

## Paradigms of Advanced Biogenics

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Left- and Right-Brain Awareness \* The Importance of Paradigms \* Final (Creative) Integration \* Factors that Stimulate Final Integration \* Similarities Between Paradigms and Discrete States of Consciousness \* Two Hemispheric Ways of Knowing \* Functions of the Two Spheres of Consciousness \* Hemispheric Asymmetry's Inhibition of Thought and Emotions, and Its Relationship to Disease

The Second Stage of Biogenics – Advanced Biogenics – differs so much from the first stage as almost to deserve a different name altogether. The first stage is taken up principally with teaching one how to know when one is awake and when one is in one of the other stages which are not far removed from 'waking'. The Advanced Biogenics is much more concerned with the range of 'Stages'. One of the things which we cannot really deal with at all until we know when we are awake, is whether we are using our right brain or our left brain, and the first thing for us to do here is to load one side only, and to see how that 'feels'.

To a great extent what we are really asking is "to what extent is a person grown-up?" That is, to what degree does he see things as they really are, and not as he learned to see them when he was three feet tall?

Erich Fromm, the distinguished psychophysicist, believes this to be a matter of 'creativity'. He says, "The state of final integration is the end of the vertical growth of the adult personality and the beginning of the horizontal expansion into creativity".

Fromm believes that the concept of creativity is not limited to creating something new, something physical in terms of an art object, but that this new concept must be extended to the human reality that

exists beneath, thus bringing about something quite new, namely a creative attitude. According to Fromm, the best general quality of creativity is an ability to see, or to be aware, *and to respond*.

The condition for such a creative attitude is summarized in the phrase: "...creativeness means to be born before one dies". The biological birth of the individual, his self-growth within the family, his social patterning, are all means of attaining a "final rebirth". All of us are born in a family; we all possess certain healthy or unhealthy, attitudes towards our parents and we all become social beings. However, both these processes (the familial and the social), as well as the biological endowments upon which they are based, provide the means for *final rebirth* – for becoming a *man* or a *woman*.

In his excellent study, "The Non-Human Environment," Searles cites numerous examples to indicate the significance of relatedness to the non-human environment in health, creativity, and normalcy.

Buber sees it as an "I-it" relationship; similar is Fromm's concept of "unity". Under the condition that one can also retain his own sense of identity: "The productive orientation involves a creative relatedness not only with one's fellow-man but also with the non-human environment".

A number of factors may motivate and provide a shock, which then instigates existential awareness. For example, these factors may be a critical ego; an achieved superego; acculturation; purity and sensitivity; early intellectual growth; accidentally finding oneself in a quest situation; a traumatic experience such as the loss of a loved object; and continuous struggle against social and mental obstacles. It does not matter how one arrives at the stage of final integration, but rather whether one adopts a suitable mechanism of rebirth.

Thomas Kuhn (1962), a historian of science, introduced the idea that science functions under the control of *paradigms*. Since his concept of paradigms is similar in many ways to Tart's concept of Discrete States of Consciousness (which means a specific pattern of functioning of the mind), and since each spiritual psychology is a paradigm for dealing with reality, it is well worth looking into the idea of States of Consciousness and Paradigms.

A paradigm is a major intellectual achievement that underlies normal science and attracts and guides the work of an enduring number of adherents in their scientific activities. It is a kind of "supertheory", a theory of formulation about the nature of reality of such a wide scope that it seems to account for most or all of the major known phenomena in its field. However, a paradigm is open-ended; there are important sub-problems to be solved within that framework, gaps and details in the overall picture to be filled in, so there is plenty of work for scientists to do.

In principle, an ordinary scientific theory is always subject to further tests. A paradigm, however, is so successful after its introduction that it undergoes a psychological change that scientific theories are not supposed to undergo. A paradigm becomes an implicit framework for most scientists working within it; it becomes the "natural way" of looking at things and doing things; it is the obvious way to think about problems in its field.

Once it becomes "obviously sensible", it no longer seriously occurs to adherents of the paradigm to subject it to further tests, and, having become implicit, it then acquires tremendous controlling power

over its adherents. You do not think about rebelling against something that seems like the natural order of the universe; you do not realize that <u>you</u> are controlled by <u>your concepts.</u>

A paradigm and a Discrete State of Consciousness are quite similar. Each constitutes a complex interrelated set of rules and theories that enable a person to interact with and to interpret experiences within an environment. In both cases, the rules become largely implicit; the psychologist forgets that his paradigm is a theory and subject to further testing; the person experiencing a discrete-state-of-consciousness forgets that it is an arbitrary way of organizing consciousness and comes to think it is simply a natural way of perceiving things. By not recognizing the tentativeness or arbitrariness of either a paradigm or a discrete-state-of-consciousness, *one becomes almost completely controlled by these*.

We all have personal and cultural paradigms about economics, politics, religion, sexuality, aggression, and so on. And, almost all of these are implicit belief systems, sets of rules for interpreting things, thinking about things, acting on things, so we no longer know what the rules are that govern our reactions.

