CHAPTER FOUR

Nyāya- Vaiśeṣika theories of Nāda, Śabda or Dhvani

The ontological theory of Nyāya-Vaiśeṣika is characterized as Philosophy of Atomism. According to Nyāya-Vaiśeṣika, the ultimate substance out of which all other substances emerge is atom (anu). Out of nine, the first five substances viz. earth, water, fire, air and manas are atomic substances and the rest four viz. time, space, ākāśa and ātma are pervasive (vibhu) substances.

According to the Vaiśeṣika Sūtra of Kaṇḍa, there are six categories (padārthas), which require investigation as a means of enlightenment or liberation or to relieve the soul from pain and misery. The word 'padārtha' means a 'meaning' of word. But Nyāya-Vaiśeṣika thinkers use 'padārtha' as a category of investigation. Such categories are six: 1) Dravya (substance), 2) Guṇa (quality), 3) Karma (action), 4) Sāmānya (the generality of a thing to its genus), 5) Viśeṣa (differentia), and 6) Samavāya (coherence). Later thinkers considered 'abhāva' (non-existence) as the seventh category.

Dravya (substances) is without any distinguishing mark (Vai. Sū.-1.4 and 17). It serves as a substrate (ādhāra) for qualities and actions. There are only nine dravyās (substances): Earth (prthvi), Water (āpa), Fire (tejah), Air (vāyu), Ether ("ākāśa"), Time (kālaḥ), Space (dik), Self or Soul (ātma) and Mind (manas). Substances are not annihilated either by cause or by effect. (Vai. Sū.-1.5). Quality inheres in substance and it is without any other quality. It is not a cause for any conjunction or disjunction. An action is destroyed by its effect (Vai. Sū.1.1.14). The characteristics of action (karma) are that it inheres in one substance. It is without qualities. It is the sole cause of conjunctions and disjunctions. (Vai. Sū.-1.1.12).
Sū.-1.i.17, 30). The categories like 'Sāmānya (genus), Viśeṣa (species) and 'Samavāya (coherence), are not amenable to perception. They are only conceptual (buddhāpekṣaṃ)-7 (Vai. Sū.-1.ii.3.)

Substantiality (dravyatva), qualitativenss, (guṇatva)) and activity (karmatva) are both general and specific. (And so all others except ultimate specifics, (atoms, etc.))"8 (Vai.Sū..1.ii.5-6). Samavāya, the last category, is generally translated as 'coherence' or 'inherence'. For example, the relation of threads in cloth is a matter of 'samavāya' but not a matter of 'samyoga', like milk placed in the pot.

According to Vaiśeṣika, the ultimate substances belong to two classes : 'anu (atom) and 'vibhu' (pervasive or extensive). When we go on dividing the substance, it cannot go on ad infinitum, but stops at a point when it cannot be divided further. Such a substance is atom (paramāṇu). A combination of two atoms is called dyad (dvayaṇu). For being perceptible to our senses it should be a combination of at least three atoms called triad (trasareṇu). A particle, visible, in the sun beam, entering a dark room, is a triad.

"The action of Fire and the action of Air are explained by the action of earth. The initial upward flaming of fire, the initial sideward blowing of air, the initial actions of atoms and of mind or egress and ingress (of life and mind , from and into body) conjunctions (ie. assimilation ) of food and drink and conjunctions and disjunction of other products, etc., are caused by 'adrṣṭam'. "9 This 'adrṣṭam' is an invisible creative force . As I have already suggested in Chapter 1, this is a new term coined for the same Vedic ārta' principle.

Of all the substances, 'ātman' (or soul) is the most important substance, since it is this substance that enables cognition of other substances. The existence of soul is proved not only on the basis of revelation but also on the basis of sensuous cognition or perception in the form of "I", such as 'I am Devadatta, or I am Yajñadatta", etc.
Every individual has different experiences of breathing, winking of eyes, life, the movements of the mind and the effect of the other senses and also pleasure, pain, desire, aversion, and volition as marks of (existence) of his soul. Hence there are as many souls as there are individuals. Soul is a substance which serves as substratum for sense-organs which produce cognition and knowledge.

Time (kāl), Space (Dik) and Akāśa are the other remaining ultimate substances. The existence of Time is proved by its marks (i.e. the cognitions or the notions of): "Posterior", or 'later', 'simultaneous', 'slow', 'quick." Likewise, Dik (space) is also an ultimate substance. 'This is remote from that" — is a mark of space. The unity of time and Space are due to unity in existence. But they appear manifold on account of the accidental qualities added to them as the result of effects. Like 'soul', both of them are 'vibhu' (pervasive) and infinite, unlike 'anu' - 'atom'. Akāśa is the last substance, with sound as quality attached to it. It is also 'vibhu' (pervasive).

Dik and akāśa as substances are always confusing to the students of Philosophy. Many of the modern philosophers translate Akāśa as space and Dik as direction, but in my opinion they are not correct. Encyclopedia Britannica has given the definition of Space as "a boundless, three-dimensional extent in which objects and events occur and have relative position and direction". This definition of 'space' includes both 'dik' and 'ākāśa'. The scientists have conceived space as a receptacle or a container or directional. Encyclopedia of Indian Philosophy, explaining the difference between space (dik) and 'ākāśa', as found in Indian systems, states: "... akāśa is not exactly ubiquitous, since it does not penetrate atoms of the first four substances, whereas, of course, 'space' as normally conceived does. Further more, the Nyāya-Vaiśeṣika, as opposed to Bhāṭṭa Mīmāṁsaka and Vaiyākaraṇas, believes that ākāśa cannot be
perceived, whereas space, one might suppose, can be." 13. Thus they translate 'dik' as space, and use the word akāśa as it is. I also propose to do the same. In fact the ‘akāśa’ of Nyāya-Vaiśeṣika is a substituted term for Vedic term 'salila'. Hence, if it is necessary to translate it in English, it can be translated only as 'ether', as many have done. Hence this - "...ākāśa is not a vacuum, a mere absence of objects, but a substance, which is conceived to be a physical matter as the other four gross elements. It corresponds to the ancient Greek conception of space as a gas-like 'ether'. In India it is thought to be the material medium of sound"14. It has been said in the Vaiśeṣika-Sūtra that "the distinguishing feature of akāśa is that it enters into (all empty spaces) and it quits (them when they are filled), (niṣkramaṇam praveśanam iti akāśasya liṅgam- Vai.Sū.ΙΙ.ι.20)."15 Therefore, 'sūnyatā' - void or vacuity, cannot go with the Nyāya-Vaiśeṣika concept of akāśa but such 'sūnyata', conceptually, may go with their 'dik' or space. Their 'dis' is an extensive space, alright, but is empty so as to accommodate all other substances, including akāśa (ether) within itself. Thus, in Nyāya-Vaiśeṣika their 'dik' (space) and akāśa coexist. The most important difference between them is that akāśa is regarded as one of the five elements (panca maha bhūtas), whereas 'dik' has no such status. Sound (śabda) is a quality or a property of the substance called 'akāśa' and not that of 'dik' or space.

