

C H A P T E R - 2

WHOLE AND PARTS (avayavi and avayavas)

I

We have had occasions to mention in the previous chapters that the realists differ radically from the phenomenologists on the question of the ontological status of whole and its part (avayavin and avayavas) and their corresponding relation with each other. According to the phenomenologists the whole is nothing but mere aggregate of its parts. But the realists hold that the whole is ontologically different from its parts and is something over and above them. In Indian philosophy the phenomenologist position is represented by the Buddhists. According to the Buddhists the whole as such is nonest, it is nothing but parts existing together. The Naiyāyikas, on the other hand, advocate the realistic position in this regard as against the Buddhists. According to them, the production of sensible material order from infrasensible atoms is explainable only on the basis of the assumption that the whole is different from its parts. We shall discuss the ontological status of the whole and part (avayavi and avayavas) in detail in the next section of this chapter. In this section let us deal with the epistemological problems relating to the concept of avayavi and avayavas (whole and parts): how is the whole

(avayavin) known by us ? Is it perceived or inferred ?
Or is there any other modes of knowledge by which it can
be cognised ?

The common linguistic usage in which the visual perception of a thing, say, a tree, is expressed is : we see or perceive a tree. But when we say that, what do we actually perceive ? As a matter of fact we perceive only the front part of the tree with which our visual senses (eyes) are in contact. But what about the back part of the tree, which we can not see directly ? Since our eyes do not have any direct contact with it, we can not say that the knowledge of the back part of the tree is perceptual. In this case what happens is this: on perceiving directly the front part, our intellect indirectly infers or interprets that there exists a back part of the tree with which our visual senses are not in direct contact. But this intellectual interpretation or inference follows that direct perception of the front part of the tree with such inconceivable repidity and instinctive spontaneity that uncritical common sense fails to take any notice of it and believes the knowledge of the whole tree (including its unperceived but inferred back part) to be wholly perceptual.

The main objective of our discussion now is to examine whether there is any interpretative or inferential components in our so called perceptual knowledge of an object. The philosophical school known as realism asserts that there is no place of inference in direct perception of an object, whereas the school of phenomenalism upholds the opinion that no perception of worldly object is possible without inference. In Indian philosophy the Nyāya philosophers largely represent realistic position, but the phenomenistic position is mainly represented by the Buddhist Logician (nyāya-vādinō Bauddhāḥ).

According to Nyāya realists, in perceiving a part (avayava) of an object we perceive the whole (avayavi) of it, since the whole (avayavi) inheres in each of its part (avayavas). So we can directly perceive the whole object. But the Buddhist phenomenists do not agree with the above contention of the Naiyāyikas. They hold that only the unique particulars called 'svalakṣaṇas' are objects of direct indeterminate perception. Perception, according to the Buddhist phenomenists, is nothing but the passive receptivity of senses, the pure sensation of an efficient 'point instant' (svalakṣaṇa) of external reality and is absolutely devoid of the forms of the understanding

(kalpanāpoḍam).¹ Moreover the Buddhists are of opinion that the so called perception of the empirical objects like an apple or a tree which the Naiyāīkas call the determinate perception (savikalaka pratyakṣa) is really the construction (kalpanā) of human mind on the basis of the indeterminate perception of the unique particulars (svalakṣaṇas). These 'particulars' are empirically conceived by the Nyāya realists but these are transcendently understood by the Buddhists. The Buddhists' particular is the point instant, the thing-in-itself (svalakṣaṇa), and is radically different from all constructions (kalpanās) of the human mind. But the realists' particular is the concrete physical individual objects of our every day experience like an apple or a tree, which for the Buddhists is a construction of our mind on the basis of transcendental particulars. The Buddhists agree with the Mimāṃsakas in holding that in all perception there must be an element of novelty, i.e., a felt addition to our experience. Cognition in the true sense must be a new cognition, cognition of the object not yet cognised (anadhigata-artha-adhigantṛ). If this be the case, argues the Buddhist, then such feeling to novelty belongs only to the first moment of sensation in the knowledge of an

1. Dharmakṛīti, Nyāyabindu, (Bibliotheca Indica; Calcutta, 1929), Chap.-1.

object. In the following moments when the attention of perceiver is aroused, it is no more that pure sensation which it was in the first moment; it becomes the repeated cognition of the first flash of awareness. True perception, therefore, according to the Buddhists, is always momentary sensation; enduring perception is not perception at all; it is not cognition proper, it is re-cognition. The cognitive element of our mind is limited to that moment only when we get the first awareness of the object's presence, i.e., the unique particulars. All the worldly object, according to Buddhists, are mental construction or imagination, and this mental construction is based on the unique particulars of the object. For example let us take the proposition 'This is a tree'. In this proposition the 'This' represents a unique particulars (svalakṣaṇa), but the element 'tree' is the quality of 'This'. The Buddhist phenomenologists opine that in seeing an object we always go beyond the given, and this going beyond can be construed as inference. The Buddhists use the term inference to refer to any type of active mental construction. In this way the Buddhist phenomenologists establish that there must be some inferential elements in perception of a worldly object.

But the Nyāya-Vaiśeṣika philosophers do not agree with the above contention of the Buddhists. They hold that even if the inference of the unperceived part were possible, that would at best provide us with the knowledge of another part side by side with the perceived one, and not with the knowledge of anything 'whole' to which these parts might be referred and in respect of which the notion of a 'whole' tree might arise. Again, the Naiyāyikas argue that if it be said that the knowledge of a whole tree is obtained by effecting a synthesis of the two parts - its perceived front part and the inferred back part - the question would at once crop up: how could such a synthesis be possible where there is no common ground and point of reference? Synthesis implies the connecting of several experiences by reference to one unitive principle. But no such unitive principle is admitted by the Buddhists. So the two parts of a tree, hold the Buddhists, are not really the parts of a unitive whole, but only discrete units constituting no more than an aggregate. It is natural, therefore, that when two parts come to be cognized, they can not be felt as complementary to each other. They appear simply as unrelated items, indifferent slices of matter which are incapable of being synthesised or integrated in such a manner as to give rise to the idea of a tree as a single composite entity.

The Naiyāyikas further argue that even if we admit that the idea of the tree arises when two parts (the perceived front and inferred back part) are cognised together, there is nothing to indicate that the tree is cognised inferentially. We may reconstruct or imagine a thing by ideally joining its parts. But the knowledge of the thing which has been achieved thus is by no means inferential in character. For, by any act of inference we neither relate the facts of experience nor experience facts as related, but know one thing through the medium of another because of an invariable relation (vyāpti) between the two. Moreover, the tree can not be an object of inference because the psychological condition which is necessary for such inference are found to be absent. If the tree as an aggregate of its parts is to be validly inferred from the perception of one of these parts, it is necessary that the aggregate should be known to have an invariable relation with the part in question, which it does not have. Again, the whole contention proceeds on the supposition that there can be an inference of the unperceived part from the perceived one. There is, however, no warrant for this supposition. We can not, for instance, accept the proposition. 'The front necessarily possesses a back' as a valid major premiss.

For, how can one part possess another ? It is only a whole (avayavin) which can possess parts, but the whole is denied by the Buddhist phenomenologists. Moreover, the Buddhists make an assumption: the back part exists invariably as an associate of the front. But, the Naiyāyikas argue that it can not be explained why the two parts should at all come together. These two parts are discrete units having ordinarily no capacity for aggregating. However, these are found to be invariably related only when they come under the operation of the causal principle in one of the following ways: either when they are related as cause and effect, or when they co-operate to produce a common effect and are thus members of a single causal collection (sāmagrī), or when they are the co-effects of a common causal factor. But, none of the above ways of the causal operation is found here, on the basis of which the invariable relation of these two discrete units, i.e., the front and the back part of the tree, can be ascertained.

The Nyāya realists are of opinion that though there is an element of truth in the common sense view that the constituent parts of a whole are present in the whole, but

it is also possible to say that the whole in some sense resides or is present in the parts of it.² As we ordinarily say that the branches, trunk etc, of a tree are in the tree, it can equally be said that the tree is present also in the branches or trunk of it. If it be so, the 'whole' tree is simultaneously present in each of its parts. The 'whole' tree is contained in its parts by the relation of inherence (samavāya), while the parts are contained in the whole tree by the reverse relation of inherence. That is why we see the tree in the branches as much as we see branches in the tree. There is no reason, therefore, to suppose that only the part is perceived, not the tree as whole.³

But the Buddhist phenomenologists in their own defence reiterate that the so called 'whole' of the Naiyāyikas is nothing but the aggregate of parts. The parts are existent whereas the whole is a mere figment of imagination (kalpanā). It has no distinct existence apart from the parts. But the Naiyāyikas reject this contention of the Buddhists with the help of a reduction ad absurdum form of

2. Gautama, Nyāyasūtra, (Bibliotheca Indica, Calcutta), Sūtra No.2.1.32.

3. Nāḥindriyena ekadeśe tatsaha cārīto' vayavi na sannikṛṣṭaḥ tena yathī kadeśah sannikarṣād upalabhyate evam avayavyaḥ api sannikarṣād upalabhyate. Uddyotkara, Nyāyavārtika, (Bibliotheca Indica, Calcutta), 11.1.32, p.215.

arguments, i.e., nothing can be apprehended unless the whole is established first as a distinct percept.⁴ They claim that sensory awareness of a part or a piece or a surface would be impossible unless the whole is accepted immediately as a surfaces. To substantiate this position the Nyāya-Vaiśeṣika thinkers put forward what is usually known as atomism (paramānuvāda).

According to this atomic theory we can not apprehend a part or parts unless we apprehend the whole. For, parts are parts only in relation to the whole, and each part must have further parts or pieces. We can regress in this way until we reach in the 'partless' atoms. Atoms are only parts, never wholes, and they have no further parts of their own. But atoms are by definition imperceptible. So, there what happens is this: atoms, the constituent parts of a whole, are not perceptible until the minimum gross visible 'whole' object is produced by the constituent parts; i.e. the atoms. In this way it is shown that if perception has to grasp anything, it must grasp whole first before it can perceive its parts.

4. Nyāyasūtra, (Bibliotheca Indica, Calcutta) Sūtra No. 2.1.35.

Again, the Nyāya-Vaiśeṣika philosophers argue that all things that have different makers (kartr) and different potencies (śakti)⁵ must be regarded as different; threads and cloths have different makers and different potencies; hence they are different. Kamalśīla clarifies the term 'ādi' occurring in 'bibhinnakartrśaktyādeḥ' as meaning 'kārya-kāla-parimāna', so that the whole expression means 'different makers (kartr), different effects (kārya), different periods (kāla), and different sizes (ākāra).⁶ Difference in these respects is antagonistic to identity. Wherever we find these features, we have to conclude that the things are different.⁷

In reply to the above objection of Kamalśīla, that is, the differences of makers and potencies are irreconcilable with identity and unity, the Nyāya-Vaiśeṣika philosophers assert that these lead to possession of contradictory qualities and contradictories assuredly can not have the same locus.⁸ The makers of threads are prior to cloth

5. "... bibhinna kartrśaktyādeḥ" Śāntarakṣita, Tattvasaṁgrah (Buddha Bharati Series), P.264.

6. Ibid (Kamalśīla's cementary); as referred by Biswanath Sen in his book The concept of part and whole (avayava and avayavi). (Rabindra Bharati University, Calcutta), p.32.

7. "Ye bhinna kartr-kārya-kāla parimānaste bibhinnaḥ", ibid.

8. "Viruddha dharmādhyāsaṁmātra-nibandhano hi bhāvanām parasparato bheadḥ", Śāntarakṣita, Tattvasaṁgrah, (Buddha Bharati Series) p.264.

in time since they are seen before the cloth is manufactured; the length and breadth of cloth are different from those of each of the yarns (patasyāyāma vistarābhyām yāvat pramānam na tāvat pratyekam tantunāmasti). On these grounds which, the Naiyāyikas assert, are not inconclusive (nanaikāntika hetunām), they hold that the avayavin is distinct from the avayavas. *

The Buddhists do not admit the above contention of the Nyāya-Vaiśeṣika philosophers. Śāntarakṣita, a renowned Buddhist logician, raised several objections against the Nyāya theory. The first objection is from the view-point of the Saūtrāntika who is an avowed kṣanabhaṅgavādin. For him things are all momentary, pataparākkālina - tantu and patasmāna-kālinatantu, threads just before the manufacture of cloth and those co-existing with cloth are different. If the Naiyāyikas mean to say that the avayavin is different from the avayavas just preceding its emergence, his argument is futile (sādhana vaiphalyam)⁹, for it seeks to prove the proven or to establish what is already established (siddha-sādhana-doṣa).¹⁰ Such difference is openly admitted and

* This argument is stated in the book of Biswanath Sen, The Concepts of Part and Whole (Avavaya and Avayavi), (Rabindra Bharati University, Calcutta, pp.32-33.

