

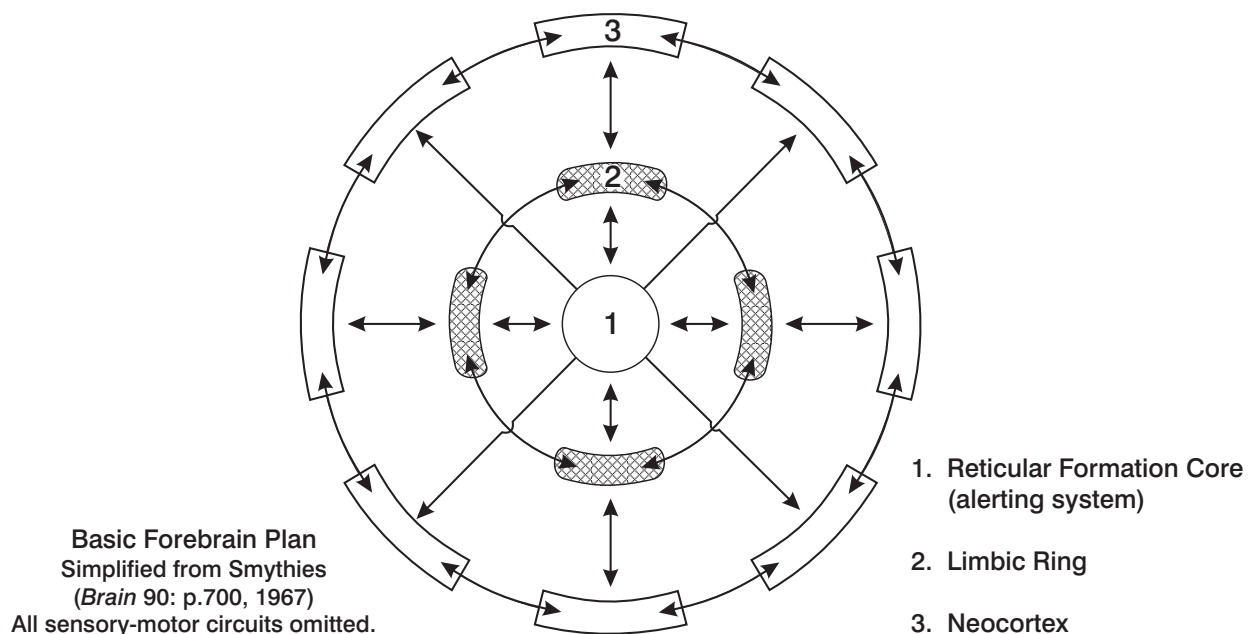
5 February 1968

## READING 2

**PART 1.** [Those who are interested can read or study some of this, which arose out of part of a conversation last Monday.]

Dr. R. About the *Ladder of Self-realization*: I feel that one tends to approach the idea of Self-realization in a very stereotyped way, not realising the immense issues involved in it. The whole thing appears to depend on those parts of the brain or mind by which man *differs* from animals. Animals of course *look* externally very different from man; they are furry, four-footed, and show all sorts of outer differences like that; but their central nervous system is remarkably similar to man's except at the top end. It is this top end (roughly above the level of the eyes) in which life for man could be 'Self-regulated' instead of being carried on by the instinct of the species and the drive of Natural Selection as it is in animals; and it is exactly in this part that one can be conscious, and only in this part. This is the part that corresponds to what in embryology is the 'forebrain', which is much larger and more highly organised than just these frontal lobes here behind the forehead, and it can cater for all aspects of life as a high level reference.

We will put up on the screen the recent conception of this forebrain as given by a team of research neurologists at Edinburgh. It is just a sort of working model (see below). It is a very incomplete model, but it will do. In the centre (1) is the system which alerts to consciousness and which is supposed to be the seat of the attention. The Shankaracharya says that Attention is Consciousness directed towards something – a 'specific' thing; whereas there can be 'non-specific' Consciousness not limited in that way. This inner core (1) is in a way like the light, pure light, and all that happens in the other two tiers depends on the degree of the consciousness in the centre. Increased awakening of the core, alerts wide areas of tier 3 and is 'non-specific'; whereas 'specific' stimuli from sight, hearing, etc., produce only local excitations and depressions there.



