his grammatical theory has remained a source to the later grammarians to engage themselves.

Bhārtṛhari (5th century AD), the grammarian and philosopher, has interpreted and speculated the language in relation to thought and reality in his text *Vākyapadiya*. In the beginning of the text, he defines the scope of his enquiry and the subjects of grammar. The text as available to us contains three kāṇḍas, called *Brahma – kāṇḍa, Vākyā- kāṇḍa* and *Prakīrṇa- kāṇḍa*. The first two kāṇḍas constitute an integral unit in thought as they deal with the nature of *sabdabrahma, sphoṭa*, manifestation and comprehension of meaning by word etc. For Bhārtṛhari, the sentence is the unit of expression which is indivisible. The first two kāṇḍas, ranging a number of issues deal with the *vākyā*, sentence. The divisible units like words, stems, roots, affixes etc and meaning attributed to them are dealt with in the *Prakīrṇa kāṇḍa*. To make the text intelligible, Puṇyarāja and Helārāja commentaries are inevitable. *Kaśikāvṛtti*, based on the *sūtras* as its unit of focus, is regarded as the most important grammatical text after *Aṣṭādhyāyī* and *Mahābhāṣya*. It is generally believed that the first five books are written by Jayāditya and the remaining three by Vāmana(7th century AD). *Vṛtti*, a model of literature dwells upon a *sūtra* and is rendered in the form of a statement

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15 VP. 1.24-26.
páraphrasing a rule by supplying understood or missing elements.\textsuperscript{16} It discusses 3981 sūtras including atha śabdānasāsanan and fourteen Śivasūtras. The principal issues, raised in different texts like bhāṣya, dhātyupārayaṇa, nāmapārayaṇa etc are featured in the beginning. The examples cited in Kāśikā are from Mahābhāṣya and other classical sources, like the Mahābhārata, the Rāmāyaṇa, Kirātarjuna, Susruta, Caraka etc. Based on Kāśikā as its object of investigation, two commentaries-Jinendrabuddhi’s (9\textsuperscript{th} century AD) Kāśikāvivaranapañcikā or Nyāsa and Haradatta’s (11\textsuperscript{th} century AD) Padamaṇjarī are available.

Compared to Prakriyā Kaumudi, Bhaṭṭoji’s Siddhānta Kaumudi interpretation is more comprehensive with wider scope. It not only provides as a key text for teaching of grammar but a comprehensive grammatical text with derivational processes. After Kāśikā, it seems to be the culmination of Pāṇinian literature. But Bhaṭṭoji’s prakriyā arrangement brings a new dimension of language analysis which motivates the latter grammarians to follow and broaden the discipline. The Kaumudi is divided into eighty five chapters which deal with eleven grammatical topics, besides the Unādis, sūtras on vedic language and accent, the Lingānuśāsanaṃti and the Ganaṇapāṭha. The grammatical topics dealt with the book are the following: saṁjñās, paribhāṣās, sandhis, subantas, avyayas, strīpratyayas, kārakas, samāsas, taddhitas, tinantas and kṛdantas. The first nine books are in the pūrvārdha while the rest are in uttarārdha. In the organization of topics, saṁjñās, paribhāṣās precede other topics as they are important in the interpretation of the sūtras spread all over the Kaumudi. The order of the topics is generally based on the sentence components in which they appear in the sentence.

Nāgęśabhūṭa (17\textsuperscript{th} - 18\textsuperscript{th} century AD), the latest grammarian of the commentary tradition has composed many commentarial and independent works in the field of Sanskrit grammar. His Uddyota, a commentary on Kātyāṭa’s Pradīpas is an important clue to comprehension of the Mahābhāṣya as well as the Pradīpa. An independent work is the Vaiyākaraṇaśiddhāntamaṇḍūkā which has two other versions, i.e., Laghu-maṇḍūkā ‘shorter’ and the paramala-ghumanta ‘shorterest’. In the Paribhāṣenduśekhara, he collects and interprets paribhāṣās which are applicable to

\textsuperscript{16} R.N. Sharma, op.cit, Pg:01.
Pāṇini’s grammar. As a whole, such phase can be characterized as the height of theorization of the Pāṇinian school.

Pāṇini’s Āṣṭādhyāyī has remained a significant work in the history of human knowledge and activity. Besides commentary tradition, many Indian as well as Western scholars have engrossed themselves in order to understand the nature and function of Pāṇinian system. Even many Western scholars have cited their observation in different instances of their linguistic works. According to L. Bloomfield, “Pāṇini’s grammar is one of the greatest monuments of human intelligence”. However, it has inspired many generations of modern linguistics from Franz Bopp (1791-1867) and William Dwight Whitney (1827-1894) onwards.

1.2. Goal of Grammar

In the Indian knowledge systems, grammar as a scientific discipline has developed with specific implications. At the earlier stage, different issues have been discussed in order to satisfy inquisitiveness among the grammarians and provide a conceptual framework obtained in grammar. The basic issues are: (i) notion of grammar, (ii) purpose of grammar, (iii) function of grammar, (iv) constituents of grammar, (v) definition of grammar, (vi) grammar in relation to knowledge and (vii) grammar in relation to reality.

As we have stated above, Pāṇini’s Āṣṭādhyāyī is a rule bound comprehensive description of both the spoken language and the compositional language. In contrast to other Indian texts, Pāṇini has not explicitly mentioned the basic objective of his śāstra. Therefore, the parameters to define the linguistic theory are generally derived from the commentary tradition. To clarify the objective of the discipline, Patañjali in his Mahābhāṣya calls Pāṇini’s grammar as sabdānuśāsana ‘the discipline of words’. The compound word, sabdānuśāsanam holds the key to define the notion of grammar in Indian context. While explaining, he raises the question, keśāṃ sabdānām? Laukika and vaidīka are the two types of words used to compose a grammar. Though both forms of languages are known to the people yet they are classified into different

17 L. Bloomfield, Language, 1933, Pg: 11.
groups. *Prāṇīpa* suggests that *laukika* is separately mentioned on account of the fact that it is spoken. *Vaidika* words are separately mentioned for their compositional importance.

*Aṣṭādhyāyī* is not a codified grammar of an individual/ a class of people to impose the supremacy of a particular form rather a description of Sanskrit language existed in that period. Moreover, as known to the scholars, it is not a pedagogic grammar meant to teach the non-native speakers. The optionality and diversity of linguistic usage explained in the grammar reveals how much Pāṇini has taken into consideration the native speakers’ linguistic performance. It is therefore the systematization of different language forms represented through variations. In conceptualizing the native speakers innate knowledge, different grammatical devices and its operations provide a theoretical framework of grammar.

Since the Vedic period, Indian scholars had realized the importance of grammar for the interpretation of texts. In this context, Patañjali states, ‘the needs of studying grammar are preservation, modification, injunction, brevity and certainty’.18 The linguistic forms used in the Vedas are not found in spoken Sanskrit and unless people know grammar, ordinary people might, following the usage of ordinary Sanskrit speech, consider the Vedic forms to be meaningless. The Vedic language differs from spoken language in many aspects. Vedic interpretation should not be always what it is, but sometimes a sort of grammatical modification of it, is essential. For the sake of brevity and certainty, grammar is the only means to have knowledge of words and its different operations. Defining grammar, Patañjali says *lakṣyā-lakṣaṇaṃ vyākaraṇam*.19 The term *vyākaraṇa* is generally used in the sense of grammar but etymologically defined as ‘that by which anything is explained’. The two parts, *lakṣyā* and *lakṣaṇa* i.e. the object of definition and the definition itself constitute the grammar. The words are objects of definition and the *sūtras* are the definitions. *Lakṣaṇa*, a set of rules is formulated based upon the principle of *sāmānya* ‘general’ and *viśeṣa* ‘particular’ observations. While formulating such rules, the basis for such generalization is *loka*, the universe of usage. Since *loka* is the authority of language function and also responsible for variations, Patañjali identifies *siṣṭa*, wise and learned

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form, usage should be taken into consideration. However, a grammar is not a mere body of sūtras but the linguistic features manifested in different forms of words are also represented in the form of sūtras.

According to Patañjali, grammar is explanation of śabda and its linguistic features. The śabda is multivalent. It stands for (i) sound, (ii) words, (iii) utterances, (iv) language, and it also stands for, (v) the linguistic sign. In a long discussion with examples and counter examples, Patañjali draws the conclusion that śabda is neither particular nor universal nor attribute nor action. In such context, he defines it as linguistic sign, ‘That which when manifested in articulated sounds brings to the hearer’s mind the cognition of cow- individuals characterized by the attributes such as tail, hump, horns, etc. is śabda’. Such definition has remained standard definition for grammarians and later on it has been elaborated by Bhartrhari in his Sphoṭavāda. Though a reference has been made to eight kinds of sphoṭas, both Patañjali and Kaiyāṭa believe in the doctrine of vākyā- sphoṭa, ultimately leading to jāti-sphoṭa. The true eternity according to them belongs only to the jāti-sphoṭa which expresses the ultimate reality. Bhartrhari, also an exponent of jāti-sphoṭa, says it is only the Being (sattva) that appears diverse as the cow or the cat in diverse relations and that is the highest universal or jāti and all words are ultimately grounded on them. Indian grammarians, like Patañjali, Kaiyāṭa and Nāgeśa have engaged themselves in the issue involved- whether Pāṇini himself coined the words or he only explained the relations that already existed between the existing words and their objects. Contrary to other philosophical schools, grammarians believe the relationship exists between word and meaning is siddha ‘given’. The term siddha means nitya, which refers to unchanging and immovable ideas or entities, such as the heaven is there, the earth is there. Howsoever it is the grammar assumes that the form, the meaning and the relation of form and meaning are given, grammar does not predict any one of them-siddhe śabdārtha sambandhe.

20 Kapil Kapoor, op.cit, Pg: 61.
21 Mahābhāṣya, 1.1
23 Ibid, Pg.32.
If the relation between word and meaning is given, then what is the norm for the acceptability? In this context, Patañjali puts an analogy of potter and grammarians. A potter is the creator and meets the demand for social need. But grammarians are neither a creator nor an authority to coin new words. Linguistic forms and their employment in particular meanings are sanctioned by loka, the universe of usage. If loka is the pramāṇa in deciding the form and meaning relationship, then the need to have a grammar of a language seems meaningless. It is not so, grammar has a certain function which lays down niyama in regard to form that are used to communicate the intended meaning successfully. In communication purpose; words with its different variations are used by the speakers. Generally, the variations as Patañjali points out belong to (i) mleccha prayoga, usage of non-native speakers, (ii) apāśabda, dialectal or marked variants, and (iii) duṣṭa śabda, inaccurate usage caused by either physical infirmity or ignorance. Dharmaniyama is the identification of, restriction to sādhu śabda, the most acceptable form of language. In a remarkable analogy, Patañjali says, any food may appease hunger but only some food is prescribed as contributing to social norm and others are prohibited. Likewise, function of grammar is to make a distinction between correct and incorrect words and set a standard norm as evolved in the society.

Besides the four-fold word class, noun, verb, prefix and particle as enumerated by the etymologists and grammarians, there are four stages of vāk- the parā, paśyantī, madhyamā and vaikharī. The parā, the initial stage represents the Brahman stage of words. The paśyantī is that stage of words in which it is in the form of incipient ideation, and therefore has not the capacity of being used as language. The madhyamā is the stage wherein the effort for construction of word formation is being noticed in the mind; and vaikharī involves the audible stage. By virtue of grammarians' knowledge, such stages of language are brought into notice. Ordinary person only speaks. They do not know the essence of language and the processes of cognition and articulation involved. Grammar accounts for the utterances of the language by first abstracting sentences and then by conceptualizing the components of these sentences as prakrti and pratyaya. Prakṛti is classified into two ways as nominal and verbal, and each sub-group has both basic and derived. The pratyayās are classified into nominal and verbal in accordance with the grammatical feature they have. Through different derivational processes grammar generates the sādhu śabda
and at some stage or other, it blocks the *mleccha prayoga, duṣṭa śabda* and *apasabda*. However, the devices employed to analyse language into various linguistic components and its different operations are the product of grammarian's own analytical method.