Each of the five elements (pañca maha bhūtas), as substances, inheres certain quality or qualities. The sensation of sound is a quality that inheres in Ākāśa. The sensation of touch inheres in Air. Likewise, Fire inheres two qualities: colour and touch; Water, three: colour, taste, and touch; Earth four: colour, taste, smell and taste. These five elements (panca maha bhūtas), in turn, produce perishable phenomenal objects, as their effects (kārya). These phenomenal objects derive their qualities on account of the Samavāya (coherence) relationship between such qualities and their basic elemental substances. The nature of the effect is already present in its cause (in the atom).16 (Note: For this part I have followed the translations of
Madan Mohan Agrawal with necessary modifications, if found necessary.17

Gautama, in his Nyāya Sūtra, accepted the atomic theory of Reality of Vaiśeṣika of Kaṇada. His contribution consists in his attempt to develop an epistemological theory to prove, with logical apparatus, the 'padārthas' and 'dravyas' which are identified by Vaiśeṣika. But for the purpose of his epistemological analysis he identifies different objects of investigation (prameyas) and proof. Accordingly he says: "Soul, body, senses, objects of senses, intellect, mind, activity, fault, transmigration, fruit, pain, and release are the objects of right knowledge."18 [Note :For this part of analysis I have adopted the translation of Sūtras by M.M.Satish Chandra Vidyābhūṣaṇa with the necessary modification whenever required].19

For the "Soul (ātman) is not body, though this body is a site for the operation of the soul, through its gesture, sense and sentiments.20 The soul is different from body and when the body is burnt the soul is released.21 The soul is beyond senses because what is seen by the left eye is recognized by the right. When body is burnt, the soul continue to exist, since it is eternal. The soul is required to be admitted, as eternal on account of joy, fear, and the grief arising in a child from the memory of the things previously experienced. The child's desires for milk in this life is caused by the practice of his having drunk it in the previous life.22 Thus remembrance is really a quality of soul.

There are five elements: earth (prthvī), water (āpa), light (teja), air (vāyu), and ether (Ākāśa).23 The sense organs viz "nose, tongue, eye, skin, and ear are the senses produced from elements"24 "Smell, taste, colour, touch, and sound are the objects of the senses and qualities of earth, etc."25 Intellect, apprehension and knowledge are not different from each other.26 The mark of the mind is that there do not arise (in the soul) more acts of knowledge than one at a time.27 Activity is that which makes the voice, mind and body begin their action.28
The elements (panca mahā bhūtas) are found both in the objects of senses and in the sense organs. The senses are essentially identical with the elements in consequence of the possession of their special quality. 'Sense' is really called as such when it is attended by its respective quality. Moreover, an object is never perceived by itself.

Perception depends upon the special character of the substance and its quality. A colour is perceived only when it abides in things intimately, and when it is perceived through the unperceived ray of our eyes, when such a ray reaches the objects through the aid of external light. There must be ray in the eye of man as we see it in the eye of animals that move about in the night (Nyā. Sū.3.1.44) The "senses are essentially identical with the elements in consequence of the possession of their special quality." But their cognition is possible through the mind (manas). The cognition (or knowledge) of an object cannot take place when the mind is drawn away by another object. Desire and aversion belong to the soul in as much as they are the causes of its doing an act or forbearing from doing the same. Therefore, knowledge, etc., must be admitted to be the qualities of the soul by the principle of exclusion and on account of arguments already adduced" Thus even "memory belongs to the soul which possesses the character of a knower." Transmigration is possible since soul is eternal.

Our false apprehension is destroyed by a knowledge of the truth just as our concept of objects in a dream comes to an end on our awakening. Gautama says that perception, etc., are the right means of knowledge and without admitting them, their denial is impossible. They are established in the manner that drum is proved by its sound. "It is through convention that the meaning of a "word", like 'drum', 'sound', 'nāda', etc., "is understood". Vātsyāyana points out that when Śūtra states that a ‘Śabda’ (Word) is an assertion of a reliable person. (‘āptopadesaḥ śabdaḥ’ –Nyā.Śū.1.1.7) It means that it is a
particular qualified Word (śabda) that can be an Instrument of Right Cognition. "which implies that there are several kinds of 'śabdaḥ'. In this sense, 'śabda' can be divided into letter -sounds (varṇātmaka) and sound in general (Noise) (dhvanyātmaka) 39.

What is ‘Sound’ then?

As per the 'Tarka Sangraha of Annambhaṭṭa', "The quality that is apprehended by the organ of hearing (sotra) is sound (śabda), it resides in ether only. (srotagrāhyo guṇah śabdah, ākāśamātravṛttiḥ). It is two fold, inarticulate and articulate. Inarticulate sound like of the sound of drum, etc., and articulate sound is in the form of letters of Sanskrit and other languages."40

Inarticulate sound (dhvanyātmaka- śabda) means a sound in general that is produced by human voice or by musical instruments, or sound in nature. This sound is quality of 'ākāśa' (ether), according to Nyāya Śūtra. Articulate sound (varṇātmaka- śabda), as explained by Bhāṣya of Vātsyāyana, commenting on Nyāya Śūtra2.2.13, is in the form of "word"- "which represents a particular combination of sounds"41. Even Viśvanātha, commenting on Nyā.Śū.2.2.39 of Gautama stated that 'there are two kinds of sounds: syllabic sound and only sound'42. (Note : The discussion that I have considered herein after is an extraction or summary from Ganganātha Ḫā). 43

Now let us see the nature of these two kinds of Sound.

