

C H A P T E R - I

IN DEFENCE OF SUBSTANCE (DRAVYA)

In our experience we distinctly see that there is a substratum, that is, a jar in which the qualities like colour, touch, size, etc., reside. Our experience presents us with two separate realities, the properties and their substratum, and they are different in their essence. This differentiation between the properties and their substratum is the basic principle of the Nyāya-Vaiśeṣika philosophers. A substance (dṛavya) is conceived as the substratum (āśraya) of its properties. Of course a substance itself may be a property (dharma). A whole (avayavin) is a property (dharma) of its parts (avayavas) in which it resides. Thus while a substance may be a property, a substratum of properties is necessarily a substance. An exception may however be pointed out that properties, according to Nyāya-Vaiśeṣika philosophers include universals (sāmānya), and the actions also. For instance, the universal 'colourness' (rupatva) resides in 'colour' (rupa) which is a quality. Here we find a substratum (āśraya) of properties other than a substance (dṛavya). But properties such as substance (in the form of avayavin), qualities and action in which the universal sattā (existence)

resides, are, for that reason, real objective properties. These properties reside only in a substance. The difference between the properties and their substratum, i.e., the substance, is that the properties are dependent for their existence on the substance. So long as the properties exist, they can exist only as the residing in their substance. But a substratum (substance) does not depend for its existence on anything else. Śrīdhara says that "apprehension on substanceness is just an apprehension of having independent existence"¹. Substance is defined by Kanāda as "possessing qualities and actions, and as an inherent cause"². Substance has obviously been conceived in this definition as the substratum (āśraya) or the repository, as the abiding ground of qualities and actions. We see that our thought instinctively serized on two different aspects of reality, that which is presented to our senses, the sensible qualities, and that which sustains these qualities in their existence, the substance. The colour, the form, the sound and the other qualities that we perceive cannot be imagined by us to float as homeless 'attributes of nothing;' we are obliged to refer them to something which

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1. Sva-prādhānyapratītir eva dravyatvapratītir. Śrīdhra, Nyāyakandali, with Prāśastapādabhāṣya, (Vizianagram Sanskrit Series, Benaras, 1895), P.13.
 2. Kriyāgunavat samavāyīkāranam iti dravya lakṣanam. Kanāda, Vaiśeṣikasūtra (Bibliotheca Indica, Calcutta), i.e., 15, 1.2.15.

holds them and is their abiding ground. This notion of abiding ground gives us the concept of substance. On the question of the separate existence of substance, the Buddhists join issue with the Nyāya-Vaiśeṣikas. The arguments of the Nyāya-Vaiśeṣika philosophers to prove the existence of substance over and above its qualities and the counter argument of the Buddhists to refute the reality of permanent abiding substance would constitute the subject matter of this chapter.

The Buddhist philosophers, like the phenomenologists of Europe, have denied the existence of substance and have employed almost identical arguments in their refutation of this category.³ According to the Buddhists, our understanding is limited to qualities. We get through senses a particular touch associated with a particular colour and external form, but we are never aware of anything which possess these qualities. The notion of an abiding, unifying substance as a single entity (for example, a rose) comprising these qualities, is only a figment of imagination. In fact

3. Vide Tattvasaṃgraha of Śāntarākṣita, (Gaekwad Oriental Series, No. XXX, Baroda, 1926), Verse No. 564-572, and Kamalśīla, Tattvasaṃgrahapañjikā (Baroda, 1926).

there is no justification for supposition of a so-called 'unitive principle' or 'substance'. When we perceive a rose we perceive some qualities like colour, touch and smell, but we never perceive a rose as a substance. Substance, therefore, is only an unnecessary and superfluous assumption. The idea of self-identical and unitive principle which exists in and through the different parts and which appropriates the diverse sensible attributes is logically unjustifiable. The so-called 'substance' as opted by the Naiyāyikas, urge the Buddhists, is nothing but the conglomeration or aggregate (samudāya) of different evanescent attributes without any permanent underlying principle called a substance (dravya).

But the Naiyāyikas, in defence of substance (dravya), argue against the Buddhists by saying that, as a matter of fact, our experience manifests itself in the shape of a synthetic judgement consisting of two items delivered by two separate sense organs in one whole. We say, 'The jar that I have touched is the same as what I see'. How can these two acts of touching and seeing refer to one and the same thing, unless the two sensible qualities are supposed to co-exist in the same substratum'? The Buddhist, however,

might argue that the so-called perception of the same substance as the underlying substratum of two different qualities obtained through different senses is illusory. But the Naiyāyikas at once retort that this illusory perception of an object is possible only if there is veridical perception of the same object at its back. For instance, even an ordinary illusion as the mistaking of a rope for a snake is possible only for a person who has previous experience of snake. And if this account of illusion be admitted, the reality of substance cannot be denied.

Moreover, there is absolutely no reason to deny the validity of this synthetic judgement, as it is not contradicted by its subsequent experience.

Again, the Naiyāyikas argue that if the perception of the so-called substance is nothing more than the sensible qualities alone, then the knowledge of identity in spite of the change of qualities would be unaccountable. To strengthen their thesis the Naiyāyikas have given the following example: The unbaked jar is black, but it becomes red when it is baked in a furnace. The cessation of blackness does

not entail cessation of old jar. Nor does the emergence of redness involve the creation of a new jar, as we have directly perceived the jar as an identity persisting in and through the persisting qualities. Thus, an abiding substance over and above the qualities exists.

The Buddhists argue that since substance and qualities are always felt together, they must be supposed to be identical. According to the Buddhists, simultaneous perception of two entities is the proof of their identity. If, for example, 'a' and 'b' are always perceived together, that is, if 'a' is never perceived without 'b' and 'b' is never perceived without 'a', then 'a' and 'b' are to be taken as identical. This is known as sahoupalambha niyama in the Yogācāra (Idealist) school of Buddhism. By applying this test of identity, the Buddhist idealists try to prove that the object (viṣaya) and the consciousness of object (viññāna) are one and the same. Now the same argument can be used by the Buddhists in general to demonstrate the identity of substance and its quality. The Buddhists might argue that since the perception of substance and its qualities always take place at the same time, i.e., substance can never be perceived without the qualities and vice-versa,

therefore, these two are to be taken as identical. Against this position the Naiyāyikas urge that it is possible to perceive a substance without its qualities. For example, an ill person perceives a conch-shell as yellow: its original quality, white, is not seen. Here the conch is perceived but not its quality 'whiteness'. This shows that perception of the substance is independent of that of its qualities.⁴

Here the Buddhists may again argue against the Naiyāyikas that, the perception of which the Naiyāyikas have mentioned is the case of an illusory perception. This, therefore, does not prove that conch shell is perceived but not its quality 'whiteness'. Moreover, we can verify the conch by means of touch and also by the pragmatic test. The sound that is normally associated with conchs is found to be produced by this particular one also. So, its presentation with an altered colour is no proof of its illusoriness. It should be maintained in conformity with the data of experience that, there is no mistake so far as the substantive element, viz, the conch is concerned, though the perception of yellowness is wrong.