1.3. Pāṇinian Grammar and other Systems of Post- Pāṇinian Grammar

As we have discussed in the earlier sections, Pāṇini’s grammar and its descriptive framework is one of the earliest existing one in the Indian knowledge systems. With the growth of different philosophical schools, multi-dimensional linguistic speculation has been subjected to intellectual activity. To rival the establishment in verbally expressing their religious and philosophical thoughts, Buddhist and Jain scholars have been under the necessity of obtaining their own grammar. In such scenario, some non- Pāṇinian grammars have also enriched Indian grammatical theory as well as literature. Moreover, many Sanskrit grammars other than the Pāṇinian grammar have been written and spread outside India like Pāli and Tibetan grammars.

*Siddhahaimasabdānusāsana* (Hemacandra’s Grammar)

The *Siddhahaimasabdānusāsana* of Hemacandra (12th century AD) is a grammar of both Sanskrit and Prākṛta languages. Like the *Aṣṭādhyāyī*, it comprises 8 chapters and each chapter has four pādas. The first seven chapters discuss Sanskrit while the last chapter is devoted to Prākṛta, Śaurasaini, Māgadhī, Paścāti, Apabhramśa etc. The sections dealing with Sanskrit and other languages have 3566 and 1116 sūtras respectively. The Sanskrit grammar of first seven chapters is based on Pāṇini’ *Aṣṭādhyāyī* excluding the rules referred to Vedic words and its accents. The eighth chapter is devoted to Prākṛta which is similar to Vedic grammar of Pāṇini. The examples cited in the text consist of both Sanskrit and Prākṛta. Though Hemacandra has obtained the grammatical knowledge from Pāṇini but he has not followed his krama ‘order’. The technique used in his grammar seems to have got inspired from the *Kātantra* grammar. The basic order followed in the text is *samijja*, *svarasandhi*, *vyanjanasandhi*, *paribhāṣā*, *nāma*, *kāraka*, *satva*, *nātva*, *strīpratyaya*, *samāsa*, *ākhyāta*, *kṛdanta* and *taddhita*. Like Pāṇinian grammar, it has also ancillary texts, i.e.,
the Dhātupāṭha, the Gaṇapāṭha, the Unādisūtra and the Liṅgānuśāsana. He has also written vṛtti of the Śabdānuśāsana and its ancillary texts.

**Kātantra Grammar**

The Kātantra, written by Buddhist grammarian, Śravavarman is the oldest one of the non- Pāṇinian grammars exist till date. It lays down the sūtras in an order different from that of Pāṇini dividing the work into four adhyāyas which contain five, six, eight and six pādas respectively. Based on its order, it deals with technical terms, sandhi, declension, syntax, compounds, noun affixes, conjugation, voice and verbal derivatives. The total number of sūtras is 1412 supplemented by many subordinate rules or vārttikas. Like the Aṣṭādhyāyī, it has the ancillary texts, i.e., the Dhātupāṭha, the Unādisūtra, the Paribhāṣā and the Liṅgānuśāsana. It has served as a model to the Pāli grammar of Kaccāyana. As a grammatical model text, it has spread over East Bengal, Kasmir and Nepal till modern times.

**Cāndra Grammar**

The Cāndrayākaraṇa of Candragomin (5th century AD) is a popular grammatical text among Buddhists. About the nature of his grammar it is stated that laghuḍvīpaśṭasampūrṇasujyate śabdalakṣonam, means this grammar is shorter than Pāṇini and complete than Kātantra. Though it is based on Pāṇini’s grammar, but it differs from it in many aspects. It comprises six adhyāyas, each of which contains four pādas. Except Pāṇini’s technical terms, it encompasses the whole scheme of the Aṣṭādhyāyī. It excludes Vedic accent rules and enlarges the contents by adding new rules. Whatever operations have been sorted out by Vārttika and Mahābhāṣya, all these have been included in the Cāndra grammar. The issues raised by Kātyāyana and Patañjali are also taken into consideration in the Cāndrayākaraṇa. Besides the major text, other related texts are: (i) The Cāndrayātīti, (ii) The Dhātupāṭha, (iii) The Gaṇapāṭha, (iv) The Unādisūtra, (v) The Liṅgānuśāsana, (vi) The Upasargavrīttī, (vii) The Śikṣāsūtra, (viii) The Koṣa.
1.4. *Aṣṭādhyāyī* and its Related Texts

In the Indian intellectual tradition, different schools of thought as well as texts are interrelated and are source of reference to each other. Language as an ontology and epistemology is associated with different branches of knowledge systems and its texts relating the various dimensions. It is obvious that *Aṣṭādhyāyī* is the core text of Pāṇinian grammar but to make a complete grammatical system, the following grammatical texts are being used. Such texts intend to provide greater understanding of operational systems involved in the language. The authorship and date of such texts are debatable but knowing the association with *Aṣṭādhyāyī*, it seems Pāṇini is directly and indirectly involved with the following grammatical texts. Such texts not only provide the source to the *sūtras* and its interpretation but ultimately culminate into a complete grammar of Sanskrit language. These are (a) the *Śivasūtra* (Ss), (b) the *Dhātupāṭha* (DP), (c) the *Ganapāṭha* (GP), (d) the *Uṇādisūtra* (Us) and (e) the *Linggaṃuśāsana* (La).24

1.4.1. The *Śivasūtra*

Pāṇini's *ākṣarasamānmāya* is divided into fourteen aphorisms, termed as *Śivasūtra* or *Māheśvara sūtra* or *Pratyiḥāra sūtra*. The sound segments of Sanskrit have been classified on the basis of *savarna* 'homogeneous' and its application in the *sūtra* text. The orders of elements listed in the Ss are as follows:

1. ai u Ń
2. r ī K
3. e o Ń
4. ai au C

vowels

complex

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Traditionally understood, the final capital letter of each aphorism, called it is not included in the sound segments. Its serve as the antya ‘final’ for any ādi ‘initial’ element which joined together forms a pratyāhāra ‘abbreviatory term’ to represent the initial and all intervening elements (P.1.1.71). Abhyankar defines pratyāhāra as bringing together several letters (or words in a few cases, such as roots or nouns) by mentioning the first and the last only for the sake of brevity. In such processes, for instance, the initial a of the first sūtra joins the final k of second sūtra forming the pratyāhāra, ak. ak includes all the sound segments, except its called simple vowels. Likewise, ac denotes all the vowels where as al for all the vowels and consonants. According to Kāśikā, pratyāharas are forty two. It is also associated with other Indian Intellectual texts.

25 R.N. Sharma, (trans.), op cit, Pg: 32.
27 The term ‘pratyāhāra’ is actually used in Rktastra but not by Pāṇini. Vājasaṇeyi Pratīṣṭhākyya has also used pratyāhāra in the classification of speech sounds i.e. varnamālā. Whatever may be its use by different Indian grammarians, Pāṇini has his own purpose and methodology to analyse and use of such abbreviatory form in his grammar. Patañjali states that the pratyāhāra sūtras are presented for the purpose of vṛtti ‘application of rules’ and samavāya ‘ordered enumeration of elements’.
1.4.2. The *Dhātupātha*

The term ‘*pada*’ and its scope and domain has been defined by different grammarians for their self grammatical objective. Yāska, composer of the *Nirukta* and *Nighaṇṭu* has divided *padas* into four types: *nāma, ākhyāta, upasarga* and *nipāta*. On the basis of Pāṇini’s *śabdānuśāsana*, *padas* have threefold classification: *nāma, ākhyāta* and *avyaya*. *upasarga* and *karmapravacanīya* belong to *nipāta* where *nipāta* is included in the *avyaya*. The *prakriyā* system, used in Pāṇinian grammar divides *padas* into two broad classes as *subanta* and *tiṇanta*. Ancient schools like *Aśīndra* hold the view that *padas* are undivided.

Verbs are of two general types: primitive and derived. According to *bhūtādayo dhātavāh*(P.1.3.1), ‘terms of the set that begins with *bhū* have the class name, *dhātu*’. Yudhiṣṭhira Mīmāṃsaka defines *dhātu* as *dadhati śabdasvarīpam yaḥ sa dhātuḥ*, ‘the primitive form which holds the different forms of words is termed as *dhātu*’.\(^{28}\) Primitive verbs, which generally undergo different modifications in the formation of derived verbs, are listed in the Pāṇini’s *Dhātupātha*. Such verb roots are divided into ten major groups also called *daśagani*. Each group has a broad based semantic classification in which one verb is entitled to specify the group. The ten groups are:

1. *bhvādi* ‘verb root *bhū* etc’ (1035),
2. *adādi* ‘verb root *ad* etc’ (72),
3. *juhotyādi* ‘verb root *juho* etc’ (24),
4. *divādi* ‘verb root *div* etc’ (140),
5. *svādi* ‘verb root *su* etc’ (35),
6. *tudādi* ‘verb root *tud* etc’ (157),
7. *rudhādi* ‘verb root *rudh* etc’ (25),
8. *tanādi* ‘verb root *tan* etc’ (10),
9. *kryādi* ‘verb root *kri* etc’ (67) and
10. *curādi* ‘verb root *cur* etc’ (441). The right hand parenthesis indicates the number of roots in each group. So the number of roots enlisted in the text is 1970. The broad classification of verb roots is purely grammatical and functional. Even G. Cardona states that the forms verbs have as they are listed in the *Dhātupātha* are not necessarily those in which they appear when used in actual speech.\(^{29}\) The basic objective of such classification is to make the *sūtra* text functional and operational and also to know the number of basic verbs exists in Sanskrit. It is no doubt that Pāṇini has arranged the verbs in a single text adhering to some linguistic criteria. As Cardona identifies, ‘within each major group of *Dhātupātha*, verbs in general are arranged according to


three criteria; they are ātmanepadī, parasmaipadī or ubhayapadī; they are udātta or anudātta; they have final sounds in common.\textsuperscript{10}

In Sanskrit literature, the authorship of the Dhātupāṭha is debatable. Except Jinendrabuddhi, all the grammarians have accepted the fact that the dhātupāṭha available to us belongs to Pāṇini. Jinendrabuddhi in his Nyāsa Kāśika’s commentary says that Dhātupāṭha had already existed before Pāṇini.\textsuperscript{31} Bhaṭṭoji, in his Kaustubha, taking the evidence from Bhāṣyakāra and Vārttikakāra, has accepted the Dhātupāṭha to be Pāṇinian.\textsuperscript{32} But whatever may be its antiquity, the Dhātupāṭha is an integral part of sūtra text in particular and of Indian grammatical system in general. The Dhātupāṭha is inbuilt in the organization, structure and function of the Āstādhīyāyī.

1.4.3. The Gaṇapāṭha

Gaṇapāṭha is the third most important text after Sūtrapāṭha and Dāthupāṭha. The basic components of Gaṇapāṭha, prātipadīka is the subject of language learning in Pre- Pāṇinian period as described by Patañjali in his Mahābhāṣya. Defining prātipadīka, Abhyankar describes ‘the regular division of a word into the prakṛti ‘base’ and the pratyaya ‘affix’ is available, first in the grammar of Pāṇini, who has given two kinds of bases, the noun- base and the verb- base. The noun- base is named prātipadīka while the verb- base is dhātu’.\textsuperscript{33} Like verb roots in the Dhātupāṭha, the nominal bases are enlisted in the Gaṇapāṭha in a specific order. It is fact that prātipadīkas are in the Gaṇapāṭha but not all the Gaṇapāṭha components are prātipadīkas. It differs from the Dhātupāṭha, in that the lists in question are cited together with pertinent sūtras and the items that make up a set by virtue of being connected with certain operations may or may not require a class name.\textsuperscript{34} Whatever may be similarities and differences, these two texts show the basic grammatical elements required in order to write a rule based grammar.