(A) ‘Sound in general’ (dhvanyātmaka- śabda)

What is the nature of the ‘Sound in general’ (dhvanyātmaka- śabda); Is it eternal or non-eternal?

The ‘Sound-in-general’ is a non-syllabic sound like the sound of ‘drum’ or the sound one hears, when some body were to simply shout loudly or the sound of a musical instrument.

What is the nature of this kind of Sound-in-general?
Goutama accepts the view of Vaiśeṣikas, that is —“Sound is the quality of ākāśa liable to production and destruction”.

According to Nyāya-Vaiśeṣika philosophy each of the five elements (panca mahā bhūtās), as substance, inheres certain quality or qualities. The sensation of sound is a quality that inheres in ākāśa and Sound is the quality of ākāśa liable to production and destruction. "Sound is non-eternal, because it has a beginning and is cognized by our senses and is spoken of as artificial (or product)"44

The non-eternity of sound is sought to be proved by Naiyāyikas, on the basis of three grounds:

1) That it has a beginning (ādi). Since it has a beginning it is caused or produced by something else. It is caused by conjunction or disjunction. Once it is caused, it is liable to destruction. Hence it is not eternal.

2) It is apprehended through sense organs and is not a matter of mere "manifestation" as contended by Mīmāṃsakas. The colour on the Jar, which is already there, is manifested. But in the case of 'sound', it is apprehended by sense organs after it is produced by contact, i.e., when there is conjunction or disjunction. "For instance", says Bhāṣya of Vātsyāyana, "when a piece of wood is being cut, the Sound that arises from the impact of the axe with the wood is heard by the person at a distance and after that impact has ceased the sound also ceases to exist....." (Jhā-Vol.II,p.905)

3) The Sound, being the product is not the one 'manifested. The product is normally spoken of as 'acute' or 'dull', like acute pain or dull pain, etc. In the case of Sound it is spoken of as 'acute sound' or 'dull sound'. In modern days also we often find terminologies like 'bass-sound' or 'treble-sound' in the musical field. In order to have this kind of thing, it must be a product. One may still assert, in support of Mīmāṃsaka, that 'acuteness' or 'dullness' belongs to the manifester, just as one can speak of painting as being in 'fast colour' or 'dull colour' etc. Thus these
qualities are of the manifeste. But this kind of analogy does not hold good in the case of the Sound. Because in case of Sound there is 'suppression', in the sense that the louder sound produced suppresses the weaker Sound, just like a lamp-light in the light of the sun. And such suppression of 'weaker sound' by 'louder sound is possible only when such sounds are produced differently, as it happens in the case of the sound of violin in the presence of bugle. In the case of painting, though the painting is the same, it may manifest 'bright' or 'dull' colour as per the intensity of light to which it is exposed. Thus Sound is 'produced' not 'manifested' like the colour of a painting. At the same time, it is possible that "the series of sounds (produced in each case) being distinct, it becomes possible for only a certain Dull Sound to be suppressed by a certain Acute Sound,- this being dependent upon their reaching the auditory organ, at the same time.". In the case of suppression of one sound, when, being otherwise audible, it is rendered inaudible by another Sound." (Bhāsya of Vātsyāyana).

Thus according to Gautama, eternal thing is one which is not destroyed (viz. atom, soul etc). If so all other things which are produced and destroyed are non-eternal. Sound having a beginning (produced) and an end is non-eternal.

Sāṅkhya also believes in the non-eternity of Sound; but, according to Naiyāyikas this non-eternity is of a different kind. For Sāṅkhya 'non-eternal" means:

"When it is found that all the conditions of the perception of a certain thing are present, and yet in its own form, the thing, having completely disappeared from the view, is absolutely not perceived.....". (Vārtika Uddyotakara). At the same time, according to Sāṅkhya, 'everything' in the world is an evolutionary product of 'prakṛti' (Primordial Matter), as such it is not different from that Primordial Matter. Thus a thing is neither produced nor destroyed.
According to them the so-called destruction is only a transformation of the known form to something else. When a pot is destroyed, it simply takes the form of pieces or dust. Such being the case, as a matter of fact, it is not possible that at any time no product of Primordial Matter should be perceived; that is, some product or the other is sure to be perceived always, as all are non-different from the original Matter, no product can be said to be absolutely 'not perceived'. If this is so, their statement, "...the thing, having completely disappeared from the view, is absolutely not perceived - that thing is called 'non-eternal'," is not consistent with their own basic theory.

The Sound is characterized by both a beginning (cause) and an end (effect), and hence it is non-eternal. It is a product. It is amenable to senses, when it is found to be perceptible by means of proximity (contact) of an organ of perception. It is not possible for the auditory organ (of the hearer) to move up to the place (in the speaker's mouth) where sound appears. From this, it follows that the Sound is produced, not simply manifested in the mouth of the speakers. At the same time, it is not possible for the sound to move up (to the auditory Organ) of the hearer, since sound has no motion. Akāśa, whose quality the Sound is, being all pervasive, also has no motion, and it cannot move up to the ears of the hearer. But unless sound reached the auditory organ of the hearer, no apprehension of that sound is possible. If such apprehension were to be possible, notwithstanding that both the Sound and Akāśa have no motion, there would be possibility of all sounds being apprehended by all men. But this does not happen, as our experience tells us. For instance, the same sound heard in Bangalore cannot be heard in Mysore. According to Vārtika of Uddyotkara, in these circumstances, only the hypothesis left is that (in case of every Sound) "there is a 'series' of Sounds; of this series, the first Sound is produced by conjunction and disjunction; and from that initial Sound proceed other Sounds proceeding in all directions, like the filaments sticking out of the 'Kadamba' flower, (or when a
stone is thrown into a pond circles of waves in water spread out, just like that) from each of these latter Sounds, there proceeds another, and thence another, each of these being duller than its predecessor; and this series of Sounds goes on being produced until there is an obstacle in the way of their vehicle (air); the last Sound of this series, having become too attenuated, loses the capacity of producing a further sound, by reason of some sort of obstacle; thus the series of sounds comes to an end. Of these series of sounds that alone which approaches the Akāśa, in the ear-cavity (of the hearer) becomes apprehended (heard), and none other is so apprehended. It is so in view of the fact that Sound is regarded as 'apprehended through a sense-organ'; and thus Sound has to be regarded as 'non-eternal'; as otherwise the said apprehension through a sense-organ would not be possible (the 'production' of the series of Sounds being impossible), if Sound were eternal."

