

An Evil Guest science errors

The Urth list — 6 messages, 5 voices, 04 Jan 2010

<https://urth.darkrealm.vip/thread/urth/5528>

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Gwern Branwen — 04 Jan 2010, 16:07

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I have seen statistics to the effect that a 12 year old who stopped aging could expect a median lifespan of >1000 years before disease or something else finally got her. But the mortality rates for young people in general are low enough that 2 or 300 years is ridiculously too little, and we can see this very easily,

<http://gravityandlevity.wordpress.com/2009/07/08/your-body-wasnt-built-to-last-a-lesson-from-human-mortality-rates/>

mentions that 1/3000 or 0.03% of 25 year-olds will die age 25. (Seems reasonable to me.)

If we assume a cohort of 10x people, and each year 0.03% of them die, then 1000 years from now, 7.4x will still be alive. 300 years from now, 9.15x will still be alive, and 200 years will see 9.42x. It's a low death rate!

Even a little basic figuring would have show 2-300 years to be absurd. And we can't make the excuse that Wolfe was estimating from the mid-40s ages of the protagonists, since the mortality rate cited for 42 year-olds is 1/750 or 0.13%. Plug in the 1/750 to the formula and ask for 300 years from now, and 6.7x are still alive. Heck, 2.6x are still alive 1000 years from now. 7/10ths or 3/10ths odds are not grounds for despair and dismissal.

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3,9.716065690000178,9.713150870293179,9.71023692503209,9.70732385395458]

gwern

James Wynn — 04 Jan 2010, 16:28 · in reply to Gwern Branwen

Perhaps Chase is using different variables based on empirical data in other non-aging cultures. Perhaps un-aging cultures tend toward more violence and risk. And for self-slaughter, we're talking suicide. We simply cannot know the rates of suicide in cultures where life goes on and on.

From: "Gwern Branwen" <gwern0 at gmail.com>

Sent: Monday, January 04, 2010 10:07 AM

To: "The Urth Mailing List" <urth at lists.urth.net>

Subject: (urth) An Evil Guest science errors

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gwern

brunians at brunians.org — 04 Jan 2010, 16:43 · in reply to James Wynn

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84415503,9.716065690000178,9.713150870293179,9.71023692503209,9.70732385395458]

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gvern

Jeff Wilson — 04 Jan 2010, 17:21 · in reply to Gvern Branwen

On 1/4/2010 10:07 AM, Gvern Branwen wrote:

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Those more modestly equipped with Excel or Windows' built-in CALC.EXE can check this by
treating it as a survival chance of .9997 per year, and raise that value to (for example) 100
years with

=0.9997^100 (for Excel)

or

click View | click Scientific

.9997 [x^y] 100 [=] (for CALC.EXE)

Jeff Wilson - jwilson at io.com
IEEE Student Chapter Blog at
< <http://ieeetamut.org> >

Gvern Branwen — 04 Jan 2010, 21:19 · in reply to James Wynn

On Mon, Jan 4, 2010 at 11:28 AM, James Wynn <crushtv at gmail.com> wrote:
Perhaps Chase is using different variables based on empirical data in other
non-aging cultures.

Which would be? Woldercon?

Perhaps un-aging cultures tend toward more violence and risk.

The intuitive arguments are for exactly the opposite: if your lifespan is indefinitely long, you jeopardize indefinitely many years with violence or risk, whereas with aging, no matter the risk you take you can lose no more than 120 years of life. A ceiling on losses encourages risk-taking. (Consider recent financial bail-outs...)

I am reminded of some old quips:

Q- Why does the devil keep his deals?

A- Because as an immortal he has an infinite time horizon of other deals he jeopardizes if he betrays any given deal. Therefore the opportunity cost of any betrayal is too high.

Q- What does that make politicians then?

A- Lower in ethical reliability than the devil.

-Oldman

And for self-slaughter, we're talking suicide. We simply cannot know the rates of suicide in cultures where life goes on and on.

If the suicides are caused solely by exogenous factors, then Reis - and certainly Wolfe - cannot know this without aging having been cured in a normal human society, which it has not, so the statement is unjustified. If suicides are caused solely by internal reasons, then Reis's statement about deaths being inevitable within 2-300 years is false since people will live as long as they want to. Any mix of endogenous or exogenous factors simply makes his statement a greater or lesser mixture of false and unjustified.

On Mon, Jan 4, 2010 at 11:43 AM, <brunians at brunians.org> wrote:

When you are talking about something totally speculative, you can make up whatever result you like, basically, and justify your assumptions however you like.

Hey, the Shivapuri Baba took up smoking at the age of 107, and died at the age of 137.

Entertainingly, I was recently reading

<http://www.overcomingbias.com/2009/12/animal-smoking-studies.html> and

<http://www.overcomingbias.com/2009/12/smoking-followup.html> arguing that the actual studies suggest that smoking is only harmful to people with bad/vulnerable lungs (for whom it is harmful enough to skew all the other statistics which we know and fear).

On Mon, Jan 4, 2010 at 12:21 PM, Jeff Wilson <jwilson at io.com> wrote:

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$=0.9997^{100}$ (for Excel)

Quite right. If I had thought harder, I would've realized that was the easier way to do it - but I'm a Haskell-er and the iterate pattern is what my mind jumped to. (It does have the slight advantage of showing all the intermediate results, but that's very slight.)

gwern

Dave Tallman — 05 Jan 2010, 21:47 · in reply to Gwern Branwen

Gwern Branwen wrote:

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For a Wolfe view of a world with unlimited longevity, look at 'The Doctor of Death Island.'

Life becomes meaningless, therefore cheap. Love is gone. The war between the sexes is literal. Etc.