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INVESTIGATING GENESIS

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“Cichlids and Evolution”

Cichlids are fish that inhabit the shallow shoreline waters of Africa’s Lake Tanganyika. Evolutionists hold them up as undeniable proof of evolution in action, because cichlids have been witnessed “evolving” into several new species over the past few decades. These events are indeed evidence of intraspecific microevolution, discussed many times in this column, but not of transpecific macroevolution, since the cichlids are not evolving into more advanced, superior life forms, in the classical Darwinian “mud to monkey to Mozart” or “amoeba to ape to Einstein” scenario.

The numerous “species” of cichlids that naturalists are witnessing springing into existence are actually the result of phenotypic plasticity. This term has also been discussed in previous installations of this column; it refers to the ability of humans and animals to change dramatically as a result of environmental changes. It derives not from mutations or natural selection, as Darwinians propose, but from a pre-programmed feature of the genetic code that allows “on-off” switches to activate or deactivate, depending upon outside circumstances.

Hans Hofmann, a fellow at Harvard’s Bauer Center for Genomics Research, has discovered that the visible “evolution” of cichlids is the result of phenotypic plasticity, not Darwinian evolution. Hofmann specializes in the relationship between an organism’s environment and its behavior, concentrating on how these two factors affect phenotypic plasticity (Shaw 2003: 30). *Harvard Magazine* reported on his findings:

“[C]ertain genes that regulate phenotypes — groups of physiological traits and behaviors — are actually under social control. A genome, the complete collection of an organism’s genes, is plastic, Hofmann contends. The environment — even social and cultural contexts — can switch genes on and off” (Ibid. 31).

Hofmann observed cichlids both in the wild and in the laboratory and found that they possess “an unusual mutability during life” (Ibid.). Cichlid on-off genes are activated not only by external factors, like changes in the environment, but by social factors as well. Hofmann found that cichlid males experience changes in color, territoriality, reproductive activity, and gregariousness depending on what other cichlids do. In any school of cichlids, there is a dominant male who does all the breeding with the females. If that setup is changed either through the death of that male or a radical change in the lake, the submissive males will battle for the top spot. Within seconds, the winning fish develops an eye stripe and bright coloring. Within a week, even greater changes take place. Previously unable to reproduce, the victor’s organs suddenly get a message from the brain to being producing sperm cells (Ibid. 31-32). Hofmann’s experiments have discovered “at least 14 phenotypic characters under social control” (Ibid. 32).

Hofmann has so far found 96 “on-off” cichlid genes that are activated by external factors. He stated: “The whole idea that a gene is for one thing only is simplistic — and it misses the inherently complex system of interactions between the social environment and individual animals” (Ibid. 33). *Harvard Magazine* concluded: “Hofmann suspects that the phenotypic plasticity of cichlids may have enabled the fish to adapt to new environments during evolution, resulting in the numerous species flocks found in Lake Tanganyika” (Ibid.).

Despite the evolutionary bias in this passage, the point is that cichlids aren’t evolving into higher, more advanced life forms through the traditional Darwinian scenario of macroevolution through natural selection and survival of the fittest. The “evolution” to which *Harvard Magazine* referred is the result of phenotypic plasticity within the wider cichlid “kind.” The radical changes witnessed by evolutionists and creationists alike do not prove Darwin, but they certainly argue for an Intelligent Designer who came up with the “on-off” genetic switch to begin with.

Reference:

Shaw, J. 2003. “Phenome Fellow.” *Harvard Magazine* 105, no. 3.

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