4. Udayana, Ātmatattvaviveka, (Bibliotheca, Indica, Calcutta), P. 722.

In reply the Naiyāyikas point out that they agree with the Buddhist's opinion of concomitant relation between the quality and the substance. But there is no necessary relation between their perceptions. Because the non-perception of the condition (vyāpaka) does not entail the absence either of the concomitant (vyāpya) or of its perception.⁵ For example, the non-perception of fire does not argue the absence of smoke, or of its perception. So, though whiteness be regarded as the necessary condition of the conch, that is, thought there can not be conch which is without whiteness, the non-perception of whiteness would not necessarily imply the absence of conch, or even its non-perception. So, substance is something which is over and above its qualities.

The Buddhists may again raise the question that it may be true that the perception of the substance is not dependent upon its qualities, but the perception of the qualities is possible only when the substance is perceived. This simultaneous perception proves that the qualities and its substance are not different.

5. Na ca vyāpakanupalabdhimātrena vyāpyatādupalabdhī nivartate. Ibid, P.724.

But the Naiyāyikas answer that the concomitance of two perceptions as cited by the Buddhists is only one-sided (sama) and not reciprocal (asama), and therefore can not be a proof of identity of existence. For instance, an object is seen only when there is perception of light. But though the perception of light and the object are found to be identical, yet light is the condition only for which the object is seen. So, light and object are not identical by any means. For this same reason the co-existence (deśavaccheda) of substance and quality can not be pressed forward as a proof of their identity. Substance and quality may be cognized at the same time on account of the necessary concomitance of their conditions of perception and their coexistence may be similarly due to the concomitance of their condition of production. Thus, there is no incompatibility if substance and qualities are numerically different and at the same time they are co-existence, or objects of synchronous cognitions.⁶

According to the Buddhists, the indeterminate perception(nirvikalpaka) is the only valid perception, because it contains no conceptual or imaginary element in

6. Ibid, pp.725 - 726.

it (kalpanāpoḍha). Such perception immediately follows the sense-object contact and apprehends the objects in its unique, individual character (svalakṣaṇa) as free from association with name, class-character etc, (nāmjātyādya-smukta).⁷ The idea of substance enter into determinate (savikalpaka) perceptual knowledge only after a recollection of the class concept by means of a name has taken place. In other words, when perceptual context is determined and distinguished by linguistic symbol, and is thus subsumed under a class notion, which is purely an intellectual act (kalpanā) that the idea of substance emerges in our thought. So, the Buddhists would say that what the Naiyāyikas call sense perception of substance is nothing but a subjective construction of creative imagination of human mind (kalpanā). If the sense organs are competent to cognize the substance, urge the Buddhists, then why is it that the substance is not cognized at the very first moment, i.e., at the time when the indeterminate perception (nirvikalpaka) takes place ? So, the notion of substance can not be derived directly from sense-perception and is only a conceptual construction (vikalpa), having nothing

7. Ibid, PP.725 - 726

corresponding to it in the objective world. Hence, the Buddhists differ from the Grammarians (Vaiyākaranas). Because, according to the Grammarians, knowledge is always word-associated (śabdānubiddha), and the knowledge which is word-associated is determinate perception. And this knowledge is only real knowledge. Hence the Buddhists differ from the Grammarians.

In answer the Nyāya-Vaiśeṣika philosophers point out that they admit the Buddhist analysis of perceptual operation, but it does not prove that the indeterminate perception is the only reality. It is true that in the first instance the knowledge is indeterminate and it is expressed in the form of determinate judgement only after the verbal associations has taken place. But this does not take away from its sensuous character, for the contents of the determinate perception are solely determined by those of indeterminate perception.⁸ The Buddhists may again raise question that if the perceptual determinate knowledge is considered a proof of reality of its object, then why it

8. Tasmād Ya eva Vastvātma savikalpasya gocārātīṣa eva nirvikalpasya Śabdollekha vivarjitah II Jayanta Bhatta, Nyāyamañjarī, (Kāshi Sanskrit Series, 1936).

is not placed in the same category with imaginary construction ? The Naiyāyika's answer is that the difference between perceptual judgement and judgement of imagination is distinct and clear to all. One is asserted to be true and the other is not asserted so. This difference of character can be accounted for only if we suppose the former judgement to be directly conversant with reality, and this can be possible only if the sense organ continues to function.⁹ The recollection of a name is only one of the requisite conditions which together with the operation of the sense organ is responsible for the materialization of the perceptual judgement.¹⁰ For example, we can not get a determinate visual judgement by simply recalling the name, if we shut up our eyes immediately after the sense object contact.¹¹ The sense function is a necessary condition of even determinate perceptual knowledge. So, there is no reason for disbelieving the objective validity of determinate knowledge, and consequently for impugning the objectivity of substance, for the knowledge of it is directly derived from the objective datum.

9. Monorajyarialpanām kāmam asty apramānata yathāvastu pravṛttanam na tv asāv akṣajanmanām. Ibid, Part-1, P.90.

10. Ibid, P.89.

11. Na hi vacakasmarianānantaram akṣiṇi nimilya vikalpayati patoyam iti. Ibid.

II

In the previous section, we have tried to argue why the Buddhist position that the substance is identical with its qualities does not hold water and the Nyāya position that substance is a separate real entity over and above its quality seems to be more convincing than the Buddhists position. But in this section we are going to discuss the Nyāya-Vaiśeṣika theory of whole (avayavin) and part (avayavas), which is stated to be one of the main planks for the defence of substance. We shall deal with this theory in details in a separate chapter, but here we shall try to preview the problem.

The fundamental difference between the Buddhists and the Nyāya-Vaiśeṣikas lies in that, while the Buddhists discard any real principle of synthesis in the external world, the Nyāya-Vaiśeṣika philosophers admit two such synthetic principles which are objectively real, viz, a substance (dravya) and a whole (avayavi). These two of course are not separate categories, because a 'whole' is also a 'substance'. The substance in the form of the whole (avayavidravya) is distinct and different in essence from the parts which it holds together. It is the basic doctrine of the Nyāya-Vaiśeṣika philosophers that the parts (avayavas) and their 'whole' (avayavin) are two different substances. The parts,

in their turn, are also avayavins in respect of their own parts and so on, till we reach the atoms which are only parts and themselves have no parts, and therefore, they are not avayavins. It may, however, be noted that although a substance in the form of avayavin(whole) is the unifying principle of the avayavas (parts), the conception of avayavas and that of 'substance' (dravya) are not identical. The concept of substance has a wider scope and includes atoms and eternal entities like ether, etc., which are not avayavins. So far as the material objects of ordinary experience are concerned they are all effect substance (kārya-dravya), and as such, they are avayavins, i.e., the unifying principles of their parts. A 'substance' (dravya) in the form of avayavin(whole) is thus a unifying principles.

