

THEORY OF COLORS ACCORDING TO ANCIENT INDIANS.

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ABSTRACT

The theory of colors according to the ancient Indians was rooted clear and comprehensively in the Sankhya-Patanjali system. As was known then, the theory was essentially metaphysical in concept and based on then prevalent basics of natural philosophy. What appears striking is that there has been a total failure to understand the role of the eye in the different perceptions. The attempt cannot also be summarily dismissed as it runs parallel to information processing approach in the metaphysical plane.

Introduction

In the earlier days all the phenomena of the physical world was discussed as a part of philosophy itself although categorical distinction was that it came under natural philosophy.

The phenomena of the visible world was always a deeply thought and discussed subject. Berkley attempted his theory of vision, in the west. The theory of colors according to the ancient Indians was rooted clear and comprehensively in the Sankhya-Patanjali system.

Theory Of Colors

As was known then, the theory was essentially metaphysical in concept and based on then prevalent basics of natural philosophy.

Here, the fundamental premise was that there exists three operative gunas viz., conservation, transformation and dissipation of energy commonly inherent in any system. It is this primal energy force that is behind all phenomenal events. Including the perception of colors by the organ of the eye and even in the eminence of colors by both natural and man-made objects.

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But, what are these gunas and energies that we are talking about? and how do these translate in to the realities of the physical world.

To begin answering these otherwise nebulous statements, let us at first try understanding this system that philosophy is referring to.

Philosophy being in the domain of deep meaningful introspection both the real and relative, there arose out of necessity to first formulate measure of these tangibles and even untangibles. This formulation apparently was the best alterity to what in the western philosophy Austin called as performative verbs.

In the Indian system it began with prakrit. prakrit, was the unmanifested ground which is considered as both formless and limitless; Ubiquitous and undestructable. It is an indeterminate and infinite continuum made up of infinitesimal reals. These reals are termed as gunas.

Gunas, are three some in existence.

1. Sattva- the essence that which manifests itself in a phenomenon and is characterised by this ten-

dency towards manifestation. The essence in other words is that which serves as a medium for the reflection of intelligence.

2. Rajas- energy that which is efficient in a phenomenon and is characterised by a tendency to do work or overcome resistance. And
3. Tamas- Either mass or inertia, which counteracts the tendency of Raja to do work and of Sattva, that is conscious manifestation.

The theory it self however, begins with a very generic statement¹,

“ The qualities of atoms tend to produce similar qualities in a molecule. A molecular quality is therefore the result of a conjunction or opposition of atomic tendencies. “

“ The result is, as a molecule forms a fresh allocation and redistribution of mass and energy occurs within the system. This redistribution, modify the potencies or tendencies in the components atoms and determine ultimately even the resultant effect. “

1. Jalpakalpatram, sutrasthana of Charaka-Pub: Chowkhamba Varanasi 1825'

Discussion

Based on these potencies or tendencies as the case may be, color of substances can be explained.

Take the case of two substances combining to produce a redistribution of energy. The mass and essence liberating would be in part force or inertia of one and the other.

This can be explained with an example from chemistry. When a coolynium is prepared by mixing equal parts of sulfur and mercury (the black sulfide of mercury), the resulting compound is black in color.

The resulting black color came from a reallocation of each of the substances of mercury and sulfur. It should be noted that each of these substances, sulfur and mercury contain sattva, rajas and tamas in different proportions. Depending upon the relative strengths of each of these compounds colors predominate. So much so, that tamas always produces black, the predomination of sattva, white and if rajas is stronger then it is red color that emanates. In the black sulfide of mercury, the

white of the mercury tends to produce white, while the yellow of sulfur, yellow and if these tendencies are not obstructed, the result would have been a mixed color but, in the particular allocation, the tamas of the mercury, becomes intensive and the black of this tamas extinguishes the white in the un-compounded mercury which was due to prevailing sattva and red producing rajas. Again in the formation of red color, by mixing powdered turmeric with lime, the dominance of tamas, rajas or sattva, or their combination and the extinction of their un-compounded tendencies by the forces set free in the new allocation. Indeed, there are instances where the color of the compound is a mixed color resulting from the colors of the continuing substance, e.g., when the sulfide of mercury and the calcined tin are mixed. The resulting color is evidently becomes a mixed one displaying a pink color. This pinkness in color, is easily explained by the colors of the component elements (the red of the sulfide of mercury and the white of the calcined tin) in the same way. There can be an

analogy that is appropriate here., The mechanical aggregate as seen in a piece of white cloth is that the color is white wherever the threads are white and colored in appearance when streaks of colored threads run in them.

Conclusion

It is no surprise that the ancient Indians tried their expertise in performative utterances logic into

an operative one, without even attempting to understand the basis of the visual phenomenon that is involved in color perception. What appears striking is that there has been a total failure to understand the role of the eye in these afferent perceptions.

The attempt can not also be summarily dismissed as it runs parallel to information processing approach in the metaphysical plane.²

REFERENCES

1. Jalpakalpatram, Sutrasthasana of Charaka - Chowkambhka, Cal.1825.
2. This system is otherwise Nyayya Vaisheshika representing an independent world view which became reduced to mere logic to a position ancillary to the study of philosophy in general.

सारांश

प्राचीन भारतीयों के अनुसार वर्णों का सिद्धान्त

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प्राचीन भारतीयों के अनुसार वर्णों का सिद्धान्त स्पष्ट एवं विस्तृत रूप से सांख्य पतञ्जली प्रणाली में उपलब्ध है। यह सिद्धान्त वस्तुतः धारणा में तत्त्ववैज्ञानिक एवं उस समय प्रचलित यथार्थ दर्शन के मौलिक सिद्धान्तों पर आधारित था। जो असाधारण लगता है वह है चक्षु के विभिन्न प्रकार के प्रत्यक्ष ज्ञान में चक्षु की भूमिका को समझने में पूर्णतः असफलता। इस प्रयास को सरसरी तौर पर नकारा भी नहीं जा सकता क्योंकि यह तत्त्ववैज्ञानिक समतल पर जानकारी प्राप्ति की प्रक्रिया की दिशा में समानान्तर में चलता है।