

46 Science Oracles

Just for fun I am going to ask two questions about science, and we will see what the Senet Oracle Board has to say. In this century our emerging age of space exploration is rapidly accelerating. Our upper atmosphere is now filled with automated satellites of all kinds. We have an International Space Station in orbit, and have been sending probes all over the solar system to photograph and learn more about the planets, moons, comets, asteroids, and other objects “out there”.

However, our space program still faces two giant bottlenecks that hold it back from really “taking off”. These two bottlenecks will be the topics of our questions. The first bottleneck is the problem of efficiently lifting people and material into space out of Earth’s gravitational influence. Everything we send up has mass, and that mass resists acceleration away from Earth’s gravity. NASA faces the “rocket equation”. Rocket fuel also has mass, so the more fuel you add to your rocket, the more fuel it takes to lift it. Adding fuel is not the most efficient solution to the problem.

Our second bottleneck is about what we do once we are in free space. The distances even in our solar system are vast. We face the problem that Einstein pointed out: no object with mass can travel at or beyond light speed. Traveling many light-years to other star systems takes far too long in human terms to be of use. Just sending signals at light speed within our solar system involves significant lag times for communication.

Until these two questions are resolved our space program will remain in its infancy and no more than a bit of tedious local exploration that takes years for individual missions.

So let us begin exploring our first question. The obvious place to start is at the House of the World. We can see in the upper portion of the card that the Egyptian nature deity for Earth, Geb himself, is held down to Earth by gravity and also somewhat “boxed in” by material limitations.

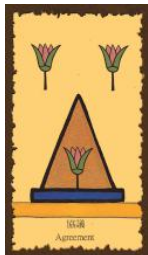


The first card we draw is the 9 of Feathers.



This right away calls our attention to the fundamental problem of “Life”. Living organisms on our planet are water based. Water is quite heavy. Lifting humans into space first requires lifting their bodies and all the water they need to stay alive. Space is like a desert. There is no water around, and temperatures are extreme. In sunlight it is very hot. If sunlight is blocked, it becomes extremely cold. These are not conditions conducive to human life, so a huge technology is required to lift a “habitat” into space so that humans and other living cargo can survive. Space travel is a major challenge for life forms such as we are. All our baggage makes lifting out of Earth gravity a tough problem.

Our second card is the 3 of Lotuses. This is a water card and again calls attention to this problem of Earth-born life forms in outer space.



The theme of the card is “agreement” and the image is that of a pyramid. The idea of agreement suggests that we must find a way of “agreeing” with the conditions of outer space. Since “mass” is a fundamental issue in lifting objects into space, we study the image for some insight. A pyramid is a structure that is very massive. However, it has a structure that repeats itself at different scales. The top of a pyramid is an apex stone that the Egyptians called the “Benben”. They considered this stone of great importance. Essentially a benben is a massive

pyramid in miniature. It has become very small. In fact, a benben could be so small it could fit in your pocket, as many souvenir pyramids sold by Giza vendors demonstrate. The key insight here is miniaturization. It is now becoming fairly inexpensive to put miniature satellites into orbit. Advances in electronics technology have drastically reduced the mass required for very sophisticated equipment. So a major trend in recent years is to send small probes around the solar system to collect information. This is an excellent solution for AI robotics, but does not work well for full-size humans unless we reach a point where miniaturized AI robots are as effective as humans in their performance. This gap will probably narrow over the next couple of decades as we reach the First Singularity that we discussed in an earlier article.

Our third card is the 10 of Fire Sticks.



This card raises another major issue. Outer space is filled with radiation from the sun and high energy cosmic rays. Humans spending a lot of time there without the protection of Earth's atmosphere would essentially get baked by the radiation. The image in the center of the card is a loaf of baked bread. Zero gravity is found to have noticeable effects on bone mass as well as a tendency for the muscles to weaken. Future stations in outer space will have to generate artificial gravity, the easiest method being to build the station as a large ring that rotates. The "fake" gravity of centrifugal momentum will give crew the real illusion of being able to walk on the inside of the outer walls of the ring. It will be as if their bodies are "radiating" away from the center of the station's ring. The little "box" within the circular loaf of bread on the card gives an idea of what a "room" on the rotating station would be like. So this card presents more challenges, but also some partial solutions.

We draw our fourth card, and meet a surprise.



The fourth card is the House of the World. We are back where we started and this is the end of the oracle. It tells us that we must use gravity to overcome gravity. Of all the forces in the universe, gravity is probably the least well understood. Until we gain a deep understanding of gravity, we will be in the dark about how to deal with this unknown property of our reality. We need to go deeply into the experience of Earth's gravity in order to understand what it is.

Newton took the measurements of Tycho Brahe and the calculations of Johannes Kepler and put them into a neat little formula that describes the behavior of gravity. However, Newton still had no idea what actually causes gravity. He knew it had to do with the property of matter that he called "mass". But he had no idea what "mass" is. He could only describe its behavior in mathematical terms. Since his time we have made very little progress on the subject of gravity.

One thing that our pyramid card suggested is that gravity has to do with density. The Greek scientist Archimedes discovered that mass has density, and that density determines where the mass will tend to settle toward in any environment with mass. Rocks sink in a pond, because they are denser than water. Wood tends to float in the same pond, because it is less dense than water. Helium balloons tend to rise in the air, because helium is less dense than our atmosphere. In other words, manipulation of gravity seems to have something to do with manipulation of an object's density.

If you lie down and fully relax on a bed, you will find yourself "floating" on the bed, because your density is less than that of the bed, and the bed floats on the Earth, because it is less dense than the Earth. There are other details such as chemical bonds and so on, but you get the idea. Wherever you are you tend to float unless you resist it with action. In outer space you float because you are in a place with no density nearby. Eventually you would tend to drift toward the sun or another massive

body in space and settle to your average density unless you maintain escape velocity momentum.