9. Ibid, p.241, Verse-578.

10. Yadi prathamāvasthābhābibhyo' samādhigata patākhyānebhya-
antubhyah patasya bheda sādhyate, tadā siddhani sādhyate.
Kamalsīla, Tattvasamgrahapañjikā (Buddha Bharati Series) on
Verse-578.

unreservedly accepted by the Buddhists, that is, the kṣanabhaṅgavādin Buddhists. Secondly, if the Naiyāyikas, on the other hand, is out to prove difference of avayavin from the avayavas constituting it and co-existing with it their argument, Śāntarakṣita asserts, is fallacious, the grounds adduced being asiddha (or unestablished).¹¹ Kamalśīla states the Buddhists objection thus; "If the cloth were a recognised entity (prasiddhas) as something different from the yarns existing along side, then it might be proved to have different makers, potencies etc. in relation to and in contrast to the yarns. As it stands, the cloth, however, is not recognised as such and the opponents i.e., the Naiyāyikas, have till to prove its difference from the yarns.¹² Kamalśīla here tried to say that; for the Naiyāyikas the probandum is 'tantubheda', the hetu is in turn 'bibhinnakartr̥ kārya' etc., and the pakṣa is 'the cloth (the form of the pratiññā being 'patah tantubhinnah bibhinna kartr̥tyadeh, i.e., the cloth is different from threads because of difference of makers etc.) But the pakṣa is here asiddha - it is not yet proved, and in such an unestablished locus or dharmi, the hetu dharma can not

11. "Atha patasmānakālabhāvino ye tantavastebhyaḥ patasyānyatvam prasādhyate, tadā hetunām asiddhate". Ibid.

12. Yādi tadānim tantu vatiriktastatsamānakālabhāvi patah prasiddho bhavet tadā tasya tantuvyapekṣayā vibhinnakartr̥ tvadayodharmāḥ siddhayuḥ, ... sa etvāyam tantuvyatireki pato no siddhaḥ tadbhedasyaiya prasādhyitum prastutatyāt". Ibid, p.242.

reside. Hence, there is the fallacy of asiddhahetu, this particular type being known as āśrayāsiddha doṣa. So, from the Śāntarakṣitas contention it can be said that the avayavin can not be proved by means of any valid argument, that it is not inferable at all. This is, we should note, not a criticism of any inference in particular where by the avayavin is sought to be proved but a general and broad criticism of the very inferability of the avayavin. The Naiyāikikas reject the above argument of the Buddhists they point out that if the sādhya or the probandum were to be an admitted entity recognised by both the disputants, then what was the necessity of proving it at all ? It is already established and any attempt to prove it would involve the fallacy of siddha-sādhana. What is needed is that it should be recognised by one of the parties. In fact, the Buddhist's plea is self-contradictory. For when does the Buddhist recognise an entity ? Before proving it or after ? Obviously it can not be the former, for certainly the Buddhists do not recognise unproved padārthas. But the latter course is also not open to the Buddhists, since they can not prove an unrecognised padārthas.

As regards the point that the avayavin can not be the subject of inference (i.e. pakṣa), the Nyāya-Vaiśeṣika

philosophers stand in the same. An alika padārtha, an entity recognised by none (at least by neither party), can not certainly be the pakṣa, for them there would be the fallacy of āśrāyāsiddhi, e.g., sky-lotus is fragrant.¹³ Here the pakṣa is some thing universally regarded as non-existent. But an entity admitted by one of the combatants can well serve the purpose of 'pakṣa'. Indeed this is an established practice amongst philosophers and even a cursory glance at the arguments advanced by them against their opponents will bear this out.

Thus the Nyāya-Vaiśeṣika philosophers establish that, the Buddhists plea of non-inferability of the avayavin is untenable and that the avayvin can be inferred, where and if necessary. This must not be taken to mean that the avayavin can not be perceived. That would be wrong, for, we see, according to the Naiyāyikas that, the avayavin is capable of being perceived, given the condition of perception. What the Nyāya-Vaiśeṣika philosophers really mean is that the avayavin can be known both by the perception and inference. Effectiveness of one pramāna does not signify ineffectiveness of another. This is because the

13. Annambhatta, Tarka-saṃgraha, (Chowkhamba Sanskrit Series), p.60.

Nyāya-Vaiśeṣika philosophers believe in both pramāna-samplava and pramana vyavasthā and not, like the Buddhists the pramāna-vyavasthā, only.¹⁴ Again, the Nyāya-Vaiśeṣika realists urge that apart from inference, perception also points out to the existence of the avayavin. Most of the objects with which we are familiar such as tables, chairs, trees, we know by perception. If they were all just the aggregates of atoms (paramānu-sañcaya) they would have remained invisible. An atom being atīndriya, a bundle of them would have remained invisible. Hence, nothing would be left over for perception if the avayavin were not admitted.¹⁵

The Buddhists also raise the objection against this agrument of the Nyāya-Vaiśeṣikas. According to them if the avayavin were an object of perception, there would have been no controversy about it, for, we would have only to see it, to recognise it. The very fact that there is more than one opinion about it which irretrievably indicates its non-perceptual character.

14. Kim punaḥ pramānam prameyamabhisamplavantetha pratti prameyam vyavasthanta iti, ubhayathadarśanam. Phanibhuṣana Tarkavāgiśa, Nyāyabhāṣya, (Calcutta Sanskrit Series, 1963), p.1.1.3.

15. Yādi hyāvayavi na syāt, sarvāgrahaṇaprasaṅgaḥ; pramānunām-tīndriyatvat. Kamalsīla', Tattvasamgrahapañjikā. (Buddha Bharati Series), On Verse-561.

Not that we do not perceive any thing but that we do not perceive anything as an avayavin distinct from avayavas.¹⁶ In fact we have only the multitude of atoms left over and it is this we perceive. Though atoms are individually invisible, collectively they are not so. It is therefore, an unwarranted proposition that atoms are ever imperceptible. This may be true for the Nyāya-Vaiśeṣika philosophers who hold the eternity of atoms, but for the Buddhist atoms are ever changing and when they attain a specific condition, they can well be objects of perception.¹⁷

Nyāya-Vaiśeṣika philosophers have also given the answer of the above objections of Buddhist phenomenologists. According to the Naiyāyikas we have knowledge of the form 'this is a table', 'this is a chair' etc. which can not be doubted. It is attested by introspective deliverance as also by linguistic usage. When there is a table before us we know by anuvyavasāya that 'we are seeing a table', we are seeing a chair' etc. That we are seeing one thing a

16. Avayava-vyātirekenavayavino' anupalambhāt. Jayanta Bhatta, Nyāyamañjarī, (Chowkhamba Sanskrit Series), P.114.

17. A siddhamānūnāmatīndriyatyaṃ; viśeṣṭavasthaprāptanāmi-ndriya grahavat. Yasya hi nitayah paramānavāḥ iti pakṣaḥ tam pratyānunām viśeṣubhāvāt sarvadatendriyatvam syāt, nāsmānprati! Kamaśīla, Tattvasamgrahapañjikā (Buddha Bharati Series) On Verse-586.

single object, is the clear verdict of 'introspection' and nobody contradicts it, since it belongs to the common stock of knowledge. Language also bears this out use of singular number of the 'table', chair, etc. and of indefinite articles 'a', 'an' before the corresponding nouns show beyond doubt that the content of perception in such case is a single object (ekabuddhi). It is one, not many. The Naiyāyikas ask: how would the Buddhists account for this perceived unity?¹⁸ For the Naiyāyikas the reason is obvious. This unity indicates that the object is a unitary entity, i.e., an avayavin. The Buddhists differ and hold that this sense of unity (ekabuddhi) is really nānārtha-viṣayaka, not abhinnārtha viṣayaka.¹⁹ It relates to many and not to a single substance. The object in all such cases is a group of atoms and not any avayavidravaya. Therefore, the knowledge of unity in respect of this plurality is false. It is illusory.²⁰ We are

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18. Ekamidam dravyam ityekabuddhervisayam paryanujojyoh kimekaonddhirabhinnārtha viṣay ? Aho nānārtha viṣayeti. Phanibhuṣan Tarkavāgīśa, Nyāyabhāṣya (Calcutta Sanskrit Series), On Verse, 2.1.55.
19. "Evamanusu sañcitesva grahyamānaprthaktvesva kamidamityu paodyate buddhiriti" Vātsāyana, Nyāyabhāṣya (Vizianagram, Sanskrit Series, Beneras) On verse 2.1.35.
20. "eka vibhramāt. Śāntarakṣita, Tattvasamgrah, (Buddha Bharati series) On, Kārikā-588, and Yathā dipādaḥ satyāpi bhedah ekatva vibhrāmo bhavati tathā nairāntaryananeka sasmātara padārtha samavedānato yamekotra vibhrama. Tattvasamgrahapañjikā of Kamalśīla, (Buddha Bharati Series) on the Kārikā - 588.

mistaking a number of avayavas closely situated for an avayavi. The Buddhists further observe that this is nothing unusual and is not the only instance of its kind. We have many other such instances where many is mistakenly treated as one. A forest is but a collection of trees, each existing separately from others and not very far from them. Yet, when referring to those trees together, we say 'one forest', or 'there is a forest' An army, for example, is nothing but the aggregates of four senāngas elephant, horse, chariot, and foot,²¹ all are distinct and separate. Though they are many, we refer to them all by the omnibus expression 'an army' or 'there goes an army'. In both these cases of sense of unity is non-veridical and the use of singular number in language is misleading. Similarly, a pot or a cloth is in reality an aggregate of parts (avayavas), a cluster of components and not a whole (avayavi) and our perception of it as a thing (avayavin) is ayathārtha.

The Nyāya-Vaiśeṣika realists have formulated a number of arguments to refute the above contentions of the Buddhists. Firstly, they raise the question: how is it

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21. Phanibhusan Tarkavāgiśh, Nyāyadarśana (Calcutta Sanskrit Series, 1963), On page-173.

possible for a group of atoms to be perceived when atoms are each of them imperceptible ? Since, the atoms are imperceptible by nature, and a thing which is imperceptible by nature can never be perceptible. So, as an atom is not perceptible, a group of atoms is not perceptible also.

Secondly, the Naiyāyikas point out that the illustrations of army and forest are far from happy infact the Buddhists are incorrect. A forest or an army is not at all an aggregate or avayavasamūha, each of them is an avayavin. Therefore, the use of singular number in these cases is perfectly in order and our perception of unity is fully justified by the objective facts.

Thirdly, even if the army or the forest were regarded as aggregates, that would not help the Buddhists, for on their analogy he would not be able to explain how a number of atoms can be perceived as one. The components of these things, viz., senāṅgas, (i.e., elephant, horse, etc.) and vanāṅgas, i.e. trees etc.) are by nature perceptible. Under appropriate conditions they can be perceived and distinguished from one another (grhyamāna prthaktvamat). It

is only certain frustrating factors like distance, dim light etc. which make it impossible for us to discern their separateness.²² Now, false perception or bhākta pratyaya is possible when something is presented to the senses and apprehended in its general character; the specific features being unnoticed. The Character perceived bears a strong resemblance (bhakti)²³ to a feature of the illusory content. In case of forest the trees are apprehended not in their specific character of 'manyness' (nānātva) or 'separateness' (prthaktva) but as a single non-distinguished something which has the 'look' of a forest. Hence, we falsely perceive the trees as a forest.²⁴ In case of a jar or any other single entity, the atoms which appear together as a jar must first of all be presented to the senses with their separateness obscured. But the atoms being supersensible, can not be apprehended; and if the dharmin is not apprehended there can be no question of failure to take note of their distinctive character. Therefore, atoms can not be held to account for our false perception of unity. The fourth objection is that, every

22. Senāṅgesu vanāṅgasu ca dūrādagrahyamānaprthaktvesu ekamidami tyupādadyate buddhiḥ. Vātsāyana, Nyāyabhāṣya (Vizianagram Sanskrit Series, Benaras), 2.1.36.

23. Bhaktirnāmātathābhūtasya tathābhāviviḥ sāmānyam; ubhayena bhajyate iti bhaktiḥ. Uddyotkara, Nyāyavārttika, (Chowkhamba Sanskrit Series, Benaras), pp.243-244.

