Evolution of Species

A Paper by John Stockford Stone

Nature is a process of interdependent diversity, governed by the determinant logic of possibility and reality, leading to difference in phenomenal forms and patterns of relationships between different phenomena; including those classified as species of life forms. Evolution is a theory to explain observed species diversity as descent from a common ancestry via the mechanisms of mutation and natural selection. In the absence of evidence of systemic causation, mutation has been attributed to random chance. Chance mutation would probably be described by modern day geneticists as random errors in the routine copying of DNA; while natural selection arises from the relative fitness of mutants to compete for scarce resources and survive.

A problem with random mutation giving rise to complex creatures like Homo sapiens is that it is a bit like the notion that if you sit a chimpanzee at a word processor it will, by chance, eventually come up with creative prose. With the added handicap that natural selection is a harsh critic, so when the poor chimp makes a serious mistake it gets the chop, thus denying it the opportunity to learn from its mistakes.

If one takes a reductionist view of mutation, that it is solely a random genetic mechanism, one has to explain how a formula for chaos gives rise to the high degree of order one observes in organisms and ecosystems. Indeed, if it were not for that degree of order neither organisms nor ecosystems would be systemic at all! That is to say they wouldn't exist! However, emergent probability is not random chance. In holistic Nature, where all events in space-time are interdependent, there is no such thing as random chance; and holistic complexity should not be mistaken for randomness. To paraphrase Einstein, "Nature Mind doesn't play dice!" But, it *is* uncertain in its deliberations.

It is instructive to refer to Charles Darwin himself on the question of chance mutation and the role of the reproductive system in change.

The Origin of Species: chapter v: Laws of variation: "I have sometimes spoken as if the variations – so common and multiform in organic beings under domestication, and to a lesser degree in those in a state of nature – had been due to chance. This, of course, is a wholly incorrect expression, but it serves to acknowledge plainly our ignorance of the cause of each particular variation. Some authors believe it to be as much the function of the reproductive system to produce individual differences, or very slight deviations of structure, as to make the child like its parents. But the much greater variability, as well as the frequency of monstrosities, under domestication or cultivation, than under nature, leads me to believe that deviations of structure are in some way due to the nature of the conditions of life, to which the parents and their more remote ancestors have been exposed during several generations. I have remarked in the first chapter – but a long catalogue of facts which cannot be here given would be necessary to show the truth of the remark – that the reproductive system is eminently susceptible to changes in the

conditions of life; and to this system being functionally disturbed in the parents, I chiefly attribute the varying or plastic conditions of the offspring."

So, it would appear that, by adopting a reductionist approach to evolution, some "evolutionary theorists" have attributed far more to Darwinian mechanisms than Darwin himself would support.

New theories on evolution centre on convergence, in which symbiosis and symbiogenesis are more significant to evolution and diversity than purely random gene mutation. Symbiosis is convergence to a degree of behavioural interdependence between two or more organisms; while symbiogenesis is convergence to a point where organisms merge and combine genetically to form new organisms.

Symbiosis and symbiogenesis require a contextual rationale to explain the convergent process which gives rise to them. Gene driven evolution is essentially a reductionist textual process which cannot fulfil that requirement. Moreover, if we stick to reductionism there is the "chicken and egg" question: which came first, the genes or the organism? In general, evolution theory focuses on the linear history of species rather than viewing species as phenomena arising within the emergent history of Nature as a whole. The linear descent of Man from some apelike anthropoid primogenitor offers a reductionist analysis which throws up the constant problem of where are the missing links in this continuum? Do all other species have similar common lines of descent? For example, insects such as ants and spiders are widely spread throughout areas where life is found. Do all the many varieties of ants and spiders descend from insect primogenitors which arose spontaneously at one point in spacetime and then spread so widely throughout the planet's ecosystems? Nature Mind Theory* offers an alternative scenario, whereby individual species are emergent phenomena arising systemically from the logically deterministic process of organization in Nature Mind. A process of convergence which gives rise to all natural phenomena as patterns of interdependent events in spacetime. Clearly, random gene mutation, mediated by natural selection, is not consistent with such concepts. The governing role of genes is in reproducing elephants not as prime movers in evolving them; while genetic transformation arises naturally from systemic interdependence between species and their ecological context. Of course, biological science, with its growing knowledge of gene sequencing, can selectively transform organisms by modifying their genomes or introducing alien material into them. But, this reductionist intervention, by perturbing the systemic interdependence of the textual organism and its ecological context, will have wider transformational effects which cannot be accurately predicted. Engineered genetic

modification, whilst textually small and local, can have major unintended consequences for systemic life as a whole.

* See my paper "Nature Mind Theory – The Logic of Possibility and Reality".

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