\textsuperscript{10} Ibid, Pg: 125- 126.
\textsuperscript{31} 1.4.3 Section 2, Nyāsa.
\textsuperscript{32} Kaustubha on P.1.3.1
\textsuperscript{33} K.V. Abhyankar, op.cit, Pg: 275.
\textsuperscript{34} G. Cardona, op.cit, Pg: 192.
Pāṇiniyas distinguish two kinds of components in the Garapātha: niyatagaṇa or viśiṣṭagaṇa and ākṛtigaṇa.35 Niyatagaṇa is the group whose members are exhaustively listed and belongs to a closed class of words. For the case of ākṛtigaṇa, the words are generally derived from the other words and belong to open class.

In the history of Sanskrit grammar, several Garapāthas are compiled by different grammarians. Yudhiṣṭhira Miśra after a detailed discussion concludes that like Dhātupātha, Pāṇini has also composed the Garapātha.36 Jinendrabuddhi is the only grammarian who has doubt about the authorship of Garapātha.37 Whether the notion of Garapāthas are pre or post Pāṇinian, but the Garapātha used by Pāṇini in his sūtra text must be his own composition. Every rule based grammar needs a body of lexicon and its systematic arrangement in order to make the system functional.

1.4.4. The Uṇādisūtra

The Uṇādipātha is a grammatical device to formulate derived nominal from verb roots in sabdānuśasana. Since uṇādī and kṛdanta formations have similar grammatical operations, the former used to be included in the latter domain. When grammar was composed and the operation of a long list of derived nominals could not be accommodated in the derivational system of the text, an additional text, called uṇādisūtra came into existence. Abhyankar defines uṇādī as affixes headed by the affix uṇ, which are similar to kṛt affixes of Pāṇini, giving derivation mostly of such words as are not derived by rules of Pāṇini.38 The existence and its use in grammar is mentioned by Pāṇini in two rules: uṇādayo bahulam (P.3.3.1) and tābhjyām anyatronādayaḥ (P.3.4.75). The first rule states that affixes wN, etc are introduced after verb roots where according to second rule, uṇādī affixes can also be introduced to denote kārakas other than sampradāṇa and apādāṇa. Two different types of uṇādisūtras are available: a pañcapādī ‘classified in five sections’ and a daśapādī ‘classified in ten sections’. Though Pāṇiniyas give importance to both the texts, but Bhaṭṭoji has used pañcapādī uṇādisūtra in his Siddhānta Kaumudi. The uṇādipātha,

37 Nyāsa on Kāśika IV: 242 on 5.3.2
38 K.V. Abhyankar, op.cit, Pg: 78.
followed by Bhaṭṭoji in his Kaumudī is divided into five padas or chapters which has seven hundred and forty eight sutras.

The authorship of these sutras, too is not certain. Interpreting ‘makuradurdurau’, Nārāyaṇa Bhaṭṭa concludes that paṇcapāḍī uṇādipāṭha is Pāṇini’s creation. Even paṇcapāḍī commentator, Dayānanda Saraswati admits it to be Pāṇinian. On the basis of Patañjali’s statement, vyākaraṇe śaṅkṣṭasya ca tokam, Kaiyāṭa, Nāgeśa Bhaṭṭa, Pāṇideva Dīkṣita have argued that uṇādipāṭha belongs to Śaṅkṣṭāyaṇa. To support their argument, they have also emphasized Śaṅkṣṭāyaṇa’s noun-verb relation theory. Bhaṭṭoji Dīkṣita is the first Pāṇinian who has cited the paṇcapāḍī as an integral part in his Siddhānta Kaumudī. He has composed a vṛtti on it in his Kaumudī and in accordance with its topic he has placed it in between the purvakṛḍānta and the uttarakṛḍānta.

1.4.5. The Liṅgaṇuśāsana

The Liṅgaṇuśāsana analyses the gender of nominals in Pāṇinian grammar. Based on structure and meaning, nominals are assigned genders and later, grouped in their respective genders. The text of this treatise consists of about two hundred aphorisms enumerating items under the headings strīlinga ‘feminine’, pulinga ‘masculine’, napumṣaka ‘neuter’, strīpumṣaka ‘feminine- masculine’, pumnapumṣaka ‘masculine- neuter’ and aviśṣṭalinga ‘variable’. As per the classification suggests, the headings are broadly divided into three sections: some having one gender, some having two genders and some belong to any of the two genders.

While composing different grammatical texts, Pāṇini was well aware of the nature of words and its relation to each other. So far Liṅgaṇuśāsana is concerned; two basic criteria, structure and meaning categorize words in their respective gender. For instance, mātr ‘mother’, duhitr ‘daughter’, potṛ ‘granddaughter’ belong to feminine since all the bases have r ending. Similarly there are rules which assign gender with reference to meanings. For example, dundubhi ‘a large kettle drum’ when used in the

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39 R. N. Sharma, op. cit, Pg: 41.
40 Liṅgaṇu 3: matṛduhitr——.
sense of *akṣa* ‘dice’ is treated as feminine.\(^{41}\) Otherwise it is masculine. Pāṇini’s *Līṅgāṇusāsana* is not the only one but other scholars like Vyādi, Amar Singh, Candrācārya and others have also their own *Līṅgāṇusāsana* for their own purpose. But all the Pāṇiniyas have attributed the authorship of the available *Līṅgāṇusāsana* as Pāṇini’s work. The way Bhaṭṭoji has made use of the *Gaṇapāṭha* and the *Dhātupāṭha* in re-structuring *Aṣṭādhyāyī*, the same treatment is not seen in case of *Līṅgāṇusāsana*. Instead he has explained it in a separate chapter at the end of his *Kaumudi*.

### 1.5. Pāṇinian Rules

Among the grammatical devices used by Pāṇini, the concept of *sūtra* deserves a considerable importance for its nature, scope and application. *Sūtra* is defined as one which is brief but unambiguous, concise but comprehensive, impersonal but objective.\(^{42}\) Contrary to the style of other Indian texts which are by nature expository and exhaustive, *sūtra* is marked by certain features. The *sūtra* style is marked by\(^{43}\)

(i) an absence of verb predicates;
(ii) a careful avoidance of repetition of the same term in a string;
(iii) use of technical terms which are defined in the introduction and which are pertinent only for the particular subject;
(iv) use of technical devices which help in making out the sense; and
(v) abstraction from a series of observations through categorization.

The concepts, *sūtra* and ‘rule’ differ substantially in their definitions as well as applications. It is fact that rule is self contained but *sūtra* is contextual. Basically, a *sūtra* is dependent on other *sūtras* in the context of intra-domain and inter-domain for its interpretation and application, while rule may or may not be dependent on others. Moreover, in the objective of grammar, the sequence of *sūtra* and rule also differ.

Pāṇini has used several types of rules which are identified and elaborated by the commentators in different texts. These are as follows:

\(^{41}\) *Līṅgānu* 14
\(^{42}\) ‘Alpaksaramasandigdham saravad visvatomukham Astobhamanavadyanca sutram sutravido vidah’.
\(^{43}\) VN Mishra, *op.cit*, Pg:30.
(a) Sanjñā sūtra ‘Technical rules’

A rule used to assign and define a linguistic term is termed sanjñā sūtra. Pāṇini has used nearly one hundred technical terms which can be classified in three sections: sabdasamjñā, arthasamjñā and dharmasamjñā. Technical terms like pada ‘inflected word’, pratyaya ‘affixes’, dhātu ‘verb root’, prātipadika ‘nominal stem’ are sabdasamjñā which assign name to certain grammatical elements. Arthasamjñā assign meaning to the grammatical elements like LOPA, LUP etc. Dharmasamjñā is a small number of linguistic terms assigned to sound quality, like udātta, anudātta and svarita.

The purpose of definitional terms is accounted for many ways:

(i) to enumerate a number of elements in a single head, e.g. pratyaya, dhātu.
(ii) to conceptually divide the sentence into sections and sub-sections like sup, tin and pada.
(iii) to demonstrate the maximum domain a term can contain (forms ending in primary and secondary suffixes and compound forms are also prātipadika).
(iv) to define the functional aspect as in the case of kartr and karma.
(v) to group the common linguistic features possessed by a single element, like, vyddhi, guna etc.

Except a few, most of the technical terms are found in the first book. Pāṇini has introduced some of the terms and has also borrowed some from the tradition which have been defined and redefined according to his own purpose. Some terms have both popular as well as technical sense. Vyddhi, guna, hetu, for instance are still used in different Indian languages in the same sense as it is in grammar.

(b) Paribhāṣā sūtra ‘Interpretive rules’

The paribhāṣāsūtras are functional in the operative system of grammar. The function of these rules is to provide a check on the operational rules so that they do not suffer from faults such as aitivyāpti ‘over application’, avyāpti ‘under application’

44 paribhāṣā—Pāṇini has not used the word paribhāṣā in his grammar. Most of these rules are propounded by Kātyāyana and Patañjali. Later on, Nagesa Bhaṭṭa in his Paribhāṣendutekhaṭa has critically examined all such rules of application.
and *asambhava* ‘impossible application’. In fact, interpretive rules assist and instruct operational rules in creating various domains. For instance, rules, P.1.1.66 ‘an element which is referred to by a locative form is understood as a right context for an operation on that which precedes it’ and P.1.1.67 ‘an element referred to by an ablative form is a left context for an operation on what follows it’ determine the environment and domain of operation. Similarly, the rule, *vipratiṣedhe paṃ kāryam* (P.1.4.2) ‘the later rule is to be enforced when there is contradiction of a former rule by a later rule’ determines the order of the rules for application. Likewise, Pāṇini has framed about seventy-five such interpretive rules in different sections of grammar.

(c) *Vidhi sūtra* ‘Operation rules’

*Vidhi sūtra* is a mechanism involved to generate grammatical words through different stages of operations. In such process, operation itself is carried out through the introduction of new grammatical elements and its operations. The derivational mechanism of the *Aṣṭādhyāyī* entails the following operations: (i) *pratyaya* ‘placement’, (ii) *āgama* ‘addition’, (iii) *ādesa* ‘replacement’, (iv) *vikāra* ‘modification’ and (v) *lopa* ‘deletion’.

(i) *Pratyaya* ‘placement’

Placement is the introduction of the first *pratyaya* to *prakṛti* to derive *pada* ‘inflected word’. Pāṇini has classified two types of affixes: *suṇ* (P.4.1.2) and *tiṇi* (P.3.4.78) to derive *pada* (P.1.4.14). *tiṇi* affixes are added to *dhātu* whereas *suṇ* are to *pratipadika*. Verb roots are of two types: primary and derived. Primary verb roots are listed in the *Dhātupāṭha* and derived verb roots are formed as introducing affixes *saṇ* etc. Nominal bases are also of twofold: primary, which is defined by rule P.1.2.45 and secondary nominal bases might be *kṛt*, *taddhita* or *samāsa* (P.1.2.46). This is one of the major operations since Pāṇini’s description of grammar looks like an affixation model.

The affixation model begins with the rule *pratyaya* (P.3.1.1) followed by its occurrence as a suffix (P.3.1.2). The major domain, *pratyaya* introduces many

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45 RN Sharma, *op.cit*, Pg: 106.
grammatical elements, like, dhātoḥ (P.3.1.7), striyām (P.4.1.3), taddhītāḥ (P.4.1.76), etc to derive different inflected words, termed as pada. The introduction of terms and conditions are mostly formal, syntactic or syntactico-semantic. Formal conditions generally concern the base whereas syntactico-semantic conditions may concern the base, affix, both or neither.