24. Grhyamānagrahanasya cānya nimittatvāt na tu paramānavo grhyante teṣāmatīndriyatvāt" ibid, p.243.

illusion presupposes a veridical experience of the illusory object. A man having rope-snake illusion must have had earlier experience of snake in a valid cognition, otherwise he can not even know that there is such a thing as a snake in the world for less save illusion of it.²⁵ Similarly, mithyā ekabuddhi presupposes Yathārtha ekabuddhi-false perception of unity presuppose of genuine perception of it in the past. But no such perception is possible on the Buddhists theory of the cosmos. There is no unity anywhere, either in the physical or psychical realm. All things are only agglomerations or saṃghāta, hence there can be no veridical experience of unity. In that case, ask the Naiyāyikas, how can there be false perception of many atoms as a unity ? This is also borne out by the fact that if the Buddhists still try to prove the possibility of such false perception, they will find no instance(dr̥ṣṭānta) in their support. The illustrations of army and forest, as we have just now seen, will not do so. The Buddhists can not cite any instance where a real unity of many atoms has actually perceived. Hence, one of the five essential elements (pañcavayaya) of demonstrative argument(parāthanumān) is lacking viz. udāhāraṇa or illustration. Therefore, the

25. "Mithyāpratyaaya apyete nabhavanti pradhānābhāvāt",
ibid,p.244.

Buddhist view about illusion of many atoms as one is untenable one.

The Buddhist phenomenologists try to answer the above argument of the Naiyāyikas in the following way. According to them, (the Buddhists) though such sapakṣas are not forthcoming in the field of visual perception. Yet these can be shown in other fields viz. in auditory, tactile, olfactory and gustatory perception (indriyāntara viṣayesva pratayah). The Buddhists make no difference between substance and quality, and so the objects of the auditory, olfactory and gustatory perceptions are, for them, nothing but the aggregates of atoms (paramāṇusamūha).²⁶ A sound, for example is composed of sound paramāṇu. Now, when we here a sound, they are each a single content, i.e., one sound as distinguished from numerous other sounds we are sensing at other times. This is same in the case of taste, touch also. These are all numerically different and we can perceive their differences. Here, therefore, we get the required basis of illusory experience (pradhāna) a veridical perception of unity. The Buddhists may claim on this basis that the perception of many atoms as one is false.

26. ...teṣāṃ mātē sabdādayo'pi sañcita eva. Vācaspati Mīśra, Nyāyavārttikatātparyatikā. (Vizianagram Sanskrit Series, Benares), p.276.

The Naiyāyikas have raised some questions in the context of above Buddhist argument of sapakṣatva. They ask: why do the Buddhists regard the perception of one sound, one taste etc. as veridical? Is there any distinction between experience of a sound and that of jar, in so far as they are experiences of unity? In both cases we perceive a unity; yet the Buddhists invest one with authenticity and denies the same to the other. Therefore, perceptions of unity in these fields cannot be cited as instances because of lack of any special, distinguishing feature in them.²⁷ Hence, the Buddhists view can not eventually be sustained and our experience of unity must be reckoned as valid.

Moreover, the Nyāya-Vaiśeṣika philosophers argue that as it is true that the constituent parts of a tree are present in the whole, it is also possible that the whole in some sense resides or present in its parts.²⁸ In other words it can be said that the tree is present also in the branches or trunk of it. Because, the tree

27. Viśeṣahetvabhāvād dr̥ṣṭānta avyavasthā. Uddyotkara, Nyāyavārttika, (Chowkhamba Sanskrit Series, Beneras) 1915, p.244.

28. Ibid, p.244 and Gautama, Nyāyasūtra (Bibliotheca Indica) on Sūtra No.2.1.32.

is contained in its parts, and must be present in each part simultaneously; as much as the parts, the branches etc. are contained in the tree. The tree is contained in its parts by the relation of inherence (samāvāya). Hence we may see the tree in the branches as much as we see branches in the tree. There is no reason, therefore, to suppose that only the part is perceived, not the tree as whole.²⁹

29. Na hindriyena ekadeśe tat saha cārīto' vayavi na sannikr̥ṣṭah, tena yathāi, kadeśābsannikarṣād upalabhyate evam avāyavyapi sannikarṣād upalabhyate. Uddyotkara, Nyāyavārttika, (Bibliotheca Indica, Calcutta), II, i. 32, p. 215.

II

In the foregoing section, we have discussed various epistemological problems concerning whole and part (avayavin) and avayavas): how is the whole known by us ? Is it perceived or inferred, or is there any other mode of knowledge by which it (the whole) can be cognised? In this section we shall mainly deal with the ontological status of whole and its parts. Accordingly we shall be concerned with the questions like: Is the whole something over and above its parts ? Or is it a mere aggregate or assemblage of parts ? How is the whole constituted and how is it related to its parts ?

We have already mentioned in the previous section that, according to the Buddhist phenomenologists, the whole is nothing but mere aggregate of its parts. The whole as such is nonest, it is nothing but parts existing together. On the other hand, the Nyāya realists opine that the whole is ontologically different from its parts and is something over and above them. The production of sensible material order from infrasensible atoms, according to them, is explainable only on the basis of the assumption that the whole (avayavas) is different from its parts (avayavas).

Both the Nyāya-Vaiśeṣika realists and the Buddhist phenomenologists admit that, the external material object which is commonly experienced as a 'whole' (avayavin) can be dissolved into discrete, detached, and disconnected ultimate realities. The Nyāya realists explain these realities as paramānu and the Buddhists call these as svālakṣaṇas or kṣaṇas, or unique particulars or point-instants. By the combination of these atoms or svalakṣaṇas (unique particulars) the external world emerges. Though there are some apparent similarities between atoms (paramānu) of the Nyāya-Vaiśeṣika realists and point-instants (kṣaṇas) or unique particulars (svālakṣaṇas) of the Buddhists, yet these two are fundamentally different.

The atom of the Nyāya-Vaiśeṣika is a substance which possesses not only qualities like smell, taste, colour etc. but many universals like satta (existence), dravyatva (substanceness) prithivītvā (earth-ness), etc. and also the differentiating entity called viśeṣa. All these properties, universals, and viśeṣa are objective entities having their essence separate from that of their substratum (atom). The atom of the Vaiśeṣika, therefore, being a substance and containing these separate entities

(properties) within it, would appear to be complex. Kṣanas of the Buddhists, on the other hand, are conceived as dharmas (properties). In Nyāya-Vaiśeṣika terminology they are described in terms of qualities (gunas), colour, touch etc. and for that reason, they are sometimes felt to be qualities. Kṣanas, however, like a material substance, possess the property of sapatighatva, i.e. obstructability, which is defined as "the fact that the space occupied by one of them cannot, at the same time be occupied by another". But they are not to be equated with the substances of the Nyāya-Vaiśeṣika system, the very idea of substance being foreign to the Buddhist thought. But atom, according to the Nyāya-Vaiśeṣikas, occupies the same space which is occupied by its effect dvy-anuka, which is also a separate substance. Apart from this kṣaṇa is like a property. It is thus obvious that the conception of the Buddhist kṣanas is different from that of the atom. But owing to their obvious similarity in being the smallest fragments of reality, the Buddhist kṣaṇa is often spoken of as an atom (paramānuh). The term kṣaṇa, however, can never be used for the atom (paramānuh) of the Nyāya-Vaiśeṣika for the reason that the latter being felt to be eternal and can not be equated with the kṣanas

which is merely a momentary point instant. Now we shall return in our main discussion that both the kṣanas and atom are discrete and detached bits of reality. The external material world presented to us is, however, a unified reality or a synthesis of these realities, and the question arises as to what the unifying agency or the principle of synthesis is ? The Buddhists say that the synthetic principle is subjective only, i.e., it exists in our thought and nowhere in the external world. But the Nyāya-Vaiśeṣika philosophers declare that the basic principle is that whatever is experienced exists in the external world and therefore, the unifying or synthetic principle has an objective basis. As a result of the connection of two atoms, there arises a unified reality in the form of 'whole' avayavin, i.e., a dvyanuka which is different from atoms. Similarly, further avayavins emerge from dvyanukas. The avayavin, which is a separate substance, has been conceived in Nyāya-Vaiśeṣika philosophy as unification of parts, a synthetic principle. Thus, a dvyanuka is a synthetic principle of two atoms. This unifying principle, as already explained, emerges as an effect substance from the parts. There is another synthetic principle called the universal (sāmānya) which brings about

a synthesis of a different kind, i.e., in the form of a notion of commonness in similar objects. These two synthetic principles, i.e., the dvyanuka and sāmānya, ofcourse different in their nature and function. But they both have one common feature. In both the cases, there is one entity associated with many. The one avayavin associated with many parts in one case, and the one universal with many individuals in the other. To hold that there is an objective reality which is one yet associated with many both in point of time and of space, is fundamentally opposed to each other. According to the Buddhist, the external reality exists only in the form of discrete and disconnected moments. The 'no soul theory' (anātma-vāda) of the Buddhists implies that there is no unifying principle in the detached moments of reality. The 'no soul theory' (anātma-vāda) is crux of the teaching of the Buddha. The term ātman is used by the Buddhist in a wider sense. According to them, there is not only no permanent entity called soul in human beings or in other living creatures (pudgal-nairātmya) but there is no soul even in other inanimate external objects (dharmā-nairātmya), which means that there is no substance in the form of a 'whole' (avayavin) residing in its parts.

Thus the 'no-substance theory' (adravya-vāda) is implied in the no soul theory, (sarvaṃ anātman). Thus the two principles, viz. the avayavin and sāmānya are the most disputed topics on which the Buddhist joins issue with the Nyāya-Vaiśeṣika school. We shall discuss about the universal (sāmānya) in a separate chapter. Now we shall be concerned with the controversy between the Nyāya-Vaiśeṣika realists and the Buddhists phenomenologists on the problem of whole and part (avayavins and avayavas).

The Nyāya-Vaiśeṣika philosophers have advanced a number of arguments to prove avayavin (whole) to be different from its parts. The main argument of Nyāya-Vaiśeṣikas is this: This material world perceived by our senses is made up of atoms which on account of being minute are imperceptible, and therefore, there must exist objects made up of atoms which possess gross magnitude and are perceptible. These gross objects must be in the form of avayavins of their parts (avayavas), i.e., the atoms from which they must be different. The Buddhists raise objection that one single hair is not perceptible from distance but a mass of hair is perceptible. In the same way, one single atom is imperceptible, but a gross

number of them will be perceptible. In answer the Nyāya-Vaiśeṣika philosophers say that a hair is not perceptible from a long distance but is perceptible by nature, because it can be seen from a close range. There is also a qualitative difference between the atom and a hair, because atoms are imperceptible by nature and consequently there is no question of their perceptibility: even a mass of atoms are not perceptible. Uddyotkara argues in this context that "those who believe that atoms themselves are the cause of comprehension of 'gross' objects like a jar should be asked whether the difference in the comprehension of atoms (which become perceptible) is due to some speciality being produced in them or without any such speciality? If it is produced in them, we call it avayavin and if not, it would be a contradiction to say that the same atoms are both perceptible and imperceptible. The opponent may say that the conjunction (saṁyog) of atoms is their speciality; and the atoms, in a mutual proximity, become perceptible on account of their conjunction. But the realists rejoin that it is not possible because atoms being imperceptible their conjunction also can not be perceived³⁰.

30. Yasya paramānobo ghatādibuddhihetabo bhavanti sa ca idam prasthya kim, paramānab upagat viśeṣa iti. Kim cataḥ? Yadyupgat viśeṣaḥ, yot sau viśeṣan sotvavavḥ iti prāptam arthanupgativīśeṣa ta ebāta indriya aindriya kah ca iti mahān virodh. Viśeṣa saṁyogaḥ paramānumāṁ, te paraspara pratyastau satyam saṁyoga upākaraṇā upalapsyanta iti na, atindriya tvadnunāṁ, nātindriyanāṁ saṁyoga pratyakṣḥ bhavitumh iti", Uddyotkara, Nyāyavārtikā (Bilolliothera Indica), p. 502.