Vārtika of Uddyotkara, in view of their above theory, rejects the theory of Mīmāṁsaka that 'there is only one Sound' occupying the entire Akāśa, or when heard by the hearer a part of it is heard' etc on the ground that, if there was to be only one Sound occupying the entire Akāśa, then all the people of the world should hear it, but it does not happen like that. Their further theory that the hearer hears the sound, manifesting at the place of source, also cannot be accepted, because, the sound occupying the entire Akāśa, would also be all pervasive like Akāśa, and a part of it (or its severance) is not conceivable; or such modification of sound, being a quality of Akāśa, also is unthinkable, (or even if sound is taken as substance representing the view of Bhaṭṭas), there cannot be its modification, unless there is a cause of conjunction or disjunction in Akāśa, but such a thing is not found). Even if it is assumed that such a 'part' of sound can be manifested, (śabdasya ekadesaḥ abhivyajyate,) then what the hearer hears at that place would be a part of the Sound that would be unintelligible. For instance, a letter of a word cannot convey
the meaning of the word. Moreover, Akāśa, being all pervasive, is indivisible. Hence this theory is liable to be rejected as absurd.\(^4^9\)

The other theory of Mīmāṃsakas that in the case of wood cutting what happens is -"the Air is produced by the stroke of the axe on the wood; this Air is produced in the form of a current; so that this Air-current reaches the Ākāśa in the ear-cavity; and the Sound subsisting in that Ākāśa, becomes heard". This also is rejected by Vārtika of Uddyotkara. It is pointed out that Mīmāṃsakas believe that 'the Sound is eternal, in eternal all pervasive 'ākāśa', and whatever Sound is manifested by the manifester in the form of 'air-current' (ie., stroke of the axe), would manifest all sounds at the same time,(in jumble), and if so, there could be no restriction for a particular sound being heard, as we do and hence this theory of Mīmāṃsaka also is untenable. But as already pointed out, the Sound is not eternal nor is it all-pervading, as being thought of by Mīmāṃsakas.\(^5^0\)

Vārtika of Uddyotkara also rejected the theory of 'Vibration'. According to this theory -" what manifests sound is, not Air, but a particular Quality of Air, called 'nāda vibration': but vibration cannot be accepted as the 'manifester' of Sound; because even when the Vibration is perceived by a man at a distance, he does not (even though he hears the sound) hear or perceive it at the spot where the Vibration has been perceived." (Jhā). Thus, this theory (of vibration) is rejected on the same grounds used, for rejecting the theory that 'Sound is manifested by the conjunction and disjunction of Air' (as propounded by Mīmāṃsakas).\(^5^1\)

However, Vārtika of Uddyotkara also took note of Sānkhya's serious objection to Naiyāyika's theory of Sound - "If it be true that Sound proceeding in a series and reaches the Akāśa enclosed in tympanum and becomes heard, --then there could be no notion of direction in regard to sound"- that a particular Sound is being heard
from the East or from the North etc. (for example the direction of 'Odour' is not being experienced). His reply is that such direction of Sound, we do experience in life and it is due to the sources of sound, located in different directions like - in the East or in the North etc. and not due to the Sound-series itself, and the notion of direction is not the same to all sounds having their sources in different directions. The source is the place where conjunction or disjunction takes place (the axe falling on the wood). Uddyotkara further clarified that "when the sound series first reaches (the auditory organ), it does so always from the direction of its source. .... Sound of this series, that reaches the Ākāśa in a particular tympanum, is recognized as reaching that part of this Ākāśa' which lies in the direction of the sound,- then there arises the notion of direction ( in regard to the Sound itself); but in cases where this first Sound of the Series cannot be discerned (and all sounds of the series crowd at once), no notion of direction can arise. But to this kind of objections Vārtika of Uddyotkara said - 'No'. 'Experience is otherwise'."52

However some are of the opinion that - 'notion of direction arises only when the object concerned is perceptible by the eye and as such persons born blind cannot experience the direction of Sound; the direction of Sound is always known with the help of both Eye and Ear. P.F.Strawson, Western philosopher also believes that "A pure auditory concept of space,.....is an impossibility" ..... without "visual, kinaesthetic, tactual phenomena" and 'congenitally blind' man can have concept of space with hearing combined with 'tactual with kinetic sensations'. If it is so, according to Strawson, one can have sense of space like, above or below, left or right, nearer or farther, etc through sense of hearing combined with 'tactual with kinetic sensations' but without 'visual' perception.53 But to this kind of objections Vārtika of Uddyotkara said - 'No'. On the ground that human 'Experience is otherwise'.

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Another important aspect of Sound as highlighted by Nyāya Sūtra (2.2.18) is that the Sound is known after it is 'uttered' or 'pronounced' (‘ucchāraṇāt). In other words, there is no sound before its utterance. But for Mīmāṃsaka Sound being eternal, either as eternal quality of eternal ‘ākāśa’ or as an independent eternal substance, exists even before its manifestation through vocal utterances. It is not comprehended because it is veiled; and the utterance with the help wind striking different parts of mouth, lifts the veil. ‘Thus the sound which was covered by veil was uncovered’.54

But according to Vātsyāyana, in fact such "impact of the wind with particular spot of mouth" caused the production of the Sound, and it is not a matter of only manifestation. Naiyāyika's further add that there is no veil so as to cover the Sound. Since Sound is non-eternal such a phenomena like a veil is conspicuously not perceptible; and such non perception consist in the absence of its perception,55 (in the sense that such veil does not exist so as to be perceived). Still objectors persist and say that Sound is intangible accordingly it must be eternal. Nyāya Sūtra replied and said that though atom is eternal still it is intangible.