(ii) Āgama ‘Addition’

Āgama is the addition of grammatical elements through operations which may or may not retain their separate identity while attached to the base. Such additions are of two types: vikaraṇa and āgama. Vikaraṇa is a process in which affixes are added to a root under the conditions of a following affix. For instance, in the derivation of pacati, LAT is replaced by ti (P.3.4.77). By rule kartari Šap (P.3.1.68), Šap is to be introduced after pac under the condition that a sārvadhiituka affix denoting agent follows. So, the result would be: pac + Šap + ti > pac + a + ti > pacati ‘he cooks’. Generally, such operations occur in case of sārvadhiituka (P.3.4.113) ‘affixes denoted by the abbreviatory term tiN and affixes marked with Š as an it, are termed sārvadhiituka’ and ārdhadhiitukam (P.3.4.114) ‘an affix which occurs after a dhātu but is not a sārvadhiituka is termed an ārdhadhiituka’.

Contrast to vikaraṇa, āgamas do not retain their separate identity. vikaraṇa is always introduced to the right context constituted by a base, whereas an āgama may be introduced to the non-base. Pāṇini marks the majority of his āgamas by Š, K or M. In the derivation of ādhiitā ‘he will read tomorrow’, Š is an āgama.

(iii) Ādeśa ‘Replacement’

Ādeśa operation acts as a substitute as opposed to sthāni ‘item to be replaced or the original’. In such processes, a complete word or a word-base is a substitute for another one, although only a letter or a syllable is changed into another. For example, in the sandhi process, vidyā + ātura, rule ahaś savarne dūrghah (P.6.1.101) will apply. This rule states that if a simple vowel, short or long, be followed by a similar vowel, short or long, the substitute for both of them is the similar long vowel. Thus, ā and ā of the above example is replaced by ā, producing vidyātura ‘eager to gain knowledge’.

[27]
(iv) *Lopa ‘Deletion’*

*Lopa* is the deletion or disappearance of a word or part of a word enjoined in grammar for producing the correct form of a word. Rule *adarśanam lopaḥ* (P.1.1.60) defines *lopa* as ‘non-appearance’ of an element. The domain of *lopa* generally is the deletion of non-affixes. Pāṇini’s deletion process takes into account various aspects; whether deletion may be partial or full, context of deletion, consequence of deletion etc.

(d) *Niyama sūtra ‘Restriction rules’*

*Niyama sūtra* is the restriction, regulation of a grammatical term used by grammarians with reference to the application of a grammatical rule generally on the domain of that rule or part of it. Grammarians generally expand the general rule as far as possible till to meet the restriction. Commentators have classified restrictions into different kinds, such as *prayoganiyama* ‘application restriction’, *pratyayanīyama* ‘affixes restriction’, *prakrtiniyama* ‘base restriction’, *sanyāṇiṇyama* ‘definition restriction’ etc. In addition, restrictive rules can account for the distribution of certain elements. For instance, rule *patīḥ samāṣa eva* (P.1.4.8) provides that *pati* has the class name *ghi* only in a compound, thereby restricting what would obtain more generally by *śeṣo ghyasakhi* (P.1.4.7).

(e) *Pratiśedha sūtra ‘Negative rules’*

Negative rules provide that under given conditions, it does not follow what should be. For instance, rule, *na śatśvasṛdhibhyah* (P.4.1.10) states that a feminine suffix does not occur after nominals of the *ṣaṣ* class and items of the group that begins with *svasṛ*.

(f) *Atidesa sūtra ‘Extension rules’*

*Atidesa* is the extension of domain or application or qualities or attributes of one thing to another. The function of an extension rule is to broaden the operation of the applicational domain. Extension rules are classified into many ways depending on the nature of their application. Based on the affix *vaiḥ, atidesa* rules are divided into two ways: *śrutātidesa* and *arthātidesa*. Where *vaiḥ* is expressly mentioned is called *śrutātidesa*, but in case of *arthātidesa*, *vaiḥ* is not expressly mentioned but its meaning
is implicit. There are other classifications of \textit{atideśa} rules, such as \textit{sanyātideśa} (P.1.2.5) ‘extension of form’, \textit{sthānyātideśa} (P.1.1.56) ‘extension of \textit{sthānin}’ and \textit{yuktātideśa} (P.1.2.51) ‘extension of same status’. Depending on the function, extension rules are classified into different categories, like \textit{kāryātideśa} ‘extension of function’ and \textit{rūpātideśa} ‘extension of form’. Moreover, there are many other types of extension rules available in the grammar. For instance, rule \textit{anekālīśīt sarvasya} (P.1.1.55) ‘a substitute ordered for an item in \textit{ṣaṣṭhi} comes in place of the entire item when it consists of more than one \textit{aL} or is marked with \textit{Ś}’.

(g) \textit{Vibhāṣastra} ‘Optional rules’

Rule \textit{na veti vibhāṣā} (P.1.1.44) defines vibhāṣā as the meaning of \textit{na}, \textit{vā} ‘or not’. There are three types of vibhāṣā:\textit{prāpte}, \textit{aprāpte} and \textit{ubhayatra}. \textit{prāpte} is a condition in which, something provided as obligatory is made optional. Whereas in case of \textit{aprāpte}, something not provided for is provided optionally. Where both the above provisions are made, is termed as \textit{ubhayatra}. In the sentences, \textit{sah kātām karoṭi} ‘he is making a mat’ and \textit{sah svam kātām kuroṭe} ‘he is making a mat for himself’, the use of karoṭi for \textit{parasmaipada} and kuroṭe for \textit{ātmanepada} are optional. In the interpretation of the two sentences, by rule \textit{vibhāṣopapadena pratīyamāne} (P.1.3.77) \textit{an ātmanepada} affix optionally occurs after roots used with a co-occurring \textit{pada} which denotes that the fruit of the action accrues to the agent’ makes that obligatory provision is optional.

(h) \textit{Nipātana sūtra} ‘Ad hoc rules’

\textit{Nipātana} is a group of \textit{sūtras} meant to form certain forms. Their function is to provide forms not with reference to their derivation process but simply as derived.\textsuperscript{48} The objective of such \textit{sūtras} is not to contradict with other operational rules. Rule \textit{phalegraḥiḥ ātambhāriḥ ca} (P.3.2.26) ‘affix \textit{iN} also occurs by \textit{nipātana} in the derivation of \textit{phalegraḥiḥ} and \textit{ātambhāriḥ}’ is an example of \textit{nipātana} involving affixes.

\textsuperscript{47} Mbh. on P.1.1.44
\textsuperscript{48} RN Sharma, \textit{op.cit.} Pg: 118.
Chapter-I

Indian Grammatical Theory

(i) Adhikāra sūtra ‘Topic rules’

The heading rule consists of a word or words which follows or is taken as understood in every following rule up to a particular limit, pratyaya, dhātu, taddhīta etc. Hardatta mentions six types of adhikāras:49 samyñā ‘name’, višeṇa ‘qualifier’, sthānin ‘substituent’, prakṛti ‘base’, nimitta ‘condition’ and ādesa ‘substitute’. The influence of adhikāra is of three types:50 (i) by being valid or present in all the rules which come under its sphere of influence, (ii) by showing additional properties and (iii) by showing additional force such as setting aside even subsequent rules if opposing. Some of the heading rules introduce the topic but states its meaning and function in the following rules, like pratyayah (P.3.1.1) ‘an affix--- ’, paraś ca (P.3.1.2) ‘and that which is termed an affix occurs subsequently ---’ , ādyudātaś ca (P.3.1.3) ‘that which is termed an affix, and occurs subsequently, is high- pitched initially’. Such rules are also employed to divide the grammar into sections and subsections.

Among the types of rules discussed above, samyñā and paribhāṣā are interpretational. The rest, except adhikāra, are primarily involved in the grammatical operation.

1.6. Aṣṭādhyāyī Interpretation

The analysis and interpretation of any grammar is viewed through its conceptual structures and hierarchy. The linguistic units, structurally arranged and represented in the language remain the basis to know about the language and its different domains. Paṇini’s grammar, known for its rule based style is divided into several conceptual structures with both major and minor. The sutras which hold the key of any sort of interpretation are arranged on the basis of different relations they posit in grammar. Cardona states, ‘the sūtras constitute a set of statements meant to account for facts of usage by capturing what is sāmāṇya ‘common’ to groups of entities and what is višeṣa ‘particular’ to subgroups of these’.51 In this context, Kapil Kapoor puts an order which is generally maintained- ‘Regular Formations followed

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49 PM ad Kas 1.4.23 Kārake.
50 KV Abhyankar, op.cit, Pg: 15.
51 G.Cardona, op.cit, Pg: 469.
by 'Irregular Formations'. This is the basic way, a generative grammar like Asṭādhyāyī works.

Whenever, the interpretation of the text is taken into account, first the rule itself and the context shared by the rule needs to be analysed. Since the rule is very brief, concise and verbless, it follows different analytical steps to provide the meaning. Pāṇini has devised different metalinguistic theories in order to understand the grammar and its different operations. In the context of rule analysis, one has to: (i) do sandhi analysis and establish separate pada, (ii) identify the adhikāra sūtra, (iii) identify anuvṛtti, (iv) insert adhikāra, anuvṛtti padas, (v) identify the vibhaktis of all the padas, (vi) arrange the padas in a particular vibhakti order, (vii) insert the verb 'be' and (viii) interpret the rule by using the metalinguistic meaning of cases. The following analysis shows the steps employed to interpret a sūtra and define its meaning:

Pāṇini’s sūtra - anuvṛtisavarnasya cāpratayah (P.1.1.69)

First step: Separation of pada
an udit savarnasya ca apratayah

Second step: Samāsa analysis
an ca udit ca anudit (copulative)

Third step: Insertion of vibhakti
an udit (1.1) savarnasya (6.1) ca (0) apratayah (1.1)

Fourth step: Insertion of verb
bodhayati

Fifth step: Anuvṛtti
svam (1.1) rūpam (1.1)

Sixth step: Derivation of meaning

52 K Kapoor, op.cit, Pg: 110.
A sound denoted by $aN$ ($a, i, u, r, e, o, ai, au, h, y, v, r, l$), or marked with $U$, provided it is not an affix, constitutes a term, signifying not only itself but also sounds homogeneous with it.

Pāṇiniyas recognize two principles for interpreting rules in the Āṣṭādhyāyī: yathoddeśa and kāryakāla.\(^{53}\) The first emphasizes that a sutra should be understood fully at a place where it first appears in the grammar. The second emphasizes that a sūtra should be understood fully at a place where it is operative. For instance, vṛddhīrādaic, the first rule of the text provides the definition of the term, vṛddhi and the interpretation waits till its further application/operation. All the linguistic elements have a domain and a specific role to play in the grammar. The domains might be small or big but sometimes for interpretation convenience, domains are divided into smaller ones. The set of terms, represented in different chapters or quarters by different rules; generally the smaller ones are interpreted through the larger domain. The hierarchy of relations describes the physical context of a rule followed by its functional contexts. In order to understand the basic question of a linguistic term, the functional context is always dependent on the physical context.

The introduction of rule and its function in different parts of the text is generally carried out by two grammatical devices: adhikāra and anuvṛtti. Adhikāra, the heading rule, is technically defined as one which recurs.\(^{54}\) Patañjali mentions three types of adhikāras: one, like a lamp, though set in one place, illuminates the entire room; another, by means of a ca, is carried to subsequent rules; and a third carries to each and every rule governed by it.\(^{55}\) Haradatta mentions six types of adhikāras:\(^{56}\) samjña ‘name’, viśesāna ‘qualifier’ sthānin ‘substituend’, prakṛti ‘base’, nimitta ‘condition’ and ādea ‘substitute’. Adhikāras function in many ways: they introduce a term, e.g. pratayāyah (P.3.1.1), specify a domain, e.g. kārake (P.1.4.23) ‘a kāraka---’, offer a locally valid interpretation, or define the context of an operation.

