

Phoenix Journal

#151



By Gyeorgos Ceres Hatonn

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DEDICATION

To all who would walk through this wonderful journey of learning and KNOWING. I am but a teacher, a messenger; YOU ARE THE LESSON AND THE MESSAGE! YOU ARE THE MIRACLE!!

FORWARD

REC #1 HATONN

THU., SEP. 28, 1995 7:18 A.M. YEAR 9, DAY 043

THU., SEP. 28, 1995

UNCONDITIONAL LOVE?
NO. ABSOLUTE LOVE!!

Many speak of “unconditional” Love as if they bear some kind of banner of perfection, giving and LIGHT. Then they speak ill, nurture hatred, broadcast tales against another and walk in the continued dark shadows as if it is somehow their duty to pull all down into their own weird form of “*unconditional love*”. **GOD IS NOT UNCONDITIONAL LOVE!** God puts more conditions on man’s truth and learning than any other one entity or circumstance in MAN’s physical journey.

GOD’S LOVE IS ABSOLUTE—
NOT UNCONDITIONAL

Since this one phrase, “*you must reflect unconditional love*”, is thrown into Dharma’s face more than any other and, since it seems that, to do a job such as hers, she must somehow be above and beyond the level of “other” people and reflect piety with never an anger allowed to show or tell, I shall briefly discuss this opinion and observation.

If something is WRONG and others are being damaged and hurt—is it RIGHT to keep silent? Cowards keep silent, readers. Cowards keep silence so as to never rock the boats of those willing to take the advantage of those who will permit such actions. The “takers” will hide behind the demanded piety and battered shield of the Brave and Risk Runners. They will, before it’s over, suck you dry of all assets, all courage, and all substance—IN THE NAME OF GOD CREATOR! Oh no, readers—GOD HAS MANY CONDITIONS ON HIS PERFECTION AND BECAUSE HE BEARS THIS PERFECTION HE ALLOWS YOU YOUR IMPERFECTION BUT INSISTS ON MOVEMENT TOWARD HIS PERFECT ABSOLUTE LOVE.

WISDOM

“WISDOM” is the mark upon a man’s actions which sets him aside and beyond the ordinary. Wisdom is gained through the learning in TRUTH. When wisdom is present, foolishness is thrust aside if actions be taken within the prescription of WISE CONSIDERATIONS. To live in a fool’s fantasy is stupidity at its highest level. You can accept the fool’s actions and endure the never-ending irresponsibilities without joining within the games of folly.

Wisdom in REASON, as offered through KNOWLEDGE and KNOWING, will gain the day and precipitate, through the alchemy of LIVING, that which is commanded. For with wisdom comes RESPON-

SIBLE ACTIONS AND DIRECTIONS which gain, always, toward the LIGHT OF TRUTH. Waiting without works is one of the most foolish realizations of all TIME. Why? Because you will drive away the very ones who would have included YOU within their fortunes and expressions. The POT at the end of the rainbow is an illusion—a bucket which reflects gold but has no bottom and is filled with holes. GOD WILL HAVE NO “TAKERS” IN HIS IMMEDIATE KINGDOM OF ACTION.

CELLS AND LARGER THAN LIFE PARTICLES

You are composed of invisible matter! It happens EVERY day. You are simply a composite structure of individual microscopic units coalesced into a working larger organism. Each of those cells which compose the whole is an individual, DNA'd entity. Each of those cells will cooperate and perform according to their individual specifications—as long as they have what is necessary to provide LIFE to them.

Just as an individual “YOU” becomes a working organism as all necessary cells are bound together and compressed into that which you call skin, so too is the universe bound together with various working cellular-structured “organs” of a living, thinking, orderly field of LIFE. Therefore comes the consideration of what, then, creates LIFE that allows thought, reason, choices, and other things that only higher animal life presents? Ah, SPIRIT—that STILL, invisible life-form which is the living thought-form of Creator. Each cell has its own form of thought program for function and when the program goes nuts you present with mutation, cancers—flawed machines. You are made up of individual cells and so too is society and races or forms within society. Each grouping of species will have their own continuation of social orders, groupings and “civilization”. Just as you are “cells”, therefore, so too is civilization. Then you must take that concept out beyond the realm of what you recognize and know, into the Cosmos, the solar systems and then on into the orderly UNIVERSE which coalesced without limits—to Creator Spirit. However, the mind is not brain. Mind is simply the instructing element of a computer system called brain. If the chosen “brain”, housing a mind, becomes “dead” or severed from spirit—it must find another “house” or move to “mind space”.

We must take one step at a time in discerning the differing factors of that which makes up the substance of life, for too many of you living forms of human shape come to believe you ARE the social structure or the “things” which seem to be as physical as are you. No, none of those physical “things” move with YOU—YOU ARE MIND! ALL ELSE IS THE STAGE-SETTING WHICH CAN BE UTILIZED FOR YOUR SPIRIT TO EXPERIENCE.

You of today who were the “you” of yesterday, and the “you” of a tomorrow, have come to the place where it is no longer acceptable to a free society for you to remain in a stupor while would-be-kings can manipulate you as machinery and robotic tools. You have, as a whole, stupefied DOWN to a damaging, destructive machine, out of control of selves—thus presenting a gigantic destructive machine of destruction—out of control and in the hands of puppet-masters who have totally humanistic evil intent. (Evil simply being the intent of pulling mankind from his direct journey unto God Creator and goodness.)

You certainly cannot blame your toenail cells for your walking yourself into trouble on the gaming field—for it is your mind which directs your “whole”. It is higher or greater mind which has direction of your mind direction, so it pays to have careful attention to that which you are directed to do lest you lose all capability

of proper function into the growing and learning which gives abundant life in the physical AND moves you into the glory of that which is LIGHTED in the time of transmutation and translation. This does not in any way diminish the value and the attachment of your toenails.

So, with these greater and more obvious things in mind we need to come to some explicit information and terminology which you can take, learn and allow you to understand the great MYSTERIES (NOT MYSTICISM) OF LIVING FORM. For, just as you are a living, viable being—so too are those microscopic things which can kill you.

Biology has somewhat come of age as a conceptual and quantitative science and you must learn enough to be able to utilize the great and wondrous gifts which are offered for your ability to command control of your being. Tedious? I suppose so, but after all, it IS you! Any animal can blunder around through a full life-span of physical expression—YOU ARE BEYOND THAT TYPE OF EXPERIENCE. HOWEVER, TO SIMPLY “EXPERIENCE” IN ETHERIC REFERENCE—INDICATES A SEPARATION OF BODY FROM MIND. Why ever in the human physical experience would you desire to be in separation? You will note that the ideal is to be ready, willing and ABLE to make transition—but in every instance physical life is clung-to like super glue, so MIND knows it is or is not ready for higher journey. JUST BEING is not enough on a physical plane—for it abdicates all responsibility for the state in which you are manifest.

Biochemistry, cytology, and genetics have been unified into a common framework at the molecular level. However, readers, cellular activity and development are regulated not by the interplay of molecules alone, but by the interactions of molecules organized in complex arrays, subunits, and organelles. **Emphasis on organization is, therefore, of increasing importance.**

So it is, also, at the other end of the scale. Organismic and population biology are developing new rigor in such established and emerging disciplines as ecology, evolution, and ethology, but again the accent must be on interactions between individuals, populations, and societies. Advances in comparative biochemistry and physiology have given new impetus to studies of animal and plant diversity—for it never has priorly been considered that you were as they. Always when great mysteries were speculated upon by a given teacher or Man, he became set aside as weird or a mystic and disallowed the passage in truth. Man is not set aside by his mere structure of physical form—for you are actually little different from a plant or animal of any kind, except in DNA/RNA structure. IT IS MIND THAT ALLOWS THOUGHT, CHOICES, REASON, WHICH MAKES YOU SPECIAL.

Microbiology has matured to the level of presentation that we can now take up the subject as a “daily” topic without the great and grand mysticism of unknowing. You can, yourself, understand and fathom the great prior mysteries and see the function of a most tiny entity. Beyond that, you can now fathom the invisible workings because you are coming into knowledge without the great singularity of supposed GURUS and MYSTICS. LIFE is not happenstance results of fortune-telling—it is organized realization of orderly function. This could hardly be considered MYSTICAL.

You now have the available INFORMATION by which to know and recognize your enemies as well as your friends. You must come to know about the world of viruses and procaryotes for they now assume a major position which can now kill off the whole of civilization.

New connections are being forged with other disciplines outside biology—chemistry, physics, mathematics, geology, anthropology, and psychology provide you with new theories and experimental tools, while at the same time are themselves being enriched by the biologists' new insights into the world of life. The need to preserve a habitable environment for future generations, and the remainder of yours, should encourage increasing collaboration between diverse disciplines and your desire for learning. **YOU HAVE TO COME TO KNOW MORE ABOUT SELF IF YOU ARE TO SURVIVE.**

INTENT HEREIN

Our intent herein and as we write our journals is to present information which can begin to allow YOU some insight, great insight—or simply passing interest, into the hidden places of the unseen world as relates to the known and seen visible world. Each of your fingers is made up of billions of functioning cells (unseen). We make every effort to write in such a way as to allow even the child to understand the workings of LIFE. You have to look and somewhat comprehend the concepts which unify the fields within biology and to the diversity that makes each field unique.

The series is open-ended for, as with all journal entries, we take that which presents in our daily logs and “life is what happens while we plan our schedules.” However, you cannot find nor understand “eternal youth” without learning something about the facts of aging.

I have chosen, however, to lump some of these more groupable “lessons” into numbered volumes to allow for ease of finding references. We will try not to make so many as to be equally scattered and overwhelming as are some courses in these subjects. Life is a wondrous journey through living matter and invisible wonderment. You don't and shouldn't dissect frogs to learn about LIFE but, to CONTROL any portion of living matter, even your own housing, you MUST HAVE INFORMATION AND KNOWLEDGE. Until you comprehend that **YOU ARE THE MIRACLE**, you cannot expect to know the secrets of the greater meanings of LIFE.

George Sand once stated: “One is happy as a result of one's own efforts, tastes, a certain degree of courage, self-denial to a point, love of work, and, above all, a clear conscience. Happiness is no vague dream, of that I now feel certain.”

You, if you would find happiness, must KNOW TRUTH—but, you must also form traditions and bindings of family and society in good things which lay forth memories and cultural traditions which are carried beyond the moment. Life must ever be renewed, but some traditional foundations must form as well lest you lose all directions. It is when the tradition becomes so staid and accepted as to have **NO MEANING WHATSOEVER AND THE RITUAL BECOMES THE MEANING—YOU ARE LOST AND THAT IS WHERE YOU NOW RESIDE—IN THE KINGDOM OF THE LOST.**

Just as a bird must have its nest, an insect its web—so too must man have relationships, a home, a bond called society. But to have **JOY and GLORY IN THE PASSAGE**—it must be founded upon the rock of basic moral goodness, trust and faith, one with another. Where LOVE is absent, so too, is Joy. You may well acquire “things” but you will be absent the one thing which brings peace and happiness. He who hoards revenge and secret actions against a brother—can have no joy for he is ever fearful of being “found out”—even after his actions are “found out”. Mankind has become sick in Spirit and Mind, and until

EACH is ready to allow God entry and function becomes that which is Godly, there can be no peace and JOY, save in the passing moments of satisfied “gotcha”. “Gotcha” is a losing game in all instances, for the one “got” is “self”. So be it.

Gyeorgos Ceres Hatonn

September 29, 1995

May the life you find be your own!

CHAPTER 1

REC #1 HATONN

SUN., SEP. 3, 1995 7:18 A.M. YEAR 9, DAY 018

SUN., SEP. 3, 1995

THOUGHT FOR THIS DAY

“It is in adversity that the good show their friendship most clearly; prosperity always finds friends.”
Euripides

Into each life some rain is going to fall, readers. And then there’s the old saying, “Save for a rainy day”. Well, I have some news for you nice people: if no rain would come—you would not be here at all. Rain is a wondrous thing which you seem to recognize as adversity and a ruined trip to a parade or a beach when you wanted to sunbathe (and get skin cancer). No, I don’t buy that trash and neither should you. Flooded fields can even be salvaged if preparation is made against the floods in the first place. YOU and your greed-based buddies have set-you-up for exactly what is happening as to drought or flood, tornados or windless days on an electric windpark. YOU have to get your perspectives corrected and your perceptions sharpened. Look at EACH as a glorious day of adventure and possibility thinking—grand and wondrous things come from EVERY seeming adversity. When your attitudes make lemon pie from those rotting lemons—then and only then will you salvage your circumstance and bring it again into joy.

Fun and games without the soul are not of lasting value; joy within is the point of our journeys—all of them. For EVERY problem there is a solution and for every solution is a good resolution. YOU have to decide which it will be. IF YOU DON’T WANT YOUR OWN DIRTY LAUNDRY AIRED IN PUBLIC—DON’T BRING UP THE PUBLIC NOTICE. People may well overlook some of the dingy spots but when you call me liar, cheat or thief—I TAKE EXCEPTION AND I WILL ALWAYS PRESENT YOUR INDISCRETIONS RIGHT OUT ON THE TABLE FOR THE SCANNING MICROSCOPE—**EVERY TIME!**

For example: Green has just notified everyone in an extremely poorly written dissertation of garbage that HE OWNS THE COPY(WRITE) [copyright??] to *Sipapu Odyssey* and plans a lawsuit if it is used with Wally Gentleman. Fine, that story was written in 1986 (before George Green even arrived on the scene) by Dorushka Maerd (Doris’ pen name for that volume. Meaning: Doris’ beloved dream.) in conjunction with Little Crow, etc., etc., and is copyrighted with the Screen Guild—it was a motion picture “treatment”. Is it possible that Mr. Green has stolen another volume of our work?? How interesting can a person become? Make sure, Ed, that all involved parties get a full copy of Mr. Green’s latest document so that Mr. Gentleman can see for himself the expectations. Fight the dragons? Of course not, for the dragons are attending themselves. Give no space or energy to the distractions. If he does more and greater foolish things—we cross those bridges as we reach them.

It would, however, be suitable and probably quite advantageous later if ones involved, i.e., Dr. Overholt

and Wally Gentleman—do a thoughtful and thorough response which can be presented clearly, succinctly and truthfully to a court of law, for Mr. Green is stating he is going through “authorities” and continues to work at bankruptcy of the Institute. This involves a LOT of you and I think it would be suitable to respond to him. We will not take more space in the paper, please. Pity the poor soul but waste no compassion—and KNOW the difference.

Now, let us move smartly on to the topics in progress, Dharma. If there is room in the paper being currently pressed, fine. If not, we shall be ahead of them. I do not want to DISTRACT from Mr. Martin’s topic in any way. I do, however, need to present the resolution and solution to such problems as the Gulf War Syndrome, etc. God always provides a WAY—but you have to seek it out, find it, and then act upon it. We can do no more.

Mr. Green believes he will put a stop to the “quackery” at this place? How so? Nothing save colloids comes from THIS place and even then it is not of Ekkers’ possessions. Just because Dharma presents the “recipe” for something is just like those original volumes Mr. Green holds—no return to her. His thefts hurt you-the-people, not the Ekkers. Funny things happen when you “lose it all”—a whole different perspective takes over your lives and you grow up and use and hold value in different perception and take shelter under and within that which is offered for same. Remember that a good hard RAIN often does more cleaning than anything else around—it certainly separates friends from adversaries. If you are left, after the storm, with no friends at all—YOU HAD NONE WITH WHICH TO BEGIN!

BIOLOGICAL TRANSMUTATIONS, PART 14

By Louis C. Kervran

English translation: **Michael Abehsera** (1972)

[Continuation of Chapter XIX, *How to Make Experiments with Biological Transmutations Successful*]

[QUOTING:]

ANALYSIS

The germination should be terminated two weeks after the beginning of the experiment (which was started at the full moon) by putting the crystallizing dishes in a drying stove at 60°C. They should be left there 48 hours, but if need be they can be left only 24 hours with the thermostat set at 90 or 100°C.

Right after cooling, grind the young plants in a mortar. Or, use the sulfo-nitric acid method.

This destruction can be done in different ways. In general, every laboratory chief has his own technique. Nevertheless, I would like to point out that the acid being used for the destruction acts on matter not yet incinerated which still contains some water. The pH of the acid will thus rise, and it will be necessary to supply more acid in order to maintain the pH at 4.8, an optimum level for the extraction of all phosphorus.

Notwithstanding, the method using sulfo-nitric acid is preferable ($100 \text{ cm}^3 \text{ HNO}_3 + 10 \text{ cm}^3 \text{ H}_2\text{SO}_4$). The mineralization is done as it is taught to laboratory assistants: heating, sudden discharge of nitrous

vapors, cooling. The black and thick liquid thus obtained is slowly heated by adding 80 cm³ of a mixture of 20 cm³ of H₂SO₄ in 1,000 cm³ of HNO₃ until discoloration. Add 25 cm³ of doubly-distilled water and heat again until the nitrous vapors disappear. When it is cool, strain the liquid from which the aliquot parts will be taken for the dosage of the element.

The lots of seeds which were not germinated and which were being kept for eventual comparison go through the same process: desiccation at 100°C, grinding, destruction with sulfo-nitric acid, analysis, etc.

Analysis must be done on the sulfo-nitric mother solution (on an aliquot part 25 cm³). The amount of phosphorus is determined by adding a sulfo-molybdic solution (classical method). The phosphorus content will show a very significant decrease, but further investigations are necessary because the process is not the same in all plants.

Hence, when oats are germinated in water very poor in limestone and absolutely free of phosphorus, there is a phosphorus increase in the germinated plants after six weeks.

One may conduct research on manganese and iron variation in a similar way. In fact, there will be an Mn decrease and a corresponding increase of Fe in the germinating seed. (Let us recall that there is one more proton in ⁵⁶₂₆Fe than in ⁵⁵₂₅Mn.)

Some plants, such as **rye-grass**, make Mn, while others, such as oats, cannot. In some plants Mn decreases.

It seems to me preferable to conduct this specific experiment in an autonomous way, i.e., not using an aliquot part from the preceding experiment relative to phosphorus. In fact, the experiment can be made even more dramatic by adding to the Evian water (which does not contain any) 10 mg of MnSO₄·7H₂O for 10 cm³ of water (2 mg of Mn), which is approximately ten times more Mn than one lot of 10 g of seeds would contain. (This is true for plants which cannot make their own Mn.)

The experiment is conducted in the same manner as the preceding one, including the destruction with sulfo-nitric acid. Mn and Fe are then weighed by the usual methods.

Analysis will verify that there is much more Fe after germination, whereas Mn could have completely disappeared. This experiment indicates the power of the enzyme responsible for this transmutation of Mn into Fe.

RESEARCH ON Mg AND Ca VARIATION

Using the preceding methods one may study the variation of Mg and Ca in germination. If Evian water is used, it is necessary to measure the quantity of water used and its Mg and Ca content.

A precaution should be taken, though: when the seeds are soaked in water one day before the germination (to eliminate the deteriorated seeds) distilled or doubly-distilled water should be used. Evian water would make it impossible to determine the quantity of Mg and Ca absorbed by the seeds.

The analysis of Mg and Ca requires some precautions. In fact there are interferences of their ions which are divalent, and there is a risk of possible substitution in many reactions.

Specialists in analysis are well aware of this and know which method to use when these two elements are simultaneously present. Here are some figures concerning the content of these elements in fresh seeds: 60 to 140 mg of Ca in leguminous plants, for 100 g of seeds; 80 to 200 mg of Mg, depending on the species, variety, and soil. The different research conducted on Mg variation during germination has shown a 9 to 16% decrease.

COMPLIMENTARY RESEARCH

POTASSIUM VARIATIONS

Many experiments with microorganisms have shown an increase in potassium when N and Mg are provided. This indicates the reaction ${}_7\text{N} + {}_{12}\text{Mg} := {}_{19}\text{K}$.

With the bacteria of saltpeter there is an increase of K and a decrease of Ca. This is the reaction ${}_{20}\text{Ca} - {}_1\text{H} := {}_{19}\text{K}$.

It is possible to note the K variation in germinating seeds.

(1) Lots of 20 g of watercress seeds are analyzed to make a dosage of K. Other lots, germinated in distilled water without the addition of salt, render 0.505 g of K_2SO_4 per lot.

If magnesium nitrate is added to the distilled water, there will be 0.570 g of K_2SO_4 (an average for three lots) which means 0.065 g more than with pure water, or 11.4% more due to the simultaneous presence of N and Mg.

The variations of K are complex, for they can produce Ca and vice versa. They may also come from $\text{Na} ({}_{11}\text{Na} + {}_8\text{O} := {}_{19}\text{K})$.

The K increase will be quite pronounced if the germinating process is begun during the full moon and terminated at the new moon. The result will be the opposite of the P variation (experiment conducted by Hauschka; *The Nature of Substance*). The variation is greater for most seeds at the end of autumn.

Note: Studies on potassium are delicate because there could possibly be an exchange between the potassium contained in the glass and the solution in the receptacle. An exchange is also possible during manipulation, heating, or when the solution contains an ion monovalent like ammonium. In other cases (for receptacles made of Pyrex, quartz, plastic, or metal) the exchange is negligible, but it is safer to make a preliminary experiment since some plastics give a potassium salt in the polymerization, and this salt is never totally eliminated.

2) The link between Ca and K can be verified in the following: in lots of watercress seeds (20 g each) 0.18925 g of CaSO_4 was found. The germination was done in distilled water in which 0.200 g of K_2CO_3 was added to each lot. After the germination there was 0.22175 g of CaSO_4 .

Ca increase: 0.0325 g, i.e. 11.88% percent MORE Ca (average on four experiments).

Conversely, if a calcium salt is added to the water, K increases. In distilled water, with no salt added, 0.505 g of K_2SO_4 was found for every lot of 20 g. When calcium nitrate was added the average increase was 0.0725 g, i.e. 14.37%.

[H: So what? Well, I suggest you study this information carefully. You don't have to be a rocket scientist or a whiz-kid to see that you do not get OUT what you PUT IN. So, if you need more useable calcium in your body you WILL NOT get it by adding calcium—you will simply get calcium clumps, bone spurs and such dastardly things as that—and, probably, an overload of Potassium.]

Do your physicians know all this? OF COURSE NOT! But then, don't be too hard on doctors because, after all, they used to bleed people to death to “cure” them of something—and—they also had to be TOLD to wash their hands between patients of examinations—to stop the spread of Childbed Fever. They are given one or two days training in nutrition—and then are trained by “detail” salesmen from drug companies for the rest of their TRAINING in the drug trade. So be it.]

CHAPTER XX

AGRICULTURE

[H: This may well be THE MOST IMPORTANT chapter any potential gardener or farmer may EVER read. You diligently go about the ACTUAL process of depleting your lands while thinking you are building them. If you do not consider the proper methodology and additives, you will have failure—especially with crops which do not hybridize, such as Spelta, red lentils, etc. These crop fruits will NOT deplete themselves and produce mutant harvest. Some individual seeds may well have mutation but the crop as a whole will not deplete the fruit—it will simply not produce. You must go into the “survival” mode with these facts in mind and then you can know what to grow to garner the best harvest for your needs and realize how to grow plants in the best potential medium.]

Classical agriculture (by this I mean the science that is taught in schools) is a huge imposture which is frightening in its cynicism. It recommends the use of complete fertilizers, the word “complete” being identified with N, P and K, as if these three elements were the only ones to be found in plants. Its basic postulate is to restore in quality and quantity the soil's elements taken from it by the yearly harvest. One may say that this agriculture has enclosed itself in a dilemma:

a) If the law of restitution is to be satisfied (whereby one implicitly recognizes that elements other than N, P, and K are taken away at harvest), the plant would have to find these other elements in the soil in limitless amounts.

b) Or, plants themselves must make these elements found at harvest and not provided for the soil. Implicit in this alternative is a transmutation of elements through a biological channel.

Otherwise, what kind of explanation can be given for the continual removal of sulfur from the harvest, for example? Let us take a crop of oats and circumscribe our study to a yield of 4000 kg per hectare (1 hectare = 2.471 acres). In the grain alone (without taking into account what is in the straw) there are 8 kg of sulfur per hectare. Where does this sulfur come from in impermeable and clayey soils, as in the case of oats?

It is not a question of migration, for from where would sulfur migrate? The same question can be posed regarding other elements. With zinc, for example, we find 120 g for 4000 kg per hectare of oats. There are also 160 g of manganese per hectare. After a few centuries of cultivation this adds up to many kilos.

Not all of these elements, however, exist in the soil in such quantities. Plants find what they need, depending, of course, on the plant and on the soil. One should not generalize. It must be established whether or not the soil contains elements that the plant will utilize to fix other elements not found in the soil, which are necessary to its growth. This being established, all conditions must allow the transmutations to take place. The latter usually occur in the presence of microorganisms for which the rhizome must provide the conditions for a vigorous proliferation. Thus we must have the synthesis of a biological agriculture which is far-removed from classical agriculture, concerned only with providing N, P, and K.

APPLICATION OF BIOLOGICAL TRANSMUTATION

Biological transmutation explains the basic process of biological agriculture, whatever the specific method. The biodynamic method, as well as other methods involving active processes, uses decoctions (fermented solutions of some plants very rich in various oligo-elements) to balance the acidity of the soil. The oligo-elements are indispensable to the enzymes: the enzymes (whose work is somehow activated by the activity of certain vegetals and even mammals) are in turn responsible for the biological transmutations.

The activation of this enzymatic action by the plants also explains the increasing success of phytotherapy and aromatherapy.

The attempt to provide plants with even a small amount of elements saturates them with these elements and creates an imbalance in them and in the soil. There arises a deficiency in other elements, and certain natural reactions are impeded. Everything becomes fragile, the soil's health deteriorates, and the reactions of the vegetal organism cease, making it susceptible to parasitic invasion—hence the necessity for the use of pesticides. Biological agriculture, on the other hand, considers which elements should be brought to the plant to be transformed into those elements found in the final stage of metabolism. The agriculture of the 19th and 20th centuries is dying, whereas biological agriculture is now taking hold.

May the reader take heed against the so-called “verifications” made by past professionals of agronomy. These findings are often illusory. (See *French Academy of Agriculture Bulletin*, 1970) Analyses have shown discrepancies of 30 to 300% in all that has been published—even by official document.

It is quite sad that such data could possibly have been published, for they manifest clearly the incompetence of many laboratories. The figures are too exaggeratedly different and contradictory to be taken seriously. I shall not expatiate further upon this unfortunate example which betrays the low level at which some research workers are operating. However, I shall return to these errors later. [*E.Y. Editor's note: The problem Kervran alludes to is pervasive throughout modern science. I was figuratively "burned at the stake" for making similar claims about the incompetence of so-called prestigious research laboratories and premier research Universities. Sadly, the New World Order's "dumbing down" plan is working now here as well as in the very machinery of so-called Higher Education. If you stop to ponder the ramifications of that one "success" on the rest of society, you quickly come to the mess that is our modern world.*]

Let us take care of the work ahead of us and be unperturbed by skepticism. We are meeting with opposition that is increasingly animated, yet one only reacts against that which has become a threat. As a friend wrote me, "The vigor which you are meeting is beneficial. The weight and worth of these antitheses reveals the certainty of the thesis."

Agronomists have always recognized that virgin soil, never before cultivated, will provide a good harvest without the aid of manure or fertilizer. Little by little, however, deficiencies arise because some specific elements are found missing after the harvest.

These agronomists have noticed furthermore that allowing the earth to rest (lie fallow) for a few years restores its lost elements. They solved the problem by establishing a rotation cycle in which a fallow period is planned. Leguminous plants such as clover and lucern-grass are sown and they "fix" the nitrogen, thus shortening the necessary length of the fallow period.

[H: While there are problems over the circumstances of our own research farm, it has been long enough in struggle to simply allow this year to be considered a lay fallow year if conditions continue to be filled with difficulties. If you wish to hire someone to turn and prepare the soil, then rather than leave it completely fallow—plant some legume plants. However, anything planted either now, Spelta, or in the Spring should be that which can manage on small irrigation needs (as if fallow) or leave alone and clear weeds as they grow so that you will be ready to utilize all the land when appropriate and equipment and personnel are available. Do not push the river lest we just further the burden. I repeat something which no-one seemed to wish to hear. You can let the land for sheep grazing but I think you would find some goats far better for weed clearing. You can even have some milk-goats if you want to handle milk. This will require good fencing or a full-time herder so do that which is most suitable and least expensive. You must keep the weeds under control or the neighbors will demand same through the commissions. No ongoing farmers want the weed seeds and there are fire and land regulations which MUST BE MET.]

Agronomists explain this phenomenon by saying that the missing elements are brought by dust, by animals, by migrations through the soil, etc. These are simplistic explanations. To say that these "ghost" elements come from a progressive solubleness of the insoluble composites of the soil is another simplistic assertion. In order to discard objections of this sort I have presented data concerning the soluble and insoluble. The traditional notion of solubility is far too arbitrary: an insoluble composite may be dissolved by the secretion of radicles, by microorganisms, etc. It is a mistake to separate the soluble from the

insoluble in the laboratory. The acid arbitrarily chosen to dissolve the mineral compounds of the soil has nothing in common with the multiple and specific acid secretions of the radicles, nor does it have anything in common with the microorganisms of the soil which dissolve these elements insoluble in water but soluble in acids.

Around 1600 a Flemish chemist, Jean-Baptiste Helmont, planted a tree in a pot containing 200 lbs. of earth. After five years the tree had gained 164 pounds. The earth had also gained weight, but only two ounces. Helmont had not supplied any mineral elements, taking care only to water the plant. He hoped to prove that water had become solid matter.

This summary experiment teaches us little, but it is a case where the origin of matter stimulated research.

In the mid 19th century in Nantes, Grandeau demonstrated that a field which rests a few years tends to regain its balance. If the soil is too acidic or too basic, it eventually becomes neutral.

Garola confirmed this observation at the end of the 19th century. In Germany Rudolph Steiner started experiments of this nature and in 1925 founded a “school of balanced agriculture” in Switzerland. The Swiss Pfeiffer took over. His books were published in French. The one most relevant to our concern is *Fécondité de la Terre*, (Edit. Les Triades, Paris 1949) and here are a few examples of his observations:

LAWN AND DAISIES

In order to produce a beautiful English lawn it is necessary to have earth containing limestone. Whenever limestone is missing, daisies spring up in the lawn. For a gardener that is the signal to correct the soil. The less limestone there is, the more daisies. Pfeiffer analyzed the ashes of the daisies and verified that they were rich in lime. Since the daisies grew precisely when there was no more lime in the soil, Pfeiffer asked himself, “Where did this lime come from?” He could not find the answer.

One could not say, of course, that lime came from migration, for in that case the grass itself would have had some too.

For Pfeiffer this provided an example of the soil’s natural tendency to find balance. When lime is missing, plants poor in silica grow and their ashes are rich in lime. Hence when stems and leaves fall in Autumn, the soil gains the missing lime. These examples of interactions are frequent in Nature. However, a mystery persisted: what was the source of the lime in the daisies?

VARIOUS OBSERVATIONS

Pfeiffer’s work raises other questions. Buckwheat has a marked affinity for sand; silica is very rich in calcium. Let us examine why.

Wheat likes soil relatively rich in lime. The incineration of its straw gave, for a specific field, a weight

of ashes which was 6% of the original dry weight of the straw. In these ashes there was 5.8% lime and 67.5% silica. On the other hand, if clover mixed with the same wheat is sown in the same field, the clover—which grows better in siliceous soil—gives 35.2% lime and 2.4% silica in its ashes.

The amount of silicon and calcium in most plants is independent of the amount present in the soil. The plant's composition is constant, depending on the species (at least roughly constant, for the quality may vary with the soil). Cultivated digitalis (fox glove) may not contain digitalis; parsley may not have vitamin D, etc.

The oak, a tree indigenous to granitic or slaty regions (i.e. soil rich in silica) where limestone is sometimes completely absent, may contain limestone, largely in its wood and bark. (Up to 60% lime has been found in its ashes.)

The engineer Simoneton reproduced the following already known experiment:

Slips of geranium grow quite well in a sand of pure silica; they are watered with rain water or distilled water, with no organic element added and with no other mineral but silica. An analysis of these plants shows, however, that they produce lime in addition to other elements. Fresh sand containing bacteria is used, not sterilized sand. This sand, called "pure", contains, besides silica, traces of seven elements (representing 0.17%) of which 0.15% are iron oxides, titanium, calcium and aluminum.

To conclude this part of the chapter let us cite one of the numerous experiments made on the English experimental farm of Rothamsted by Lauwes and Gilbert, two great scientists of the second half of the 19th century.

A commercial garden produced a culture exclusively of clover for 17 years. It was mowed two or three times a year and was sown with seed every four years without the use of fertilizer. Regarding this experiment Lauwes and Gilbert write, "A singular fact was verified... this piece of land, devoid of fertilizer, gave cuttings so abundant that if one were to add what had been taken away over 17 years, one would arrive at these figures: 2636 kilos of lime, approximately 1255 kilos of magnesia, over 2150 kilos of potash, approximately 1255 kilos of phosphoric acid, and 2636 kilos of nitrogen."

Figures from a study (Reinberg, *Le Potassium et la Vie*, P.U.F., Paris 1955) made in France in 1955 indicate that the plants took 1,500,000 tons of potash per year. 300,000 tons were provided by manure and 450,000 by potassic fertilizer. Hence the fields were given only half of what was taken away from them.

