People Might be the Chosen Ones

My hypothesis starts with understanding the "Big Bang" and the second law of thermodynamics.

Big Bang. For my hypothesis I will presume that this theory of the origins of our universe is true with all of its consequences. The universe began as a singularity, a point of infinite density and temperature. Then it underwent a rapid expansion, known as cosmic inflation, creating the initial conditions for the universe. As the universe expanded, it cooled, allowing for the formation of fundamental particles like quarks and leptons. These particles eventually combined to form protons and neutrons, which then formed atomic nuclei. Over time, atomic nuclei combined with electrons to form atoms. This process, known as nucleosynthesis, created the elements that make up the universe today.

The second law of thermodynamics. In a nutshell it states that the **entropy** of any isolated system always increases. This means that the disorder or randomness of a system naturally increases over time.

Entropy is a scientific concept that measures the degree of disorder or randomness in a system. A system with high entropy is more disordered, while a system with low entropy is more organized.

Examples of increasing entropy:

- 1. **Ice melting:** When ice melts, it becomes a liquid, which is more disordered than a solid. The entropy of the system increases.
- 2. **Gas expanding:** When gas molecules move into a larger volume, they become more spread out, increasing the entropy.
- 3. **Temperature evening**. When cold and hot objects come in close proximity, they start evening each other, the cold object gets heated and the hot object gets cooled, which increases the overall entropy.
- 4. **Burning wood**: When wood burns, it breaks down into ash, gases, and other byproducts, leading to a much more disordered state. The overall entropy of the system increases significantly.

Examples of decreasing entropy:

- 1. **Crystallization**: When a liquid cools and solidifies into a crystal, the molecules arrange themselves into a highly ordered structure. This decreases the entropy of the system.
- 2. **Freezing Water**: When liquid water freezes into ice, the water molecules form a more ordered, structured arrangement in the solid state, leading to a decrease in entropy.
- 3. **Protein Folding**: When a protein folds from a random coil (a disordered state) into its functional, three-dimensional structure (an ordered state), the entropy of the protein itself decreases.
- 4. **Condensation**: When water vapor (a gas) condenses into liquid water, the molecules become more closely packed and ordered, resulting in a decrease in entropy.

These examples demonstrate situations where entropy decreases, indicating a transition from a more disordered to a more ordered state. However, it's important to note that these processes are not isolated; the decrease in entropy is local to the system, while the overall entropy of the universe still increases, consistent with the second law of thermodynamics.

Conclusion. Having all that information in mind, we have an understanding of the tendencies of the universe and where it's heading. The universe increases its entropy which in the end will make all the energy evenly distributed, and no further work will be performed. This means that, practically speaking, there is no difference from one region of space to another; the universe will be uniformly cold, dark, and while particles like photons, neutrinos, and possibly some stable dark matter particles might remain, they would be so diffuse and possess so little energy that they could no longer form any structures or complex interactions.

The highly debatable part. This is the point from where I start to make my own interpretation of what is going on. If the information above is true, we know where the universe is going, and therefore I conclude it to be its goal. Now, we also know that the purpose of life is to survive and reproduce, which means that its goal would be to live forever and reproduce infinitely. And that seems to be the exact opposite of the universe's goal, which is to basically "die" in a sense. So, it's a constant fight, living creatures are trying to lower the entropy, while the universe is going in the direction of increasing its entropy.

Humanity. In that regard, people are the most efficient creatures on the planet at lowering the entropy, making the systems we live in less chaotic. And if before we were focused on the local system, we now live in the modern times, when we are aware of the observable universe and are trying to understand it and control it as much as possible. We want to make it stable, so it will not collapse and we all will not die. So basically, we are going against the universe.

At the moment of the "Big Bang" the entropy was very low, meaning there was no chaos in the system, but when it started expanding the entropy started rapidly increasing (like the entropy of melting ice, which from ordered structure turns into a spreading water). The space started inflating like a balloon, it was analogical to when gas molecules move into a larger volume, they become more spread out, increasing the entropy. The universe started "cooling down", and at that point gravity started causing matter to clump together, forming the first stars, galaxies, and eventually larger structures like galaxy clusters. The formation of these structures increased entropy significantly because it introduced more complexity and disorder on large scales. Gravity, by pulling matter together to form dense structures (like black holes), dramatically increased the entropy locally in those regions.

To me it seems that those macroscopic objects in the universe are the result of gravity trying to preserve order locally, which of course is actually increasing the overall entropy of the universe, but still, it seems like it's trying to make an order out of chaos with its limited influence. **Gravity** is a long-range force, but its influence weakens with distance which is increasing due to the "Big Bang". Of course, gravity itself doesn't seem to have consciousness, but it still seems to "try" to impose local order in a chaotic universe. Which is, I guess, its nature.

In this cosmic tug-of-war, gravity serves as a force that creates temporary structures and patterns of order against the backdrop of a universe that, on the whole, is heading towards a state of maximum entropy.

What can that mean? My hypothesis is that humanity was created from the gravity trying to preserve order, and we may be the peak of it's work. It seems to share with us the need for order, structure and stability (meaning low entropy). Although, the humanity wouldn't want everything to come down to a new singularity point, because it would mean it's death as well. But it is obvious that it would be much harder to create order from chaos that chaos from order. And so, my sloppy thinking brings me to this kind of a realization that we are here to "Bring balance the force" kind of a thing. Or otherwise, we are all going to die along with the universe.

Moral. If we go deeper into that thought, we could think that maybe we should just align with the universe's goal? Maybe, if humanity survives and strives, after some x number of years we would be making this moral choice, having the technology to manipulate the universe. Who knows? Humanity surely didn't think two hundred years ago that we will have so much today. So why be skeptical about it?

Instincts. But of course, our instincts would surely choose to make everything possible to survive and reproduce. I'm almost certain what choice we would make.

If we take out all the frippery out, the conclusion of this paper is that the nature of humanity and its potential are aligned with the idea of trying to preserve order in the universe, and stop it from becoming fully entropic. And because we are the result of the gravity and matter forming **local pockets of order**, we might actually be deliberately created, or rather concluded from their nature to preserve the order. It may actually be the meaning of life.

But as with all ideas, this should not be taken as the truth, it's only a hypothesis with a lot of presumptions. Which means that my hypothesis depends on the truthfulness of those presumptions and my limited cognitive abilities and knowledge. Also, my hypothesis doesn't have a practical application, it offers only a perspective on the universe and its goals, meaning. The only thing that it may provide is the dilemma of should we align with the increasing entropy of the universe or try to "preserve" the low entropy that is likely to align with our instincts. And maybe shine the light on possible new understanding how the gravity works, its nature, and historical function.