

# Information and Announcements

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## Living Science Creatively

Recent trends in science suggest that order emerges free in living systems at all levels from minute, ancient bacteria in hot springs to giant colonies of fungus-cultivating leaf cutter ants in South American rain forests to the human body and right upto the working of the planet itself. The myriad relationships and inter-connections among the parts ultimately result in new levels of order and freedom.

The Schumacher College situated amidst the beautiful hills of South Devon, England was founded in 1991 upon the twin convictions that the world view which has dominated western civilization has serious limitations and that a new vision is needed for human society, its values and its relationship to the earth. This educational centre is an integral part of the Dartington Hall Trust founded in 1925 by Dorothy and Leonard Elmhirst. The College organised a course on 'Living Science Creatively' for a period of three weeks during May 1997. The course was aimed to discuss new approaches in science. In this observation is transformed into communion and experiment is transformed into experience. Combination of observation, experiment, analysis and intuitive understanding helps to explore and experience the emergent order. New participatory biology through objective descriptions with subjective experience made the course a knowledgeable experience.

The main areas focussed during the course were - why wholes are more than the sum of their parts, the similarities and differences between the realm of living and non-living nature.

- The way in which coherent order emerges at the edge of chaos with complex systems and how this may be applied to the emergence of evolutionary novelty.
- The application of general principles of complex dynamic systems to specific examples such as the development of plants and animals from embryo to adult, the behaviour of the vertebrate heart and circulation, ant colony dynamics and ecosystem organisation including Gaia models.

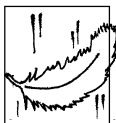


- The learning of methods of sensory observation and intuitive comprehension through the practice of group and individual exercises using a variety of examples from living and non-living worlds.
- Understanding Goethe's position in science and his method of combining observation with active imagination in the study of nature.
- The development of schemes for classifying living systems based on the skills of participatory research.
- An understanding of the relationships between the human organism in health and illness and the substances within the natural world which can act as catalysts for healing.
- The integration of 'nature' and 'nurture', genes and environmental influences into a coherent holistic view of organisms and their evolution.
- Engaging in participatory conversations between people and place as an experimental basis for healing the planet.
- The value of communal living and group praxis as essential elements of science as a creative healing act.

The entire course gave an insight into the science of complexity, concepts like non-linearity, attractors, bifurcation, excitable media, fractals, chaos, emergent order, nature-nurture conflict, Darwinian biology, value of communal living and group praxis and others. Objective-subjective dichotomy in sciences was understood through application of Goethe's methodology. Outrageous onslaught on Earth, its repercussion and remedial measures were discussed at length. Participation by 23 students drawn from ten countries of the world made the course a real holistic-experience. Besides, field work along the banks of the river Dart and frequent garden walks at Dartington enriched both geological and botanical knowledge.

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One of the great surprises of the present century has been to learn from physics how limited our common sense ideas about reality are.

*R Hanbury Brown*

