22 May 1972

READING 10

Part 1. Discovery and Artistic Creation

Of the six possible combinations of three forces, Mr. Ouspensky named two as supreme: artistic creation and scientific or intellectual discovery. Self-remembering, he said, was the same combination of forces as in artistic creation, but directed entirely to Self-creation rather than to the production of material works of art. The Shankaracharya Tradition has the same idea expressed (of course) in different language: there are two routes to the Param-Atman – one through Emotion by the devotional way (Bhakti), and one through Knowledge (Jnana).

Intellectual discovery requires one kind of energy and artistic creation another kind – all the intellectual energy in the world will not by itself produce a symphony, or a single great painting or piece of sculpture, or building like the Taj Mahal. Though the mathematicians and physicists can be quite vocal on the question of how a scientific discovery comes about, the artists mostly prefer to be dumb, because they know that any sort of intellectual analysis will put a stop to the process they desperately want. Occasionally we have been able to quote off-the-record descriptions (as those by Mozart or Cézanne) given to a friend when in the mood; and these show that artistic creation comes through the silent hemisphere and is governed at every stage by the 'aesthetic taste' of the artist. The poets are more vocal, for after all their tools are words.

Thus A.E.Housman in his famous Leslie Stephen Lecture:

> Having drunk a pint of beer at luncheon – beer is a sedative to the brain, and my afternoons are the least intellectual portion of my life – I would go out for a walk of two or three hours. As I went along, thinking of nothing in particular, only looking at things around me and following the progress of the seasons, there would flow into my mind, with sudden and unaccountable emotion, sometimes a line or two of verse, sometimes a whole stanza at once, accompanied, not preceded, by a vague notion of the poem which they were destined to form part of. Then there would usually be a lull of an hour or so, then perhaps the spring would bubble up again. I say 'bubble up', because so far as I could make out, the source of the suggestions thus proffered to the brain was an abyss which I have already had occasion to mention, the pit of the stomach. When I got home I wrote them down, leaving gaps, and hoping that further inspiration might be forthcoming another day. Sometimes it was, if I took my walks in a receptive and expectant frame of mind; but sometimes the poem had to be taken in hand and completed by the brain, which was apt to be a matter of trouble and anxiety, involving trial and disappointment, and sometimes ending in failure. I happen to remember distinctly the genesis of the piece which stands last in my first volume. Two of the stanzas, I do not say which, came into my head, just as they are printed, while I was crossing the corner of Hampstead Heath between the Spaniard's Inn and the footpath to Temple Fortune. A third stanza came with a little coaxing after tea. One more was needed, but it did not come: I had to turn to compose it myself, and that was a laborious business. I wrote it thirteen times, and it was more than a twelvemonth before I got it right.
>
> (Quoted by Koestler in *The Act of Creation*, pp.318–319)

There is, however, a curious similarity (just different in the order of action of the forces) between the genesis of great poetry and great scientific discovery:

a) *the poet* (Shakespeare):

> And, as imagination bodies forth
> The forms of things unknown, the poet's pen
> Turns them to shapes, and gives to airy nothing
> A local habitation and a name.
>
> (*A Midsummer-Night's Dream*, Act 5, Sc.1)

b) *the biochemist* (Kekulé):

> I turned my chair to the fire and dozed. Again the atoms were gambolling before my eyes. This time the smaller groups kept modestly in the background. My mental eye, rendered more acute by repeated visions of this kind, could now distinguish larger structures, of manifold combination; long rows, sometimes more closely fitted together; all twining and twisting in snakelike motion. But look! What was that? One of the snakes had seized hold of its own tail, and the form whirled mockingly before my eyes. As if by a flash of lightning I awoke... Let us learn to dream, gentlemen.

Kekulé, Professor of Chemistry in Ghent, had fallen asleep one afternoon in 1865, and dreamt what has been described as 'the most important dream in history', for it put the fifth dimension (the 'ring' or circle) into biochemistry.

You may also remember Nobel prizeman Sir Lawrence Bragg saying (in his talk to our Society) that the aesthetic side of one's nature was the arbiter between the various solutions to a research problem – 'the most beautiful being likely to be the truest.'

Part 2. A way to the Param-Atman

We have been slow to take up a hint given by the Shankaracharya in a discourse in August 1970 when he suggested that we 'consider a lump of sugar'. What he said has somewhat lost its significance in translation, so we'll try and express the meaning in our own way beginning with the sentence:

> Consider a lump of sugar, the real thing about it is its sweetness – its form is irrelevant.

Now 'sweetness' is a conscious response to a sensation which can only be defined by experiencing its taste. To a man who has not tasted the sweetness of sugar, no other means of arriving at it could be devised. This is one way to the Param-Atman – starting with a sensory object and rising higher and higher, we get at the extra-sensory.

> Similarly we meditate with the help of a Mantra, which is a sensation of sound, in order to get at something which is otherwise beyond the reach of the human mind.

We do this by exploring our inner world for the Source of Truth, and by constant rejection – 'Neti, Neti' – 'not this, not that' – a process of polishing or purging of all material associations.

But reason and knowledge, through the proper use of the dominant hemisphere, can also help some people to understand the nature of Param-Atman. To return to the lump of sugar: a lump of sugar consists of compressed grains, each of which consists of an enormous number of molecules, and each of *them* composed of 24 atoms ($C_6 H_{12} O_6$) – all in a frozen or crystalline condition, which is utterly unlike the dancing atoms or 'ions' of that same sugar in the sap of sugar-cane or any green plant. The lump of sugar belongs to the solid physical world, the

'dancing ions' to the subtle world. Recent researches with radioactive isotopes reveal that, in the current equation for photosynthesis, the oxygen produced comes wholly from water (not partly from carbon dioxide as previously supposed); and molecules of water are *newly formed* as the result of the reaction and are not identical with those at the beginning. Moreover, the process is in two stages, first the splitting of water into hydrogen and oxygen, and then (the oxygen being given off), the hydrogen is used in the second stage – the 'reduction' of CO_2 to sugar.

All this takes place via various intermediate products, with great rapidity (it has to be measured in nanoseconds, thousand-millionths of a second) – at about the same frequency as the speedy transitions among the hydrocarbons in a flame.

This line of argument can give us some idea of the high frequencies of the subtle world within us; for our own body chemistry proves to be another kind of photosynthesis that goes on in addition to the ordinary process of vision. (See various articles in *Scientific American*.) Single photons of light striking the retina when we open our eyes every morning, trigger off a hormone cycle in the pineal body which, in turn (through the pituitary), rouses and orchestrates the other endocrine glands.

But then, when we come back to the *sensation of sweetness* (which is not helped at all by all these learned thoughts), and when we have excluded all the resulting physical attributes and associational thinking, we experience the causal level where there is no time, no change. Here we can actually 'taste' only permanencies like Sweetness, Truth, Beauty, etc., which are hallmarks of the nature of one single Param-Atman.

> [With any idea such as that of the 'four servants' (who are really ministers in charge of highly complex departments – Home Office, Foreign Affairs, Defence, etc.), we must always direct our enquiries towards the unity of Param-Atman, or we shall merely fall apart!]

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