(B) Articulate Sound (Varnātmaka dhvani)

Articulate Sound is the one that takes the form of the letters (varṇa) and ‘words’ (sābda) in language. If so, a question may be raised, 'What is the nature of the ‘Sound’ in a letter and consequently in 'word'?;

Viśvanātha in his Bhāṣya-Pariccheda explained the nature of of syllabic sounds as - “Sounds such as ‘ka’ that are produced by the conjunction of the throat, etc. are regarded as articulate (kaṇṭhasaṃyogādi janyā varṇāste matāḥ) (165) and The Sound is transitory, because we have the notion that (the sound) ‘ka’ is produced, and the sound ‘ka’ is destroyed. As for the recognition, ‘This is that ‘ka’, it apprehends its belonging to the same class” (167)

55a In Siddānta-Muktāvali, his own commentary on Bhāṣya-
Pariccheda, he further clarified that the sound is non-eternal being produced and destroyed. So also the sounds of syllables like ‘ka’, etc., are produced and destroyed. However ‘It may be urged that sound is eternal, since we recognize that this is the same ‘ka’, and so on;’ But his explanation is that, in such instances we recognize the sound ‘ka’ as belonging to the same class of ‘ka’. and not that of its identity with first individual ‘ka’, and, in these circumstances even though sound ‘ka; is produced and destroyed but its recognition as belonging to the same class also is there, as in the case —‘The very medicine that I had made was made by another also’. 55b

Praśastapāda commenting on Vai.Śū. 2.1.27 and 2.2.21, in his Padārthadharmasaṅgraha explains how this kind of process takes place. According to him “the sound in the form of letters ...proceeds from the contact of the mind and soul as influenced by remembrances. (p.612). What constitutes such ‘remembrances’, Nyāyakuṇḍalī of Śrīdhara offers as further explanation : ‘the recognition of that ‘this is the same sound that I had heard yesterday’- can be explained as being similar due to similarity ; as in the case of the flame, (which is regarded to be the same, while as a matter of fact there is only a series of continually appearing and disapperarining series of distinct flames); specially as the fact of each sound (though similar) being distinct is proved by the differences in the degree of loudness or fairness of each individual sound.” 55c I may emphasise here that the syllabic sounds proceeding from from the contact of the mind and soul as influenced by remembrances, as explained by Praśastapāda and Nyāyakuṇḍalī, are modified or modulated sounds with the help of mind are of the discription of Nāda, similar to theory of Bhartṛhari. Hence ‘varṇātmaka dhvani’ of Naiyāyikas is by itself Nāda though they have not used the word ‘Nāda’, nor they accept the theory of Bhartṛhari.

How do these letters manifest cognition?
Vārtika of Uddyotakara points out that the theory of Naiyāyika', is in contrast to the 'Sphoṭavāda' of Grammarians. According to 'Sphoṭavāda', "Things are not signified by 'letters'; as letters cannot have any connection with anything, either singly or collectively. Nor can things be held to be signified by letters as aided by the impressions left by the preceding letters; because impressions can pertain to their own objects, and not to other things; hence the impressions of letters could bring about the cognition of Letters only, and not of 'things' And yet it cannot be denied that when the letters 'gha-ṭah' are pronounced, there comes about the cognition of the jar.

Hence the conclusion is that the letters concerned bring about the manifestation of a peculiar entity in the shape of 'Sphoṭa' - a kind of conglomerate Sound'-which in its turn brings about the cognition of the jar. That several letters should give rise to one 'Sphoṭa' is just like several words forming a sentence. Hence there is no such thing as 'word', denoting things." This theory of Sphoṭa is refuted by Vārtika of Uddyotkara by observing that - " In answer to this view we have the Sūtra laying down that the 'Word- by which things are denoted -- consists of the letters themselves, -- and 'not' of any such thing as 'Sphota'. As a matter of fact, when a thing is spoken of by means of verbal expressions, we do not perceive anything except certain letters...... And so long as we can explain the phenomena of verbal expression on the basis of the directly perceptible letters, there can be no justification for assuming of a super physical and purely hypothetical entity in the shape of 'sphota'."

Sphoṭvādins' further objection is that- 'if the letters are the only thing perceived then cognition of the thing signified by them may not be possible.' Meeting this objection Vārtika of Uddyotkara, stated that the perception of the last letter aided by "representative cognition' of forgoing letters makes such a cognition possible."

According to Tātparya of Vācaspati Miśra 'antyavarṇānapratyāyāt' means "the later ('antya, in relation to the first
perception of each letter) 'cognition of letters (varṇapratyāyaya), the comprehensive cognition in the form of 'remembrance', that follows after the perception of each of the letters.". In other words, according to the theory of Naiyāyikas, on the basis of the memory of their conventional denotative potency, the series of sound-letters, perceived (in a word) from beginning to end, (as represented by the last letter), signify the things they denote. They are established in the manner that a drum is proved by its sound. "It is through convention that the meaning of a word", like 'drum', 'sound', 'nāda', etc., "is understood". "There is no universal uniformity of connection between word and its meanings". That is to say connection between a word and its meaning is not everywhere uniform. However "there is necessity for the classification of Vedic speech differently."

According to the Bhāṣya of Vātsyāyana, on this Sūtra, "Vedic texts must be regarded as an 'instrument of right recognition'; just as is done in ordinary parlance [where every word serving a useful purpose is accepted as an instrument of Right Cognition". Vācaspāti Mishra's 'Nyāya-Vārtika-Tātparyatīkā gives the following examples: 'Fire is the antidote for cold (which is quite true)."Vedic texts are trustworthy, - 'because there is a classification of them on the basis of their purpose'- Vedic texts also are found to be serving diverse purposes, these should be trustworthy". Veda is thus reliable like the spell and the medical science because of the reliability of their authors."

Is there a modification of sound?