Commenting on the above passage of Uddyotkara, Vācaspatimīśra quotes a verse from Dharmakīrti's Pramānavārttika which argues the Buddhist point of view thus: "what the contradiction is there, if many atoms, having acquired some excellence (atiśaya) which was absent in a single atom, cause comprehension of one gross object like the sense and others.³¹ It means that the sense, manas, and an external object produce a knowledge when all of them work in concert, but each one of them separately does not do so. In answer to the above Buddhist question Vācaspati Mīśra points out that Uddyotkara has already answered this question when he says that excellence or speciality in atoms can not be any thing other than the origination of an avayavin. To this the Buddhist rejoins; even for the origination of an avayavin, you (the Naiyāyika) will have to admit the emergence of a new quality (speciality) which will be its cause. Why not hold, then, the same quality as the cause of the knowledge of one gross object instead of introducing an immediary, avayavin.³² In answer to this Vācaspati Mīśra replies; "whatever is

31. The verse in question is: "Ko vā virodho bahavaḥ samjātā-tiśayaḥ pṛthak/Bhaveyuḥ kāranam buddher yadi nāmendriyadivat" Vācaspati Mīśra, Nyāyavārttikatātparyatikā (Vizianagram Sanskrit Series, Beneras), p. 502.

32. "Na ca vam āgantukam āsādyā paramānavo' vayavinām janayanti teniva sthūla-buddhiṃ, kṛtam avayavinā" Vācaspati Mīśra, Nyāyavārttikatātparyatikā (Chowkhamba Sanskrit Series, Banaras), p. 502.

comprehended in a cognition is regarded as the object cause (ālambana pratyaya) of that cognition.³³ Moreover he says that "our cognition can not have for its object mutually exclusive and most subtle atoms. Therefore, we have to assume the emergence of a gross object in form of an (avayavin). Otherwise, there cannot arise the knowledge of one gross objects because atoms are different from a gross object".³⁴ The Buddhists, however, point out that grossness or extension of the external object is not the attribute of an external object but the comprehension of the object (pratibhāṣa-dharma). The realists may rejoin: in that case, the knowledge which presents an external object as gross or extended will have to be regarded as an illusion'. Moreover, the Nyāya-va'isesikas assert that if it is true, then it is also true that there must have some cases in which there was the right perception of a real gross object. Because, illusion is always preceded by right knowledge. So, from the above discussion we can conclude that the atoms(parts) are the constituent elements of external objects (whole). Our next attempt will be to discuss how the whole (avayavin) is related to its component parts ? On this question of relation, to its

33. Yad-abhāsa hi buddhis tad asyā ālambanapratyayaḥ,
Ibid,p.502; line-19.

34. "Na ceyam paraspara-vyavṛtta-pramā sukṣma-paramānu-
ālambana,tathā sati sthūla bhedāt tad ekam iti na
syāt". Ibid,p.502, Line-20.

the phenomenologists, i.e., the Buddhists, are sharply divided in opinion from their philosophical opponent, the Nyāya realists.

According to the Nyāya-Vaiśeṣika philosophers, the whole (avayavin) is related to parts (avayavas) by the relation of inherence (samavāya) but not vice-versa.³⁵ The avayavas are samvāyin or the container (ādhāra) of the content avayavins. For example, in the case of a jar, the whole jar is related to its parts by the relation of samavāya, and the soil is the container (ādhāra) of the content whole jar. The Nyāya-Vaiśeṣika philosophers consider the samavāya as vyāpyavṛitti. They explain the constitution of the whole as follows: The parts come in contact with one another and then they make the whole (avayavin). And the new born whole (avayavins) is related to the parts (avayavas) by the relation of inherence (samavāya). And the whole, (avayavin), according to the Nyāya-Vaiśeṣika realists is supposed to pervade its parts through and through.

But the Buddhists are vehemently opposed to the concept of samavāya and ādhāra-ādhārya-bhāva and the concept

35. The inherence relation is not the both way relation. It is asymmetrical relation. If X stands in one relation to Y, Y can not stand to X in the same relation. Here avayavin is related to avayavas in the relation of samavāya, but from the side of avayavas it is not samavāyi but "samavetatva".

of one subsisting in many, Hence forward we shall highlight the Buddhists' arguments on the basis of which they refute the realistic theory of (i) samavāya, (ii) concept of whole subsisting in its parts (iii) the idea of one substing in many.

According to the Naiyāyikas the substance, i.e., the avayavin subsist in every constituent parts of it. But the Buddhists, specifically Śāntarakṣita says that things like yarns, hands, and other limbs cannot be pervaded by a single composite whole, because they are many (anekavat).³⁶ Moreover, the substance, i.e., the avayavin cannot subsist in many because it is one like atom.³⁷ Kamalśīla elaborately restates this argument of Śāntarakṣita. According to Kamalśīla that which is diverse can not be permeated by a single substance, that is, for example, straw, hut and jar.³⁸ These objects (straw, hut and jar) are many and diverse in character and admittedly not imbued with any single substance. The

36. Ekāvayavyānuḡata naiva tantukārādayaḡ. Śāntarakṣita, Tattva Saṃgraha; (Baroda Oriental Institute, 1926), Verse-604.

37. "Nānekāvayavāśrītam ekatvādanuvat" Śāntarakṣita, Tattva saṃgraha, (Baroda Oriental Institute, 1926), Verse-605.

38. "Yadanekam na tadekadravayānuḡatam; Kata Kuttya Kutādayaḡ" Kamalśīla, Tattva saṃgrahapañjikā, (Boroda, Oriental Institute) Verse-605.

The components in question viz. Yarns, hands etc. are also many and diverse. Experience nowhere provides us with an instance of plurality being steeped in unity, of many being shot through with one. Experience rather tells us of unredeemed pluralism of 'many-free' from the least vestige of community. Hence, there is vyāpaka viruddhopalabdhi, i.e., knowledge of the contrary of the vyāpaka of the opponent. So, the Nyāya-Vaiśeṣika thesis is untenable. Again, the Buddhists say that, what is one must subsist in a single atom.³⁹ The 'avayavin' is one; therefore it can not subsist in many. So, there is again vyapaka viruddhopalabdhi. Śāntarakṣita now contends that inspite of the above arguments if the opponents stick, to their position, then they can be challenged on the ground that such subsistence of one in many is not warranted by any pramāna. It is impossible because it militates against the nature (svabhāva), form and character (rūpa) of an avayavin to subsist simultaneously in many parts. The Buddhists raise the question in this connection : Does the avayavin subsists in one part in the same form in which it subsists in another ? Or does it do in some other form ? The former alternative is not acceptable.

39. "Yadekaṁ tadekadravvyāsrītam ya thaikah paramānuḥ"
Kaṁalśīla Tattvasaṁgrahpañjikā, (Oriental Institute,
Baroda, 1926), Verse-604.

Because, if the whole subsists in one part with its form and distinctive nature intact, it could not be subsisting in others at the same time in the same way. If the whole pertaining to one component subsisted in some other component which occupied a different space, in the form and manner, it would mean that the two components were not distinguishable from each other. The second alternative is not also acceptable equally. If the avayavin subsisted in the other part in another form and feature, it would no more be one, for difference of form and distinctive character nullifies unity of the object. Indeed, on this view, we should have to postulate as many avayavins as there are parts, for the avayavin has to subsist in each of them in a different form and character.⁴⁰ But this is absolutely absurd. Hence, neither of the alternatives is tenable.

The Nyāya-Vaiśeṣika philosophers answer the above Buddhists arguments in a very simple way. According to them experience determines the truth and content of propositions and it is to experience that we have to turn to see whether one resides in many or not. Experience shows

40. "Tadekaṁ dravyamekāvayava kodikṛitam yattasya rūpam tenaivavyavāntaresu vartate, Yadyā anyena-iti pakṣa dvayam". Śāntarakṣita, Tattvasaṁgraha, (Oriental Series, Baroda,) p.250.

that in some cases one resides in one, as in the case of a man lying on the coach and that is in some others it resides in many, that is, the whole is in the parts. This is not however a solitary case where we find the relation of container and contained (āśraya-āśrayī) between many and one. Uddyotkara has given other examples, that is, number (sankhyā), separateness (prthakatva), conjunction (saṁyoga), disjunction (vibhāga) and universal (sāmānya). In all these cases, according to Uddyotkara, how can Buddhist deny that one can dwell in many?⁴¹ Moreover, as Raghunāth Śiromani points out, if these were really self-contradictory, how could this be found at all in experience? Contradictions under no system are admitted to be objects of experience, for if they are experienced they can not be deemed to clash with each other.⁴² Since we get instance galore where a manifold is the substrate (āśraya) and a unit is the content (āśrayī), we have to conclude that there is nothing monstrous in holding that one can and does reside in many.

Now we shall discuss the Buddhists arguments against the Nyāya-Vaiśeṣikas second theory that the whole can

41. "Evam sarvesvaneka dravya vrttisū saṁkhyā prthaktva saṁyoga vibhāga sāmānya disvanuyogādhi kāraṇa vyāvṛtn doṣo vaktavyaḥ. Uddyotkara, Nyāyavārtika (Bibliotheca Indica) p.215.

42. Yadṛśasya virodho na tasyādhyāso yadṛśasya cādhyāso na, tasya virodh, Raghunāth Śiromani's Commentary on Ātmattvaviveka (Bibliotheca Indica), p.586.

subsists in its parts either wholly or partly. According to Nyāya-Vaiśeṣika realists a thing can subsist in another only in two ways either partly or wholly. The avayavin therefore can subsist in each of its parts wholly without any remainder, e.g., vocal excellence of the cuckoo (kālavinka kantha gura); or it can subsist only in part, e.g., a single thread running in and through the followers.⁴³ Now, if the avayavin subsisted wholly in one part and were exhausted in it there would remain nothing over, to be in other parts; so they would be useless and superfluous.⁴⁴ If it is still maintained that the whole somehow subsists entirely in each and all of the components, then it follows that there would be as many avayavins as there are parts, each avayavin having a different locus of its own., like water lilies blooming in different tanks.⁴⁵ But this is repugnant to the Naiyāyikas. For this means that the avayavin would cease to be one and be reduced to the status of avayavas. A unitary reality embracing the parts such

43. "Yathā Sraksūtram Kusumeṣu", Vācaspatimiśra, Nyāyavārtika tātparyatikā (Chowkhamba Sanskrit Series Benaras), p.381.

44. Śeṣāvayava variyartham, Uddyotkara, Nyāyavārtika (Chowkhamba Sanskrit Series, Benares,) p.213.

45. Tataśca savārtmāna vṛtterjugapadaneka kundādivya vasthota kubālādivat anekatvamavayavinaḥ prapnoti. Kamalśīla, Tattva-saṁgrahapañjikā, (Buddha Bharati Series,) Verse-612.

as the avayavin is supposed to do in blown sky-high.

The matter does not end here, there are other difficulties also. If a avayavin existed wholly in a part and was constituted of it, it would be 'ekadravya' and it will be not perceivable. Because the conditions of perceptibility recognised in the Nyāya-Vaiśeṣika are, among other things, gross dimension and composition by many substances. Since the avayavin in the present case consists only of one part, it obviously can not be perceived. And this goes against the Nyāya-contention that the whole is perceptible. In fact, such an avayavin would be atomic in magnitude, for an atom alone is ekadravya. Moreover, on such a view the avayavin would be indestructable. A thing that is composed of many may be destroyed, because destruction is only decomposition, a resolution into smaller components. So, there is no meaning in saying that it can be destroyed.

We can not also maintain the other alternative viz. the avayavin exists part by part in its components. For this would mean that the whole existed in its component through the medium of a set of intrinsic, non-constituent

parts. There would be thus two sets of parts - constituent and non-constituent parts. But this goes against the experience and also to the Nyāya-Vaiśeṣika contention. Because, experience does not give us any such two fold parts of a thing. Now, the question may be raised that how is the whole related to its non-constituent parts ? As stated before it can not exist entirely in any of its parts; if however it is to exist partially, there would be a third set of parts and so on ad-infinitum.⁴⁶ Again, if the whole was to exist piecemeal, we would have any instance of many being in many and not of one being in many.⁴⁷ The whole would lose its self-identify and unity and would just be a conglomeration of parts.⁴⁸ But this is precisely the Buddhist view and the Naiyāyikas would certainly not accept it.

Śāntarakṣita, the Buddhist philosopher, does not accept the very Nyāya-Vaiśeṣika concept of vṛtti of subsistence of the whole in the parts. According to him if each

46. "Atha ekadeśena iti pakṣaḥ tadā anāvastha syādekadeśanām"
Kamalśīla, Tattvasaṃgrahapañjikā", (Buddha Bharati Series)
On verse-613.

47. "Tathā ca sati nikamānekats aikadeśena vartate kim tu
anekamānekatva iti" Vācāspati Miśra, Nyāyavārtikatātparyatikā,
(Chowkhamba Sanskrit Series, Beneras), P.382.

