

Samadhi and Dhumo: A Theoretical Explanation and a Potential Application

by

Douglass A. White, Ph.D.

Primordial Anaerobic Processes

Life began on this planet much earlier than most scientists suspect. The first quasi-living processes did not involve sunlight and were anaerobic. They occurred during a time when the earth was much hotter than now, subject to a great deal of volcanic activity, and had an atmosphere very different than it has today. The atmosphere was cloudy and did not let in much if any sunlight. Recent theorists have even proposed that life could occur on planets far distant from stars if the gravitational mass of the planet is sufficient to maintain the proper geothermal conditions to maintain temperatures similar to these.

The original living processes on earth evolved from a natural form of hydrolysis that produced atomic hydrogen and atomic oxygen as portable energy resources that could be used by certain chemical structures in controlled chemical reactions. The cells in our bodies retain encoded in the DNA a memory of these primordial reactions and are capable of switching back into an anaerobic metabolic mode. They automatically do so when a person engages in strenuous activity that exceeds the ability of the lungs to absorb sufficient oxygen to maintain that level of physical activity. This anaerobic activity usually produces lactic acid as a side effect. The excess lactic acid causes the muscle soreness that people experience the day after unaccustomed strenuous physical activity.

The Samadhi Effect

What is not well known is that cells can switch into a quasi-anaerobic mode in another way that does not result in the production of excessive amounts of lactic acid. This occurs in a very quiet manner and is not due to over-exertion. Expert yogis are able to demonstrate a phenomenon that I will call the Samadhi Effect. This is not something only yogis can do. Anyone can do it. With a little practice your cells remember this ability and you can deliberately control the process. How far it can be taken in terms of duration and depth and application to life situations is a question for future experimentation and exploration. It obviously has relevance to future space programs that involve long term travel in sealed environments.

Samadhi is a condition that occurs during the practice of deep meditation. The ancient texts on yoga describe various forms of samadhi. In this article we will limit

our consideration to a state in which metabolic activities are greatly reduced and specifically the need to breathe through the ordinary process of respiration with the lungs is greatly or entirely eliminated. This is what we will call the Samadhi Effect.

I believe the technology of the Samadhi Effect is quite simple. The human body is largely composed of water. Water is a molecule composed of two atoms of hydrogen loosely bound to an atom of oxygen. Water is the primary resource for the generation of the Samadhi Effect. The body has plenty of water, and only a tiny amount is needed for the Effect.

The second important element required to create the effect is electricity. We activate and coordinate the various organs and functions of the human body by means of a nervous system. The nervous system is a set of cells that specializes in the transmission of electrical impulses. Nerve fibers are analogous to electric wires.

These two components, water and a source of electricity, are the key to the Samadhi Effect. The way it works is that the yogi assumes one of several recommended postures and then contracts certain muscles. These are not muscles used for normal physical activity such as walking or lifting, but are more concerned with the tone of internal organs. To contract the muscles the brain sends electrical signals down the efferent nerve fibers. The electrical impulses not only trigger the muscles to contract, they also act to electrolyze small amounts of water molecules in certain parts of the body. This disassociates the water into atomic hydrogen and atomic oxygen. The hydrogen atoms are essentially protons. These protons are used to run the ATP pumps in the cells. The oxygen is used to supply cells with their respiratory needs for oxidation processes in the metabolism.

While initiating this Samadhi Effect the yogi also uses a technique that tends to suppress or turn off the breathing function of the lungs. The metabolism then switches over to a mode in which it has access to an internal oxygen source and does not require atmospheric oxygen. The only breathing may be the exhalation of some excess carbon dioxide. The yogi uses this procedure during a state of deep relaxation of other physical processes in the body. He is meditating and not engaging in external activities. Thus his metabolism is naturally slowed. The gases provided by the hydrolysis process adequately offset the energy required to run the process and maintain a “neutral gear” idle condition for the rest of the body.

I personally have experienced this Samadhi Effect to a noticeable extent and can

vouch for the fact that something very interesting occurs. This is my theoretical attempt to explain the phenomenon. I welcome the scientific community to carry out some experiments to verify this theory or to provide an alternative explanation.

The Dhumo Effect

Another interesting and mysterious yogic ability is the Dhumo Effect that is often attributed to lamas who practice yoga in the cold environment of the Tibetan plateau. We can define the Dhumo Effect as an ability to produce at will sufficient heat within the human body to protect it from harsh environmental cold.

I have not personally learned the secret techniques of Dhumo, but there is a considerable body of anecdotal evidence testifying that many Tibetan yogis can perform this procedure with varying levels of efficiency. We can extend the theory of the Samadhi Effect to include a simple scientific explanation of how the Dhumo Effect might be achieved.

