

Re: Peano's space-filling curve

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From: John Morgan (john.morgan_at_REMOVECAPSataraxie.fr)

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Daniel Grubb <grubb@lola.math.niu.edu> wrote in message
news:ca4uv5\$hv4\$1@news.math.niu.edu...

>
> *>Only the comprehensible ones, as I carefully explained in
> >my answer to your request above. When you get the
> >Dirac equation jargon thrown at you from all angles,
> >which you will, just try to treat it as water off a
> >duck's back. Someone, somewhere out there, will have
> >the necessary ability and skill to: A) understand fully
> >the Dirac equation (it isn't me, that's for sure) and; B)
> >a clear mind, solid colloquial language and sufficient
> >patience to see you through the dark days ahead (that
> >might just be me, but then I don't meet requirement A).
> >The incomprehensible will wait on Google until you are
> >ready for it. Hope this helps. Good luck in your quest!*
>
> *One big problem with this is that colloquial language is
> not specific enough to get any handle on the Dirac
> equation. You may be able to discuss some of its
> consequences, but you certainly won't understand the
> equation itself. In order to understand it, you will have
> to learn new, technical terminology (aka jargon).
> For example, you cannot expect someone to understand
> nuclear physics without knowing the general concepts of
> charge, protons, neutrons, and isospin. These may all be
> considered to be 'jargon' to outsiders, but they are
> crucial for the area. If a person doesn't know them, they
> have to learn about them, thus gaining familiarity with
> the jargon.*

These are very good points, all absolutely true, and all very regrettable. Why? Because we are entering a new dark age, where young people distrust and show disdain for boffins, mathies and their ilk, whom they call "nerds". And they do this because of exactly what you have observed. The technical language has subtle meanings that are hidden from them. They would see this in the same light as we see our

forefathers being kept in the dark about what was going on by using e.g. Latin, for the liturgy. I keep banging on to you all about using plain language because I see our failure to do so as being a problem.

> *In math this happens to an even greater degree. Because
> the results are often counter-intuitive, precise language
> is crucial for real understanding. In your own posts, you
> use the 'jargon' of onto, surjection, bijection,
> one-to-one, function, etc. The problem is that you don't
> seem to really understand what these concepts are
> saying. Part of the frustration that some people feel is
> that you are using this jargon incorrectly. Part is that
> you are trying to criticize results that depend heavily on
> the subtleties of those concepts and you seem to be
> unwilling to relearn the definitions correctly.*

I'm a willing pupil, really, even if a little dense and irascible at times. Also no criticism of the results intended. It's the scientific method at work. I have to assume the result is falsifiable to be able proceed.

Try talking your talk with a bunch of so-called "New Age Travellers" and don't be surprised when they tell you they prefer the predictions of Nostradamus. When I see virtually every popular newspaper devoting half-a-page of print to astrological pseudoscience daily, but hardly a line to any real science, it's hardly surprising I'm upset by the failure of us nerds to communicate with the hoi-polloi. And if we are to avoid the return to the Dark Ages we need to urgently address this failure of ours. We're the ones they'll burn at the stake next time around. Who should I see about that?

> *BTW, did last few posts make any sense to you?*

Good news, Dan, though I think I transmitted it already. I believe I am sorting out the tangle in my mind and have begun back-tracking with the help of Google to see if I can now follow the early stuff.

What you say above reminds me of the way in which a child might learn vocabulary. You hear it used. You have an idea what it means so you use it. Then somebody corrects it. You hope they do a good job because you don't want to repeat the process too often. They may give an ambiguous definition, through no fault of their own. You pick up the wrong sense and go further wrong. In olden times they would've probably then beaten the crap out of you, but times have changed. You get the correct meaning finally, then move on to the next word.

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Writing that has just shown me that I learned a whole lot more than maths! I said in another post I hoped you were a teacher. But it's not just you, but all of us. How else can we hope to avoid ending our lives choking on a dense cloud of wood smoke? That's assuming we don't die on the rack first.

Cheers

John

Keep a clean nose

Watch the plain clothes

You don't need a weather man

To know which way the wind blows

– Bob Dylan