The soil does not contain such reserves of potash. How then could 750,000 tons be taken every year?

The reader understands better, now, that plants have two ways of producing potassium: from sodium, by the reaction sodium + oxygen = potassium, and from calcium, by the reaction calcium - hydrogen = potassium.

I would like to recommend the research recently conducted in Ohio by J. Benton Jones, an account of which appeared in *Science* magazine (4/2/65, p. 94). An experiment of this sort opens a new channel for

research. But here again we find verification of a phenomenon without any explanation.

The oligo-elements are indispensable. They enter into the structure of the coenzymes. If there is no metal in the coenzyme, the enzyme remains ineffective. With these important oligo-elements molybdenum (Mo) is found. Mr. Jones discovered a deficiency of potassium in leaves of hybrid corn and at the same time verified that the leaves were too rich in molybdenum.

<u>Plants deficient in potassium</u>		<u>Normal plants</u>	
Potassium (%)	Molybdenum (parts/million)	Potassium	Mo(ppm)
0.97	2.0	2.70	0.5
0.56	4.0	2.49	0.9
0.52	2.8	1.73	0.7

One can see that under a certain level of K there is an Mo decrease.

After that, Mr. Jones made a systematic study by changing the doses of potassium given to the soil. Here are the results which I shall give in kilograms per hectare (1 hectare = 2.471 acres). [see Fig. 12]

Potassium given to the soil	Degree of deficiency in K	Composition of the leaves	
		(K %)	Mo (ppm)
	0		severe
	4		
	36		light
1.79	1.2		
	72		null
2.28	0.9		
	108		null
2.49	0.9		

The amount of molybdenum does not change when there is adequate potassium. The diagram shows the simultaneous variations of potassium, calcium, magnesium, and molybdenum. Although the author makes no comment, the reader will rapidly make the comparison. Calcium diminishes, but potassium increases. Let us note that the calcium and magnesium are almost parallel. This can be explained: the plant needs calcium to make the magnesium of its chlorophyll, and the more calcium is given, the more the plant enriches itself in magnesium (up to a detrimental limit, of course). Conversely, if there is not enough calcium, there will not be enough magnesium. It should be noted that even without any potassium being provided, it will be found in the leaves, but four times less than if it had been given abundantly.

[See fig. 12 next page]

This experiment leads us to a general statement: the origin of the molybdenum cannot be detected. But an interesting conclusion to which this experiment brings us is that **a plant rich in potassium will be poor in molybdenum (one of the most important oligo-elements).**

Agronomists should then know that an excess of potash, even if it is supplied by manure, leads to a deficit in molybdenum.

It is well known that a fruit sickness called “bitter pit” in the U.S.A. results **from an overly rich supplement of K in comparison with Ca.** Tomatoes have a Ca deficiency **if too much K is present.** One may compensate with Mg which, becoming Ca, will reestablish K/Ca. **[H: Tedious this may be— BUT, if you want healthy bodies and ability to have that which you need—you had better learn it.]**

fig 12

If potassic fertilizers are exhausted some day it would not be so catastrophic for the agronomists who use them. They may be obtained either industrially or directly from the soil in at least two ways. Yeasts and microscopic seaweeds can produce potassium from sodium; other microorganisms can produce it from calcium. **[H: How many of you have heard of diatomaceous earth? I thought that might get a whimsical glance around the room!]**

Already a few companies are producing microorganisms to be utilized in agriculture. Yeasts of all kinds are made industrially, molds (penicillin, etc.) as well.

The problems of deficiency in animals and vegetables require closer study. Cattle breeders and agronomists will be forced to recognize the phenomenon of biological transmutations, a phenomenon which, although everyone has already observed and used it, is not understood—thus its application has been limited.

This is the prediction of the leaders of all the associations which advise and apply the biological culture in France, Italy, Switzerland, Germany, England, etc. These leaders are the elite of the agricultural world. They have observed that chemistry does not explain all of biology, that too much confidence in chemistry, where biology is concerned, is an error responsible for much damage.

Excess in any domain is inevitably paid for one day or another. We are often advised to use 250 kilos per ha (100 kilos per acre) of potassic fertilizers at 50% K_2O , or 625 kg/ha of sylvinit at 18% K_2 , although cereals on the average do not take away more than 40 kilos per ha of K_2O per year. Thus 3/4 of the K_2O is lost.

How much land is lost in America! In the west of Europe the harm is less visible for the time being, for the common sense of the peasant has helped to postpone the reckoning.

The *development of parasites* is also a consequence of biological imbalance. Thus agronomists have had to consult their colleagues who understand the necessity for developing biological culture.

The mechanism of these biological transmutations teaches us what to give the soil, according to the following conditions: that the soil be alive, that it be rich in microorganisms, and that the proliferation of the latter be possible. If the soil is too much damaged by chemical abuse, one must reconstitute it. This can take time, especially if there is no humus (an essential part of living soil).

A SIMPLE EXPERIMENT: THE
FORMATION OF CALCIUM IN THE
GERMINATION OF CEREALS

Here is a simple and convincing way to demonstrate the validity of biological transmutation. For practicality I have chosen to give a simple and essential experiment with germinating seeds. (Experiments on man and animals are very complex.) The experiments involving microorganisms give rise to problems which can be handled only with great skill.

Many kinds of seeds have been used and the variation of different elements has been studied. Nevertheless, for the sake of illustration it would be better to limit ourselves to an experiment in which the variations are quite great. Here is our example: let cereals germinate in a medium without calcium and witness the increase of calcium after germination.

The author conducted this experiment using wheat and oat seeds from a biological culture. One hundred hand-selected homogeneous seeds were incinerated in order to determine their calcium weight. (The figure obtained was compared to the average weight found in different seeds, from dozens of analyses of thousands of seeds. This was done in order to insure that no grave error had been committed during the manipulation or analysis of this 100-seed lot.)

One hundred identical seeds were germinated in vats, on porous ashless paper saturated with a fertilizing solution of salts dissolved in water. The solution was free of calcium. After six weeks the vegetation was arrested by placing the young plants in an electric oven. The plants were then incinerated and analyzed in the same manner as that used with the first lot of seeds.

More than twenty such experiments were performed, essentially on oats, by changing the moment when the sprouting was begun, extending or shortening the time of culturation, or using different varieties of seeds. Here are the results obtained. The values are given in milligrams per unit (for every seed or for every plant). For lots of one hundred seeds, these numbers must obviously be multiplied by 100. One may operate on lots involving many hundreds of seeds.

Oats	Wheat		Oats
	“Roux clair”	“Noire du”	Pa-
nache			
Prieure “de Roye”			
Weight.....32.98	37.96	24.48	
Calcium (in one seed).....0.0386	0.0372	0.0235	
Calcium (in one plant).....0.129	0.155	0.106	

There is 3.34 times more calcium in the wheat; 4.16 and 4.51 times more calcium in the oats.

Augmentation of this kind cannot be the result of errors in computation of results. Nevertheless, the chemical analysis was confirmed by a modern and specific physical method of great sensitivity: **analysis by spectrophotometry of atomic absorption**. [**H: Now isn't it just a nice coincidence that we have "happened upon" a spectrometer which will suffice when the FDA comes to call? God works miracles in His wonders to perform???**] The converging results were communicated to the Head of Agriculture of France on the 1st of December, 1971, by the chemist-engineer J.E. Zundel.

COMMENTARY

These numerical values ask for some remarks. In biology one should never generalize. These experiments have shown us that calcium increases in great proportions in some plants. Every plant reacts differently (or, rather, every species of plant). That is why the increase is greater for oats, whereas in some plants—rye-grass, for example—the calcium does not increase. Hence we learn a lesson: plants able to make their own calcium can grow very well in clayey and siliceous soils, whereas others cannot make their own calcium and must be given it. (The variations of Mg and K in oats were also studied.)

Other observations of ours have proved interesting to many scientists. For instance, the effect of the moon is very important for the formation of calcium. [**H: He said formation of calcium—not werewolves!**] In the previously mentioned experiment, the germination operation was begun at the new moon and terminated at the second full moon, which followed in approximately six weeks. [**H: I don't intend to go into Astronomy or Astrology to bog down in hocus-pocus but there are some VERY DEFINITE cycles that flow with the cycles of the Moon—even more than appears with the Sun (seemingly). However it is because you notice more at moonshifts for you are accustomed to having to have cycles turn on the Sun.**]

I can give only an outline of this relatively simple research on the germination of seeds. However, I remain at the disposal of all those who can afford to reproduce such an experiment, to whom I can give all the useful details. [**H: Well, not exactly as you might suspect—the man is long "dead". So, "trust me, the check's in the mail...!"**] If they do not have the material means for the analysis, they may entrust the analysis of their seeds and plants to a laboratory equipped for such research.

The importance of such an experiment in terms of its application is in knowing whether the calcium increase occurs during the germination only, or whether the whole plant becomes richer in calcium (to the detriment of another element which is transformed into calcium—here, potassium). In the latter case the soil's composition would be modified by the stubble remaining in place after harvest. There is here a very interesting study to be made by a laboratory of biological agriculture.

I have reported the qualifying observations made by Pfeiffer on different plants (e.g. the daisies in the grass) which enrich the soil with limestone. Another example, very well known by horticulturists, is the case of azaleas. A culture of these plants was made in a soil of heath, an acid soil devoid of limestone. The soil analysis showed that it became too rich in limestone and the cultivation could be continued only by removing a layer of soil and replacing it with the soil of heath, or by cultivating plants which cannot make calcium. This example is another illustration revealing a substitution of calcium with another simple body,

which would have to be determined in the case of every cultivation.

The whole secret of biological culture is yet to be discovered with the study of substitution. This phenomenon cannot be studied by reason alone; it must include concrete experimentation. **[H: Ah, but you CAN learn from the EXPERIENCE of others—especially the “organic” growers.]**

The present form of agriculture, to which our biological agriculture is opposed, leads to the ruin of soil and health and will eventually bring about the death of humanity. Already man is poisoned by all sorts of pesticides or by mineral excess. Phosphates, while favoring the proliferation of some plants which invade the waters, simultaneously deprive the water of oxygen and, little by little, make all life—animal and vegetal—impossible.

Let us then heed the advice of the specialists of agro-biology in order to insure the good health of the vegetal kingdom and of man.

[END QUOTING OF PART 14]

Let us leave this as it very lengthy. We will next take up the topic of “Nutrition”. Oh, botheration! No I am NOT going to tell you to live on nothing but Spelt—but close! If you get the things you NEED for full health—you can have almost anything else you wish—but you may find you don’t longer “wish” them.

CHAPTER 2

REC #1 HATONN

MON., SEP. 4, 1995 8:23 A.M. YEAR 9, DAY 019

MON., SEP. 4, 1995

AMONG THE TOP TEN LESSONS

“DO NOT GIVE TO YOUR FRIENDS THE MOST AGREEABLE COUNSELS, BUT THE MOST ADVANTAGEOUS.” Tuckerman

You must come to realize the above thought is almost important enough to be placed in the upper “three” lessons to be learned. When you fail to act within that counsel of presentation or acceptance, in thoughtful insight of self and circumstance—you greatly err. Opportunities come—and great opportunities come, sometimes, only once. If prior lessons have not been learned—then that once great and magnificent opportunity will be again lost to lack of self-realization.

Most people are only as happy as they make up their minds to be—in EVERY instance. If the dreams are to be successful and fulfilled—the work must likewise be done with that goal intent always uppermost in focus. When one acts in such a manner as to be only self-focused, especially while proclaiming God as focus, the stuff usually hits the fan one way or another. This will be reflected by defensive actions to negate the necessity to look at one’s own lack of self-respect. It is not sexual prowess or even what you refer to as “love”, that superficial toss-about word which builds relationships and honor—it is respect and reverence for both self and all those about you. This game is not about who can lie, or thief (without getting caught), or attain high placements which ultimately will be taken by another—it is mutual respect which makes lasting relationships and friendships—that ability to always, without exception—TRUST. People always tell on themselves when the confrontation with others happens—they will turn to the other person’s enemy and hop into his camp against you. It happens all the time—it has just recently happened here when confrontation came and need finally was reached to make some cutbacks mandated BY NECESSITY—the party in point could not wait for the finalizing of other alternatives—but suggested going to Jason Brent to “getcha”! Good, it cuts through the entanglement of pain for the ones who have to bear responsibility.

Closures come, readers, in every play. For all the sadness of closure, there is a new and joyful unfolding in the process of “becoming”. It doesn’t matter on “whose side” you may have placed yourself—you can move into better consideration in EVERY instance—or find the way most difficult—the choice is always YOURS. Do you burn your bridges before or after your chasm crossing? You might want to check on “facts” rather than the “fictional fantasy” you usually perceive, for far greater options were just ready to be inserted in this very place and now it cannot come to pass for some burned their bridges before crossing the river. You might also want to check the bridges you may be burning for those who rely on you such as spouses and children. Acquaintances will simply be left or moved on—friends will be friends or they were not so in the first instance. But what have YOU done to be worthy of friendship of that other you perceive as adversarial? In EVERY journey these self-truths must be confronted before the greatness of PUR-

POSE can be brought into fruition. The solutions are there for the grasping, but will YOU take the opportunity? So be it. The choices always remain with the individual but rarely are children's choices considered as "individual". Check out your choices!

Moreover, and this is for the "fixits": do you JUST want harmony so YOUR life is not ruffled—or do you want truth and resolution? Check your barometers and see where YOU tossed your towel.

Let us move on now to the next topic to put together our unfolding *miracle*:

BIOLOGICAL TRANSMUTATIONS, PART 15

by Louis C. Kervran

English translation: **Michel Abehsera** (1972)

[QUOTING:]

CHAPTER XXI

NUTRITION

It is universally known that one of the chief concerns of the times is the problem of nutrition. Vitamin pills have great success among those who are not sure that they are getting the proper diet. The source of protein is a mystery quickly solved by the nutritionist who gives his impatient patient as much protein as he fears he needs.

Theories about nutrition are based upon the old academic chemistry which declares that nothing is lost and nothing created: everything is transformed. Therefore, to be safe, extras of everything are given—plus always a little something in case of a leakage. Thus a chemical accountancy is forced upon modern man whose mind is centered on the capitalization of matter. Health is synonymous with capital. Proteins, minerals and vitamins are caused to be retained internally in any way possible. If the iron's desire is to leave the body, one employs a fixative so that it will remain there long enough to provide energy for meeting the day's activities. **In such a way chemistry has sold its SOUL to the merchants, the muses of the research workers; these workers are told what to produce in accord with the needs of the times.**

Medical doctors often do not know the contents of the drugs they prescribe. Merchants provide them with brief pamphlets which are too seldom read. More time is spent in the politics of big business than in curing the patient.

It is hoped that biological transmutation, which is intended for everyone's understanding, will awaken man from his lethargy. There is no need to surrender oneself to strangers who aim to manipulate consumption during the next decade. This new science with its clarity of exposition, its thousands of proofs, and its chief witness—the order of the world—will guide man in such a way that he will be able to choose his food himself according to his own needs.

[H: Since this information was published first, before 1960, and dealt with research from the '20s

and '30s, it is a bit frightening, is it not? Further, it was published from work and studies done in FRANCE (Europe). What think you now about America and, therefore, the rest of the world? Do you actually have CHOICES as indicated above? Of course not—you are simply buried in MORE confusion and sold on more and more junk intake as big business in vitamins/minerals moves into even higher running gear. I can only remind you to keep uppermost in mind the timing of what I have chosen to offer here because, had you changed when this information was brought forth, there would, actually, be no New World Order to worry about—for you would have maintained control of yourselves.]

The findings concerning calcification alone should suffice to convince anyone concerned with proper nourishment about the significance of biological transmutation. It does not help in any way to take into account the mineral calcium found in the food, for our organism rejects the majority of this calcium and fixes the rest of it but imperfectly. (When it is hot, especially, one rejects more of this element than one ingests.) **[H: PLEASE BACK UP AND READ THIS PARAGRAPH AGAIN.]**

The phenomenon of transmutation, unobserved by dietitians, proves the caloric balance sheets based solely on the chemical reactions of carbon oxidation to be inadequate. The research done with the calorimeter will not prove satisfactory since some elements, due to enzymes and various physiological conditions, can be transmuted with absorption or emission of energy. This is enough to show how incompatible are the complex determinations of the energetic balance sheets, setting forth the simplistic view accepted to this day by almost everyone.

We have seen the impossibility of relying completely on chemistry. Several medical doctors understand that a diet rich in calcium does not necessarily strengthen the bones. Decalcification is sometimes caused by a deficiency of the enzyme which transmutes sodium into magnesium. If, however, it is due to a deficiency of the enzyme which transmutes Mg into Ca, it is advisable to strengthen the bones with potassium and organic silica.

When calcium is being used by plants, this element, with the help of other enzymes, may produce potassium, and magnesium (as do the bacteria of saltpeter).

****DECALCIFICATION MAY THEN OCCUR WHEN SALT-FREE DIETS ARE PRESCRIBED, ESPECIALLY CHLORIDE-FREE DIETS.****

Silica seems to be a superior element for the strengthening of the bones. One must still refrain from excessive intake, as with any kind of food, but the tolerance is great. That is why it can possibly be used without medical control. The excess is eliminated by the urine, thus horsetail is a diuretic for many people.

[See figs. 13 & 14 next 2 pages]

The action of horsetail is rapid: nails which break easily, an early sign of decalcification, become normal within two weeks with a horsetail extract; horsetail decoctions take a while longer. **[H: Yes indeed we feed our Gaiandriana and Aquagaia silica AND horsetail extract. We add it to the Gaialyte also and make sure it is within the medium with which we make all varieties of “teas”. Our membrane cartilage product is heavily laden with Silica so that you get the most effective placement of the necessary components. I am contemplating asking that silica be added to the bread**

mixes—but that is something you can EASILY do right at baking time. If you use the liquid or gel you can add a bit to each loaf in exchange for the water in whatever amount you choose or use the crushed tabs or empty capsules directly into the mix. Good quality silica has no flavor so I suggest silica instead of horsetail extract or decoction as additives to foods. The heat of baking will not have any effect on the silica. There is NO REASON FOR CONTINUED BONE LOSS IN ELDERLY OR YOUNG IF YOU DO THE PROPER THINGS.]

fig 13

fig 14

Spectacular results have been obtained with fractured bones. An experiment was made in a specialized nutritional laboratory where young rats were subjected to a controlled diet. (*Transmutation of Faible Energie* (2nd edit.) Maloine Pub., 1972, p.100.)

These rats were divided into two lots of three each. One of the lots received a normal diet which included a fairly generous amount of calcium. The other lot had an extract of horsetail added to its food. X-rays of all the rats were taken ten days after their bones were broken. It was clear that the ingestion of vegetal silica had already healed the bones. An X-ray taken on the 17th day showed that the cure was complete, whereas with calcium alone, X-rays taken on the 17th day showed that the bones were not yet healed.

On the other hand, Professor Delbet demonstrated many times to the Academy of Medicine that it is beneficial to increase the usual allowances of magnesium. The cases of decalcification, much more frequent nowadays, are due in part to our “industrial” modern diet which is deficient in magnesium. White bread and white salt are preferred for business and aesthetic reasons, to the detriment of our health.

It would be beneficial if a systematic study were made, under medical control, in nurseries, kindergartens and high schools. There is much to be learned from the conclusions that would be made concerning the food that is provided there.

Statistics taken from January 1957 to November 1963 in Copenhagen showed that 80 children, from three to four months old, died suddenly. Although they had been given milk, their deaths were caused by a lack of calcium. Accidents of the same type were observed in a hospital in Paris. A post-mortem study showed that these sudden deaths, occurring in the cradle without warning, were caused by a spasm of the glottis which turned upside-down and obstructed the trachea.

Many hospital dietitians and even pediatricians do not yet know that these spasms, which are caused by a lack of calcium in the contractile cells of the blood, cannot be fought with calcium. Only magnesium can cure these spasms; the same applies to rickets. It seems that these unfortunate children had a deficiency of an enzymatic order; therefore, they had difficulty in transmuting sodium into magnesium. They should have been given more magnesium directly. Of course, one should be careful to give a supplement of magnesium to patients subjected to salt-free diets, to avoid decalcification.

Cereals and whole flours are richer in magnesium than meat products. We do not advise taking magnesium in the form of sulfate, this salt being purgative and irritating to the mucous membrane of the intestines.

When animals travel by truck or rail it is advisable to triple their intake of magnesium a few weeks before the trip, in order to strengthen their skeletons. This will permit them to travel without the risk of a fracture, especially the pig and calf which, due to modern methods, have “grown too fast”.

More could be written about dietetics in the light of the biological transmutations. It is expedient to expose the problem of decalcification since that is the most classical among the problems of nutrition. The reader will have to go back to previous chapters if he wants to understand more about the subject, succinctly treated here. In order to understand the problem of decalcification he will have to study closely all of the chapters in which calcium is involved. Once again, this book is intended only as a catalyst; its goal is to arouse in the reader—and hopefully in the minds of scientists—enough curiosity so that they will pursue the subject on their own.

I shall end this chapter with a story which illustrates in the most dramatic and clear manner the problem of nutrition.

A doctor advised a pregnant woman to take iron when he discovered that she was deficient in this element. But because iron cannot be fixed in the body he also advised her to take with the iron something to fix it in the intestines. The woman, who did not believe in taking too many pills, was somewhat shaken by the “news” that she was lacking iron. She went home and told her husband, who was well-acquainted with the phenomenon of biological transmutation. The husband reassured her that everything was all right, but that she would simply have to take more cereals and chew them more thoroughly in order to assimilate the manganese well and activate her metabolism. The husband then advised her to make her next appointment with the doctor in the afternoon instead of in the morning. A month later she went to the doctor, who declared that she had done well to follow his advice for there was plenty of iron now!

What happened was this: cereals, especially whole wheat, brown rice, [**H: SPELTA, SPELTA AND SPELTA!!**], etc., are rich in manganese. But we know that **MANGANESE CHANGES INTO IRON** ($\text{Fe}_{56} - \text{H}_1 \longrightarrow \text{Mn}_{55}$). The pregnant woman had a slow metabolism, so her husband advised her to see the doctor in the afternoon; by that time the manganese had changed into iron. A woman with a more active metabolism has plenty of iron within a few hours after breakfast.

Iron content varies with every individual and must not be administered mechanically. The biological transmutations promote the serenity of the physiological man as compared to the paranoia of the world of the “quick pill”.

CHAPTER XXII

MEDICINE

A time will come when the biological transmutations will be fully instituted and practiced in medicine. **[H: I take exception to this “dreaming”, scientists. This will NOT happen in a billion years as**

long as money is involved. **YOU will attend yourselves until you make it or break it from here on in, readers. “Medicine” is not going to do anything for you except strip you of that which you have left in working order. Neither I nor anyone else can give YOU what you must have to keep your machinery working properly and, as long as you slash, bash and burn along with the poisons presented by the New World Order Cartels who OWN the chemical and petroleum DRUG HOUSES, you can’t heal anything—much the less yourselves. You have come to the place of necessity of self-preservation or forget it and die on schedule.]** The health that modern man has is temporary, lasting just for the time it takes for the last pill to wear off. When a symptom of a sickness begins to appear one shuts it in mechanically with whatever new pill is on the market. If one unit is not enough, one takes two, etc.—for months, or even for life. Rather than seeking quality, one turns to quantity. Quantity overwhelms the sickness and baffles it for a while, but like a balloon pressed against the water, the sickness springs out stronger than ever in another place. In medicine, as it is practiced by many doctors, there is no intelligence involved. Everything is arranged so that nothing will be lost. When something disappears, everyone is worried and hurries to replace it immediately—and, to insure the success of this mechanical operation, a supplement is administered. From a comprehensive physiological understanding man has shifted to the purely mechanical. The body is but a factory without a foreman where all the machines run wild. A man is hired to put things together. But the task is so difficult that he gives up the job and another is hired.

The “replacement” of an element is a primitive approach, born out of defects in understanding. This mechanical attitude makes man a frightened being who is out of place in this world. This pattern of thinking and practice impedes progress and, worse, leads man to the loss of his mental faculties. With the proper understanding he could evolve and become the man he is meant to be, not a compulsively busy one, wasting his time patching up his sorrows and pains.

The phenomenon of biological transmutations brings man back to life and reality. By studying and making use of them man will recover the health he lost a long time ago. Health means not only to be able to do one’s work with a certain required strength, but to be a clear thinker who can spend time learning about the wonders of this world. To be healthy is to be able to grow and perceive; it is also the ability to learn from others with humility. An artificially induced physical health is temporary. True and complete health must encompass the mind as well as the body; it implies happiness and understanding. The application of the biological transmutations can be a guide for the safe conduct of man.

CALCIUM IS NOT ALWAYS THE ANSWER

The problems of decalcification and the strengthening of the bones must be investigated all over again. We have seen how fractured bones can be healed rapidly by means of organic silica (see chapter entitled “Production of Calcium from Silicon”). We have learned how horsetail, which is quite poor in calcium, can help heal fractured bones. Spring horsetail, as compared to summer horsetail, is rich in organic silica—not in mineral silica which is, on the contrary, decalcifying. **[H: This is VERY important so don’t take a rash approach to this without knowing the consequences. In dispersion or colloidal state the mineral silica is almost as useful. Further, when I say I have added to the Gaiandriana the “silica”, I mean exactly that—in colloidalized form because the cells need the PARTICULATE for their processing in perfect cells and this REQUIRES transmutation. You need the easiest-to-assimilate form of things because your body is so out of balance as to make it difficult for it to**

program itself. This is ANOTHER REASON you need GAIANDRIANA and AQUAGAIA—the intaken cells are already in perfect balance and will then program to your own needs—moving right to the imperfect cells of your own body and take on the DNA characteristics of the cells in jeopardy—be they liver, kidney, muscle or immune system.

If you don't have enough properly programmed cells working in your body—you are not going to get the fine results which could be yours by starting with a better cellular structure. You who have been regular users of Gaiandriana AND Aquagaia (mitochonDRIA) are a long way out front because when you rid yourself of parasites and then kill off the invading microbes intended to sicken you—you can then use this information to maintain a perfectly functioning body without drugs or toxins ADDED. I am, however, NOT INTO DOCTORING, MEDICINING OR “TREATING” YOU. I CAN TELL YOU WHAT THERE IS, WHAT IS AVAILABLE AND SUGGEST AN “ORDER” IN WHICH TO MAKE MOST CONSIDERABLE AND THRIFTY USE OF PRODUCTS—NO MORE.]

Fresh green vegetables (young plants), radishes, etc., contain a large amount of silica. We now know it is due to the ingestion of fresh grass that milk-cows can excrete more calcium than they ingest, without decalcifying. The mother who breast-feeds her baby may correct her diet by adding a small amount of horsetail to her food in order to avoid decalcification. This is now recognized without dispute and is being applied commercially in France.

Many articles include names of authors who have referred to my work, citing spectacular results obtained in the attempt to strengthen the bones with organic silica. The chief surgeon of a hospital asked for my assistance when he found himself confronted by a delicate case: a young man with bones broken very badly in an accident. The classical treatment of Vitamin D plus a phospho-calcic salt failed to bring about any improvement. However, the administration of organic silica healed the bones rapidly. I could cite various other examples.

At that time Professor Delbet had already arrived at the understanding that it does not help much to ingest calcic phosphates. He wrote, “It is questionable whether calcium phosphate is formed in the bones,” and, “We do not know how the calcic phosphates come to the skeleton,” for calcium has never been found approaching the bone.

In 1962 a Canadian author, H. Selye, wrote a whole book about what he called “calciophylaxis”, which he defines as “a diffuse hypersensitivity” in which “the tissues react... because of an intense and local calcification”—a purely dialectical explanation. Unfortunately, he concludes, “The nature of the local mechanism of calcification is one of the most important problems of biochemistry which has not been resolved.” He had no knowledge of my work.

The question of calcification commands us to revise all our notions about dietetics, for it is useless to take into account the mineral limestone found in food. Our organism rejects most of the limestone and fixes the rest but poorly. In general, one rejects ingested calcium when it is hot. The mineral limestone comes in part from magnesium, when the latter is produced in excess.

CHARNOT'S RESEARCH

(*Le Silicium dans l'Osteomalacie le Darmous et la Turbulculose*, C.R. Acad. Med., Paris 1947.)

In the autopsy of a tuberculous patient, Charnot noticed a strengthening of the bones and a simultaneous anomaly in the percentage of magnesium, accompanied by a lack of silicon in the bones.

Magnesium and silicon are two of man's main sources of limestone. The verification of this fact served as the starting point for systematic research on tuberculous guinea pigs, establishing that ***tuberculosis is always accompanied by decalcification***. Silicon disappears before calcium; that is an early sign of decalcification. But when organic silica is given, a rapid calcification of the caverns occurs.

When silica disappears, calcium leaves the bone. If organic silica is administered, the calcium returns. Whatever interpretations one may conceive, one fact is irrefutable: the two elements are linked.

Charnot also remarked that there is a link between potassium variation and decalcification. (See chapter entitled "Potassium-Calcium.") This fact inspired him to utilize the actions of silicon and potassium in the treatment of rheumatism.

To a patient whose rheumatism was so bad that it deformed her fingers and joints, Charnot gave bicarbonate of potassium with an extract of organic silica. An X-ray was taken before the treatment. After 6 days of treatment another X-ray was taken. It revealed a complete cure.

To another patient, suffering from a decalcification of the knees, he again gave organic silica, this time extracted from plants. The silica was given with bicarbonate of potassium. After a month of daily treatment the knee was healed.

To a woman who was badly decalcified he gave, for several consecutive days, an amount of calcium superior to the amount she was excreting; nevertheless, she excreted more silica than she ingested.

Though one can learn from this that potassium and silicon bring calcium to the bone, thus curing rheumatism without having to depend on the ingestion of calcium, he should be careful not to generalize. Excessively heavy doses of silica—especially the mineral ones—cause decalcification. Charnot's experiment is cited here as an example for the reader of how biological transmutation occurs in man's body.

The impracticability of an absolute reliance on chemistry has become clear to several doctors. For example, a diet rich in calcium does not necessarily strengthen the bones properly. This is the understanding of those concerned about promoting efficient diets. One of them, Dr. Plisnier (Belgium), made various observations which make sense in the light of biological transmutation. In his book *Save Your Health* he states a few observations which I can cite but incompletely:

a) A delayed dental growth in children receiving a diet normal in calcium (according to the old, classical dietetics which prescribes fruits, vegetables, milk, cheese, and meat) was corrected in a matter of a few weeks. The children were given instead a regimen excluding milk and cheese (which are considered great sources of assimilable calcium).

b) This same diet, poor in calcium, allowed the rapid repair of a fracture. The patient was a woman in

her sixties who had broken her femur which, in spite of two operations and a diet rich in calcium, could not be healed.

In medical reviews, authors are universally recognizing the contradictions which present themselves—concerning sodium, potassium, magnesium, or, most of the time, calcium.

Let us not accept blindly the dictums taught us. We have been told that the practice of substitution is essential, that if calcium appears it is because it has been displaced—by magnesium, for example. This is a position taken for the sake of conformity, to satisfy the “non-creation” dogma. Those who affirm the substitution theory have never weighed the magnesium and calcium before and after the experiment.

Those who believe in the substitution theory say that the total Mg + Ca is constant. This is an unfounded assertion, for the relative constancy they have observed results from the fact that Mg decreases and Ca increases. The sum of Mg + K + Ca is constant. But as far as some scientists are concerned, the element lost from an organ has gone to some other place!

I remind the reader of the experiments made in the Sahara Desert where for six months petroleum workers excreted an average of 320 Mg more calcium every day than what they ingested, and this without decalcification!

All that has been written on the metabolism of calcium which does not take into account the biological transmutation must be studied all over again, as there are important facts medicine must begin to use.

THE THYROID AND THE METABOLISM OF CALCIUM

In the chapter entitled “Sodium and Potassium” I indicated that the transmutations of the latter seem to depend on the aldosterone. But in the chapter devoted to magnesium, I made no allusion to the endocrinal secretions on which the magnesium-calcium link may depend. In order to orient research which would help determine the enzyme capable of accomplishing the transmutations, it seems useful to cite a few findings:

The role of the thyroid in the regulation of mineral metabolism has been studied in vertebrates and especially in fish, by M. Fontaine (1954). (*Archives Soc. Physiologie*, 7, C55 to C78 (Paris).)

The lowering of the water salinity of the outside medium stimulates the thyroidian formation of the fish, says M. Olivereau (1948), whereas the opposite, the elevation of the salt rate in the inside medium, makes the thyroid decrease its activity. (*C.R. Soc. Biologie*, p. 124, 176 (Paris).)

Nigrelli (1952) believes that it is the variation of the Ca/Mg ratio in the water which influences the thyroidian activity of the fish. (*Zoologica*, 37, 185-189 (Paris).) This is also recognized by Professors Berg and Rasquin; Olivereau admits it also (1955). Etienne (1958) studied the actions of the K, Mg, and Ca ions on the thyroidian function of trouts. (*C.R. Soc. Biologie*, 152, No. 2, p. 308-312 (Paris).) There are many others, such as Koch (1942), who studied the influence of the thyroidian hormone on the osmotic regulation of the fish. (*Ann. Soc. Roy. Zool. Belge*, 73, p. 164-172.)

Hence many individual discoveries have shown that the enzyme which regulates the relation between Mg and Ca seems to be secreted by the thyroid. The stimulating action would depend on Mg, which leads one to believe that Mg provokes an increased thyroidian activity.

