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GETTING OVER FREE WILL

By Andrew Gonsalves

*The notion of free will is philosophical comfort food, but it doesn't stand up to empirical knowledge. We have a scientific model of how the world works, which allows us to figure out the things we don't quite understand yet through extrapolation. In this case, we don't have a complete grasp on how the mind works, but we have a good idea about how the matter that makes up our brain works,*

Andrew, if that statement were true, there wouldn't be dozens of different interpretations of quantum physics. Those researchers, including some of the brightest physicists in the world, admit there is much about matter that they don't understand.

But I'm sure they will be thrilled to learn that there is someone out there who can bring them up to speed.

*so we can infer through various evidence that the mind is a manifestation of the physical brain. If you wanted to suggest otherwise, you would need to invent some unobserved, unproved mechanism without having any proof.*

Andrew, you've got it ass backwards. You can't tell your opponents that their conclusions are unobserved and unproven, until you first see their evidence. *Then* you can attack their position.

*Some people call that the soul or the spirit, but I don't see those terms filling up any scientific journals.*

*Back to what we know about matter; it has no mind of its own*

Andrew, matter has no mind of its own?

That is pure genius.

Just out of curiosity, Andrew ... why would you even make such a stupid statement?

*matter follows the laws of physics without fail.*

Andrew, which laws of physics? Classical? Quantum?

You do know those two aren't consistent, don't you?

*This gives rise to what is the determinist philosophy: Our minds, being the emergent property of predictable physical processes, are only following the script written for them by the matter they are composed of (which, in turn, follow the laws of physics).*

Andrew, if you understood what emergent properties were, then you could see where your argument went off the rails.

While the laws of classical physics dictate deterministic action, the laws of quantum physics do not always do so. Emergent properties have qualities not available to the basic elements by themselves. These emergent properties, as well as quantum uncertainty, both allow randomness to enter your deterministic universe. If there is any randomness at all in the Universe, then it cannot be a wholly deterministic Universe.

So for your deterministic philosophy to remain above water, you must prove that no randomness exists anywhere in our Universe.

Good luck with that, Andrew.

*This is more than just hypothetical logic; there is actual evidence for this.*

Andrew, I'm glad to hear that because logic is not evidence. Logic can only be applied *to* evidence. So what's this evidence you claim to have?

*In studies, we have seen with fMRI imaging that a brain's activity indicates a decision is made a split second before the conscious mind is aware of it.*

Andrew, Andrew, Andrew. The fact that we don't consciously realize that a decision has been made, doesn't mean that we did not intentionally initiate an action.

For example: if you play a fast piano piece, you will be hitting keys so rapidly that your conscious brain could not possibly keep up. If your conscious mind had to realize every key you intended to strike before striking it, the only tune you could play would be a slow-motion version of Melancholy Baby.

Training and practice enable our subconscious minds to develop the ability to initiate tasks that we could not accomplish with only our conscious minds alone.

*The conclusion at this point is that free will doesn't actually exist.*

Andrew, what do you mean "The conclusion?" You mean "your conclusion"

You are basing your conclusion on a misunderstanding of one of Libet's experiments.

Andrew, here is an interesting side note: had you bothered to research Libet's experiment, you might have learned that even Libet didn't interpret his experiment the way you want him to.

Determinists are the ones who have interpreted Libet's experiment the way that they need it to be interpreted, in order to try to convince others that they have scientific support for their position.

Andrew, that makes Determinists - the Creationists of the philosophy community.

*If free will did exist, the process would probably work in the opposite direction, with the conscience being aware before - or at least the same time - the brain reacted.*

Andrew, the conscience mind doesn't work that way for the reason I just explained.

So, is one misunderstood Libet experiment your whole bag of evidence, or do you have something substantial?

*We are tricked by the illusion of control, which is no different than believing that the sun rotates the earth.*

Andrew, if you can't tell the difference between free will and the sun circling the Earth, then it makes more sense now why your thinking is so screwed up.

But I *will* give you credit for one doozy of a False Analogy.

*You would not be blamed for holding this belief before being presented with evidence to the contrary.*

Andrew, we're still waiting for *your* evidence.

*Once the evidence is provided, however, the idea of free will starts to fall into the realm of supernatural belief.*

Andrew, that's another false analogy. Supernatural beliefs are by definition outside of science. Free will has nothing to do with the supernatural; it is an ongoing area of research in the field of neuroscience.

*This may not be intentional though. What's more likely is that those who support the idea of free will are working backwards from a foregone conclusion.*

Andrew, the logical fallacy of personal attack. Why did I know that was coming?

Instead of attacking their arguments. You attack them personally by accusing them of irrational thinking processes.

Andrew, here's some advice: drop the personal attacks and focus on their claims. But before you do that, you first need to find evidence for your own position. And misunderstanding the Libet experiment doesn't provide evidence for your position - it only provides evidence that you formed a conclusion based on insufficient research into the subject you are writing about.

*There are some huge moral implications to the idea that free will doesn't exist. For one, it means that we cannot justify our hatred toward evil. With this model, evil doesn't even exist.*

Andrew, if anything should have opened your eyes to the possibility that you may have taken the wrong train ... it should have been that.

