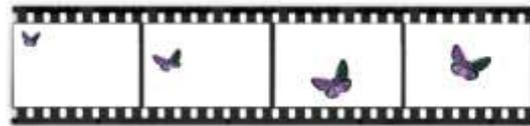


Quantum Leap in the Holographic Universe (Holographic Physics, physics of Matter-like, not Matter)

Something must be predictable to be mathematical. However, the fact that the location of electrons, the building blocks of matter, could not be determined and predicted, has revealed the notion of randomness. This is the reason for saying quantum probabilities. The quantum leap which is the inability to know where the electrons would leap make all the possible leaps possible. This results with the need to think of every probability. Thus, the quantum physics is based on uncertainties. As the quantum guru, **Yakira Horona** explains, ***"The reason for the uncertainty of the atoms, meaning the place and time of the next move of the electrons on the atomic base, cannot be known before the leap. The future is not definite on the atomic level."*** This randomness/uncertainty is contradictory to mathematics always giving the same result.

But that does not mean nobody could know about it. Albert Einstein by saying, "God does not throw dice," indicated that we might not know it, but God must have known. I think we are only looking at the leap and the leaper, but we also need to look inside where the leap happens. The seemingly ambiguous jumps are the obvious hints of the holographic universe in which we live.

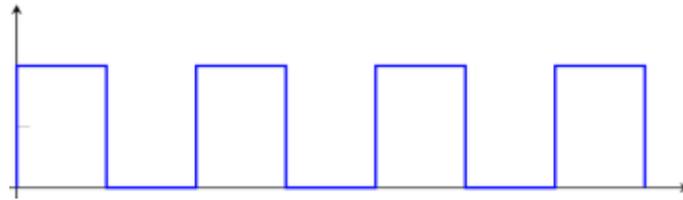
In Plato's Cave, they talk about an illusion created by the shadows of the puppets in front of the fire reflected on the wall of the cave. Plato had designed the movie theaters of today without realizing it. The images on the film frames passing through the projector are projected onto the screen, and the viewers facing the screen with their backs turned to the projector, watch the images on the wall of the movie theater. Now let's watch what is happening step by step. The film frames pass through the projector at a rate of 25 frames per second.



The viewers watch the butterfly images in the frames as a seamless motion on the screen.

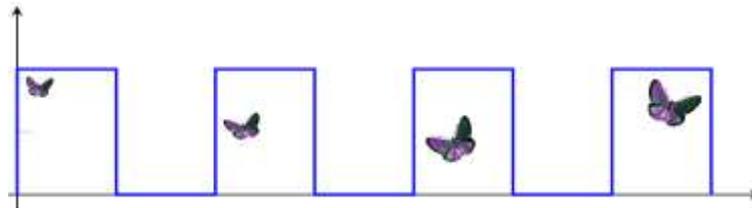


On the background, however, the image projected on the screen disappears between each film frame, and when the next film frame comes in front of the projector, the image reappears on the screen.



The movie frames in the film strip are seen at a particular rate of 25 frames per second passing in front of the projector so that the human eye follows the motion continuously. However, the image on the screen is continually present, absent, present again and absent again and again and again. In mathematical terms, it is "1" and "0" alternating during the movie.

Imagine it's a moving scene, and there is a flying butterfly in this scene. When we watch the film frames in slow motion, the butterfly will appear almost at the same point as it is in front of the projector. As one film frame moves to the next frame, the butterfly image on the screen will disappear, and the screen will become white. It is uncertain for the audience where the butterfly would appear until the next frame comes to the front of the projector.



Just like in the Plato's Cave, for someone who is not aware of the projector, but just looking at the screen, the image of the butterfly on the screen between each film frame will completely go away, and the butterfly will appear to move jumping through the screen between film frames. For someone who just looks at the screen, the butterfly can appear everywhere on the screen with every leap. For the viewer, every part of the screen becomes a potential quantum leap area.