48. "Evam hi sati eko ' vavi na syāt avayava pracayamātr-
arupatvāttasya. Kamalśīla, Tattvasaṃgrahapañjikā (Buddha
Bharati Series) Loc, cit.

of the composites present in each of the components together occupied the same space, then and only then they could be said to subsist in a component,⁴⁹ since, however, that is not possible, i.e., the many composites subsisting in the many components can not all occupy the same locus, we can not speak of subsistence of the whole in the parts.⁵⁰ Vācaspati also states this Buddhists argument as purvapakṣa with considerable greater trenchancy. According to Vācastati Miśra, if the whole exists, part for part, in the avayavas, then ultimately we have to come to atoms and instead of saying 'a garland running through flowers', should say 'an atom of the garland is in a atom of a flower.'⁵¹ But subsistence of one atom on (or in) the other is absurd. Hence, it is not meaningful talk to say that the avayavin subsists in the avayavas (avayavesu avayavi vṛtteḥ).

The Nyāya-Vaiśeṣika philosophers next give arguments to refute the Buddhist objection and to establish their position, i.e., the whole or avayavin is over and above its parts. They give two arguments to reject the Buddhists

49. Yadyekadeśaḥ pratyekāvayavinah syuh, tadā avayavehyavayaviv ṛttaḥ syāt, Kamalśīla, Tattvasamgrahapañjikā, (Buddha Bharati Series) Loc, Cit.

50. Kamalśīla, Tattvasamgrahapañjikā (Buddha Bharati Series), loc, cit.

51. "Kusumaparamānabekasmīn sūtra pramānureko vartate", Vācaspati Miśra, Nyāyavarttikatātparyatikā (Chowkhamba Sanskrit Series), p. 382.

position. According to the Buddhists the only ground of rejecting an avayavin is the impossibility of its subsistence either part by part or in its entirety. Now the question may arise, the Nyāya-Vaiśeṣika philosophers point out : Is this ground or probans some thing perceived by the Buddhists ? Or is it some thing unperceived ? In the latter case it is open to the charge of being 'asiddha' (unproven). As a matter of fact, the Buddhists have nowhere perceived such subsistence, hence the ground asiddha; consequently, the Buddhists conclusion, that is, the avayavin is non-existent is untenable. If, on the otherhand, such vr̥tti or subsistence as such is not admitted by him it would be the same in everywhere including the case of the avayava and avayavin. In that case it is not open to the Buddhist to deny 'avayavin'. Again if vr̥tti or subsistence as such is not admitted by him, then the question whether subsistence is partial or complete does not arise at all and should not be entertained at all. Instead of hair spilliting as to the mode on subsistence the Buddhist in the very begining should denounce it. So the Naiyāyikas may finally wind up by saying that in any event the opponent can not deny avayavin, because it is vouched for by our perception which takes the form'. 'It subsists herein',

'the cloth subsists in the yarns' etc.⁵² Vācaspati says in this context that if, as the Buddhists argue, there is no subsistence, then all talk of whether subsistence is by part or as a whole is no much empty verbiage.⁵³

The Buddhists say in reply that so far as subsistence or 'vyrtti' as such is concerned it has been shown to be a myth. The second question relates to the mode of subsistence and to the validity of such expressions as 'partial or complete subsistence'. These are used and intended to be taken only analogically. By the term 'in', entirety' what is meant to be clarified is whether the 'avayavi substance' subsists as an impartible whole-in the way in which the śrīphala, that is, the bilva fruit, lies in a dish ? Or does it subsist in some other way as a certain person, Chaitra does when lying down on several seats ?⁵⁴ This latter sense is shought to be brought out by then term 'subsistence in part'. Hence, there is nothing wrong in using expressions to which Nyāya-Vaiśeṣika has exception. Lastly, as regards to the perceptual character

52. Śāntarakṣita, Tattvasamgrah, On verses Nos.-613 - 617.

53. "Vṛtiterabhāvāt ekadeśena va karṭsnryena va vartate iti riktam vacah", Vācaspati Miśra, Nyāyavārttikatātparyatikā, (Chowkhamba Sanskrit Series,) Loc,cit, Verse No.620.

54. Śāntarakṣita, Tattvasamgraha, (Buddha Bharati Series) Verse No.620.

of subsistence of the whole in parts, it is flatly denied by the Buddhists. The Nyāya-Vaiśeṣika philosophers restated this Buddhist contention to negate the relation between whole and part. The Nyāya-Vaiśeṣika philosophers controvert the Buddhist thesis that since the whole can not exist in the parts either wholly or in part, it can not be admitted. Like Vātsyāyana Uddyotkara challenges the very basis of the Buddhist contention and says that the concepts of 'existing wholly or in part' (kārtsnyena ekadeśenava) do not apply to the whole.⁵⁵ When there are many things in a group and we include all of them without remainder we use the term 'kṛtsna' or 'all' (or complete or exhaustive).⁵⁶ More clearly, it may be said that the underlying idea is that it implies a totality, a manifold, each member of which has been included in our calculation and none left out. Naturally, it can not be applied to the avayavin which is unitary substance and not a manifold. Similarly, concept of 'part' does not go with it, again for

55. "Kim pratyayayavām kṛtsnovayavi varbateathaikadeśenen nopapadyate prasnaḥ. Phanibhuṣan Tarkabāgiśh, Nyāyabhāṣya, (Calcutta Sanskrit Series), S.No.4-2,11 and "Kimavayaya ekadeśena vartate atha ursnenaiva vartate iti na yuktah prasanaḥ navayavi kytsno naikadeśaḥ" Uddyotkara, Nyāyavārttika, (Chawkhamba Sanskrit Series), p.214.

56. Kṛtsnamiti khalvanekasya śeṣāsyabhidhānam, Ibid.

the reason that it has no parts except the avayavas of the components which are its inherent cause and therefore different from it. In fact, the word 'ekadeśa' as distinguished from the word 'kṛtsna' is used when some members of a given total are left out.⁵⁷ The avayavin, being a unitary and not a multiple substance, obviously does not admit of being conceived as existing in part.

It may be asked, "if the whole does not subsist in the parts, either wholly or partly, how else does it do so ? These are the only modes of subsistence and there is no third one".⁵⁸ Vācaspati in answer to this question says that it is not correct to hold that subsistence must always be either in entirety or in part, i.e., subsistence is vyāpya and either of these modes (prakāradvayānyatra) is vyāpaka.⁵⁹ There is also another mode viz, subsistence by nature (svarupataḥ). The thread running through the flowers of a garland is such that, by nature, it has to exist in the flowers. It does not exist there wholly or in part but by reason of its being what it is. Similarly guna subsists in its locus by reason of its nature, i.e., because of its

57. Na ca kṛtsnaikadeśābhyāṃ prakāraṅtamasti. Vācaspati Miśra, Nyāyavārttikatātparyatikā (Chowkhamba Sanskrit Series), p.381.

58. Na kiṃcitkvacit kārtṣnyenaika deśena va vartamānam drṣtam iti tayorvṛttimprati vyāpakatvamasiddham, ibid, p.382.

59. Tatra sūtrasya kṛttih kusumeṣu naikadeśena vā nāpi kṛtsne yena kimtu svarupataḥ; evamavayavesvayavināḥ svarupataḥ eva. ibid, p.382.

being a guna, even so in the relation of avayavas and avayavin. The avayavin is such that it can not but be in its avayavas - that is its nature, its svarûpa. Therefore, the above said bimodality can not be said to cover all cases of subsistence of the avayavin in the avayava can not be nullified. In fact the problem of how many ways are there of a thing being subsistent in another is to be empirically determined and we can not start with any preconceived notion in the matter.

Thus, we see that subsistence of the avayavin in the avayavas is natural, not circumstantial.⁶⁰ This relation is called samavāya. It is āśraya-āśrayi bhāva - the avayavas are āśrayi or, the content. In this relation one is in many at one and the same time. But the Buddhists do not admit any such relation and this brings us to the next point of discussion, that is Buddhists criticism of samavāya.

We have already mentioned that one of the Nyāya-Vaiśeṣika contention is that the whole is apprehended by us as subsisting in parts. We have cognitions of the form 'the cloth is in the yarn' or 'the pot is in the potsherds': and

60. "Svābhāvika na tu āgantuka" Udayana, Kiranābalī, ed by Gourināth Śāstrī, p.251.

this clearly shows that there is subsistence of the whole in the parts. Since experience and knowledge attest such subsistence, it has to be admitted as a brute datum, as an indisputable objective fact. Possible difficulties regarding mode of subsistence can not be allowed to supersede or negate this fact, rather they are to be explained or sorted out on the basis of and in the light of such subsistence. The Nyāya-Vaiśeṣika philosophers designate such subsistence by the term samavāya or inherence.

Although samavāya or inherence later came to be supposed to obtain in various cases, e.g., as between a substance and its qualities and motion, an eternal substance and its ultimate differential etc., still, in the beginning, it seems to have been introduced into the Nyāya-Vaiśeṣika literature only to explain the peculiar relation between the kāraṇa and kārya-dravya. Kanada does not indicate of qualities, movements, universals to be residing in their substance by relation of samavāya. He defines samavāya as "that which produces in respect of the material cause and the effect, the notion this

subsisting in that".⁶¹ The relation of samavāya, therefore, makes it possible for the material cause and the effect to be container and contained (ādhāra and ādheya) respectively. It seems that originally samavāya was meant to explain only this relation of subsistence; subsequently, it was extended so as to cover other cases. The Buddhists, however, reject the relation of samavāya. They deny the relation samavāya which is vouchsated by relevant cognitions such as 'the cloth is in the treads' or 'the pot is in the potsherds'. Dharmakīrti, the great Buddhist logician, asserts in this context that, apart from the Nyāya-Vaiśeṣika literature, we nowhere come across such linguistic expressions. They are not also found in language of the ordinary people. The Nyāya-Vaiśeṣikas deliberately coin such expressions which a view of defending their theory of samavāya; these expressions are not dictated by the nature of things.⁶² Śāntarakṣita also argues in this context that the notion of subsisting in this' (etadiha vijñānam) exists for the opponents only (pareśāmeva vartate)

61. "Ihedam iti yataḥ kārya kāranāya sa samavāya", Kanāda, Vaiśeṣikasūtra, (Bibliotheca Indica) vii, 2.26.

62. Yadirasti samavāyah, tadā' tha tantusu pataḥ' ityādiyaḥ buddhyaḥ na syaḥ ? ... iha tantusu pataḥ ityādisabadaḥ ime svayam mamāyanu locanaiḥ kṛtaḥ na vs as ta pur adhināḥ, ibd, Verse-149.

it is due entirely to their infatuation with their own doctorins (svasiddhāntanuraguna); and is never met within common experience (na dr̥ṣṭai laûkikam tu tat).⁶³

The Naiyāyikas answer by saying that expression of the form 'A' is in 'B' (iha khalu vartate, atra khalu vartate) with some words in the locative case and same in the nominative indicating presence of one thing in another, are not peculiar to him or to his philosophy. They are used by common people as well and even by the Buddhists themselves. Do they not claim, for example,⁶⁴ The horn belongs to the cow 'sr̥ṅgam gāvitishatilit' the horn is in the cow? And do they not claim validity for the same? Here certainly some sort of subsistence obtain and is so accepted by the Buddhist. Dharmakṛitti points out that regarding the above expressions of the Nyāya as indicating samavāya of the whole in the parts, e.g., the cloth is in the thread is unknown to the common man; it sounds outrageous to him.⁶⁵ Not only does he never have such knowledge but he had rather knowledge of the reverse, e.g., the

63. Śāntaraksita, Tattvasaṅgrah, (Chowkhamba Sanskrit Series) Karika-826.

64. Dharmakṛitti, Pramānavārttika, (Buddha Bharati Series), Verse-150.

65. Ibid.

thread belong to the cloths.⁶⁶ As Dharmakṛīti points out, the latter is certified by pratyakāṣa and is universally accepted, as is borne out by the language of all unsophisticated people; the former however is maintained only by the Nyāya-Vaiśeṣika philosophers. It is 'upakalpita', i.e., imagined by the Nyāya-Vaiśeṣika philosophers and 'alaūkika', i.e., not found in the world, because it falls beyond the realm of what is established by pramāna (pramāna siddhir bahir bhāvāt."⁶⁷ Śāntarakṣita drives home this point by saying that the notion that appears in our ordinary experience is 'the branches are in the tree' and not 'the tree is in the branches'⁶⁸, 'the stones are in the hill', and not 'not hill is in the stone'. Thus we should say following universals down the ages that parts make up the whole and being to it, and not vice-versa, as the Naiyāyikas believe, to wit, the whole belongs to and is in the parts.