Gautama proceeds to investigate in order to find out whether there can be modification of Sound or not; since "there is a doubt, because there is mention of both 'modification' (vikāra) and 'substitution' (ādeśa), in the injunctions (upādeśāt) of the Śastras. For instance, the conjunction of two words, viz., 'dadhi' and 'atra', according to Grammarians, becomes 'dadhyatra' because 'i' of 'dadhi' in conjunction with 'a' of 'atra' gets modified and becomes 'ya' so as to read 'dadhyatra'. But according to some others 'i' of the word 'dadhi'
and 'a' of 'atra' are in juxtaposition and 'i' of 'dadhi' stands replaced by 'ya', and as such there is substitution of 'ya' in the place of 'i'.

According to Bhāṣya of Vātsyāyana, there is substitution. There cannot be modification for the reason that:

a) No continuity or persistence of letter-sound 'i' is perceived so as to cause modification of 'i' sound into 'ya'.

b) The two letters, 'i' and 'ya' are uttered with independent effort ('prayatna') at different parts of mouth: - in the case of 'i' there is open articulation like any other vowel but in the case of 'ya' there is 'slightly touched articulation' as is the case with semi-vowels. Hence there is no modification of letter 'i' into letter 'ya'. It follows that the letter 'ya' is substituted in the place of 'i'.

Would it not violate the rule of the grammar - that "'ik' followed by 'ach' becomes 'yan'. (Panini, 1.1.45 & 6.1.77) and as such there is modification? But Vātsyāyana says 'no'. According to him, the grammatical rule ('iko yanchi') itself means that "when 'i' and 'a' are in juxtaposition, we should use 'ya' in the place of 'i' and 'not' that 'i' is 'modified' into 'ya'. As pointed out by Ny.Su. II.ii.41, if the letters underwent modification, an increase of the bulk in the original material would have caused a corresponding increase of the bulk in the modification. In the instant case both short 'i' and 'ya' are of the same bulk. Moreover the modification always follows the original base. Eg. the banyan-seed gets modified into banyan tree. A Coco-nut tree cannot emanate out of a banyan-seed. Bhāṣya of Vātsyāyana further states that the letters cannot have modifications like gold into ornaments. In case of gold ornaments gold subsists as constancy. Hence ornaments can be converted back into gold. Moreover, no such conversion is possible, if the thing converted takes altogether different qualities or properties. For instance, curds cannot be reconverted into milk. Thus curds is altogether a different substance from milk. This illustration makes it clear that no 'constancy' (nityatva) subsists in milk and curds, (like gold in gold-ornaments) so as to convert one from the other. In the same way 'ya' is altogether a different bundle of
qualities than 'i'. Hence there is no modification of 'ya' into 'i' or vice versa. Hence the letter 'ya' in 'dadhyatra' is only a substitution to 'i'. Vārtika of Uddyotkara further clarifies that in all the cases of 'so called modification' there is either 'coming in of fresh properties' or 'suppression', but not any modifications of letters, as such. ⁶³

But according to Bhartṛhari and other grammarians, there is modification of Sound in syllables and words. (See Chapter 7). I will be considering both the theories critically in Chapter 9.

What is the nature of ‘Perception of Sound’ according to Nyāya-Vaiśeṣika Philosophers?

According to Nyāya-Vaiśeṣika Philosophers, sound being the quality of ‘ākāsa’ it inheres in it. It is produced by the causes like conjunction and disjunction. For example, Sound is produced (in the case of sound of the drum) by the conjunction of of ākāsa with drum; and this conjunction is aided by (and hence dependent upon) the force with which the stick is struck. Sound also produced by disjunction as in the case of separation of bammoo-fibre. In both the cases “the ‘contact’ (sannikarṣa) in the form of ‘inherence’ of the inherent (the genus inhering in sound which inheres in the ‘ākāsa’ of the Auditory Organ is necessary. ⁶⁴

In all cases of perceptions including that of sound the contact of sense-organs with mind also is necessary and it is this mind which, in fact establishes contact between the sensation of the sense organs with the objects of the external world. According to the notes appended by Vācaspati Miśra’s Nyāya-Vārtika-Tātparyaṭīkā, just as “the axe and such other instruments operate on their objects (wood, etc.,) only by getting at them, -- and the Sense-organs are instruments, --therefore the sense-organs must be operatuvie by getting at their object”, ⁶⁵ “the sense-mind contact is similar to the Mind-soul contact”. ⁶⁶ Thus according to Naiyāyikas, there cannot be perception of the objects unless the sense organs get at their objects. “Thus then it is
established that Perception is the ‘congnition’-‘produced by the contact of the Sense-organ with the object’. In the circumstance, Nyāya Sūtra defines perception as: “Perception is that knowledge (jñānam) which arises from the contact (sannikārṣe) of a sense with its object, which is determinate (avyabicāri), unnameable and non-erratic (un-erroneous) (indriyārthasannikarṣotpannam jñānamavyapadeśyamavyabicāri vyavasāyātmakaṃ ‘pratyakṣam’)

An objection is raised: “For what purpose is the word ‘congnition’ introduced into the definition of Perception?

The Naiyāyikas offer more than one reason by way of reply. Their strongest reason for including ‘cognition’ in the definition of perception is to avoid ‘erroneous cognition’. Bhāṣya of Vātsyāṇa explains such ‘erroneous cognition’ with the help of ‘mirage’ experienced during summer. - ‘During summer it often happens that the Sun’s rays mixed up with the heat-rays radiated from the earth’s surface; and the two together flickering at a distance come into contact with eye of the observer, who apprehends them as water’.

“What is that is ‘erroneous’? Does the error lie in the ‘Object’ or in the ‘Cognition’

Some Naiyāyikas say — “The ‘Error’ lies in the object: it is the object that appears as what is not; and it is on account if this wrong appearance of the ‘object’ that the Cognition is called ‘erroneous’. According to Bhāṣya this explanation is not correct. “Because the object all the while remains the same as what it actually is. In regard to the flickering rays of the sun, when there is arises the cognition of water, there is no error in the object; it is not that the ‘rays’ are not ‘rays’, nor that the ‘flickering’ is ‘not flickering’; what the error lies in is the ‘Cognition’; as it is the ‘Cognition’ which, instead of appearing as the ‘cognition of flickering rays’, appears as ‘the cognition of water’, -i.e., the Cognition of a thing as something
which is not; there being no water there’..... It has been so “by reason of some defect in the perceiving organ; hence it is in the ‘Cognition’, not in the object, that the error lies.” \(^{69}\)

How is it that the mind is not included in the definition of Perception?

