



PSYCHOTRONIC VIBRATIONS

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A B S T R A C T

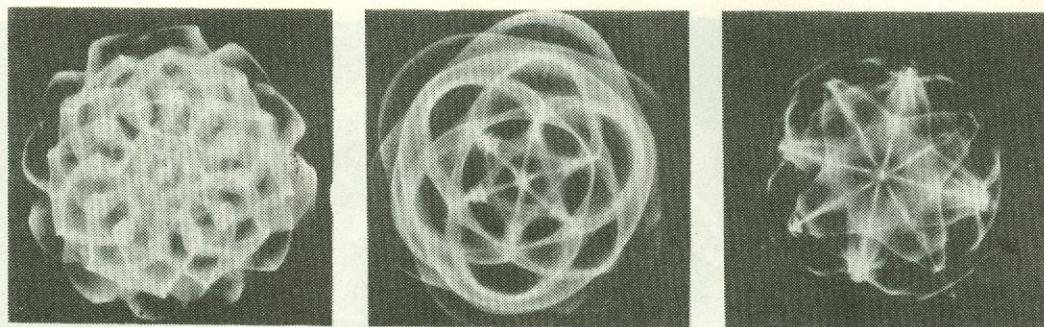
A scientific model for parapsychological phenomena is proposed, based on vibrations of the psychotronic field, coupled to biochemical oscillations in living material.

I N T R O D U C T I O N

Vibratory mechanisms for material phenomena, especially the evolution of form in living material (biological morphogenesis) and its interaction with the physical universe, was proposed in the Rg Veda, and has fascinated scientists ever since -- Pythagoras, Aristotle, and Goethe for examples. Now called kymatics, this circle of ideas has been given a firm mathematical foundation in the revolutionary work of Alan Turing (1954) and Rene Thom (1966). Recent results in biological morphogenesis reveal specific vibratory (biokymatik) mechanisms in embryology, plant growth (phyllotaxis), social amoebas (chemotaxis), insect swarms (ecotaxis), colored dappling of plants and animals, and oyster shells, fingerprint patterns, and many others. Here I propose similar mechanisms for mental functions such as memory and perception (psychokymatics), and speculate on the role of psychotronic vibrations in parapsychology. I am grateful to Neemcaroli Baba, Rene Thom, Hans Jenny, Dick Bierman, Emilia Hazelip, and Fred Abraham for many discussions, and Hans Jenny for the photographs.

A M A T H E M A T I C A L S C H E M E F O R K Y M A T I C S

This section is for mathematicians, and can be omitted harmlessly. A simple geometric formalism, suggested by the ideas of Thom, Ruelle and Takens, may be visualized as follows. Let S denote the spatial domain of the process, of dimension three or less. Let T be the temporal domain, a line. And let V be the space of possible vibrations of the process, an infinite dimensional space in general. Imagine the product space $S \times T \times V$ is a simple triaxial scheme, with S and T as horizontal axes, and V as the vertical axis. Over each "event", or point (s,t) in $S \times T$, record all vibratory states of the process at that point by marking the appropriate point in the triaxial scheme, $(s,t,v(s,t))$. After recording all the states at all events, the vibratory history of the process represents the graph of a function (possibly multi-valued)



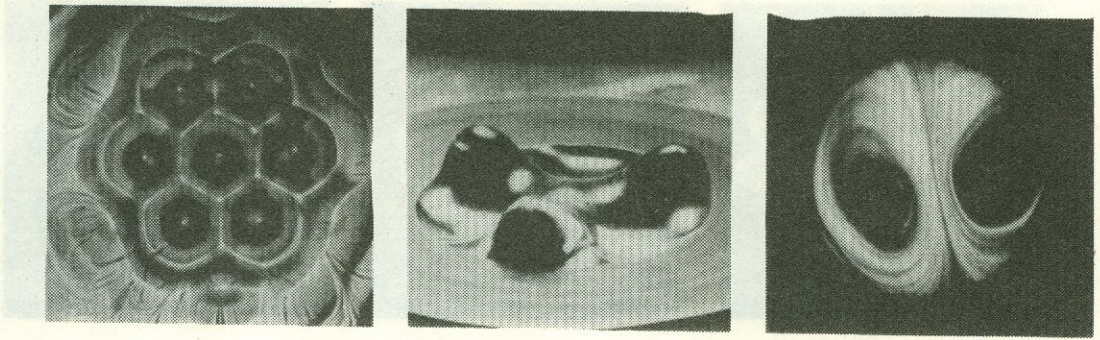
from $S \times T$ to V . If variation of the event (s,t) causes a discontinuity, or radical change, in the vibratory state $v(s,t)$, then (s,t) is called a catastrophe point of the process. The catastrophe is the set of all catastrophic points in $S \times T$, and may be visualized as a family of curved planes of dislocation, or faults, in the space-time domain. The noncatastrophic points are divided by these faults into various connected pieces, each characterized by a single mode of vibration. These pieces are the space-time domains of irreducible units of the vibratory process, and in various contexts are called wave-packets, chreodes, particles, crystals, psychotrons, and so on. In general, I will call them crystals, and think of a crystalline structure produced in the space-time domain by the vibratory process.