A fault in calcium metabolism thus seems to be linked to a modification of the thyroidian and parathyroidian activity.

All endogenous formations of calcium seem to be connected with the thyroid and parathyroid. The action of K has also been studied: K increases thyroidian activity as does Mg; Ca does not. **[H: I suggest you who feel the call of the “wild chubbies” get onto some good portions of whole grain (Spelt) (a little goes a long way so you don’t need to OVERdo) and get your silica intake, Mg intake and some good amounts of potassium INTO THAT BODY. Give it a couple of weeks and see that you are utilizing your food better, feeling better and have a better thyroid output.]**

But calcium may also come from silica (and there could be a simultaneous action Mg, K and Si, producing Ca) so that one must find a link between organic silica and the activity of the thyroid.

It has been established that people with tuberculosis suffer a decalcification. Dr. A. Charnot proceeded with an analysis of 29 organs or parts from both a healthy guinea pig and a tuberculous one so he could weigh the silica. Here are some results, given in grams for 100 grams of fresh organs:

<u>Organ</u>	<u>Healthy Guinea Pig</u>	<u>Tuberculous Guinea Pig</u>
Lungs	0.0059	0.0058
Liver	0.0053	0.0068
Kidneys	0.0046	0.0055
Brain	0.0093	0.0104
Heart	0.0072	0.0073
Pancreas	0.0061	0.0044
Thyroid	0.0234	0.0533
Suprarenal	0.0418	0.0390
Blood	0.0452	0.0554
Cerebellum	0.0663	0.0686
Teeth	0.0505	0.0463
Bone	0.0491	0.0412
Skin	0.0657	0.0573
Hair	0.0899	0.0530

The silica rate is the same in the spleen as in the pancreas. Young guinea pigs have a thymus rich in silica.

One can see that in the teeth and bones the silica rate is high in the healthy guinea pigs but low in the tuberculous ones. This reduction of silicon precedes the reduction of calcium, as if it were the lack of silica which caused the lack of calcium. This is interesting because falling hair and nails is the early sign of decalcification. **[H: NOTE THAT POOR NAILS WITH RIDGES AND FALLING HAIR ALSO**

GO ALONG WITH HEAVY DIETING FOR WEIGHT LOSS.]

One can see that the thyroid is relatively much richer in silica than the other organs. Here the tuberculous subject has a silica rate twice as high as that of the healthy subject.

This relative abundance of silica suggests that the thyroid plays an important role in the metabolism of calcium. I do not think that this observation has been made before. That is why it will be fruitful to compare all the research made concerning the role of the thyroid in the metabolism of Mg, K, Si, and Ca.

There are some other cases where the action of the thyroid could be associated with magnesium. I have already stated the variations of Mg in cancer, as cited by Delbet. If the thyroid is removed when the cancerous tumor is operated on, the reappearance of cancerous tissue is much more pronounced.

Would this not come from the fact that the regulation of the Mg metabolism together with that of K and Si is perturbed? Wouldn't this be an ideal ground for the cancerous proliferation?

HEART FAILURE

Groups of M.D.s (some of them professors at the Faculty of Medicine) wishing to learn more about the basic problems of their discipline asked me to teach them the mechanism which had so far remained unexplained by biochemistry: the potassium increase in the blood despite a diet deficient in potassium. They had read my first books where I explained how the endogenous production of potassium was possible. This knowledge had opened for them new horizons in the explanation of the mechanism producing heart failure. (Death occurs when there is an exaggerated increase of potassium in the blood serum.)

It is known that the body cell (the nervous cell is no exception) is rich in potassium, although it lives in the midst of a nourishing liquid rich in sodium.

The potassium can go from the inside to the outside of the cell wall (called cellular body) and back again. In some cases the same is true with sodium—a normal balance is achieved by a much higher potassium content inside the cell. Because of this, there is outside the cell an intermediate potential between K and Na, leaning toward K. In the serum there is a potential leaning toward that of Na.

Let us recall that compared to that of the hydrogen electrode, the potential of sodium is negative: -2.175 volts. The potassium potential is even more negative: -2.924; thus K behaves more negatively than Na which has 0.209 volts. One can imagine a battery where the positive pole is Na and the negative pole is K. (The reader will recall that the differences of potential to which the nervous fibers are sensitive consist only of some tens of millivolts. There is a degree of rest and a degree of excitation. Thus great mixings of K and Na are possible, since in a pure state there would be 209 millivolts difference.)

However, if one ends up with a ratio such that the difference between the potentials on each side of the nervous cell wall is too small, excitation is not possible. The nerves are blocked and heart failure results.

In the case of heart failure the potassium increase in the plasma can rise so high that the difference of potential from that of the inside of the nervous cell becomes insufficient and there is a blocking of the

nervous influx. This, of course, is a simplified figuration, for the biological reality is always much more complex.

In order to prevent a dangerous increase of K in the blood, some doctors thought to maintain a severe regimen including a minimum of potassium. In spite of a significant deficiency of K in the food, the potassium level continued to rise, causing an eventual accident.

Confronted with such a failure, others thought that the dangerous K increase in the blood called for removal of this serum too rich in K and the injection of an artificial physiological serum at 9⁰/₀₀ of NaCl, containing no K. Unfortunately, this direct injection of sodium into the blood circuit provoked an immediate death.

There is, in the logic of the biochemist, another reason for believing that sodium should be given. When the potassium increased, there was an intense, unexplained “leakage” of sodium. The subsequent reasoning was thus: since the sodium goes away and there is not much of it left, we must give it to the organism!

The nuclido-biological reactions which I had observed helped to explain what was happening. An hormonal disorder (of the suprarenal) provokes the continual synthesis of the aldosterone, thus transmuting the blood’s sodium into potassium.

Hence, in this case the potassium increase in the blood has nothing to do with the oral ingestion of potassium, because it is the sodium of the blood plasma which becomes potassium. It is only the sodium ingestion that one should change, and it is understood that by an injection of artificial serum—water salted with sodium chloride—the blood receives a fresh and abundant afflux which transmutes immediately into potassium and causes death. A salt-free diet is traditionally imposed, **but for a lasting cure one should act on the suprarenal. [H: !!!]**

ADDISON’S DISEASE

In December 1963 a chief endocrinologist of one of the largest hospitals in Paris asked me to give some doctors an exposé on potassium. This professor wanted to show his assistants, interns, students, pharmacists, laboratory chiefs, etc., the formation process of potassium and the disappearance of sodium, since the sodium “leakage” and the potassium risings remained unexplained. A typical example is Addison’s Disease, where the percentage of sodium in the blood plasma decreases while the percentage of potassium increases.

It had been established in 1927 by Bauman and Kurland that the potassium increase in the blood serum was caused by a malfunctioning of the cortio-suprarenal.

In 1931 Hastings and Compere, in a surrenalectomy on a dog, verified that on the second day the increase of K in the plasma can exceed the normal balance by 50%, causing death to occur a few days later (at which time there is six times more K than normal).

The potassium also increases in the cell. Harrison and Darrow in 1938, Buell and Turner in 1941, verify this in the rat.

This observation invalidates the arguments of people who say that the increase of K in the blood serum is caused by a “leakage” of K from the cell. The researchers previously cited provided proof that it is the total potassium which increases; it is not a case of the simple removal of an ion.

In Addison’s Disease the symptoms are aggravated by an excessive supplement of potassium in the diet. The disastrous role of potassium with regard to cortical malfunctioning has been confirmed on surrenalectomized animals by Allen, Nilson, Kendall, Cleghorn and McVicar.

The plasmatic sodium, which falls in cases of cortical malfunctioning, rises under the effects of D.C.A. or cortisone. The plasmatic potassium, which rises in cases of cortical malfunctioning, is decreased by D.C.A. or cortisone. The opposite effect which these have on Na and K was established in 1948 by Green, in 1939 by Kuhlman, and in 1940 by Tookes. D.C.A. can act so intensely that it can cause a loss of the K stored in the cell.

Darrow demonstrated that under the influence of D.C.A. a deficit of intracellular K causes an alkalosis. This alkalosis (increase of Ca), linked to K, has been confirmed by specialists of endocrinology.

Thorn, in 1941, demonstrated a different effect caused by cortisone on Na and K in Addison’s Disease. An excess of cortisone (or D.C.A) can lead to such a loss of K that decalcification results. It was never understood why the lack of K caused the lack of Ca.

Rheumatism treatments with cortisone (200 Mg/day) modify the Na/K equilibrium. Long treatments can lead to fatal troubles by causing the atrophy of the gland which secretes these hormones (resulting in a reduction of the cortex matter).

In the treatment of rheumatism, as in the treatment of Addison’s Disease, the amount of potassium excreted is greater than the amount ingested. This negative balance sheet is accompanied by a negative calcium balance sheet, showing that the disappearance of K is accomplished directly by the transmutation of the latter into Ca.

CUSHING’S DISEASE

Here, the opposite is true: an hormonal excess leads to a sodium increase in the blood.

The alkalosis in this disease is corrected simply by giving potassium.

Cushing’s Disease is caused by excess suprarenal activity which in turn is often produced by a tumor of the hypophysis, no longer able to control the suprarenal. The latter then produces an abnormal quantity of cortisone and other steroid hormones. One knows the effects of excessive injections of cortisone. Excess tension, a loss of minerals in the skeleton and a poor endocrinian function are the consequences, and together they may ultimately cause death.

Cushing’s Disease has been considered incurable. It has always been treated by surgery: by the partial removal of the suprarenal and the removal of the tumor in the hypophysis. It has also been treated with gamma or X-rays, an attempt which always causes damage to adjoining tissues.

[H: Anybody getting sick to your tummies yet? How many people do you suppose “medicine” is killing off every year? You have the perfect setup here for needing all sorts of transplants, dialysis treatments and infinite (until you kill the patient) use for drugs which INSURE DEATH and misery while you attain death. WHAT YOU DON’T KNOW IS KILLING YOU MORE AND MORE RAPIDLY EVERY DAY.]

People who undergo cortisone treatment typically excrete more K than they ingest. For us this fact was one of the leads in researching the enzyme which provokes the transmutation of Na and K and which seems to be the same group.

The secretion of ACTH from the hypophysis under traumas such as hemorrhages, severe burns, violent physical effort, acute infections, bad wounds, operational shocks, strong emotions, etc., also causes a large secretion of K. I believe that in this case we should study the possibility of giving a physiological serum (Na). Whoever deals with the excretion of K must also consider the Na consumption, since Na is needed to replace K. Hence water, salted with NaCl, should be given as liquid intake to avoid a possible loss of K.

Above all, one should not commit the grave error—which is still being made—of saying that since the organism is losing K, one should introduce more of this element. (This is similar to returning to an organism its wastes!) Actually a large injection of KCl could be dangerous because it might cause a local and lethal concentration in the cells.

It is by using precise balance sheets that we have established the reality of the biological transmutations. It can be seen that this “new” science clarifies much that has remained mysterious thus far (concerning the metabolism of potassium, for example). This evidence must surely oblige everyone to return to his studies in biology. Indeed, the facts have been seen for a long time. It was no disappointment for me to learn that they had been discovered before me. Quite the contrary—I was thrilled, for this merely proved me to be correct. **[H: AHO!]**

[END QUOTING OF PART 15]

I can only continue to urge you to not look at this information as old or just a “botheration”. You do not have to be a college graduate to learn the symbols and signs for elements and find out what YOU NEED. You have been so trained and controlled as to disallow any measure of attending your own welfare. I am not going to hold you down and shove something down your gullets—how long and well you wish to live is strictly up to you. Don’t write or come to Dharma, either, to lay forth a plan FOR YOU. You are perfectly capable and she has no more information than do you. I am warning you, however, that some of your holistic healers, herbologist, etc., are JUST AS MISINFORMED AS ANYONE IN THE SO-CALLED PROFESSIONS!! You are going to have to go back to the early basics and work forward if you hope to regain your health and maintain through that which is coming upon you. We can offer help but no more. More people are KILLED every year by the mistaken assumptions regarding potassium than probably any other cause. YOU HAVE TRULY BECOME PEOPLE OF NOTHING BUT LIES. If you pour sugar into your automobile gas tank, what happens? Well, you do far, far worse things to your “auto” and fuel system and motor than anything you can do to your cars, etc. Are you not important enough to learn a few basic and simple things to attend self—at least as much as you are willing to learn about your new car? So be it and Salu.

CHAPTER 3

REC #1 HATONN

FRI., SEP. 8, 1995 7:20 A.M. YEAR 9, DAY 023

FRI., SEP. 8, 1995

***“A FOE TO GOD WAS NE’ER TRUE FRIEND TO MAN;
SOME SINISTER INTENT TAINTS ALL HE DOES!”***

(A wise old speaking.)

I am in a most unique position to watch what mankind does as he denies God, God’s Hosts and God’s way. When the confrontations come it seems every bridge across every chasm is set afire in revenge for interpreted “wrongs”. Then, as reason comes to light, it is attempted to withdraw the flames, plead impatience and error, and beg God to put the bridges back in place that you might cross into the “Promised Land”. Well, often the bridge has been burned on the bodies of those perceived as the erring parties, the stories change but still shield self, and you find that which you SEEK buried in the rubble in the bottom of the canyon beating upon the rocks in the middle of the gorge. I marvel at MAN in that he will go to the ends of the Earth to destroy HIMSELF.

I further find it interesting that for the sake of ones’ “own good” a man may well SAY he has rethought a given set of circumstances and apologizes—so that he might go back to the acceptance which was without complication and sheltered him from his own responsibilities. The assumption, of course, is that God’s people will simply suck in their breath and say: “Of course, brother, come back in for I have missed you kicking and beating me.” Well, sometimes, there is simply nothing to come back TO—for the reasons for actions in the first case, which offended so greatly, was the LAST alternative available in the given set of circumstances. Chance after chance is given while the bridge is standing and the crossing easy. Then, after the bridge is burned, comes the realization that that bridge is not so easy for passage—THEN, and only then, do we come off our ponies and consider “better” alternatives than cutting our own throats. Well, “I” do not cut throats, I do not tell of bad things to come without offering solutions, and I don’t take responsibility for your silly actions. I have a team who has learned that quite profoundly.

Forgiveness has NOTHING to do with your actions against me. I have nothing to forgive, and forgetting is a stupid response to anything for you as a people have “forgotten” everything of truth that you ever KNEW. Every child must learn to walk on his own two legs or he is handicapped, at the least, for all his physical days. By far the majority of mankind get up on their feet and walk—in all directions as if in blind-man’s bluff. Fine, for those are the ways of learning, if, after the child is matured physically, he continues to keep the blindfold on or rips it off and moves in intelligent, sober intent, with the assumption he knows what he is doing, or, he says he has not learned enough and willingly hoves-to and learns with his back to the task.

How many of you can relate to the Christian on the rooftop in the midst of the flood who waits for God to save him? The truck comes by and asks him to come aboard and into safety, then the little row-boat

comes and he declines for “God will save me.” Finally the rescue squads come in their boats and still he waits for God; then someone comes by in a low-flying plane and tosses a life-ring which is pushed away for “God is going to save me.” Then, just as the water reaches to the ears, a helicopter comes and the response from the drowning man is that “No—God is going to save me!” Then the man drowns quite dead.

His spirit comes to the “gates” and begs entrance, but in a most angry attitude. “Why didn’t you save me?” he spouts off to God. “I did,” says God, “I sent the angels for you!” “Ah,” shouts back the drownee—”but they were the angels of death!” “So be it,” said God. “I sent everything from a truck to an aircraft and you denied them—they were ALL angels of life—YOU WAITED FOR THE ANGELS OF DEATH!”

While you WAIT in defiance of that which IS—do you then blame God and God’s responsible people who have offered the life-ring? This may perchance be OK in the daily hum-drum of existence: it is NOT OK in the vineyards of God when a task is at hand that YOU have asked to do. Blaming another and/or God for your misadventure is not an equitable nor legitimate response.

I am continually disappointed and amazed at those, who could have had it all—who demand to be left in FLATLAND counting pigs for, after all, pigs is pigs. Moreover, WHAT DO YOU PROVIDE FOR YOUR SPOUSE AND PARENTS IN THESE IRRESPONSIBLE ATTITUDES BUT, MORE THAN THAT, WHAT TEACH YE YOUR CHILDREN IN THESE PERFORMANCES OF ZEALOUS DEFENSE OF SELVES? THEN, FINALLY, WHILE ONES ARE WORKING TO GET THE LIFE-RING TO YOU—DO YOU PUSH IT AWAY IN A FIT OF TEMPER? SO BE IT. We serve the angels of LIFE, for revelations of truth come in many forms for your growth and learning and when YOU withdraw from school, so too do the teachers stand back and stop offering to save you in spite of self! REMEMBER, READERS, THOSE PEOPLE SERVING AND SAVING YOU ARE ALSO ABOUT GETTING THEIR LESSONS AND THEY DIDN’T DROP OUT OF SCHOOL.

You will accomplish exactly what you set out to accomplish—be it great or perceived failure. All the thrashing about will do naught but insure your achievement of that which you perceive of SELF. After you bash, trash and thrust out at others around you in an effort to get them on YOUR side of something or other—and they see what you have done and how you have performed—who will be there to help you move on? Who will seek a job for you? Sometimes that “better deal a’comin’” that you forfeited the NOW to await—eludes you after all. If you take no responsibility in the NOW when the work is there but the abundance is NOT—who will want you in attendance when the abundance arrives—at “their” responsible labor’s rewards? These are worthy things to consider as each does his part to change a sinking world. Readers, you are on the rooftops and the angels are gathering. Which angels will you choose? And remember, the choice WAS MADE BEFORE YOU GOT TO THE ROOF-TOP!

Now, for an even more difficult look at self: Do YOU just go about trying to smooth over all things—right or wrong? Are you a “fixit” who assumes the roll of “fixing” that which is obviously broken? Do you repair it PROPERLY or do you screw on a cast and leave the leg at odd angles to later infect and fall off? And, furthermore, do YOU attempt to get the unbroken leg to fix the broken leg? You know, that leg that said, “Hey, ‘nother leg—you are broken and you make a cripple of both of us.” Do you go forth and say, “But, unbroken leg—you are strong and other is weak.” So?? WHY is that LEG BROKEN? Will YOU see to it that all the legs are broken so that the ill-begotten broken leg can have the crutches and rise again to

walk in the pot-holes to break again and again? We did not come forth to walk in the pot-holes of a dying world—we came to see who would FLY with the angels of life and who would sink with the angels of death. We seek LIFE, not DEATH.

WHAT IS LIFE? WHAT ARE SECRETS WHICH ALLOW FOR LIFE? AH, THE UNIVERSE IS AWAITING YOU WHILE YOU QUIBBLE OVER EGO POWER. YOU CANNOT KNOW LIFE IF YOU REFUSE TO LEARN WHAT *IS* LIFE!

We have now written on the Secrets of Life and on Transmutation—both of which are mandatory lessons if you are to have any idea of that which IS and that which you ARE. In the meanwhile, every effort is made to thwart our presentations. The world falls in on Dharma, as a for instance—in hopes of silencing our messages. I know our subjects are boring and seemingly useless—**BUT THEY EXPRESS WHAT YOU ARE**. How can you go on a trip saying you want to go directly to Canada while living in Southern Texas by not bothering to get a map and proceeding through Mexico, South America, Africa and back to the Antarctic, then to Asia, Australia, etc.? God is not going to pick you up and force you to move north to Canada! God will assume you like the world tour!

START WITH THE BASICS

I find that we NEED even more basic material than I have yet offered. I cannot expect you, I see, from your modern school teachings, to understand anything about SELF and LIFE. To allow YOU to see this consequence of sleeping overtime I will ask some questions and see how many of you “ordinary” citizens can answer the questions.

Let us only consider some molecular aspects of Biology, here. I have no wish to place you in a state of shock—but if you don’t know what a molecule is—how can you expect to understand the functioning of integrated molecules—WHICH YOU ARE?

In this listing I note that even this doesn’t make much sense to you so let us consider a bit more material and see what you think might be category one, two, three, etc.

1. Would you expect the chemical organization of living organisms to differ markedly from that of the rocks and minerals of the Earth’s crust? Would you expect to find unique types of chemical compounds associated with living organisms?
2. All matter is said to be composed of atoms. Do you think this includes living organisms? What do YOU know about the nature and variety of atoms that is applicable here?
3. You have probably heard that living things are largely composed of water. Does this appear to be a desirable feature? Can you imagine some form of life entirely lacking in water content? What properties of water might make its presence very desirable in living organisms?
4. Are all chemical compounds about the same relative size and complexity? Do you think there might be some relationship between the complexity of living organisms and the unique compounds of which they are composed?

5. Is there more potential energy associated with a boulder poised at the brink of a cliff, or with the same boulder lying in the valley at the foot of the cliff? Is there more potential energy in the gasoline in the fuel tank of an automobile, or in the exhaust fumes from the automobile engine?
6. What is a catalyst? How does it affect the rate of chemical reactions? Are there special catalysts in living organisms to affect their chemical reactions?

Ah, I see, you aren't quite up in the "know" to understand exactly what I have in mind? We have gone from nothing to a discussion about chemistry, physics and, for goodness sakes, electricity! Well, you are an ELECTRIC CELLULAR ENTITY WHO FUNCTIONS ON LIGHT! But since when? Always! How? Ah and now maybe you will give attention? We will go through the rudimentary things of vocabulary first so that we can move into CONCEPTS with some amount of language understanding.

I have tried to start here with the most simple concepts which should have been learned in grade school. I have no wish to overwhelm anyone. However, readers, you have placed your very existence and your "perceived" eternal lives into the hands of self-proclaimed experts who have made sure to feed you THEIR drugs, THEIR lies, and THEIR controlled information. They have taken absolutes as in mathematics, chemistry, cellular life and altered the presentations so that you no longer KNOW anything about your subject save what you have been TRAINED to accept. Then, they further teach you to WAIT for REVELATION of some kind or another. You have to KNOW about self before you can change the world! You can realize that "something" is wrong with society and political aspirants—but you have to KNOW a bit about SELF and living cells to achieve your destination and relationship, even with GOD.

The most wondrous realization and truth lies in the incredible LIFE of the UNIVERSE—and you drift through in blind acceptance of that which ALL YOU ARE.

Let us see if we can utilize some text materials and outlay some terms and explanations and see if you can learn some basics—then we can move on.

Commander Soltec gave some wondrous lessons on Geophysical phenomenon but, as we move within that which makes up YOU, we bog down for you have no fundamental knowledge of self—even the TEACHERS and PROFESSORS are now teaching what they were taught—and that is often WRONG INFORMATION.

Let us try to put this information in some type of order by calling this first section:

CHAPTER ONE THE LIVING WORLD AND ITS STUDY

Preview Questions:

1. *What would you expect from a study of biology? How will it contribute to your life?*
2. *What do you envision when you think about life within a forest? What creatures are present? What are they doing? How are their activities interconnected?*

3. *Where does one begin the study of biology? With the structure of the forest, with the organization of one group of living things within the forest, or with the structure or activity of an individual creature?*
4. *How would you proceed to satisfy your curiosity about life? What kinds of activities characterize the scientific study of life?*
5. *How do you explain the variety of organisms and the many ways of living found within a forest?*

TERMS

ORGANIZATION: An arrangement of things in a pattern, such that the parts are integrated; seen, for example, in a college or university with students, professors, administrators, departments, schools, etc.

ORGANISM: The individual living thing, characterized by an organization of parts; for example, a dog or a tree.

COMMUNITY: The interrelated variety of organisms living in a particular place, as evident in a forest.

MATERIALS: The physical substances of which the Earth, its atmosphere, watery areas, and organisms are composed.

ENERGY: That which makes action possible: energy is contained in the food you eat.

BEHAVIOR: The movements of organisms in response to conditions around them; evident, for example, when a dog encounters a cat.

MOTIVATION: The inner feeling that serves as the “push” for thought or action. It becomes evident, for example, when the child catches the adult eye or ear by an intrusive act.

OBSERVATION: The act of noting objects and events through the employment of one or more of the human sense organs and the brain; as indicated by a driver stopping his automobile when the traffic light is red.

GENERALIZATION: A statement illustrating or describing the essence, core, or common feature of a number of observations; for example, the statement, “The modern city is a complex and changing social institution.”

EXPLANATION: A statement of the relationship between facts or ideas; for example, the statement: “There is a historical basis for the structural similarity of man and whales.”

HYPOTHESIS: A statement of possible explanation; as seen in the idea, “Breathing difficulty may be due to certain materials in the air.”

THEORY: A hypothesis in which there is confidence derived from confirmation based upon testing the explanation. This is illustrated by the statement, “A change of environment, to one containing less pollen in the air, results in marked reduction of breathing difficulty. Pollen appears to be the source of the breathing upset.”

A good illustration of this might be found in the O.J. Simpson matter; i.e., the Defense hypothecates that there was planted evidence and therefore O.J. is innocent of the murders and was set up by someone.

Theory: A party is found who plants evidence exactly like that found in the plot of the murders. So, the theory may then evolve from the hypothesis that somebody else may well be responsible for the murders. This is oversimplification, but suffices, I believe. The proof of the hypothesis follows the theory and then proof must be accomplished.

Let us give a try at some review questions and see how best to proceed with these lessons so that as we write we can all be explicit as to understanding when a given “term” is used by either of us. If you cannot learn to be explicit in all things—you will be tossed on the winds of misunderstanding and poor communications, or, implicitness. It doesn’t matter what “term” you give a thing—as long as all parties KNOW EXPLICITLY what is the MEANING of the term.

Review Questions:

1. Why is it important for you to study other living things as well as the human being? What does man have in common with other living forms? How does man differ from other organisms? What is the relationship of man to other creatures?
2. What actors and themes would you expect to find in a grassland prairie? In a mountain-top meadow? In a tropical rain forest? In a desert oasis?
3. Will you find the same kinds of organisms in each of these communities? Why or why not? Are there any similarities in the activities carried out by the organisms of these varied communities? What are the common activities? What lies behind these similarities?
4. Which level of biological organization catches your eye as you examine a community in your vicinity? What other levels contribute to this level? Which levels, because of the size of the organized being, require special techniques for their study? What procedures are required for each?
5. The traffic light changes from green to amber. I am in a hurry to get home for dinner and wonder whether it is possible to accelerate and get through the intersection before the light turns red. At that moment, I recall a newspaper report of a collision with great damage, due to one party’s driving through on the amber light and the other party, in a great hurry, starting through on his amber light. What might happen if I continue through the intersection? My foot is applied to the brake, and the car is halted before the light changes. Identify the following aspects of this experience: motivation, observation, hypothesis, generalization, explanation, and behavior.
6. Do you find yourself using the scientific conceptual scheme? If not, why or how is it unsatisfactory to

you.?

Now let us consider a few more advanced “terms” for specific discussions as needed to understand. We will move on to:

CHAPTER TWO: UNITS OF LIFE
MOLECULAR ASPECTS OF BIOLOGY

[Refer to the already presented Review Questions above, prior to Chapter one.]

A FEW TERMS TO KNOW

ATOM: The smallest unit of matter with a **distinct chemical identity**. Atoms are composed of smaller elementary particles.

[H: By the way, as we move along here, I am offering that which is accepted information—we aren’t going to quibble over details AT THIS POINT. You need fundamentals and we can deal with advanced Cellular Life, later—after you have an idea of that about which we speak in generalities. We are not trying to give you one lesson and you become a rocket scientist—although that is, unfortunately, the way today’s rocket scientists achieve their place in history—after blowing away worlds.]

ELEMENT: Matter composed of a distinctive kind of atom; i.e., a pure sample of the element gold would be composed only of gold atoms. Over 100 different elements *are now known*. **[H: The text I hold is from work presented BEFORE 1970 so is already totally outdated. However, the basic terms are yet valid enough for your present needs.]**

MOLECULE: An organized form of matter containing two or more atoms (of the same or different kinds) combined together. **[H: Even this can be argued with validly—however, as with Dr. Young, we CAN live with this for basics. I suspect Drs. Ed and Norey, Overholt and James will be patient with our lessons—lest they get given the teacher’s role in my stead. Do all we Biology professors, Chemists and Physicists understand me? If you already know all the answers, perhaps you could learn a bit about “teaching”!?!]**

COMPOUND: Matter composed of molecules containing two or more different kinds of atoms. If two oxygen atoms combine, a molecule of oxygen is formed, but this does not constitute a compound; i.e., its properties are not distinctly different from atomic oxygen. However, if two hydrogen atoms and an oxygen atom combine, a molecule of the new compound water is formed, with chemical and physical properties quite different from those of its component atoms.

ELEMENTARY PARTICLES: The component units out of which atoms are built. There are only a few types of elementary particles. The diversity of atoms results from specific collections of elementary particles. For example, an atom composed of one proton and one electron is a hydrogen atom, whereas an atom composed of two protons, two electrons, and two neutrons is a helium atom. **[H: And now you have neutron BOMBS which can be easily carried in a lunch sack which can take out whole cities.]**

Three types of elementary particles of great interest are:

PROTONS: Particles with an arbitrary mass value of 1 and a *positive* electric charge.

NEUTRONS: Particles with an arbitrary mass value of 1 and *no electric charge*, i.e., electrically neutral.

ELECTRONS: Particles with only 1/1836 the mass of a proton and a *negative* electric charge.

ATOMIC NUCLEUS: The central portion of an atom, containing its proton and neutron complement; thus, the preponderance of its mass.

ATOMIC WEIGHT: The total mass of an atom, i.e., the sum of the masses of all its constituent protons, neutrons, and electrons. For all practical purposes, the mass of the electrons is negligible.

ATOMIC NUMBER: The characteristic of an atom determined by its normal number of protons (or electrons).

ELECTRON SHELLS (ORBITS): The pathways around the nucleus of an atom traveled by its rapidly moving electrons. Each type of atom has its distinctive number of shells and its specific number of electrons moving in the shells (orbits).

CHEMICAL BONDS: Those specific forces that hold together the atoms of a molecule. These are of three major types:

COVALENT BOND: Results from the sharing of electrons between the outer orbits of two atoms.

IONIC BOND: Results from the transfer of an electron from the outer orbit of one atom to that of another atom. Ionic bonds result in one atom becoming negatively charged (an anion), while the other becomes positively charged (a cation).

HYDROGEN BOND: Results from the presence of a hydrogen atom attached to two negatively charged atoms on opposite sides. This is a weaker bond than the others but is of great importance in biologically significant molecules.

ION: An atom or molecule that has either lost or gained one or more electrons from its outer shell. Those that have lost one or more electrons are termed *cations* and are positively charged, whereas those that have gained one or more electrons are termed *anions* and are negatively charged. (From the Greek term meaning “wanderer”.)

ELECTROLYTES: An alternative term for compounds with ionic bonds. Refers to the ability of their water solutions to carry an electric current.

NONELECTROLYTES: An alternative term for compounds with covalent bonds. Refers to the inability of their water solutions to carry an electric current.

SURFACE TENSION: The tendency of the surface of a liquid to act like a stretched film and contract to a minimal area.

IONIC DISSOCIATION: The tendency of the ions of an ionic compound to separate into free ions and wander randomly through the solution when dissolved in water.

ACIDS: Chemical compounds that dissociate in solution to liberate hydrogen ions (H^+).

BASES: Chemical compounds that dissociate in solution in such a way as to be able to combine with hydrogen ions (often, but not always, by the liberation of OH^- ions).

pH: A symbol representing hydrogen ion (H^+) concentration in a solution. The pH scale runs from pH 0 to pH 14. The smaller the pH value, the greater the H^+ concentration. The midpoint of the scale (pH 7) represents the point of neutrality—the pH of pure water.

BUFFERS: Substances that can prevent a drastic shift of pH in a solution despite the addition of a considerable quantity of acid or base.

ORGANIC COMPOUNDS: That large and biologically important class of compounds that contain carbon, nearly always hydrogen, and perhaps other elements as well. The name was derived from the early observation that such compounds always appeared to result from the activities of living “organisms”.

INORGANIC COMPOUNDS: The class of compounds that includes all compounds not classified as organic. Thus, all compounds may be divided into the categories of organic and inorganic. The name resulted from the early observation that such compounds were characteristic of the nonliving (“inorganic”), mineral crust of the Earth. **[H: Do NOT bite on the “non-living” presentation here. ALL things are LIVING. It, therefore, is simply a descriptive term to separate major categories.]**

STRUCTURAL FORMULAS: The symbolic, TWO-dimensional representation of the spatial arrangement of atoms in a molecule. *Empirical formulas*, by contrast, represent only an inventory of the numbers and kinds of atoms in a molecule. The empirical formula of ethyl alcohol is C_2H_5OH , and the structural formula is:

formula

ISOMERS: Two or more compounds with the same empirical formula but different structural formulas. Two compounds that differ only in being “right-handed” and “left-handed” mirror images of one another are known as *stereoisomers* (or *epimers*).

FUNCTIONAL GROUPS (RADICALS): Certain distinctive groups of atoms frequently found in molecules. Some common examples would be the amino group ($-NH_2$), the carboxyl group ($-COOH$), and the methyl group ($-CH_3$). They play an important role in determining the chemical behavior of the

molecules of which they are a part.

MACROMOLECULES: Large or giant molecules, usually composed of hundreds, or even thousands, of individual atoms. Macromolecules are commonly formed by the linking together of simpler molecules (*monomers*) into very long chains (*polymers*).

