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By: Martin Standard.

"TRITICALE - THE FIRST MAN-MADE PLANT SPECIES CAPABLE  
OF REPRODUCING ITSELF IN KIND"

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I have chosen this subject for tonight's paper because in this day of 'gloom and doom' it is refreshing to stop and realize that mankind was created with the ability to survive no matter how great his problems. Some think that our little Garden of Eden is so overgrown with human-weeds that the Lord is about ready to plow it up and replant with new seeds, but I do not believe this. I think that we are just being shaken up like a naughty school child so that we can sit down and commence thinking straight and doing our work instead of constantly fighting and killing each other.

Since the beginning of time, the No. 1 problem of mankind has always been finding enough food to live on. And NOW, with the world's population in the billions and doubling every 20 years or so, we are faced with mass famine and the death of untold millions unless we find ways to grow more food.

History tells us that there have always been poor nations and hungry people. Some even believe that it has to be that way for proper balance --- somewhat like the iceberg wherein 6/7 must remain below water and out-of-sight in order to support the 'beautiful' 1/7 shining above water. Well, gentlemen, before it is too late, we might stop and consider that when the iceberg gets too far out of balance, it does a 'flipflop' and that that

beautiful 1/7th above water is replaced by a purer 1/7 from below water.

Foodwise, we in the United States are doing fine. In fact, we are one of the few nations that grow enough food to export it. All of the other nations either import part of their food or do without it because they do not have enough money to pay for it. This embalance of 'haves' and 'have-nots' cannot long endure. Sooner or later the 'have-nots' will gang up and not only take our food but 'kill the goose that laid the golden egg'.

We like to think that our ability to grow such an abundance of food is due to our being smarter and more industrious than anyone else in the world (like Hitler's super-race), BUT it is not. It is due almost entirely to the fact that our National boundaries encompass huge quantities of the finest crop-growing lands on the face of the Earth. Look at a map of the 'arable lands' of the world and you will see what I mean.

The conditions for growing food crops is almost ideal in the United States. The temperature is moderate, with proper length of growing seasons. The rainfall is almost perfect for most areas and is spaced out to come when the plants need it. The 'light' or sunshine, which is the most essential engredient of plant growth, is ideal --- not too little and not too much.

The land itself is fertile by nature but responds well to the addition of chemical fertilizers --- many lands do not.

In general the land of our Nation is at the right elevation for growing many of the so-called food-grains, which are the foundation of man's diet. AND, ---- and this is a big 'and', --- our land is level enough for using all sorts of mechanical equipment for planting and harvesting these crops, which greatly reduces the labor cost of production.

YET, with all of these things, the answer to the world's food problem is not in the growing of more in the United States, but rather in finding some crops which will grow well under the conditions of land and climate existing where the food is needed.

Giant steps have been made in this direction. The first breakthrough being the development of TRITICALE. TRITICALE is the very first 'Man-made' plant species capable of producing viable seed and thereby reproducing itself in kind. It is a man-made cross between two separate individual 'species', WHEAT and RYE, but it is so completely different from either of these that it is actually a brand-new SPECIES --- 'neither fish nor fowl' (wheat nor rye) but a new grain, and it is considered by grain scientists to be the first new grain to appear either in nature or in the laboratories in the last 12,000 years. TRITICALE takes its name partly from TRITICUM, the genus name of wheat, and partly from SECALE, the genus name of rye.

The effort and International cooperation put forth in the development of TRITICALE is impressive. In fact, it may be the first world problem which man has ever solved on an international basis. And it was done without any meddling from the



from  
politicians or <sup>^</sup>that worthless organization called the United Nations. All political barriers were lowered on both sides of the 'iron curtain' and information on a year to year progress flowed freely every step of the way. When success came, no one Nation or group of Nations could take all of the credit. There were at least fifty Nations working on the problem; perhaps a hundred of the outstanding Universities with their staffs of plant genetists; thousands of 'Plant Hunters' searching the entire face of the earth for new genetic material to use in their laboratory crosses; \$1.6 million dollars in money, exclusive of numerous gifts of work and services and use of facilities by foundations such as Ford and Rockefeller; and thousands of hours of volunteer work by College students involved in plant breeding.

