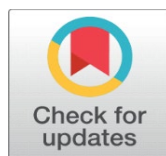


NYAYA-VAISESIKA ON NUMBER AND ITS PERCEPTION

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ABSTRACT

The Nyaya and the Vaisesika system are two arthodox (astika) system of Indian Philosophy meaning they admit the Vedas as eternal and infallible that preexist the common era. In their early history, the Nayay and Vaisesika were two Independent system with their own respective metaphysics, epistemology, logic, ethics and solerious. Overtime, the Vaisesika system become so entwined with the Nyaya to the extent that until recently, there was he Independent history of the Vaisesika as a basic system. One reason for addverssing these two systems together is that share many important tents; both systems are committed to common – sense realism and pluralism in their ontology; believe in the creation of the world from material atmos that conjoin to generate. This world by the will of God and in accordance with the accumulated merits and demerits of individual agent. In my article I want to discuss about the Nyaya-vaaisesika on number and its perception.

The Nyaya-Vaisesika account of number is based on an analysis of our actual - cognitions like 'one', 'two', 'three', etc. They raised the different problems regarding number neither from their interest in mathematics nor from a logistic point of view. We use number words like 'one', 'two', 'three', etc, which in this view designate numbers one, two, three, etc. And numbers for them are as much qualifying features of substances as the qualities like colour, taste, etc. are. They hold a realistic view of number, but such realism should not be confused with Platonism, because numbers in their system are not eternal, timeless, self-subsistent entities known in a priori intuition. A peculiarity of the Nyaya-Vaisesika treatment of number should be noted. The number words like 'one' or 'two', do not refer to any single number like one or two. In fact they admit many ones many, twos many threes, etc.

Keywords: Nyaya Philosophy, Vaisesika Philosophy, Number, Perception, God, World, Astika, Ksana, Vivodha, Eka, Dvitva, Samskara

1. INTRODUCTION

As has been already pointed out, numbers for the Nyaya-Vaisesika are not merely mental concepts having no seat in the reals. They are due to our cognition of many *ones*, and so may be said to have a subjective origin, but they are nevertheless the features of external objects. Like colour, taste, etc., we become primarily acquainted with them in our sense-experience. That we may be acquainted with number one in our sense experience may not be a highly controversial issue, so the Nyaya-Vailesikas take much pain in establishing their thesis that other numbers are also so known. The origins of number one and other numbers are not the same. Number one is out there embedded in substances, existing independently of us. But as we have just said, the Nyaya-Vaisesikas hold that the other numbers, though external and given to us, are subjective to some extent. Number *ones* and their cognitions are the conditions for the origin of other numbers. We have at first the simultaneous cognition (*apeksabuddhi*) of many ones (which are qualities of different substances). And from this cognition arises the other numbers, *two* from the cognition of two ones, *three* from the cognitions of three ones and so on. It is interesting to note that numbers, in this account, do not emerge successively out

of the counting of each unit. Thus, when we have four units to count we are not successively acquainted with the numbers *one, two, three, four*. On the other hand the number four presents itself to us after the four units have been presented in a single cognition.

Is continuing always necessary for the apprehension of numbers? Prasastapada and his commentator Sridhara do not seem to be quite explicit on this point. From their account it appears that what is necessary is *apeksabuddhi*. But *apeksabuddhi* should not be confused with counting or enumerative cognition, it is rather the result of a counting process where there is such a process at all. We may count each unit one after another, but at the end the counting of the final unit, all the units should be present before the mind so that the number would then emerge. Or it may also be the case that even without counting, when many objects (substances) are simultaneously present before us, the perception of the number ones in them would immediately give rise to the final number as a characteristic feature of those objects.