Dharmakīrti, a celebrated Buddhist logician of the seventh century A.D. (638 A.D.), initiated a new phase in the discussion of the theory of the whole by introducing in his Pramāna-Vārtika three difficulties, which along with one or two more added later, provided basis of controversy between the Buddhists and the Nyāya-Vaiśeṣika philosophers, and this controversy reached a climax in Udayana's treatment in his Ātmatattvaviveka.

Dharmakīrti's three difficulties are the following:

(1) According to the Nyāya-Vaiśeṣika a person's body is a whole of which his hand is a part. Now it is possible for a hand to move without the whole body moving, as we can easily see; yet, on the Nyāya theory, since the whole is a unity, it must move if a part of it does. Therefore, we are led to a contradiction: the body both moves and does not move. (2) An extended object may be partly covered up by another one; Yet, since the whole is unity, it follows that it is both covered up and not covered up. (3) One whole, say a cloth, may be partly red and partly some other colour. Yet, since the cloth is one thing, it is both red and not red at the same time.

Udayana discusses these three arguments and adds two more: (4) A unitary thing can occupy only one place, for otherwise it will have several parts corresponding to the several places it occupies. Yet, patently the wholes such as a pot and a cloths, which the Nayāyikas call unitary do occupy several places. Therefore, one thing both does and does not occupy several places, which is contradictory. (5) The fifth antinomy which is raised by the Buddhists is as following: The whole as an extendend thing, it is

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contended, may be both perceived and not perceived by the same person at the same time and in the same place; for, when it is perceived in connection with one part, it is not perceived in connection with another part which lies outside the visual field.

Some Nyāya-Vaiśeṣika philosophers namely, Vācaspati-miśra, Śrīdhara and Udayana have attempted to give answer to the above alleged Buddhist difficulties in the following way: (1) So far as the first difficulty is concerned, the Naiyāyikas opine that there is no contradiction involved here, for the opposite properties movement and absence of movement - do not characterize one and the same entity. The movement is found in the hand, and the absence of movement in the body as a whole. Udayana, a eminent Nyāya philosopher, asserts in this context that it is not the fact that, the movement of the part necessarily entails the movement of the whole, for the whole and the part are different entities which owe their movements to different causes; and these causes do not always synchronize.¹² The movement of the hands, for instance, is due to a particular

12. Udayana, Ātmatattvaviveka, (Bibliotheca Indica, Calcutta), P. 586.

kind of volitional impulse, and that of the body to another. One may will to move the hand but not the whole body. The Buddhist may object again that if the whole does not move when a part moves, it means that the whole is composed of two parts, one of which is in motion and the other is not. But such a whole can not exist, because, the moving part would inevitably be disjoined from the motionless one, and this would result in the snapping of conjunction between the two parts and in the disruption of the whole composed of them. But the Naiyāyikas would reply that this objection is not valid. Because, according to them, a moving part necessarily gets disjoined from another part in the whole. There are, according to the Naiyayikas, two types of disjunction which may be caused by movement - one which is destructive of such conjunction of parts as contributes to the formation of a whole, and the other which is not destructive of such conjunction and which means only the disjunction of a part from the space previously occupied by itself. These two types of disjunction are mutually exclusive and cannot simultaneously brought about by a single movement in a part. Thus when there is a movement in the hand, it results only in its change of position, and not in the severance of its connection with the body. (2) The Naiyāyikas have easily answered the second

objection of Dharmakīrti, i.e., a thing is covered and uncovered at the same time. According to the Naiyāyikas what is covered is one part and what is not covered is another part, so that the contradictory predicates are really related to two distinct entities, and not to the whole which is different from either or both of them. Vācaspati Miśra opines that the whole may be perceived even when a part is covered, for the other part being not covered is exposed to the view.¹³ But a question may be raised here by the Buddhist: Why does not the whole look as much extended when a part is covered as when no part is covered, if it is the same whole that is perceived in both the cases? The Naiyāyika's answer is that even the whole is perceived, the perception of its specific magnitude depends on the perception of a part that is sufficiently large. It cannot be definitely said how large the perceived part is required to be, the only thing that can be said is that it should be large enough to make the perception of the specific magnitude of the whole possible. So, when an appreciably large part of the whole is covered, the true magnitude of the whole is not perceived owing to

13. Vācaspati Miśra, Nyāya Vārtikatātparyatikā (Vizianagram Sanskrit Series, Benares), P.265.

the lack of the requisite conditions.¹⁴ (3) In answer to the third objection of Dharmakīrti, i.e., the same whole being coloured and not coloured at the same time, Vācaspati Miśra said that there is no contradiction involved here because there is really no redness in the whole or in any part of it. If the whole or a part appears as red, that is because of its conjunction with a colouring substance (rāgidravya saṁyoga), by which its true colour (not-red) is eclipsed; the perception of redness in it, therefore, is as illusory as the perception of redness in a crystal associated with a red flower.¹⁵ (4) The fourth argument, i.e., or one thing occupying and not occupying several places, has ramification beyond the context of a discussion of wholes, since it relates to the attitudes of Buddhists and Naiyāyikas on the problem of universals as well. The Buddhists find it contradictory that one thing can occupy more than one place as in the cases of universals as well as wholes. The answer of the Naiyāyika is that things do come into contact with more than one thing at once. Nyāya-Vaiśeṣika philosophers answer this objection in their atomic theory, according to which, atoms can do just that, that is, they come into

14. Udayana, Ātmatattvaviveka, (Bibliotheca Indica, Calcutta), P.588.

15. Vācaspati Miśra, Nyāyavārtikatātparyatīkā, (Vizianagram Sanskrit Series, Benāras), Page.267.

contact with several other atoms at once. (5) As an answer to the fifth objection of the Buddhists, the Naiyāyikas give the following reply. The Naiyāyikas point out that, if one part is perceived and another is not, this does not imply that the whole is both perceived and not perceived. It is not necessary for the perception of the whole that all its parts should be simultaneously perceived. Hence, when one of the parts is perceived, the whole is also perceived, although the other part may remain unperceived. There is thus no antinomy of the nature indicated by the Buddhists, for the contradictory characteristics are predicated of two distinct parts, and not of the whole composed of them.¹⁶

According to the Nyāya-Vaiśeṣika philosophers, the whole (avayavin) is an effect substance (kārya-dravya) of which the parts (avayavas) are cause. Now, an objection has been raised by the Buddhists against the Nyāya-Vaiśeṣika position: How can cause and effect as 'parts' and 'whole' exist simultaneously? It does violence against the principle,