BUT, even with all of this joint international effort, it took about 20 years to produce the first cross with viable seeds and another 30 years to develop these seeds into a dependable food crop. The work is still not finished. However, it is progressing rapidly and with the new knowledge of 'genetic engineering', it should go forward by leaps and bounds. Through genetic engineering we can also expect other successful crosses between widely varying species of food crops, some far superior to TRITICALE and possibly revolutionizing the eating habits of mankind. There are even 'perennial' types of WHEAT and TRITICALE being worked on which will produce up to 10 years without being replanted. This will be very helpful on hillsides where cultivation would soon cause erosion of all of the top soil. Roots would go 4 to 6 feet



deep and bring up valuable minerals, enhancing the food value of the grain.

WHEAT, of course, is the best source of food man has ever found, but it just will not grow successfully in most parts of the world where the starving populations live. In many of those areas it is either too hot or too cold, too wet or too dry, the elevation is too high or too low, or the soil is not suitable for growing wheat.

Growing tests through<sup>out</sup> the world have indicated that TRITICALE seems to have by-passed to a large extent most of the limiting conditions of wheat, and that it will produce excellent yields almost anywhere that plantlife will grow successfully.

TRITICALE will thrive in temperatures from near the equator to the far north in Sweeden, Siberia and Canada, well beyond the limits of wheat. It will thrive in semi-arid lands which comprise most of the 'Third-world Nations', and is well adapted to irrigation farming. It will grow as a 'winter' crop in the valleys of mountainous regions, and as a 'summer' crop on the mountainsides up to near the 'tree-line' on those mountains.

#### WHAT DOES TRITICALE LOOK LIKE?

It looks more like its 'father plant' RYE, and tastes more like its 'mother plant' WHEAT. However, some of its features are quite distinctive. It is more bushy than either of its parents, thus permitting a sparse stand to yield a plentiful crop. The grain heads are much longer than that of either parent, usually being about ten inches long or twice that of wheat, and are very densely kerneled, bearing between 200 and 250 grains per head.

#### HOW ABOUT ITS YIELDS?

In extensive tests in Canada, planted alongside plantings of wheat, TRITICALE produced up to 60 bushels per acre as opposed to 30 bu/ac for wheat and 15 bu/ac for rye. It is frost-resistant where wheat is all killed by the same frost, so that in cold climates or in 'cold years' such as the 'Year Without Summer', it will produce bountiful harvests where wheat would produce nothing.

#### HOW ABOUT ITS USES?

For human nutrition, tests showed it to be extremely good, with protein content above that of either parents. TRITICALE flour is not as good as wheat flour for 'risen' breads. However, for making the so-called flat breads which the majority of mankind still prefers, such as biscuits, pancakes, tortillas and fried breads, it is somewhat better than wheat flour and its flavor is sweeter and more nutlike.

In tests it worked out exceptionally well for cooked cereals, though not for cold cereals. It showed special merits as a broth and a 'stiffener' flour, and it is an excellent livestock food, and is also <sup>a</sup>good base for beer and grain whiskey.

We have looked at its desirable qualities, now let's take a look at its undesirable qualities:

The water content of the grain is still too high, causing the cured kernels to shrivel and look ugly. The grain is brownish in color and makes a darker flour than wheat, and most paying customers throughout the world like 'white' bread. The stalks are too tall for convenient harvesting with standard

harvesting machinery, and it would be very costly to change the equipment. In its present form, its worst fault is its susceptibility to a disease called 'rust'.

These 'undesirable features' will very likely prevent TRITICALE from ever becoming very popular in the United States, especially since we can grow far more wheat than we can sell at a profit.

However, as pointed out in the first of my paper, the sole purpose of developing this new grain was to find a food-crop which billions of hungry people of the world could grow where WHEAT would not grow because of their soil or climate. AND, to this extent, TRITICALE, either in its present form or in one of the many improved forms now being worked on by plant breeders, is almost certain to answer many of the food problems of the have-not nations. This of course may hurt the American farmer by cutting down on our export of wheat, BUT it will certainly help the American tax-payer who has to buy the wheat from the farmer to give to some foreign country and then pay for the shipment of it from America to those countries.

No matter how good TRITICALE turns out to be as a plant, its use as a food will depend upon its acceptance by the people living in the hungry nations of the world. Wherever we live on the earth, all humans are highly prejudiced in regard to what they eat, their desires being influenced more by their minds than by their taste or nutritional needs.