The Nyaya-Vaisesika philosophers explain the perception of numbers with the help of their established theories of sense-object contact, the distinction between the determinate and indeterminate perception, the division of time in the form of moments, (*Ksanap* which is necessary for their explanation of the causal process, momentary view of the cognitions, etc. Of these theories, the theory that the cognitions are momentary needs special attention. The Nyaya-Vaisesikas are of the opinion that there is a real incompatibility (*virodha*) between any two cognitions. And this view of incompatibility between cognitions has assumed two forms. In the one, which is known as *badhyaghatakapaksa*, a new cognition coming into existence is said to destroy the previous cognition. So a cognition can last only for two moments, viz., the moment of its appearance and the moment in which the new cognition (which will destroy it) appears. In the third moment it ceases to exist. In the other view, incompatibility is known as *sahanavasthana* which means that two cognitions cannot co-exist in the same moment. So the appearance of a new cognition means the destruction of the earlier one in the same moment. Cognitions, therefore, on this view last strictly for one moment.

Now we should say here a few more words on the status of numbers in the Nyaya-Vaisesika ontology, because that will help us a great deal in understanding how perceptual judgements regarding numbers have been made possible in these systems. Numbers in these systems are not treated as universals. They are particular qualities inhering in substances and are classifiable with the help of their class essences. Thus just as there are many ones there are also many twos, many threes, fours etc. We say, 'two cows', two horses, 'two men'. The cows, men and horses in these instances seem to be characterized by the same kind of property (characteristic), so that these properties (characteristics), viz., the different twos (*dvitva*) would belong to the same class, and would have same common (identical) nature, viz., the characteristic of being two (*dvitvatva*). These essences like all other universals are eternal and the particular numbers come into existence by realizing their essences. Thus in the Nyaya-Vaisesika ontology we have numbers like ones (*eka*) twos (*dvitva*), threes (*tritva*), etc. as particular and transitory qualities of substances and also the eternal forms or essences of these numbers like *ekatva*, *dvitvatva*, *tritvatva*, etc.

If we keep all these in mind it will not be difficult to follow the Nyaya-Vaisesika account of the perception of numbers. It is curious to note that most Nyaya-Vaisesika literatures on number concentrate on an analysis of cognitions like 'two substances', etc. So let us take one such cognition, e.g., 'two substances' (*dravya*) and see how the Nyaya-Vaisesikas account for it. In such a cognition the number two appears to be the qualifying feature (*Visesana*) of the substances and so must have been given beforehand to make such perceptual cognitions possible. The same is also true with two itself which is characterized by twoness (*dvitva*). We have seen that the *samkhyā* (number) two originates due to the simultaneous presentation (*apeksabuddhi*) of two ones. Thus the order of moments in which the different elements which contribute to the perception of 'two substances' occur as follows: the *apeksabuddhi*, the origination of the number two, the acquaintance of its class character twoness (*dvitvatva*), the distinct perception of the number two, the distinct perception of 'two substances'.

This account of the origination of cognitions like 'two substances' gets the support of Prasastapada. Of the two alternatives about the incompatibility of cognitions, viz., *badhyaghatakapaksa* and *sahanavasthanapaksa*, he accepts the former one, because he thinks that it can properly account for the continuance of the presence of the number two in the substances till the moment previous to the origination of the cognition of 'two substances'. *Apeksabuddhi* in this account can last for three moments. It is destroyed only after twoness (*dvitvatva*) is known in indeterminate perception; so the possibility of their coexistence in the same moment is not ruled out. In the *sahanavasthanapaksa*, however, this is not possible. This theory holds that cognitions are strictly momentary. So we have in the first moment, the *apeksabuddhi*; in the second, the origination of the number two and the destruction of *apeksabuddhi*; in the third, the indeterminate perception of twoness and the destruction of the number two (due to the destruction of its cause in the earlier moment),

in the fourth, the distinct perception of the number two, but in the fifth there can be no distinct perception like 'two substances' because of the absence of the distinctive feature, viz., the number two in its previous moment.