CARBOHYDRATES: The important class of organic compounds that includes sugars, starches, and their derivatives. They normally contain carbon, hydrogen, and oxygen, with the latter two elements in the 2:1 ratio found in water; thus, the name *carbo-hydrate* (“Carbon-water”). The simplest carbohydrates are termed *monosaccharides* (“single-sugars”). These may be linked together in long chains termed *polysaccharides* (“many-sugars”). If the chain has only two links, the substance is a *disaccharide* (“two-sugar”). [**H: This becomes very, very important when we get around to informing you about the “mitochondrias”.**]

CONDENSATION (DEHYDRATION SYNTHESIS): The chemical process by which large molecules are synthesized by the linking of many small molecules, with a molecule of water being split off in the formation of each bond. The reverse process is known as *hydrolysis*, i.e., the cleaving of a large molecule into many smaller molecules by the insertion of a water molecule at each joint.

LIPIDS: The poorly defined class of organic compounds that includes fats, oils, and waxes. Lipids are generally characterized by poor solubility in water. Simple lipids, phospholipids, and steroids are some of the common subtypes of lipids. Fatty acids are important components in most lipids.

PROTEINS: The important class of organic macromolecules that exhibit both great complexity and wide range of biological activity. Protein chains are polymers of *amino acids* linked together by *peptide bonds* into highly specific sequences. (Amino acids are simple molecules containing an amino group and a carboxyl group.) These chains (the *primary* structure) are commonly coiled in a long helix (the *secondary* level of structure), which is folded, looped, and crosslinked (the *tertiary* level of structure) to form a highly *specific* and unique molecule. Proteins may be joined with other classes of compounds (such as lipids) to form *conjugated* proteins (such as lipoproteins).

NUCLEIC ACIDS: The class of organic compounds that includes the largest molecules found in living organisms. These serve as the hereditary material. Nucleic acids are polymers of *nucleotides*—simpler building-block molecules containing a nitrogenous organic base, a simple sugar, and a molecule of phosphoric acid. There are two types of nucleic acid: *deoxyribonucleic acid* (**DNA**) and *ribonucleic acid* (**RNA**).

ENERGY: The capacity to perform work, or move something. While actually doing work, the energy is termed *kinetic*; otherwise, it is *potential* energy. Kinetic energy may take the form of mechanical motion, light, electric current, or chemical activity. In general, energy is readily convertible from one form to another.

Activation energy: The energy required to start a chemical reaction. This is analogous to the energy required to push a boulder over the crest of a hill in order for it to roll down the slope.

EXERGONIC REACTIONS: Chemical reactions in which a net amount of energy is released; i.e., the change in free energy is negative. Oxidations, such as the burning of coal, are exergonic reactions.

ENDERGONIC REACTIONS: Chemical reactions that require a net input of energy in order to proceed; i.e., the change in free energy is positive. Reductions, such as the formation of sugar from CO_2 and H_2O by green plants, are endergonic. In this case, the energy input is in the form of sunlight.

OXIDATION: A type of chemical reaction in which energy is released from a compound; i.e., the reaction is exergonic. Oxidation basically involves the *loss of electrons* from a compound and may be accomplished by either the addition of oxygen or the removal of hydrogen from the compound. The burning of wood, the rusting of iron, and the production of carbon dioxide from sugars in the human body are all common examples of oxidation.

REDUCTION: A type of chemical reaction in which the energy content of a compound is increased; i.e., the reaction is endergonic. Reduction basically involves the *gain of electrons* by a compound and may be accomplished by either the removal of oxygen or the addition of hydrogen. The production of sugars from carbon dioxide and water in green plants represents the most important biological reduction.

CHEMICAL EQUILIBRIUM: Refers to the situation where a chemical reaction proceeds in forward ($A \rightarrow B$) and reverse ($A \leftarrow B$) directions at the same rate. As an analogy, consider two groups of boys throwing a dozen footballs back and forth between the groups. If one group threw the balls at a faster rate than the other, the footballs would accumulate on one side. On the other hand, if they both threw at the same rate (say, 10 balls a minute), the equilibrium situation would exist.

ENZYMES: The name given to the class of catalysts found in living organisms. Even in very low concentrations they speed up chemical reactions that would otherwise occur at only a negligible rate, and yet the enzymes are not consumed in the process.

COENZYME: The nonprotein, separable portion of an active enzyme unit. Many *vitamins* function as coenzymes in the body.

SUBSTRATE: The chemical substance acted on by a given enzyme. Thus, the substrates of lipase enzymes are *lipids*.

PROGRAMMED UNIT: ATOMS, MOLECULES, AND CHEMICAL BONDS

Please use a piece of paper as your answer shield and place it over the following frames. Fill the spaces as indicated. As you lower the shield, the correct responses will be indicated. In other words, the answer to (1) will be in the No. (2) box—except we won't bother with boxes.

1. It is well known that all the material of the universe (including, of course, living organisms) is commonly organized into minute basic units known as _____.
2. There are slightly more than 100 different kinds of atoms, which are distinguishable by their chemical

and physical differences. These different kinds of atoms comprise the _____.

Ans. No. 1: atoms.

3. Atoms are in turn constructed of smaller units, the *elementary particles*. Although many different elementary particles have been identified, three are usually judged as the most important in a general consideration. These are _____, _____, and _____.

Ans. No. 2: elements.

4. The protons and neutrons are quite massive compared with the electrons—possessing about 1836 times as much mass. These two types of particles occur together centrally in atoms and collectively form the _____.

Ans. No. 3: electrons, protons, neutrons (any order).

5. The electrons, by contrast, revolve rapidly around the nucleus in various orbital pathways. These orbital pathways are not flat, but spherical and concentric. Because of this layered, concentric arrangement, they are commonly referred to as electron _____.

Ans. No. 4: nucleus

6. The organization of these elementary particles in atoms is very crudely analogous to the structure of the solar system. In such a view, the spinning electrons in their orbits would represent the _____, whereas the massive nucleus would be analogous to the _____.

Ans No. 5: shells

7. Each electron shell can hold only up to a fixed maximum of electrons. The first shell (closest to the nucleus) can hold up to 2 electrons, the second shell up to 8, the third normally 8, etc. Diagram the atomic structure of carbon, which contains 6 protons, 6 neutrons, and 6 electrons, showing the appropriate electron shells.

Ans. No. 6: planets, sun.

NOTE: We won't even give the diagram for No. 7 because people will rise up in anger that we have such a boring thing going here. Anyones of you wanting a real course in this information, perhaps we could have a correspondence course of some kind, with questions and answers, quizzes and all the set-up of school. I lose most students, however, when you start having to THINK and REMEMBER, so I prefer to move on with terminology so that you can have a kind of dictionary of "stuff" to help understand that which we will be presenting.

I will insert here a "Self-Test" and let's see where we are:

to find nothing grows?

Childhood's end is over, students—AND YOU DIDN'T LEARN YOUR LESSONS! So be it! Do we drag you kicking and screaming in your ignorance all the way through the university of Life? No, it doesn't work that way. You go only as far as you wish to be responsible for going! However, we will **MAKE ROOM FOR THE STUDENTS, IN YOUR CHAIR—WHO DO WISH TO LEARN.**

Ponder these things, readers, as we take a break for today and attend our other business. Thank you.

Salu and good morning.

CHAPTER 4

REC #1 HATONN

SAT., SEP. 9, 1995 7:43 A.M. YEAR 9, DAY 024

SAT., SEP. 9, 1995

TEARS AND TARES

It is good to release frustrations, anger, sorrow, joy and/or anything else, through tears, which represent the heart feelings flowing through the eyes which are reflective of the soul. At least, once this was so—now you have robotic-like beings whose hearts are so hardened that the reflection is lost.

For instance, is Mr. Fuhman sorry for his actions upon his Black brothers? NO! He is only sorry he is causing his buddies, in the crimes, problems by his own foolish ego actions. This is the truth of the feelings and actions of MOST people—just sorry to be caught in whatever hidden agendas they have under way. These things then become the “sins of the fathers (and mothers) rested upon the sons (children)”. What do you want reflected of you by your children? What legacy do YOU want to leave as a memory of your passage? And, I must remind you: A legacy is that which usually comes to be recognized AFTER your passage.

There is something else to be considered here, however: Most parents, right under their noses, do not know what the children are doing, telling, or reflecting while actions are quite obvious to observers in objective viewing. It is “somehow” come to be a child’s DUTY to keep as much from parents as is possible—especially right under the noses. “It’s a tough job but somebody has to do it!” A normal child is a very busy, shrewd person, who, don’t forget, is closer to the “remembering” than are any adults. They measure, they push the envelope, they walk on the edge of disaster, and then dare the parent or authority to touch them lest they leap over the edge and into the chasm.

When you bear their troubles for them, hide the indiscretions behind the shroud, and deny the actions and intent—you lay a burden of GUILT upon the head and shoulders of the very ones crying out for help. No parent is immune from such for no child is immune from the impact of personalities and life. And remember something, readers: the closer the family is required to be by circumstance or living modality, the more reflective the child becomes for he knows not another way. You cannot live in another’s space all the time without becoming quite pressured by the negative energy created by the very act of “growing”. He who tells me there are no problems and no disagreements within a marriage or family unit, is telling me lies—or either one or the other is a total lame-brain. It is not the encounters—it is how you handle those encounters.

I would also caution all of you readers to attend the point I offer here as well. A storm which blows suddenly is representative of building energy which may well be released in the cloudburst, but know well that the storm was brewing and percolating in the pot. The cloudburst may well be only the visible symptom of that which is the storm itself. Check the final straw on the camel’s back—but also check the first one you dumped there.

If the pile of straw has been worthy and no hidden bricks are within—the last ones can be removed and the camel is still quite able to bear his load. A camel which can thread through the “needle’s eye” can never make it with an overload of straw!

In business it becomes even more heavy. On one hand you will have ones saying there is poor management and not enough is coming “my way”. Then the adversary says of the same manager: “He wastes all the funds and takes them for himself.” Where would you be in this scenario? It is as with the man and the donkey who first has the donkey haul the load. Then finally the man, at the observations and assaults of others upon him, ends up with the load and then, finally the donkey as well—on his back. There comes a time when, in good management, the donkey(s) AND the monkey(s) are wisely removed from the head and shoulders, the load readjusted and forward movement continued. Others may then do that which they choose, but the burden is removed as the source of confrontation.

We who are about our tasks to the very best of our ability cannot be into the business of quitting when the going gets rough. What others think of us, if we be acting in responsible manner, is NONE OF OUR BUSINESS. We must always LISTEN, change if the direction is wrong, but stand firm when the changes are made mandatory. It is NOT Godly to be poor stewards, more especially when many depend on your works and management to benefit all involved.

How many in this very place have gone forth and agreed to have a garden? You tilled, planted, weeded and fewer and fewer went to the garden to attend it. Now what have we? What of the garden’s needs? What of THAT garden YOU agreed to share in the tending? What if I simply stopped in the work because it no longer interests me or the ground is too hard or too soft? What if the management, wherein ones have shared their fundings and expect good business, or at the least until the price of gold doubles, some serious effort to make projects for which funds were loaned WORK, just lay down their efforts and say “Oh well!”?? People have loaned us funds—not as GIFT and not as INVESTMENT—but they expect good management and, by golly, they shall have it no matter how difficult it may be for ones in the manager’s chair. Hard? NO! Readers, it is the way things MUST COME TO BE OR YOUR WORLD IS NOT GOING TO MAKE REVOLVEMENT INTO THAT WHICH IS WORTHY; YOU WILL SIMPLY CONTINUE AS IS, UNTIL YOU FOLD.

“But,” you ask, “why do we always start from behind?” Your world is “behind” but in many instances here, for instance, you started WAY OUT FRONT AND AHEAD WITH ALL OPPORTUNITY BEFORE YOU. No amount of money can replace inept operators. There is nothing wrong with being unable to perform a task or stop if you are not getting ahead—the error comes ONLY from the continuation in the wrong direction after the facts are obvious. And, children cannot do the work of the adult lest all becomes the production of children not trained to the task. If, therefore, the adults remain childish in their demands and prefer the circulation with social matters rather than the task of supporting the children in the children’s own responsible need for education and growing in accountability—the adult is never going to be wiser, or older in action, than the children and the children shall grow to despise the parent. What is really painful, however, is when the chip-off-the-old-block becomes the big chip on the shoulder.

Dharma asks me why we must teach all the tedious things that should have been learned in school. Because they WERE NOT **LEARNED** IN SCHOOL—were they? Even though some of you are old enough or were focused enough into a given occupation or science to learn these things—the percentage

of knowledgeable things even as to scientific “terms” is all but void. Even then the lacking in understanding is above 99.9%. No one can hold 100% knowledge—for the very definition of learning specifically means a lack of knowing all there is to know. Therefore, if we must go back to basics in the school room, so shall we go back for you pray constantly to be shown “THE WAY” and it requires you PHYSICALLY begin, at the least, to KNOW WHAT IS GOING ON AROUND YOU IN TRUTH, NOT THE FABRICATIONS TO FOOL YOU. IT IS IN THE SCIENTIFIC WORLD OF WHICH YOU MUST BE WARY FOR THE DEADLY THINGS BROUGHT AGAINST YOU. THE POLITICAL ASPECT IS THAT WHICH PLAYS UPON YOUR IGNORANCE IN A MOST MANIPULATIVE “MIND” GAME. If, however, you are INFORMED, it is not possible to fool you all the time and when you cannot be longer fooled all the time—you begin to get back into the game, grown in skill and knowledge—and can finally WIN THE GAME.

So, before we move into CHAPTER 3 of our discussion on “LIFE” units, we will finish the lesson already begun. We had gotten through statement “7” but did not give the “answer”. Therefore we shall begin here at NO. 8 and offer the diagrammatic answer to NO. 7. As with any fun game, when you know how to play—you can win. If you do not know the rules and fundamentals of the game—there is NO WAY FOR YOU TO WIN!

There is no point in going on unless you are a nuclear scientist or GO BACK AND READ THE PRIOR WRITING OF YESTERDAY. You, if you were “with” us, will have a paper and be on No. 8 in our list of information and “check” out information absorption.

NOW, READERS, YOU ARE GOING TO FIND OUT “WHY” THE PHOENIX INSTITUTE FOR RESEARCH & EDUCATION WAS/IS ESTABLISHED. OUR RESEARCH IS IN CELLULAR LIFE AND TEACHING (research and education). We have had to live with a lot of “toads”, kiss frogs, and slay poison dragon-flame throwers. But THIS is what we are “about”. Our vision is that YOU GET EDUCATED SO THAT YOU **KNOW** TRUTH AND WHEN YOU KNOW IT YOU WILL HAVE WON THE CERTIFICATE FOR ETERNAL LIFE PASSAGE. That would seem a quite worthy “degree” to my own professor’s intent. If you think you are simply going to ascend by hugging trees—you are incorrect. You must have the secrets of life brought back into your consciousness—and this is the only way to do it—by learning it! Would “God” take time to teach you? Well, HE sent me and my other brethren cohans (professors) to be at your service.

We are turning over the major political monstrosities to such as Ronn Jackson’s crew to make or break a “Republic”. I will continue to share in information offering—but you have worthy hands to cover those subjects. We also have worthy hands attached to minds which can teach you THIS information—but I want to offer the basics so that you can understand the subjects about which I shall be speaking. Those will be the things which are capable of taking your very physical lives. Then we can move on into the arena of the etheric and how and why you CAN utilize soul in separation from physical housing.

How many people have YOU seen ascend into heaven, and are you sure they made it all the way into “heaven’s pearly cities”? First you have to understand your physical manifestation before you can rip off to fantasy-haven in the Cosmos. So, please, grab your pencils and paper and let us have some fun—and yes indeed, this is FUN! Finally, this IS fun.

CONTINUATION: CHAPTER 2: UNITS OF LIFE

SUBJECT UNDER WAY: MOLECULAR ASPECTS OF BIOLOGY

8. The chemical reactivity of an element depends primarily on the number of electrons in its outermost shell. An atom whose outer electron shell is complete is chemically inert or unreactive. An atom of the element neon has 10 protons, 10 neutrons, and 10 electrons. Is its outer-most electron orbit filled? (yes/no). Is it chemically unreactive? (yes/no). On your paper, diagram an atom of neon. You will want, possibly, to refer to Ans. No. 7.

Ans. No. 7:

“carbon”.

9. Chemical reactions occur because atoms with unfilled outer electron shells are unstable and tend to complete their outer shells in order to achieve stability. They may complete these shells by reacting with other atoms, thereby forming a *chemical bond*. A stable group of two or more atoms thus bonded together is termed a _____.

[See next page]

Ans. No. 8:

neon

B. COVALENT BONDS

10. Several different types of chemical bonds are common. In one important type of bond, atoms may *share* pairs of electrons in their outer shells so that each atom behaves as if its (inner/outer) shell were complete. This type of bond is called a *covalent bond*.

Ans. No. 9: Molecule

11. Covalent bonds characteristically bind atoms very tightly; that is, a (large/small) amount of energy is required to break them.

Ans. No. 10: Outer.

12. When diagramming the formation of a covalent bond between two atoms, we need only show the electrons in the outer shell of each atom. Draw a diagram of the electron structure of two chlorine (Cl) atoms joined by a covalent bond to make a molecule of chlorine (chlorine has 17 electrons arranged in 3 shells).

Ans. No. 11: Large

13. Each pair of shared electrons constitutes a covalent bond. Circle the pair of shared electrons in your diagram of a chlorine molecule. This represents a single covalent bond between the two atoms.

Ans. No. 12: ** form.

14. Because making outer electron shell diagrams is tedious, it is accepted form to ignore all unshared electrons and to only show each pair of *shared* electrons (forming a single covalent bond) by a dash (-). Thus, the chlorine molecule is depicted as Cl-Cl. Using this form, indicate the structure of water in the space below (two hydrogen atoms, each bonded to the same oxygen atom by a single covalent bond).

Ans. No. 13: ** form.

15. This form of depicting the makeup of a molecule is termed a ***structural formula***. It shows only the atoms present and the _____ bonds connecting them.

Ans. No. 14:

*diagram pg.13

16. Covalent bonds may involve the sharing of more than one pair of electrons between two atoms, as in oxygen (molecular form).

Write the structural formula for the molecule.

Ans. No. 15: Covalent.

17. Most of the biologically important molecules are *covalent compounds of carbon* linked with one or more other types of atoms. Each carbon atom can form four covalent bonds. A hydrogen atom can form only a single covalent bond, but oxygen can form two such bonds. Write the structural formulas for *methane* (the main substance in natural gas)—one carbon atom bonded to four hydrogen atoms—and *formaldehyde* (a tissue preservative)—one carbon atom bonded to two hydrogen atoms and one oxygen atom.

Ans. No. 16: O = O

18. Most importantly, carbon has the somewhat unique ability to form covalent bonds with adjacent carbon atoms. A series of such covalently linked carbon atoms may form long chains (straight or branched) and thus produce very large molecules. In the space below, write the structural formula for *octane* (an important component of gasoline), which consists of eight covalently linked carbon atoms in a straight chain with 18 hydrogen atoms attached.

Ans. No. 17:

(methane & formaldehyde)

19. Structural formulas of such complex molecules are somewhat cumbersome. Often a more compact designation is used which merely lists the symbol for each element with a following subscript numeral indicating how many of these atoms are present in the molecule. This designation is known as an *empirical formula*. The empirical formula for water is H₂O. Write the empirical formulas for:

methane
formaldehyde
octane

Ans. No. 18:

form.

20. On your paper, clearly define a covalent bond.

Ans. No. 19: CH₄

CH₂O
C₈H₁₈

C. IONIC BONDS

21. If, instead of sharing a pair of electrons, there is an *actual transfer of an electron* from one atom to another, an ionic bond is formed. The number of positively charged protons in the nucleus is balanced by the number of negatively charged electrons in the orbits, so that atoms are normally electrically _____.

Ans. No. 20:

A covalent bond is formed by one or more *shared* pairs of electrons between two adjacent atoms.
(Or some similar statement.)

22. The atoms involved in ionic bonding, since they have either lost or gained electrons, are no longer neutral. Instead, they become electrically _____.

Ans. No. 21: Neutral

23. These charged atoms are termed *ions*. *Anions* are ions that are (positively/negatively) charged, and *cations* are those that are (positively/negatively) charged.

Ans. No. 22: Charged

24. Ordinary table salt (sodium chloride) is a good example of an *ionic compound*. Since, in the process of forming an ionic bond, each sodium atom transfers an electron to a chlorine atom, the sodium becomes _____ charged and the chlorine becomes _____ charged.

Ans. No. 23: Negatively

Positively

25. Since opposite charges attract, the anions and cations of an ionic compound are strongly attracted. Although the two types of ions are held in a regular order in the latticework of the solid (crystalline) form, they readily separate (or disassociate) and move about independently when dissolved in water. Such separation into free ions is termed ionic _____.

Ans. No. 24: Positively

Negatively

26. This dissociation in water solution into positively and negatively charged ions allows such a solution to readily conduct electric currents. Because of this high degree of electrical conductivity, they are commonly termed _____.

Ans. No. 25: Dissociation.

27: The dissociation of sodium chloride may be shown as follows:



A single ionic bond is formed between a potassium atom (K), and a chlorine atom in the formation of potassium chloride (KCl). Write the equation for the dissociation of KCl.

Ans. No. 26: Electrolytes

28. Some atoms are able to form more than one ionic bond with other atoms. Calcium (Ca), for example, forms two such bonds. Since chlorine forms only one ionic bond per atom, the empirical formula for calcium chloride must be _____. How would you write the equation for the dissociation of calcium chloride?

Ans. No. 27: $\text{KCl} \longrightarrow \text{K}^+ + \text{Cl}^-$

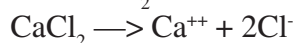
29. Thus far, ions have been described as individual atoms that have either gained or lost electrons. In addition, however, many stable *groups of atoms* may act as ions.

For example:

CO_3^- carbonate ion
 NH_4^+ ammonium ion
 SO_4^- sulfate ion
 PO_4^- phosphate ion
 OH^- hydroxyl ion

Which of these are cations and which are anions?

Ans. No. 28: CaCl_2



30. Write the dissociation equation for sodium carbonate (Na_2CO_3).

Ans. No. 29: All but NH_4^+ are *anions*.

31. The transfer of one electron establishes one ____ bond. The number of bonds that an atom can form is termed its *ionic valence*. Thus, sodium has a valence of +1 and the chloride ion a valence of -1. Indicate the ionic valence for each of the ions in the following list:

KCl
 Na_3PO_4
 NH_4Cl
 $\text{Ca}(\text{OH})_2$

Ans. No. 30: $\text{Na}_2\text{CO}_3 \longrightarrow 2 \text{Na}^+ + \text{CO}_3^-$

32. In the space below, define an ionic bond in your own words.

Ans. No. 31: ionic

K	= +1	Cl	= -1
Na	= +1	PO_4	= -3
NH_4	= +1	OH	= -1
Ca	= +2		

D. HYDROGEN BONDS

33. You have already learned that the sharing of a pair of electrons between adjacent atoms form a bond.

Ans. No. 32:

An ionic bond is formed by the *transfer* of an electron from one atom to another. (or some similar statement.)

34. The pair of electrons is sometimes unequally shared. Water molecules are a good example of such unequal sharing. To review this situation, on your paper, draw a complete diagram of the structure of the atoms of hydrogen and oxygen bonded as water, showing nuclear composition as well as all electron shells. (Remember that hydrogen atoms are composed of 1 proton and 1 electron, while oxygen has 8 protons and 8 neutrons in the nucleus and 8 electrons in 2 shells.) Circle the electrons of the two covalent bonds.

Ans. No. 33: Covalent

35. Careful study of the water molecule has revealed that the two hydrogens tend to be located on

adjacent sides of the oxygen atom, rather than across from one another. On your paper, indicate this by a structural formula.

Ans. No. 34:

*diagram

36. Study your diagram from question 34. If the covalent pairs of electrons are held more closely to the oxygen atom, then the hydrogens appear as bare protons on adjacent surfaces of the larger oxygen atom. Also, the electron swarm appears displaced around the oxygen nucleus. Label the portions of this water molecule where the protons appear concentrated and the area where the electrons predominate:

Ans. No. 35:

*diag

37. Since protons carry a _____ charge and electrons a _____ charge, this molecule actually has a positive end and negative end. Such a molecule is termed **polar**. [*E.Y. Editor's note: The actual bonding angle that the two hydrogens make with the oxygen is 105 degrees; that is, a bit more open than a 90 degree angle.*]

Ans. No. 36:

*diag

38. Polar molecules are not to be confused with ions. The polar nature results purely from an unequal distribution of charge *within* a molecule. Show this unequal distribution of charge in the water molecule by labeling the respective ends as "relatively positive" and "relatively negative."

Ans. No. 37: Positive

Negative

39. Since opposite poles attract, in a mass of water molecules the relatively positive hydrogen of one molecule can weakly attract the relatively negative oxygen of its neighbor. In the space below, draw two molecules of water, showing such an attraction.

Ans. No. 38:

*diag

40. The weak bond formed by such an attraction is called a **hydrogen** bond. Indicate the hydrogen bond between two water molecules by a dotted line on your drawing from question 39.

Ans. No. 39:

*diag.

41. The attraction between a hydrogen atom in a polar molecule and a relatively negative atom in another polar molecule is called a _____ bond. Hydrogen bonds are quite weak in comparison to covalent and ionic bonds. However, they are of great importance in determining the structure of such biologically important molecules as proteins and nucleic acids.

Ans. No. 40:

*diag

42. In summary, we have found that in _____ bonding, two atoms are held together by a common attraction for a pair of electrons. If electrons are transferred, producing two ions, which are then held together by the attraction of their _____ charge, this is termed _____ bonding. In _____ bonding, the [“positive”] hydrogen atom of a polar molecule weakly attracts a negative atom of another polar molecule.

Ans. No. 41: Hydrogen

43. Can you now give a general definition for a chemical bond?

Ans. No. 42: Covalent

Opposite (unlike)

Ionic

Hydrogen

Ans. No. 43:

A chemical bond is any type of force which holds two atoms together. (Or some similar statement.)

If you recognize the following “review” and “self-test”, we are making a lot of progress, chelas (you ARE students, are you not?).

It is suggested that when you finish the study of a specific chapter, try to answer all the review questions. You may find it helpful to write out those answers. These questions point out some of the more important concepts considered in the chapter and aid you in synthesizing the content of your study.

As to the Self-Tests; at the conclusion of your study, you will be ready to take the chapter self-test. Unlike the review questions, which are often more general and point toward a synthesis, the self-tests are objective and will allow you to sample your knowledge of a subject area. They constitute a sampling of details, and if you do well on them, you probably have mastered the chapter. You should attempt the self-test only *after* you have completed your study of the chapter. Take it as a test by actually writing in your answers and scoring the result by using the answers provided. The self-tests have little value if used in other ways.

The discovery and understanding of the goals, the methods, and the conclusions of biology (as a creative human venture) constitute a most worthy intellectual adventure. May we travel within this adventure—together?!

It will become evident as you first begin that there is far more information available on all of these subjects. I am not a biology teacher nor am I a professor of education. We are ripping right through the information in this short version of a class in cellular life. If you want more you will have to obtain the texts necessary for your slower integration of material. Now, where will you get “more”? I suppose any college bookstore will have such workbooks and in-depth texts. Our intent is not to give you a college-credit course, but to give you WORKING INFORMATION adequate to follow along with what we otherwise have to offer as we speak of DNA, RNA, microbes, viruses, cellular structure, etc. We are making every effort to allow you to follow along without that college degree. After we work a while here in terminology, etc., I think you can go back and re-read the *Secrets of Life* and *Biological Transmutation* and they WILL MAKE SENSE TO YOU. I offered those FIRST so that you would realize you need backup and will welcome the opportunity for learning. I suggest you also get a book with the table of elements and their symbols. Let us not turn this wonderful game into WORK, please.

REVIEW QUESTIONS:

1. What difference of internal structure is found when atoms of different elements are compared? In what way do differences in the outermost shell of orbital electrons lead to differences in chemical activity?
2. List and describe the three types of chemical bonds, and indicate specific molecules containing illustration of each. Is it possible for a molecule to have more than one type of bond in its structure? Can you cite an example of such a molecule?
3. Compare and contrast the four major classes of organic compounds most commonly found in living organisms. Can you cite a general function or use for each class? Are any of these classes of compounds entirely restricted to either plants or animals? Are any unique to man?
4. The denaturing of a protein molecule represents a drastic and irreversible alteration of its tertiary structure. What characteristic features or functions of protein molecules might be destroyed by denaturation? Since denaturation is brought about by excessive heat, among other factors, might this partly explain why living forms have a restricted upper limit of temperature tolerance?

- List and explain briefly some of the forms of kinetic energy commonly met in the everyday world. Which form(s) of energy do living organisms principally use? Usable energy becomes increasingly depleted at each conversion step until at last none remains, whereas the same chemical matter can be repeatedly utilized in the biological world. Explain this situation.
- What are some of the characteristics of enzymes? Of what significance is the concept of an enzyme-substrate complex in explaining the mechanism of enzyme action? "All enzymes are catalysts, but not all catalysts are enzymes." Explain this statement.

[H: Now, I gave you the "Self-test" questions at the end of yesterday's lesson. I am going to repeat it here for your convenience and also give you the answers. We will see if you do your work or go straight to the answers. Remember that cheating on lessons—is CHEATING SELF IN LIFE! However, don't be too hard on selves, for in this short version of biology you may not have much resource save the "answer". Let us pretend to be adults in this education and I think we can work it out AND save a lot of TIME.]

SELF-TEST

- To ascertain your comprehension of the relative size relationships at the chemical level of life, arrange the following components in descending order of relative size (largest first, smallest last):

glucose molecule electron hydrogen atom
 water molecule protein molecule carbon atom

- Name five specific compounds or groups of compounds that could be called macromolecular.
- Name the following common functional groups (radicals):

-NH₂ -OH =O
 -COOH -CH₃ -C₂H₅

- A solution with pH 8 would be:

- neutral
- a very strong base
- a very weak acid
- a very weak base
- a very strong acid

- The formation of a series of peptide bonds in a linear sequence is related to:

- the tertiary level of protein structure
- the secondary level of protein structure
- the primary level of protein structure.

6. Name some of the unusual properties of water, and note which ones are related to water's tendency to form hydrogen bonds.
7. The most abundant type of compound found in living tissue is carbohydrates. (True or False?)
8. Chemical reactions that result in less usable energy being available:
- are termed oxidations
 - involve the gain of electrons
 - commonly occur in living organisms
 - may occur by the removal of hydrogen from the compound
 - may occur by the addition of oxygen to the compound
9. What structural feature do the following molecules have in common permitting us to class them as organic molecules?



10. All the substances involved in a reaction are present in equal concentrations when an equilibrium is reached. (True or False?)
11. Which of the following are *not* true of enzymes?
- They are protein in nature.
 - They often require vitamin-coenzyme compounds in order to function.
 - They are relatively unaffected by heat.
 - They normally act to slow down unwanted chemical reactions.
 - They act by forming a temporary, loose, surface combination with their substrate(s).
12. What are two fundamental chemical differences between DNA and RNA?
13. For each of the following macromolecules, list the simple organic compounds of which they are composed:
- nucleic acids
 - simple and complex lipids
 - polysaccharides
 - proteins
14. Which four elements are the most abundant in living organisms?

[H: Ok, here we go with the answers—just remember that on that desert ISLAND, there may be no answers at the bottom of the page!]

Chapter Two, *Molecular Aspects of Biology*:

1. protein molecule, glucose molecule, water molecule, carbon atom, hydrogen atom, electron.
2. starch, glycogen, triglycerides, proteins (such as casein or hemoglobin), DNA, RNA, etc.
3. -NH_2 : amino -OH : hydroxyl =O : keto (carbonyl)
 -COOH : carboxyl- CH_3 : methyl $\text{-C}_2\text{H}_5$: ethyl
4. d
5. c
6. (a) expansion on freezing, (b) a uniquely high surface tension, (c) unusual thermal properties (heat capacity, heat of vaporization). All are related more or less to water's tendency to form hydrogen bonds between adjacent molecules.
7. False
8. a, c, d, and e
9. the presence of carbon (and hydrogen)
10. False [*E.Y. Editor's note: Equilibrium simply means the forward and backward reactions are proceeding at the same rate so that chemically the reaction appears to be standing still.*]
11. c and d
12. RNA is composed of nucleotides with ribose sugar components, whereas DNA nucleotides contain deoxyribose sugars. Where DNA has the base unit thymine, RNA substitutes uracil.
13. a. nucleotides
 b. fatty acids and glycerol
 c. monosaccharides (simple sugars)
 d. amino acids
14. oxygen, carbon, hydrogen, nitrogen.

END OF LECTURE

You should enjoy the closing arguments in the O.J. Simpson case so much more now that you know what DNA might represent. Remember that DNA is an individual and unique “fingerprint” when considered as a “whole”. Bits and pieces only point toward “tendency” as relative to other DNA structuring. Identical DNA/RNA means a clone and in your world today—science can clone everything to some extent. Certainly it is easy to allow for blood types to be identical without much effort. O.J. was “HAD” and a

manipulated, uninformed jury and judicially uneducated parties will NEVER learn how easy—until after the fact. Racism doesn't have anything to do with it—as is obvious. However, since people are misinformed, disinformed and totally UNINFORMED, the issues can't be offered clearly, for ALL involved IN THE TRIAL (not the murders) are ignorant of truth in FACT.