Besides adhikāra, anuvṛtti also sets the ground for proper understanding of different operations. It can be defined as a process whereby a former rule or its

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\(^{53}\) RN Sharma, op.cit, Pg: 60.
\(^{54}\) Ibid, Pg: 61.
\(^{55}\) Mbh. 1:362, trans RN Sharma, pg: 62.
\(^{56}\) PM ad Kas 1.4.23 Kārake.
elements is brought close to the context of a subsequent rule.\textsuperscript{57} These two processes, \textit{adhikāra} and \textit{anuvṛtti}, are grammatically related with each other. Whenever a general rule of an \textit{adhikāra} is followed by a particular rule, then \textit{anuvṛtti} is blocked. Sometimes minor domains of a major domain act as a blocking for the recurrence. For instance, the \textit{adhikāra sūtra}, pratyayah (P.3.1.1) is a major governing body in which rules, 3.1.2, 3.1.3 and 3.1.3 are the \textit{kāryakāla}. The sub-domain which has also an \textit{adhikāra} blocks the earlier one and defines its own function.

Continuation and discontinuation of grammatical operations is generally represented by \textit{adhikāra sūtra}. The term, \textit{kāraka} is introduced as \textit{kārake} by the \textit{adhikāra sūtra}. To make the \textit{kāraka} functional, vibhakti is added to them. The domain associated with such \textit{kāraka} is broadly divided into two sections: types of \textit{kāraka} and vibhakti ‘case ending’ assigned with \textit{kārakas}. The \textit{kāraka} and its types are enumerated and described in the following manner;

\[
\begin{align*}
\text{kāraka} & \quad \text{P.1.4.23} \\
\text{āpādāna} & \quad \text{P.1.4.24} \\
\text{sampradāna} & \quad \text{P.1.4.32} \\
\text{kārana} & \quad \text{P.1.4.42} \\
\text{adhikarāna} & \quad \text{P.1.4.45} \\
\text{karma} & \quad \text{P.1.4.49} \\
\text{kartā} & \quad \text{P.1.4.54}
\end{align*}
\]

But Pāṇini has arranged the vibhakti in different section, i.e. P.2.3.1-P.2.3.73. Now the question arises, why Pāṇini has put the vibhakti and kāraka in different chapters though they are directly related in order to make them functional. Grammar is a set of linguistic terms and its operations, well connected with each other to make the language functional. In such circumstances, vibhakti provides the functional aspect of kāraka but belongs to the \textit{adhikāra sūtra sup} ‘nominal endings’. There are many instances in the text which are interpreted in their local domain as well as beyond it. It proves that the linguistic terms are not in isolation but the composition of the whole as one.

\textsuperscript{57} RN Sharmī, \textit{op.cit}, Pg: 67.
In such a hierarchy based grammar, i.e. major set to minor set, selection and interpretation of *padas* are very crucial. The methodology used to generate inflected words needs the speaker’s grammatical knowledge. Take for instance, a sentence like *rāmah paṭhaṭi* ‘The boy reads’ which has two *padas*: *rāmah* and *paṭhaṭi*. The major set, *rāmah* and *paṭhaṭi* identifies them as *prātipādika* ‘nominal stem’ and *dhātu* ‘verb root’ respectively. The *adhikāra* rules, *nyāp- prātipadikāt* (P.4.1.1) ‘an affix occurs after that which either ends in affixes marked with *Nī* and *āP*, or is a *prātipādika*’ and *dhātoḥ* (P.3.1.91) ‘after a verbal root----’ identify the terms in its larger domain. After this stage, rule *svaujasmaut---* (P.4.1.2) ‘affixes *sU, au, Jas---* occur after that which either ends in affixes marked by*Nī* and *āP*, or is termed a nominal srem’ and rule *lasya- tiptasjhi---* (P.3.4.77- 78) ‘in place of *LA---*’ and ‘affixes *tiP, tas, jhi---* occur in place of *LA*’ are applicable in case of *rāmah* and *paṭth* respectively. Now a serious selectional problem arises in which rules P.4.1.2 and P.3.4.78 have 21 and 18 elements respectively. These rules describe *spar, LA* and *tin* in its broader form. Though all the elements are interrelated but they are classified in order to make the system operational. Let us first consider *LA* and *tin*. *LA* occurs in P.3.4.77, P.3.4.69 ‘*LA* affixes occur after transitive verbal roots to denote *karman* or *kartr*; they also occur after intransitive verbal roots to denote *kartr* or *bhāva’ and P.1.4.99 ‘a replacement of *LA* is termed *parasmaipada*’ in which affixes are placed after transitive and intransitive verbs. Such classification groups the verbs into *parasmaipada* and *ātmanepada*. The rules P.1.4.100- 102 and P.1.4.104 classify *tin* elements in two sets of three triads each. Individual triads in a set represent *prathama* ‘third’, *madhyama* ‘second’ and *uttama* ‘first’ persons. Similarly, individual elements in a triad represent *ekavacana* ‘singular’, *dvivacana* ‘dual’ and *bahuvacana* ‘plural’. Following *LA* and *tin* selection, the rule *lah parasmaipadam* will proceed. Since agent has to be expressed, *parasmaipada* is selected. In case of *bhāva, karman* is to be expressed by the verb and *ātmanepada* ending should be selected.

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58 P.1.4.100- Replacements of *LA* denoted by *taN* and also those denoted by *āna* are termed *ātmanepada*.
59 P.1.4.101- The triplets of *tiN* in both *parasmaipada* and *ātmanepada* are termed respectively *prathama* ‘third person’, *madhyama* ‘second person’ and *uttama* ‘first person’.
50 P.1.4.102- The individual members of each triplet are termed respectively *ekavacana* ‘singular’, *dvivacana* ‘dual’ and *bahuvacana* ‘plural’
59 P.1.4.104- Each triplet of *sUP* and *tiN* is also termed *vibhakti*.  

[34]
For the case of rāmaḥ, we have to consider sup. The sup rules classify the sup
elements in seven triads where each triad contains singular, dual and plural. These
elements together form a subset of vibhakti along with tin. The sup selection is based
on the kārakas which the nominals possess. After scanning all the possible options
available in sup and tīti, the twofold classification of verbs: parasmaipada and
ātmanepada take the operation one step ahead. If the verbal root path ‘to read’ is in
the parasmaipada set, the agent will be expressed through its parasmaipada endings.
The result would be: path + sap + tip > paṭhati ‘reads’. Since the agent is marked by ti
in paṭhati, the nominal stem will retain its prātipadika form i.e. rāmaḥ. On the other
hand, if path opts for an ātmanepada set, rāma will have to express the agent. The
result would be: rāmeṇa paṭhyate ‘read by Ram’ expressing it as passive rather than
active.

Not only syntactic analysis, all the other constituents like samāsaḥ (P.2.1.3),
taddhitaḥ (P.4.1.76), striyām (P.4.1.3) etc also undergo different interpretations and
operations in the text. Moreover, such devices employed in the grammar prove that
the grammatical elements are not independent elements but have a sort of syntactic
relations among themselves.

1.7. Structure of the Aṣṭādhyyāī

Pāṇiniya śāstra as we have already discussed, a rule based grammar has
provided a greater space for debate and discussion by later grammarians in its
organization and function. The text available to us is generally entitled by four names:
Aṣṭaka, Aṣṭādhyyāī, Śabdānuṣāsana and Vṛttisūtra. Since the grammar is divided
into eight chapters, the titles Aṣṭaka and Aṣṭādhyyāī are generally associated with it.
Patañjali while defining the goal of grammar in his Mahābhaṣya has used the term
śabdānuṣāsana in the very beginning. Instead of sūtrapātha, Patañjali has used
vṛttisūtra twice in his commentary. The use and its broad based objective by the
later two titles sometimes justify the text as śabdānuṣāsana or vṛttisūtra. Since
Aṣṭādhyyāī and its ancillary texts have been handed down to us through oral tradition,
a few variant readings and interpolations exist. Such variations on the basis of region

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61 Mbh. 1.1
62 Mbh. on 2.1.1 and 2.2.24
are described in three ways: prācyā, udīcyā and dākṣinātya.63 The pātha used for the Kāśika Vṛtti is termed as prācyā pātha. The text held by Kṛṣṇaśāmi and Kashmir scholars is udīcyā pātha and dākṣinātya pātha is the text followed by Kātyāyana in his Vārttikā.

Though Aṣṭādhyāyī is structured into eight chapters and each chapter has four quarters, grammatically it can be re-arranged in various ways. The conceptual structures reflected in the sūtras represent the terms as class and sub-class. Based on the different reference points, the text can be put in different grammatical order. However Aṣṭādhyāyī may be divided into two basic organizational units: sapādasaptādhyāyī ‘the first seven books and one quarter’ and tripādī ‘the last three quarters’.64 This twofold division is shown by pūrvarūḍhādham (P.8.2.1) which states that rules of the last three quarters ‘tripādī’ are treated as asidha ‘suspended’ in view of rules of the first seven books and one quarter. Such classification is essentially motivated for the derivational processes used by Pāṇini.

Two grammatical devices, inflection and derivation used in Sanskrit like in any other Indian languages are the operational systems involved to generate padas ‘inflected words’. The derivation being a word formation process generally precedes the inflection in the sequence when used as a syntactic unit. Again, so far nominal and verbal inflections are concerned; the former is followed by the later one. Such order and its organization, i.e. prakaraṇa krama has led the text to be organized into four functional divisions.65

Division 1
> Classification and enumeration of base and categories (samjñā): Chs. 1 and 2

Division 2
> Prakṛti–pratyaya analysis (enumeration) and derivation of bases: Chs. 3 to 5
> Verb bases and derivation of primary nominals: Ch. 3
> Derivation of secondary nominals: Ch. 4-5

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64 RN Sharma, op.cit, Pg: 76.
Chapter I

Indian Grammatical Theory

Division 3

> Synthesis of prakṛti-pratya: Chs. 6 and 7 and 8.1
> Changes affecting the bases (prakṛti): Ch.6
> Changes affecting the affixes (pratyaya): Ch.7
> Reduplication: Ch.8.1

Division 4

> Sandhi (euphonic combinations and resultant changes): 8.2 to 8.4

It is very much evident that rules are ordered in a specific way dividing sections and sub-sections. Starting from commentary tradition to modern phase, scholars have interpreted and organized the rules to reflect their own goal. Such reflection is the grammarians own structural representation of language constituted through language. Pāṇini’s structural analysis is the reflection of intrinsic grammatical knowledge which exist in the speaker’s mind. Chomsky’s notion of d-structure and s-structure and grammar composition can be well interpreted through Pāṇini’s grammar. The topics and its arrangements are described in the following manner:

Book I: General definitions and rules of interpretation
   (i) major definitions and interpretational rules
   (ii) rules dealing with kitvat, svar, asisya and ekasesa compound
   (iii) rules dealing with dhātu, ātmanepada and parasmaipada
   (iv) rules dealing with kārakas and purusa

Book II: Compound and declension
   (i) rules dealing with samāsa
   (ii) rules dealing with vibhakti
   (iii) rules dealing with napumsaka
   (iv) rules dealing with ardhadhātuka and LUK prakarana

Book III: Verbal affixes
   (i) rules dealing with derivational verbal affixes like, kṛt, kṛtya, sannanta etc
   (ii) rules dealing with verbal inflections, nāmadhātu

37
Chapter-1 Indian Grammatical Theory

Books IV-V: Feminine and secondary affixes
(i) rules dealing with feminine forming suffixes and declensional suffixes
(ii) rules dealing with secondary derived affixes

Book VI-VII: Morphophonemics at the word level
(i) rules dealing with dhātu- dvirvacana
(ii) rules dealing with reduplication and its types
(iii) rules dealing with svar
(iv) rules dealing with aluk
(v) rules dealing with stem-alternation in suffixation ‘ainga’

Book VIII: Miscellaneous related to pada and non-pada
(i) rules dealing with doubling relative to pada
(ii) rules dealing with accent relative to pada
(iii) rules dealing with other phonological operations relative to pada
(iv) rules dealing with various operations relative to non-pada

The first book discusses the grammatical terms and its interpretation. These terms are basically the conceptual constructs used to define the language. Some of these are popular uses, some are not but after all, all of them are technical terms in building different domains and sub-domains. It is not the case that Pāṇini introduces all terms in the first book, some which may be few, are available in other books. This means that while composing the text, Pāṇini was very sensitive to the contexts of the uses. For instance, he introduces the terms sārvadhiituka (P.3.4.113) and ardhadhiituka (P.3.4.114) in the domain of dhātoḥ (P.3.1.91) to facilitate the introduction of elements such as Sap.

