

Re: Evolution article in BioScience Encyclopedia

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- *From:* "John W Edser" <edser@xxxxxxxxxxxxxxxx>
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sciencebioresearch <sciencebioresearch@xxxxxxxx> wrote:

Evolution article in BioScience Encyclopedia –
<http://www.bioscience.ws/encyclopedia/index.php?title=Evolution>

Critical omission within the above website:

The only way to empirically refute Darwinian evolution (which remains the only refutable theory of evolution that we have) is to force the total number of infertile forms raised to fertile adulthood per parent per population to remain exactly the same. I term this critical, final but 100% omitted from Neo Darwinism fitness "Total Darwinian Fitness" (TDF). It provides the only falsifiable frame of reference that evolutionary theory has.

My comments of quoted text follow:

1)" In biology, evolution is the changes seen in the inherited traits of a population from one generation to the next"

The units of selection is not a single gene and the Darwinian mechanism of evolution, i.e. "natural selection" cannot operate directly on each genomic gene as a supposed independent selectee, only on fitness dependent groups of genes and only via the phenotypes that these gene groups happen to code for. While Mendelian traits do separate on an independent basis at meiosis, this does not mean that such traits must also be independently selected.

2) "The modern evolutionary synthesis defines evolution as the change over time in this genetic variation" .

Only simple additive change in genetic variation is considered heritable and therefore selectable within critically oversimplified population genetics models so only changes in just additive genetic variation over time can define Neo Darwinistic, oversimplified, uncorrected concepts of evolution.

Non additive heritable variation is known as "genetic epistasis". Almost all

of it was deleted within Haldane's oversimplified, basic population genetics equations because he argued that these dependent non additive effects would be lost by the shredding of the genome at meiosis. However, empirically, it was shown that this is not necessarily case. C. H. Waddington demonstrated experimentally that non additive traits can be conserved and provide a high and a low gearing for evolutionary change. He termed the protection non additive epistasis can provide against genetic additive change "canalization" and the acceleration it provides, "assimilation. The Darwinian fitness of any trait is epistatically coded. This means that fitness of any one trait is never the sum of the fitness of the sub traits that comprise it, no matter how you define fitness, e.g. the fitness of a hand is never the simple sum of the fitness of each finger and thumb. Waddington was the first to amend Haldane's basic population genetics equations to include a critical variable for genetic epistasis. This amendment remains ignored to this day.

3) "There are three basic mechanisms of evolutionary change: natural selection, genetic drift, and gene flow. "

There is only the one NON random process which can produce evolutionary change: natural selection: the default set intersection of all TDF fitnesses per population and absolutely nothing else. The random processes of genetic drift and mutation can only provide temporal and spatial heritable _variation_. Falsifiable Darwinian theory combines these within the _one same theory_ such that the evolution of groups can be produced via the independent natural selection of fertile individuals within each group (only fertile forms can possibly pass on their genes). Just individuals can be selected and only populations of them can evolve and not the reverse. This view I term the classical Darwinian monocentric theory because it allows just the one unit of selection: the fertile adult form. OTOH oversimplified models of this falsifiable moncentric theory allow multiple units of selection so I term them polycentric. The cost polycentricity is irrefutability which is just a massive cost. This is produced by allowing more than just the one fitness maximand per theory which inevitably allows a contradictory evolutionary theory (which does not matter at all to the mathematics!). Within Neo Darwinism the non random process of natural selection has become decoupled from the one, same theory within which just random processes form a vital part, only providing heritable random variation and selection as separate, mathematical processes. Note: A maximand is any value which must be maximized, e.g. the velocity of light. The net result of this is that random forms of evolution have become allowed reducing evolutionary theory to the status of just another irrefutable belief, i.e. on par with creationism.

4)

"Natural selection is the process by which genetic mutations that enhance reproduction become, and remain, more common in successive generations of a population. It has often been called a "self-evident" mechanism because it necessarily follows from three simple facts: Heritable variation exists within populations of organisms. Organisms produce more offspring than can survive. These offspring vary in their ability to survive and reproduce."

JE:–

There is nothing "self evident" about natural selection. In fact, Darwin's proposed non random mechanism for producing evolutionary change when critically coupled with random, heritable variation within the one same theory, is not sufficiently understood by the majority of researchers. The only values being compared per population are Total Darwinian Fitnesses (TDF's). These were not defined by Darwin but are empirically: the total number of just fertile forms raised to fertile adulthood by each parent per group and absolutely nothing else. Once established these fitness totals remain fixed for every parent per group over time because they represent fitness constants per parent per population. If all the heritable traits could be known per parent per population, just a simulation could reproduce empirical evolution.