66. Na kevalam 'tḥa tantusupatak' ityādika dhiya loke na siddhaḥ kintu tadviparitatā eva prariddhān. Kamalāsīla, Tattvasamgrahpañjikā, (Buddha Bharati Series) On verse-830.

67. Dharmakṛīti, Pramānavārtika (Buddha Bharati Series) On verse-150.

68. Vriṣṭe śākhāyaḥ sibaśeāga ityesa laūkikimatih. Śāntarakṣita, Tattvasamgrah, on verse-830 and na tu śākhāyām, vṛkṣaḥ, silāsu pravata iti. Kamalāsīla, Tattvasamgrahpañjikā, On verse-830.

The Naiyāyikas now seek to give counter arguments to the Buddhists above stated argument.* They argue that even the expression approved of by the Buddhists, that is, 'the horn belongs to the cow' suggests that what is called 'the cow' is different from its parts and thus goes to prove the avayavi as distinct from avayavas. If the whole were not distinct from parts, the cow from its avayavas. We could not even speak of horns being in the cow.⁶⁹

The Buddhists say in reply to the above argument that it simply means that the horns are never found apart from the remaining parts which together with them, i.e., the horns are known as the cow,⁷⁰ It does not signify the existence of an additional avayavin called 'cow'..

Śāntarakṣita explains in this connection that according to the Buddhist sentences containing a word in the nominative and another in the locative signify two things,

* Biswanath Sen, The Concepts of Part and Whole (Avayava and Avayavi) (Rabindra Bharati University, Calcutta, 1985), pp. 45-46.

69. Yadyayayavebhyo na gaurbhinnah tadā gāvī sṛigam ityāpina syāt ? Monorathanandin's commentary on Pramānavārttika, (Buddha Bharati Series) on Kārikā-150.

70. "Gavākhyā-pariśiṣṭāṅga-vicchedānupalambhāvāt", Pramānavārttika on Kārikā-150.

close proximity (nairātmya) or identity (tādātmya).⁷¹ It signifies close proximity when the two words stand for two portions of an aggregate (avayasañcaya) as in the above example or for portions of two different aggregates, i.e., the bilva fruit is in the bowl (kundādau śrīphalam). 'The branches are in the tree', or 'stones belong to the hill', mean that branches and stones are found to be in close contact with portions other than themselves, viz, trunk of the tree and base of the hill respectively.⁷²

But in case where we speak of colour, sound, taste, smell, action etc. and residing in a substance identity is meant, identity between the substance and colour, taste etc. as the case may be 'colour is in the jar' means 'colour is of the nature of the jar, and not that 'colour' and jar are two different things and one inheres in the other. Kamalśīla here points out that the word 'tādātmya', used by Śāntarakṣita, is not to be taken as 'sameness' or equation', other wise colour and jar would be identical; wherever any patch of colour is found, it would be termed 'jar' and vice-versa. What is however intended here is that

71. Na tu avayavatiriktagosadbhāvāt" Monorathanandin's commentary on Pramānavārttika, (Buddha Bharati Series) On Kārikā-150.

72. "Vivakṣita śākhārīta vyatirekatanyadhovyavasthi tāni skandhādinyanyani" Kamalśīla, Tattvasaṃgrahapañjikā (Chowkhamba Sanskrit Series) On Kārikā-831.

though colour is found in many places, colour associated with certain other sense data which together forms a jar, is different from character, components found elsewhere. This distinction from other things, i.e., sense data (atadvyāvrtti) is sought to be pointed out by the expression 'colour in the jar'. Hence it means not that the 'colour is the same as jar but that it is of the nature of the jar' (ghate rūpam = ghatasva bhām rūpam, no ghatadyāt mākamityārtha).⁷³ Śāntarakṣita, therefore, concludes that only when two things are known to be different from each other and one is contained in the other, do we have the notion that 'this subsists in that'?⁷⁴ Cloth and yarns however are never perceived as distinct from each other, so there cannot arise in our mind the notion that one subsists in the other.

Dharmakīrti also says in this context that cloth and threads can not subsist one in the other by inherence, for inherence would pre-suppose that the two things are different and exist simultaneously. But this is obviously absurd. For threads are the cause and cloth is the effect

73. Ibid.

74. "Nānāvalakṣane hi syādādha rā dheya bhūtāyoḥ idamatreti vijñānam kundadau sṛīphalādivat. Śāntarakṣita, Tattvasaṁgrah (Chowkhamba Sanskrit Series) On verse-831.

cause. Cause and effect are related as antecedent and consequent and not as synchronous entities (naika kālam kathañcan). A cloth is but the subsequent state of yarns brought into existence through the instrumentality of loom, weaver and other machinery (tantusaṃskārasambhūtam kāryam) threads are the antecedent condition of the cloth.

We have seen in the above discussion that Buddhists do not admit samavāya. In fact the Buddhists do not admit any relation,⁷⁵ not to speak of samavāya only. According to them reality is but detached and discrete bits called moments (kṣanas) and all relations are only upakalpita or imaginary, being subjective projections on an infinitely pluralistic universe. This being so, it is not surprising that the Buddhists have severely denounced samavāya. We have discussed their arguments together with the Nyāya-Vaiśeṣikas answers thereto. We, however, made it clear and wish to reiterate that our concern is with samavāya not in all of its aspects but only in so far as it bears on our problem in hand, i.e., as the relation of substrate and content, between the cause and the effect, between parts and whole. It has also been seen in the above discussion

75. Saṃyoga vibhāgayoh pratidhesh". Śāntarakṣita, Tattvasaṃgraha ed by Baroda, p.270, Saṃyoga vibhāgankalpitu tavanārtakṣu'

that the difference between two contestants is the simple issue. Is the effect something different from the cause or not ? If it is held to be different, then samavāya or inherence becomes necessary to bring them together and keep them connected. This is the view of the Nyāya-Vaiśeṣika philosophers. If, however, the effect is deemed to be but a form of the cause, they would turn out to be an identical substance. Naturally, there would be no necessity of samavāya. It is for this reason that the Buddhist has no place for samavāya in his cosmological scheme.⁷⁶ The Nyāya-Vaiśeṣika philosophers have tried to establish that the avayavin is distinct entity and can be proved to be so by various reasons. Therefore, samavāya must be admitted. Besides holding between avayavas and avayavin, samavāya holds also between substance and quality, substance and action etc. with which we are not concern here. The Navya-Nyāya has tried to prove it on another ground. The ground is : we have qualified knowledge (viśiṣṭa buddhi) of qualities, action etc., e.g., 'the jar is blue' (which is guna viśiṣṭabuddhi). 'Devdatta is in motion' (which is kriyā viśiṣṭa buddhi) etc.⁷⁷ Now such determinate knowledge has three contents viśeṣya or qualificand, viśeṣaṇa or

76. "Na samavāyosti pramānabhāvāt". Iśvarakṛṣṇa, Sāṃkhyakārikā, (Nirnaya Sagar Press, Bombay), Sāṃkhya-sūtra-5/99.

77. Gunakriyādiviśiṣṭabuddhirviśeṣaṇa viśeṣya saṃbandha viśaya viśiṣṭa buddhitvāt. Viswanath, Siddhāntamūktāvalī, (Nirnaya Sagar Press, Bombay) On Kārikā-11.

qualifier and a relation between these two. Now such relation can not be samyoga which holds only between substance and not between a substance and a quality or an action. It can not be tādātmya because the substance, and the quality or the action are perceived to be different. It can not also be svarupa sambanda because in that case absence of a pen from the table can not be explained. Therefore it must be other relation which Naiyāyikas designate as inherence. Whatever be the ground for which it is established, the Naiyāyika asserts that the reality of avayavin can not be disputed.

To sum up the conclusion, the whole can not be equivalent to a mere aggregate of its parts, because the perception of it as a single unified thing is an uncontradicted fact. The theory which equates the whole with the totality of parts serves only to show that the perception of the whole, which is a felt fact, is impossible. In other words, the theory defeats itself. It sets itself to explain the perception of the whole, but ends in a declaration that, though not exactly in so many words, that there is no such perception at all. An analysis of the nature and

constitution of the perceived whole reveals the fact that the whole subsists in all its perceived and unperceived parts; it is composed of its parts and derives its being from them, but at the same time it is something in excess of them. The Nyāya-Vaiśeṣika conception of the whole thus resembles that of Russell. The whole, according to Russell is "a new single term, distinct from each of its parts and from all of them. It is one, not many, and is related to the parts, but has a being distinct from their".⁷⁸

78. Russell, Principles of Mathematics. p.141.

III

In the previous sections, we have discussed in detail the epistemological and the metaphysical problems concerning the whole and part. Now, in this section we shall confine our attention to elaborating the Buddhists' argument on the basis of which they deny the reality of citra-rûpa or variegated colour as a whole (avayavi) as advocated by the Nyāya-Vaiśeṣika realists. We shall also examine the Buddhists arguments on the ground of weight and space to refute the reality of the whole as a separate entity. We shall also try to give the Nyāya answers to the five fold Buddhist antinomies (pañchabibha-virodh) which have been put forward by the Buddhists against the Nyāya concept of a distinct whole (prthagbhuta avayavi).

The existence of a separate colour in whole is, according to the Nyāya-Vaiśeṣikas, conclusively proved by the emergence of what may be called a variegated colour (citra-rûpa) in an object (say a cloth) produced from parts (i.e., yarns) possessing different types of colour. A variegated colour is not the same thing as a variety of colours; the one is a single unified colour, and the

other is a manifold of mutually distinguishable colours.⁷⁹ When, therefore, we speak of a multi-coloured cloth, we distinctly understand one particular type of colour to be present in the whole fabric of the cloth. On the Nyāya-Vaiśeṣika view, colour by its very nature is pervasive of its substratum (vyāpyavṛtti). If a particular colour is present in any part of a thing, it can not be absent in any other part of the same thing. When a piece of chalk is described as white, it is assumed to be white in every part of it. It thus follows that the apparent co-presence of a number of colours in a multicoloured thing should be explained as implying the absence of each of these colours and the emergence of a new colour, viz., variegated colour, through their combination.⁸⁰ And this variegated colour must have a cause; it is the colours of the parts which generate it. The colour of one part, however, is different from that of another, and so there is no variegated colour in any one part. We have, therefore, to admit that the variegated colour belongs to the whole, and not to be parts.

79. Uddyotkara, Nyāyavārttika, (Bibliotheca Indica, Calcutta), p.511.

80. Na ca nīlāpitādaya eva bahavo' vyāpyavṛttayas citrapadāspadam, rūpādinām vyāpyavṛttitvāt. Vācāspati Mīśra, Nyāyavārttikatātparyatikā, (Vizianagram Sanskrit Series, Beneras), iv-ii, 12, p.454.

The Buddhist objection to the doctrine of a distinct avayavin (prthagbhuta avayavin) relates to the Nyāya-Vaiśeṣika hypothesis of variegated colour or citra-rūpa.

The Buddhists argue that if the avayavin is a distinct entity, it should have a colour of its own apart from that of the avayavas. But even the closest observation of a cloth does not disclose in it any colour other than of its parts. When the colour of the whole is thought to be perceived, we really perceive the colour of the parts. The whole, therefore, can not have any distinct status.

The Naiyāyikas say in reply that the avayavin must have some colour, for there can be no substance without colour. And the colour of the whole follows the colour of the parts - if the parts are red, so is the whole. This is in accordance with the maxim - kāranagunaḥ kārya gunanāmānabhante, i.e., attributes of the cause produce in the effect attributes of the same kind (this is true when the attributes are of a specific nature, and

not general, i.e., viśeṣa guṇah and not the sāmānya guṇah).⁸¹
We fail to distinguish the distinctive colour of the whole from that of the parts because of the sameness of kind (sajātiyatva). Both the colour being of same nature, the one overshadows the other and make it impossible for us to discriminate between these two, but it does not mean that the other is not there. So, the non-discrimination of the colour of the whole does not prove the non-existence of the whole.

The Buddhists reject this contention and says that while it may go well when the parts are of a uniform, unvaried colour, it breaks down when they are of different colours. What colour would be the whole if the parts were some red, some blue and some yellow ? Similarly, what will be the nature of a cloth if it is made of different kinds of fabrics, viz. cotton, silk and wool ? The avayavin can not obviously possess one of the colours in preference to another, for in that event the whole would have a colour different from that of some of the parts, and this would go against the above Nyāya maxim. The avayavin

81. Phanibhuṣana Tarkavāgiśh, Nyāyaparicaya, (Calcutta Sanskrit Series), p.83.

can not also possess all these colours simultaneously, for they are mutually contradictory (paraspara viruddha svabhāva). So, avayavin has no colour of its own.