According to Naiyāyikas the ‘mind’ is in fact an effective means of right recognition, but the nature of ‘mind’ is different from other sense organs. While other sense-organs “are effective on only certain particular objects, the mind is effective on all objects. [This affords the reason for Mind not being mentioned in the Sūtra along with the other sense-organs.]” \(^{70}\) In the result, we find that, according to Naiyāyikas there are six sense-organs with six kinds of senses, viz.,

1) the eye, (colour, etc., 2) the ear (sound), 3) the nose (odour), 4) the tongue (savour), 5) the tactual surface (touch of warmth, coldness, hardness, softness, etc., and 6) the mind (feeling of pleasure pain etc).

“Corresponding with the senses there are six kinds of senses six kinds of knowledge (perception), viz., the visual, auditory, olfactory, gustatory, tactual and mental (internal).

The contacts (sannikarṣa), translated as ‘intercourse’ by Vidhyabhusana, is of nature of the connection of the senses with its object, and it is of six kinds as follows:

1) Union (saṃyoga), e.g., in the visual perception of a jar there is union of our eye with the jar.

2) United -inherence (saṃyukta-samavāya), that is, inherence in that which is in union, e.g., in the visual perception of the colour of a jar there is a union of our eyes with the jar in which colour inheres.

3) United-inherent-inherence (saṃyukta-samaveta-samavāya), that is, inherence in that which inheres in what is in union, e.g., in the visual perception of the “colourness” (the gereric nature of colour) of a jar there is union of our eye with the jar in which
inhere colour wherein again abides ‘colourness’ in the relations of inherence.

4) Inherence (samavāya), e.g. in the auditory perception of sound there is the inherence of sound in the ether which pervades the cavity of our ear.

5) Inherent-inherence (samaveta-samavāya), that is, inherence in that which inheres, e.g., in the auditory perception of “soundness” (the generic nature of sound), there is the inherence of “soundness” in sound which again inheres in the ether of our ear-cavity.

6) Particularity (viśeṣaṇatā), e.g., in the perception of non-existence of a jar on a ground, there is a union of our eye with the ground which is possessed of non-existence of the jar.”

Since I am concerned with perception of sound, the type of contact (sannikarṣa) that is applicable would be vide items nos. 4 and 5. If some body were to utter sound ‘gha’ the same is hered by the listener because the sound ‘gha’ that inheres in ‘ākāśa’ (in ‘samavāya’- relation as its quality) produces the soundness (that inheres in sound by way of ‘samaveta-samavāya’- relation) in the ‘ākāśa’ of the ear-cavity of the listener. As the result the listener ‘perceives’ the sound ‘gha’ that inheres in the ‘akāśa’ of his ear-cavity. This sound ‘gha’ in linguistic convention is recognised as a letter-sound (varṇa). This letter-sound along with another letter-sound ‘ṭa’ takes the form of a word-‘ghaṭa’. And, according to convention it means a ‘pot’. If a person knowing the meanings of these words, utters a sentence - ‘ghaṭaḥ asti’ ‘there is a pot’ it would be a means of valid knowledge. In this manner “...the means by which or the process through which the valid knowledge is derived is called verbal testimony (śabda pramāṇa)....Any knowledge derived from a speech is called verbal knowledge (Śabda-bodhay)”.

Vidyābhūṣaṇa explains the nature of this speech process as under:

"In a speech — 'ghaṭaḥ asti' (there is a pot) —
are to be noted the following:

i) At first there is hearing of (śabdasya śravaṇam) words in the speech, viz., 'ghaṭaḥ +ḥ+as+ti'.

ii) Then there is the recollection of things (arthasya smarāṇam) signified by the words, viz., the recollection of "pot" signified by the word ghaṭa, of "one" signified by ¹ (modification of the first-case-ending u) of "existing" by ti, (a verbal termination of the third person, singular number, present tense)

iii) Afterwards there is the knowledge of the mutual connection of things thus recollected (saṃsarga-bodhaḥ), that is, the knowledge that a 'pot' as qualified by oneness is an abode of existence. The knowledge in this third step is specially called a verbal knowledge.

iv) Lastly there is self-consciousness (anuvyavāśāya) of the knowledge in the following form: "I am the possessor of the knowledge of pot which as qualified by oneness is an abode of existence."³²

The Gist of the theory of Nyāya-Vaiśeṣika philosophers:

Nāda is a quality (guṇa) of 'ākāśa' (ether) —
(Phenomenal theory of Sound) —

Nyāya-Vaiśeṣika philosophers also adopt the principles of Vedic Cosmic Vāk, like Sāṅkhya-Yoga, but they proceed from the phenomenal world to the cosmic world, in keeping with their theory of 'atomism'.

In Nyāya-Vaiśeṣika theory, Sound is a 'quality' of 'ākāśa'. Ākāśa' is one of the nine substances (dravyas). Of all the atoms,
Ākāsa’ is vibhu (an extensive and all pervasive substance). Qualities inhere in substance. The phenomenal objects derive their qualities from the ‘samavāya’ (inherence) relationship between the qualities and their basic substances. Even actions inhere in substance. They cause conjunction and disjunction, etc., because of the ‘adrśṭa’ principle (Ṛtam principle). Time and space (‘dik’) are other substances. ‘Posterior’, or ‘later’, ‘slow’ and ‘quick’, etc., indicate time, and ‘this’ and ‘that’ indicate ‘dik’. Ākāsa is similar to Greeks’ ‘gas like ether’ (similar to vedic ‘salila’) which functions as a material medium of sound. Sensation of sound is also a quality that is inherent in ‘ākāsa’. Perception, as a right means of knowledge, depends on the special character of the substance and its quality. Sound is caused by conjunction, disjunction, etc., and gets destroyed by any kind of obstruction. Hence Sound, being a quality of ‘ākāsa’, is produced and destroyed, and, as such, it is non-eternal. But Veda can be an ‘instrument of right recognition’, as a statement of a reliable person just like the statements of the persons in medical science.

