Go Figure: The Brain runs on Chaos!

Description

Well, Iâ€™m not a real scientist, but I play one on this blog sometimes. The naming of this blog had this concept in mind, as formulated by the reading of â€œChaos: The Making of a New Scienceâ€• by James Gleick, about 15 years ago. Actually, my entire point, I think missed by many, is James Gleick pointed out that chaos is actually organization at a level we fail to take the time to dig for. Itâ€™s in the way past the decimal point places, that we round off before we get there, either out of â€œgood enough,â€• laziness, or computational limitations. Itâ€™s order at a very subtle level, while looking exceptionally random to those who donâ€™t take the time to take the journey. Over 20 years ago, I began playing with the creation of fractals on my Macintosh II, sometimes leaving it running all night, just to generate the image way down in the insides of the fractal form. Now, such things are easy to make quickly, and are widely used to generate scenery for movies.

I had always planned, from day one of the blog, to write about this, yetâ€¦almost 5 years later, and three iterations of this blog at different places, I have failed to get there yet, however, I feel vindicated today, by real scientists.

> HAVE you ever experienced that eerie feeling of a thought popping into your head as if from nowhere, with no clue as to why you had that particular idea at that particular time? You may think that such fleeting thoughts, however random they seem, must be the product of predictable and rational processes. After all, the brain cannot be random, can it? Surely it processes information using ordered, logical operations, like a powerful computer?
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> Actually, no. In reality, your brain operates on the edge of chaos. Though much of the time it runs in an orderly and stable way, every now and again it suddenly and unpredictably lurches into a blizzard of noise.
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> Neuroscientists have long suspected as much. Only recently, however, have they come up with proof that brains work this way. Now they are trying to work out why. Some believe that near-chaotic states may be crucial to memory, and could explain why some people are smarter than others.
> [â€¦]

Lets go to the video:

Take some time to read the article. Maybe youâ€™ll get a grasp on the chaos that reigns sometimes.

So, here I sit on the domain â€œChaotic Synaptic Activity,â€• before the brain scientists figured it out. Sometimes even a blind squirrel finds an acorn in the snow.

Category

1. Biology

Tags

1. chaos
2. chaotic activity
3. choatic synaptic activity
4. James Glick

Date Created
July 13, 2009
Author
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