The Nyāya reply against the above contention is that, if the avayavin is admitted at all then chitra-rūpa has to be admitted. Recognition of avayavin is the ground of recognition of chitra-rūpa not the vice-versa, i.e., it is not that, chitra-rūpa is first of all proved and then the avayavin is said to follow from it in a consequence. This will go to dispose of the Buddhists criticism that if chitra-rūpa is proved to be inadmissible the avayavin will have to be scrapped as if chitra-rūpa is the basis of recognition of avayavin. But this is just putting the cart before the horse. The avayavin is proved, the Naiyāyikas assert, not on the ground of chitra-rūpa only but on other grounds also, but once proved, it demands a colour of its own when the parts are all of different colours. The result is recognition of chitra-rūpa. A thing can not be perceived by the colour of another, as in that case the colour of the wall of a room might make the air associated with it visually perceptible.⁸² Since,

82. Na tāvad avayava rūpādavayavino grahanam yuktam vāyonaphupalādhī prasaṅgāt. Yadyanya rūpādanyasyoplabdhī bhavati vāyorapyupalabdhīh prāpnoti, na ca ita dasti; tasmāt svarūpādavayavyupalabhyate. Uddyotkara, Nyāyāvārttika (Chowkhamba Sanskrit Series), p.507.

the avayavin is perceived, it has to be assigned a colour of its own different from that of parts.

The Buddhists insist that their thesis is not adversely affected by the above facts. If there is no such colour as citra-rûpa, how can the avayavin have it ? And their point is that there is no one species of colour called citra-rûpa. It is just a mixture of colour and that's all. But the Naiyāyikas answer this Buddhists' objection in the following way: First, the Naiyāyikas assert that recognition of avayavin is the ground of recognising citra-rûpa does not mean that it is the only ground and there are no other grounds. All that is meant is that, it is the sufficient condition, though not the necessary condition, of recognition of citra-rûpa. Secondly, the further ground on which chitra-rûpa or variegated colour is admitted is that it is perceived.⁸³ We perceive variegated colour as we perceive yellow or blue. This is borne out by the fact that when different parts of a cloth have different colours, we speak of 'the colour of the cloth' and not 'of colours'. There we have perception of a unity which is expressed by the singular number and

83. ... tathāpi citrātmāno rupasya nāyukta ... sarvaleka prasiddhena pratyaksenaivopapaditvāt. Śrīdhara, Nyāyakandali (Vizianagram Sanskrit Series, Beneras), p.30.

not by plural. There we feel that, we are in the presence of a unitary colour and not of a variety of colours.

Moreover, the Nyāya philosophers offer another reason. Colour, they say, is universally recognised as vyāpyavṛtti, unlike conjunction (saṁyoga) which is always slectional (avyāpyavṛtti). A thing can not have many colours. It may be red or yellow, green or blue but it can not be all of them together. Hence, the very concept of mixture of colours or variety of colours is alien to the Buddhists.

The Buddhists again raise the objection what would happen if the border of a variegated cloth were not variegated? In as much as the cloth as an avayavin exists in the border, its variegated colour should also be there and should therefore be perceived. But as a matter of fact we do not perceive it. How would the Naiyāyikas account for it? The Naiyāyikas answer this objections in the following way. According to them, variegated colour or citra-rūpa is produced and revealed by a variety of colours present in the parts.⁸⁴ Hence, we can not perceive the citra-rūpa unless we are perceiving at

84. Avayava vṛtti vijātiya rūpa samāhāra avhivyañgyatvāt. Udayana, Ātmatattvaviveka (Chowkhamba Sanskrit Series), p.274.

the same time many colours belonging to parts; it does not reveal itself through a part having one uniform colour.⁸⁵ This is the solution of Udayana. Śrīdhara also supports it. The condition of perception of variegated colour (citra-rūpolambha sāmagri) is perception of colour of various parts.⁸⁶

The main objection of the Buddhists, therefore, that the whole does not exist as a separate entity because it cannot have a colour of its own, is, according to the Nyāya-Vaiśeṣika, based on misinterpretation of experience and shallow logic.

The Buddhists next take a different line to attack against the Nyāya concept of the 'whole' as a separate entity. They bring in the notion of weight and space as instruments against the concept of 'whole' as an entity which is over and above its constituent parts. First, the Buddhists argue that if it is the fact that, by the conjunction of parts an additional whole is produced, then there should be an increase of weight. When the yarns are

85. "Ekarūpavayava sahitasyā 'vayavina upalambheplyupalabhyate", Ibid.

86. Navyastu tatrāpi avyapya vṛttya eva nānārūpam. Biswanath, Nyāyasiddhāntamuktāvali, (Nirnaya Sagar Press, Bombay, 1916), On Kārikā-100.

woven into a cloth, we have, on the Nyāya view, not merely the avayavas, the yarns, but also the emergent avayavi, the cloth. And since the avayavin subsists in its avayavas and is not found apart from them, weighing the cloth really means weighing the yarns and the cloth, the avayavas and the avayavin. Consequently, we should have double the weight of the yarns. But we never find that it is so. The weight of a body is never found to exceed that of its parts. Rather our experience is that the whole weights equally as its parts. This conclusively shows, say the Buddhists, that the additional avayavin is a myth and a thing is nothing but its parts taken together.⁸⁷

The Nyāya-Vaiśeṣika, however, sees in this argument an assumption which goes against the principle of qualitative causation. According to this principle, a quality of the cause produces a corresponding quality in the effect, and the two qualities, though similar, are numerically different from each other. The whole, therefore, should be supposed to have its own weight which

87. Gurutvādhigato syātaṁ yadyasya syāt tulāntih. Dharmakīrti, Pramānavārttika, (Buddha Bharati Series) On Verse-154, p.411.

is derived from the causal efficiency of the weight of the parts. We can not, of course, distinguish between the two weights, but that is not because there is no difference between them, but because we lack the capacity to appreciate the difference. In fact, if a whole, i.e., a body, had no weight of its own, it would not fall down when left unsupported, for the fall of a substance can be caused only by its own weight. It can not be contended that the weight of the parts is responsible for the fall of the whole. For it is only when two substances are in conjunction (samyoga) with each other that the weight of one contributes to the fall of the other; but the whole, which inheres in its parts, can not be in conjunction with them.⁸⁸ So the whole must be credited with a specific weight of its own, and can not be identified with its parts on the ground of the sameness of weight.

The second Buddhists argument is on the ground of space. According to them if the avayavas and avayavins are completely two different things then they cannot occupy the same space, that is, a jar or a cloth.⁸⁹ They

88. Uddyotkara, Nyāyavārttika, (Bibliotheca Indica, Calcutta), P.238.

89. Yo hi yasmādvyatiriktah sa tadadhithisthitadeśa vyatirikta deśādhithāna upalabhyate ghatādivapato, na caivamaavayava bhyah prthagdeśo drśyate. Jayanta Bhatta, Nyāyamañjarī, (Chowkhamba Sanskrit Series), p.114.

are always found to occupy different portions of space. So, if the avayavin and the avayavas were different entities, they should be found in experience to do the same, i.e., they occupy different portions of space. But the fact is otherwise. The avayavin and the avayavas, whole and parts, occupy one and the same space, (samānadeśavṛtti). Therefore, they should be adjudged to be one and the same (abhinna). The Nyāya-Vaiśeṣika philosophers have also refuted this argument of the Buddhists. According to them, it is conceded that parts and whole, threads and the cloth do not occupy different portions of space, but this is because of the relation of samavāya or inherence. Samavāya is āśrayāśrayi samabandha, it is the relation of substrate and content between two inseparables (ayutha siddha). In it, the samaveta resides in the samavāyi, the cloth in the yarns. The content naturally occupies the space of the substrate, and the two, therefore, come to occupy the same space, cloth occupies no other space than that of yarns. Although difference of space signifies numerical difference of things, non-difference does not point to identity. This is due to the fact that the avayavin is āśrita in the

avayava and not because there is no distinct avayavin.⁹⁰

So, the Buddhist argument, on the ground of space to refute the Nyāya theory of whole, does not hold water.

Again, the Buddhist phenomenologists have advanced five antinomies to refute the Nyāya-Vaiśeṣika theory of the 'whole' - the whole as a unitary principle is numerically different from the avayavas though related to them by the relation of inherence or samavāya. This five antinomies (pañchavidha virodh) are as follows:

a) Grahanāgrahana virodh or upabambhānupalambha virodh or the antinomy of being perceived and unperceived at the same time, (b) āvaranānāvarana virodh or the antinomy of being covered and not covered at the same time. (c) Kampākampa virodha or the antinomy being in motion and yet not being so simultaneously. (d) Raktārakta virodh or the antinomy of being coloured and not coloured simultaneously, (e) Taddeśatvātaddeśatva virodh or the antinomy pertaining to presence of the self same thing in many places. Now, we shall elaborate these antinomies of the Buddhists and the Nyāya reply to refute these antinomies.

90. "Tatvavyavāśrītatvameva nimittam nastivam" Ibid. p.114, and "Dravyanāme katva samavāyena samāndeśatam vyasidhāmo", Vācaspati Miśra, Nyāyavārtikatātparyatikā, (Calcutta Sanskrit Series, Calcutta), p.1069.

a) Grahanāgrahana virodh or upalambhānupalambha virodh or the antinomy of being perceived and unperceived at the same time - According to the Naiyāyikas the whole subsists in each of its part and a part is known along with the whole that subsists in it.⁹¹ But in the case of perception of an object, i.e., the whole, we perceive that part of the object which is in contact with our sense organs (eyes), but there is also a back part which is not perceived. Now if we admit the Nyāya theory, i.e., the whole subsists in each of its part and the condition of perception,⁹² it is not possible that the avayavin should remain unperceived when its substratum, the parts, are being perceived. In other words the whole as subsisting in perceived parts is perceived and as subsisting in unperceived parts remains unperceived. But it is one and the same whole that subsists in both these parts, and not two wholes or even two parts of a whole, one subsisting in parts perceived and the other in remaining parts. Hence, we have to say, as the Buddhists advocate, that the self same avayavin can both be perceived and unperceived by the same person at the same time and

91. Ekadesopalabdhistat saha cāritavayavuyyoplabdhīśca. Vātsyāyana, Nyāyabhāṣya, (Vizianagram Sanskrit Series, Benaras), On Su-32.

92. "Tasyā vavavasthanasyopalabdhikāraṇa prāptasyikadeśopalabhhavānupalabdhīranupanneti". Vātsyāyana, Nyāyabhāṣya, (Vizianagram Sanskrit Series), Benaras) On Su-32.

in the same place. But the Buddhists point out that it is self-contradictory which goes against the distinctive existence of the avayavin as a separate unity.

The Nyāya-Vaiśeṣika realists are also agree with the Buddhists in the point, that, any self-contradictory principle can not be acceptable principle. But in the case of above mentioned objection, i.e., apprehension and non-apprehension of the whole, there is no such contradiction. The whole or avayavin can not be both perceived and unperceived, for once the whole is perceived, whatever the conditions it is apprehended once and for all and can not be said to be unapprehended. Moreover, they assert that apprehension and non-apprehension as such are not opposed, but if a thing is apprehended at a given time and at a given place by a person and yet is not apprehended by him at the very same time and place only then the alleged antinomy would arise. But this case does not occur in the perception of whole. So, this antinomy of the Buddhists, i.e., grahana-agrahana Virodh, does not stand as a valid.

b) The second antinomy which is raised by the Buddhists is the antinomy of being covered and not covered at the same time avarānāvarana virodha. The Buddhist phenomenologists point out that according to the Nyāya-Vaiśeṣika realists the whole belongs to each of its parts. Now when one part of the whole, for example, a jar, is covered then what would happen to the whole ? In this case we have to say, as the Naiyāyikas advocate, that the whole is covered. Then the problem may crop up that there is also exposed part and we should say that the whole is uncovered at the same time as the whole belongs in the uncovered part. So, a whole may be covered and uncovered at the same time, which leads to a contradiction.

The Naiyāyikas assert in reply that, there is no contradiction in the above case. Because, the covering of a part does not mean that the whole is covered, as the Buddhists assert, for, firstly, the avayavin is different from and other than the avayavas,⁹³ and the covering of one is not the ipso facto the covering of a different thing.⁹⁴

93. "Avayavas yāvaranam nāvayavinah tasyānyatvāt". Vācaspati Miśra, Nyāyavārttikatātparyatikā, (Vizianagram Sanskrit Series, Benares), p.383.

