

Revised: March 31, 2016

Attempt 1

- **1.** Why do we exist? We must at some place and time exist since it is physically possible, hence eventually probable.
- 2. Why is physics so that it is possible? Because we exist.
- 3. What if existence is an illusion and we don't exist? I for sure do.
- 4. Can you prove it? I wrote these notes.
- 5. What if these notes don't really exist? You are reading them.
- **6.** What if I don't really exist? Goodbye, come back when you finish the absolutely personal exercise of convincing yourself that you exist. If you don't come back that's also fine.
- **7.** How did we come to existence? We did not, it is a not a question of cause-consequence. It is a matter of possible stable equilibrium for some interval of time
- **8.** Why do we seem to be the only self-conscious beings? We are not, everything is self-conscious.
- **9.** What is self-consciousness? It is the active deliberate drive to the preservation of a local state of equilibrium, of survival of a certain lump of things.
 - 1. So what is self then? That lump of things with an active deliberate drive to its survival.
 - 2. Shoudln't you better define every unused term? No.
 - 3. How so? This is called bootstrapping.
 - 4. But this is impossible, you need to define every unused term, and then you go down an infinite spiral, you whole project is useless. No.
 - 5. How so? Bootstrapping is ultimately based on implicit definitions not explicit ones.
 - 6. Aren't the only right definitions the explicit ones? No, we would be lost if it was so. There is no need for a bias for explicit definitions.
 - 7. What is an implicit definition then? It is a bunch of words in equilibrium.
 - 8. Isn't this some rethorical trick? No. Wittgenstein explained that there is no infinite spiral and that ultimately, the meaning is the use. Hilbert explained that his formal geometry is based on implicit definitions, anything that models that balanced bunch of words is a geometry. Baron Munchausen bootstrapped himself, he pulled himself up by the straps of his boots.

2 Attempt 1

9. Isn't that appeal to authority, and moreover abstract nonsense? Here is my explanation, it is pedestrian common sense: The use of definitions is to bootstrap a discussion. An implicit definition ultimately must point outside of the words you are reading, into the real world. Whatever the reader feels satisfies the definition is what the definition defines, no more no less.

- 10. I insist on explicit definitions so that every word is explictly clear. Implicit definitions have proven themselves.
- 11. How so? You must throw away all modern mathematics and physics if you disallow them.
- 12. Am I not free to throw them away? If you do, you must put down the screen you are using to read this, or the paper you printed, immediately. They are the results of modern mathematics and physics and so you have no right to them, nor to modern medicine and pills from the pharmacy.
- 13. Isn't then this definition a bit vague? There is no need for bias against 'vague' things, they have the right to exist and be useful as much as 'non-vague' ones, that is, if you insist on using this 'vague' characterization of 'vague'.
- 10. Is a stone then self-conscious? Yes, it is so, vacuously. It has no means of action so it is.
- **11.** But isn't self-consciousness the awareness of self? The stone is also aware of itself, vacuously. It has no means of awareness.
- **12.** Is it not required that self-consciousness is established non-vacuously? No because if so, we are also not self-conscious.
- **13.** How so? At a certain scale, we are but a lump of atoms, electromagnetics and other physical things, which vacuously are self-conscious. Our action and deliberation is ultimately mechanical.
 - 1. If this is so, what is the purpose of our existence? Nothing.
 - 2. If it is nothing, why do you do anything at all? I am programmed to survive.
 - 3. You can eat and sleep, but you cannot convince me it's nothing? Why not?
 - 4. If it was only survival, why are you writing such notes, they have nothing to do with survival! They do.
 - 5. How so? If I would only eat and sleep, I would bore myself to death, literally. My brain would chemically fall into depression and die. I write them out of survival, for which I have been programmed.
- **14.** Should we not require that consciousness is required to be defined at our own scale and non-vacuously? If so, the stone is conscious at the definition of consciounsess defined at its own scale.
- **15.** And if we insist? Then the question makes no sense to begin with, since we defined self-consciouness so specifically such that only we are self-conscious.
- **16.** But, maybe there are other beings that fit this? Yes, other humans, but nothing else fits.
- **17.** So if we program the computer to have the means and deliberation to try to preserve itself physically in a simple kind of way, does it become self-conscious? The computer already is, vacuously. But it would make it closer to imitating us.

- **18.** Isn't this cheating? Humans were not specifically programmed like this. No it is not, we were programmed by evolution, and so by indirection, that simple computer.
- **19.** Do you realize that you are suggesting that self-consciousness as commonly understood is in your opinion mere imitation of humans? Yes.
- **20.** So there is no depth to this concept at all? No.
 - 1. What about all the philosophy around it? Philosphy is dead.
 - Are you claiming all these genius philosophers are stupid? Philosophers are the best, the best way to learn mathematics is to read what philosophers write about it. Still by death of its utility, philosophy is dead.
 - 3. Shouldn't you learn mathematics from mathematicians? Philosophy is dead, philosophers are great, mathematics is great (by continued utility), mathematicians are useless, especially when it comes to learning from them, especially the specially clever ones.
- 21. Self-consciousness should emerge in the machine, the way it does in us, isn't that deep? No.
- **22.** How so? This is another constraint on the imitation. You require that self-consciousness emerges by imitating the way it emerges in humans, making your definition ever more exclusive.
- 23. But for me, this is what self-consciousness is, and that's deep. No, there is no depth this either.
- **24.** How so? I can program the computer to first have limited access to its actors and sensors, and turn off its information processing, and only gradually increase these. Then, I would program it such that when information processing is on, it would first try to figure out where self is, by wiggling all its actors, and using its sensors to detect them, the lump of them being self.
- **25.** But you would still have to cheat with self-preservation wouldn't you? No.
- **26.** How so? If you insist on such a level of imitation, I can add touch sensors on the actors, and program the computer to have reflexes like move hand away when it hurts.
- 27. But aren't those non-emergent reflxes cheating? No, it's what babies do, and you insisted on imitation.
- 28. It is not self-conscious, it has to learn to preserve itself in more delibrate ways than reflexes. Not yet.
- **29.** Why not, because consciousness is deep? No, because we do not yet have the technology to emulate the reasoning power of the brain in a way that imitates our brain (since you insist on imitation).
- **30.** But we have supercomputer don't we? Yes. They are not enough.
- **31.** How can they not be enough, they are much more powerful than the brain! Yes, but you insist on imitation not power, they can emulate the brain once we have the hardware and software to do so. Hardware alone is not enough, since it must do expensive emulation of an organic brain which it is not, and emulation is always terribly slow. We don't have the hardware that can do that yet, nor sufficient understadind of the brain to imitate it.
- **32.** So there is no hope right now for self-conscious computers? As I said, they are already self-conscious, they just don't imitate us.