This outside tier (3) represents the newer cortex of the mammalian brain, the part which was thought in the last century to be the most important 'brain', but which is now realised to be mainly a screen which mirrors what goes on, so that you *know* about it precisely; a slow process but quite essential because, if you don't know what goes on, you will never learn, never profit by experience.

But in the middle tier (2) is a great turmoil, for here is the 'limbic circuit' (with many inter-connecting circuits, the small geared to the greater) which underlies all the 'psychological weather' which we experience – everything that comes between the light and the screen – emotions mixed up with thoughts, with sensations, with movements – always in motion. It is the site of those reverberating circuits which waste our energy, interfere with Self-realization, and spoil our relations with people. This simple model is a great improvement (from the point of view of Self-study) on those that neurologists have given us from time to time.

Let's see how easily it can be understood and applied practically: When we start to meditate by sitting still, shutting our eyes and turning away from all external sensations, we try and reach the stillness at the centre (1), and we all know very well that immediately we shut our eyes we are apt to get the psychological weather in full blast! We don't notice it when we are doing things with our eyes open; then impressions from the outer world take its place. When we shut our eyes we are brought face to face with our being, and the Aim (as we have said so often before) is not to let our attention be diverted to any *repetitive* function at all, except the one sound that we are given to repeat which can take us straight to the centre (1), with nothing but love for Consciousness, for Real 'I', in our heart.

Miss Wright. Is there any choice between getting something in the cortex (the outer circle) direct from No.1. right in the middle, or whether it comes via the limbic circuit, because it looks like that on the diagram?

A. I suppose the first would be like light (pure Consciousness) shining on the screen without any processing or conditioning (see answer to Prof. Guyatt, p.7). But at least we know that turning on the light at (1) alerts wide areas of cortex all together; this must be why a moment of Self-remembering is such a vivid and generalised experience.

(Pause)

This diagram applies from the neurological point of view equally to rats, so we have to imagine a great deal – the difference between ourselves and those furry things with which they experiment.

Mr. Allan. Do rats have that R.F. core?

A. They do, and except at the top or forward end, their brains are extraordinarily similar to ours, apart from size (i.e., numbers of cells and connections). But for the human experience there's any amount of scope further forward!

Mr. MacOwan. Is there a similarity found in the limbic ring? I was wondering whether animals suffer from reverberating circuits?

A. No, they don't A circuit activity rises and dies away; a lion gets hungry, hunts, kills and eats, then it is all over and he goes to sleep without worrying where his next meal is coming from.

Tomorrow doesn't exist. With us, it is all those turning thoughts in the associative areas of the hemispheres and neocortex (tier 3) that keep the circuit reverberating.

Walt Whitman expressed it very well:

I think I could turn and live with animals, they are so placid and self-contained;  
I stand and look at them long and long.  
They do not sweat and whine about their condition;  
They do not lie awake in the dark and weep for their sins;  
They do not make me sick discussing their duty to God...

Prof. Guyatt. What is the function of the limbic circuit?

A. It has one function at the animal level where it seems to exercise an overall neurochemical control. Recent work, for example, describes the Pineal Body as a transducer which converts electronic currents from the optic nerve into two chemicals (hormones), one of which reaches a peak at midday and the other at midnight. These impart rhythms to the endocrine glands chiefly through the pituitary. The pineal is at the back end of the limbic structures, the pituitary at the front end.

Then at the ordinary human level, this electrochemical system of clocks gives us our measure of passing time and enables us to compare different 'Times' and speeds. The limbic circuit is now described as continuously producing 'a circulating complex of schemata which we can call a programme circuit for the brain's computers. Packets of information enter and leave the programme... so that the needs of the organism can most effectively be met in response to a complex and ever-changing environment.' †

But there are higher functions still, of course; depending on higher states of alerting of the R.F. (1) together with finer energy. In other words, we are concerned with the Programmer who can select the programme.

Prof. G. Does this control get in the way; is it part of that 'cloud of unknowing'?

A. Yes, if wrongly used. We might call this whole arrangement (Figure) the Soul of a person, the psyche, corresponding to the Buddhi of the Shankaracharya. A higher control could be achieved by the arousal of this R.F. (1) from the narrow to the Universal, plus the ordering of all these functions of sensation, emotion and reason as one unit of mind; that is what we are aiming for.

Mr. Hammond. From what I read the rat family are being put through a lot of discomfort to produce the material for this diagram. What can we do now to relieve them of the job, and what is the necessary step for us?