16. Udayana, Ātmatattvaviveka, (Bibliotheca, Indica, Calcutta), P. 587.

i.e., two gross material substances (mūrta dravyas) can not occupy, the same space (deśa).¹⁷ The Buddhists point out that impenetrability (sapratighatva) is a necessary attribute of matter, which means that the space occupied by one matter can not be occupied by another. To reply the above objection the later Naiyāyikas differ from the early Naiyāikas. According to the early Naiyāikas, the effect-substance (avayavin) is different from its parts and emerges from them as a new substance,¹⁸ but the simultaneous existence of the cause with the effects is not postulated. Vātsāyana has clearly stated that new effect-substance (kāryadravya) is produced only when the cause-substance (kāraṇa) undergoes a different arrangement (Vyūhāntara), it is inferred that the cause is destroyed when its effect is produced.¹⁹ The cause (kāraṇa), in the theory of the earlier Nyāya-Vaiśeṣika school, is conceived in the form of 'arrangement of parts preceding the effect (kārya). For example, in the case of cloth, the previous arrangements of threads is its cause which is destroyed when the cloth is produced. The Buddhists

17. Mūrtanām-samāna-deśatā-virodhāt. Jayanta Bhatt, Nyāyamañjarī, (Kashi Sanskrit Series, 1936), Part-II, p.66. This dictum is also referred to in other works of Nyāya-Vaiśeṣika schools. i) Śrīdhara, Nyāyakandali, (Vizianagram Sanskrit Series, Benaras), p.148, (ii) Viśvanāth, Nyāyasiddhāntamuktābali (Nirnaya Sagar Press, Bombay), On verse No.113.

18. Dravyāntarotpatti-pakṣa. Vātsāyana, Commentary On Nyāyasūtra (Calcutta, Sanskrit Series, Calcutta) Part-II, ii.16.

19. Vyūhāntarād-dravyotpatti, drasānam purva-dravya nivṛtter anumānam. Gautama, Nyāyasūtra, (Bibliotheca Indica, Calcutta) Part-II, ii.16.

may contend again that if the cause is destroyed before the effect comes into existence, it will mean that the effect is produced from the destruction of the cause, i.e., from the void (sunya). Vātsāyana answers the above Buddhists contention by stating that, when the old arrangement of parts is distributed and, consequently, the cause substance which was born of that arrangement disappears, the effect is produced from the new arrangement of parts which comes into being and not from the void.²⁰ Thus, the early Naiyāyikas have established that although the cause-substance is destroyed, its parts arranged in a different way produce the effect. It may be noted here that, the effect, according to early Nyāya-Vaiśeṣika theory, is not merely a new arrangement of parts but is a new substance produced by that new arrangement. Thus, the early Nyāya-Vaiśeṣika philosophers refuted the Buddhists objection by asserting that, the effect produces after the destruction of the cause but the causes (avayavas) leave its parts behind; it is not any case of destruction without any kind of continuity (niranvaya-vināśa avayavins). So, the problem of existence

20. Vyāhatā-Vyūhānām avayavānām purva-Vyūha-nivṛttam vyūhāntarād dravya-niṣpattir nabhāvāt. Vātsāyana, Nyāyabhāṣya (Viziamagram Sanskrit Series, Benares), Part-IV, i. 18, p. 939.

of two gross substance in the same space does not arise. But the later Nyāya-Vaiśeṣika philosophers do not accept these early Nyāya theory. They refute the Buddhists objection - simultaneous existence of two substances (avayavas and avayavin) in the same space(deśa) - by saying that, it is the fact that two gross material substances (mūrtadrayas) can not occupy the same space (deśa). But the term 'deśa' in the Nyāya-Vaiśeṣika dictum does not mean space, but substratum (āśrya). And substratum of an object, according to the later Nyāya-Vaiśeṣika philosophers, is in the form of its parts(cause) in which it resides. For instance, threads are the substratum of the cloth, and substratum of the threads is their cause, i.e., fine fibres of the cotton(aṁsus). Thus the cause and the effect have not the same substratum. It would appear that the objection has been met by the peculiar Nyāya-Vaiśeṣika theory that an effect resides in its cause or a 'whole'(avayavin) resides in its parts(avayavas). The real problem of the same space being occupied by two gross material substance is, however, not solved. The answer from the Nyāya-Vaiśeṣika standpoint would be that the dictum that two gross substances cannot occupy the same space is not applicable in respect of two gross substances of which one resides in the other by inherent relation(samavāya).

III

In the foregoing sections, we have discussed the logical necessity of postulating substance as a distinct category apart from the qualities and whole apart from the parts along with the objections of the Buddhist philosophers. In this section we shall be concerned with the possibility of formulation of a definition of substance. In other words we shall discuss here with such question as: is a definite conception of substance possible? Or what is the common feature of the things called substance (dravya) by the Vaiśeṣika philosophers? An ordinary unthinking man can not be expected to have a conception of substance wide enough to comprehend all the known and unknown substances coming under it. Nor again, can the enlightened convention of philosophers be proof of the possibility of such a concept, because the convention of one school is found to be irreconcilably at variance with that of another. For example, the Mimāṃsaka is convinced that darkness (tamas) is a substance, and the Vaiśeṣika is equally convinced that it is only the negation of light, and not a substance at all. So, neither the popular, commonsense view of things nor the philosophical interpretation of them can be relied upon to throw light on the essential nature of substance which is universally present in all the substances known to us.²¹

21. Na hi laukika parikṣā kasaśādhārani dravya kāraṇagatcent matiḥ paravipratipattyāvā sandehas tatra. Śankara Miśra Kanṭhābharana, a commentary on Nyāyalīlābatī (Chowkhamba Sanskrit Series, Benares), p.89.

Here we propose to deal with the various definitions suggested by different thinkers of the Nyāya-Vaiśeṣika school and to critically evaluate them in the light of the criticism advanced by the Buddhists and other critics.

We have seen previously that substance is a kind of entity in which the attributes inhere but which itself is distinct from its attributes. But this definition of substances advocated by the Nyāya-Vaiśeṣikas was severely attacked by the Buddhist phenomenologists. The problem of the definition of substance has, however, been approached from a different angle by Śrīdhara, the author of Nyāya-kandali. According to Śrīdhara, substance, apparently, means more than merely something which has qualities. It means something that is felt as self-subsisting, something that exists in its own right. For a definite idea of substance, it is necessary that there should be posited a synthetic concept of substancehood (dravyatvajāti) to which all specific substances can be affiliated on account of their possession of some fundamental common character. But no community of nature, apparently, subsists between a lump of clay and a lump of gold both of which are supposed to be substances. Now, the question is what is the common

character of these sepcific substances through which substancehood reveals itself and makes itself intelligible to us ? Śrīdhara answers that the notion of substancehood is arrived at through a notion of self-subsistence.²² A particular substance may have qualities and action widely divergent from those of another substance, and may, for that reasons, look unlike the latter very much. But this does not affect their essential similarity of character based on the fact that every substance is felt as self-subsisting, as compared with its qualities and actions which can not be supposed to exist without being supported by something that exists in its own right; that is, by substance.