As we have already discussed earlier, rules of a specific topic may not be in a rule binding domain. Sometimes, rules of a particular section overlap with other section, for example, striyām (P.4.1.3) and taddhitāḥ (P.4.1.76). Among the topics, pratyayah (P.3.1.1) is the largest domain which proves the grammar to be an affixation model. Taddhita ranging rules up to the end of book five is the second largest domain. The grammar represents the word formation processes, its syntactic properties and what sort of agreement it has, to generate sentences. From the
structural analysis, *taddhita* 'secondary derived nominals' is the largest word formation process followed by *kṛdanta*, *samaśa* etc.

Apart from word formation processes, syntactic processes involved in language, rule ordering and its interpretation are the key factors in structuring the text. General and particular rules decide the extent of a particular section which can be accommodated in the grammar. The question of overlapping of a topic with another depends on the linguistic features associated with them. Apart from the derivational processes like *kṛdanta*, *taddhita* and *samaśa*- gender, an intrinsic property of the nominals is attributed to them in their following domain.

### 1.8. Pāṇini’s Grammatical Model

#### 1.8.0. Nature of Grammar

We have already discussed about the *Aṣṭādhyāyī* and its related texts in the preceding section (1.4.). *Aṣṭādhyāyī* is a set of rules formulated from generalizations citing particulars, exceptions and restrictions which accounts *loka*, as standard or norm. Such standard form, *sādhū sābda* is proved to be *siddha* in different derivational processes. On the other way, the basic objective of Pāṇini’s grammar is to generate acceptable linguistic forms in Sanskrit language. When Patañjali defines grammar as *sabdānuśīśana* 'discipline of words', then the question arises how such framework of grammar is accountable in generating sentences? Nāgēśa justifies, “it is impossible to explain the extent of individual linguistic units and its meanings reflected in separate sentences by any other briefer means. Hence, a strategy employed is to make a theoretical assumption and divide the constituents of a sentence.” However, Pāṇini gives an account of the sentences by conceptualizing the components of these sentences as consisting of *prakṛti* ‘base’ and *pratyaya* ‘affixes’.

In the contemporary grammatical scenario, *Aṣṭādhyāyī* has been debated and interpreted in various dimensions in order to understand its grammatical framework. In some of the instances, modern scholars have described it as prescriptive grammar or word- structure grammar or morphological grammar or phrase structure grammar.

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66 Paramalaghumanjusa, 4
etc. Sometimes, it is being argued that the theoretical model used in the grammar is only meant for Sanskrit language. To encounter such assumption, K. Kapoor argues,

Pāṇini’s Astādhyāyī is not a pedagogic grammar in the strict sense - it is a linguistic grammar that makes explicit the native speaker’s knowledge of Sanskrit. But this knowledge, is the knowledge of sādhu sabda the acceptable, forms – the ‘rules’ that embody this knowledge generate the acceptable variety of language, both written and spoken.

About the nature of grammar P. Kiparsky states,

Theoretical linguists of all persuasions are in addition impressed by its remarkable conciseness, and by the rigorous consistency with which it deploys its semi-formalized meta-language, a grammatically and lexically regimented form of Sanskrit. Empiricists like Bloomfield also admired it for another, more specific reason, namely that it is based on nothing but very general principles such as simplicity, without prior commitments to any scheme of “universal grammar”, so it seems, and proceeds from a strictly synchronic perspective.

V.N. Mishra opines about the different units of grammar,

Pāṇini had in view the sentence as the starting, as well as the ultimate, point of description. The entire framework is that of substitution for one syntactic concept either by way of compounding, derivation (primary or secondary) or inflection.

R.N. Sharma observes about the conceptual and abstract structure as,

In order to analyse Sanskrit sentences, Pāṇini presents the conceptual structure of sentences in which abstract syntactic categories and grammatico-semantic relations are identified. The process of lexicalization, and operations on emergent structures, then follows.

However, it is interesting to mention that the depth and flexibility of the grammar has motivated the modern scholars to interpret it by their own viewpoints. Having partial knowledge of such grammar not only deviates Pāṇini’s objective but also puts a long continuous Indian grammatical system in astray. To understand and analyse the grammar, knowledge of sūtra text as well as ancillary texts, commentaries and Indian culture is essential. In the Indian grammatical theory, as shown in the previous section (1.4.), grammar is not based on a single text. Different components

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67 K. Kapoor, op cit, Pg: 161.
70 R. N. Sharma, op cit, Pg:04.
have been categorized and enlisted in different texts. Pāṇini has broadly classified grammar into lexicons and rules. For lexicons, two ancillary texts, the Gaṇapātha and the Dhātupātha have been composed. Even two other grammatical components, sound segments and gender attached to nominal are enlisted in different texts, called the Pratyāhārasūtra and the Lingānuśasana respectively. The commentary tradition, especially Patañjali analyses, interprets and sets a theoretical model in order to understand Pāṇini’s methodology. Grammar in essence can be defined as re-analysis of sabdā-rāsi ‘the universe of words’ to form pada ‘inflected word’. As we know, pada siddhi, the basic objective of grammar raises the issue whether pada has an independent identity or related with other elements. Since Sanskrit is an inflecting language, pada as a morphological construction does not remain as an isolated section. The formation of pada, derived in the grammar is a syntactic unit which is divided conceptually only for the grammatical analysis. In the interpretation of various rules, the relations they posit, i.e. intra- and inter-dependency describes the grammar as ekavākyatā. The description and descriptive units are syntactically divided into various sections and sub-sections. It is a fact that except kāraka section, Pāṇini has not provided any section for sentence. But, the description which can be called morphological is the composition of various syntactic units and its agreement with each other.

In the theoretical framework, Pāṇini’s grammar can be visualized/interpreted from different dimensions. Pāṇini does not draw a line between morphology and syntax as corroborated by Bhartrhari that there is no absolute dichotomy between a sentence and pada. Even Singh quotes. “pada defined as a morphological construction ending in inflectional suffixes, is a syntactic unit.” In the contemporary linguistic framework, Pāṇini’s word formation processes can be categorized into broadly two ways: morphological and syntactic. When we talk about the word in its internal order independently, it is morphological. But when we talk about the word beyond its boundary, then it is syntax. The configuration of the above two types of

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71 Since the present work focuses on the morphological structure of Pāṇinian grammar, Phonetics and phonology are excluded from the discussion.
72 VP.1.77. “vākyāt padānārayantam pravīveko na kaścona”
73 J.D. Singh, Pāṇini: His Description of Sanskrit, Pg.08.
interpretation can be said morpho-syntactic model. The processes associated with it are basically derivational and inflectional. Derivational morphology confines itself to word formation processes while inflectional morphology deals with word formation processes as well as the grammatical functions of words. For instance, kṛdanta, taddhita and samāsa are the derivational processes in which new words are coined/derived from the bases through different grammatical processes. But grammatical features like kāraka, vacana, puruṣa etc. are syntactically motivated in order to create pada ‘inflected word’. Whenever words follow both the processes, inflectional affixes succeed the derivational affixes. The pada can be represented in the following hierarchical levels:

Semantic information

Morphosyntactic representation

Morphological representation

Phonological form

The grammar re-analyses the śabda-rāśi ‘the universe of words’ into prakṛti ‘base’ and pratyaya ‘affixes’. Prakṛti has the sense of basic form as opposed to modified.74 The bases are divided into twofold: the nominal and the verb root. Pratyaya is defined as artha sampratyaśayati sa pratyayaḥ,75 which gives meaning is called pratyaya. According to Pāṇini’s grammar, the conjugational signs, the signs of tenses and moods and the compound endings are called pratyayas, since they all come under the heading rule pratyaya (P.3.1.1) There are six main kinds of affixes given in grammar:76 (i) suppratyaya ‘nominal affixes’, (ii) tīṇpratyaya ‘verbal affixes’, (iii) kṛtpratyaya ‘primary derived nominal affixes’, (iv) taddhitapratyaya ‘secondary

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74 Nirukta, ii. 2
75 Mbh. on 3.1.1
76 K.V Abhyankar, op.cit, Pg:265.
derived nominal affixes', (v) dhātuprātyāya 'verb affixes' and (vi) striprātyāya 'feminine affixes'. Prātyāya, as a rule comes after the prakṛti to which they are added. Hence Pāṇini formulates the application sūtra, paras ca (P.3.1.2) immediately after the rule prātyāyah (P.3.1.1). All the operations in this grammar are based on the process of affixation in which the affixes, while themselves undergoing change may also bring about a change in the base. Taking into consideration the base and affixes, the grammar may be described as an Affixation Model which looks like the following diagram:

1.8.1. Śabda ‘Word’

According to this grammar, language is a system of five successively “higher” units77—vara ‘sounds’, akṣara ‘syllable’, śabda ‘word’, pada ‘morphological construction’ and vākya ‘sentence’. To understand a language, all the above units, hierarchically arranged, i.e. from lower to higher level needs to be analysed in terms of their structure and function. Since the present discussion is based on morphological model, sounds and syllable are excluded for further elaboration.

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77 K. Kapoor, op. cit, Pg:36.
The third level of hierarchical unit is *šabda* ‘words’ constituted by syllables. Yāska in his *Nirukta* has classified words into four classes:78 *nāma* ‘substantive, i.e. nouns and adjectives’, *ākhyāta* ‘verb’, *upasarga* ‘prefixes’, *nipāta* ‘particles’. *Upasarga* are words such as *pra, pari-*, which are always used along with a verb or a verbal derivative or a noun showing verbal activity. *Nipātas* such as *iva, na, ca*, etc are particles which do not possess gender, number and case termination. Pāṇini has used basically such fourfold classification of words but many rules refer different classifications in different contexts. Functionally, however, all words are divided into two sets- declinable and indeclinable as shown below:

\[
\text{Šabda} \\
\quad \text{Vikāri} \quad \text{Avikāri} \\
\quad \quad \text{Prātipadka} \quad \text{Dhātu} \quad \text{Upasarga} \quad \text{Nipāta} \\
\quad \quad \quad \text{(nominal stems)} \quad \text{(verbs)} \quad \text{(prefixes)} \quad \text{(particles)}
\]

The above four classes are either classified and listed in the ancillary texts or mentioned in the *sūtra* text. The prātipadika are enumerated exhaustively in the *Ganapātha* and the dhātus are classified and listed in the *Dhātupātha*. The upasargas and nipātas are mentioned in the *Sūtrapātha*.

