
From: Joscha Bach [REDACTED]
Sent: Tuesday, January 2, 2018 12:16 PM
To: Jeffrey Epstein
Subject: Re: Happy new year, and A Holiday Story for You

> On Jan 1, 2018, at 13:22, jeffrey E. <jeevacation@gmail.com> wrote:

>

> great new years present. . thoughts 1. hope. ? it is not =acked by any evidence in first order. but second order attributes =bound. livng longer etc. . internal benefit to many if not =ost.

Do you mean that hope is not about the present state (zero order), the =isible trend of the present state (first order), but about changes in =hat trend (second order)?

I don't yet understand how that is significant.

When we model the future, we extrapolate the present into a number of =rajectories. We tend to fail, not only because or lack of information, =r because the world is often non-linear or chaotic, but because the =pace in which these trajectories play out does not have a fixed =imensionality. The eigenvectors that characterize the future universe =ill usually be different from those of the past; e.g. a universe with =oogle and social media is constituted differently than one without =hem.

In my view, hope refers to the possibility of entering trajectories with =ositive valence in a universe in which many trajectories have negative =alence.

Hope is a representation of the indication that we should invest into a =ubset of the available action space. As soon as we have given up hope =or that subset of the action space, we should stop investing in it, =ecause it won't yield any conceivable return.

While the hope construct can be used to model rational investments, it =ften does not approximate the actual distribution of expectations, =ecause many of the expected trajectories mean death, or something =ufficiently close to death that they can be ignored, i.e. they don't =arrant any possible further consideration in the view of the agent. =nstead, hope distributes the investments along those trajectories that =ave acceptable valence, even if they are very unlikely.

Using hope instead of rationality for modeling the future is dangerous =hen we are not an individual agent but a society. For instance, if we =uild our models of future development of the climate on hope, we will =e cutting off investments into the death and near-death trajectories, =ven if those are not unlikely.

Based on that thought, I would for instance suggest building a =epository of knowledge for bootstrapping epistemology, civilization and =eneral AI for future non-human civilizations, i.e. those that will =pring off long after all large mammalian species are wiped out by a =uper volcano, meteor, global warming, nuclear war or bad AI =ingularity. It might make sense to put a few copies in orbit, and a few =nderground, perhaps equipped with broadcasting facilities that announce =he presence of the repository every few hundred years. (Not that I have =ny reasonable priors from which I could derive the rationality of such =n investment, but it could be fun.)

> . 2. it is a form of self deception that carries an evolutionary =dvantage if modulated. . ie cant hope to fly. maybe modulates or =llows the system to call in reserves. .

See above: hope as indicator for whether we should invest. If my only chance to reap future rewards lies in a trajectory that has an extremely low probability, it still makes sense to throw all available resources on the assumption that this trajectory can be realized.

What I don't understand is which aspect of the hope construct is non-obvious.

> 3. the theory that we are more advanced thinkers than the past seems like today's exceptionalism. In ancient times one had to know many things, as cities grew. Specialized knowledge made the group more efficient but potentially at the expense of the individual's breadth of knowledge.

Agree. There are few instances in our recent evolution that gave opportunity or selection pressure towards higher intrinsic intelligence, with the exception of the Ashkenazi mutation and a handful of similar events. Pre-modern societies had fatal selection (i.e. your children die or remain unborn if you are stupid), modern society puts the reproductive cutoff at being able to have sex, and incentivizes high-IQ individuals disproportionately against having children.

It seems that Greece and Rome had a class society that allowed the upper classes to have more offspring than the lower classes, and larger social mobility based on IQ than our current arrangement. Medieval society still drew on a pool of exceptional minds, but tended to lock them away into monasteries and reducing their number of offspring.

On the other hand, we now have 20 times the population and the internet links them all up to the global library, so even if the relative fraction of high IQ individuals is much smaller, their absolute number might be sufficient to add to the edifices built by the minds of the past.

> 4. I believe that teaching every person to write is harmful to some individuals. Writing slows down the thinking and forces a rule-based system onto complex definitions. and speed reduction. Asperbergers could be an advantage as well as some form of writing disability. . =.

Many people benefit from the ability to turn off verbal thought, or to only employ it for communication. I don't know enough about people at the lower end of functioning to know how much better they work if you don't give them analytic compositional operators at all.

> asperbergers could be an advantage as well as some form of writing disability. . 5.

And here I thought your writing style is just an expression of time and attention being the most non-renewable resources in the life of a millionaire :)

Anecdotically, many entrepreneurs I know seem to have dyslexia. I suppose it comes down to a greater ability to generalize in the face of conflicting data, i.e. the opposite of OCD.

– Joscha

PS: Our account is emptied, and I think the one at H+ as well. Could you please pitch in? Thank you so much!

```
<?xml version="0" encoding="TF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="0">
<dict>
```

```
<key>conversation-id</key>
<integer>17961</integer>
<key>date-last-viewed</key>
<integer>0</integer>
<key>date-received</key>
<integer>1514895328</integer>
<key>flags</key>
<integer>8590195717</integer>
<key>gmail-label-ids</key>
<array>
    <integer>6</integer>
    <integer>2</integer>
</array>
<key>remote-id</key>
<string>782760</string>
</dict>
</plist>
```