This view of substance has been severely criticised by Citsukhāchārya. He asks: what is this self-subsistence that is supposed to be the criterion of substancehood ? Is self-subsistence (svātantrya) equivalent to existence without a substratum or the capability of a thing to be perceived independently of the perception of its substratum²³ ?

22. Svaprādhānya pratītir eva dravyatvapratītiḥ. Śrīdhara, Nyāyakandali, (Vizianagham Sanskrit Series, Beneras), p.13.

23. Citsukhācārya, Citsukhī (Tattvapradīpikā), (Nirnayasagar Press, Bombay), P.178.

In the first alternative, all composite wholes, i.e., material substances will cease to be substance, since everyone of them is dependent for its existence upon the parts that constitute it.²⁴ In the second alternative, sound and touch of air, which are admitted as qualities by Nyāya-Vaiśeṣika philosophers, will transpire to be substances, since they are perceived even when their substrate, i.e., ākāśa and the air in which they respectively inhere, remain unperceived.²⁵ Self-subsistence, therefore, in any sense can not be held to be true criterion of a substance.

The Vaiśeṣika philosophers say in reply that substance are of two kinds, namely, eternal and non-eternal. Atoms, ākāśa, time, space, mind, and soul are eternal substances, whereas the composite material bodies are non-eternal substances. Eternal substance are, by their very nature, self-subsistent, in an absolute sense. They exist in their own right, i.e., independently of any other thing. Non-eternal substances, however, can not claim such absolute self-subsistence because they are constituted of parts in

24. Nayanaprasādini of Pratygrūpabhāṣyat, a commentary on Citsukhī, (Nirnaya Sagar Press, Bombay), P.77.

25. Ibid, P.178.

which they inhere.²⁶ But even a composite material body, though sustained in its existence by its constitutive parts, is felt as self-subsisting in relation to its own qualities and action which inhere in it. Substancehood thus implies the character of self-subsistence (either absolute or relative) that we perceive in things marked by the possession of qualities and actions. The instance cited by Citsukha in connection with the second alternative interpretation of self-subsistence are beside the point, and the undesirable consequences alleged by him arise not so much from any defect in the definition as from the Sceptic's eagerness to do away with the concept of substance altogether. As a matter of fact the denial of substance on the ground of its imperceptibility will, in some case, inevitably lead to the substantializing of its perceptible qualities, and this is what we find in the cases of sound and touch of air.

Again, Kanāda, the author of Vaiśeṣikasūtra, defines substance as that which possesses action and qualities, and is the inherent cause.²⁷ Here we get three distinct characteristics (lakṣaṇa) of substance. These three characteristics

26. The Bhāṣya of Prasastapāda, (Vizianagram Sanskrit Series, Benares), PP.16 - 21.

27. Kriyāgunavat samavāyī kāraṇam iti dravya lakṣaṇam. Kanāda, Vaiśeṣikasūtra, (Bibliotheca Indica, Calcutta), P.1.i.15.

are first, substance is that which possess action or motion (kriyā), secondly, substance as possessed of qualities (gunattva) thirdly, the substance is that which is inherent cause or material cause (samavāyikāraṇa). Now, we shall discuss these three characteristics and their defects separately. First, substance is that which possess action or motion (kriyā). This definition of substance is too narrow, as it fails to include within its scope certain recognised substances which are immobile by their very nature, e.g., space, time etc. Motion of course need not be actual in all cases; even the mere possibility of motion in a thing entitles it to be classed as substance. But motion, whether actual or potential, is only an incident of limited magnitude (mūrtatva), and can not belong to ubiquitous substances like ākāśa, time etc. which are not capable of changing their position. So, the definition of substance by means of property of motion is not applicable.

Secondly, some philosophers of the Vaiśeṣika school define substance as 'that which is the substratum of qualities'.²⁸ And this definition has been formulated on the

28. Guṇāśraya dravyam. Vallabha, Nyāyalīlābati (Chowkhamba Sanskrit Series, Benares), P.752.

basis of Kanāda's reference to the possession of qualities (gunavattva) as one of the distinctive characteristics of substance. This definition, according to Citsukha, is not acceptable, because it excludes a substance at the first moment after the production, when it remains destitute of qualities.²⁹ According to the Vaiśeṣika theory, substance is the inherent cause (samavāyikāraṇa) of its qualities, and when cause is the antecedent of the effect, then substance will be its antecedent to its qualities and remains qualityless at the moment of its origination. So, this definition of substance, i.e., substance is the substratum of the qualities, suffers inconsistency. To avoid this difficulty Vallabha, the author of Nyāyalīlāvati, has given a new definition. According to him, "the substance is that which is never the substratum of the absolute non-existence (atyantābhāva) of quality as such".³⁰ In other words, the actual existence of quality is not intended as the definition, but even the potential existence of quality will do. This definition of Vallabha does not apply to substance at the

29. Utpannamātram dravyam kṣanam agunam tisthti'ty agnikārād avyāpheḥ. Citsukhāchāryā, Citsukhi (Nirnaya Sagar Press Bombay), P.178.

30. Gunāśrayo dravyam. Tatra yadyapi sambandha na sanatānaḥ tatta'pi hā tyantayogavyavaccheda lakṣanārthaḥ. Vallabha, Nyāyalīlāvati, (Chowkhamba Sanskrit Series, Benares), P.753.

moment of its origination. But this definition has also been criticised. This definition will extend to absolute non-existent itself. As a thing can not function as its own substratum, the non-existence in question cannot be the substratum of the same non-existence.³¹ So, the definition of substance as that which is not the substratum of the absolute non-existence of quality is found to be too wide, be contended that absolute non-existence is, like knowability or namability, a fact, of which negation is not predicable in any context (kevalānvayin) and which therefore is necessarily present in every thing including itself; for such a contention implies its presence in substance as well, so that even substance comes to be the substratum of the absolute non-existence of quality.³² Again, it may be said that the whole objection is based upon a right adherence to the assumption that absolute non-existence is a unitary principle, although, as a matter of fact, there is no conceivable logical bar to the possibility of a plurality of non-existences. So one non-existence can be the substratum of another non-existence, whereas a substance is never the

31. So'pi hi gunavattvātyan tabhavs tasyā' nadhikaranam, Svāsya svasminnavrtteḥ. Citsukhāchārya, Citsukhī (Tāttvapradīpikā), (Nirnaya Sagar Press, Bombay), P.176.