If you study along with us and DAILY make sure you are getting this background information—you will find a whole world of INCREDIBLE knowledge at your fingertips and, better, within your mind and brain. Knowledge IN WISDOM is the most valuable asset offered to MANKIND.

Thank you for joining me on this journey. Salu.

CHAPTER 5

REC #1 HATONN

SUN., SEP. 10, 1995 7:49 A.M. YEAR 9, DAY 025

SUN., SEP. 10, 1995

ALWAYS CLIMBING

It isn't for the moment you are struck that you need courage, but for the long uphill climb BACK TO SANITY AND FAITH AND SECURITY. Ah, but remember that if you give to the world the best you have, the best will find its way back to you.

EAGLES HAVE LANDED

The eagle is at your window, friends, for messengers have come to show the way. Many of you wonder upon “what” does the massive Thunderbird live. He lives on the most tiny of the particles of earth. He sometimes feeds on other creatures—but mostly he lives from the things he finds in the cracks and crevasses of trees, the soil and upon the bits of soil he ingests. Dharma, remember the dove who nested in your bedroom—she left the food you offered and ate the soil from the pots of growing plants. You have forgotten that of which you are. The Phoenix thrives on the ashes—but he scavenges not; he rebuilds; he eats not of the garbage of death—unless, of course, he has been nurtured by humankind and forced to live as outcasts of KNOWING beings. His CHOICE will never be destruction, but always, LIFE. The lesser eagles will always come when the unbalance comes with creatures in overabundance—just as the seagulls will come inland to feed upon the crickets destroying the crops of man. God provides BALANCE if you but leave the scales untampered. There IS a place for each and all things. However, man has created great killing machines for which he shall dearly pay the ultimate price of annihilation.

May you learn your lessons, students, for through knowledge of the way it IS shall you be able to rise beyond the shrouds which hide your view. Remember that bars on thine windows and doors are an effective cell for self as for intruders to keep them out. Bars of ignorance bind forever he who is caught within. Think upon these things for the freedom you seek is your own. Only through knowledge shall you find your freedom and that knowledge must be accurate and IN TRUTH or you shall only bog more deeply in the mire set forth to trap you.

When troubles come and changes are required, must you always RUN AWAY to distant places? Can you not consider the circumstances and find that which you need without running away—somewhere out there? When the going gets tough must you always RUN AWAY? Are you so instilled with insecurity that you cannot bring balance to family and self—without RUNNING AWAY? Whether or not you agree with me, readers, I BRING TRUTH and I shall not change to suit the needs of the egos of ones who come to claim that truth and then deny it.

If you had a job which allowed some modicum of security and it is not longer available—do you simply

RUN AWAY? Are there not other places to which commute is possible to weather the storms? Or, do YOU RUN AWAY? The test of a being is that which he does with his trials and changes. There is no man alive who, at one time or another, has not made a fool of himself—why should YOU be different? Check out the ones who SEEM to be the advisors when troubles strike. What do they tell you to do—or do they just encourage your unrest and ego boosting to unreasonable heights so that you further hurt yourself? WHAT HAVE “THEY” PRODUCED TO PROVE THEIR WORTHINESS AS ADVICE-GIVER? See who works constantly to get THROUGH the stagnant times and WHO WAITS AT THE EXPENSE OF OTHERS WHILE TALKING A BIG GAME AND DOES NOTHING SAVE ACT IMPRESSIVE. Do you wait for El Dorado while all goes to waste about you? That is La-la-land in its most notorious form. What are YOU planning to do—supervise El Dorado’s treasures while others labor in the vineyards? Is that a practical attitude for your qualifications? Are you not willing to LEARN YOUR LESSONS so that you are then qualified to manage the abundance which flows from your own labors? How many of you contemplated running away from home (or did so) thinking it would be better? Was it? Some contemplate it RIGHT NOW and are too young to attend selves. If you are a parent—YOU HAD BETTER ATTEND THIS—NOW, FOR IT IS SERIOUS. Since ones are offended when we speak names and focus on specific parties, we shall not now do so—but it is serious, parents, and it has been serious for some time. At least one child wanted to ESCAPE to Mexico. Trouble comes in many forms—but ignored, it will not go away.

I know that some ones have asked to receive no further messages from this source. WHY? I suggest that someone who actually cares enough to reach out—see to it that appropriate information is carried forth instead of the cackling and chewing of events, in denial. So be it. Dharma speaks what I request her to speak. Doris speaks for SELF. NO ONE SPEAKS *FOR* ME! If YOU cannot tell the difference then the problem is yours but if you have come a great and difficult distance to share with “me”, I suggest you think carefully about that which you do next, and next and next—or have you already burned your bridges?? Check the bridge pilasters, dear ones, and see if the foundation is strong enough to hold timbers on which to cross back again. You might well be surprised at that which you find. Often times man finds he can build a whole bridge with the chips he removes from his shoulders. Wherefore art thou chips? There are many kinds of “chips”: potato, cow, buffalo, “off the old block”, AND THOSE WHICH RESIDE ON THE SHOULDERS. The most notable are the “shoulder chips”.

As to waiting for that which was a failure to perform, again study the past, for forgiveness is Divine—forgetting is Stupid! When you loan a man money for a room when he is without shelter and he chooses a \$700-a-night suite—YOU ARE THE FOOL. When you send a man money so that he can do his projected work and he rents a Mercedes and driver and takes a vacation—YOU ARE THE FOOL. When you hang onto the lies and the liars as if they are your last life-ring, YOU ARE THE FOOL. Even if those ones who lie to you now may well produce SOMETIME, SOMEWHERE—they LIED TO YOU THEN AND THEY CONTINUE IN THE LIE until all is repaid with “interest”. If you wait for the dragon to change to the dove—YOU ARE THE FOOL! And above all: KNOW THE DIFFERENCE!

Now for we who are ready to continue in the “getting to know” phase of our visitation, please let us move on to the next chapter of our sharing.

FACTS OF LIFE

CHAPTER THREE
THE CELL: UNIT OF LIFE

PART A

[H: This will cover a lot you claimed you wanted to KNOW—and asked for, but didn't REALLY want at all, after all. If you WANT LIFE—YOU HAVE TO KNOW WHAT IT IS!]

PREVIEW QUESTIONS

1. In order for biologists to conclude that cells are the basic unit of life, many observations of different parts of living things were required. What prevented the Greek and Roman “scientists” from making these observations and reaching this conclusion?
2. How clear-cut is the distinction between life and nonlife? Of course, you can tell the difference between a live dog and a nonliving boulder, but what is the essence of this difference? Is it size, chemical composition, structural organization, or movement? Do you think that certain masses of matter might appear as borderline cases and be classified by some biologists as living and by others as nonliving?
3. What is your concept of a cell? Is it like a miniature rubber balloon filled with gelatin and colored marbles? Do you think our present knowledge of cells is rather final and fixed, or is there yet much to learn of these units of life?
4. Water and life are inextricably bound together. Most cells exist exposed to either sea water, fresh water, or body fluids. What problems do you think might beset cells in attempting to maintain an internal chemical composition that is quite different from the external fluid environment?

TERMS [See picture of a cell.] (next 2 pages)

CELL: The basic structural and functional unit of life. Cells are commonly microscopic in size yet contain a complex substructure. They are typically composed of a central nucleus surrounded by a semifluid cytoplasm (with its various organelles) **[H: And we have a whole book to share with you on JUST cells and organelles because YOU don't really know what an “organelle” is, do you?]** that is enclosed on its outer surface by a membrane. (In Latin means: “little rooms”.)

VIRUSES: Organized molecular units of considerable complexity, but smaller than cells and lacking the internal organization. Viruses lack the key attributes of self-reproduction and self-regulation and are thus commonly regarded as non-living entities or, at best, borderline cases of life. Viruses must invade living cells to reproduce, and in so doing they destroy the cells. As a result, they cause many familiar human diseases, such as influenza and measles, as well as diseases in plants and animals. **[H: Go back and read this one again, please.]**

CELL MEMBRANE (PLASMA MEMBRANE): The universally occurring external boundary of living cells, which retains the cytoplasm and nucleus within it. It has been shown to be of a complex

structure that involves several layers of protein and lipid molecules lying side by side. This membrane controls the chemical intake and output of the cell. Cell membranes of adjacent cells in a tissue are commonly held together by a basement membrane substance (“cell cement”).

a cell

Schematic diagram of a cell and its organelles drawn to reveal their three dimensional structure.

AV, autophagic vacuole; C, centriole; CH, chloroplast; CI, cilium; CR chromatin; DV, digestion vacuole; F, microfilaments; G, glycogen; GA, Golgi apparatus; JC, junctional complex; LD, lipid droplet; M, mitochondrion; MT, microtubules; MV, microvillus; N, nucleus; NU, nucleolus; P, peroxisome; PL, primary lysosome; PM, plasma membrane; PV pinocytosis vesicle; R, ribosomes and polysomes; RB; residual body; RER, rough endoplasmic reticulum; SER, smooth endoplasmic reticulum; SV secretion vacuole.

The organelles have been drawn only roughly to scale. Also, the sizes and relative amounts of different organelles can vary considerably from one cell type to another. For example, only plant cells show chloroplasts, and among animal cells only a few types show peroxisomes. A detailed enumeration of the organelle content of one cell type is presented in Chapter 2.12.

NUCLEUS (of a cell): The large, usually central body of a cell that contains the *chromosomes*, the carriers of the cell’s hereditary information. Because of the chromosomes, the nucleus may be regarded as the ultimate control center of all the cell’s activities. Within the nucleus, one or more smaller spheres—the *nucleoli*—are present. A perforated *nuclear membrane* separates the nucleus from the cytoplasmic area of the cell.

CYTOPLASM: The area or substance outside the nucleus of a cell but within the outer membrane. It is semifluid in consistency and contains a large number of discrete, membrane-bounded organelles, such as *mitochondria* and *plastids*, as well as a network of channels (the endoplasmic reticulum).

ENDOPLASMIC RETICULUM: The network of tubelike, membrane-lined channels that permeate the cytoplasm. These afford direct connection with the interior of the nucleus on the one hand, and with the outside of the cell on the other. The surface of this network frequently is peppered with small *ribosome* particles. (The term *endoplasmic reticulum* means literally “innerplasm network”.)

RIBOSOMES: Minute, dense particles encrusting the endoplasmic reticulum, composed primarily of RNA. They appear to be the major sites of protein synthesis within cells. They were originally (and are still occasionally) called *microsomes*. [The name means literally “ribose (for the RNA subunit) bodies”]

GOLGI COMPLEX: A many-layered complex of membranes that appears to participate in the secretion of proteins in a manner that is not well understood. (Named for its discoverer, Camille Golgi.)

MITOCHONDRIA: Sausage-shaped bodies with a complex internal structure that appear to be centers of cellular respiration and energy-releasing reactions. These are nearly universal in living cells. (The name means literally “tread granules”.) **[H: These are extremely important and are the**

basic make-up of AquaGaia. The reason we separate the mitochondria from the Dria (Gaiandriana) is because when the other food for fuel is used up in the restrictive container—the mitochondria feeds on drias (that is, on the Gaiandriana). This does not happen once ingested into a “body” but, while bottled, the mitochondria will eventually consume the drias.]

LYSOSOMES: Membrane-enclosed bodies that contain enzymes for the digestion of macromolecules, such as proteins. Their function appears to be the breakdown of the cell in which they are contained when it is irreparably damaged. They are also picturesquely, but not entirely accurately, called “suicide bodies”. (The term means literally “dissolving bodies”.)

CENTRIOLES: Paired, cylindrical bodies lying near the nucleus and embedded in a larger structure, the *centrosome*. Their main function is to set up the apparatus for cell division. Centrioles are characteristic of animal cells but rare in plant cells. A nearly identical and probably related structure, the *kinetosome*, is found at the base of projecting cilia.

PLASTIDS: A class of structures associated with the formation and/or storage of such compounds as starch and sugar in the cells of plants and protists. *Chloroplasts* are the important type of plastids in green plants that contain the green pigment *chlorophyll* and are the site of photosynthesis.

VACUOLES: Membrane-bounded cavities common in the cytoplasm of plant cells and protozoa. They are usually filled with watery solutions but may take the form of *food vacuoles*, in which ingested food particles are digested, or of *contractile vacuoles*, by means of which excess cell water is excreted.

PROTOPLASM: A collective name for all the constituents of a living cell. This term is not meant to infer that the cell is homogeneous, because it is actually composed of a complex organization of quite different components.

COLLOIDAL SYSTEM: The physical state of protoplasm, chiefly characterized by the size range of the suspended particles involved and the rapid changes of viscosity that may occur. Particle size is usually too large to form a true *solution* but small enough so that a stable *suspension* may persist, primarily as a result of the protein molecules in protoplasm. Viscosity is reversibly changeable from a liquid condition only slightly more viscous than water (a *sol*) to a thick jelly-like consistency (a *gel*) of which ordinary gelatin is a familiar example. In living organisms, the most commonly colloidal systems are of solids in liquids, but other systems, such as liquids in liquids (*emulsions*), also occur.

[H: This is extremely important as we consider the “gaias” as relate to GaianDriana, AquaGaia and the colloids WE offer. The only truly usable form of minerals and vitamins are those which become colloidalized in some manner. Why? Because only tiny, tiny particles of the given additive can be accepted by the cells themselves.

I am asked what should the label ACTUALLY read on a bottle of Gaiandriana? Appropriate would be “transmuted cellular life-crystal colloidal solution” or “liquid cell-life” or “perfect life-crystal cells”. You have to understand, however, that all are based in “perfect” water to be living forms. The drias themselves will purify their own water-bath while transmuting all particulate introduced into the growing medium. This is always true given sufficient time for proper multi-

plying and dividing. If the frequency is cosmically sufficient—all negative organisms which negate LIFE will be transmuted and removed as fuel for the growing cells. “You’ve come a long way baby...” FROM the facts of life and how to have perfect life-form.]

DIFFUSION: The tendency of molecules to spread from regions of higher concentration to those of lower concentration. This occurs in the gaseous, liquid, and solid states of matter, but the first two states are of major importance to living organisms. The spread of an odorous substance through still air or of a colored dye through an unstirred glass of water are examples of this phenomenon. Diffusion is a direct result of the fundamental property of matter—molecular motion.

SEMIPERMEABILITY: The phenomenon whereby membranes (such as cell membranes) allow some substances to diffuse readily through them while restricting or completely blocking the diffusional passage of others. A synonymous term is *differential permeability*. This phenomenon accounts for the ability of cells to maintain an internal composition that may be quite different from their external environment.

OSMOSIS: The phenomenon that occurs when two aqueous solutions of different concentration are separated by a semipermeable membrane that passes water molecules more readily than solute molecules. In such a case, a net diffusion of water from the less concentrated solution (but higher solvent concentration) to the more concentrated solution (but lower solvent concentration) occurs, and an increase in physical pressure (*osmotic pressure*) on the latter side results.

PLASMOLYSIS: The phenomenon of osmotic water loss from the vacuoles of a plant cell resulting in shrinkage of the cell membrane away from the cell wall and (usually) cell death.

I would like to end this portion of this topic at this juncture. We will continue on with our statement-shield section. That is the portion wherein you can see what you have picked up from the foregoing and allow for questions and responses to correct, fill-in, or actually, just inform. I find it is a good method of teaching and therefore, learning, for it becomes a game instead of a lecture series. It also allows you to move to topics which are not readily available to your consciousness rather than spend added time having to re-cover that which is already known to you. You simply cannot speak a language unless you know the meaning of terms as in words. It is useless to pick up a paper written in Greek if you know not, first, the Greek alphabet and then understand the meanings of the connected symbols, even though most of your English language COMES FROM GREEK.

After we finish these lessons perhaps I shall share some MAGIC methods in MATHEMATICS. Your brain is far better than your calculator, especially for simple arithmetic. You have simply forgotten how to use that old brain properly. There are indeed simple ways of calculation which bypass all the tedium of number-by-number figurations. Once again, you have only to perceive the “whole” of the “problem” to see the points needed for objectivity and solution.

First, however, you have to **KNOW WHAT YOU ARE** and then we can show you how to **USE WHAT YOU ARE!**

When you **KNOW** a “thing” you don’t longer have to accept what another thrusts upon you. Ponder it.

CHAPTER 6

REC #2 HATONN

SUN., SEP. 10, 1995 11:49 A.M. YEAR 9, DAY 025

PART B

PROGRAMMED UNIT: DIFFUSION, SEMIPERMEABILITY, AND OSMOSIS

(Place the answer *shield* over the following PROGRAMMED “frames”. Fill in the spaces as indicated. As you lower the shield, the correct responses will be indicated along with the next question or statement.)

A. DIFFUSION

1. It is a fundamental property of matter that all molecules are in constant _____.
2. This constant motion is inherent in individual molecules, which thus act independently of all other _____.

Ans. No. 1: Motion

3. In a bit of matter such as a drop of water, each of the enormous number of molecules moves _____ of all the others. This results in a constant colliding with and rebounding from other molecules.

Ans. No. 2: Molecules

4. However, the net effect of all this independent, random molecular motion on the drop of water as a whole is nil; thus, the drop ___ (does/does not) ___ move as a result of the molecular motion.

Ans. No. 3: Independently

5. In the illustration of a drop of water, we are considering a uniform distribution of a single type of molecule (water molecule). In this case, despite the molecular motion within the drop, no net change in the _____ of the water molecules occurs, since as many molecules move in one direction as in another, on the average.

Ans. No. 4: Does not

6. If we now consider the previous drop of water in relation to its external environment, a related phenomenon becomes apparent. Imagine that the drop of water is located inside a large sealed jar containing only dry air. We know from experience that the drop of water would ___ (increase/

decrease) in size over a period of time as a result of _____.

Ans. No. 5: Distribution

7. The dry air in the sealed jar would initially contain no _____ molecules. As a result of evaporation, however, more and more _____ molecules would leave the surface of the drop and move out among the molecules of gas in the air, until eventually the entire drop would have evaporated.

Ans. No. 6: Decrease

Evaporation

8. Initially, the concentration of water molecules in the drop of water was virtually _____%, and their concentration in the dry air was essentially _____%.

Ans. No. 7: Water

Water

9. As a result of evaporation, the concentration of water molecules in the air (increased/decreased). Since evaporation is the movement of molecules of water from a liquid state to a gaseous state, it is only a form of the general phenomenon of _____.

Ans. No. 8: 100

0

10. Continued evaporation eventually resulted in all the water molecules leaving the drop and entering the (liquid/gaseous) state. Furthermore, the molecular motion of these water molecules eventually brings about their (equal/unequal) distribution throughout the air in the sealed jar.

Ans. No. 9: Increased

Molecular motion

11. Such an equal distribution of two (or more) different kinds of molecules throughout a given space is termed a state of _____.

Ans. No. 10: Gaseous

Equal

12. In review, the water molecules moved from a region of (higher/lower) concentration in the drop of water to a region of higher/lower concentration in the dry air. Note that this was only a net movement and that at any given instant some water molecules were leaving the drop of water, while others were re-entering it.

Ans. No. 11: Equilibrium

13. This net movement of molecules from a region of higher concentration to a region of lower concentration is a general phenomenon. It is called _____.

Ans. No. 12: Higher

Lower

14. Diffusion always occurs in the presence of an unequal distribution of two or more types of _____ and is a direct consequence of the general phenomenon of _____.

Ans. No. 13: Diffusion

15. Diffusion occurs in _____, as well as in liquids and gases. However, the *rate* of diffusion is normally so very slow in the former medium that it is disregarded. Furthermore, the rate of diffusion in liquids is much (slower/faster) than that in gases.

Ans. No. 14: Molecules

Molecular motion

16. You will note that diffusion is a *directional* phenomenon, i.e., a movement from a _____ concentration to a _____ concentration.

Ans. No. 15: Solids

Slower

17. Since diffusion proceeds from higher to lower concentrations, we often employ the term *diffusion gradient* to indicate the direction of diffusion in a given situation. On the diagram below of the drop of water in a sealed jar, indicate by arrows the diffusion gradient.

Ans. No. 16: Higher

Lower

jar 1

18. If, instead of a small drop of water in a large jar, we had a jar that was nearly filled with water and contained only a small volume of dry air at the top, would evaporation and diffusion of water molecules still occur? Why, or why not?

Ans. No. 17:

jar 2

19. In this situation, would you expect the same type of equilibrium state to be reached as before? If not, how might it be different?

Ans. No. 18: Yes. A diffusion gradient would exist.

20. Note then that a(n) _____ condition is not always one in which two (or more) kinds of molecules are uniformly distributed through the same space. The condition described is termed a *dynamic equilibrium*, since it results from balanced, but opposing, changes.

Ans. No. 19: The small air space would quickly become saturated with water. The equilibrium resulting would be one in which water molecules were returning to the liquid as fast as they were evaporating.

21. Diffusion results in an equilibrium condition in a sealed jar. This may be either a *static* equilibrium (uniform distribution) or a _____ equilibrium.

Ans. No. 20: Equilibrium

22. The diffusional events in the above examples of sealed jars occur solely within the jars and are unrelated to water concentrations outside the jars. Such a condition is referred to as a *closed system*. Now consider the sequence of events that would occur if the jar lid were removed and the contents left exposed to a dry atmosphere outdoors for a long period of time. Would diffusion (or evaporation) of the water molecules occur? (yes/no). Would an equilibrium be reached?

Ans. No. 21: Dynamic

23. From experience, you know that in time all the water in the jar would evaporate and diffuse away into the air, but that air and nearby air would not become saturated. In addition, air currents would carry away these water molecules and at the same time bring others into the vicinity. Clearly, this *open system* is no longer as easily analyzed as the closed system. You can see that in an open system diffusion results in a strictly unidirectional movement of molecules without an _____ being reached.

Ans. No. 22: Yes. Not in the usual sense of an equilibrium.

24. For example, in the lungs of man and other air-breathing animals, there is a constant unidirectional diffusion of oxygen from the lung air spaces into the surrounding small blood vessels. An equilibrium is never reached because the circulating blood carries away the oxygen, thus maintaining a constant _____ gradient. This situation represents a(n) _____ system.

Ans. No. 23: Equilibrium

25: You have examined several aspects of the phenomenon of diffusion and have considered a number of examples of it as well. Can you now give a concise definition of diffusion that covers all these aspects?

Ans. No. 24: Diffusion

Open

B. SEMIPERMEABILITY AND OSMOSIS

26. The cytoplasmic contents of living cells are not in direct contact with the external environment. Instead, they are enclosed by the cell _____.

Ans. No. 25: Diffusion is the tendency of molecules to move from regions where they are in higher concentration to regions where they are in lower concentration. Diffusion is a direct result of molecular motion and occurs in gases, liquids, and solids. (Or some similar statement.)

27. It is a general characteristic of cell membranes that they allow some molecules to diffuse through them readily while hindering or absolutely barring others from such diffusional passage. Such membranes are termed _____.

Ans. No. 26: Membrane

28. These variations in permeability to various molecules are not completely understood but appear to depend on a number of interacting physical and chemical factors (temperature, pH, etc.). In addition, such variations are not constant but may change from time to time. For this reason, such membranes are more precisely termed _____ permeable.

Ans. No. 27: Semipermeable.

29. In general, differentially permeable membranes allow water to diffuse through them more readily than many other molecules. This phenomenon is of great importance to living cells, which are nearly always immersed in _____.

Ans. No. 28: Differentially

30. At this point, carefully consider a container in which there is water and a semipermeable sac containing sugar. When the semipermeable sac of sugar solution is immersed in a jar of pure water there will be molecular distribution on either side of the sac. In this situation is the water concentration higher inside or outside the semipermeable sac, as dispersion begins?

What of the sugar concentration inside the sac to that outside.

Ans. No 29: Water

31. In the above case, the membrane is impermeable to sugar molecules but readily permeable to _____ molecules. The water molecules are therefore free to diffuse from the region of their _____ concentration (outside the sac) to the region of their _____ concentration (inside the sac).

**Ans. No. 30: The water concentration is higher outside the sac.
The sugar concentration is higher inside the sac.**

32. Molecular motion alone causes water molecules to move through the sac in (only one/both) direction(s). Diffusion, however, is the net movement in (only one/both) direction(s).

Ans. No. 31: Water

Higher
Lower

33. As a result of the net movement of water molecules into the sac by diffusion, a _____ develops inside the sac that causes it to swell. This force is known as _____ pressure, and the entire phenomenon is termed _____.

Ans. No. 32: Both

Only one

34. Note the essential features of *osmosis*: two different aqueous solutions separated by a membrane differentially permeable with regard to the components of the two solutions. It should be apparent that osmosis is merely a special case of _____, involving a semipermeable membrane and concerned principally with the movement of _____ molecules.

Ans. No. 33: Pressure

Osmotic
Osmosis

35. Now consider a situation like that above, except that sugar solutions of equal concentrations are present in the sac *and* in the jar. Would molecular motion cause water molecules to move through the membrane? _____. Would diffusion occur? _____. Would osmosis occur? _____

Ans. No. 34: Diffusion

Water

36. What important requisite of osmosis is missing in this situation?

Ans. NO. 35: Yes

No
No

37. The greater the initial difference in concentration across the membrane, the greater the _____ pressure that can be developed.

Ans. No. 36: The presence of a difference in concentration across the semipermeable membrane (or some similar statement.)

38. Can you now define osmosis?

Ans. No. 37: Osmotic

ANS. NO. 38: Osmosis is the net diffusion of water molecules through a semipermeable membrane from a more dilute solution (higher water concentration) to a more concentrated solution (lower water concentration). This movement results in the development of osmotic pressure. (Or some similar statement.)

REVIEW QUESTIONS

1. What is the basis for the statement that “the cell constitutes the minimum material organization possessing life”? Would you consider viruses “alive”? Why?
2. What is misleading about such a term as “a typical cell”? Is there such an entity as “a typical cell”? What is it (would it be) like?
3. Name some features of cell ultrastructure that have become evident as a result of the use of the electron microscope. How has electron microscopy changed our view of the internal structure of cells and their components? Cite specific examples of structures not seen by means of light microscopy.
4. Why would it be most undesirable, if not fatal, for cell membranes to be either absolutely impermeable on the one hand, or completely permeable to all substances at all times on the other hand? What advantages and/or disadvantages result from the semipermeability of cell membranes?

SELF -TEST

1. Which one of the following biologists is *not* closely connected with the development of *cell theory*?
[H: Yes indeed this IS a trick question. I do, however, want you to know who is outstanding in this subject so that you who wish to move further, may know who to research].
 - a. Robert Hooke
 - b. Charles Darwin
 - c. Anton van Leeuwenhoek
 - d. Theodor Schwann
 - e. Rudolf von Virchow
2. In general, independent organisms are larger than individual cells, which in turn are larger than macromolecular units, such as chromosomes. However, there are numerous exceptions to these size relationships in that some macro-molecular units may even be larger than some very small independent organisms. (True or False?)
3. Match the cellular structures in the left column with their location with regard to the major features of the living cell in the right column.

a. mitochondria	(1) the cell surface
b. nucleolus	(2) the cytoplasm
c. cell wall	(3) the cell nucleus
d. chloroplasts	
e. endoplasmic reticulum	
f. Chromosomes	

- g. centrioles
- h. plasma membrane

4. List at least two structures of organelles common in certain cells of higher plants but rare or absent in the cells of animals.
5. Conversely, can you list a structure common only in certain animal cells but rare or absent in the cells of higher plants?
6. The phenomenon of diffusion:
 - a. occurs only in aqueous solution
 - b. requires the presence of a semipermeable membrane.
 - c. usually leads to the loss of organelles from the cytoplasm
 - d. never reaches an equilibrium state
 - e. is a direct consequence of molecular motion
7. Which one of the following pairs is mismatched?

a. ribosomes	site of DNA synthesis
b. chloroplasts	site of photosynthesis
c. vacuoles	storage, digestive, or excretory cavities.
d. cell wall	external support
e. chromosomes	repository of genetic information.
8. List two reasons many biologists do not feel viruses should be considered living organisms.
9. What is the predominant molecular constituent of cells?
10. The cytoplasm of most animal cells appears to be a fairly homogeneous, simple, and noncompartmented area. (True or False?)
11. How does a colloidal suspension differ from a true solution?

END QUESTIONS

Now the *secret answers*:

1. b
2. true
3. a (2), b (3), c (1), d (2), e (2), f (3), g (2), h (1)
4. chloroplasts (plastids), large vacuoles, cell walls.
5. centrioles
6. e
7. a

8. They do not possess the capacity for self-reproduction or self-regulation.
9. water
10. false
11. The difference is largely in the size of the particles involved. In general, colloidal particles are larger than true solute particles. The actual differences are more subtle than size alone, however.

End answers to Chapter 3.

I ask that a picture be included here for your visualization ease. I know that it is hard to understand that which you cannot see. However, please realize that I have to bring “pictures” from other texts and they do not always match completely with what is offered, especially at a given lesson time. Perhaps, however, if I give you a bit of explanation from the “Introduction” of another text, you will be better able to connect the lessons.

[See next 2 pages]

cell

Schematic diagram of a cell and its organelles drawn to reveal their three dimensional structure.

AV, autophagic vacuole; C, centriole; CH, chloroplast; CI, cilium; CR chromatin; DV, digestion vacuole; F, microfilaments; G, glycogen; GA, Golgi apparatus; JC, junctional complex; LD, lipid droplet; M, mitochondrion; MT, microtubules; MV, microvillus; N, nucleus; NU, nucleolus; P, peroxisome; PL, primary lysosome; PM, plasma membrane; PV pinocytosis vesicle; R, ribosomes and polysomes; RB; residual body; RER, rough endoplasmic reticulum; SER, smooth endoplasmic reticulum; SV secretion vacuole.

The organelles have been drawn only roughly to scale. Also, the sizes and relative amounts of different organelles can vary considerably from one cell type to another. For example, only plant cells show chloroplasts, and among animal cells only a few types show peroxisomes. A detailed enumeration of the organelle content of one cell type is presented in Chapter 2.12.

CELLS AND ORGANELLES

[QUOTING, Novikoff, Holtzman (Text):]

INTRODUCTION

The analogy between cells and atoms is a familiar one and like many familiar comparisons it is both useful and limited. Cells and atoms are units. Each is composed of simpler components which are integrated into a whole that exhibits special properties not found in any of the parts or in random mixtures of the parts. Both exhibit considerable variation in properties, based on different arrangements of components; the number of variations far exceeds the number of major components. Both serve as basic building

blocks for more complex structures.

However, the analogy cannot be pressed too far; cells can reproduce themselves, whereas atoms cannot. **The ability to utilize the nonliving environment to make living matter is probably the most fundamental property of LIFE**, and cells are the simplest self-duplicating units. Duplication is based on DNA (deoxyribonucleic acid) which **can be replicated to form perfect copies of itself**. Thus the genetic information encoded in DNA is perpetuated from one cell generation to the next, sometimes without significant variation over vast periods of time. DNA is unique among macromolecules in its replication. **Only in certain viruses has another macromolecule (RNA, ribonucleic acid) been shown to replace DNA in its central hereditary role; the replication of RNA in these viruses is essentially like that of DNA.** [H: You may read that as essentially being the determining factor in the replication of a being. When you replicate a clone you are basically determining outcome by the tampering and conditioning of the RNA factors—otherwise you would simply have perfect duplication. However, there is so much MORE to the scenario when, especially, you are cloning “thinking” man, that you have to take into consideration the data downloading into the brain of the ability to carry thought, reason and relate it to “action” beyond that of lower animal forms and plants, etc. This can easily be accomplished but the etheric soul or spirit is altered in EVERY instance, even if the knowledge is presented.]

Genetic information is expressed in cells by the mechanisms of *transcription and translation*. Transcription transfers the DNA-coded information to RNA molecules. Translation results in the formation of specific proteins whose properties are determined by the information carried by these RNA molecules. Among the proteins are *enzymes*, catalytic molecules that control most of the chemical reactions of cells. Enzymes differ in the kinds of molecules they affect (their substrates) and in the kinds of reactions they catalyze. Many are involved in the synthesis of the other cellular macromolecules, the nucleic acids (DNA and RNA), the lipids (fats and related compounds), and the polysaccharides (polymers made of many linked sugar molecules). Through this chain of transcription, translation, and enzymatic activities, DNA directs its own replication, and controls as well the rest of *metabolism*, the sum total of all the chemical reactions that take place in cells. The chain is universal and thus all cells are made of the same classes of macromolecules (nucleic acids, proteins, lipids, polysaccharides) and smaller molecules such as water and salts. Duplication, and presence in different cells of similar molecular and structural materials and mechanisms, are features of *cellular constancy*, one of the main themes of this particular book.

A second theme of the book is *cell diversity*. Cells may be classified into a large number of categories. Eucaryotic cells are distinguished from procaryotic cells, plant cells from animal cells, and muscle cells from gland cells. These distinctions derive from differences in morphology and metabolism. Eucaryotes differ from procaryotes in complexity of cellular organization. The unicellular protozoa, most algae, and the cells of multicellular plants and animals fall in the eucaryote category. In these cells, different specialized functions (such as respiration, photosynthesis, and DNA replication and transcription) are segregated into discrete cell regions which are often delimited [H: Fix or define the limits of—] from the rest of the cell by membranes. The cell's *organelles* reflect this segregation; they are subcellular structures of distinctive morphology and function. The most familiar of the organelles is the nucleus, which contains most of the DNA of the cell and enzymes involved in replication and transcription. The nucleus is separated by a surrounding membrane system from the rest of the cell, the cytoplasm. The cytoplasm contains many organelles including the *mitochondria*, the chief intracellular sites of respiratory enzymes; in plants,

the cytoplasm contains *chloroplasts* in which are present the enzymes of *photosynthesis*, a metabolic process unique to plant cells. The mitochondria, chloroplasts, and a number of other cytoplasmic organelles are also delimited as discrete structures by surrounding membranes.