**1.8.2. Pada ‘Inflected Word’**

The next level of organization is *pada*. A *pada* is formed by a conjugation of *prakṛti* and *pratyaya*. The bases are of two kinds: (i) *mūla* ‘primary’ and (ii) *vyutpāna* ‘derived’. Each group has both nominal and verbal. Primary nominal bases are listed, some exhaustively and some typically in the *Ganapātha*. Derived nominals are formed through different affixation processes. The primary verb bases, i.e. verb

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78 *Nirukta* 1.1
roots are listed in the Dhātupātha whereas derived verb bases are formed with affixes through different grammatical processes.

Like prakṛti, pratyayus are also divisible into nominal and verbal. Again, they are cross-classified as (i) derivational, and (ii) inflectional. Derivational and inflectional affixes are applied to both nominal and verbal elements. Both of these groups occur in a certain relative order within words in which inflectional affixes follow derivational affixes. Moreover, inflectional affixes indicate certain grammatical functions of words without changing the word class category such as person, number, case and tense. In such process, they create paradigms of both nominal and verbal elements. Contrast to inflectional affixes, derivational affixes is associated with word formation processes. In case of taddhīita and feminine formation, they do not change the word class category but kṛdanta formation is the changing of verb to noun. Inflectional and derivational affixes can be distinguished in terms of semantic relations. When inflectional affixes are added to the base, the meaning of the base and the meaning of the base + affix is quite regular. In contrast, in the case of derivational affixes the relation between the meaning of the base and the meaning of the base + affix is sometimes unpredictable.
In the interpretation of Pāṇinian grammar, the theoretical framework has been analysed and classified in many ways. According to Pāṇini’s Šabdāmuśāsana, šabda is divided into three ways: nāma ‘nominal’, ākhyāta ‘verbal’ and avyaya ‘indeclinable’. 79 Upsarga and karmapravacaniya belong to nipāta and nipāta is included in the avyaya class. Derivationally, all words, i.e. padas are divided into two sets: subanta and tīṇanta. 80 Even Pāṇini defines pada as suptiintam padaṁ (P.1.4.14), an element that ends in sup or tiṇ is pada.

1.8.2.1. Subanta ‘Word Ending in Nominal Inflection’

In case of subanta, upasarga, nipāta and prātipadika constitute prakṛti. Since upasarga and nipāta are indeclinables, they don’t go for further modification. The form of noun which is not inflected, technically called prātipadika. In the word

80 Ibid, Pg: 245.
formation processes and morpho- syntactic units, i.e. pada formations, such nominals are the basic units which can take both derivational and inflectional affixes.

1.8.2.1. Derived Nominals

Derived nominals are generally classified into: (i) kṛdanta ‘primary derived nominals’, (ii) taddhiśa ‘secondary derived nominals’, (iii) sāmasa ‘compounding’ and (iv) dvirvacana ‘reduplication’ discussed as below:

(i) Kṛdanta ‘Primary Derived Nominals’:

Kṛdanta is a word formation process in which the kṛt affixes are added to roots or to their modified forms to form nouns, adjectives and indeclinables. These affixes are broadly divided into two groups: (i) those which are involved in the sūtra text and (ii) Unādi affixes, described in an ancillary text. Whenever they are added, various changes, i.e. phonological and morphophonemic take place in both the preceding and succeeding elements. For primary derived nominals, affixes like aka, at, āna, vas etc are added in various contexts.

For instance,

\[
\begin{align*}
Pac & \text{ ‘to cook’} + aka > pācaka ‘cook’ \\
Bhav & \text{ ‘to be, become’} + at > bhavat ‘being’ \\
Div & \text{ ‘to play’} + āna > divyamāna ‘playing’
\end{align*}
\]

The Unādi affixes are classed separately because the nouns derived by their means are either formed irregularly or its derivational system is not included in the Sūtra text.

For example,

\[
kr ‘to do’ + unādi affix > kārū ‘an artisan’.
\]
(ii) **Taddhita** ‘Secondary Derived Nominals’

*Taddhitas*¹ are those that are formed by the addition of *taddhita* affixes to substantives, primary or derived from roots. These affixes are added in various senses. Whenever they are added, various changes, i.e. phonological and morphophonemic take place in both the preceding and succeeding elements. It is the most word productive processes in Sanskrit language. As described in the grammar, it is the largest one which means the most word formation process in Sanskrit language. The topic begins with the rule *taddhítah* (P.4.1.76) which contains 1110 rules covering almost two *adhyàyas* viz. from P.4.1.76 to the end of the fifth *adhyàya*. Affixes, like *a, aka, ámaha, ika* etc are used in various contexts to form secondary derived nominals. The *prakrti* and its derived nominals, though belong to nominal class, contrast semantically in the language.

(1/3) For instance,

- *manu* ‘Manu’ + *taddhita* affix > *mánava* ‘a descendant of Manu’
- *go* ‘cow’ + *taddhita* affix > *gavyam* ‘belonging to a cow’
- *pitr(h) píta* ‘father’s father’ + *taddhita* affix > *pitámr(h) ‘paternal grandfather’

(iii). **Samásá** ‘Compounding’:

*Samásá*, a word productive process, is composed of elements that function independently in other circumstances. Explaining *samásá*, Kale defines ‘in Sanskrit, simple words, whether substantive, adjective, verb or indeclinable have the power of entering into combination with one another.’² The *Mahábháṣyakāra* has mentioned only four principal kinds of compounds: *dvandva* ‘copulative’, *tapatruṣa* ‘determinative’, *bahuvrihi* ‘attributive’ and *avyayībhāva* ‘adverbial’. But later Indian grammarians have given many subdivisions of these compounds as for example, *dvigu, karmadháraya, itaretaradvanda* etc. In such formations, individual words

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¹ *Taddhita*- a technical term used by pre- Pāṇinian grammarians occurs in the *Nirukta* (11.2) and the *Vājasaneyī Prātiṣṭākhyā* (1.27). It is used by the ancient grammarians in the sense of a word derived from a *pratipadika* ‘substantive’ by the application of suffixes like *a, yar* etc. But Pāṇini has used the term *taddhita* in the sense of enumerating different suffixes to form such words in different circumstances.

retain their meaning but sometimes the compositional meaning differs from the individuals.

(1/4) For example,

\[ \text{rājan} + \text{purāṇah} > \text{rājapurāṇah} \ '\text{King's person}' \]
\[ \text{vidvas} + \text{janah} > \text{vidvajjanah} \ '\text{learned person}' \]

(iv) Dvirvacana 'Reduplicated Nouns'

Like kṛdanta, taddhita and samāsa, reduplication is also a word-formation process. Pāñini discusses such phenomena at two different places which classifies them into two groups. The first group deals with how verbal bases are reduplicated before taking any other affixes where as the other group encompasses the repetition of forms such as nouns, verbs, adjectives and pronouns. The later group belongs to subanta. In the sūtra text, Pāñini has elaborated the reduplicated form in 10 contexts, i.e. P.V111.1.1 to V111.1.15. The sūtra, sarvasya dwā (P.V111.1.1) as an adhikāra sūtra defines the nature of reduplication, ‘two occur in place of one whole form’. In such formation, the derived word is constituted of two elements: the base form and the reduplicant. The base form might be a lexical item or not, but the derived form is a lexical item. Generally, the base form of the onomatopoeic constructions is syllables. The reduplicant has some resemblance, i.e. phonological and morphological with the base form which categorizes the total process into total or partial.

(1/5) Like,

grāmo grāmo ramanīyāḥ ‘each and every village is beautiful’

1.8.2.1.2. Sup ‘Nominal Inflections’

Sup is the inflection of kāraka ‘case’, vacana ‘number’, liṅga ‘gender’ and puruṣa ‘person’. The affixes used for inflections are called vibhakti. The features associated with such processes are discussed as below:
(i) Kāraka ‘Case’

Kāraka, is introduced as Kārake (P.I.4.23), means which helps in the accomplishment of an action. There are six kārakas in Pāṇinian system, such as kartā ‘nominative’, karma ‘accusative’, karaṇa ‘instrumental’, sampradāna ‘dative’, apādāna ‘ablative’ and adhikarana ‘locative’. Since sambandha ‘genitive’ is not directly related to the verb, it is excluded from the kārakapātakaraṇa. The common characterization of all kārakas associated with the verb is reflected in the below diagram:

![Diagram of kārakas]

So far the notion of government is concerned, cases are governed by indeclinables and verbs, called upapadavibhaktis, and kārakavibhaktis respectively. Pāṇini has employed various parameters for kāraka division and vibhakti assignation. For instance, karma kāraka is defined as ‘that which is especially desired by the agent to be accomplished by the action’ (P.I.4.49).

(1/6) Like,

\[ \text{bālakah\, ghaṭam\, karoti.} \]

\[ \text{boy.NOM.SG\, jar.ACC\, make.IMP.PRS.SG} \]

The boy makes the jar.
Here, *ghaṭa* 'jar' as the object of the agent is assigned accusative case with *dvitiyā vibhakti*, i.e. accusative singular.

(ii) *Vacana* 'Number'

*Vacana* is used for the analysis of word classes displaying numerical contrasts among nouns and pronouns. Sanskrit has three numbers: *ekavacana* 'singular', *dvivacanci* 'dual' and *bahuvacana* 'plural'. Number in case of *bālaka* 'boy' is represented in the following manner:

(1/7)  

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bālakāḥ</td>
<td>bālakau</td>
<td>bālakāḥ</td>
</tr>
<tr>
<td>'boy. NOM.SG'</td>
<td>'boy. NOM. DL'</td>
<td>'boy. NOM.PL'</td>
</tr>
</tbody>
</table>

According to *vibhakti* assignment, i.e. whether overtly marked or not, number is categorized into *nirvibhaktika* 'not overtly marked' and *savibhaktika* 'overtly marked'.

(ii) *Līnga* 'Gender'

In Paninian system, a *prātipadika* has three genders: *strālīṅga* 'feminine', *pūrṇīṅga* 'masculine', *napūmsaka* 'neuter'. Such three fold classification is evident in *Kāśikā* on P.2.3.46. The words, *deva, daitya, manusya* etc belong to masculine gender. Verbal derivatives formed by the terminations *ani, mi, ni, ti, i, ā*; as *abanih, bhūmiḥ, glaniḥ, lakṣmīḥ, camāḥ* etc are feminine words. The words like, *mukha, niyana, māmsa* etc are neuter words.

Feminine bases are derived from the masculine by the addition of the affixes which are broadly divided as ā, i, u and ti. Panini has described several instances to form feminine bases, such as

(i) A *prātipadika* ending in *a*, and the words included in the *Ajādi* group form their feminine base by adding ā (P.4.1.4).

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83 *Kāśikā* on P.1.2.51
(1/8) For instance,
\[\begin{align*}
aja & > ajā 'a young girl' \\
baḷa & > balā 'a young girl'
\end{align*}\]

(ii) Words indicative of the stages of life take the feminine affix \(f\) (P.4.1.20).

(1/9) For example,
\[\begin{align*}
kumāra & + f > kumārī 'a young woman' \\
kiśora & + f > kiśorī 'a young woman'
\end{align*}\]

(iii) \textit{Purūṣa} ‘Person’

\textit{Purūṣa} described by Pāṇinian system are of three types: \textit{prathama} ‘3rd person, he or she’, \textit{madhyama} ‘2nd person, you’ and \textit{uttama} ‘1st person, I’.\textsuperscript{84} Such three way classification also corresponds with number, gender and case.