The prerequisite for the Dhumo Effect is that a person must be able to produce the Samadhi Effect to some extent. Once he can do this, he has a source of atomic hydrogen inside his body. Ordinarily during the Samadhi Effect this atomic hydrogen goes directly into the mitochondria of cells and fuels the Boyer Wheel nano-pumps for shifting ADP to ATP. However, if the body is also subjected to an external environment with a low temperature, this stresses the body, because it must maintain a certain minimum body temperature in order to keep cells from freezing and suffering from frostbite.

What presumably occurs in the Dhumo Effect is that some of the atomic hydrogen produced during the Samadhi Effect combines to form tiny bubbles of diatomic hydrogen gas. This is a very exothermic reaction releases up to 109,000 cal/gram mol in gross heat output. (The literature gives a wide range of numbers going from around 70,000 up to 136,000, but they are all large. The different numbers probably derive from variables in the test setup.) At this rate only a very small amount of atomic hydrogen is needed to provide the extra heat needed to maintain internal body temperature at a comfortable level. The yogi decides what is comfortable for him and controls the process by his will.

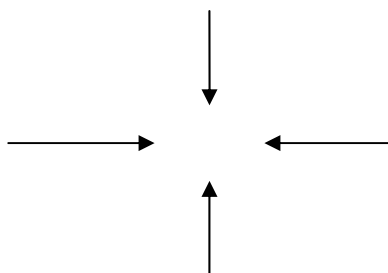
A similar process conceivably could heat all our houses that are subject to winter cold with only a small amount of catalytic electrical energy to run the process. One the system was fired up the required electrical energy to keep it running might even be

obtained from some of the resulting heat output by operating a steam turbine generator. During the early 20th century Langmuir discovered, and the utility companies prefer that you do not know, that the dissociation of diatomic hydrogen gas into mono-atomic hydrogen apparently requires only about 103 cal/gram mol. We can achieve this with tungsten electrode arcs for example. Appended to this article I post a link to the most detailed information I have found to date regarding the research and development work by Langmuir, Bohr, and others on the behavior of atomic hydrogen. (“Irving Langmuir and Atomic Hydrogen” by Nicholas Moller. My first awareness of the atomic hydrogen heat exchange phenomenon came from reading William Lyne’s somewhat polemical monograph, “Occult Ether Physics: Tesla’s Hidden Space Propulsion System and the Conspiracy to Conceal It.”) The technology was developed for use in super high temperature welding torches and then quietly shelved into obscurity for some unknown reason. Given the renewed interest in hydrogen as a clean energy source, it seems we should apply some modern research technology to find out the whole story of mono-atomic hydrogen and its potential uses.

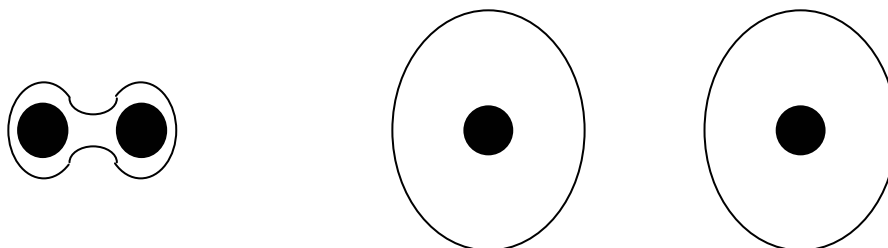
The basic setup for an atomic hydrogen heat transfer system is to have a source of hydrogen that is used as a medium for capturing and storing energy. An electric arc with tungsten electrodes disassociates the atoms of a stream of hydrogen gas into the mono-atomic state with a small expenditure of energy (apparently 103 cal/gram mole) once the system heats up. The mono-atomic hydrogen then spontaneously recombines into diatomic hydrogen and releases a large amount of energy in the form of heat (as much as 109,000 cal/gram mole). We can extract this heat from the hydrogen for various uses and then recycle the hydrogen for disassociation again.

The heat from the hydrogen torch process can reach temperatures of 3500 K. Apparently most of the heat does not come from the arc, and the hydrogen is not combining with other elements or undergoing a nuclear reaction. Where does all the excess heat come from? If more heat comes out than goes in, it must be coming from another source. Let’s look for the source.

This heat from the reaction is a form of electromagnetic radiation. I suspect that it represents the anti-Poynting vector of a phase conjugate interaction. The interaction is a fundamental four wave mixing phase conjugation interaction in which the tungsten arc provides a powerful “capacitor” in one dimension. The current in the tungsten electrodes generates the capacitance that sucks electromagnetic radiation from non-local sources in the second dimension of the four wave system.

