

Re: specialization momentum

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- *From:* "g" <gillawton@xxxxxxxxxxxxxx>
 - *Date:* Mon, 27 Jun 2005 01:44:15 -0400 (EDT)
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"g" <gillawton@xxxxxxxxxxxxxx> wrote in message news:...

>> The Concept of Momentum of Specialization

>> By Gil Lawton

>> June 25, 2005

Title: Part II, MoS and the 'differentiation dilemma' in current stem cell research

By: Gil Lawton

Date: June 26, 2005

In Part One, an attempt was made to introduce you, at the simplest level, to the concept of MoS (Momentum of Specialization) and how it seems (to me, at least) to be an essential part of the game (as it were) of evolutionary change.

Upon finishing that, I was anticipating Part Two as the place to begin discussing the way MoS can serve to explain some very real and present issues facing stem cell research. I'm itching like crazy to get on into that... but in reading back over Part One, I see that I have made MoS look far too simple and obvious and easy to understand than it really is. In a conceptual pyramid, each concept can be simple and easy and obvious by itself alone, but less the task of APPLYING many such seemingly simple things into a larger synthesis, let us remind ourselves that the most difficult of all mathematical problems and solutions ALSO are nothing more than skillful application of what, at the roots, are simple, easy and obvious ideas.

So, however, simple it seems at first, I ask the reader to bear with me, and to get a firm grip at the simple and obvious level, because there will come a point at which the application can get a bit rigorous. Please hang in, if the challenge seems too light just yet.)

To further clinch the idea of MoS, let me reiterate a few points that were offered there, and add some that you may need to know from other messages from this writer. Let me enumerate a few:

- a. A mutation providing a sensory detection function, in an early ancestor to one or more subsequent organisms, may

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have been as primitive as a single axon which fired and caused a cellular contraction that yielded the slightest advantage to an organism in the ecology in which it was located. Say, for example, that primitive organism (or pre-organism, capable of reproducing itself) were at the edge of a wet rock that dried out between tides, and if it dried out, it would lose its essential existence or reproduction capacity, so that members of its kind that stayed wet got to reproduce, and those that dried out, were eliminated from the game. Now let a mutation occur in the form of something of the nature of an axon which, when it began to dry out, twitched, and caused the organism to increase its likelihood of rolling, or falling, onto a wet area.