

ISRAEL	85
ELECTRON BEAM CLEANS DIRTY WATER	86
DRUGS TARGET RNA TO KILL TUMORS	86
GULF WAR SYNDROME	88
CHAPTER 12	91
MON., NOV. 6, 1995	91
GULF WARFARE—aka GULF WAR SYNDROME	91
THE PRESIDENT’S MOTIVE FOR THE OKLAHOMA BOMBING	92
CHEMICAL WARFARE AGAINST AMERICAN CIVILIANS	92
VACCINES TWO YEARS IN ADVANCE	93
SCHWARZKOPF	93
THE WAR WAS PLANNED SEARCH APPROVED BY BUSH	94
NO ONE THOUGHT HE WOULD LIVE	95
FEDERAL AGENTS PROVIDE EVIDENCE	95
GRAND JURY DENIED EVIDENCE GULF WAR ILLNESS!	96
MOVE IN THE HEAVIES	96
CITY’S WATER POISONED	97
DOCTORS INTIMIDATED BY GOVERNMENT AGENTS	97
EVIDENCE MOVED TO OKLAHOMA FOR BOMBING	97
GULF WAR ILLNESS	98
GOVERNMENT INVOLVED IN CRIME	98
AMERICA WILL BE ENSLAVED	98
NOT IF BUT WHEN	98
CHAPTER 13	100
TUE., NOV. 7, 1995	100
ACTION VS. BEING	100
LETTERS, WE GET LETTERS	101
CONTACT	102
PULSE GRID SYSTEM	103
OVERLOAD	104
FOR YOU WHO WONDER ABOUT——	105
WHAT ABOUT	105
PRECIPITATED COLLOIDS?	105
COLLOIDAL SILVER COULD REPLACE	106
SOME ANTIBIOTICS	106
CHAPTER 14	109
WED., NOV. 8, 1995	109

DEDICATION

To all who seek the light in truth.

FOREWORD

REC #1 HATONN

TUE., NOV. 14, 1995 7:34 A.M. YEAR 9, DAY 090

TUE., NOV. 14, 1995

This journal seems to touch on so many topics that I may as well utilize another one for the Foreword. To understand why and how my “forewords” and “introductions” are mostly of no connections to the contents of the bound book itself, you have to know that we don’t write “books” as do other authors, except rarely. We have ongoing daily writings and happenings, studies and changing focus. The Epilogue and Prologue or Introduction, whatever, are opportunities for instructions, comments, left out material, or just an opportunity for me to give you another writing.

Keeping this in mind, THIS “Foreword” will follow that very pattern in that the next writing will be in response to a letter from a Canadian friend who asks some good questions which “don’t fit” here but some of the questions scatter through many various topics. I can’t have the time or space to respond in detail per item but maybe we can offer his letter and then consider our various responses.

[QUOTING, from: L.F.J., Canada] 10/30/95:]

Dear Hatonn,

I am writing and hoping for some good information on the latest weaponry being used against inhabitants of Terra. Can you respond as to UFO teleportation (Re: Study and experiments on humanity.) Permission has been given by the Government of the United States for certain tests (humans) through groups: “K Group”, “Majestic 12” and other Top Secret avenues of Government to use your ships to gather data from any building or level of Government.

I myself, in the past, have experienced “Alien Possession” with very unusual experiences perpetuated on me with permission of “Satan knows who” and the game is “deadly”. I also saw in *Spotlight*, an ad (Office in Chicago) that suppressed and had hidden part of the *Bible* becoming available (e.g. Geneva Bible). “PLEASE DON’T SCARE PEOPLE WITH THIS” sort of “Biological Transmutation” through changing energies existing in and around myself. I know that you will be able to tell from my writing that I have been affected. Please don’t jump to any conclusions about all this but try to take a non-judgmental sort of view and present facts and what may be the best way to cope and deal with all this.

A lot of negative entities in UFOs assist to suppress and inflict harm on people born from Earth who need some sort of protection, as will always be [necessary].

Is there any possibility of transmission for Esu or Soltec? Please include them and HUMOR in your writings.

Please see what you can put together, and thank you for an avenue to express myself.

“In need of you”

L.F.J., Canada

P.S.: “There IS something governing my EVERY MOVE....aaahhhhaaa!

Include “Report on Banks”

[END OF QUOTING]

Starting at the top:

Mind Control through use of pulse beams of very, very HIGH FREQUENCY transmitters (HAARP) in couple with extra, extra low frequency pulse waves. The global system is now operative.