32. Na ca prameyatvādivat kevalānvayitvam yen.... svavrtlita syat, Kertanvayitva ca bhagnam dravyalakṣanam. Pratyagrūpabhagava, Nayanaprasādini, (Nirnaya Sagar Press, Bombay), P.176.

substratum of the non-existence (atyantābhāva) of qualities. But his defence too is not satisfactory. It is observed that though one non-existence can be conceded to be the substratum of another non-existence, the expression 'non-existence of quality' as an element in the definition of substance, suffers from ambiguity, which must be cleared to make it intelligible. The question may crop up that, does the non-existence refer to any one of the qualities definitely, or all the qualities collectively? If the absence of one or the other specific quality is intended, then the definition will be too narrow. As the qualities are numerous, the presence of one particular quality in a substance is consistent with the absence of another, and the terms of the definition will exclude the substance in question from its purview.³³ Thus, if substance be defined as 'that which is never the substratum of the non-existence of one definite quality, say, colour (rūpa), air (vāyu), which is marked by the possession of the quality of touch (sparśa-guna) will be excluded from the class of substance on the ground that the quality of colour is never predicable of it. If however, it is mentioned that the expression 'non-existence of quality' means the non-existence of each and every one of the qualities, then

33. Ibid, P.176.

the definition will be impossible, as we can not conceive of an entity which is never the substratum of the non-existence of all the qualities, that is, in which all the qualities are always present. The affirmation of all the qualities in a substratum would be intelligible if each individual substance could be supposed to be always possessed of all the qualities.³⁴ The definition may of course change its implication if by the 'non-existence of quality' we should understand not the absence of all conceivable qualities, but the absence of any one of them. But this too will not improve upon the former position because the meaning of 'anyone' is absolutely indefinite. Every member in a class of existents may be designated by the term 'anyone' and so the inclusion of this term in a definition is extremely misleading. It makes the definition indefinite and thus defeats its very purpose.

From these above two definitions we get no clue to the existence of the substance universal (dravyatva jāti) which must be posited to make possible our conception and linguistic usage of substance as a category. Our experience also is more or less non-committant in this matter, for, in

34. Ibid.

the bewildering variety of specific substances we fail to discover any community of nature which may indicate the presence of substance universal in all of them. So, a positive, independent proof of the substance-universal has to be pointed out, and this is sought to be given in a new definition, viz. that substance is that which is the inherent or material cause (samavāyikāraṇa). This we get in the third aspect of the definition of substance proposed by Kanāda.

We have seen already that a quality or an action can never be an inherent cause of anything because, by its very definition an inherent cause is that in which the effect directly inheres. An effect, be it substance, quality or action, must have a substratum to inhere in, and this substratum is invariably a substance. Now, one question may arise here: what is the effect that can be universally referred to substance as its inherent cause? The effect can not be a specific quality (viśeṣaḡuna) like colour or sound, because, substance like space and time have no specific quality, and so the definition would not extend to them. This is why, conjunction(saṁyoga) or disjunction (vibhāga) has been suggested to be the effect which can be

affiliated to all substances irrespectively.³⁵ Even eternal and ubiquitous substances must come into the relation of conjunction with, or disjunction from, another substance. Conjunction and disjunction being qualities must have a substratum in which they can inhere as their cause, and this inherent cause is substance. So, the definition of substance as the inherent cause of conjunction or disjunction is complete, and does not exclude any substance out of its scope. Now, the relation of causality is conceivable between the things only if each of them is found to be possessed of a definite character. A cause is always a definite entity, and so also the effect. The Nyāya-Vaiśeṣika philosopher does not believe in the existence of the uncharacterized simples. If an entity without definite character is supposed to function as a cause, there will be no possibility of restricting the affirmation of causal relation to only legitimate cases of such relation.³⁶ When, for instance, we say that timber is cause of the table, what is it that we should understand by affirming timber as the cause? Certainly timber is understood not merely a substance, that

35. This point has been introduced first by Vallabha and developed later on by Viśvanāth. Vide Nyayalīlābatī of Vallabha, (Chowkhamba Sanskrit Series, Benares), pp.94 and 97, and Siddhāntamuktāvalī of Viśvanāth, (Nirnaya Saḡar Press, Bombay), pp.64-65.

36. Avaśyam **h**y avaccedakena bhavihavyam, anyathā ksmikatapatteḡ. Śaṅkara Miśra, Upaśkāra, (Bibliotheca Indica, Calcutta), I.ii.5.

is, something, which is different from all that is not substance, but, as a definite substance with a distinctive character (timberness). If it were not so, the cause of the table might as well be affirmed to be any other substance just on the ground of its being a substance. This also applies to the effect. So causality is intelligible only with regard to a fact having a definitive character. This definitive character in a thing not only makes it what it is not, but also determines the exact function that it should be capable of exercising; in other words, its specific function (including the causal function) is entirely dependent upon what constitutes its specific qualitative content (dharma). This being the case, the definition of substance, as the inherent cause of conjunction or disjunction, necessarily pre-supposes that this inherent causality must have a definitive characteristic of the causal entity as its determinant (avaśchedaka), and that the characteristic is nothing but what is called the substance-universal. This universal should be a logical necessary, be supposed to be present in all things which are found to be the inherent cause of conjunction or disjunction.³⁷ The postulation of

37. Kāryasamavāyikāranatavaśchedakataya saṃyogasya vibhāgasya na samavāyikāranatāvaśchedakatayā dravyatvajātisiddheḥ. Viśvanātha, Siddhāntamuktāvali (Nirnaya Sagar Press, Bombay), pp. 64-65.

the substance universal as a determinant of inherent causality is thus an inescapable logical necessity, otherwise every individual instance of inherent causality would be an isolated, self-determined fact, and there would be no criterion to determine why this causal function should be exercised by some reals and not by others. It, therefore, follows that such reals alone are in a position to function as inherent cause participating in the substance-universal and are determined and characterized by it.³⁸

An objection has been raised by the Buddhist Phenomenalist against this definition of substance by reference of causality. Causality, it is urged, is only an accidental character; as it can come into operation only with reference to an effect. An entity can be characterized as a cause only when an effect is produced, and an event being an occasional event, the causality is an occasional characteristic. It can not be supposed that there might be eternally existing effects, because the very supposition is bound to lead to absurd consequences. An eternally existent fact can not call

38. Kāryāśrayatvam api sāmānyāniyatamo navasu eva na syāt. kāranatvam hi sāmānyena niyamate. Udayana, Kirnābali, (Benares, Sanskrit Series), p.33.

for a cause of its own, because a cause is necessary only to bring into existence something not existing before. So, the Buddhists opine that, the definition of substance by reference to causality does not seem to be wholly satisfactory.

This difficulty, however, cannot make the knowledge of the substance-universal, as the universal character of all substances, impossible of realization. Causality is only the medium through which we come to the knowledge of the substance-universal, and even if the latter be a wider concept, there will be no difficulty in seizing hold of it as the constitutive ground of substance as a class. The concept of inherent causality, we know, is not intelligible without a determinant and as this determinate, again, cannot be anything else than the substance-universal, the definition of substance by inherent causality has got its utility. In fact, apart from the evidence of perception, the possibility of substancehood as the universal character of all substances can be inferred only from causality. Although, causality is not a necessary concomitant of substancehood, being a temporal determination, still it is the unfailing means of our knowledge of the latter as the universal that functions

as a determinant of causality. That substancehood does not necessarily co-exist with causality and is therefore, independent of this functional characteristic, is not denied. The Buddhist objection that, causality is only an accidental determination, therefore, does not stand in the way of our knowledge of it. The inherent causality, which is found in all substances, is thus an independent proof that established the existence of the substance-universal as its determinant.

