

Sound and Light

What can we learn from studying light and sound?

If we are to move from an informational age into a vibrational age, it is critically important that we have a better understanding of all types of wave phenomena and how they interact. All of the theories in quantum physics involve how light interacts with matter. So, the study of light is of primary importance to science. We are far from exhausting our understanding of electromagnetic energy and have only recently begun to study bio-electricity, bio-magnetism and bio-photons. This type of investigation will revolutionize the healthcare and pharmaceutical industries.

Sound is a vibrational quality that we can generate at will. Intuitive practitioners have long used sound as a healing tool. In the past few decades, several scientific studies have confirmed these results. To broaden the use of sound as an instrument of healing, I've developed classes which harmonize acoustics, which is the physics of sound, and ancient geometry, to show what sound is by understanding how a circle works.

The study of waves and their interference patterns may very well change how we model our understanding of reality. For instance, a hologram is made by recording the interference pattern of two sources of light reflecting off the same object. The hologram itself later became a model for how the brain stores, retrieves and comprehends information. Further investigation into this area will expand these models in new and, perhaps, unexpected ways.

In the book, you included a good deal of history about the study of light. Why?

Because light has always been correlated to the divine. The first people to make a scientific study of light were immersed in an intuitive understanding of it. Light is the only energy which penetrates all of the realms intact. It changes color in each realm, like a gel on a spotlight, but it remains the same otherwise. In your dreams, you may touch objects or hear sounds, but they are not the same as the physical objects or movement of air particles we experience in the manifested realm. Light is everywhere the same energy.

Newton was an alchemist and a very religious man. These aspects played heavily into the conclusions he drew from his experiments. But, he was most interested in optics, or how we see light. By contrast, Goethe was most interested in how we experience color, not in just what and how we see it. Both men were interested in the source of color but, because of their philosophical differences, they approached the subject in different ways and drew different conclusions.

In many ways, the physicists of today have effectively divorced the study of light from its metaphysical underpinnings. Because many products can be developed from the study of particle theory, they have somewhat ignored the wave nature of light. It would be in our best interest to re-examine the wave nature of light from an intuitive perspective. To do that, we must return to the historical records left by the intuitive practitioners and the early scientists.

What type of tools do we use to understand waves?

The biggest mathematical breakthrough in the study of complex waves was developed in the early 1800s by mathematician and physicist Jean-Baptiste-Joseph Fourier. He determined that all complex waves were created by the interaction of several simple waves. We now use his calculations, called Fourier Transforms, to deconstruct complex waves. This technique is the math behind non-invasive medical imaging devices, such as the MRI. It is also used in common data compression software that creates smaller files to display music and pictures on the internet.

Frequency and wavelength are commonly used terms in current literature. What are they?

In sound, the length of a wave is a real thing and occupies space. Frequency is an abstract standard of measurement, like a foot or a meter. Light is both a particle and a wave, so it is addressed a little differently by science. In quantum physics, the wavefunction is used to describe a system in a state of flux. That wave is collapsed when a thing comes into physical manifestation. The wavefunction, in this sense, is a mathematical abstraction and not a real thing either, although there has been some debate about that point.

Are sound and light a continuation of the same spectrum?

No, and this is an often misunderstood point. They can both be measured by frequency and wavelength, but they are very different types of waves. Sound is a mechanical wave. To travel, it requires a medium, like air or water. By contrast, light is a non-mechanical wave and requires no medium to travel. Light is also self-propagating and sound energy is not.

But isn't everything made of light?

Everything is made of informed energy. This is a very different definition than science uses for light. However, it is often the definition used by intuitives to describe the "light" or the "one source" of everything. This misunderstanding has led to a great deal of confusion and slowed the progress of collaborative efforts between the rational sciences and the intuitive arts. Common terms such as this are addressed all throughout *The Sage Age*.