Changing the programme in a computer, changing one's state of consciousness from one d-SoC to another d-SoC, and looking at the world from two different paradigms are very comparable actions. They each give us a totally different understanding of things.

## NON-IDENTICAL TWINS: THE TWO BRAINS IN MAN

From time immemorial, man has had an uneasy awareness of his dual nature: heart and mind, the way of the right and the left-hand path, the rigor of science and the liberality of art. But it is only in the last twenty years that medical science has proved that – as the Sufis have claimed for many centuries – there are two ways of knowing, and that these result from profound differences in the functions of our two cerebral hemispheres.

Other animals also have two brain hemispheres, but in them each hemisphere is the mirror image of the other. In man alone the physical similarity of the two hemispheres contrasts strangely with their functional difference.

The left hemisphere contains the speech centres and functions in an extraverted verbal, analytical, logical and abstract way. The right hemisphere functions are introverted sensory-perceptual, synthesizing and holistic. These facts suggest that the reason for man's two distinct brains is the fundamental incompatibility between language function, so vital to a socio-cultural animal, on the one hand, and holistic, synthesizing-perceptual functions on the other.

So radical are these differences that Professor Sperry, who first divided the nervous connections between the two hemispheres of epileptic patient, wrote: "Everything we have seen so far indicates that the surgery has left each of these people with two separate minds, that is, with two separate spheres of consciousness".

The left hemisphere has the monopoly of all symbolic functions: it produces and understands words, both spoken and written, carries out mathematical computations and logical analyses. Because of the importance of verbal and logical processes to man, it has become known as the 'dominant' hemisphere.

But recently it has become more and more apparent that the right hemisphere has its own superiorities: for example, in perceiving the spatial relationships between objects, in the recognition of faces, in musical appreciation, in map reading and in picture comprehension, and in solving visual or tactile mazes, the right hemisphere excels.

All the above is based on the assumption that we are dealing with normal right-handed people. But 'handedness' is not just a matter of left or right, it is a graded phenomenon which includes all possibilities. Left handers form about one in fifteen of the population. In some of them the hemisphere specialization is completely reversed, while others have mixed specializations, for example, language in both sides.

Our researches over the past six years—whether T.M., Yogic, Zen, or of any other school, so long as it is practiced regularly—strongly suggest that meditation progressively changes the individual's EEG patterns to a more bilaterally symmetrical form wherein the two hemispheres coordinate harmoniously.

We find that people at the top of their profession, no matter what that may be, show more symmetrical patterns even without training.

## HEALTH AND THE TWO HEMISPHERES

The current explanation offered by orthodox medicine for the occurrence of disease is infection or trauma. This implies that, for any given disease there is a single cause, and that this can, in some way, be neutralized. Orthodox medicine is much more concerned with disease than it is with health, and there is relatively little done about preventive medicine, that is to say, the maintenance of health.

But the fact is that whenever we become ill there is a combination of causes; physical and psychological stress, social difficulties, and our own maladaptive efforts to cope.

The treatment prescribed by the doctor will usually cure the patient's symptoms, at least for the time being. But such treatment of symptoms does nothing to remove the stress, or the inability to cope, which made him liable to the symptoms in the first place.

A permanent cure requires a holistic approach, which takes into account not only the symptom but, as far as possible, all the sources of stress in the life of the individual; physical stress, psychological stress, especially the stress of adopting an 'attitude' towards the illness which you hope will keep it 'in its place'.

The distinguished Soviet psychologist, Professor Luria, has stressed that the right hemisphere is the one primarily concerned with the perception of information received from one's own body, and that lesions

of the right hemisphere frequently lead to disturbances of the normal body sensations. Again, the researches of Flor-Henry and of Schwartz show that communication between the right hemisphere and the limbic system is of special importance in facilitating emotional responses.

Today, many doctors believe that susceptibility to chronic disease is greatly increased by difficulty in the expression of the emotions. Greer and Morris have demonstrated this in breast cancer, and Kissen has found the same relationship in the case of lung cancer. The right hemisphere is known to play the dominant role in fantasy, dreaming and the regulation of emotional responses in man.

Nemish and Sfneos have shown that patients with psychosomatic diseases also show impoverished fantasy and dream recall. Our own experiences with subjects taking our basic courses in self-control has been that they report improved active imagination and dream recall even before their physical problems clear up.

It is probable that the basis of these effects is a failure of left-right communication, due to excessive dependence on left hemisphere functions, with consequent inhibition of neural transmission across the corpus callosum. This is almost certainly the explanation of the beneficial effects of guided imagery which enables the mind to play with complicated undefined shapes.

In Zen, Yoga, and Buddhist meditation, the initiate is clearly cautioned against analyzing, criticizing, judging, explaining, and is instructed just to be aware of each state of mind.

This clearly implies that one purpose of the exercise is to restrain the functions of the left hemisphere and to open up awareness of the imaginative, intuitive, and Gestalt processes of the right hemisphere instead.