Another basic concept of the kymatic scheme is synchronicity. When two crystals, although separated in space-time, exhibit the same vibratory mode, they are called synchronous crystals. In physical systems, synchronicity is usually produced by an external coupling of two separated vibratory processes, each represented by a single crystal. Resonance produces essentially identical vibratory modes in each vibrator. Most physical vibrators are extremely sensitive to very weak coupling to another vibrator.

B I O K Y M A T I C S

By mechanical vibrator I mean a physical material -- gas, liquid, liquid crystal, or solid, in a state of vibration, or periodic flow. A chemical vibrator is a mixture of diffusing chemical reagents, in a state of periodic reaction. An electromagnetic vibrator is a periodic wave-form of the electromagnetic field. Coupling between chemical and mechanical vibrations in the same medium takes place when hydrodynamic flow combines with diffusion to transport the reagents. Coupling between mechanical and electromagnetic vibrations occurs if the physical medium is charged (plasma), a conductor (magnetohydrodynamics), or molecularly electroactive (solid or liquid crystals). Coupling between chemical and electromagnetic vibrators occurs by ion transport, for example.

A fully coupled mechanical, chemical, and electromagnetic vibratory process is characteristic of biological materials and life processes, so I call this a biochemical oscillation. Many such vibratory processes



have been photographed in laboratories, and reveal highly symmetric and beautiful space-time waveforms, or biochemical crystals, recalling the morphology of many biological forms. This is the basis of the biokymatic theory of pattern formation of Turing, and his successors.

P S Y C H O K Y M A T I C S

To date, most psychobiological theories of mental function, both local and antilocal, are connectionist, that is, they involve only the neural network. Here I am speculating that a thought, or memory (engram), is a biochemical crystal in the brain body, and the neural network functions mainly as a metabolic energizer for the maintenance of the biochemical oscillation, and a coupling device to other vibrators in the organism, such as the muscles and organs of perception. Similarly, I propose that perception is a resonance phenomena between the brain and external vibrators. The skin, eyeball, and cochlea are intermediate vibratory transformers. Electromagnetic registration and chemical disturbance of neural activity give some support to this idea, which will be described more fully in another publication. There is little doubt that biochemical crystals exist in the brain body, but it is not yet established whether these are functionally significant, or epiphenomena.

P A R A P S Y C H O L O G Y

If we accept, for the moment, the psychokymatik hypothesis -- a thought is a coupled mechanical, chemical, and electromagnetic wave-form in the brain body -- then the resonance phenomena of coupled vibrations immediately provides us a mechanism for many parapsychological phenomena of short distance by electromagnetic coupling, without invoking the existence of a psychotronic field. But if we suppose, in addition, that the psychotronic field exists, supports vibratory activity, and is coupled to biochemical oscillations by some unknown mechanism, then the combined psychobiochemical crystals in living material, and especially the brain, provide mechanisms for all parapsychological phenomena. Especially, cosmobiology, psychometry, primary perception in plants, telepathy, and clairvoyance are easily understood as crystal resonance phenomena.

Rather than detail these models, I would like to end with a plea for more experimental data. Oscillatory mechanisms have largely been ignored in psychotronic research. It would seem valuable, in all experiments involving electromagnetic registration, to monitor the power spectrum in the principal range of biochemical frequencies, 0 to 200,000 cycles per second, using techniques such as those of Volkers and Candib.

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