## THE HOLOGRAPHIC PRINCIPLE AND KABBALAH

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A hologram is a way of storing information; yet, although we may think of a hologram as being formed through light, in the case of laser holograms; they can also be formed through sound.

To understand this we must first take a look at a particular aspect of sound - interference patterns. Sound can be measured or mapped in wavelengths. When this is done we are left with a long sheet of paper covered in 'wavy' lines. One way of describing these lines is to differentiate the line into 'hills' and 'valleys'. If we then superimpose two or more lines together, we can begin to analyse the patterns and 'beats'. Two wave patterns of identical frequency result in the hills and valleys matching each other, when added up they produce a wave form twice the height of the original wave forms. This is known as 'constructive interference', because it amplifies the original sound.

If we place two sounds together of different frequencies, the result is much different. Where the hills and valleys are directly opposite, they cancel each other out and on our piece of paper a flat line will emerge. This is called 'destructive interference'.

But what has this to do with Kabbalah? Before we come to that, let us look at two more simple experiments to do with interference patterns: we have discovered that interference in waves of sound can be mapped onto a piece of paper, but they can also be mapped in a 3D format as well. If sand is placed on a flat piece of metal, held with a clamp to keep it horizontal, and a violin bow is drawn across one of the free edges until a note is emitted, the sand will begin to form intricate patterns on the metal sheet. This occurs in the same way as the valleys and hills on the paper, where two frequencies are identical, or nearly so, a 'standing wave' emerges, causing the metal to vibrate up and down at this point; where the standing waves are less identical, however, the metal will be more still, i.e. it has less vibration on its surface and the grains of sand will collect there. Alternatively, if a transparent box was filled with a fluid and particles of the same gravity were dispersed into it, by vibrating all the sides of this box in a synchronous manner a perfectly symmetrical three-dimensional pattern would appear, as the vibrations would cause standing waves to form in the fluid and push the particles into position.

Some physicists believe this is how our physical universe came into existence. And so we come to Kabbalah. "In the beginning was the word", states the Bible in the book of John<sup>1</sup>. If Chockmah contains the first swirls of creative energy from the first explosion from Kether then, in our model, Chokmah is where the initial sound occurs. Across to Binah now, where small particles (atoms perhaps) respond to vibration and begin to make forms and shapes. You will note that the 'Empress' path here represents data, in this case, the primal data of nature. At Daath the data, now in forms, begins to become information as it is organised into the archetypal energies that come from Chesed. You

may wonder, in this model, where the 'Fool' path comes into play, as I did for a while, until I realised that this represented the interference patterns, which I had begun my study with.

Now I have explained how sound waves and interference patterns work we can begin to look at holograms, which can be described as being nature's way of storing information. A hologram is produced by using laser beams and photographic plates but there is already evidence that our brains store information in holographic form. An example is the genetic code carried in our bodies; each cell carrying all the information required to make an additional copy of ourselves.

A simple way to understand the holographic principle would be to take the example of dropping pebbles into water. The complex and apparently chaotic pattern of waves are caused by interference patterns, and if it were possible to quick-freeze this water, we would be holding in our hands, something akin to a holograph. If it were possible to shine coherent light (by this I mean a certain kind of light, such as a laser) through this sheet of glass, we would not only be able to trace where each pebble fell, but actually see a three-dimensional image of the pebbles as well. Also, if a small piece of the ice were to become broken away from the whole, the three pebbles would still be able to be seen through it.

When I first came across the forming of holographic information, I immediately thought of the principles of Yesod. That none of us ever see reality, just it's image. I wondered if this could be mapped in Kabbalah. If the image produced can be represented in Yesod and Malkuth is reality, then the holographic plate would have to be represented by the 'Universe path'. I worked out that the source of light would have to be Kether, but I couldn't work out how the light could emanate from Kether, through the hologram (universe path) and into Yesod. It was only when FP reminded me of the 'Kether in Malkuth' principle that I could see how it might be mapped, because if Kether is in Malkuth then it's light can shine directly through Malkuth upwards to Yesod in this sense.

Applying this to the Initiatory System was interesting for a number of reasons. I thought about the Adeptus Minor degree, and realised that if one were observing from here one would still only be able to see the image (Yesod) and not the reality (Malkuth). "So what changes?" I asked FP. "One is no longer part of the image," he replied. One of the obvious mystical statements that comes to mind is that of Blake's, "to see the world in a grain of sand, and a heaven in a wild flower". To understand through looking at holograms that the whole of the universe can be seen, understood and generated from any tiny particle of it must have reinforced this statement in recent times. But the final conclusion that this train of thought led to was the fact that it proves beyond doubt that it does not matter 'how' the Great Work is carried out. Initiatory realisations, states of awareness and certain conclusions may be able to be mapped, by Kabbalah or other systems, but that there is 'one true way' to get there cannot be argued if, by looking at the holographic principle, we understand that from observing any tiny piece of the universe, we can know the rest.

<sup>1</sup> In Bhuddism, creation is said to be started with the vibration of the word, Aum.