Naiyāyikas use ‘śabda; for physical sound which is considered the quality of ‘ākāsa’. This sound is divided into: Dhvanyātmaka (physical sound produced by drum (bherī) and ‘Varnātmaka dhvani’ (syllabic sound). The syllabic sounds consciously produced by an effort in vocal organ in their application, would be of the nature of ‘Nāda’. The syllabic sound is the basic material for a letter, and, ultimately for the word. A word is a ‘particular combination of Sound’. Sound is a quality of ‘eternal ākāsa’, and, as such, there cannot be any modification of such sound but only a substitution; and ‘ya’ is a substitution in the word —‘dadhyātra’ for ‘i’ and ‘a’, and not a modification. Hence they do not accept the theory of modification sound of Bhartrhari. Each letter is (destroyed), by succeeding letter but with the help of the last letter, in a series, a comprehensive
cognition is obtained, on the basis of the memory of their conventional denotative potency.

Notes and References

1. Vai. Sū.-1.i.4
2. Vai. Sū.-1.4 and 17
3. Vai. Sū.-1.5
4. Vai. Sū.-1.i.12
5. Vai. Sū.-1.i.14
6. Vai. Sū.-1.i.17, 30
8. Vai. Sū.-1.ii.5-6
9. Vai.Sū.i.ii.12,13 &17
10. Vai. Sū..III.ii.10 and 18
11. Vai. Sū.2.2.6
12. Vai. Sū.2.2.6
16. Vai. Sū.4.1.2&3
17. Madan Mohan Agrawal : *Six Systems of Indian Philosophy (Sūtras of Six Systems of Indian Philosophy —with English Translation and Indices; (2001);Pub: Chaukhamba Sanskrit Sansthan, Delhi-110007
18. Nyā. Sū. 1.1.9
20. Nyā. Sū.1.1.11
21. Nyā. Sū.3.1.4
22. Nyā. Sū.3.1.18 & 3. 1.18 &21
23. Nyā. Sū.1.1.13)
25. Nyā. Śū.1.1.14
26. Nyā. Śū.1.1.15
27. Nyā. Śū.1.1.16
28. Nyā. Śū.1.1.17
29. Nyā. Śū.3.1.70
30. Nyā. Śū.3.1.71 III.i.71
31. Nyā. Śū.3.1.35,36,41
32. Nyā. Śū.3.1.63
33. Nyā. Śū.3.2.7
34. Nyā. Śū.3.2.34
35. Nyā. Śū.3.2.38-40
36. Nyā. Śū.4.1.10
37. Nyā. Śū.2.1.12
38. Nyā. Śū.2.1.15
39. ‘dvividhascayaṇ śabdo varṇātmako dhvanimātrāscac). (Bhāṣya of Vātsyāyana’
40. ‘srotagrāhyo guṇāḥ śabdaḥ, ākāśamātravṛttīḥ, sa dvividho-
dhvanyātmakā varṇātmakaśceti, dhvanyātmako bheryādau,
varṇātmakaḥ śaṃsakṛtabhāṣādirūpaḥ’ - (Tarka Sangraha-30).
41. Ganganātha Jhā : Volume II (foot note, at page 903);
42. ‘dvividhaścāyaṇ śabdo varṇātmako dhvainmātraśca’ [p.638- in his
Vṛtti (Amarendra Mohan Tarkatirtha: Nyāyadarśanaṃ with
Vātsyāyana’s Bhāṣya, Uddyotkara’s Vārtika. Vācaspati Miśra’s
Tātparyatīkā & Viśvanātha’s Vṛtti(Sanskṛt Text)— (2003);
Munshiram Manoharlal Publishers Ltd. New Delhi-110055.
43. Ganganātha Jhā : The Nyāyasūtras of Gautama with the Bhāṣya of
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Banarasidass Publishers, Delhi-110007.
44. Nyā. Śū.2.2.13
45. See pp.904-907- Gangānātha jhā
46. Gangānātha jhā Vol.II.p..910
47. Tatparya - Foot Note No.3 at page 915-Vol.II -Gangānātha jhā).
49. See pp.921-923 Jha)
50. pp. 923-930 Jha
51. Gangānātha Jhā Vol.II.p. 931) 
53. Strawson P.F : Chapter on "Sounds"; p.65-66; "Individuals" (An Essay in Descriptive Metaphysics); (1959); London Methuen & Co.Ltd. 36 Essex Street. w.c.2)
54. Gangānātha Jhā Vol. II-pp.952
55. Nyā Sū. — 2.2.19-21
55a Swami Madhavananda ; : Bhāṣā-Pariccheda of Viśvanātha Nyāya- Pañcānana; 165; p.266 (1996); Advaita Ashrama, Culcutta-700014
55b. ibid., (p.268)
55c Gaṅgānātha Jhā : Padārthadharmasaṅgraha of Praśastapāda (1952); pp.612-613 (1982); Chaukhamba Orientalia, Varanasi-221001)
56. Tr.para 3 of foot note-at p.1010, Vol. II- Gangānātha Jhā
57. Tr. at pp. 1011, Vol. II- Gangānātha Jhā
58. Nyā. Sū.2.1.55
59. Nyā. Sū.2.1.56
59a. Nyā. Sū.2.1.61
60. Gaṅgānātha Jhā- Vol.II; at pp. 861-862
62 Nyā. Su.2.2.40
63. Tr. at pp. 1009, Vol. II- Gangānātha jhā
64 Jhā p.121
65 Jhā Vol.I; p.132
66 Jhā. vol.I; p.127
67 Jhā. vol.I; p.133.
68 Jhā, Vol I, p.135
69 Jhā Vol.I; p.135-136
71 Satis Chandra Vidyabhusana — A History of Indian Logic (Ancient, Mediaeval and Moderen Schools; pp.411 & 412;p (2002); Motilal Banarasidass, Delhi-110007)
72 Ibid., p.444-445)

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