*Without free will, we lack fault for our faults because we had no choice or instrumentation in becoming the people we are.*

Absolutely correct Andrew. Without free will we would only be pre-programmed, biological robots.

*Obviously, this turns the whole concept of criminal punishment inside out.*

Andrew, not just inside-out; how could you justify *any* punishment whatsoever if there is no fault?

You can't.

Therefore, you must abolish all criminal laws. People will once again be free to do anything they want, to anyone, for any reason; and there can be no legal consequences.

Congratulations Andrew, your argument has just set humanity all the way back to the Stone Age.

Nice job!

*It's not moral to punish someone for being nothing more than who they had no choice to be.*

Andrew, right again. I think we should bronze your statement and place it in the Criminal Defense Attorney's - Hall of Fame.

*You can then see why some people might adamantly argue for the existence of free will, despite evidence to the contrary.*

Andrew, it doesn't matter why people adamantly argue. The only thing that matters is the evidence.

We are nearing the end of your essay now, Andrew, and up to this point, the only evidence you've offered is one experiment that you misrepresented. Come on Andrew, you must be saving up for a big finish - let's see what ya got.

*It is no longer a matter of finding the truth, but more a defensive mechanism to hold their concept of reality together.*

Andrew, more personal attacks. Tisk, Tisk.

You argue like a Creationist. They too have no evidence to support their claims, and like this essay, their attacks are laced with logical fallacies and personal attacks ... in place of evidence.

*We see the same justification in Young Earth Creationists, who believe what they do, not because of any convincing evidence, but because otherwise their concept of authoritative morality would crumble and they would lose their mooring to reality as they know it.*

Andrew, another false equivalence. Young Earth Creationists are pushing pseudoscience. Those who disagree with you regarding free will, are not.

And if anyone has exhibited Creationist thinking ... it's you Andrew.

*To protect themselves, they establish that their conclusion must be true, and then work backward from there.*

Andrew, your accusation doesn't make logical sense. If they "established their conclusion" to be true, your argument would be dead. What you should have written was "they *claim* that their conclusion must be true."

See the difference Andrew?

*The good news is that you never had free will, so realizing you don't have it doesn't change much for you.*

Gee Andrew, thanks for the proclamation. I'll be sure to notify the press, and the Nobel committee, that you have solved one of science's biggest controversies.

*It's a shame that people hold on to it so dearly, though, because it could possibly improve a lot of lives if we gave it up.*

Actually Andrew, if you want to improve lives, you could accomplish that today if you would just stop posting your vast knowledge to the internet until you've spent a few years researching subjects that you consider yourself an expert on.

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THE SCIENCE SEGMENT

The Black Death Left a Mark on the Human Genome

The Black Death didn’t just wipe out millions of Europeans during the 14th century. It left a mark on the human genome, favoring those who carried certain immune system genes.

Geneticists know that human populations evolve in the face of disease. Certain versions of our genes help us fight infections better than others, and people who carry those genes tend to have more children than those who don’t. So the beneficial genetic versions persist, while other versions tend to disappear as those carrying them die. This weeding-out of all but the best genes is called positive selection.

A thousand years ago, the Rroma people—commonly known as gypsies—migrated from northern India into Europe. But they intermarried little with European Romanians and thus have very distinct genetic backgrounds. Yet, by living in the same place, both of these groups experienced the same conditions, including the Black Plague, which did not reach northern India. So researchers sought genes favored by natural selection by seeking similarities in the Rroma and European Romanians that are not found in Northern Indians.

Researchers looked for differences at more than 196,000 places in the genomes of 100 Romanians of European descent and 100 Rroma. For comparison, the researchers also cataloged these differences in 500 individuals who lived in northwestern India, where the Rroma came from. Then they analyzed which genes had changed the most to see which were most favored by selection.

Genetically, the Rroma are still quite similar to the northwestern Indians, even though they have lived side by side with the Romanians for a millennium. But there were 20 genes in the Rroma and the Romanians that had changes that were not seen in the Indians’ versions of those genes. These genes were positively selected for in the Romanians and in the gypsies, but not in the Indians.

The genes that researchers were most excited about were a cluster of three immune system genes found on chromosome 4. These genes code for toll-like receptors; proteins which latch onto harmful bacteria in the body and launch a defensive response.

What events in history might have favored these versions of the genes in gypsies and Romanians, but not in Indians? Scientists tested the ability of the toll-like receptors to react to the bacterium that caused the Black Death. They found that the strength of the immune response varied depending on the exact sequence of the toll-like receptor genes.

Researchers propose that the Rroma and European Romanians came to have the same versions of these immune system genes because of the evolutionary pressure exerted by the bacterium. Other Europeans, whose ancestors also faced and survived the Black Death, carried similar changes in the toll-like receptor genes. But people from China and Africa—two other places the Black Death did not reach—did not have these changes.

There have been multiple plagues throughout history around the world, but none have been so deadly as the Black Death, which killed an estimated one-fourth of all Europeans.

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FAMOUS QUOTES

Kathryn Schulz is an American journalist and author, and the book critic for New York magazine. She published a book titled:

Being Wrong: Adventures in the Margin of Error

“Regret doesn’t remind us that we did badly.

It reminds us that we know we can do better.”

“If you want to live a life free of regret,

there is an option open to you.

It’s called a lobotomy.”