The universe is one. Unless something pushes things apart, they tend to all come back together as one. This is the universe's quality of love. The real question is what is it that pushes things apart? That takes energy and a resistance to unity. We are here on Earth, because we like its density. To leave Earth in a serious manner, we will have to change our density -- we have to leave the notion of mass behind.

This brings us to our second question about the Velocity of Light. Objects with mass may not go faster than light (FTL). EM light frequencies can travel at the speed of light (SOL), but the vast distances of space make even SOL travel impractical. To move around in the vast distances of space we must have FTL transport, which is not possible with a massive body. We seem stuck in our local space.

Einstein pointed out that EM Light (EML) always travels at a velocity scientists label as "c", no matter what the relative velocities of objects are. The EML automatically adjusts its frequency (or wave length) to compensate for the relative motions of objects. The EML velocity is very fast, but still finite and not nearly fast enough to move across vast spaces of many light-years within a practical human time frame.

We begin our exploration with Tem, the Tower Trump, because that signifies the fastest possible change, and may even be FTL, since it is simultaneous throughout its extent.



Our first card is the Lord of Touch, which we place in the House of the Tower. The idea suggested is that we have a sudden impulse that puts us immediately in touch with a far distant point. This touch must be detectable with a physical device.



The second card that appears is the 10 of Fire Sticks. We saw that same card in our last question, so there is a connection here. This card shows rays of light (Fire Sticks) as if radiating in all directions from a central source. This is how EML behaves. When it is emitted from a source, it radiates in all directions and, according to Feynman, takes all possible paths. We place this card on the House of the King of Towns. This indicates that the light emission is the key to our transmission. The question is: how can the transmission go FTL?



To probe that question we draw our third card and put it on the King of Fire Sticks, who governs the technology we are exploring. The card is the 6 of Towns, which is the glyph of the Senet Board and has a label about team play. Senet is a game, and each player moves a team of pawns as efficiently as possible across the board. A modern version of the game that is still quite popular is called Backgammon. We will discuss that game in more detail in a later article. A key principle of the Backgammon version of the game is that the two players move across the board in opposite directions and interact as they encounter each other. This brings up an aspect of EML transmission that is often ignored. If light takes all possible pathways, then it also travels backwards. If light is emitted from a source, it is later absorbed by a receiver of some sort. The absorber plays the role of “subjective awareness”, and the emitter plays the role of “objective light”. If you look at a light source, the light source emits light photons (particles of light), and your eye absorbs some of those photons that touch the retina of your eye. You experience that as awareness of light. It forms in your mind as a conscious thought.

What if your awareness sends an anti-photon (attention particle) from your eye to the light source? The anti-photon follows the same path as the photon, but in a reverse direction. It also moves backward in time, because you see the photon that left the light source some time in the “past”. We have now begun to understand this technology as phase conjugation, a very general principle of nature. Wave phenomena such as photons (or water and other media) that travel through space can be in phase and become bidirectional in both time and space. If you look at a star 50 light years distant, you see the star as it was 50 years ago, and your attention has traveled 50 years into the past to touch that star, just as it was then. The Senet Board grid is fixed forever in time and space. Pawns like photons can travel back and forth on it.

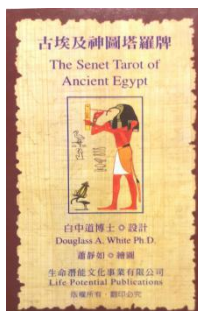


Our next card turns out to be the 5 of Lotuses. This has the image of Hathor’s “menat” necklace that we mentioned earlier is the ritual symbol used in what was perhaps the highest initiation of a pharaoh. We then put this card on the Lord of Touch, because the King of Towns is already occupied by the 10 of Fire Sticks (the source for our transmission). If you look closely at the picture of Sety’s initiation by Hathor, you find that she holds out the bundle of jewels on the necklace she is wearing toward Sety with her left thumb, and Sety touches the necklace with his right thumb. At the same time her right hand and Sety’s left hand are joined together just below waist level. This is the bidirectional touch that links the transmission into a unity. Hathor is the Cosmic Mother of Love and Light who stands beyond space and time with the necklace encircling her. The link happens at a moment in time, but it fills the entire cosmos at that very instant. This is FTL transmission that occurs on the level of wholeness, thrilling every fiber of the universe.

A shift of perspective is necessary to step into the FTL component of any STL (slower than light) or VOL (velocity of light) transmission.



Our fifth card is the Transcendental Wisdom Cover Card.



This card ends the oracle reading and gives us a direct experience of the FTL transmission of information. The card represents the entire full Tarot deck. It also, of course, represents the whole Senet Oracle Board. You can experience an FTL transmission simply by looking at the whole

Senet Oracle Board. You see all 22 Trumps plus 8 Court Cards in a single glance. All the information on the board hits your eye in the same instant. The light travels to your eye at VOL, and the nerves send the information field to your brain at STL, where it is processed also at STL speed. However, you received the entire transmission of all information on the board simultaneously in the instant you looked at the board with an unobstructed view. It might take you a long time to digest the information, but you received the complete transmission in a single moment. This is FTL communication. It requires an expanded point of view, but is natural to every person. We only have to develop the technology to its fullest extent and we will be able to explore the entire cosmos.

46 Study Questions

- * Why are the two questions we asked important in our current era?

- * Einstein's own equations (along with the findings of Planck and de Broglie) declare that the information of any STL communication is also present in an FTL format. The two formats meet at VOL. Go back and study the Velocity Equation.

- * What is the key to understanding gravity?

- * What is the key to developing FTL communication?

- * How does this discussion relate to the Series Overview?