5)

"The central concept of natural selection is the evolutionary fitness of an organism. This measures the organism's genetic contribution to the next generation. However, this is not the same as the total number of offspring: instead fitness measures the proportion of subsequent generations that carry an organism's genes.[51] Consequently, if an allele increases fitness more than the other alleles of that gene, then with each generation this allele will become more common within the population. These traits are said to be "selected for". Examples of traits that can increase fitness are enhanced survival, and increased fecundity. "

The preferred Neo Darwinian fitness which "measures the proportion of subsequent generations that carry an organism's genes" always remains just an ongoing variable and requires all epistatic gene fitnesses to remain deleted as an uncorrected, critical oversimplification of the falsifiable theory which absolutely required them and provided a constant fitness per selectee per population. The net result is that Neo Darwinistic theory is reduced to polycentricity in just a futile attempt to make empirical sense. We end up with Hamilton's minimally tri-centric inclusive fitness concept allowing Dawkins selfish genes which have to (absurdly) combat the very same phenotype they are required to exist within, in order to win. The net result: the more they win the more that they must lose. Neo Darwinian fitnesses as typified within Hamilton's Rule, have no fitness constant frame of reference. The net result of this is that a relative gain providing just an absolute loss cannot be differentiated from the same relative gain which provides an absolute gain, i.e. an altruistic donation cannot be empirically differentiated from a selfish investment.

6) An active area of research is the unit of selection, with natural selection being proposed to work at the level of genes, cells, individual organisms, groups of organisms and even species.[57][58] None of these models are mutually-exclusive and selection may act on multiple levels simultaneously.[59]

JE:–

As just, irrefutable, oversimplified MODELS they are not

"mutually-exclusive" but within the one falsifiable theory from which all of these models were derived via the process oversimplification, they remain absolutely mutually-exclusive. IOW the misuse of mathematics has reduced empirical theory to just mathematics in order to evade falsification. Polycentric models as contesting empirical theories of nature remain self contradictory.

7)

"Although natural selection is responsible for adaptation, the relative importance of the two forces of natural selection and genetic drift in driving evolutionary change in general is an area of current research in evolutionary biology.[64] These investigations were prompted by the neutral theory of molecular evolution, which proposed that most evolutionary changes are the result of the fixation of neutral mutations that do not have any immediate effects on the fitness of an organism.[65] Hence, in this model, most genetic changes in a population are the result of constant mutation pressure and genetic drift.[66]"

JE:–

The above is the product of gross model misuse. The elevation of a naked random process to become an evolutionary event in it's own right and not just a heritable variation event, requires the critical decoupling of the non random process of natural selection from the random processes of drift and mutation such that, instead of forming just the one, same, falsifiable theory, they are now forced to form two competing non falsifiable theories grounded in just, mathematics. Mathematics is not a science.

8) "Organisms can also respond to selection by co-operating with each other, usually by aiding their relatives or engaging in mutually-beneficial symbiosis."

JE:–

Darwinian Fitness mutualism was and remains the most important selective force that any fertile form can experience. Here TDF's are mutually but hardly ever equally, increased. Because polycentric Neo Darwinism has no constant fitness proposition per selectee per population (so it has no falsifiable frame of reference) it cannot separate mutualism from selfishness or even, proposed altruism! Thus the overriding importance of true, falsifiable fitness mutualism remains ignored within Neo Darwinism. In falsifiable theory the Baldwin Effect can provide a massive selective force allowing expanding cooperation within expanding competition. Most of our human history deals with the mass effect fitness mutualism has provided.

9) "Adaptations are structures or behaviors that enhance a specific function, causing organisms to become better at surviving and reproducing.[7] "

JE:–

"Surviving and reproducing" cannot both constitute a fitness maximand. One must reduce the other to just an optimum for the other. Either nature maximizes survival (life spans) OR to reproduction using finite resources.

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Quite clearly, reproduction is the fitness maximand and not survival. The reproduction of what exactly? Darwin answered this by arguing that each parent has to raise as many children to adulthood as possible. IOW, fecundity is not a fitness maximand just the reproduction of parents (which have to be fertile just to be able to constitute a parent) is. Counting infertile forms within a total fecundity count is out by thousands of percentage points because only a tiny fraction of most parents offspring can be raised to fertile adulthood.

This means that infertile forms can be selected against but not selected for. In gene centric terms this means that the genes within infertile forms are selected for only within the soma of the fertile parent from whence they came and never within the body of an infertile offspring.

End Part One.

I will finish this when I have time.

Regards,

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