
From: Robert Trivers [REDACTED]
Sent: 4/14/2018 5:06:12 PM
To: Alan Rogers [REDACTED]; Jeffrey Epstein [jeevacation@gmail.com]
CC: Gordon Getty [REDACTED]; Oliver Goodenough [REDACTED]; Tim Kane [REDACTED]; Rob Hanson [REDACTED]; Paul Zak [REDACTED]; Bobby McCormick [REDACTED]; Terry Anderson [REDACTED]; Clive Crook [REDACTED]; Matt Ridley [REDACTED]; Gerry Ohrstrom [REDACTED]; Lee Silver [REDACTED]; Monika Gruter Cheney [REDACTED]; Dane Stangler [REDACTED]; Ron Bailey [REDACTED]; Anna Dreber [REDACTED]; Anula Jayasuriya [REDACTED]; Paul Romer [REDACTED]; Mike Cagney [REDACTED]; Evan Smith [REDACTED]; Roger Edelen [REDACTED]; Bill Prezant [REDACTED]; John Mallen [REDACTED]; Jim Halligan [REDACTED]; Marguerite Atkins [REDACTED]; Alex. Family Pines [REDACTED]; Ditsa Pines [REDACTED]; David Darst [REDACTED]; president@usfca.edu; Clair Brown [REDACTED]; Ms. Yvette Robbins [REDACTED]; Richerson, Peter J [REDACTED]
Subject: Re: Free Growth (09-29-17) part 2.pdf

Importance: High

yes Alan i think you are

you are referring to duplication of a gene—there are many such genes including those produced by retrotransposons (as evidenced by lack of introns)—where a gene has two separate effects and there is an advantage to having a gene with each effect you will often prefer two genes to one, because of less interference in fitness effects

Peter was talking about a gene with a single effect—sickling—and the other allele is the normal one—the heterozygote destroys malaria within red blood cells at trivial cost and there is no cost at all if malaria is not present—by contrast homozygous sickle individuals suffer lifetime effects

Peter was trying to conjure up a heterozygote that propagated asexually but this requires a chiasma between neighbouring genes, a very rare event and hence it usually leads rapidly to mutational decay of one of the two copies, i.e. so-called pseudogenes, of which there are many in our genome

in haste

On Thu, Apr 12, 2018 at 11:02 PM, Alan Rogers <[REDACTED]> wrote:

I haven't read whatever Pete wrote, but if I understand Bob correctly, Pete must be talking about subfunctionalization:

<https://en.wikipedia.org/wiki/Subfunctionalization>

If so, it's not a radical suggestion. It's thought to be the process that gave rise to all multi-gene families. Michael Lynch discusses it in his book, The Origin of Genome Architecture.

Am I missing something?

Alan

On Thu, Apr 12, 2018 at 3:03 PM, Robert Trivers <[REDACTED]> wrote:

here is my latest and final comment on Peter Richerson's comments on Gordon's idea about Trump being a narcissistic psychopath—a view with which i firmly agree

i have learned a lot by thinking through all of Peter's argumentation but i have not learned much that contradicts either my biases nor reality herself

all best wishes

On Fri, Sep 29, 2017 at 5:26 PM, Gordon Getty <[\[REDACTED\]@gmail.com](#)> wrote:

Friends and Family,

Here's my latest on free growth theory. Tell me if I'm making any progress in my old intelligibility deficit. I'm also working on a new version without math.