A. Yes, I would rather work with you than with rats, and I feel that the rat family have contributed quite enough! All this has been done on these laboratory creatures, and the sooner we can find a scientific way of studying *human* consciousness the better. What we want is some altogether better kind of evidence and a modern description of the full and right functioning of this Soul. The evidence we produced that I put to some extent into that try-out, the *Waking Up* book, is not convincing enough; it could be subjective – you could 'think yourself into' much of it! We would like some people to take the necessary steps to

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†J.R. Smythies, *Brain* 90: p.705. 1967

get into a higher state of consciousness more often, go up the Ladder of Self-realization and produce the evidence; then we'll be away or on a second edition or another series of books!

Mr. Crampton. What is the meaning of the series of 'dog-leg' arrows?

A. They are just a few of the connections in the rat; but it is essential to remember that there are an enormous number of interconnected pathways; this picture is only a suggestion of some of the connections which have been established.

Miss Wright. Is it like a railway bridge? It just hops over the other one without crossing?

A. This illustrates just one of the possibilities. Of course impulses *can* be carried by 'express nerves' right through a given centre to another without connecting, but they don't *have* to. Each cell of the thousands of millions of brain cells can have up to 200 telephone connections with other cells, so there is plenty of scope! Nature has laid down so many possibilities; but the actual connections are made by the individual.

Miss W. Can you say attention is 'applied' consciousness, rather like the difference between pure mathematics and applied mathematics?

A. I think you could. I mean that you can say that if attention is present, it can be applied or pure – a state of Doing or just of Being.

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## PART 2

Some quite important implications arise from familiarity with the use of the above plan in sorting out one's own experience:

1. This plan arises from what the scientists call the 'objective' study of the rat – that is, from measurements of changes of function set up in the rat following artificial changes produced in parts of its forebrain. They can never infer anything about the nature of its consciousness nor of the world perceived by the rat; they know nothing (and care even less) about whether the rat is feeling anything at all. Such things are called 'subjective' and are clearly outside the scope of experimental science. Yet for Psychology, for Self-knowledge and for Self-realization this is quite as important a part of the programme as knowledge derived from observing other people or other species of organic life. Either alone will inevitably give a mistaken view; both kinds of knowledge are required.

2. One of the many omissions in the plan (Figure) derived from the so-called 'objective' study is the different time-space perception of the three tiers. If the Observer looking from tier 3 has a periodicity measured (say) in seconds and a frequency measured in a few cycles per second, (hertz) then Observer 2 looking from tier 2, records in milliseconds and kilohertz (a thousand c/s), and Observer 1 in the central core would record in microseconds and megahertz (a million c/s). The correct figures can be calculated, but these are roughly of the right order.

What does this mean? The difference has nothing primarily to do with speed; it means a *different kind of perception* of the world. Observer 1 scans the world by radio, as contrasted with Observer 3 using successions of separate photographs. Astronomers have been through similar experiences; first they took photographs through optical telescopes, then (following Janessky's

chance discovery) they scanned on shorter and shorter wavelengths in the radio range; and now they are viewing a new X-ray world.

Microscopists too. We should never have seen viruses without photographs taken through the electron microscope which can be enlarged by 50,000 diameters.

Just so, the Self-observer has to accustom himself to the new world which the high-frequency scanning of increased Consciousness brings him. Note however at the start that it brings increasing *stillness* and liberation from the noisy high velocity world that the rat scientists are offering us.

3. There are certain organs of perception not ordinarily in evidence which however come into use during 'high-frequency Self-observation'. These are 'Insight', and the inner equivalent of hearing (which may be the counterpart of the sonar and echo-location developed by some species of birds and bats and marine mammals). But, above all, we learn to rely on the sense of smell (and taste, which is mainly smell), but what we might call 'in-scent', not 'out-scent'. It is through the development of this new sense that we learn to distinguish different mixtures of the three Gunas, and it becomes our chief guide not only during meditation but at other times in many situations.

The mechanism for this is an elaborate one at the front segment of the Limbic Circuit, which has always been known to underlie the sense of smell, the memory of which lies in the old brain. But one of the disadvantages of an exclusive diet of rats' brains is that all this important part of human psychology remains unexplored!

While we can't claim to know much about the perception possible in tier 1, the above suggestions can be of great help in screening ourselves from the more unpleasant weather produced by 'limbic circuits' in tier 2.

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