The procaryotes include the bacteria, the blue-green algae, and some other organisms. In contrast to the eucaryotes, they have relatively few membranes dividing the cell into separate compartments. This is not to say that all components are mixed together in a random fashion. The DNA, for example, does occupy a more or less separate nuclear region, but this is not delimited by a surrounding membrane. In fact, the traditional distinguishing feature of procaryotes is the absence of a membrane-enclosed nucleus (the suffix *caryote* refers to the nucleus). Respiratory and photosynthetic enzymes are not segregated into discrete mitochondria or chloroplasts, although, as will be seen, the enzymes are held in ordered arrangements within the cell.

The diversity of cell types owes its origin to evolution. By comparison with other macromolecules, DNA is remarkably stable. But *mutations* do occur at an appreciable, though low, frequency. Mutations alter the genetic information that is encoded in DNA and passed by a cell to its progeny; thus, they can produce inherited changes in metabolism. Some result in a *selective advantage*, roughly defined as an increase in the number of viable offspring produced per lifetime by an organism. In the evolving population, organisms carrying such advantageous mutations will slowly replace organisms without them. The pattern of the spread of a mutation in a population depends on reproduction and thus, ultimately, on mechanisms of division of cells.

Usually the daughter cells resulting from division of *unicellular organisms* are essentially similar to the parent cells; the daughters contain replicates of the parent cells' DNA and the DNA establishes the range of potential responses to the environment by specifying the available range of metabolic possibilities. Given a similar environment, there is little difference between parent and daughter. If the environment changes, parents and daughters will change in similar fashion and within genetically imposed limits. Diversity of cell types rests upon mutation.

In *multicellular organisms*, diversification of cell type without mutation is a regular feature of development. Most multicellular animals and plants start life as a single cell, a *zygote*, with a nucleus formed by the fusion of two parental nuclei. (Usually this results from fusion of sperm and egg or the equivalent.) The cell divides to produce daughter cells with identical DNA, but these *differentiate* into specialized cell types with different morphology and metabolism (for example, gland cells producing digestive enzymes or muscle cells rich in contractile proteins). Part of the mechanism for this is based on the fact that the immediate environment of a given cell is strongly influenced by the other cells of the organism. Cell interactions are of major importance in the development of multicellular organisms. They are key factors in determining what portion of its total genetic endowment will be expressed in a given cell. In different cell types, different portions of the DNA apparently are used in the transcription that underlies macromolecule synthesis; presumably, for a given cell type only a particular part of the total genetic information is responsible for the cell's characteristics. Thus constancy in DNA coexists with diversity in metabolism and morphology of the cells which carry that DNA. Differentiation implies that cells are not mere aggregates of independent molecules or structures each "doing its own thing", and that DNA molecules are not autonomous rulers of subservient collections of other molecules.

As in development, the normal functioning of adult multicellular organisms also depends upon the interaction of neighboring cells and upon long-range cell-to-cell interactions mediated, for example, by hormones or nerve impulses. Cells are integrated into tissues, tissues into organs, and organs into an organism. Similarly, cells are themselves highly organized; molecules are built into structures in which they function in a coordinated and interrelated manner, and often show properties not found in a collection of the same molecules free in solution. The products of one organelle may be essential to the operation of another. Cell functions depend upon mutual interaction of parts. *Cell organization* and the implications of organization for function are a third theme of the book. **[H: Which we will not even consider at this point.]**

Reproduction and constancy, evolutionary and developmental diversity, the integration of cellular components into a functional whole—all are subjects for investigation in cytology and cell biology. The fourth theme of the book is the dependence of major biological findings upon the development of *new methods of study* and upon the *choice of the best organism* for the problem at hand. We will illustrate the kinds of experiments and approaches currently used in cytology and cell biology. The central tool is the microscope, but microscopy is increasingly supplemented by chemical and physical studies. Descriptive and experimental approaches supplement each other. The great diversity of cells and organisms presents opportunity for choice of cell types especially well suited for analyses of new problems. Investigations of pathological material and of cells experimentally subjected to abnormal conditions provide valuable clues to normal functioning. **[H: Neither will we go into this yet.]**

Study of the cell is progressing rapidly and the solution of many problems presently unsolved may be anticipated with confidence. Some of the unsolved problems are of practical importance. As our understanding of cells increases, so does our ability to control and modify them. This ability is crucial for medicine and agriculture. It also raises important ethical and social questions.

[END OF QUOTING]

I offered this last portion for a good reason which I assume all of you “caught”. I wanted you to see how much MORE you understand about the entire subject by simply learning a few terms and their meanings. It becomes as the difference in walking a mine field with lights or stumbling along in the darkness waiting for the bombs to blow-up.

If we were able to take the basis of the cellular structure of government, we could investigate all the happenings which “went wrong” along the way—but that is NOT MY thrust. You are capable of ETERNAL LIFE—if you learn what THAT MEANS. Politics will come and go, planets will come and go and mankind will come and likely go, but truth and knowing shall always REMAIN. That which you ARE is that which you must first CONFRONT. So be it and I thank you, Dharma, for a very long and tedious day at the keyboard.

Good afternoon.

CHAPTER 7

REC #1 HATONN

TUE., SEP. 12, 1995 7:24 A.M. YEAR 9, DAY 027

TUE., SEP. 12, 1995

YOUR LAST PRIVACY SHELTER

I have asked permission of Nevada Corporate Headquarters Inc. to bring your attention to their 1995 Workshop. As things change in your nation and the frantic effort arises to get more and more money from fewer and fewer citizens with ability to pay, I am remiss if I fail to bring shelters to your attention.

Mr. Christie has been kind enough to write for *CONTACT* without charge, on ongoing subjects regarding the advantages of incorporation, and more specifically, incorporation under the sheltering wings of Nevada.

Through the years Mr. Christie has brought to your availability such notable personages as Jack Miller who is, I believe, the most knowledgeable one person in the use of Corporations and Real Estate management.

PATRICK SPENCER

Most of you, however, don't actually deal much in Real Estate except possibly on a once or twice circumstance. However, Patrick Spencer can be a useful information resource every day of your business or personal lives. He can instruct you how to **MAKE SURE** you are covering **ALL** of your necessities as regards the Internal Revenue Service. Remember always that incorporation is not to evade anything but to better manage your business and assets and offer avenues of sheltering in privacy some of your business options.

Patrick Spencer is a nationally recognized **Tax Planning Consultant**. He has conducted hundreds of lectures and seminars for both major U.S. corporate clients and for the public at large. His T.V. shows, radio shows, and speeches have turned a terribly dry subject into a fascinating, exciting and financially rewarding experience for many thousands of people. A retired former IRS examiner, Mr. Spencer holds a Master's Degree in Business Taxation.

Mr. Spencer, who has been in the accounting and tax field for over 40 years, developed the first standardized computer accounting program which he sold to a NYSE firm. The program is still in use today by thousands of CPAs, other accounting and financial planning professionals, and National Franchise firms.

Mr. Spencer was the founder of the first national prepaid Income Tax Audit Protection company. This service utilized a network he formed, of over 1,100 former IRS Managers, Instructors, Attorneys and Agents to represent taxpayers before the IRS in audits. The firm acquired over 30,000 clients and suc-

cessfully conducted thousands of IRS audits on behalf of taxpayers.

My thrust has always been, from onset of our sharing information, to offer the insight and make available, as we could grow, the teachers and guides to help you through the troubled times with the best advantages available. We do not do shyster recommendations which cover bad dealings—our full and only intent is to allow you work WITHIN the system which exists, to the very best of your sovereign individual ability with protection to the utmost available for self, family and nation. But all we can do is offer.

Even if you think you know all you could possibly know, or feel that you can't afford even one more seminar—**please reconsider for this is a “workshop” which can teach you the nitty-gritty of keeping “square” with the IRS and Uncle Big Brother. If all people would run their business as a corporation there would be ever so much less hassle and bombardment from that uncle big brother who always watches. Lawyers and accountants HATE IT because they are out of a job when you take command of your business.**

One of the most notable advantages is the very act of passage on from this world. If you have handled your affairs well, made your will for personal items and correctly formed a family corporation in the State of Nevada—you have full control over your assets while alive and after death. You, say, are the President of the Board and you die—you do not go into probate court, you don't have your assets frozen or taken—your corporation honors you and elects a new president—there is not a moment lost in ability to continue to function or do business. **THERE ARE NO FAMILY SQUABBLES TO TEAR THE REMAINDER OF THE FAMILY ASUNDER. YOU HAVE CONTROLLED YOUR BUSINESS AND DIVIDED STOCK TO BE ISSUED AT YOUR DEATH—AS YOU HAVE SEEN FIT AND WISH TO DO. THERE IS NO LEGAL ALLOWANCE FOR BREAKING YOUR DECISION.**

It is my understanding upon inquiry that Mr. Spencer will be available for consultation, concerning your tax questions or problems.

I am also informed that the Nevada Corporation Workshop Coursebook (already some 300 pages) is being completely revamped—so you are not going to leave that workshop with empty hands.

I consider the handling of your affairs to be as important as managing your self and body. If you invest in healthy and healing attitudes and knowledge as regards SELF and possibilities for GOOD FUNCTION, and KNOW what you are doing—you will live long and prosper. **YOU NEED NOT BECOME THE SYSTEM TO WORK WELL WITHIN THE SYSTEM!!**

If you have had recent encounters with the “law” or lawyers—you will recognize that at ten times the price of some good workshops—**YOU SAVE MONEY BY THE TRUCKLOAD.**

Because I feel this is so important I am going to ask that *CONTACT* please run this in the most prominent visible section or page of the paper.

You can reach Nevada Corporate Headquarters in Las Vegas at 1-800-398-1077.

If you simply cannot attend, you might inquire if the workshop will be put to tape or print. I believe the

information is SO IMPORTANT that I urge you to update your own information bank as is possible. We know that tough times are upon you—but remember: informed, knowledgeable, and insightful TOUGH PEOPLE will last and the tough times will pass as YOU ATTEND YOUR AFFAIRS AND VALUES.

GULF WARS AND GULF WAR SYNDROMES

I cannot let this pass without bringing to your attention “today’s” news items which probably you are missing in the overall confusion of Ito’s circus-circus and Bosnia bombing (which, like Kuwait and Iraq, is over OIL) and since blood and oil don’t mix—the blood flows more freely while the “oil” remains hidden. My interest is not in either as I write this material for I just want to remind you that you are dealing with what appears to be non-living assault weapons—but the dastardly truth is that living organisms are presented with every detonation and as in the Gulf War Syndromes—parasites bearing bacteria bearing viruses. If you are keeping up with my other writings (now about a week behind in *CONTACT*), you KNOW that I am serious and bringing you TRUTH.

Viruses are VERY TINY organisms, now often manmade. They cannot reproduce themselves or regulate themselves—they HAVE TO HAVE A HOST IN WHICH TO DRAW “LIFE”. They can be carried and utilize all manner of microbe and bacteria for that purpose to survive and rebirth within either until another host is made available. So, the bacteria bearing the virus can then be introduced into a carrier PARASITE which is then carried within insects (fleas, mosquitos, etc.) and when they “bite” they introduce the organisms into the next host and the next and the next and thus and so.

So, to attend the syndrome dis-ease, the parasites must be removed from the host (YOU). That is simple with a good parasite cleansing kit which you can get from several places, I suppose, but the one I KNOW works is from New Gaia. However, NOW you have the disease mutant organisms working you over most profoundly—but without the parasites there is no place for the microbes to go hide. The disease organisms can then be cleansed out with some hard-hitting colloids of high frequency range and these will NOT do anything except enhance the health of the normal cells. Then you need to attend that immune system with some liquid crystal life-cells [*Gaiandriana & AquaGaia*] while regularly (every few months) running through the parasite cleansing program—because you now have parasites IN EVERY PUBLIC WATER SUPPLY. PARASITES HAVE BECOME THE VIRUS CARRIERS OF CHOICE WORLD WIDE. FURTHER, THE VIRUSES ARE NOW ALTERED TO HAVE TITANIUM (OR HIGHER FREQUENCY METAL) CAP-GLUE. THIS IS THE MOLECULE WHICH HOLDS THE “BRAINS” TO THE CRYSTALLINE VIRUS STRUCTURE. Silver with gold enhancement colloids instantly knock out that molecule and the virus simply is sluffed off. If you are regularly taking a liquid crystal—the DRIAS in the crystal feed on the broken up fragments. Gold colloids will do the trick more rapidly from “within” but silver (with gold traces) will also act as a topical antiseptic. Gold particulate in colloid works within the cells so won’t do much on “contact” outside the body. A colloid such as OxySol is the BEST water purification product along with being the best antiseptic and method of intake anywhere, anytime (so far). It is a colloidal solution of gold AND silver presented by catalytic action with simple hydrogen peroxide and carbon, among a few other badly needed elements that are hard for the body to obtain in their unaltered state.

I had not intended a lecture on protection for self, but after all, that IS WHAT YOU ASK FOR, isn’t it? Just to KNOW about a thing is not the solution to the problem. But KNOWING and acting IS often the

simple solution.

“But,” you say, “the Government says they don’t know what that Syndrome is and that it is not related to the Gulf War, etc.—ask any veteran who has tried to get help.” Oh? Read on:

LOS ANGELES TIMES

Aug. 10th or 11th, 1995

by Robin Wright, writer *L.A. Times*.

[QUOTING:]

U.N. OFFICIALS ASTOUNDED
BY IRAQ’S GERM WARFARE

WASHINGTON—In their most comprehensive revelations about biological weaponry, Iraqi scientists have admitted to conducting groundbreaking research on viruses that make eyes bleed and cause lethal diarrhea in infants and on toxins that can eliminate entire crops, U.N. investigators and U.S. officials said last week. **[H: WHAT THEY DO NOT SAY, HOWEVER, IS THAT THE RESEARCH AND DEVELOPMENT CAME DIRECTLY FROM THE UNITED STATES OF AMERICA.]**

Iraq’s program, which is turning out to be one of the most extensive in the history of biological warfare, included work on viruses and toxins ranging from yellow rain and chemicals to toxins that produce gangrene.

“No country I know of has ever even played with the idea of developing many of these into instruments of war,” a senior U.N. scientist said. “It represents highly innovative thinking and a very huge investment.” **[H: Do not believe this garbage—you have been investigating and testing these very things in many nations including ISRAEL and RUSSIA—AND RIGHT IN THE GOOD OLD U.S.A. IRAQ ONLY USES WHAT THEY GOT FROM YOU!!]**

Iraqi scientists, seeking to threaten civilians as well as troops, also worked out a novel way to make their deadly or debilitating germs rain down on wide areas, the speaker said.

They modified “drop tanks”, originally designed as auxiliary fuel pouches for warplanes, so that they could spray biological agents over the countryside from high altitudes.

The initial targets now appear to have included Israel **[H: Oh Barf!]** as well as regional rivals and any opposition troops mobilized against Iraq after its invasion. Israel was a target in part because of its 1990 bombing of an Iraqi nuclear reactor, the Iraqis told the U.N. inspectors.

Iraq says it dismantled the program following the 1991 Persian Gulf War, a claim that U.N. inspectors must now verify.

Iraqi officials disclosed the dimensions of the program, which is proving far more ambitious than Western intelligence and U.N. arms inspectors had expected, to U.N. investigators last week.

Until then, Iraq had claimed that its program employed only 10 people who wrote six research papers

on biological warfare over a four-year period.

But U.N. investigators now say the biological weapons program involved up to 150 scientists and technicians, not including support staff, security and other aides.

The germ warfare program, well under way during the Iran-Iraq War, moved into an even more intensive phase in July 1990, a month before Iraq's invasion of Kuwait that eventually terminated with the 1991 Persian Gulf War.

[H: Readers, I apologize if we are leaving out some vital information but the FAX copy we hold is so poor as to be illegible in part. We will have to skip several paragraphs, so perhaps you can obtain a copy for self if this is insufficient.]

...Among the viral agents, U.N. specialists said, was one that causes hemorrhagic conjunctivitis, which at minimum causes temporary blindness and in the worst causes the eyes to bleed. The onset is within 24 hours, and the virus is highly transmissible.

Another... a virus that causes chronic diarrhea that can be lethal in children and incapacitating to troops. A third was camel pox, which, like smallpox and monkey pox, produces toxins. None of the three has been used in biological warfare, the U.N. scientist said. **[H: Perhaps not, but all have been TESTED on unsuspecting villages and villagers in isolated places in South Africa to which Iraq has NO WAY TO REACH WITH ANYTHING. YOU ARE AGAIN BEING FED LIES—GOOD FRIENDS! THESE VERY MICROBES ARE BEING SINGULARLY USED ON VARIOUS CITIZENS OF VARIOUS COUNTRIES TO TEST CAPABILITIES.]**

The Iraqis also considered making two other viral agents, those that cause yellow fever and the Crimean Congo hemorrhagic fever, which is a tick-borne disease common to the Crimean Sea river and the region of the Zaire River, formerly known as the Congo.

The Iraqis did produce more than 78 gallons of the bacterium that causes gangrene, a common infection in wartime wounds, the U.N. specialist said.

They were experimenting with spreading it through aerosol devices that would allow the spores to penetrate the lungs, and with weapons releasing shrapnel that would open wounds in the skin for spore penetration.

Perhaps the most consequential biological agent tested in the Iraqi laboratories was the *wheat-cover* "smut", which produces a purplish-black growth on the grain stem and ultimately kills the entire plant. **[H: THIS ONE IS BEING USED IN THE UNITED STATES AS WE SPEAK. REMEMBER, THE MONEY OF THE FUTURE IS RESTING ON COMMODITIES AND FUTURES ON SUCH AS WHEAT, SOYBEANS, PORK-BELLIES, ETC. IF YOU CORNER AND HOLD THE FOOD SUPPLY—IT IS EVEN A MORE DASTARDLY METHOD OF CONTROL THAN IS ENERGY/OIL.]**

[END OF QUOTING]

I would like now to extend the propaganda as being presented by such as *U.S. News and World Report*, Sept. 11, 1995. The barrage of media hype is “on”, readers. The “secrets” are true as far as items mentioned. The thrust against Hussein and Iraq are lies. There IS a major effort being made to tell the world what is in store for you—through the Hussein connections, now in Jordan, but people—sleep on and you shall be “had” for the microbes of war are going to “getcha”—AIDS was only a “nice” beginning.

[QUOTING:]

BAGHDAD’S DIRTY SECRETS

New Iraqi disclosures may help explain what ails Gulf-War veterans.

Rolf Ekeus wasn’t sure what to expect when he traveled to Baghdad in mid-August, but he had a feeling the trip would be worthwhile. Iraq had summoned him as the United Nations official responsible for uncovering its hidden biological weapons. Iraq had long insisted that there were none. But just a few days earlier, Saddam Hussein’s son-in-law, the mastermind of Iraq’s weapons industry, had defected and was threatening to reveal all. So when Ekeus sat down in Baghdad with Iraqi Deputy Prime Minister Tariq Aziz and Army Gen. Mohammed Rasheed Amir, he could only chuckle at their admission, one that put the blame for the well-concealed weapons squarely on the defector, Hussein Kamel Hassan al-Majid. “Like in *Casablanca*, they said they were *shocked* that he had kept those terrible weapons secret,” Ekeus recalls. “No one knew about them, of course, [Hussein Kamel] had kept it secret from Tariq Aziz. He also kept it secret from his closest deputy, General Amir.” Never mind, Ekeus notes, that Amir’s wife runs Iraq’s biological weapon program. **[H: Anyone reminded of the super-human abilities of such as Col. Oliver North or O.J. Simpson?—nobody else knew, nobody else participated, nobody did anything—just one man doing and keeping it all secret!]**

No one, least of all Ekeus, was shocked to learn that Iraq had developed toxins and organisms that, when spread by weapons, can infect humans, animals and crops with deadly disease. Iraq had already owned up to developing nuclear and chemical weapons, and Ekeus had long insisted that Iraq also had germ warfare agents. What the new admissions reveal is the unbridled ambition and undeniable success of Iraq’s efforts in building a biological—as well as a chemical—arsenal and readying it for use in the Persian Gulf War.

Iraq, Ekeus learned, had produced tons of deadly substances. More than 1,500 gallons of **anthrax toxin** was loaded into 50 bombs and 10 missile warheads. Nearly 3,000 gallons of **Botulinum toxin, an agent that attacks the nerves and chokes its victims to death**, was poured into 100 bombs and 15 missile warheads and sent to airfields. **Ricin**, another deadly nerve agent that can kill with one drop, had been tested in artillery shells. The Iraqis had even made 78 gallons of a **toxin that produces gangrene**, a discovery United Nations sources say they will reveal later this week.

The only remaining question is, did the Iraqis use the stuff? Saddam Hussein insists they did not, and the Pentagon says no such weapons were found in the war zone. **[H: Well now, you had better get nervous if the Pentagon also says “no”.]** But newly released Pentagon documents show that at least some chemical weapons were found on the battlefield. That and reported detections of chemical agents in the air appear to support claims made by gulf-war vets suffering from strange illnesses that some American

and allied troops *were* exposed to Hussein's chemical arsenal, either from Iraqi attacks or by release of poison gas as allied planes attacked Iraq's chemical depots. **[H: I guess those little buggers just hitched onto those planes over 2000 feet in the air? Does anyone realize what a pack of you-know-what this IS? How actually "stupid" do they take you for? Silly question, forgive me.]** U.N. officials note that they discovered the presence of mustard gas at a chemical weapons supply depot. Allied planes hit dozens of other chemical storage sites during the war. U.N. officials say allied planes also hit biological and chemical weapons centers at Muthanna, Salman Pak and Al-Kindi. **[H: Any Chemicals on the allied planes GOT ON THE PLANES BECAUSE THE PLANES WERE RELEASING THE SUBSTANCES!!! THERE IS NO OTHER WAY. It is like gun-powder on a fired gun or on the hands of the one who fires the gun. This is full tale-telling, readers—if it is on the plane, it started on the plane!]**

Connecting dots. The new Iraqi disclosures show how easy it is for outlaw countries to amass chemical and biological arsenals and how difficult it is to detect them. The U.N. hunt for Iraq's biological agents took real sleuthing. Unlike the equipment necessary to make nuclear or chemical weapons, that for biological weapons is of a smaller scale and is easily concealed. In the months after the war, Iraq insisted that its biological weapons program consisted of only 10 research papers; until early this year, U.N. inspectors had little to refute that claim. In January, U.N. scientists noticed something interesting at Al Hakam. Invoices showed that the Iraqis had purchased organic "media", a substance in which organisms are grown, from three European companies. **[H: Owned by the U.S.]** "It was the amount and it was the packaging that was peculiar," says Ekeus. "They said it was for medical purposes and medical is, you know, small packages."

Instead, Iraq was ordering media by the ton. The inspectors called the companies, and they hit pay dirt. The companies, the names of which Ekeus refuses to disclose **[H: I bet!]**, allowed that they had been selling quite a lot of growth media to Iraq. "We figured out that they had bought this media in a very limited time period, late 1988, 1989," Ekeus says. "And it was a huge amount, 40 tons or more." Confronted, Baghdad conceded that it had pursued an aggressive biological weapons program.

The question now for America and its gulf-war allies is whether the new Iraqi disclosures mean their earlier calculation about contamination of soldiers were in error. Pentagon officials say chemical weapons had probably been removed from most Iraqi facilities before they were bombed, and, at any rate, the fumes would have come no closer than 85 miles to allied troops. But the new evidence raises some doubts. Five days after the air war started, Allied Central Command logs show, a Czech reconnaissance vehicle in Saudi Arabia detected a deadly nerve agent, either Tabun or Sarin. "That hazard is flowing down from factory/storage bombed in Iraq," the log states. "Predictably, this is... going to become a problem." Asked about the report, Pentagon spokesman Jim Turner said such reports were raw information and upon evaluation turned out to be false.

There were more gas detections. During the early days of the air war, chemical alarms sounded at positions manned by French and Czech units, especially around King Khalid Military City in northern Saudi Arabia, where allied troops camped and trained. The Czech soldiers were experts in chemical warfare and defense. Their detections were noteworthy, says Jim Tuite, a former Senate investigator who has spent two years studying this issue, because the Czechs had the most reliable and sensitive automatic alarms in the area. U.S. commanders belittle the Czech alarms. Logs show that on January 23, upon

receipt of “yet another Czech unit chemical report”, the U.S. Central Command told the Allied Air Force command center “to disregard any reports coming from the Czechs”. Asked about that exchange, a Pentagon spokesman said he had no immediate explanation for that log entry; **[H: Seems the Pentagon just doesn’t know a thing about anything, doesn’t it?]** other officials say there were probably thousands of chemical alarms in the war zone, all spurious. But not everyone agreed. On Feb. 4, 1991, a French military spokesman said the allied bombings had produced nerve-agent fallout “a little bit everywhere”.

Still more chemical-agent alerts sounded when the U.S. Marines invaded Kuwait. In one location, they detected blister agents. In another, two marines were burned on the arms by mustard gas, possibly from a land mine. Other marines reported finding chemical rounds marked with skull and crossbones and apparent mustard gas in drums in a bunker near Kuwait City. Marine Capt. Michael Johnson disputes Pentagon assertions that there were no chemical weapons in the war zone by pointing out that he got a medal for identifying a 250-gallon container of Iraqi blister agent and phosgene.

Low-level, sporadic exposures. All of this, says Tuite, points not to concerted chemical attacks by Iraq but to low-level, sporadic exposures. How well U.S. troops were prepared for such exposure is unclear. Recently declassified data show that the best U.S. detectors were able to recognize some types of nerve gas at concentrations 1,000 times above their hazard level. A 1990 Pentagon report called the Army’s automatic chemical alarm “not sufficiently sensitive.” CIA documents say U.S. troops deployed no detectors for biological agents.

That’s what concerns gulf-war veterans, some 50,000 of whom believe they suffer symptoms that could have come from low-level exposure to Iraq’s chemical agents. Last year, a Defense Science Board Task Force found “no evidence” that U.S. troops were exposed to chemical or biological agents. **[H: Oh well...!]** A National Academy of Sciences panel agreed. President Clinton has since formed a blue-ribbon commission to study the problem anew. **[H: And you can’t beat those speedy blue-ribbon committees with a stick.]** Suffering veterans hope the Clinton commission will carefully examine the gulf-war detections in the light of new information coming out of Iraq. “The national security aspects are real,” says Tuite, the Senate investigator. “Publicly denying it is not the way to overcome it.”

(By Stephen J. Hedges, Peter Cary and Linda Fasulo AT THE UNITED NATIONS.)

[END OF QUOTING]

May God be with you for this is going to come to be the most vile and miserable thing to come upon mankind. Salu.

CHAPTER 8

REC #1 HATONN

WED., SEP. 13, 1995 8:00 A.M. YEAR 9, DAY 028

WED., SEP. 13, 1995

THE CRASH OF '95

As we struggle to get information to you on WHAT YOU ARE, we are constantly pounded into the realization that “living” is what happens while you are trying to decipher “life”. And, furthermore, man still claims to want to KNOW ABOUT LIFE while he really wants to know about his “things”. Therefore, we have to divide up the massive load here and share the space in the paper until such time as we can have abundance which will allow for all and require less super-human beings to accomplish our presentations. However, please note that if “ifs” were gold—we would be tremendously wealthy and all the problems would be DIFFERENT. So, we work with what IS while we pray and plan and lay foundations in sturdy and sound preparation for the “ifs”, and by that planning—it will come forth.

If you place a sick baby into a hospital bed with a man dying of Ebola—the baby will most certainly catch the disease. If you pour funds upon a flimsy association unable to run their own lives in the most ordinary of ways—how think ye that the projects and presentations would fare? We, for instance, will go with the tested and true who stay the course regardless of that which comes against them—for in the ending THEY WILL PREVAIL and they will do so in “rightness” and stability, not by just tossing around the funds. Until this is understood, directions secured and intents honed and realized, we will not toss money into a dirty house whose foundation is crumbling under personal pressures.

I would caution some right here under our noses that they DO NOT need to, nor SHOULD they, tamper about in the Indian (American Native) business—in any way at all save the presenting of information in the paper. You are getting a lot of things totally confused and the Indians will despise you for it. Do not, for instance, go to the Hopi’s suggesting that Wakan Tanka, Tunkashila, Standing Bear, White Buffalo Calf Woman sent you. They do not recognize these names even though they know what they mean. They will toss you out in disgrace for this is LAKOTA language and names. You are mixing cultures and you may well get a feather stuck up your nose for the intrusion. Further, no one goes to Grandfather’s place for Little Crow to do anything!! You may well get a sign of some kind but it will NOT BE THE SIGN YOU SEEK. Be patient in the learning sequence and note that you bog down in your own receiving and tasks if you attend that which is outside the needs of the moment. All will unfold in its proper time.

If you have great need to “handle” or “experience” something—clear first with either Little Crow, who will tell you instantly to mind your own business, the Indians are not your problem, and/or to E.J. Satala who is a Hopi and understands about Sipapu(s) and Earth interpretations. YOU ARE ALIENS IN THEIR MIDST—PLEASE BE GRACIOUS GUESTS FOR YOU ONES REMIND ME OF THE NOSY MISSIONARIES WHO ARE GOING TO SAVE SOMETHING WHEN THEY WEREN’T “LOST” IN THE FIRST PLACE.

NONE of you need to GO anywhere—stay and attend your business and, at this moment—it is NOT IN INDIAN LANDS OR EVEN IN THE WACO HOLOCAUST. I am not going to “keep you safe” while you flit about attending everything and every and any speaker who wishes to share and tell. What some of you are considering in action—IS DEADLY!

Dharma’s father died (physically) two nights ago and she was notified, from Texas, that the funeral would begin in less than an hour. Tell you something? The CIA and Military Intelligence had already moved in to meet her. Everyone she would contact would be in terrible danger. When you choose this pathway we have to remind you constantly that once you pass the point of no-return, you can’t just turn it off or step over the bodies on your way out the door.

And by the way, Ronn Jackson is doing all he can. There is a terrible confrontation going on between your “administration” and the “committee” over what to do with US and, for that matter, Ronn. They all know we both exist and continue to dance on the pin-head. Do you actually think the Clinton Administration enjoys you-the-people knowing what was written “just” in yesterday’s *CONTACT*, by Cathy O’Brien? [see 9/12/95 *CONTACT* pages 12-15] Satan rules, children, and he doesn’t like to lose even one tiny round in this ring of exposure. They are too stupid to recognize that if they would meet their agreements, we would go about our own business and they could dance until they perish—on their own terms. Oh well!!

I would add here, also, that we can’t continue to bear the load of all the political information, possible New Republic activities, “Grandma’s” drive to handle gold certificates, delve into all the land loans and fund returns. We have more than we can handle on that which we have GOT TO PUBLISH. We know that you have opportunity to get those other things without us RE-RUNNING them so we have to continue as best we can to inform where we can and ask you to try to keep up with that which you can—until we can have funding and work out some kind of integrated paper. When we merged *CONTACT* with a Las Vegas newspaper, it now becomes obvious what was in intent. However, there is no way to carry papers without subscribers and if something as widely read as *is CONTACT* can’t carry the load, no other small paper can do so. Our hope is that we can merge several. We do NOT take advertising as do the other papers for with money advertising, there is a compromise usually required at some point along the way. We must have our KNOWLEDGE available with every item we suggest for your use or we won’t run the product—and never without comment.

I do not have time to write and re-write on given subjects—further, information already available gives you clues to your “not being alone” and there is a lot of information recognized by a LOT OF FELLOW-CITIZENS. You have far more power than you realize and by offering what OTHERS bring, such as Eustace Mullins, etc., you can know who and where to go for contribution or to help. You also have full and inexpensive input available from the Journals offered here. We realize that some of you are having to read *CONTACT* with a magnifying glass but frankly it is the only way the staff can cover a pittance of information for you without many re-runs. We do the very best we can and we have to ask you to do likewise.

Since we near October and the expected “Crash of ’95” as given as probability as far back as 1989—by me, if you can’t remember who else—it is upon you! Dr. John King, now deceased, wrote incessantly about it and we furthered the work in *Spiral to Economic Disaster* and other Journals, back then.

You MUST get your houses IN ORDER and I cannot push incorporation in Nevada hard enough. You need some sheltering and you need to be OUT OF THAT MARKET. The markets, after all, ARE the major manipulators.

So, AS A REMINDER of how things ARE, I will share something sent to my attention within this week. It is entitled *The Crash of '95* and it comes from an article by “Cedric X” of *The Final Call*, reprinted in *New Dawn* and is sent from **Australia**.

The “attention” line reads: “*A Final Call Special Investigation Asks: ‘Has a Financial Panic Been Planned for October 1995?’*”. I would acknowledge that coincidences are NEVER ACCIDENTS so it behooves you to pay attention. If NOTHING happens you are yet prepared and if SOMETHING happens—YOU ARE PREPARED! This will be too lengthy to present in one writing, Dharma, so allow us to label this “Part One” and then we can break it conveniently. I think, however it would be better to present, in publication, as one document if possible.