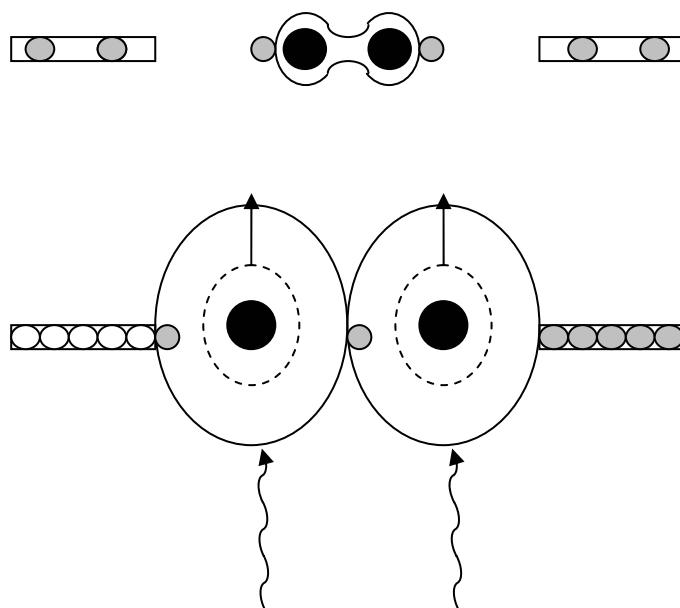


This ambient radiation gets captured and stored in the atomic hydrogen. How is it stored? When hydrogen is in its diatomic state, the two electrons are in a tight orbit around the molecule. When the hydrogen atoms disassociate, the electron shell around each atom expands into a much larger shell with a basically spherical shape. This corresponds to the absorption of a large amount of energy. The mono-atomic hydrogen expands and occupies at least double the volume of the diatomic state. Thus the process is analogous to the way an electron can absorb a photon and jump to a higher energy orbit and then drop back down and release the photon. In this case it is the difference between one proton and two protons that determines the tightness of the orbit. The hydrogen likes to be in a diatomic state because then it has a pair of electrons that form a Cooper pair and give it a better sense of balance.



Here is a sketch (obviously not to scale) of diatomic and mono-atomic hydrogen. The orbit of the electron pair in diatomic hydrogen (represented by the dumbbell shaped curve) is much closer than the orbit of a single electron around a single proton. This situation produces the effect as if the electron had been boosted up to a higher energy orbit. When the hydrogen is disassociated, the energy is drawn in on the Poynting vector from ambient radiation and ambient energized free electrons in the surrounding atmosphere that are giving up photons. The anti-Poynting vector is the outward expansion of the electron orbit. The “current” is the flow of the electron in its orbit and of course of electrons in the electrodes.

Let’s look at the whole process in a schematic format.



The top portion shows the tungsten electrodes with some electrons drawn as grey circles. A molecule of diatomic hydrogen with its two electrons is between the electrodes. (In the real case there are many more molecules.) The bottom portion of the sketch shows how the current applied to the electrodes polarizes the system. The hydrogen bridges the gap by expanding into two hydrogen atoms. (I only drew one pair greatly exaggerated.) The electron orbits expand and photon energy is sucked in to push out the orbits to their maximum mono-atomic “ground state” diameter. As the mono-atomic gas passes by the electrodes with pressure from the oncoming flow of gas from behind, it leaves the highly charged region and the atoms then recombine and release the electromagnetic energy that they have captured from the environment during their mono-atomic state. The atoms come together and the electron orbits collapse inward emitting a lot of thermal radiation. This is the reverse of the initial process. The energy used in the process is small compared to the energy flow that is created and the electrodes as well as the hydrogen act only as catalysts to initiate and maintain the flow. The key point is that the energy comes primarily from ambient field energy radiation in the environment and not from the electric current. Feynman makes this clear in his lecture on “Field Energy and Field Momentum” (Vol. 2, chap. 27.)

The electric current moves in the electrodes. The magnetic field surrounds the electrodes, and the Poynting vector comes into the gap between the electrodes from ninety degrees relative to the electrodes. (See Feynman, Fig. 2:27-3.) The atomic hydrogen is moved away from the electrodes by the pressure from the constant oncoming flow of hydrogen gas. It then spontaneously recombines and releases the temporarily stored energy. In the application the heat is then extracted from the hot

recombined hydrogen and put to some use such as high temperature welding or possibly heating your house.

This technology is well attested since the 1920's and 1930's in the form of atomic hydrogen welding equipment. The Germans called it Arc-Atom. The ancient Tibetan yogis for centuries may have used a scaled down version of this technology to keep warm in their caves.

It is very possible that the recent experiments in what is often wrongly labeled as "cold fusion" are demonstrating the Dhumo effect. These experiments are just variations on the principle of the light bulb except that they create more heat than light.

Whether the utility and gas companies will allow the emergence of a technology that may radically restructure their business operations is a political, economic, and ethical question outside the scope of this article. So far they appear unwilling to do so and ridicule or otherwise sabotage attempts to change the status quo that they believe is set in their favor. A little careful reflection, however, reveals that there is plenty of room for everyone to make lots of money, but we do not need to destroy the environment in the process.

Perhaps we will soon have some experimental data and prototypes to sort out the whole truth of what is going on and what is possible.