You still have available all of the non-electronic weaponry—updated with electronic guidance systems which are now sometimes run on non-limiting power systems which, when engaged, can go ANYWHERE on your globe as easily as shooting across a street.

As to “my ships” gathering data for your Government—perish the thought. Any “UFOs” you find running around with any Government co-venturing—ARE NOT “OUR” SHIPS! **ANY TESTS ON ANY HUMANS ARE NOT TO UPGRADE ANYTHING—BUT TO BRING ALL HUMAN CITIZENS UNDER TOTAL CONTROL.** ABDUCTIONS ARE “NOT”—IT IS A SIMPLISTIC SHOW-AND-TELL AND PROJECTS FEAR AND DEMONSTRATED ABILITY TO PLANT ANY IDEA, ANY THOUGHT, AND ARE STUDIES TO CONTROL MINDS AND ERASE MEMORIES WHILE LEAVING WHATEVER RECALL-IMAGE DESIRED. But, yes there are, alien-DNA-structured beings functioning in and around many of your underground secret facilities. ALL OF YOU ARE “ALIENS” SO WHAT’S NEW?

POSSESSION

You state that “in the past while I have experienced ‘alien possession’”. No, you may have experienced some “control” over your thoughts and actions—but it was NOT “alien”, other than to be a negative force. How can you know the difference? GOD FILLS YOU! ONLY NEGATIVE FORCES “CONTROL” OR “POSSESS”. GOD NEVER CONTROLS! YOU MAY WELL CONTROL SELF THROUGH THE GUIDELINES AND EXPECTATIONS OF GOD ACCORDING TO HIS KNOWN “LAWS”. BUT HE NEVER “POSSESSES”—HE ONLY FILLS TO OVERFLOWING—IN GOODNESS! UNIVERSAL OR COSMIC ALIENS ARE NOT ALLOWED, BY COSMIC LAW, TO “POSSESS” ANY BEING. With permission granted by an individual aspect experiencing—outside frequencies may be utilized to communicate. SATAN CAN AND DOES POSSESS, TOTALLY, THE THOUGHTS AND MINDS OF MUCH OF HUMANITY. HUMAN, BECAUSE OF THIS, HAS LOST HIS STATUS, IN MASS, OF HIS “HIGHER UNIVERSAL” QUALIFICATIONS. In other words, much of mankind has forfeited his SOUL and will not move beyond the basic “outer limits” of Earth-bound physical placement even in astral form. And, brother, THIS IS WHAT IS MEANT ABOUT THE SINS OF THE FATHERS BEING RESTED UPON THE CHILDREN!

GENEVA BIBLE

I have no comment about any “Bible”. So-called “bibles” are written for the use of the ONES IN POWER! If this “scares” you—I suggest you get right with God and never mind the “bibles” flung at you. God has a good SHORT list of commandments (which, by the way, do not include rules for tithing and when you can work). I DO NOT SCARE PEOPLE—I OFFER TRUTH AND INFORMATION—PERIOD.

I, further, judge not! I do discern, however, and I find that YOU are more at dis-ease than any whom you might well be trying to “protect”. And, I repeat:

Negative Entities in UFOs may well do a lot of things—but they are NOT aliens. UFO: Unidentified Flying Object. I can IDENTIFY them all—and mostly “they” are not in any relationship to “aliens” other than perhaps “foreigners” to your location.

There is NO REASON you cannot IDENTIFY “our” ships (craft). We, when visible to your eyes, identify constantly and continually with strobing lights, rainbow colored in nature, and transmit without interruption. Because of the sunlight, we are not visible in the daylight hours to the “naked” eye, but we are there just as are the stars that you can’t see in the daytime hours. At night we are easily visible. We don’t abduct ANYTHING, although our team players are aboard almost every day for some period of time. This is not by abduction, but by working agreement.

OTHER TRANSMISSIONS

My scribe cannot humanly carry the load of various participants. We did what we needed to do to get as much information forward as possible, at upstart. Now, we have several other receivers right at this point of function. There are daily writings from Esu, Soltec, Korton, and the Commander of the Ashtar Command (the computer base). These also have constant input from the Pleiades Sector commanders. In our function in this location we have a very PHYSICAL job to be accomplished, so you won’t get may “flowery speeches” from here. We are trying to get serious information out to you people because you are in SERIOUS TROUBLE FROM THE LIES UPON WHICH YOUR WORLD IS NOW FOUNDED.