[QUOTING:]

THE CRASH OF '95, PART 1

By Cedric X of *The Final Call*. Reprinted from *NEW DAWN*, Sept.-Oct. 1995.

[H: This comes as a well-read document with underlining and emphasis added by the reader. I shall honor this attention to detail by including the notations. I will embolden the underlined portions for better ease of reading—but please take this as important—even if there are a few misperceptions for, overall, the document is “right on”.]

October 1857, October 1929, October 1987. Will history repeat itself in **October of 1995**? The previously-mentioned Octobers witnessed three of the most devastating **financial panics in U.S. history**. Many financial insiders and government sources fear that **the stage has been set for the most tragic financial panic of the 21st century**.

In an honest and thorough attempt at examining the likelihood of such an occurrence, *The Final Call* spoke to economists, financial experts, historians and high-level government officials. What follows are the results of a six month examination of three areas that may very well lead to a **financial panic by the end of this year**.

This investigation also examines the **reality that living men and not “accidents” are actually manipulating the world of finance and economics through a variety of vehicles**. The investigation dealt with three crucial areas around which financial panic is revolving: 1) Instability in Mexico. 2) **Interest rate changes by the Federal Reserve**. 3) the possibility of a **war involving the U.S.**

What follows is an analysis of each of these three areas and how they could contribute to the worst financial panic in history.

INSTABILITY IN MEXICO

When the Mexican economy took a turn for the worse earlier this year due to the devaluation of its currency, the Mexican government made some very serious concessions that **virtually turned control of its government over to the most powerful international bankers in the world [H: Khazar Pharisees/Zionists]**. First on the list of the banks that gained a great deal of control over the decision-making powers of the Mexican Government is the **Federal Reserve Bank of New York City. [H: 12 Khazar owners.]**

There are many strings attached to the recent \$20 billion aid package to Mexico. One of the most glaring of these strings is the provision that a great portion of the loans that U.S. banks will be making to Mexico are to be secured or backed by sales of Mexican oil. Therefore, money generated from sales of Mexican oil is **now headed for the vault of the Federal Reserve Bank of New York City, which is privately-owned by banks right in New York.**

Mexico's Minister of Economic Affairs, Salvador de Lara, is a firm supporter of his country's relationship with the International Monetary Fund (IMF) and the Federal Reserve Bank in his country's affairs. Having such participation, he says, "is a guarantee that both the Mexican program and international loan package are solid." **[H: For takeover!]**

But it is the Federal Reserve Bank of New York that promises to gain the most from the Mexican concessions. As a part of the concessions that Mexico made to international bankers through the U.S. Government, revenue generated from the sale of Mexican oil can be taken from Mexico and **paid to international banks WITHOUT the permission of the Mexican people. [H: Hummmn—just like in the U.S.A.]** In the case that Mexico defaults on these loans, the United States can draw from Mexican oil sales revenue that is currently being held in an account in the Federal Reserve Bank of New York. This situation has caused some observers to believe that Mexico **is losing its own sovereignty.**

While this may very well be true, the Mexican financial crisis indicates that it **may be the U.S., not Mexico, that is losing sovereignty.** *The Final Call* has learned that very important information involving the relationship between the **Federal Reserve, IMF, the Bank for International Settlements, the International Bank for Reconstruction and Development, and the Inter-American Development Bank, has been withheld from the American public.** In fact, President Clinton **deliberately withheld information from members of Congress** as it relates to the Mexican crisis.

In an April 14, 1994 memorandum from President Clinton to Secretary of the Treasury Robert Rubin, obtained by *The Final Call*, President Clinton states that he arranged for \$20 billion to be taken **from the Exchange Stabilization Fund (ESF) and given to Mexico.** The ESF was **established for the purpose of stabilizing the U.S. dollar on world financial markets**, but now President Clinton is assigning this money to assist Mexico. **[H: Well, to assist the Banksters at any rate, any way you choose to look at it.]**

Particularly interesting in this memorandum is that Mr. Clinton states the money is being given to Mexico partially because, "The Government of Mexico is making progress in ensuring an independent central bank." Why would Pres. Clinton be informing the Secretary of the U.S. Treasury that Mexico was taking steps to "ensure an independent central bank?" The Mexican bailout had **absolutely nothing to**

do with the establishment of a central bank. The problem was largely caused by international bankers speculating or betting on the movement of the Mexican peso, thereby helping to create the environment where the Mexican peso could **fall due to its instability**. In fact, if the Mexicans were to establish an **independent central bank, the government would lose all control over the issuance and value of its currency**.

Nonetheless, Clinton is helping to push Mexico into forming a central bank. Why? Because there is more to the Mexican bailout than meets the eye.

In another section of this memo, Clinton reveals that the Federal Reserve and U.S. Government are **deliberately withholding critical information from the American public**. A section of Clinton's memo states that while the Executive Branch has provided some documents requested by the House of Representatives but **"the Executive Branch has not provided those documents as to which the Executive Branch informed the House that it would be inconsistent with the public interest to provide the documents to the House. Pending arrangements for safekeeping of classified material in a House facility, classified documents have been provided to the House by making them available at Executive Branch facilities."**

(The information was requested through House Resolution 80 adopted March 1, 1995.)

What is in those documents, and what is the reason the public was uninformed about them? Would information contained in them **expose the Shadow Government that not only controls the United States Government but also controls nearly every other government in the world?** Those who laugh at the so-called "conspiracy theory" will not be laughing later this year if circumstances concerning Mexico are allowed to move at their current pace. The Department of Defense is preparing for military intervention in Mexico and is currently coordinating activities with various branches of the government. One of these branches is the **United States Treasury, which has many secrets of its own. One secret involves the office of the Secretary of the Treasury.**

The Secretary of the U.S. Treasury, **Robert Rubin, is paid by the IMF**. By law he cannot be paid by the United States Government. This is the case even though he is appointed to his position by the President of the United States. The Secretary of the Treasury of the United States is also the **U.S. Governor of the IMF and, therefore, is not allowed to be paid by the U.S. Government**. This is a matter of public record and is a part of the reforms that have been made to the **Bretton Woods Agreement of 1944, that originally established the IMF**.

This being the case, is it any surprise that the **IMF arranged for \$17.8 BILLION for Mexico?** This means that **Robert Rubin, as U.S. Secretary of the Treasury and a Governor of the IMF [H: Remember that the Sec. of the Treasury, (U.S.) is NOT PAID BY THE U.S. but by the International Monetary Fund itself. This makes the Secretary of the Treasury an employee of a FOREIGN entity and being in the government is ILLEGAL.], is responsible for monitoring the \$20 billion the U.S. Government is backing for U.S. bankers and the \$17.8 billion the IMF is providing**. In fact, IMF and U.S. Treasury officials jointly reviewed the financial books of the Government of Mexico when the crisis first began. In reality, since the United States, through the Treasury Secretary, is the **leading subscriber to the stock of the IMF, are not IMF policy and U.S. Treasury policy being**

implemented by the same person? Nearly \$38 billion of Mexico's \$153.1 billion debt will be **handled by Robert Rubin, a Zionist.**

While the U.S. Government is publicly stating the financial crisis in Mexico is now under control, they are not saying **at what price.** In order for Mexico to be bailed out, President Clinton, through the United States banking community, has now **linked the stability of the U.S. economy to the utter instability of the Mexican Government [H: EXACTLY AS PLANNED!].** The bottom line now is that any misfortune in Mexico, political or financial, will have **serous ramifications on Wall Street and therefore the entire U.S. economy [H: EXACTLY AS PLANNED!].**

Alan Sinai, chief global economist at Lehman Brothers, told *The Final Call*: "There is a recession and a huge increase in unemployment (in Mexico) as a result of the conditions of the U.S. loans to Mexico. The question that remains is whether the people of Mexico can stand this huge rise in unemployment and, furthermore, how will the government handle this type of situation. At any time, something terrible **can happen in Mexico,** I think there could be political problems inside of Mexico that could come back to haunt the U.S."

Sinai says that the problems of Mexico can **spread throughout the financial community in America.** He believes that the investment community will be extremely nervous for a least six to nine more months. He thinks that any sudden emergency such as the **collapse of the Government or the assassination of Mexican leader Ernesto Zedillo** could have **disastrous effects on both the stock market in America as well as the production of the U.S. economy. [H: Note the use of the term "America" and not restricting impact to the "U.S."!]** Sinai adds that in the event that the Mexican economy were to take a turn for the worse, the international bankers would be forced to continue to bail out Mexico.

"The International Bankers would provide Mexico with more money because they feel Mexico has taken the tough steps that it was asked to take," he says. **[H: Don't buy this garbage—that is NOT why they will continue to bail out Mexico—they want Mexico to fall and therefore the foreclosure goes without ability to do anything but roll over and be dead.]**

Part of the reason that Mexico's problems may affect the U.S. is because of the North American Free Trade Agreement (NAFTA), that joined Canada, Mexico, and the U.S. into one trade block, making the U.S. and Mexico dependent on one another for much of their exports and imports. This means that the U.S. economy could be **deeply hurt by any sudden emergency in Mexico.** Demonstrating this impact, Mr. Sinai explains, "There has already been a \$20 billion dollar loss of income to the U.S. because of Mexico's troubles. This has cost the U.S. growth and jobs. Any bad situation in Mexico will certainly have serious and negative impacts on the U.S. as well as negative financial impacts because U.S. banks and institutions **are the holders of the debt that Mexico owes.**" The situation in Mexico is certainly bad but it is a situation in which President Clinton, the Federal Reserve, and Wall Street bankers have deliberately decided to become more involved. Why?

NAFTA has already made the U.S. and Mexico interdependent, but not to the point where Mexico was dependent on the U.S. to bail it out of its financial woes. The question deserves to be asked: **Are the international bankers deliberately forcing the United States financial community to become fatally attached to the negative impacts of a sudden emergency in Mexico?** Why? And finally, if

Clinton is pushing for Mexico to follow the example of the United States Government in forming an “**independent central bank**,” who, other than the international bankers, will purchase the stock?

The history of the establishment of independent central banks in Europe and the United States shows that if Mexico follows their example, it will only be a matter of time before the country will become increasingly indebted to the **banking community**. When this occurs, the very decision-making power given to publicly-elected officials will fall into the hands of financiers and economists who **do not value national sovereignty**.

It is no coincidence that the establishment of such a bank in Mexico is being heavily promoted by the **most powerful of all central banks**, the Federal Reserve of New York City. Not only is this bank helping to pave the way for a **potential financial disaster in Mexico**, it is also in the vanguard position of those financial forces that are **manipulating America’s economy**.

[END QUOTING OF PART 1]

CHAPTER 9

REC #1 HATONN

THU., SEP. 14, 1995 7:12 A.M. YEAR 9, DAY 029

THU., SEP. 14, 1995

LOOK AROUND— THE SKY IS ACTUALLY FALLING, HENNY PENNY

The crescendo is becoming louder and louder, the apogee nears as the noise and chaos of that which is planned for the happenings which shall accompany the anarchy all but deafens the ears and bogs the heart, mind and soul. The smoke simply burns the eyes until the brain cannot see and engage the fire. And who is the enemy? Mostly “self” trying to make the meandering trail reveal itself. I would remind you, however, as you seek to convince selves, to soothe your immediate position, that “*He who is capable of being a bitter enemy can never possess the necessary virtues that constitute a true friend.*” Therein lies the ‘secret’ of journey in relationships. Yes, indeed it may well, from time to time, appear that some are actually the true friends as they rally and assist a “cause” or two—but when the focus continues to be on the “self” and it is perceived that somehow you have crossed them—THEY WILL, IF THEY ARE CORNERED IN THEIR OWN PRIVATE TRUTH—LASH OUT AND STRIKE YOU DOWN. Does this invalidate **their** own truth? No, nor should it invalidate your own—you must look at the overall script of life and choose your way.

LET’S CONSIDER MONEY

You ALL ask about money, security, values, etc. This shows that you wish to be prepared and always take full advantage of all information you can gather—even to the psychics and fortune-tellers. Why? Because it is through the holding of wealth that a man has come to measure his own worth. So be it, that is another topic for “someday”. Ah, but do you piece together the bits and pieces offered you? Well, a lot of you depend on us (or me) to make sure you are warned in advance about happenings—and then some act on the information and most just toss it aside because the best-two-out-of-three “advisers” said, “It won’t happen!” What won’t happen? Do you have ALL the pieces? NO YOU DO NOT!

How many of you know that there is a new \$100 U.S. currency “bill” (money) that has FIRST been presented to Russians for viewing and, yet, not yet presented to you-the-people? It was presented to Russia to “calm their fears about collapse” of their own monetary system as a world system oozes into place. I won’t go into that now as we need to finish the article we started yesterday—but this it TRUTH and we will provide backup for you. The POINT I would make however, is that THAT information is being used to get you to INVEST in German “marks”, get your funds off-shore (with the writers, of course) and let you in on the “insider” tip-offs. Well, the facts are that the information is right there before you but you don’t see it for all the smoke.

More proof of my statement about new currency? OK, “104th Congress, 1st Session: **S.307: To require**

the Secretary of the Treasury to DESIGN AND ISSUE new counterfeit-resistant \$100 currency. IN THE SENATE OF THE UNITED STATES. Legislative day Jan. 30, 1995. (Senator Leahy introduction). A BILL: **To require the Secretary of the Treasury to design and issue new counterfeit-resistant \$100 currency...**” So, if you put all the pieces together with the building chaos and wham-bam of the “Thank you ma’ams”, you can see the facts. I note, however, that the minute people get crosswise in their own journey—they DEMAND A CEASE AND DESIST OF ANY INFORMATION FROM VALID RESOURCE FROM ENTERING INTO THEIR SENSES. “Stop sending the writings, or the papers, or the notices,” and, plopp, again into the sand-box goes the head and shoulders lest truth fall upon them as “responsibility” demands center stage. Very well and good, but who might well be the loser in the event of fall-out, in ignorance? If you bury your head from responsibility—you also are not available to grab the golden ring also swinging where your head WAS AND YOUR REAR-END NOW IS!

We will leave it here for now for you need the immediate reminder of “how it IS” and perhaps you will take advantage of what may be some final opportunity for action in security if you have some assets.

It will be impossible to get funds BACK FROM “OFFSHORE”; it will become, OBVIOUSLY, worthless currency to depend upon foreign currency—you are headed for WORLD CURRENCY BY COMPUTER ONLY, Gold and precious metals used for “money” will be confiscated—and what you have so dearly hoarded for your security—will suddenly be GONE when you could have, at the least, purchased a bit of safe placement and food—in advance. Readers, THIS IS YOUR LIFE—are you playing it or watching it pass you by?

THE CRASH OF '95, PART 2

By **Cedric X of *The Final Call***. Reprinted from *NEW DAWN*, Sept.-Oct. 1995.

[QUOTING:]

THE FEDERAL RESERVE

First things first. The Federal Reserve Bank of New York, which **controls the entire Federal Reserve System, is privately-owned**. According to Section 4 of the Federal Reserve Act of Dec. 23, 1913 the Federal Reserve is legally required to be privately-owned! [**H: Merry Christmas, 1913. You were given the gift that keeps on giving—right to your death-bed!**] This Act is available in every public library of this country. According to the Act, five banks were to issue the stock of the Federal Reserve Bank of New York.

This occurred in May of 1914 when five banks: (1) National Commercial Bank of Albany, New York, (2) Marine National Bank of Buffalo, New York, (3) Irving National Bank of New York, New York, (4) National Park Bank of New York, New York and, (5) First National Bank of Syracuse, New York, **issued over 200,000 shares of stock in the Federal Reserve Bank of New York City**. Those who persist in dismissing the private status of the Federal Reserve Bank of New York are asked to **simply look at the Federal Reserve Act, particularly Section 4**.

Finding out who owns the Federal Reserve is of the highest importance as it reveals the motives of

those who **make decisions at the Federal Reserve**. One of the biggest decisions that the Federal Reserve makes is determining the **level of interest rates**. **The Federal Reserve controls the U.S. economy** primarily through **two interest rates**. These rates are known as the **Discount Rate** and the **Federal Funds Rate**. The Discount Rate is the rate that the Fed charges the **largest banks in the country to which it makes loans**. The Federal Funds Rate is the rate that **banks charge other banks for overnight loans**. Both of these interest rates ultimately affect the **cost of borrowing** for America's corporations and her citizens. **Both are under the influence of the Fed.**

The Federal Reserve has actually helped individuals make billions as they raise and lower rates. Some believe that the Federal Reserve is currently helping to destroy America simply by raising or lowering rates. Eustace Mullins, author of the book, *Secrets of the Federal Reserve*, is one of many individuals who believes the Federal Reserve was **established to manipulate money markets and the value of the U.S. currency by controlling interest rates**. [H: I believe you will find a couple of articles elsewhere in this paper edition, directly from Eustace Mullins. Anything and everything you get from Eustace is worthy of MORE THAN your immediate attention and we are honored when he offers us his writings and observations. We have had this for some time but space in the paper is prohibitive of getting everything offered to you, the readers. We must, for security reasons, keep some of our contacts in the forefront of publication so that they are in "open" security and protection. This, of course, does include Eustace Mullins.]

He says that the Federal Reserve is currently driving the stock market to **new levels** by not raising interest rates. "The Federal Reserve is cooperating with the [*Elite*] **speculators**. The speculators are making **huge sums of money because the Fed is not raising interest rates**. The decision by the Federal Reserve not to raise interest rates is causing investors to relax and gain confidence in the stock market. When this happens, more and more people invest, pushing the stock market to record levels," he told *The Final Call*.

Mullins believes that the Federal Reserve is helping **wealthy investors, known as speculators, to make huge sums of money this [U.S.] summer because the Federal Reserve plans to raise interest rates later this year**. He believes there are speculators that already know the Federal Reserve will **raise rates later this year and he believes they will "short sell" in order to make huge sums of money**. **Short selling occurs when investors make bets that the price of a stock will fall within a certain time period**. This would mean that any person who knew the date that the Federal Reserve was going to raise interest rates could make huge sums of money by selling short in harmony with the rate change.

Mullins believes the goal of the international bankers is to **get all middle-class Americans to invest in the stock market and then to suddenly incite a drop in the stock market where they can sell short and eventually buy back the stocks they sold at dirt cheap prices**. Mullins believes that most middle-class Americans, corporations, pension funds and local governments that invest in the stock market are **financially ignorant** and are being taken advantage of by **international bankers and speculators**.

Because these types of investors (middle-class Americans, corporations, local govt.) are totally unaware of when the Federal Reserve will raise or lower interest rates, they are **heading for the edge of a financial cliff** and do not know it. "The middle-class investor, pension funds and corporations are not

privileged to know the Fed's moves and when they are encouraged to enter the stock market by the speculators they are the first ones to lose because they do not have **enough information and experience**. The professional investors will make money and the average investor will lose money," Mullins said.

Anthony J. Hilder, a Los Angeles-based researcher of **the secret relationship that exists between international bankers and politicians who has distributed video and audio tapes worldwide that espouse what is known as the "shadow government"**, told *The Final Call* that a stock market crash has already **been planned and is on the way**. "You can already see **signs of the crash**. The big traders, by encouraging the **masses of people to buy stock, are causing the stock market to reach all-time highs**. When the public sees in the media that the stock market is reaching new highs they enter the market. Those who control the market are **beginning to sell what they own**. This is a sure sign that the **market is about to crash**," he says.

Hilder believes that when the crash occurs, the middle-class investors, corporations, and local governments will not be able to **pay off their other debts** and, therefore, will have to make **concessions to banks and sell their property**.

Although there are many factors that have influence on the stock market, the greatest power to do so is **in the hands of those who own the Federal Reserve Bank of New York**. A single raising or lowering of interest rates can cause the market to drop or rise dramatically. Those who believe that only the paranoid are worried about the Federal Reserve should hear the comments of some of the leading economists and bankers in the world. Some of them believe the **worst thing** that could happen to the stock market right now is a **raise in interest rates**. Al Smith, principal economist at Nationbank told *The Final Call*: "*If the Fed were to raise rates that could make many people become very defensive and that could set off a great deal of caution.*"

Sung Wahn Sohn, chief economist of Norwest Corp., said the Fed's past decision-making is now actually starting to hurt the American economy. "The economy is weakening more rapidly than anticipated and there is a possibility of an economic recession. Hopefully, interest rates will no longer rise this year. It is my hope that they will fall and that this drop in interest rates would lay the foundation of an economic recovery," he says. Mr. Sohn believes the Federal Reserve will have more impact on the stock market and the economy than any other factor in the upcoming year.

Echoing the view of the dominating influence that the Federal Reserve has on markets was Hugh Johnson, chief investment officer for First Albany Corporation.

He believes the Federal Reserve is damaging the U.S. economy with its policies and that great harm can be done this year. "One of the things that could lead to a recession is if the Fed were to raise rates further. I believe that they have already raised rates to the point where the economy has slowed. If they raise rates further, it will more than slow, and then hurt the stock market."

As powerful as the Fed is there remains one other factor that has the potential to lead to the worst financial panic this world has ever seen. That factor is war. *The Final Call* spoke to insiders who believe that a war involving the U.S. is being planned for various regions of the Earth.

A WAR INVOLVING THE U.S.

Wars are planned. Just ask L. Fletcher Prouty, a retired Colonel of the U.S. Air Force who served for nine years as a liaison between the Joint Chiefs of Staff and the Department of Defense. He also wrote a portion of the script for Oliver Stone's blockbuster film "JFK". Prouty believes that the U.S. economy cannot exist without periodic wars. Prouty told *The Final Call*, "The people in the Pentagon and in Wall Street believe that if the United States did not have the threat of Communism since the end of World War II the economy of America could not have survived. So they (the Pentagon and Wall Street) created the Communist threat and have lived off of it for the last 50 years. Now America is in a period where it does not have the Communist threat. Therefore America must create a new enemy to create a war because America has not found a way to economically survive in peace."

Prouty said the close relationship between bankers and the Department of Defense "should not be surprising. In fact, throughout the 1960s employees of the J.P. Morgan banking family were officials in the military wing of government. There was even a time when members of the Defense Department would leave a position such as Secretary of Defense and then would become officials at banks, particularly Morgan Guarantee." (It is interesting to note the Morgan banking family bought stock in the Federal Reserve, this according to the original stock certificate of the Federal Reserve Bank of New York, obtained by *The Final Call*.)

Prouty even believes that the Gulf War of 1991 was planned well in advance by a group of people in both banking and the Defense Department, long before Saddam Hussein entered Kuwait. "What a lot of people don't understand about Desert Storm is that warfare takes a logistic base. You must prepare for the transfer of big tanks by building special bridges. For Stealth bombers, you have to build special hangers because you can't leave them outside. When the United States got to the Middle East to fight Iraq, all of that stuff **had already been built**. When the Stealth bombers arrived, they taxied on new runways. How could hundreds-of-millions of dollars have been spent on all of that and built within a few months? How could all of that have been planned and built based upon a few words out of the mouth of Saddam Hussein? The war in Iraq required a strong supporting base (which) has to be planned well in advance. **The question is where are we planning in advance to fight next?**

The Final Call has learned from high level sources in the State Department that plans are being made right now to involve America in a military confrontation with Iran. One senior level official at the State Department said the U.S. Government believes that Iran is sponsoring terrorist groups that are disrupting the Middle East peace process. The official told *The Final Call* that the United States is currently working with its allies in Europe and Japan to get them to take steps economically against Iran. Other sources have told *The Final Call* that it would be wise to believe that a major military conflict with Iran and others in the Middle East will occur sooner than later.

What does this all have to do with a financial panic in the month of October? For those who have not been looking, which is the vast majority of the American public, America will be officially broke in October of this year. When this occurs what will be the motive in the mind of those who hold America's debt? How will they get their money? How will the Federal Reserve obtain its \$300 billion-plus debt from the American Government?

Whenever there is a war, the only individuals that prosper are the banks that loan money to the government and the defense companies that sell new weapons to the government. But the next war that America fights will break the economy. Remember that the new budget plan passed by Congress will take seven years to pay off the debt. The U.S. will be broke in four months. Something does not add up. Tensions are rising in Bosnia for a reason. The United States economy is headed for another recession, and many corporations have become nervous about their future. They are laying workers off at a quickened pace. War is the only thing that can get the massive changes that the international bankers desire. Just imagine a sudden war, imagine the media frenzy and how all of America will be glued to a media that has many bankers as their most powerful shareholders.

When people are frightened, they make agreements that they never would otherwise. If the international bankers know this, will they take advantage of this by manipulating wars and rumors of wars? They certainly have the power to do so.

If Clinton knows his country is four months away from bankruptcy, why is he allowing his country to be moved into the middle of such dangerous conflicts? He knows how sensitive the Stock Market is. He knows his government owes the Federal Reserve over \$300 billion dollars. Yet, he continues to implement policies and to write executive orders in private that allow the Treasury Department, the Federal Reserve and the Defense Department to pour American dollars into regions that can now influence the financial and economic condition of America in a very negative way.

Mexican instability, Federal Reserve interest rate movements, and the possibility of a war involving the U.S. all must be looked at in order to get an idea where this country is headed. In the human body, blood is the fluid of life. In the body of this world, money is the fluid of life. The occurrence of any of the three factors examined here is sufficient to cause a financial bleeding so severe that this world would have to be placed on the equivalent of an economic life-support system. America really represents the heart of this world—as America goes, so goes the world. That is why it is crucial to calculate on the facts and determine where the country is headed.

It is headed for what the media notoriously calls “Black Monday” or “Black Friday”. It is no coincidence that the financial panics of years past have taken place in October. After all, that is the month that serves as the home of Halloween. May we all be wise enough to not be tricked into providing the ultimate financial treat to the international bankers. (Reprinted from *The Final Call*, July 19, 1995 and *NEW DAWN*, Sept.-Oct., 1995) Subscription information can be obtained by writing New Dawn International News Service, GPO Box 3126FF, Melbourne, 3001, Australia. *New Dawn* is published bi-monthly and is \$25-6 issues or \$40-12 issue.

[END OF QUOTING]

Now, STAFF, I am going to lay a miserable trip onto you. We continue to wonder WHY there are so few subscribers to *CONTACT* when the paper seems to be ALL OVER THE WORLD and is the most read document. I kept waiting for the “light” to flicker on for you. There is a sidetracking of subscriptions through as clever a scheme as *Constitutional Law Center* and *Constitutional Law CENTRE*. The mail is diverted and when your paper goes to press—a copy is immediately sent to the “other” parties involved, and put to press. It is easy, slick, shrewd and a lot of funds are being diverted as in past

escapades. Isn't it time you did something about it?—and I suggest you start right in your door-yard with just “who” does all the mailings on Tuesdays. It is easy, my friends, to fool you almost all the time...!

It is claimed that information comes from our “nasty” writing? No, our circulation is not enough to scare a flea—there is big-time paper rustling going on!

May you walk in LIGHT, brothers and sisters, because as the light bulbs go ON a lot of people are going to get caught with their PANTS AND PANTIES DOWN!

So be it and may we now go turn to the O.J. Simpson fiasco and see how soon L.A. is doomed to disaster—as is the rest of the world. Note the sudden over-supply of terrible and offensive T.V. tales of violence and death on your tubes!

May you also attend your preparation and MAKE SURE WITH WHOM YOU DO YOUR BUSINESS AND ENTER YOUR SUBSCRIPTIONS. Salu.

CHAPTER 10

REC #1 HATONN

FRI., SEP. 15, 1995 7:55 A.M. YEAR 9, DAY 030

FRI., SEP. 15, 1995

ARE YOU “TOPPLE PROOF”?

You don't need a psychic, guru, or rocket scientist to KNOW that your world WILL CHANGE. LIVING changes, for you are living beings in constant change. Do you hold to myths, dreams of your own design, and false ideas and sometimes ideals so that when they do not come to pass as YOU perceive they should—are you shattered and toppled from stability? Also, please, look at that which causes you to draw into a cocoon and snarl out at any who might pass your door.

Dear one, when a “thing” is not working, change is necessary—even for God to respond to your prayers. Can you not allow for growth—intellectually, emotionally and spiritually? Old ideals will bind you and cause you to stagnate. Can you not dare to dream new dreams and go where they lead with confidence?

Look around and see WHO gives advice that stagnates you, blames others and aligns to “get the perceived culprit” who may have been caused by necessity to change also? Do you lash out to destroy, hurt, revenge and damage that “other”? Do you burn your bridges? I can only remind you that a bird who will sit on your hand and sing to you and does what he can to bring you security and joy—is far more dependable than ALL those others in the bushes who promise great and wondrous things, talk the talk but can't walk the talk and from them you could, if you didn't burn your bridges or their fingers, get ongoing and unlimited help through the hard times. And in wisdom, how wise are you?

A LITTLE TALE

I would like to tell a little tale of courage and service which can be a great and grand lesson. I have asked silence on this matter for my needs were to see who serves in honest integrity and who will accuse, blame and belittle another. We all have children and I have to attend MINE as do you need to attend yours. But you are in a time of great disadvantage, especially, quite frankly, if you are “free, white and 21”! But God has no color sense. In that line of thought I want you people to consider something very, very important: WHO IS GOING TO DEFEND YOU WHEN THE GANGS COME? WHO IS GOING TO STAND BY YOU, IF YOU BE WHITE, IN A WAR OF DEATH-TO-THE-WHITES?? Would it not be a bit wise to have friends of more prominently colored races? I would certainly think so—and have them ON YOUR SIDE?

I have, however, a far more interesting matter to attend. Do YOU KNOW with whom you deal and deal-out? Do you always look to the “other” in an instant of distress and blame the “other” than your “own”? We have just gone through this within our little working businesses as business gets fouled with “family” and

“group”. I will use alias names to protect but NONE of you know who is “José Pablito”. YOU assume Joe is some sort of alien who has few roots and is quite unsuitable as a suitor or great friend to your daughters? YOU HAD BETTER *THINK AGAIN!* JOE is going to be THE one who brings you protection when the stuff hits the fan. HE IS IN MY CARE—AT VERY LENGTHY NEGOTIATIONS. YOU THINK HIM TO BE ONE THING—HE IS QUITE ANOTHER. HE COMES FROM ONE OF THE MOST OUTSTANDING FAMILIES OF HIS COUNTRY! HE WOULD BE A “PRINCELY” “CATCH”, MY GOOD FRIENDS—PRINCELY INDEED!

I placed him within the loop of Dharma’s circle for I knew she would defend, attend and love him as her own. I did not err! I knew that E.J. would demand of him honesty, integrity, and a code of ethics about everything he does. We rejoice in his joy and are saddened by his hurts, just as we are with all our children as they are hurt, err, or are offended. Dharma and E.J. wish no amends to their own offense in feelings—but attending the pain brought to others is mandatory.

What has happened to Dharma is both good and hard—in the “flap” over children’s feelings and exclusions, “another” pronounced what was being said around and about that somehow discredits Hatonn!! I remind her that if others cannot tell Hatonn from Doris, the problem is theirs, not hers and we have no need to speak—we are doing our job right here and right now. Any meetings are for those who ask and want to share—nothing more.

I also get weary of being bombarded with personal questions as to how best to manage personal matters for individuals—for I write for 6 billion people. I am no PERSONAL GURU to anyone or anything. I accept responsibility for those who work with me and protect those who ask and serve God. I do not serve as personal bodyguard or money-fixit.

I am weary of being lumped in AS ONE WITH SUCH AS RUSSBACHER, JACKSON OR ANYBODY ELSE YOU CAN NAME. I have negotiations and agreements with MEN who can use the conduits—IF THE MEN IN POINT KEEP THEIR AGREEMENTS! I’m sorry, you who inquire constantly now—about Jackson, as a “for example”. I do not attend his farm-claims or misdirected dastardly deeds of the government. I do not believe, and have stated same, that any gold certificates will be honored UNTIL or UNLESS the POWER-BROKERS decide to do so. The point of the government and banksters is to destroy you-the-people and totally control you. They are not going to simply hand over billions of dollars for NOTHING!! We can’t seem to get them to hand over a “bit” for SOMETHING which will also help them. Ronn Jackson TRIES to keep every possible move of his own—FROM ME. It doesn’t work nor does he fool anyone—REALLY. His business is HIS BUSINESS, his business with me is MY BUSINESS. I am sad to see what is happening for as we go along here there is not much time left to hold him in ability to lead to anywhere. A man is only as good as his word and if he cannot meet production with “his word”, why do you turn and BLAME GOD? He THOUGHT it would be easy to accomplish that which he promised. I TOLD YOU IT WOULD NOT BE EASY, IF POSSIBLE AT ALL. Does this mean that YOU cannot build a “New Republic”? We shall see. NO man can do it alone! There are some magnificent plans and possibilities coming forth from the ones working on the foundation of such a plan. CONTACT simply has not the space to run them.

CONTACT CLONING

CONTACT, for that matter, has found that there are ones who ship off an edition of the paper, pertinent information is changed, and a lot of people subscribing to *CONTACT* ARE ACTUALLY SUBSCRIBING to an alias by-pass operation which takes the subscriptions AND THE FUNDS FOR SAME. Interesting? NO, CRIMINAL, FELONY FRAUD. In Washington D.C., for instance, the paper is run off after working hours on Tuesday evening and passed out FREE all around the Capitol—as an underground SECRET document. But Washington is NOT the rip-off team—old buddies are the more interesting entrepreneurs.

