Chapter 7

PHOTODYNAMICS

An Advanced Treatise in QUANTUM BIOLOGY

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What are the photon effects of biology?

In the beginning God created the heavens and the earth. Later he created light. After creating light, then life was possible, because life could not exist without light; the existence of the photon allows for the existence of life. New evidence from physics relates all electrodynamic processes to the photon.

The electron transport chain of both the plant and the animal is a photodynamic process. As the electrons change quantic states in the transport of energy in any process, they emit or receive a photon with each quantic change, and it takes a photon to initiate another electron to do another quantic change. This is why life must produce infrared radiation, as Chapter 8 points out that the mitogenic radiation of life is in the infrared, the UV, and also the visible light spectrum (from 300 to 1200 NM). This is also why a measure of heat or a background infrared photon bath is needed for biology.

At room temperature of 70E F there are approximately 20,000 photons per cubic centimeter. This photon bath was absolutely essential for the formation of biology, as it provides an interchange to help free the virtual photons that are developing within the electrons of the various chemicals. One of these infrared photons can be interchanged, and sets free the virtual photons. As we can see from the photomultiplier studies of Nelson, et al, this photon bath is absolutely essential, and provides the backdrop for the photodynamics of biology and cellular metabolism.

A group of scientists recently sought to understand the processes of shaping life on this planet. They took matter that supposedly existed pre-life, such as salt water, various minerals, and compounds, which they then exposed by rolling them over heated rock, approximating what could have happened if these compounds were rolled over a heated piece of magma. We know that the Earth was in much more volcanic turmoil than it is today, and that these substances, when passed over these heated rocks, formed amino acid-type compounds, and much to the scientists' surprise, these amino acid compounds engulfed to make bubbles; small (10^{-5} cm) bubbles, much akin to a single membrane. Then, to the scientists' further surprise, they found that these bubbles were *photodynamic*, and that when exposed to light they would generate a sixty to ninety millivolt electro-tension between the inside and the outside, and that when exposed to darkness, this electric force diminished.

Amino Acid Primordial Bubbles Membrane Potencies effected by Light Thus this meager existence of life used light as an electrical force. As the photons came in, it allowed for the creation of an electric potential that would later allow for metabolism and reproduction.

All biological material is photosensitive. This electrical potential in the long-range forces of the molecules would shape the molecules into various structures. Thus cells started as electrical photodynamic units. These units would need to be developed to handle mass, momentum, heat, charge, and the full range of other cyclic, energetic events. But the type of infrared radiation produced by heat is not the only type of photon that biology would have to deal with. Biology would also have to deal with the *visible* light spectrum and the wavelength material coming from the sun.

Existence on this planet was never constantly exposed to visible light. Thus another compound would need to enter to allow for the regulation and storage of photons during the day and the emission and control of these photons during the night. Many scientists have speculated that one such compound was melanin. There are over 256 known forms of melanin in existence; all forms of the same compound, and yet different in structure. Melanin has the fantastic ability to regulate photons and then remember or replicate this process in the dark.

The pineal gland of the human body secretes melanin in darkness. Many researchers have found the ability of the melanin to relax the body during the evening, and with the light, as the pineal gland makes less of it, it starts the day process of activation. The pineal gland is in control of our circadian (daily) rhythms. It was a structure that needed to be developed in a multi-cellular organism to regulate the needed response to various types of daily events dictated by the photons of the day. As the heat of visible light and infrared radiation builds during the day, at night, when we have the difference of a cooling-down process, our bodies would need a quantic regulator, which would be the pineal gland.

Melanin later gave rise to more precise compounds able to control this photon and electron process, leading to RNA and DNA compounds. So these helix structures culminate in an ability to not only receive instructions through photons, but also to transmit photons in a precise way, to relay other information through long-range forces of these virtual photons. RNA and DNA thus create the quantic state necessary for the electron-positron pairs, to allow for the virtual photon release and reception.

It is wrong to think of RNA and DNA as simple chemical machinery; if that were the case, how would one cell in the toe know what to do vs. one cell in the eye, when the RNA and DNA are exactly chemically the same? The precept of plastic surgery is that a piece of tissue can be transported from one part of the body to another. The dependency of this process has two parts: one, that the volume of tissue that is transported weakens the process; and two, that the health of the receptive organism is also a factor. Thus, the more tissue we move from one spot to another, the harder it is for the body to reprogram the new tissue. Also, the healthier the body is that receives this transplant from one part to another dictates how quickly the recovery process will ensue. When these cells arrive at their new location, the body now gives them a different virtual photon pattern, allowing for the RNA and the DNA to adapt to the new circumstances.



Thus mitogenic radiation needed to be developed to allow RNA and DNA to communicate with other RNA and DNA through the process of vibratory photons. These photons would, through an electronic process, allow for intricate and immediate transformation of information to help set the electronic dynamics of intercommunication of the cells. This type of process would go a long way toward explaining many of the unexplainable events in biology and cellular phenomena.