We simply do not have ability to afford (financially) large papers which can carry the plethora of information available and flowing through. Most of the information from Korton and Soltec is technical and our engineers and physicists are working closely with them and some of our earlier “retired” scientists such as Mr. Tesla. Perhaps the difference between us and other receivers about your globe on the “bandwagon” is that we have a job to do and are not in the entertainment BUSINESS.

CONTROL

You say that “something” is governing your every move? I hope, Sir, that it is your conscious conscience, for “governing” represents your own decision while “control” represents that which is beyond your ability to discern or act on your own. I suggest you realign, get rid of any “dark energies” and GOVERN your actions and SELF according to the laws of God; never mind your visiting “aliens” because they are obviously getting you into a state of trouble and you are accepting them. They may well be “alien” energy forms—they are NOT UFO “aliens”. AND REMEMBER SOMETHING: IF IT OR THEY ARE OFF

THE EARTH SURFACE—THEY ARE EXTRA-TERRESTRIAL! SO, WHEN YOU START IDENTIFYING AND CLASSIFYING AND CALLING NAMES—REMEMBER THAT **YOU FIT THE DESCRIPTION. Why? Because your body is of Earth bindings—YOU, HOWEVER, ARE YOUR SOULETHERIC BEING** WHICH IS NOT BOUND TO EARTH TERRA. Above and beyond that fact, all of you came from “the stars”. YOU DID NOT “JUST HAPPEN” OR BECOME HUMAN FROM A FISH OR A MONKEY—HOW LITTLE KNOWLEDGE YOU HAVE OF LIFE FORMS AND GOD CREATOR. YOU ARE DNA-RNA STRUCTURED **HUMANS** [*Higher Universal Man*]! Your biggest problem is that you are too lazy to care enough to read the “very best” and you live on MYSTICISM instead of TRUTH and do not go unravel the MYSTERIES. Further, YOU PLAY AT POLITICS and allow the imbecilic puppet-masters to rule your world.

The answer to ALL your problems and questions lies in this very fact: you have asked for 4 papers. Sir, there are now some 156 journals, thousands of hours of tapes (audio), thousands of pages of handwritten pages—just through my own scribe. There are additional hundreds upon hundreds of pages of writings from others. You will get very little continuity or the specific information you seek unless YOU BECOME INFORMED. FEAR comes from the “unknown”.

I offer everything that I AM and all that is TRUTH as I may do so—and have, together with my own compatriots and ground workers, offered thousands and thousands of hours of valid DATA. We have, in detail, covered every topic you have mentioned and zillions left unmentioned. WE CAN DO NO MORE—YOU HAVE TO DO YOUR SHARE! If you truly WANT TO KNOW—you WILL go learn. If you want to just PLAY in this game—you are going to get the you-know-what scared out of you. If you feel you are now or ever have been “possessed”—you are already in serious trouble if you still feel “something” unknown is governing your every move. YOU KNOW WHEN IT IS GOD AT THE HELM!!!

I am in GREAT appreciation for your letter and I do not, in any way, jest. It gives me an opportunity to focus on that which is urgently IMPORTANT to all of you. Because we have so thoroughly covered these topics in the past—I tend to not repeat them more than is necessary. I do not wish to serve as your advisor, Spiritual Lord, God or anything else other than what I am—a “Host” with a very intensive mission to be served. YOU, YOUR LIFE, AND YOUR SOUL—ARE BETWEEN YOU AND GOD! Make sure YOU CONTROL YOUR life-style and live it within the laws of God so that you may always be in feeling self-worthiness to offer your soul in honor—BACK TO GOD. HE will hold it, nurture it, and give it back a bit better perfected into your keeping to live according to your freedom of choices and YOU, sir, are allowing some very dark energies to INFECT (not “affect”) your life-stream of THOUGHT!

Think most carefully as to WHY you want more information on “banks”! Where your interest and your heart is—there go YOU as well. The banks are run by very “unGodly” Banksters who rule in the most unGodly manner possible. They are THE tools of the puppet-masters and their intent is to control all the physical property of the world—including YOU. And yes indeed, if you offer them YOUR SOUL, they will take it and YOU WILL LOSE IT!