(1/10) Like,
\[\begin{align*}
\text{rāmaḥ ‘Rama’} & \quad \text{nadi ‘river’} \\
'Rama.NOM.SG.M.TP' & \quad 'river.NOM.SG.F.TP'
\end{align*}\]
\[\text{aham ‘I’} \quad 'I.NOM.SG.M.FP'\]

In the context of \textit{prakṛti} and \textit{pratyaya} configuration, the following basic \textit{subanta padas} can be formulated:

\[\begin{align*}
\text{(i) Nominal base + nominal inflection} & > kumāra ‘boy’ \\
\text{(ii) Nominal base + feminine affix + nominal inflection} & > kumārī ‘girl’ \\
\text{(iii) Verbal base + kṛt affix + nominal inflection} & > ācaka ‘cook.M.’ \\
\text{(iv) Verbal base + kṛt affix + fem. affix + nominal inflection} & > pācikā ‘cook.F.’ \\
\text{(v) Nominal base + taddhita affix + nominal inflection} & > gāṛi ‘Gārva’s son’ \\
\text{(vi) Nominal base + taddhita affix + feminine affix + nominal inflection} & > gāṛtī ‘Gārva’s daughter’ \\
\text{(vii) Compounding, nominal base + nominal base + nominal inflection} & > rājapurūṣaḥ ‘King’s person’
\end{align*}\]

\textsuperscript{84} \textit{Nirukta}. VII. I and 2
1.8.2.2. Tiṅanta ‘Word Ending in Verbal Inflection’

Like subanta, tiṅanta is also constituted by the configuration of prakṛti and prayaya. Tiṅanta prakṛti includes both basic verb roots and derived verb bases. The basic verb roots are enlisted in the Dhātupāṭha.

1.8.2.2.1. Pratyāntadhatavatāh ‘Derivative Verbs’

Derivative verbs are those which may be derived from a basic verb root or noun. Such verbs can be divided into two main groups: (i) dhātuadhatavatāh ‘verbs derived from basic verbs’ and (ii) nāmadhatavatāh ‘verbs derived from nouns’. The former category can be further classified into four main subdivisions:

(i) Niṇjanta ‘Causative’

Niṇjanta, a technical term used in the grammatical description of verbs to refer to the addition of an argument in the completion of an action. The causal form of a verb implies that a person or a thing causes or makes another person or thing to perform the action.

(1/11) For example,

\[ \text{gana} > \text{gana}t > \text{gana}yati \text{ 'he causes to count'} \]
\[ \text{gam} > \text{gam}t > \text{gam}yati \text{ 'he causes to go'} \]
\[ kṛ > \text{kar}t > \text{ka}yati \text{ 'he causes to do'} \]

(ii) Saṃjanta ‘Desiderative’

Saṃjanta, a type of derivative verb, expresses the notion that a person or thing wishes / desires to perform the action. The desiderative base is formed by:

(a) reduplicating the first consonant of the verb root.
(b) adding certain affixes on the basis of sandhi rules.

(1/12) For example,

\[ \text{paṭh} > \text{paṭhi}ṣati \text{ 'he wishes to study'} \]
\[ \text{jugups} > \text{jugups}iṣate \text{ 'he wishes to censure'} \]
(iii) *Yañanta* ‘Frequentative’

*Yañanta*, a grammatical device, uses to refer to the expression of repeated action. The basic verb roots used to derive the frequentative verbs are basically monosyllabic roots beginning with a consonant. Such derivatives are formed by the reduplication of the initial consonants with certain morphophonemic changes. There are two kinds of frequentative bases: (i) *Ātmaneṣa* frequentative and (ii) *Parasmaipada* frequentative.

(1/13) For example,

- pac > papacyate ‘to cook again and again’
- ḍā > dadā ‘to give again and again’
- vid > vivid ‘to know again and again’

(iv) *Dvīrvacana* ‘Reduplicated Verbs’

In such process, the verbs are derived from the base form.

(1/14) Like,

- oḥāk ‘give up’ > jahāti ‘to give up’
- ṇībhā ‘be afraid of’ > bibhēti ‘to be afraid of’
- dūbhṛī ‘possess, foster’ > bibharti ‘to possesses, foster’
- māṇ ‘regard’ > mimite ‘to regard’
- pacati pacati ‘cooks and cooks’

(v) *Nāmadhātu* ‘Denominative’

*Nāmadhātu*, a type of derivative verb in which derivation occurs from nominal bases by means of certain affixes. They have various meanings. They sometimes convey the notion of performing, practicing, using the thing / quality expressed by the noun and are used transitively. The bases employed to form denominatives are both noun and adjective.

(1/15) For instance,

- kavi ‘poet’ > kavīyati ‘he wishes for a poet’
- rājan ‘king’ > rājīyati ‘he wishes for a king’
1.8.2.2.2. *Tīū 'Verbal Inflections'*

Verbal inflections affixes, technically called *tin* represent tense, aspect, mood, number, gender and person in *tīūanta padas*. The inflectional properties like tense, aspect and mood are independent in its existence with verb but number, gender and person are dependent with nominals to have an agreement with verb. So, according to the above functional division, inflectional properties can be classified into two groups: independent inflection and dependent inflection.

1.8.2.2.2.1. Independent Inflections

**Tense**

In Pāṇinian grammar, *lakāra*\(^{85}\) is the grammatical term used for tense, aspect and mood. Tense marks the time of action denoted by the verb. It is a deictic category which is divided into three ways as *bhūta* 'past', *vartamāna* 'present' and *bhavisyatā* 'future' (see Kaśikā, P.11.4.21). But Pāṇini takes the three primary tenses- present, past and future and names them *laṭ*, *liṭ* and *lut* respectively. It uses *vartamāna* for *laṭ* following the rule *vartamāne laṭ* (P.3.2.123). For *liṭ*, Pāṇini explains it as *parokṣe liṭ* (P.3.2.115). The rule *anadhyatane lut* (P.3.3.15) describes in case of *lut*. In addition, tense forms can also be interpreted in the context of semantics other than temporal ones.

(1/16) For instance,

(i) *gachāmi* ‘I go’,

(ii) *āgachāmi* ‘I went’

(iii) *gamisyāmi* ‘I shall go’

Hence, the above sentences, (i), (ii) and (iii) represent present, past and future tense respectively.

\(^{85}\) *lakāra*—a term denoting tense, aspect and mood used for the ten technical terms *laṭ*, *liṭ*, *lut*, *leṭ* *loṭ*, *lan*, *liņa*, *lunand lṛṇa*. It is the *la* of the *adhipatāra* rule *kāle* (P.3.1.10) that has led Pāṇini to use such terms.
Aspect

Aspect, a grammatical description of verbs refers primarily the duration or type of temporal activity denoted by the verb. Indian languages make a clear distinction between three main aspects: progressive, perfect and imperfect. The perfect denotes an action done before the present day and not witnessed by the speaker (P.3.2.115) whereas the imperfect denotes past action which is not done in the present time (P.3.2.111).

Mood

The part of grammar that encodes the social and the expressive is the mood system. Semantically, a wide range of meaning is involved, especially the attitude on the part of the speaker towards the factual content of his utterance, e.g. uncertainty, definiteness, vagueness, possibility. Syntactically, the contrasts may be inflectional forms of the verb or auxiliaries. Moods used in the Pāṇinian system are of four types: anja ‘imperative’, ādhi ‘potential’, asi ‘benedictive’ and sanketa ‘conditional’.

(i) Ānjādi ‘Imperative’

The imperative mood does not express merely command but also entreaty, benediction, courteous enquiry, gentle advice, ability, etc (P.3.3.162).

(1/17) Like,

kṣamasvāparādham ‘Oh God! Forgive my faults.’

(ii) V Ūdihi ‘Potential’

The potential mood expresses the sense of command or directing a subordinate, pressing invitation, giving permission, telling one to attend to an honorary office or duty, courteously asking a person a question and prayer (P.3.3.161).

(1/18) For instance,

tvam grāmam gaccheḥ ‘go to the villages’
(iii) Āśīh ‘Benedictive’

The benedictive mood is used to confer a blessing or to express the speaker’s wish.

(1/19) Like, ciram jīvāt bhavān ‘may you live long’.

(iv) Sanketa ‘Conditional’

The conditional mood is used in those conditional sentences in which one factor is associated with another in order to get a result (P.3.3.139). In the sentence, If there would be plentiful rain then there would be an abundance of corn, rain depends on the production of corn.

1.8.2.2.2. Dependent Inflection

Inflections like case, number, gender and person are inherent properties of subanta padas. But whenever titaanta padas are formed, such properties are reflected in agreement with tense, aspect and mood. It is so overtly marked that in the context of subject position, nominative, accusative and instrumental cases are marked with the verbal inflections.

(1/20) For example,

\[
\begin{align*}
\text{rāmah} & \quad \text{gacchati} \\
\text{Ram.NOM.SG} & \quad \text{go.IMP.PRS.SG.TP} \\
\text{Ram goes.} \\
\text{odanah} & \quad \text{pacyate} \\
\text{rice.NOM} & \quad \text{cook.ACC.PRS} \\
\text{Rice cooks.} \\
\text{āśiś} & \quad \text{chinatti} \\
\text{sword.NOM} & \quad \text{cut.INST.PRS} \\
\text{The sword cuts.}
\end{align*}
\]
All inflected forms of the verbs are represented in accordance with number and person.

(1/21) For instance,  
\begin{align*}
gachāmi & \quad \text{‘I go’} \\
gachāmaḥ & \quad \text{‘We go’} \\
gachati & \quad \text{‘He goes’} \\
gachanti & \quad \text{‘They go’}
\end{align*}

In the above sentences, all the inflected verbs denote number and person of the subjects.

In the context of verbal base and verbal pratyayas, the following tinanta padas can be formulated:

(i) Verbal base + verb inflection > pacati ‘he cooks’
(ii) Verbal base + causative > gamayati ‘he causes to go’
(iii) Verbal base + desiderative > pipaṭhiṣati ‘he wishes to study’
(iv) Verbal base + frequentative > papacyate ‘He cooks again and again’
(v) Verbal base + reduplication > bibheti ‘to be afraid of’

It can be concluded from the above discussion that language has remained an object of study since the Vedic period. Different linguistic thoughts have evolved through various religious and philosophical texts. But Pāṇini’s Asṭādhyāyī represents as the central text of the Indian Grammatical Theory. It is a rule based grammar which consists of both the spoken language and the written language. Kātyāyana’s Vārttika and Patañjali’s Mahābhāṣya are supplementary to the Pāṇini’s text. The culmination of these three texts is called Trīmūrti Vyākaraṇa. It is such a text which has been analysed and interpreted in multiple dimensions since its composition till date. Two components of grammar, lexicon and rule have been presented in different texts. As a result, Asṭādhyāyī has five ancillary texts, i.e. (a) the Śivasūtra (Ss), (b) the Dhātupāṭha (DP), (c) the Ganaśāṭha (GP), (d) the Uṇādisūtra (Us) and (e) the Lingānuśāsana (La). The grammatical system formulated by Pāṇini has divided the pada into subanta and tinanta which is again subdivided into various sections and subsections. Above all, it is a generative process which produces correct form of Sanskrit speech.

Chart-1
ANALYSIS OF SANSKRIT PADA

Pada

SUBANTA

Uparasarga Nipāta Pratipadika

Prakṛti Pratītī

Pada

Primary
derived
nominals
(kṛdanta)

Secondary
derived
nominals
(taddhita)

Gender: number assignation or,
number assignation and formation
of feminine base

APPROXIMATION

Pratyaya

Inflectional
(SUP)

Basic
 Derived

Compound

1. Causal
2. Desiderative
3. Frequentative
4. Object expressive
5. Impersonal
6. Object as
subject
7. Denominative

Affixation

'mṛtya'

Basic roots
Derived

Adjectival

Inceptive

Inflectional

Derivational

Derived

Kṛt.

Causation

Pre-post

vikarana

agreement

APPROXIMATION

Inflectional

Derivational

Gender: number assignation or,
number assignation and formation
of feminine base

AGREEMENT