From this discussion we can conclude that the definition of substance by means of inherent causality is possible and useful. More widely, the definition of substance which has been given by Kanāda, is more justifiable and logically acceptable definition than that of the Buddhists.

IV

In the previous section we were concerned with finding a satisfactory definition of substance as given by Nyāya-Vaiśeṣika philosophers. In the present section we shall try to discuss various types of substances as admitted by them. Finally we shall also discuss the theory of atomic substances (paramānuvāda) as advocated by the Nyāya-Vaiśeṣika philosophers and the Buddhist critique of it.

The Nyāya-Vaiśeṣika philosophers have admitted nine different substances, each exclusive of the rest, but all ultimately conformable to the notion of substance as such. They are following :- earth(prthivī), Water(ap), fire or light(tejas), air(vāyu), ākāśa, time (kāla), soul (ātman) and mind (manas).³⁹ Among these nine substances (dravyas) recognised by the Nyāya-Vaiśeṣika philosophers five of them, namely, earth, water, fire, air and ākāśa are material elements (bhūtāni); and the rest four, i.e., space (deśa), time(kāla), mind(manas) and soul(ātman) are non-material, (though not necessarily

39. Kṣhityaptejomarud byomkāla dig-dehināu manah |
Dravyānyth gunā rūpaṁ rasa gandhatataḥ param.II,
Viśvanāth, Nyāyasiddhāntamuktāvalī, (Nirnaya Sagar
Press, Bombay), Verse No.3.

spiritual, in the sense consciousness not being to essential quality of them).

The physical order has been explained in the Nyāya-Vaiśeṣika system in terms of the five physical substances - earth, water, fire, air and ākāśa. Every physical substance (bhūta-dṛavya) has some specific qualities perceptible to an external sense.⁴⁰ The specific qualities of earth, water, fire, air and ākāśa are odour, taste, colour, touch and sound respectively. The soul, no doubt, has a number of specific qualities, viz, consciousness, pleasure, pain, etc.⁴¹, still it can not be classified as bhūta, as these qualities can be apprehended only through the operation of the mind which is the internal sense-organ (antaḥkarana). A physical substance or bhūta, therefore, can also be defined as a substance possessing some specific qualities which is absent in the soul(ātman).

Among the five physical substances, ākāśa differs from others in many important respects. Ākāśa is a non-corporal(amūrta) substance and therefore possesses unlimited

40. Praśastapāda, Bhāṣya, (Vizianagram Sanskrit Series, Benares, 1895), p.22.

41. Ibid, p.24.

magnitude, it is also devoid of tactility(sparsá). The other four material substances, on the other hand, are limited in magnitude and characterized by tactility with all its implications. These substances, again have the capacity of producing composite substance out of themselves, i.e., of being their formative causes(samavāyikārana). Earth, for example, is such a cause of a substance like jar.⁴² But ākāśa is incapable of being the constitutive stuff of any substance. Again, the specific quality of ākāśa, i.e., sound, is non pervading(avyāpyavṛtti); that is, its incidence at any particular moment is confined within the limits of a part of ākāśa, and its existence in that part is not incompatible with its absence in any other part of the same. The specific qualities of the other four material substances are, in contrast, pervasive of them. And these substances necessarily possess some of the important characteristics by means of which matter is ordinarily sought to be defined. Such characteristics are size, shape, impenetrability and mobility. The Nyāya-Vaiśeṣika. Philosophers treat these substances as material principles which are neither transmutable into one another nor reducible to a common ground. Each of them,

42. Ibid.

according to them, is a fundamental and homogeneous kind of matter, characterized by its own specific quality or quality-group.

All the material bodies, according to Nyāya-Vaiśeṣika philosophers, are composed of extremely minute, in visible and infrasensible particles, i.e., atoms(parāmanu) of the four material substances such as earth, water, fire and air. It is the common knowledge that finer and finer constituents or parts. In other words, every material thing is divisible into parts, which are necessarily finer than itself. If we push the process of division further and further, we shall, of course, come by finer into finer-parts. This finest part is called atom(paramānu) by the Nyāya-Vaiśeṣika philosophers. According to Nyāya-Vaiśeṣika thinkers, the basic material of this visible universe are, therefore, the four different kinds of atoms which can never be destroyed. An atom or parāmanu is eternal because it is a substance which is partless like other.⁴³ Udayana in his Ātmatattvaviveka argues that partlessness and producedness are contradictory to each

43. "Paramānuḥ nitya dravyatva satyam avayavatvāt ākāśavat". Śrīdhara: Nyāyakandali, (Vizianagram Sanskrit Series, Varanasi, 1963), p. 329.

other. Atoms are indivisible and partless. Therefore they are not produced. So they are eternal. There is a qualitative difference among these ultimate particles of matter or atoms, so that atoms of any particular element can give rise to the product of that element only. They are intrinsically inactive colourless and partless.

Now, the question arises; why should we admit the existence of atom or paramānu at all ? Vātsāyana in his Nyāya-Sūtra-Bhāṣya and Śaṅkara Miśra in his "Upaskāra" and Śrīdhara in his Nyāya-Kaṇḍalī holds that the existence of atom is deduced from the divisibility of a perceivable material objects into finer and finer parts. In this progressing decreasing scale of matter, its magnitude of minuteness (anuttva) must find its culmination in some substratum just as the magnitude of largeness (mahattva) which is found to occur on the progressively increasing scale attains its highest point in such all pervading substances as time, space, etc. This terminal point in the process of division of matter which refuses to be further divided is known as atoms (paramānus). The atoms thus mark the limit of divisibility of matter. Udayana argues in his 'Kiraṇāvalī' that, the above argument

involves the blemish (doṣa) of mutual dependence. The existence of minutest magnitude proves the existence of an atom. Again the existence of an atom proves of the minutest magnitudes.⁴⁴ Some may say that matter is essentially a continuous structure and therefore every bits of matter, however small it may be is infinitely divisible. But Sridhara in his 'Nyāyakandali' and Jayanta Bhatta in his 'Nyāyamañjari' argues that if all objects be alike divisible indefinitely, it would be difficult to account for the observed variation of magnitudes in gross matter. Thus, for instance, if a mustardseed and a mountain were supposed to be constituted of an equally infinite divisibility of matter necessarily implies, it would lead us to the absurd positions to think that the size of both the seed and the mountain is the same.⁴⁵

The Buddhists phenomenologists may question again that, inspite of equality in the number of parts two bodies are found to vary in size, and it is because of the fact that the parts of the larger body are themselves larger than those of smaller body or because the parts

44. Paramānu siddhau anuparimāna siddhoi paramānu siddhi. Udayanāchāryya, 'Kiranāvali' (Benars Sanskrit Series, Benaras),

45. "Sarvesām anuvasstita avayavatva merusarsapay tulya parimānatva pratītiḥ". Sridhara, 'Nyāyakandali', (Vizianagram, Sanskrit Series, Varanashi, 1963), Page. 330.

are packed together more loosely in the former than in the latter. But Udayana in 'Kiranāvalī' holds that, this objection is an untearable one. Difference in size between two things is possible only when at least one of them is of finite extension. But how can a thing be finally extended whose constituent parts are supposed to be infinite in number ? In short, in this case there will be no final unit of a determinate size in respect of which the difference in size between two things can be logically explained.