Looking into the chemistry of RNA and DNA would be like a scientist looking into the chemistry of a TV set. He would not know if the TV set were on or off, because all he knows is mass. He would not understand photons. By looking at the mass, he is only looking at the chemistry. If he wanted to know where Willard Scott was on the TV set, he would tear apart the picture tube and the rectifier circuit looking for the mass, not realizing that his small child could tell him that the TV set is receiving electromagnetic radiation (photons) and converting this information into a signal which produces photons.



Electromagnetic radiation was discovered and utilized one hundred years ago by Marconi, and was found to be a way of transmitting information via photons at great distances. These photons cannot be seen or felt consciously by the human body.



The true secrets of DNA will be unlocked as we start to understand the virtual photon and the photodynamics of its electron transport chain and enzyme patterns. We will not unlock this through chemical analysis. We will be able to proceed with a genotype project, and understand which of these chromosomes and genes are involved with which diseases. This is a highly recommendable and highly *com*mendable process. The true understanding of life will be increased by a quantum leap when we look at the photon dynamics.

 $6 \text{ CO}_2 + \text{CH}_2\text{O} 6 \text{ C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$) GE = +686 kcal/mole of glucose

In 1985 the New York Academy of Sciences printed Volume 453 of "The Medical and Biological Effects of Light". In this brief discussion the photobiology of vitamin D was discussed, as well as calcium, metabolism, light-induced changes in plasma, tryptophan and cysteine. The light effects on transport excretion of bilirubin, total reaction of UV light on DNA in the human skin, comparison of sinthetic Sorolyn derivatives and 8 MOP in the inhibition of lymphocyte proliferation, dietary carotene one Sorolyn-induced phototoxicity, the effects of different types of lighting on eye and other worker-related conditions, the effects of light on depressed patients in seasonal-affective disorders, circadian rhythm and melatonin reaction, pineal gland effects, jet lag, therapeutic uses of lighting, health effects of interior lighting, pyrimidine dimmers in DNA by incandescent spot lamps, photo-activation of urokinase in pseudomonas by a biochemically-generated excited state, and the effects of electric lighting on human muscle strength were brought up.

Many other topics were discussed. We can see that science has long been fascinated by the effects of light on biology. It is a treatise of this book that the effects of light are integral and synonymous with biology and life itself.

To date, as we have indicated, the experiments of the analysis of light and its interaction with biology has been very much a sideline, a side issue of how biology has adapted in some small way to the process of life. As we point out in this treatise, the photon bath provided by electromagnetic radiation in the infrared range and the visible light of the sun have generated a type of biology dependent on a mitogenic radiation, in which now light becomes extremely important in both its intake into biology and its output. The biologic cells must intake light to live; they also will output light to communicate and control cellular phenomena. Body heat is indeed not a useless byproduct of metabolism. It could be a communication structure, as well as a participant in the virtual photon bath. This is why the body would have to try to fight to maintain body heat, so that it could maintain this photon bath and allow for metabolism reproduction and life.

The study of chemiluminescence and the other lights coming from the body in the visible spectrum are also bound to not be a useless byproduct, but indeed the foundation of life itself. Life is an electrodynamic process, and all electrodynamic processes are photon-dependent.

Here we would like to point out that some of the first photon multipliers used in analyzing the human body have been developed by this author. Patents are currently being sought for devices that can measure the photon production of the body; the wavelength, perhaps even the carrier wave signal coming off these biological processes. This book is not meant to be an extreme digression into the exactitude of the research, but merely a point of bifurcation for society, to point out the need for biology and medicine to digress into electronic and energetic modalities. It is the purpose of this book to lay out these theories. We can look to *New Biology I, II* and *III* to find more exacting practical information.

SUMMARY

- 1. LIGHT IS THE MISSING FACTOR IN ALL BIOLOGY.
- 2. PHOTONS AND VIRTUAL PHOTONS ARE NOT ONLY NEEDED TO EXPLAIN QUANTUM THEORY BUT BIOLOGY AND MEDICINE AS WELL.
- 3. HEAT SUPPLIES THE PHOTON BATH NEEDED FOR VIRTUAL PHOTON TRANSFER (ACCORDING TO THE STEFAN BOLTZMANN LAW). (SEE *BIO-QUANTUM MATRIX.*)
- 4. ALL ELECTRON TRANSPORT IS DEPENDENT AND CORRELATIVE TO PHOTON RELEASE AND ABSORPTION.
- 5. SUBTLE PHOTONS WILL BE THE NEW AREA OF BIOLOGICAL STUDY.
- 6. LIVING CELLS USE A VARIETY OF EMR (PHOTON) TRANSMISSION AND REC EPTION TO CONTROL PROCESSES, TRANSFER REACTION NEEDS, AND COMMUNICATE WITH OTHER CELLS.
- 7. THUS QUANTUM ELECTRODYNAMIC THEORY ALLOWS FOR THE PHILOSOPHY OF ENERGETIC MEDICINE AND MEDICATION TESTING.