May you become within, and remain within, THE LIGHT that you may see and know—and none can rise above you. CHECK YOUR PERCEPTIONS!

MAY YOU ALWAYS ABSORB THAT WHICH IS LIGHT AND ACT IN SUCH MANNER THAT

THE DARKNESS HOLDS NO FEAR OF EVIL FROM YOUR OWN HAND. IF YOU REFLECT GOD, THEN IT FOLLOWS THAT NO HAND CAN RISE AGAINST YOU NOR CAN YOU BE CAUSED TO FALL. YOU ARE THAT WHICH IS ABOVE AND BEYOND ANY “THING” WHICH YOU PERCEIVE. YOU **ARE** THE PERFECTION OF THE VERY ESSENCE OF GOD—YOU HAVE JUST FORGOTTEN!

Salu.

Gyeorgos Ceres Hatonn
HC-IGFF-PSC
November 14, 1995
Year 9, Day 90

CHAPTER 1

REC #2 HATONN

MON., OCT. 23, 1995 11:35 A.M. YEAR 9, DAY 068

MON., OCT. 23, 1995

CODES OF LIFE AND CELLULAR LIFE

As we again turn to the discussion about cellular life and the very “units” that make up living organisms I am offering a reminder for you to REVIEW the prior lessons on the subject. I believe that up to now we have offered six parts covering what we will refer to in units as Chapters and have gone through segment chapters 1 - 6. Life itself got in the way of the continuous flow of this information. However, there is no point in learning about life if you have no intention of “living” in it. I hope that the Editors can decipher enough of these writings to eventually gather all the lessons into one or two volumes for your reference. The lessons will be including everything from the very one-celled organism of living life-form to the viruses and bacteriology. We, of course, have no intention of making you into scientists or college professors but we do want you to have a basic understanding of life-forms so that you can KNOW what to do for SELF and HOW to do it. You cannot have a solution to a problem of which you have no notion of content. Your species is in decline and, before it becomes extinct, it would seem you might wish to change your directions a bit. You seem to now be enduring “higher forms of killing”, with you as the slain or “to be” slain. Let us not, through simple ignorance, meet the axeman silently.

This particular segment which we will offer is probably as dreary and beyond reach for the novice as any—but it will cover briefly the “*Chromosome Theory*” of heredity—so it DOES most seriously touch each and every individual entity upon the sea, land or in the air. Bear with us and do try to understand. I will give a little different approach to this segment and ask that the answers follow DIRECTLY the question so you can peek. If you followed the Simpson trial you will recognize some of the terms offered by expert witnesses and tossed around by lawyers as if they know what is being said. Perish the thought—but wouldn't it be wondrous for all of YOU and for those lawyers to have had our little series of lessons?

To get you back into the stride of these current lessons we will offer one more chapter on the subject and then I will ask for a recent article to be printed. It is both interesting AND will present the “terms” for your integration and self-testing for retained information. You will find it a wondrous thing to know that which you read—much like being in a foreign language country and at least knowing a smidgen of their communications systems. To allow the testing in gaining USEFUL information is even better. So please, let us continue right along.

PART 7: FACTS OF LIFE

[QUOTING:]

THE CHROMOSOME THEORY OF HEREDITY

PREVIEW QUESTIONS

1. There is an old saying, “Blood will tell.” Is there any biological basis for the ideas of “good blood”, “bad blood”, “blue blood”, and blood lines generally?
2. Can you cross a camel with a sparrow and come up with an ostrich? What is the result of a cross between a crocodile and an abalone. A crock-a-balone?
3. If the laws of chance apply to hereditary mechanisms, how is it possible to predict the outcomes of plant- or animal-breeding experiments?
4. What is the basis for sex determination?
5. It is possible to explain the color of corn kernels (either yellow or red) on the basis of a single gene difference. How can you explain the hereditary mechanism involved in the inheritance of some variable quality like tallness?

TERMS

LAMARCKISM: A term used to indicate the doctrine of the inheritance of acquired characteristics. This view was most clearly presented by the French biologist Lamarck in the early 1880s.

PANGENESIS: A view, linked to Lamarckism, that proposed that tiny particles called *pangenes* entered the semen from all parts of the body and thus provided the physical basis for the inheritance of acquired characteristics.

GENE: The basic functional unit of heredity.

ALLELE: An alternative form of the same gene. For example, the genes for yellow seeds or green seeds in peas are alleles. The genes for red flowers and white flowers are alleles. The genes for seed color and flower color are NOT alleles.