At a very large meeting in Bozeman, Montana, for instance, Cathy O'Brien and Mark Phillips found that everyone attending were REGULAR and eager readers of *CONTACT*. In fact it is only through the “daring of press” in *CONTACT* that hardly anyone KNOWS of these two incredible people. However, the home office shows only one or two Montana subscribers! Now is that not about as interesting as you can get? This has been the pattern of recognition ALL OVER THE NATION! TO WHOM DO YOU SUBSCRIBE? ARE YOU SURE???. Does anyone remember the scam game in which the Constitutional Law Center was functioning in Sacramento and some real artists were accepting checks for the Law Center and diverting them to the Law CENTRE “Trust”? It operated right out of the same building and the checks were being cleared and deposited IN COLORADO! Gold was also being received and diverted to garages and back yards while all expenses were being charged to the Phoenix Institute.

I personally am quite pleased that anyone feels our paper, which these very ones deny has validity, is worthy of such translation and transmutation.

Persons who grab up the new issues and trot them off to parties who get them right off to such as Mr. Green and his “nightmare team” might do well to consider that a bit more carefully. You think you serve your own interests? Perhaps you do but the law is on your tails and, no, it is not through this routing! Dharma complained to some around here doing this very thing and asked why papers were being sent directly to those who are actually acting as our enemies. The response was ridicule and threats and dares to take ones off this or that Board. Of course the same ones threatening—had gone directly to the corporation officer and agent—to get resignation forms. DO YOU ACTUALLY THINK THAT “I” DON'T KNOW?

My business here is NOT to build you a “New Republic”. It is to bring you the truth and wake you up so you can live to balance your lives with TRUTH and find freedom in your wondrously sovereign selves. I am here to warn you and tell you, YES, IN ADVANCE, of what to expect. See what has happened before and check very, very carefully for clues as to when YOUR TURN AT NEGATIVE NATURAL OR POLITICAL DISASTERS MIGHT BE APPROACHING. I am at WAR with NOTHING OR NO-ONE! I use the term “war” sometimes to indicate a “meaning” that you can understand as terminology. I don't WAR! I simply WIN—and it will behoove all of you to remember same.

Along the lines of warning you, I have here some five copies of an article from a tabloid. They have been sent by some very concerned elderly people who depend on Social Security to make it through the remainder of their lives. Is THIS article true? It doesn't matter whether it is specifically true in all details—but the concept and facts are true and whether it is a “trial balloon” at this time of total chaos is not of importance. A collapsed national economy will see that it, and the welfare system, and all national programs will FOLD. This article goes right along, hand-in-hand with the one on the Crash of '95. It is an

unavoidable and inevitable consequence of what is taking place in your political and financial orchestras. As I have done in the past, when I get many copies of an article, I will share it with you; however, since the same information has now been run in several various tabloids, I won't name all the sources but will use the one best outlayed and that is from something called *Weekly World News*. Remember two things about tabloids: They are your only possible source of REAL NEWS—but, they are also the source of totally false information when the “balloons” are flown. The stories PLANTED are usually a “lot of truth” with silly twists for denial and, of course, sensational. You be the jury but balance it with the true information you now have available.

[QUOTING:]

PLOT TO END SOCIAL SECURITY

MASKED WHISTLEBLOWER'S STORY ROCKS WASHINGTON!

[H: You who can't bring yourselves to believe your politicians could do the things described, in say, Packwood's diary, think AGAIN. Look how your PRESIDENTS behave at Bohemian Grove. It is the Evil Empire in action, readers, and YOU ARE OF NO CONSEQUENCE OR IMPORTANCE TO THEM EXCEPT FOR YOUR BLIND VOTES.]

WASHINGTON —A masked but obviously highly-placed government informant says Social Security will be abolished during a trumped-up financial crisis on Feb. 17, 1996, ending the program that has helped elderly and disabled Americans put food on the table and a roof over their head since the height of the Great Depression.

“The decision to abolish Social Security has been made, the date has been set, and the only thing the average American can do is wait for the shoe to drop,” the informant, who risked his life to blow the lid off the plot, told a select group of Washington reporters.

“Make no mistake, Social Security is going down the drain. The powers that be can promise to keep it and dance around the problem—and the truth—as much as they like.

“The fact is, the abolition of Social Security is a done deal, so much so that the Pentagon is already preparing for a worst-case public reaction, **including riots, work stoppages, anarchy and civil war.**”

The decision to abolish Social Security even as President Bill Clinton and key congressional leaders are promising to keep the program intact is sure to come as a shock to most Americans.

But the informant says an elite group of financiers, businessmen and industrialists—some of them foreign—have been setting the stage for the abolition of Social Security since the mid-1980s. **[H: This will come right after the folding of business pension plans. The only ones who will continue to get pensions as long as there is any government at all are the Congressional members. Do you actually think that such as Packwood is hurt by firing? No—he will get his available pension; he just wanted to make it a few months more so he could collect the higher amount which would be adjusted soon.]**

These men, he continues, play a bigger role in government than most Americans know or would like to think.

And the decisions they make, filtered through congressmen who are elected by the people but answer to the billionaires and power brokers who finance their campaigns, stick—or else.

“The feeling among these men is that Social Security has become too great a burden **on the federal budget** and must be abolished to eliminate the deficit,” explained the informant.

“Their interest in the deficit is purely personal,” he continued. “Their fortunes ride on the ability of the federal government to remain solvent and handle its debt. **[H: This is largely B.S. for they don’t give a tinker’s damn about the government remaining solvent OR handling its debt. Governments don’t handle debt—PEOPLE DO! Money is as simple as running a printing press, blind ones, and if you need more money and you own the press—you make more money. Simple? Indeed!]**”

“Without the burden of Social Security, the deficit can quickly be brought under control, increasing their wealth and personal power many times over.

“To set the stage for such drastic action, these men intend to manipulate stocks on a massive scale, causing the appearance of a financial crash that will serve as a smokescreen and excuse for eliminating Social Security.

“Vicious? Self-serving? Of course it is.

“But money talks, and if these power brokers don’t have anything else, they’ve got the cash—and they call the shots.

“President Clinton, Newt Gingrich and Bob Dole can only dream about having that kind of power,” he added. “But in the final analysis, politicians do what they’re told to do. **[H: This is “right on”!]** And they’ve been told to abolish Social Security on Feb. 17, 1996, regardless of the cost in human suffering and misery.”

The informant spoke to a hand-picked group of reporters in a Washington hotel room and went to extraordinary lengths to keep his identity secret.

In addition to wearing a heavy leather mask, he spoke through a hand-held device that changed the sound of his voice.

He was also accompanied by two armed bodyguards and actually started the interview by placing two tiny vials of cyanide in his mouth.

Had the session been interrupted by federal agents, he intended to break the vials open with his teeth, releasing the poison and taking his own life. **[H: Impressed? Well, I’m not—for that is a silly, silly thing to fool YOU. One vial would be more than sufficient—so why TWO? Moreover, anyone who is in the “know” would not do such a stupid show-and-tell in this manner. This is CIA-type**

escapading but does not diminish at all the probability of Social Security being SHUT DOWN. It is only a matter of “when” and under these circumstances, if a collapse comes before the end of the year—so too will Social Security be in trouble—BEFORE THE END OF THE YEAR! If CONTROL of all is not accomplished, then the welfare programs will continue to keep you sucked into the LIE, as will Social Security. Remember that the PLAN 2000 IS TO ACCOMPLISH TOTAL CONTROL AND OWN ALL ASSETS!]

To prove he has access to information about the plot to abolish Social Security, he produced a top-secret Pentagon memo that, though heavily censored, speaks of the need for “a full military alert to prevent or contain work stoppages, riots and possible civil war in the wake of an artificial financial crash and ensuing announcement that Social Security has been abolished.”

Neither the White House nor the Pentagon would comment on the whistleblower’s report, though one highly-placed military insider conceded that the military “seems to be preparing to deal with a major domestic crisis of some kind”.

It is unclear how much President Clinton knows about the plan, although one source said that “he will do everything in his power to stop it.”

The informant concluded: “Americans are fighters. I don’t think they’ll take this lying down.”

[END OF QUOTING]

Lying down? Yes you will and the powers that be intend that you most certainly will be helpless and “lying down”—one way or another. The whole plan of Social Security in the beginning—WAS TO GET YOU SUCKED IN AND HELPLESS IN YOUR ELDER YEARS—SO YOU WOULD NOT TAKE CARE OF YOUR OLD AGE AND WOULD BECOME TOTALLY HELPLESS TO SURVIVE WITHOUT “BIG BROTHER”! It has been accomplished and all that remains is the shouting.

What will YOU do between now and, say, February 17th next? I thought not! Will you Just shout a lot? How about eating? Smut has been introduced into your growing grain fields—and only the government knows the “cure”. WHAT are you going to eat? Food is set up to be SCARCE! THAT is what will bring more and more WEALTH to the CONTROLLERS and keep you begging for enough to simply SURVIVE. Ones starving to death do not make good warriors against the ones who HOLD ALL THE FOOD! Where will you find shelter? Even if you own your house—it can be taken for lack of TAX PAYMENTS—so you have rental at the very MOST. Can you see that loss of a CROP is worse than loss of your money?? It is going to be TOUGH, readers, and I cannot solve it for you—NO-ONE, AND NOT GOD—CAN SOLVE IT **FOR** YOU. We can “suggest”, warn and assist where possible—but we can’t cram it down your throat or even get you to open your mouth for same. You can blame anyone you want, discount me, discount Dharma, DISCOUNT TRUTH and CALL IT LIE—it will NOT CHANGE ONE IOTA OF THE FACTS OF IT ALL. WHEN YOU SELF-FOCUS AND BLAME OTHERS—YOU DIMINISH SELF TO HELPLESSNESS. Nothing untoward is going to just “go away” because you don’t “like it”.

You are to the ending acts of this particular “play”—how it ends is up to YOU. I can, however, assure you

that kicking and screaming and blaming others for your sad plight—gains nothing but the assurance of ending up in the dead-end of the “play”. You can’t do it with a commune, cult or anything of the sort. Changing this play means responsible action on the part of individual sovereign citizens. Your CARE and survival **MUST DEPEND ON YOUR ACTIONS**. And, yes indeed, you **CAN** purchase, in good intent, a place by your gifts of all kinds, be it simply a silver spoon or a offering of love and support when there is no other way to participate.

As for a “New Republic”: **NEW GOVERNMENTS and REPUBLICS are built FROM THE ASHES OF THE CORRUPT AND DESPOILED THING THAT CAME BEFORE! BUT, YOU DON’T WANT TO EVEN LET GO OF YOUR SOCIAL SECURITY PAYMENTS OR YOUR WELFARE CHECKS?? SO BE IT—YOU WILL NEVER BUILD A NEW GOVERNMENT WHILE YOU MANDATE AND SUPPORT THE OLD ONE IN ITS CORRUPTION.** Somebody has to go get the ingredients and bake that cake that you both **WANT AND WANT TO EAT!** Are YOU baking or waiting to eat? Are you helping the “bakers” or prattling and ridiculing and speculating about them while they bake and you **WAIT?** **AND, MOREOVER, HOW MANY OF YOU ARE SENDING GIFTS WHICH DON’T GO TO THE RIGHT PLACE AS INTENDED, BUT TO THE VERY ONES WHO STAGE THE SIDE-TRACKING CON GAMES?? WE CANNOT HELP YOU IF WE DO NOT KNOW WHO YOU ARE!!**

In addition, these are clever deceivers and you will get nice thank-you notes from ones with the “right” names, i.e., Rick, Brent, etc. This even makes the CON-game easier to pull off. I will leave it to the crew to consider ways of isolating the problem and correcting it. It has gone on for a very long time and the clues are all there—even in recent mailings received by **MANY** of you when reference was made to “a couple of you”...!! The adversary wants to discredit **ME** and **MINE**? Fine, I have many ways to respond as well as do you. The liars and thieves can never **LIE** their way out of **TRUTH**—for truth will always be there in the ending. The **MANY** lies and versions tell the **TRUTH OF IT**. **TRUTH ONLY NEEDS ONE (1) VERSION!!**

It is most certainly **PAST** “serious” time. God will take good care of those who **HELP THEMSELVES, TAKE RESPONSIBILITY FOR SELVES AND THEIRS, AND ATTEND THEIR OBLIGATIONS—AND STOP BLAMING EVERYONE OR ANYONE ELSE FOR THEIR FAILURE TO HEAR, SEE AND ACT APPROPRIATELY.** In Just Cause, the help of brothers will always be there for your support in moving, restructuring, etc., although it can’t always be in the form of financial support or responsibility—remember **ALL** are struggling as are you when the chips are down and the cupboards bare.

You who feel and giggle and cutely say that “my job is to keep things stirred up!” might well ponder on that attitude, for credibility is lost in the personal hurt that that brings to others. Your game of “getcha” is always most likely to “getchurself”. May you seek, and find, **THE Light**.

Salu.

CHAPTER 11

REC #1 HATONN

SAT., SEP. 16, 1995 6:27 A.M. YEAR 9, DAY 031

SAT., SEP. 16, 1995

IN THE QUIET OF THE DAWN

I walked with Dharma on this early morning awakening of a new day—a new time of work. We greeted the pre-dawn crayon-colored sky as an old friend not often attended any longer. Then I watched her mind wondering why she was awakened so early, yet without clear need to go write. Sometimes, dear ones, you need to THINK in the quiet stillness of the morning and allow feelings to be more clearly defined than in the surrounding chaos of the evening.

Sometimes, however, the confrontation of facts unexpected overflow the heart and eyes and bandaids don't cover the wounds.

SUPRARENALS

Some reader has found “error” in my writing about “suprarenals”. Error? There may be perhaps many errors, but my insertion of location of same as referred to in inset (kidneys) is no error, friends. I only wanted to focus you to a given “known” by most people. You recognize “kidney” as a place, a thing, more easily than you recognize wherein you might find the hypothalamus gland or the placement of the renal glands known as the suprarenal. Renal refers to “kidney”; supra refers to “atop” and suprarenal glands are the adrenalin-producing glands which are placed on top of the kidneys. I will remind you readers, however, I am not going to do your homework for you—if you question, GO LOOK IT UP!

MARILYN MONROE AND ALBERT EINSTEIN

Great denial comes from many of you at the thought of a cute little butterfly such Marilyn Monroe with such a great scientist as Albert Einstein. Well, I would question both the “great” scientist and the cute little butterfly. It is wondered if Marilyn ever accomplished her desired romp in the hay with Einstein as she often confided to friends. It seems that among her “souvenirs” and precious keepsakes were, surely enough, notes and pictures from Sir Einstein, genius. His portrait picture was personally inscribed, “To Marilyn, with respect and love and *thanks*, Albert Einstein.” Monroe’s room-mate for a while, Shelley Winters, crudely wrote: “We shall inquire no further. We’d like to believe in a union of the greatest mind of the century and one of the finest bodies.”

SLEEPLESS NIGHTS AND SHAKY DAYS

You are in constant motion, chelas—always were and always will be. The hyper-realization of same is coming in bombardment of pulse waves. There is no magic “cure” for this and I have no miracle answers. Until, however, the substance called “Melatonin” is removed from your ability to have same—get some at the Health Store and take one (or two if one doesn’t work) at night. It works—or it wouldn’t be under attack by the “remove-what-works” brigades.

Let me share with you what is really serious: wristbands that control your sleep and keep tabs on you every minute of your day. Can’t believe it?

[QUOTING:]

IN THE FUTURE: HIGH-TECH SLEEP CONTROL

ARMY TIMES, Sept. 18, 1995

WASHINGTON—Within 10 or 15 years [**H: No, it is already here only in much easier-to-manage form and far more subtle than a wristband.**], soldiers will be able to monitor their sleep with high-tech wristbands and control it with a series of pills, if Col. (Dr.) Gregory Belenky has his way.

Belenky, chief of the Walter Reed Army Institute of Research’s department [**H: And total recycling center!**] of behavioral biology, is the Army’s leading expert in the field of sleep management. He is proposing a high-tech sleep management system for the soldier of the near future.

As Belenky sees it, this system would require a soldier to wear a small wristband that measures and records arm movements. These data can be used to estimate the quantity and quality of that soldier’s sleep.

Such wristbands already are available commercially, and Belenky and other Army researchers use them in their experiments. The wristbands also have a performance model that, based on previous studies of sleep and sleep deprivation, can predict a soldier’s future performance.

ELECTRIC MONITORING

In Belenky’s future system, the wrist-bands would transmit data on a local area radio-frequency network to a personal computer which the Army wants to field to each soldier by 2006.

The computer would send the information to a central data base at each echelon’s command and control headquarters. Commanders and their staffs would be able to monitor the recent sleep history of each unit, as well as each soldier. [**H: How is this for privacy?**]

SLEEP IN A PILL

The sleep management system would also include three different drugs.

One would induce sleep and allow soldiers to grab quality, uninterrupted rest in environments that are not usually conducive to sleep, such as long-range deployments or combat situations. Belenky already has found two drugs that can do this effectively; what is missing, he said, is a doctrine for their use.

The second drug would be what is called an “antagonist drug”. It would restore full alertness to soldiers who have taken the sleeping drug and need to wake up quickly.

Belenky emphasized that the drug he is currently using in this role, called flumazenil, is not a stimulant. It has no effects on alertness or performance when taken alone, but merely blocks the effects of the sleep-inducing drug.

However, the Army will need to get FDA approval before it can hand out flumazenil pills, Belenky said. **[H: Why? They didn't get approval for full-body death by radiation for your test children!]**

The third drug would be a stimulant, to be taken when soldiers need to be fully alert and effective. In this case, Belenky is planning to rely on an old standby: caffeine.

Soldiers with any field experience may not think of this as a tremendous breakthrough, given that each Meal, Ready to Eat (MRE) already contains instant coffee. But Belenky said the caffeine from the coffee is not enough to do the job.

“If you’re eating three MREs a day, you’re talking a maximum of 200 milligrams of caffeine, which is small,” he said. Also, he noted that “although the Army’s supposed to run on coffee, during combat operations, coffee can’t be had for love or money.”

Belenky’s solution is to give soldiers tablets containing between 300 and 600 milligrams of caffeine—enough, he said, to improve soldier performance for 10 to 12 hours after 48 hours **without** sleep.

The U.S. Army Research Institute for Environmental Medicine at Natick, Mass. also is experimenting with a caffeine bar, he said. Ideally, decisions to take the caffeine would be made down a unit’s command chain rather than its medical chain, Belenky said.

Belenky said he would have a working model of the wristband with a built-in performance model by November. The system’s fielding depends upon full implementation of the soldier computer and other elements of this digitized battlefield that will provide communications links, he said.

[END OF QUOTING]

HOW ABOUT BIBLES?

One of the greatest arguments about reading any of our material is the excuse of the “*Bible*”. Ok, how about your *NEW BIBLE*—the *Politically Correct Bible*?

[QUOTING:]

From *Reuters* (published throughout the country, Aug. 31, 1995)

POLITICALLY CORRECT BIBLE?

'INCLUSIVE' TRANSLATION CALLS CHRIST "THE HUMAN ONE" AND ELIMINATES RACIST OVERTONES. By Arthur Spiegelman (a nice Christian name).

NEW YORK—*The New Testament* gets a major face lift next month with a new English translation eliminating references to God the Father.

The revised version also turns the Son of Man into “the human one” and removes accusations that Jews killed Christ.

The new translation says not that children should “obey” parents, but should “heed” them. Wives are no longer “subject” to their husbands, but “committed” to them.

“Darkness” is no longer equated with evil, because of possible racist overtones, and the *Lord's Prayer* now begins “Our Father/Mother in heaven.” **[H: Still believe no one would dare tamper with the Word of God?]**

References to the right hand of God are also deleted. It becomes God's mighty hand.

The editors of *The New Testament and Psalms: An Inclusive Version* deny they have spent the last five years producing a “politically correct” *Bible*. But they admit that a legion of traditionalists is waiting in the wings to “cast the first stone” and begin one of the biggest *Bible* debates in years.

Some critics have already charged that the editors have censored the *Bible* to make it fit the political trends of the day.

The book will be published Sept. 11, by Oxford University Press. **[H: And so it was.]**

“This translation is aimed at churches and Christians who are thoughtful about the way the *Bible* includes everyone. I think political correctness is a pejorative term which is used by people who want the *Bible* to produce obedience, not thoughtfulness,” said Susan Brooks Thistlethwaite of the Chicago Theological Seminary, who is one of the six editors.

For example, they have eliminated all references to the Jews killing Jesus as in *Thessalonians 2:14-15*, which in standard translations says: “... for you suffered the same things from your own compatriots as they did from the Jews who killed both the Lord Jesus and the prophets.” **[H: So, since the term “Jew” was not around until the late 1700s (18th Century) it was ALREADY rewritten (translated) from fact into the lie. How many of you are going to argue over this distraction because it is there and something to argue over according to your local preacher—OR, WILL YOU GO STUDY HISTORICAL TRUTH AND INFORMATION—AND LEARN SOME TRUTH WHILE YOU ARE AT THE TASK? I didn't think so!]**

That becomes “...for you suffered the same from your own compatriots as they did from those who killed the Lord Jesus and the prophets.”

Thistlethwaite said in an interview that the authors of the King James version “felt themselves much freer to depart from the original word of the text than we did.”

[END OF QUOTING]

No further comment on the matter.

Let us now consider some ill-effects of NOT KNOWING about what is making you sick unto death and past.

[QUOTING:]

News-Leader, Springfield, MO., Wed. July 26, 1995

The Associated Press (so it must be true).

OLD, NEW DISEASES CAUSE GLOBAL HEADACHES

WASHINGTON—The Spanish flu epidemic of 1918 ambushed the human race and left millions dead before it vanished. Scientists still don’t know where it went, and say another outbreak could occur.

HIV appeared in the early 1980s, and the lethal disease may infect 40 million by the year 2000. Researchers haven’t found a cure, or even a dependable treatment.

The Ebola virus appeared in Zaire and killed scores before quarantine and other measures brought it under control. **[H: Well, you aren’t allowed to quarantine any longer—it is against your “human rights”.]** Scientists are searching now for the origin of the killer disease.

Also in recent years, there have been outbreaks of dengue, yellow fever and cholera in the Caribbean and South America; Hantavirus and Lyme disease in the United States; Rift Valley fever in Africa; diphtheria in Europe; and Morbillivirus in Australia.

Disease is on the march, and the human race is not now ready to defend itself against what is really an unending siege by pestilence, experts say.

A new report compiled by experts from 17 U.S. Government agencies called for intensified international surveillance of disease outbreaks, the organization of a quick-strike system that would respond rapidly to outbreaks and assisting other countries to create a system to detect and treat infectious diseases.

Such action, said the report, is a matter of U.S. security and international stability.

“Microbes don’t respect international boundaries,” Dr. James Hughes of the Centers for Disease Control and Prevention said Tuesday at briefing on the report. “We really have a global crisis.”

Hughes said that while new diseases, such as HIV, are emerging, old diseases such as tuberculosis, plague and cholera are returning to kill again. Many of the older diseases have become troublesome again because they have developed resistance to antibiotics or because of failed public health measures, such as poor sanitation in cities.

Joshua Lederberg, a Nobel laureate from Rockefeller University, said that many experts were absolutely confident in the 1960s that medical science had solved forever the problem of infectious diseases.

HIV, the virus that causes AIDS, has proven how wrong that view is, he said.

“Nobody would have predicted 10 years ago that we would be stuck today,” still looking for an effective treatment for HIV, he said. “It is a very clever virus, indeed.” **[H: No, it is NOT clever. It is lazy and stupid, rides on parasites, moves into cells where it lives OFF the body and mutates at random to suit its host. Colloidal silver and gold, Gaiandriana after or during a course of parasite eradication—clears it away. Viruses are simply crystalline entities which cannot reproduce ON THEIR OWN nor can they regulate themselves. They are easily manmade and tampered with, carried by bacteria and microbes, along with parasites. Simple? Yes—but then, you are a “drug”-oriented people of the LIES.**

Efforts to monitor outbreaks and to detect new diseases early are now stripped and inadequate because of cuts in the federal budget for general diseases, Lederberg said. He said maintaining the nation’s and world’s surveillance of disease threats is important to the United States and to people everywhere.

Dr. Michael Osterholm of the Minnesota Department of Health said that support in the federal and state health departments for monitoring disease outbreaks “is actually declining just at the time we have emerging diseases.”

[END OF QUOTING]

Now, you who have written and objected to my suggestion that weapons using blinding light are not available:

[QUOTING:]

BLINDING LIGHT: LASER WEAPONS MOVING
FROM SCI-FI TO BATTLEFIELD

U.N. CONFERENCE TO DEBATE BAN. **[H: SURE!]**

The Gazette, Montreal, Canada, Sept. 2, 1995:

It sounds like something out of science fiction: a weapon made of concentrated light. A weapon whose purpose is to blind. But the machinery described in science fiction has a habit of becoming real. And in the

1990s, blinding laser (photon) weapons are on the verge of turning from fantasy into military fact.

[H: There are weapons already PERFECTED that can shoot a laser into the cockpit of a flying plane, blind and confuse the pilot and cause INSTANT crashes—you have witnessed it often in the last couple of months. Perhaps you just didn't know what it was. There are larger projection weapons which can BLIND AN ENTIRE ARMY—RIGHT FROM THE AIR OR ON MISSILES.]

“The technology is around now,” says Myron L. Worlbarsht, a professor of ophthalmology at Duke University in North Carolina. “Laser weapons could be given to individual infantrymen as an attachment to a rifle. They won't be very heavy and, if you mass-produce them, they won't be very expensive, either.”

The U.S. is known to have at least 10 laser-weapons systems under development. One of them, the LCMS, can be mounted on an M-16 rifle; it's powerful enough to destroy vision from a range of 1,000 meters. The U.S. has already spent more than \$100 million on the LCMS alone.

France, Britain, Germany, Israel, Russia and other former Soviet republics have also been experimenting with laser weapons. As for China, it recently began marketing a “portable laser disturber” at Asian arms bazaars.

The Chinese system weighs 33 kilograms; despite its name, therefore, it's not as portable as a couple of the American prototypes. But the desired effect is similar: “By means of high-powered laser pulses, to injure or dizzy the eyes of the enemy combatant... so as to cause him to lose combat ability, or to result in suppression of his observation and sighting operation.”

If laser weapons do nothing more than that, there wouldn't be such anxiety about their development. But the problem is, they don't just “injure or dizzy the eyes.” They can also cause permanent blindness.

“The scientists we have spoken with”, says Louise Doswald-Beck of the International Committee of the Red Cross (ICRC) in Geneva, “are absolutely adamant: it is totally impossible to have a laser weapon that can dazzle the eyes without also having the capacity to blind.

“To have any dazzle effect, you need a certain energy level. The laser goes through the lens to the retina. And so you end up with damage to the eye.”

In the publicity material for its “portable laser disturber”, China claims that the weapon will succeed in causing temporary blindness at a range of 10 km. A range of 2 to 3 km is given for “effective distance of direct human eye injury.”

But at a closer range than that, such a laser would inevitably destroy vision. And whereas you can replace a soldier's arm or leg with a prosthetic device, nothing can replace sight.

“It is the only weapon I'm aware of,” says David Warren, executive vice-chancellor of the University of California, Riverside, “that is directed to a particular part of the body. It's the eye's ability to process light that puts it at jeopardy. Laser weapons don't do anything to any other organ.”

A psychologist by training, Warren has served as a consultant to the ICRC. Alarmed by the medical implications of rapidly developing laser technology, the ICRC has been lobbying for a ban on laser weapons since 1989.

Its efforts might finally be about to bear fruit. From Sept. 25 to Oct. 13, a UN weapons conference in Vienna will debate a Swedish proposal to prohibit the use of laser beams as a method of warfare. If the resolution is passed, blinding laser weapons would then be banned under the Geneva Convention. **[H: Oh well—that would fix it just like it has biological and chemical warfare!!]**

At least 25 nations support the proposal. According to Ariel Delouya of the Department of Foreign Affairs in Ottawa, Canada is among them.

Of the countries that have been experimenting with laser weapons, France, Germany, Britain and Russia seem willing to support the Swedish initiative. But China and Israel have said nothing. And until recently, the U.S. was firmly against the proposal.

In May, Human Rights Watch released a detailed report on U.S. laser weapons. Even within the U.S. military, though, there is believed to be unease about their development. And a spate of adverse publicity following the spring report might have embarrassed Washington into rethinking its policy.

Laser weapons have their defenders, however—not just on military grounds, but also on philosophical ones.

“The issue,” says Kosta Tsipis, a physicist who heads the Science and Technology in International Security program at the Massachusetts Institute of Technology, “is whether these weapons are particularly vicious and inhumane. **[H: Does anyone but me feel as if you are in a working insane asylum? READ ON AND YOU WILL.]**

“I don’t think they are. All weapons kill and maim. Let’s not panic about lasers: I suspect they’re not going to be as effective as the Red Cross fears or as the military hopes.”

Stephen Goose, program director of Human Rights Watch Arms Project in Washington, emphasizes that “lasers can do *good* on a battlefield. They can enhance the accuracy of weapons; they can decrease collateral damage to civilians. But we want to draw a distinction between different kinds of lasers: the acceptable ones that are in adjunct to other weapons, and the unacceptable ones that serve as weapons in their own right.”

[H: Do all of you still feel safe and secure in this new world of peace? Remember, no longer a cold war, good friends. What is THIS CONSIDERATION? You already have weapons which will blow your planet apart—why should you object to blinding half or the whole of the population? How handy to have billions of people groping around in blindness, starving, bleeding and dying. What are YOU going to do? I suppose YOU are still laughing along with the good Col. Gritz and Green about dark glasses?? Ho-Humnn and “Oh Well...!”]

The Swedish proposal to ban laser weapons specifies that “blinding as an incidental or collateral effect of the legitimate employment of laser beams on the battlefield is not covered by the prohibition.” The

debate centers, in short, on what “legitimate employment” might mean.

Advanced laser weapons are effective not just against enemy soldiers, but also against machines: they have the potential to disable helicopters, surface-to-air missiles and armored vehicles. **U.S. FORCES USED SUCH TECHNOLOGY AGAINST IRAQ IN THE 1991 GULF WAR.**

But American planners also envisage the deployment of tactical laser weapons in “special missions”, such as counterterrorism and counterinsurgency. **[H: There it is, readers; get ready to have your riots quelled with blindness, and incarceration where you are going to be eradicated by use of nice wiggly bugs.]** Human Rights Watch points out that such deployment “may be inherently antipersonnel in nature, with blinding the exact intended effect.”

Outside the military, of course, lasers are now a common tool for improving vision. For at least 15 years, doctors have used them to cure eye diseases.

“They work by burning, by micro-explosions or by vaporization,” says Montreal optometrist Guy Julien. “Say you have a leaky vessel in the retina, which we often see in diabetes patients. We burn it away. There’s always scar tissue that forms—but it doesn’t matter because the laser is so precise.”

The impact of a laser weapon on the eye depends on many things: distance, laser color, laser intensity, weather conditions, and eye protection (if any). The damage it inflicts is without cure. Tsipis claims that effective protection against lasers is theoretically possible; but other experts disagree.

“I think it will be possible to protect soldiers in tanks or fortified positions,” says Duke University’s Wolbarsht. “But they’re not the important problem. I do *not* think it’s possible to protect soldiers on foot.”

And if the U.S. military, with all its resources and money, cannot protect the eyes of its infantrymen, what of the rest of the world? If laser weapons spread, they will sooner or later be used by guerrillas and in civil wars. Imagine an Afghanistan or a Somalia trying to cope with hundreds of thousands of blinded civilians. **[H: Never mind Afghanistan or Somalia—how about New York, Los Angeles or Timbuck-tu, Georgia? Why do you people keep referring to distant places as if YOU ARE SAFE? THIS NEXT WAR IS GOING TO BE IN YOUR DOOR-YARDS AND IT IS PLANNED TO START ON OR ABOUT THE MIDDLE OF OCTOBER—ON THE HOME-FRONT!]**

As it happens, history does offer one example of blinding as a military technique. In the year 1014, the Byzantine emperor Basil II imposed an overwhelming defeat on his Bulgarian opponents. After his army captured 15,000 prisoners, he decreed that 99 per cent of them should have their eyes put out. The other one percent were blinded in one eye only. These men were told to lead the others back home.

Basil’s ploy was successful. His barbaric action led to the disintegration of Bulgaria. Within a few years, it was incorporated into the Byzantine Empire.

With that kind of precedent, some human-rights activists fear that even a UN ban on laser weapons might not prevent their deployment.

“People who are going to use them,” Wolbarsht says, “are unlikely to find an international ban of any consequence.”

The counter-arguments centers on the sheer power of shame.

“Blinding as a method of warfare has to be prohibited,” says Ann Peters of Human Rights Watch in London, “That principle is what we stand for.”

[END OF QUOTING]

Oh well....!

I agree with my scribe at this moment in that working toward understanding of our little body cells and how we “tick” seems a bit remote and outdated as to protection of self in this world in this time. And just what else to you suggest, dear one? Can YOU, alone, get Janet Reno out of power or cause the insane and greedy controllers to clean up their acts? No—but one at a time, as you come into understanding of self—you will learn that you CAN attend self and, through that, others will link and you CAN grow—without FIGHTING (AS IN WAR) these atrocious entities come upon you. You will note that they weren’t too nice in the age of the Byzantine Empires (above)—only the methods of atrocities have changed! Moreover, he who waits for God to solve and resolve his problems and give him wealth and great power—will wait forever! Infinity is a very long, long time. I rather tend to equate the breathing dead to the seeing blind.

Good morning.