94. Biswanath Sen, The Concepts of Part and Whole (Avayava and Avayavin) (Rabindra Bharati University, Calcutta), 1985, p.101.

Secondly, if upon a part being covered the whole were also covered, it would not then be capable of being apprehended; but as a matter of fact the whole is apprehended in such a contingency, being capable of being perceived through the exposed parts.⁹⁵ Moreover, the Naiyāyikas argue that we never see a thing in its entirety. We always see only the front, the interior and the back portions ever remain hidden and obstructed by the front. If the Buddhists were correct and if covering of a part entailed covering of the whole then we should not be able to apprehend the whole even through the frontal part.⁹⁶ But this is surely absurd, for in that case nothing in the world could be known and everything would have been in the dark. For these reasons, the Naiyāyikas hold that avayavāvarana is not avayavyavarna. To put it more precisely, covering a part is not the sufficient condition of covering of the whole.

95. Avayavavarane'pi tasya katipayavayavavasthāns ya grahanādeva. Vācaspati Miśra, Nyāyavārttikatātparyatikā, (Vizianagram Sanskrit Series, Benares), p.384.

96. Kimcidavayavāvaranevayavī yadyāvṛta-stadā parabhāgāva cchedenevārvāgava cchedenapi sa nopalabhyeta. Bhagiratha Thakkura, Bhagirathtikā on Ātmatattvaviveka, (Bibliotheca Indica, Calcutta), p.588.

The Buddhists make another point. When there is no cover on any part of a thing, the thing is apprehended along with its magnitude. Similarly, if the thing remains uncovered even with some parts behind a cover, we should be able, as before, to cognise its magnitude (sthaulyopalambha).⁹⁷ But as a matter of fact we are not able to do so. Some parts remaining covered, we fail to take a correct measure of its magnitude. To this the Naiyāyikas' answer is that even when the whole is perceived, the perception of its specific magnitude depends on the perception of a part that is sufficiently large. It can not 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 the lack of requisite condition.⁹⁸ But a

97. Anāvaranadaśāvat katipayavayavāvarne'pi tathāvidh-
asthaulyopalambhahkinna syāditi. Udayana,
Ātmātattvaviveka, (Bibliotheca Indica, Calcutta)
p.587.

98. Ibid, p.588.

question may be raised; "How can the whole be perceived at all minus its magnitude"? Vācaspati says that the magnitude being only an attribute, the whole which possesses it is different from it, and so the non perception of its specific determination does not stand in the way of the perception of the whole.⁹⁹

c) The third antinomy which is raised by the Buddhists is the antinomy being in motion and yet not being so simultaneously (kampākampa virodha) - The Buddhists argue that it is a matter of our common experience that when one part is in motion, the other often remains unmoved. The whole, i.e., a body, does not move even when a part of it, say a hand, moves. The body, in this case, obviously moves in respect of a part of it and does not move in respect of the unmoved other part.¹⁰⁰ Now, the body as a whole, the avayavin, must, therefore, be said to be both moving and unmoving which leads to a contradiction.

99. Vācaspati Miśra, Nyāyavārttikatātparyatikā, (Vizianagram Sanskrit Series, Benares), p.266.

100. Six Buddhist-Nyāya Tracts in Sanskrit, (Bibliotheca Indica Calcutta), p.81.

In reply to this objection the Naiyāyikas assert that there is no contradiction 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. The Naiyāyikas do not think that the movement of the part necessarily entails the movement of the whole; for, according to them, the part and the whole are different entities which owe their movement to different causes, and these causes do not always synchronize. The movement of the hand, is due to particular kind of volitional impulses, and that of the body to another. One may will to move the hand but not the whole body.¹⁰¹ Thus the Naiyāyikas conform that sakampatva (motion) and niṣkampatva (absence of motion) pertain to the concerning parts (avayavas) and not to the whole (avayavin). Hence, it is not the case, as the Buddhist advocate, that the whole has and yet has no movement simultaneously.

101. Udayana, Ātamatattvaviveka, (Bibliotheca Indica, Calcutta,) p.588.

When all the constituent parts of a whole is in motion, then only the 'whole' moves.¹⁰²

d) The fourth antinomy which is raised by the Buddhists is the antinomy of being coloured and not coloured simultanceously (raktārakta virodh) - This objection is akin to the first antinomy. If a part is red, for example, while the other is not, how is the whole to be characterised ? In keeping with its stand, the Buddhists argue that the whole as inhering in the other part which is not red, must be not red. But then the difficulty arises as before; how can the whole be red and not red at the same time ? As stated above, it is not also possible for the whole to be partly red and partly not-red. This dilemma cuts at the root of the avayavin and negates its existence.¹⁰³

102. Avayavikampasya sakalāvayava-kampaniyatatvāt kva cidavayava kampe pyavayavi niškamphaḥ/Bhagirath Thakkura, Commentary on Ātmatattvaviveka, (Bibliotheca Indica, Calcutta), p. 590.

103. Biswanath Sen, The Concepts of Part and Whole (Avayava and Avayavi), (Rabindra Bharati University, Calcutta, 1985, pp. 56-57.

To prove the invalidity of the above contention to refute the avayavin, the Nyāya-realists have advocated a new theory. Instead of denying co-existence as in the other cases here they deny outright the contradictoriness of the proposed alternatives. They deny, apparently paradoxically, that being red and being not red at the same time are contradictory. Why is it ? Because they are found to go together (sahadarsanāt). To make this contention clear we should be aware of two preliminary conditions. Firstly, the Buddhists are not here referring to the natural colour 'red' but to artificial colouring of red. So, the red colour of the avayavin is due to contact with a colouring substance (maharājano samyoga nimittatvāt).¹⁰⁴ Moreover, if the red colour spoken of here were natural and intrinsic, the Naiyāyika's straight reply would have been that colour is always vyāpyavṛtti and that a thing would be red all over and not partly red. Hence, the Buddhist contention would be declared senseless. Secondly, it may be contended that the parts

104. Vācaspati Mīśra, Nyāyavārttikatātparyatikā,
(Vizianagram Sanskrit Series, Benaras), p.385.

being red and not red, the whole would be citra-rūpa. But this is wrong. 'Not red', it must be understood, is not a species of colour, not even a quality, being an abhāviya padārtha; as such, red and not-red together cannot be said to produce citra-rūpa. It must be emphasised, however, that though 'not-red' is not itself colour, the 'not-red' part will not go altogether without colour; it will have some colour other than red. So, the above objection of the Buddhists on the ground of raktārakta virodha does not hold water.

e) The fifth antinomy pertaining to presence of the self-same thing in many places (taddeśatvātaddeśatva-virodh). This antinomy imply two things:¹⁰⁵ (i) A single, undivided entity can not occupy many parts of space; (ii) A single, undivided entity such as the avayavin can not be in many avayavas. The second condition obviously follows from the first. Pandit Aśoka, an eminent Buddhist logician, advocates that any two portions of the space are mutually exclusive-uniformly

105. Biswanath Sen, The Concepts of Part and Whole (Avayava and Avayavin), (Rabindra Bharati University, Calcutta, 1985), p. 58.

and invariably and we find no exception to it.¹⁰⁶ This exclusion can not be denied, because, so far as a part of space is what it is, can not be any other part. It has a specificity, a definiteness of its own which distinguishes it from the rest. This being so, the different parts stand opposed, and to that extent, contradictory to one another. As a result, the content of these different parts are also mutually exclusive.¹⁰⁷ A thing can not therefore be in more than one locus. Subsistence in one locus automatically negates its subsistence in another which is exclusive of and opposed to the former. Since the parts of a thing occupy different parts of space, the avayavin can not subsist either in the different avayavas or in the different parts of space. If a thing is in one locus, we can know by the law of contradiction that it can not be in another. Again, the Buddhists assert that there is no necessity of perceiving the locus. The mere presence of the thing in front of us proves that it is nowhere else. This knowledge is based on the notion

106. Taddesayośca parasparābhāvābhicāra nimitto virodhaḥ.
Six Buddhist-Nyāya Tracts (Bibliotheca Indica, Calcutta), p. 90.

107. "... Tenādhārabhūtena deśena yadvyāptam rūpam tadāpi deśāntara saṃsargādvicchinnaṃ bhavati", Ibid.

that different parts of space are contradictory and a thing can not be in more than one locus. Stcherbatsky asserts in this context that "one real thing can not exist in many places. If that were the case, it would run against the law of contradiction. If a thing is present in one place, it can not at the same time be present in another place. Thus to reside in many places means to be and at the same time not to be present in a given place!"¹⁰⁸

The Naiyāyikas answer that there is no rule, indeed nothing, to warrant the assumption underlying the Buddhist position, that is, to be in one place means not to be in another.¹⁰⁹ Rather experience tells us quite the contrary. It shows with unmistakable evidence that a thing can exist in many places and in many parts. A table pervades all the parts of space covered by it, and all its own avayavas occupying those parts. In this context the Naiyāyikas raise the question that what 'ataddeśatva' means? Does it mean

108. "Stcherbatsky, Buddhist Logic, Vol.1,p.86.

109. Udayana, Ātmatattvaviveka (Bibliotheca Indica, Calcutta), p.271.

'tadanyadeśatva', i.e., existence in another avayava or 'taddeśatvabhāva', i.e., non-existence in the avayava concerned ? If the Buddhists refer to the second sense, then their objection comes to this; how does the self same-whole exist and yet not exist in a particular part ? 'But this does not arise, as the Naiyāyikas do not hold that this is ever the case. It is admitted by all that a thing can not both be and not be in a place. Then, the Buddhist above said objection turns out in a new direction, that is, how can a thing, i.e., the avayavin exist in many parts simultaneously ? The Naiyāyikas have started their reply stating this problem. So, from this observation, it may be said that the above objection of the Buddhists, i.e., the presence of the self-same thing in many places, is untenable.

Beside the defence of the Buddhists objections the Naiyāyikas have advocated certain independent arguments to prove the existence of avayavin. Goutama asserts that if the avayavin is not admitted, every thing in the world would remain unapprehended (sarvāgrahanam

avayavasiddheh).¹¹⁰ By every thing he means not merely all other substances but all other categories of reality viz. attributes (guna), motion (kriyā), universal (sāmānya), particular (viśeṣa) and inherence (samvāya). The more Goutama opines that, if the gross substance (sthūla dravya) is not recognised, as the Buddhists think, it should not be, then we can not also recognise atoms, or a concourse of atoms (paramānupuñja), because they are imperceptible. Consequently, we should fail to perceive any substance whatsoever, whether gross or atomic. If the substance went by the board, how should we be able to apprehend guna and karma which are not self-subsistent but always exist in the substance as their locus? If the locus (āśrya) went unperceived, we could not obviously perceive the content. Similarly, the universal has its locus only in substance, attribute and action, and if the last three go, the universal can not remain as a perceptible object. On the same ground of the locus being non-perceivable inherence (samavāya) and viśeṣa or particular also fade into oblivion. Non-recognition of the avayavin thus entails non-apprehension of all things under the sun. But

110. Gautama, Nyāyasūtra, 2.1.34

certainly this is not true. It contradicts our universal experience and can not be accepted.

Again, the another ground for recognising avayavin, according to Goutama, is holding(dhāraṇa) and pulling (ākaraṇa).¹¹¹ He advocates that a thing is said to be held when a part of it being held, it is restrained from moving to another place. When we hold for example, a part of a book in hand, the book itself is held and does not go apart. To hold a part of thing is, therefore, to hold the thing itself. And this is possible, asserts the Naiyāyika, because, the thing is a unity. If it was a mass of atoms, detached and disjointed, these things would not happen. We should then have slice in our hand, the other remaining where it is. Similarly, if a part is pulled, the whole also gets pulled and drawn.¹¹² This also shows the unitary character of the whole.

111. Dhāranākaraṇanopapatteśca. Gautama, Nyāyasūtra, 2.1.35.

112. ekadeśagrahanāsāha cārye satyāvayavino deśāntaraprāpti pratiśedho dhāraṇam. Ibid.

From the above observation it may be said that the Buddhists' arguments to refute the contention of perceptibility of the whole as an entity over and above the conglomeration of parts have some logical basis. But the arguments of the Nyāya-Vaiśeṣika realists to refute the Buddhist position and to establish their own stand, i.e., whole is perceptible and is a separate entity, is more justified and hence it is more acceptable.