DOMINANT: When its presence masks the presence of its alternative allele, an allele is said to be dominant. In peas, the red-flower gene is dominant over the gene for white.

RECESSIVE: If its presence is masked by the presence of its alternate allele, an allele is said to be recessive. In peas, the green-seed gene is recessive to the gene for yellow.

HOMOZYGOUS: If the allelic pair are alike in an organism, the organism is said to be homozygous for the trait governed by the alleles.

HETEROZYGOUS: If the alleles are unlike in an organism, the organism is said to be heterozygous for the trait governed by the alleles.

PHENOTYPE: The outward “visible” expression of the genes, e.g., red flowers, tall plants, etc. From the phenotype, it is often unapparent whether the organism is homozygous or heterozygous for a given allelic pair.

GENOTYPE: The actual gene makeup of the organism. This can be inferred from the phenotype of the organism and from what is known of its ancestors and progeny.

SEGREGATION: Sometimes called Mendel's first law, it can be stated as follows: Genes do not blend; they behave as discrete units. They pass intact from one generation to another, where they may or may not produce visible traits, depending on their dominance characteristics. Genes segregate at random, thereby producing predictable ratios of phenotypic traits in the offspring.

INDEPENDENT SEGREGATION (ASSORTMENT): The inheritance of an allelic pair located on a given chromosome pair is unaffected by the simultaneous inheritance of other gene pairs located on other chromosome pairs. The different traits assort independently of each other. Of course, linked genes do not follow this so-called law.

AUTOSOMES: Chromosome pairs in the cell, other than the sex chromosomes.

LINKAGE: The phenomenon in which many genes are linked together on the same chromosome and thus tend to be inherited as a package. Linkage is an exception to independent assortment. The number of linkage groups for a species corresponds to the number of chromosome pairs characteristic of the species.

CROSSING OVER: During prophase I of meiosis, paired chromosome parts may be exchanged between homologous chromosomes via crossing over after synapsis. Crossing over explains the appearance of recombination types as well as parental types in crosses involving linked genes.

POLYGENES (MULTIPLE FACTORS): Numerous different genes that produce a cumulative or an additive effect that results in continuous variation in various phenotypic traits. For example, pigmentation in humans appears to be controlled by polygene inheritance—an increase in the number of pigment genes transmitted to the offspring increases the pigment developed.

REVIEW QUESTIONS

1. What is involved in Mendel's "law of segregation"? What is his "law of independent assortment"?
2. How did Mendel test his hypothesis? Did he find evidence for the acceptance of his hypothesis?
3. Chapter 6 is entitled "*The Chromosome Theory of Heredity*." What is this theory? What kinds of proof confirm it?
4. Do all bisexual populations have a similar sex-determining mechanism?
6. How does the fact of quantitative inheritance, i.e., continuous quantitative variation in a phenotypic trait such as body size or skin color, conflict with Mendelian principle?

SELF-TEST

Multiple-choice: Select the one BEST response.

1. The body cells are related to the germ cells in:

- a. a one-way fashion: the germ cells give rise to the body cells but are not derived from germ cells.
- b. a one-way fashion: the body cells give rise to the germ cells but are not derived from body cells.
- c. a two-way fashion: the body cells produce pangenes, which are incorporated in the germ cells and in turn give rise to new body cells.
- d. a two-way fashion: the germ cells produce soma, which is modified in the body cells and then reincorporated in new germ cells.
- e. no way.

Answer No. 1: b.

2. Which of the following types of sex determination is prevalent in mammals, including man?

- a. XY type
- b. XO type
- c. ZW type
- d. male haploid type
- e. none of the above

Answer No. 2: a.

3. Consider the following data concerning crossover frequency, then choose the statement that seems warranted on the basis of this data.

Frequency of crossing over between A and B = 10%
Frequency of crossing over between B and C = 2%
Frequency of crossing over between C and D = 8%
Frequency of crossing over between D and E = 6%
Frequency of crossing over between C and E = 2%

- a. The genes A, B, C, D, and E are arranged in linear order and are equally spaced on the chromosome.
- b. Gene E lies between C and D and is closer to D than to C.
- c. Gene E lies between C and D and is closer to C than to D.
- d. Crossover frequencies are of no value in mapping chromosomes.
- e. The genes A, B, C, D, and E are arranged in the following order: A, D, E, C, and B; A and B are at the most distant loci on the chromosome.