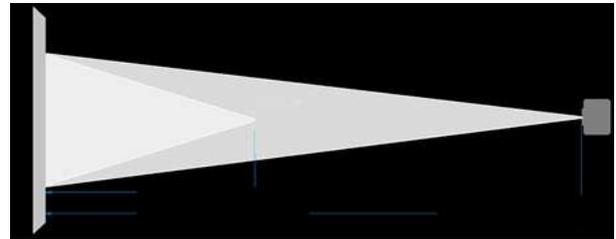
The quantum leap is the leap where it cannot be detected. Both the scientists looking at electrons, and the viewers watching the screen are looking at a system that works on the same principle. The electron leaps in one while the butterfly leaps in the other; both making quantum leaps since it is not possible for those watching to know where any of them would leap next.

This modeling applies to all images on the computer and television screen, and also game programs. While the present image on the computer screen travels in and out at a certain speed, every new image leaps according to the previous one. In short, depending on where it leaps, both the leap and leaper can have other meanings.

If the electrons in the atomic level, that is, matter, appears and disappears, it means they exist as "0" then as "1", respectively. It is a digital structure such as "101010101010101 ..." In this case, the universe just like the images on the movie screen exists and disappears between the film frames. And this is a three-dimensional play of light.

If you look closely and carefully at the screen, the image on the screen trembles, that is, the image leaps as it appears and disappears. As for the Big Bang in the holographic universe design;

First, consider the area covered by the image on the screen. Then, the area the same image covers as the projector emits. Finally, when you look at the projector from the screen, you see that the square footage covering the entire screen is initially a few centimeters square.



Here's the Big Bang! The situation where everything is together at the beginning. If there is a 3D projector at the end of Space, the entire universe will appear to be at one point at the beginning for a person who looks at the projector.

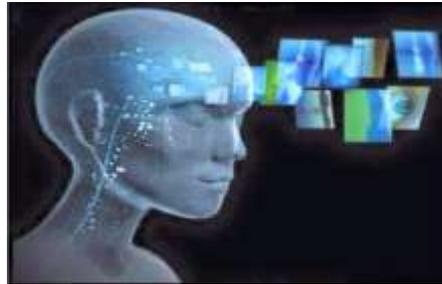
The audience may not know where the butterfly would appear after the leap, but of course, the filmmaker knows.



Now, let's think we are watching a 3D movie with 3D glasses. In this case, instead of the movie theater screen, the 3-D image that we see around us will also appear at the same speed and disappear.



Only the screen has become 3D. The 3D images around the viewers make three-dimensional leaps this time between each film frame. The 3D image while appears and disappears is, in fact, makes 3D quantum leaps.



The human eye sends images it sees around it to the vision center of the brain in the form of photo frames. In this case, there is again a quantum leap between each frame. The human brain converts these two-dimensional image frames into three-dimensional allowing the three-dimensional perception of a person's surroundings. It's as if the 3D glasses needed for our 3D perception of the universe are congenitally placed into our brain.

Example: *The playing cards are two-dimensional, but the deck of cards is three-dimensional. The cards do not see the deck. Two-dimensional cards come together to make a 3D model.*



“The same leaps and uncertainties applied to space scales. The outer space constantly leaps while it appears and disappears on the macro scale.” In this case, the universe in the periphery of the human being appears and disappears as well.

The 3D universe around us is constantly present and absent both in the atomic level and at the space level with quantum leaps, then it is like a play of light consisting of 3D film frames. It means that we are no different from the audiences in 3D cinema. And it is a necessity to have a filmmaker. Life is a collection of moments as they used to say in the old days.

The absence and presence which is the quantum leap rate of the image around the people watching a 3-D movie wearing 3-D glasses must be the same as the frequency of the image frames going to the vision center of the brain through the eyes of the viewers. If the rate of image change is not in sync with the speed of image frames going from the eye to the vision center, the image will not be clear. Based on this observation, the frequency of the photo frames sent by the human eye to the vision center should be the same as the atomic and space-based quantum leap frequency.

"The moment you realize that you are in a dream or a 3D world illusion, the time and place you live in does not have any material meaning." A person who realizes that he is in a dream is similar to a person watching a 3D movie. You can excite, scare or make him happy only to a certain extent since he knows what he is watching is an illusion only.

Since the act of seeing happens in the course of our dreams, the quantum leap must also be valid in our dreams. The time and place we see in our dreams must appear and disappear at a certain speed.