Again, the Mādhyamika Buddhists attack this atomic theory by saying that in the process of division of matter. We come to a terminal stage no doubt. But it is not because we have discovered certain atoms which can not be further divided but because nothing is left to be divided. The ultimate nature of all things, according to them, is void (sūnya). But Uddyotkara in his Nyāya-Vārtika shows this objection in the following way: Division is possible only if there is a thing to be divided. That thing really constitutes the base (ādhāra) on which division is to rest. However for the process of division may be carried on it can at no times annul its base or end in vacuity because

division minus the divisible is inconceivable and absurd as digging a cave in empty space.

Again, the question is raised; Does ākāśa which is simple and all pervading principle exist in the inside of an atom or not ? The admission of the former alternative will make an atom further divisible and that of the second will reduce ākāśa to a thing of limited magnitudes. Uddyotkara answers that this objection springs from a misconception of the nature of relation of ākāśa to the atoms. Ubiquity has been defined as conjunction or with all substances of limited magnitudes⁴⁶ and the conjunction of ākāśa with the atoms is not denied. Hence, ākāśa is certainly ubiquitous. But the question of the existence of ākāśa with the atoms does not arise at all, as an atom has neither inside nor outside. Ubiquity does not mean conjunction with even what is non-existent. The inside of atom does not effect the ubiquity of ākāśa at all. Now the existence of atom is admitted.

From these combination of these atoms gross material objects are originated. The process of origination is as

46. Yan mūrtimat tena sarvena sambandha iti sarvagatetvārthaḥ. Uddyotkara, Nyāyavārtika, (Bibliotheca Indica, Calcutta), iv, ii, 20, p. 517.

follows. The atoms conjoined together give rise to a binary compound which is technically called dyvanuka. The dyvanuka is infinitely small and therefore imperceptible. Three such binaries suitably adjusted produce a triad or trasarenu which is the minimum visible entity. Its magnitude is finite and all other finite objects are made out of it. To the question how the finiteness of the trasarenu arises from the infinitely small size of the atoms, the answer given is that, it is due to the number and arrangement of constituent atoms. The qualities of all producers are to the qualities of atoms of which they are compared.

We already describes that atom is not visible and they are not capable of directly producing gross material objects. There is an intermediate entity called dyvanuka which is the result of the combination of couple of atoms. But what is the logical necessity of assuming the existence of dyād ? To answer this question Śrīdhara argues in his Nyāya-kandali that if the single eternal substance like atom is supposed to be directly productive there would be perpetual condition for production and production would never cease, which contradicts the notion of pralaya (cosmic dissolution) admitted in the Nyāya-Vaiśeṣika

philosophy. Therefore, the gross matters are directly produced out of something which themselves are non-eternal (dvyanuka).

It should be noted here that the gross material object which is brought into existence by the conjunction of atoms in an entirely new product which did not pre-exist in its parts (asatkārya-vāda). The relation which holds between the new products and the atoms or between the whole and its parts is one of the inherence (samavāya).

Saṅkara in his commentary on Brahmasūtra and Vasubandhu in his Vṛiṅsatitīkā have raised objection against the conjunction between two things. They argue that the conjunction between two things is possible only in respect of their parts and since the atoms have no parts they would coalise at one point and the result would be a failure of accretion of gross magnitudes. To answer this difficulty the Saūtrāntika Buddhists advocates the paramānupuṅjavāda according to which, the atoms informing the gross material objects, do not actually come into contact with one another, but merely assembly together very closely. Raghunātha Śiromoni, the famous Neo-Naiyāyika

of Bengal, suggests another solution. He advocates trutivāda according to which, the gross visible, truti or trasarenu, is the ultimate unit of matter. But the classical Nyāya answers that the above solutions are untenable. In the famous case the gross material object would become imperceptible since the atoms are. In the latter case, the truti can not be the ultimate unit of matter since, it is visible entity and all visible entities and further divisible into parts.⁴⁷ Hence, Śrīdhara is of opinion that the conjunction among the partless atoms must be admitted. He says that for conjunction it is not necessary that substances should have parts, for even an impartile substances like ākāśa is found to be in conjunction with other partless substance like the soul. Again, both the soul and the mind are partless entities; yet they are found in conjunction with each other. Hence each case of conjunction it is to be explained as determined by the special nature of substance conjoined. The principle which makes the conjunction possible in the case of atom is not the compositeness of the factors, but the possession of a definite magnitude (mūrtatva) and touchability (sparsātva). These two characters are the principle of exclusion and

47. Trasarenuh sāvayavaḥ cākṣuṣa dravyatva ghatavat.
Raghunāth Śiromāni, Padārthātattvanirupana, (Benares Sanskrit Series, 1916), p. 13.

resistance. An atom having characteristics thus excludes another atom and prevents mutual absorption. Uddyotkara in his Nyāyavārtika points out that the fact that conjunction and resistance are observed in composite bodies is made the basis of a general conclusion that for conjunction and resistance atom must be composite. But this is nothing but an argument by analogy.

The combination or conjunction of atom in performing gross material objects requires activity or motion. But the atoms are supposed to be passive or devoid to activity in nature. So from which source their motion or activity is derived? To answer Nyāya-Vaiśeṣika thinkers say that all atoms are combined into the multifarious things of the world by an omniscient and omnipotent conscious agent who is God. The creative will of God sets the atoms in motion and the world is created by their combination. But God's will in this respect is not arbitrary. It is determined by the prospective experience (bhoga) of the individual souls. The experience of the individual soul in its term is determined by the moral disposition (adrsta) it has acquired in his previous life. This means that God has created the world according to dharma and adharma in the individual soul.

Dharma means such disposition acquired in the previous life as it is to yeild unpleasant experience in the present life. Hence, we find that God guides the process of creation according to the adrsta of the individual soul. Hence, when Śaṅkara attacked the Vaiśeṣika atomism by saying that, an intelligent principle like adrsta cannot account for the notion of atom in the process of creation he had in mind the ancient, view of Vaiśeṣika which did not admit the existence of God. But Śaṅkara's charges holds no longer when the latter Vaiśeṣika thinkers introduced the notion of God in their philosophy.