Answer No. 3: b.

4. The number of linkage groups that can be determined for a species corresponds to

- a. the number of genes present in the germ cells
- b. the diploid number of chromosomes present in the germ cells

- c. the haploid number of chromosomes characteristic of the species
- d. the number of sex chromosomes
- e. none of the above

Answer No. 4: c.

5. The inheritance of pigmentation in humans can be explained by
- a. simple Mendelian genetics (1 gene pair)
 - b. linked genes
 - c. the rule of dominance
 - d. multiple alleles
 - e. multiple-factor or polygene inheritance

Answer No. 5: e.

6. Which one of the following pairs is mismatched?
- a. inheritance of acquired characteristics LAMARCK
 - b. chromosome theory of heredity SUTTON
 - c. pangenesis MENDEL
 - d. continuity of germ plasm WEISMANN
 - e. The Origin of Species DARWIN

Answer No. 6: c.

7. Which one of the following was NOT an assumption made by Mendel in regard to the interpretation of his results from pea crosses?
- a. Each plant contains a pair of hereditary factors controlling flower color.
 - b. The two factors in each pair are derived from the plant's parents—one member of the pair from each parent.
 - c. The two factors in each pair separate, or segregate, in the formation of germ cells; each germ cell receives only one factor.
 - d. The factors for red flowers and white flowers are alternative forms of the same factor; the red is dominant over the white.
 - e. None of the above.

Answer No. 7: e.

8. Linkage and crossing over are phenomena that provide important proof for
- a. the theory of the inheritance of acquired characteristics
 - b. the Mendelian laws of heredity
 - c. the chromosome theory of heredity

- d. the theory of blending inheritance
- e. none of the above

Answer No. 8: c.

9. The *segregation* of paired hereditary factors (genes) that Mendel postulated occurs during
- a. anaphase of the second meiotic division
 - b. prophase of the first meiotic division
 - c. the brief interphase between the two meiotic divisions
 - d. anaphase of the first meiotic division
 - e. none of the above

Answer No. 9: a.

10. Which one of the following pairs is mismatched?
- a. alleles alternative forms of the same gene
 - b. genes paired hereditary factors—the functional units of heredity
 - c. phenotype the outward, visible type of the organism
 - d. genotype the hereditary type, or actual genetic constitution, of the organism
 - e. none of the above

Answer No. 10: e.

END OF LESSON

I am ending this lesson without going into the detailed connections and percentages of gene dominance, etc. I know that this may well be very interesting to some of you but I have already lost a lot of readers before we reached this point.

I wanted ALL of you to get interested enough to go seek more in-depth information if you have such interest. It is up to you as to how much more information you research. I will henceforth simply outlay the *TERMS* which will continue to pop into all writings on this matter and we will have to have “overwhelming” petition from you readers if you want more depth in the outlay. Since so much of your recent and ongoing science is in the crossing of genes, chromosomes, DNA structuring, etc., it is imperative to have a smattering of definition of terms in order to even glimpse inside that wondrous world of life. Don’t get burdened by the load—it is a delightful mystery which can ONLY cease being a mystery when understood and SOLVED. To do this adequately—you must learn and there seem to be no shortcuts to this knowledge. We don’t, however, have to turn you into professors to get a glimpse into the subject. I hope our work will tend to cause curiosity enough to have some of you pursue the puzzle more diligently for this is THE scientific arena wherein your very developmental life or death shall be foundationed.

God said the way would be interesting—not easy, and yet, a task learned well—IS EASY to master. Salu.

CHAPTER 2

REC #2 HATONN

TUE., OCT. 24, 1995 10:57 A.M. YEAR 9, DAY 069

TUE., OCT. 24, 1995

***WE ALWAYS HAVE ROOM FOR MORE IN OUR LIVES.
WHEN WE ARE READY FOR IT,
WHAT WE NEED FOR GROWTH WILL EMERGE!***

As you make use of that which “is”, there is never an overfilling of the mind. There is only more and more room for accepting knowledge and truth. Sometimes it is overwhelming and the tide rises too rapidly for full absorption of all facts presented, all tales told, all stories written—but it is not space in MIND that is lacking. You WILL find your place, dear ones, each and every one of you, for a musician must make music, an artist must paint, a poet must write, if he is to be at peace with himself. What a man can be, he must be. All you have to decide is “what kind of a person you are capable of being”. Then, GO BE IT! It IS WISE, however, to call upon the invisible universe for guidance—for that which the eyes see, the ears seem to hear and the physical experience may well HIDE that which is divine and inspired beyond that physical dabbling in the clay of the potter’s wheel or the musicians keyboard. GREATNESS CAN ONLY FLOW FROM THAT WHICH IS BEYOND THE PHYSICAL. Knowledge can be gained—but WISDOM is learned and, when learned well, will guide the ships PROPERLY into the harbor. Where is YOUR ship?