Everything we see has to be a quantum leap because our brain works this way. Time and place are the visible faces of information. If there is no information, there is no time and place. If time in the dreams and Holographic Universe is shaped according to the KNOWLEDGE of the space design, the Equation of Theory of Everything in the Holographic Universe is:

$$\text{Time + Place = KNOWLEDGE}$$

(Time and Place exist for Knowledge)

The equation of the Holographic Universe is also the **equation of dreams**. Since we are talking about an equation, we need to look into the interaction in the equation itself.

If we define the screen with the image as "knowledge" and the screen without the image as "ignorance," we will constantly see "Knowledge/Ignorance" on the screen just like the quantum leap. Knowledge defines a physical or intellectual substance. For this reason, if there is a substance, it should have a design information, and if there is information, there must be a substance. For example, when I say a pen, I also give the information about the pen, or if I give the information as "used for handwriting," you will immediately know that I talk about a pen. Time defines the place of matter and is the measurement of change. If there is no time, there is no change, and the information is constant. When information changes, time also has to change because change has happened. If we get back to your equation:

$$\text{Time + Place = KNOWLEDGE}$$

When anything changes in your equation, everything else will change. When knowledge changes, the design of time and place change, and when time and place change, knowledge changes. Since the image on the screen change when the information in the film frames changes, it is a unique power that determines and changes time and place. For this reason, the theory that will bind together everything and address everyone is the Theory of Everything:

$$\text{Time (t)+ Place (P) = KNOWLEDGE (☉)}$$

Whether on 2D or 3D cinema screen, the image is fixed. If you ask, "How do you explain the expansion of the dark matter or the universe in this case?"

It can be explained in two points. **(1)** As the screen is exposed to light, its atomic structure heats up, and it expands on an atomic basis. When the screen expands, the image on the screen expands as well, and everything in the image moves away from each other. **(2)** The lens, which reflects the film on the screen, heats up on the atomic basis, and as the image on the film's surface expands again, everything in the image starts moving away from each other.

Even if the dark matter or the universe expands, its specific-weight does not change. No matter how much milk you add to your coffee, its specific-weight does not alter. The density of the vision on the cinema screen is independent of the content of the image on the film frame because the intensity of light is the same all over the screen.

Light is an energy and a kind of substance. The image created by light is an illusion; an illusion is a shadow. The entire image is made of light. That is why all kinds of illusionary images are made from the same substance.

It is normal for the density not to change in an environment where everything is made of the same substance (light). The intensity of the view on the computer screen is also the same everywhere. In this case, we need to look into the possibility of an expansion over time of the images on the 3D glasses used for the three-dimensional films. Also, we need to consider if there is enlargement of the image on the 2D screen?

Depending on the clarity of the scene on the screen and the brightness of its colors, we can also measure our distances to the screen or the depth of the image on the screen.

We can find new answers by obtaining new equations from the existing equations related to the universe without even making observations as Bob Nichol said, ***"If it's like that then this is how it should be."*** We can detect things that are not yet visible in the universe and make them visible.

In quantum atomic theory, you can say that is the theory of what small things are on the micro scale, but outer space exists and disappears on the macro scale and leaps non-stop. The same leaps and uncertainties apply to space scales. This uncertainty is expressed as dark matter and dark energy.

The dark energy in space is more than the energy that must be for the universe. If there is no energy balance in a system, there is no order and harmony. However, everything moves in harmony in space and the world. The energy of light on the screen has to be more than the energy of the image on the screen. The power governing the system has to be more than the energy in the system. Because the energy obtained in the system has to be less than the energy that makes up the system.

Why are there these leaps that seem to be ambiguous for now? There is a simple answer; if there is no space in between the movie frames in the cinema, the transition between the images would be blended just like the blurry situation when a decrease or increase happens during the 25 frames per second flow. This confusion, which is incompatible with brain's perception rate, would cause loss of the perception of reality.

If you do not delete the images on the computer screen, they will soon start to overlap. After a few blurred images, there will be nothing visible on the screen. It will be similar to continue writing over the words on a blackboard without erasing the previous words.

As a result, the physics of the Holographic Universe is the Holographic Physics, and it is the **physics of Matter-like, not Matter.**