It has been suggested by some that in spite of the absence of the distinctive feature in the previous moment just a knowledge of such a feature may make such a perception possible in the next moment. But Prasastapada does not accept this explanation. He thinks that such an explanation, even though tenable in the case of a *laihgikajnana*, does not hold good in the case of a perceptual cognition where the qualifying feature appears to be a very distinctive one, (*A/a tu laiHgikam jnanam abhedena utpadyate, tasmad visamao'yam upanyasa*)². So the objection that the *Sahanavasthanapaksa* does not offer a proper account of our cognitions like 'two substances' seems to be a valid one.

It may be urged that the *Nyaya*, following its pragmatic attitude towards knowledge, holds that one of the main functions of a cognition is to generate an impression (*samskara*) so that once the impression comes into existence, it makes the original cognition no more necessary, and so destroys it in the next moment. Now, if this principle is strictly adhered to, we cannot even in the *badhyaghatakapaksa* offer an explanation of the possibility of cognition like 'two substances'. For *apeksabuddhi* being destroyed in the third moment, the number two will no more be there in the fourth moment so that it cannot be perceived as a distinct characteristic of two substances in the next moment. *Prasastapada* meets this objection by denying that *apeksabuddhi* leaves any impression behind it. He says that we can perceive a group of things, each characterized by the number one, but do not recollect the things as characterized by that property. This shows, in his view, that *apeksabuddhi* does not generate any impression in our mind (self). It is important to note that the *Nyaya-Vaisesikas* would admit the recollection of a cluster of number ones (in abstraction from their respective substances) (*dravya-vivekena ekagunayoh smaranam*) or of objects characterised by the number two, three, etc., or even of one object as one object but never of a group of objects each characterized by one. This seems to be the sufficient ground for the *Nyaya-Vaisesika* assertion that *apeksabuddhi* does not create any *samskara* in our mind. Thus, it will not be destroyed in the third moment. So in the next moment the number two can be very well be present along with the distinct perception of it (as explained before). So there is no difficulty in having the determinate perception of two substances in the fifth moment.

We have seen the numbers enjoy the status of quality (*guna*) in the *Nyaya-Vaisesika* metaphysics. But a peculiar characteristic of all numbers except the number one is that they are *VySsajavrtti*. They qualify many substances by being present in them simultaneously. Thus the same identical number two (*dvitva*) is present through the relation of inherence (*samavaya*) in each member of a particular pair of objects (substances) and qualifies each of them. But why do we not then say that each of them is two? On the contrary, we say that they are two and that shows that the number two (*dvitva*) somehow belongs to them in some other relation. *Nyaya* has, therefore, postulated the relation of *pariyapti* to account for this fact of our experience.

Many modern writers on *Nyaya-Nyaya* logic are of the opinion that the *Naiyayikas* showed a deep logical insight in their discovery of *pariyapti* through which properties like two, etc. are related not to the members of pairs, etc., but to the pairs themselves. Thus Professor Ingalls says, 'This theory that number subsists by *pariyapti* in effect points out what Frege first pointed out in Europe in the nineteenth century. The 'twoness that inheres in each member of pairs' corresponds to the Western 'class of two members'. The 'twoness that is related by *pariyapti* to the pairs and not to the members of the pairs' corresponds to the Western 'number two, the class of all classes of two members'³. The remarks of Ingalls in this context are very illuminating and require elaborate discussion. But we can only say here that the *Naiyayikas* have not perhaps admitted two sorts of twoness in the two contexts. The relation of *pariyapti* in the context of number was mainly discovered by the later *Naiyayikas* to solve the epistemological issues like why one thing is not known as two and how things which are not substances can be characterized by number which are qualities.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Moments are not here to be understood as the abstract points in time, they are the real portions of time that account for the cognitions of before and after in a causal process.
- Prasastapadabhasyam, Sri Durgadhara jha (Ganganatha Jha Granthamala- I) page, 290.
- Materials for the Study of Navya-Nyaya Logic, Daniel Henry Holmes ingalls, page 77.
- Vatsyayana: Cognition as a guide to action, Matthew Dasti, Oxford Academic Book – 3 (2014)
- The Central Topics of Nyaya Matthew, Dasti, Oxford Academic Book – 3 (2014)