Let us turn to a most wonderful story with which to test your new information about your very life-cell structuring. You may want to keep your “terms” listing handy but let us unfold the beautiful recognition of having actually LEARNED something and let us hope it will cause you to want to LEARN MORE. Thank you, students, for allowing me to share with you this bit of journey into KNOWING. From *DISCOVER* magazine, Nov. 1995, pg. 71: [*For Discover subscription information call 800-829-9132; for full article and illustrations get your copy at the newsstand.*]

[QUOTING:]

FIRST CELL

by Clark Zimmer

To most who search for life’s origins, genes are everything. But as David Deamer keeps reminding them, without a container for those genes, there can be no life.

“Part of the definition of life,” says David Deamer, “is that it is in a place.”

Deamer is not uttering a koan in a Zen monastery. He’s sitting next to a microscope in a biology laboratory at the University of California at Santa Cruz. Deamer is a hard-core biophysicist, but still there is a monkish quality to him.

It comes not just from his unnervingly gentle manner of speaking but from his entire approach to science. This is a man who, in contemplating the pattern of nucleotides in DNA—represented by the letters A,C,G, and T—was reminded of musical notation. By allowing the letters to stand for notes instead of nucleotides—and using E as the equivalent of T—he turned human DNA into hypnotic melodies, available now for your meditative pleasure on both tape and CD. Deamer himself likes to hum the insulin gene. **[H: Don't laugh too hard for I take note that the symbols Dharma types upon a keyboard as each letter has its tone. She writes symphony after symphony if it but were put to sound-track.]** This is a man who isolates chemicals from meteorites and asks guests in his lab, “Do you want to smell outer space?”

It doesn't hurt to have such a cosmic view of things in Deamer's chosen field of study: the origin of life. Deamer is unusual even among the few dozen researchers in his field, and not just in his discography. For most of the others, explaining the origin of life means explaining the origin of the genetic code: How did DNA arise from chemical reactions on the early Earth? How did the original building blocks of today's genetic code assemble themselves into crudely self-producing units? Were the first life-forms based not on double-stranded DNA but on single-stranded RNA? **[H: Isn't it nice, readers, to have definition to these terms of which this great man speaks, i.e., DNA, RNA, nucleotides, etc. When you can actually READ and understand the music or the language, is it not wondrous?]**

For the past 18 years, though, Deamer has been gently reminding his colleagues that these questions define only part of the puzzle of life. DNA does not float loosely through the oceans. Life is constrained in a place—or, to be more specific, within a boundary. Life is chemical interaction, and for that interaction to occur, life's molecules must be close to one another. Without a physical boundary of some sort, without a skin, a bark, or a cell membrane, an organism is nothing more than a diffusing blur of molecules. To explain how the first creature came to be, you have to explain how its innards got to be distinguished from its surroundings. In other words, you've got to explain how the first single-celled creature got encapsulated in a cell.

Over the years Deamer has persistently been teasing out some answers to this thorny question. Now he has reached a milestone. Under conditions something like those on the early Earth, he can create something like a cell: an enzyme-carrying bubble that draws in nutrients from its surroundings and crafts them into genetic material. Call it a quasi cell—and say that Deamer has created quasi life.

CELLS

A cell membrane's importance to life is often underappreciated, says Deamer. “People say, ‘Well, it's just a little bag.’ But it's much more. It's the interface between life and everything that's outside.” The membrane of any cell has to do many things at once. It has to be impermeable enough to keep essential things (like DNA) in and harmful things (like viruses and poisons) out. Yet a cell membrane can't form a perfect seal. It has to be able to flush out waste and heat from its own system and take in nutrients from the surrounding medium. And the first cell membrane, like the membranes of many single-celled organisms today, probably had to be able to collect energy as well.

When Deamer began his work on membranes as a graduate student in the early sixties, biologists were