You and I would almost starve before we would eat a dog which had been fattened and then beaten to death with a stick to 'tenderized' it, yet it is considered a real delicacy in many



parts of southeast Asia. Some Jews would almost starve before eating a piece of pork, yet many Americans want it every morning for breakfast. And so it goes, on and on. I am reminded of the story of the lady who went into the grocery during World War II when meat was scarce, and asked for a 'nice roast'. The clerk said "Lady, I am sorry but we have sold out of everything except a few pieces of tongue". She said "Young man, I would never eat anything that came out of the mouth of an animal" ---- The clerk replied "Well, Lady, how about a dozen eggs"!!!!

As long as we furnish the food FREE to the third-world nations, they will accept nothing less than the best --- if there is any 'second choice' stuff, we the taxpayers will have to eat it ourselves. If you do not believe this, just follow a 250 pound woman through the grocery and see how many more choice cuts of meat she buys with food-stamps than you buy with cash.

Helping the hungry nations to grow crops on their own land with their own labor, will not only fill their bellies with food, it will fill their hearts and minds with pride and start them merrily on the road to becoming a 'DEVELOPED' nations rather than continuing as undeveloped nations.

In conclusion, it occurs to me that perhaps the most beautiful aspect of this entire research program on TRITICALE was the manner in which the participants cooperated, crossing national boundaries and 'iron curtains' at will, sharing with one another the results of the work being done in each country, and all working toward the one goal of preventing worldwide famine. Maybe this

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tells us something ---- when the chips are down and we are faced  
with extinction, we will forget politics and <sup>the</sup> 'snail darta' and  
cooperate to save ourselves, even to the outlawing of all nuclear  
weapons.

Goodnight Gentlemen.

LIGHT AT THE END OF THE TUNNEL

PRESENTED TO ATHENAEUM SOCIETY

APRIL 1, 1982

BY

SAM H. TRAUGHBER, M.D., F.A.C.P.



## INTRODUCTION

THIS PAPER IS NOT ABOUT A NEW FINANCIAL SCHEME TO HELP YOU INVEST YOUR MONEY WISELY AND TO PREPARE FOR YOUR RETIREMENT. IT IS NOT A HISTORICAL TREATISE ABOUT PROBLEMS FACED IN THE JOHNSON PRESIDENCY. THIS PAPER WILL DEAL WITH A SUBJECT WHICH HAS RECEIVED A GREAT DEAL OF PLAY IN THE PRESS SINCE THE MID 1970'S AND DEALS WITH A SUBJECT WHICH MOST PHILOSOPHERS HAVE DEALT WITH AND THOSE OF US WHO TEND TO BE MORE CONCRETE <sup>in our</sup> THINKING, TRY TO AVOID. THIS PAPER POSSIBLY DEALS WITH WHAT HAPPENS TO US WHEN WE DIE. WE WILL NOT BE TALKING ABOUT WHETHER THERE IS A LIFE AFTER DEATH, OR WHETHER THERE IS A HEAVEN OR HELL, OR HOW ONE MUST LIVE IN ORDER TO JOURNEY ONE PATH OR THE OTHER IN ORDER TO REACH THE HEREAFTER. RATHER, THIS PAPER WILL LOOK AT THE MAJOR BOOKS PUBLISHED ON EXPERIENCES OF PEOPLE WHO HAVE COME CLOSE TO DEATH AND HAVE "RETURNED." SINCE IT IS STRICTLY VERBOTEN IN ATHENAEUM TO DISCUSS A RELIGIOUS SUBJECT, AND SINCE I DO NOT WANT TO BE THE FIRST PERSON TO DEAL WITH SUCH A TABOO MATTER, I SHALL TALK WITH YOU ON AS STRICTLY A SCIENTIFIC BASIS AS I CAN, ABOUT MATERIAL WHICH IS CURRENTLY PRESENTED TO US IN THE PRESS AND THEN DISCUSS SOME OF THE POSSIBLE EXPLANATIONS FOR THESE PHENOMENON.

THE FIRST AUTHOR TO PROMOTE THIS SUBJECT AND BRING ABOUT THE CURRENT "FLURRY OF RESEARCH" ON WHAT WE WILL CALL "NEAR DEATH EXPERIENCES" WAS DR. RAYMOND A. MOODY, JR. DR. MOODY IS A PSYCHIATRIST, AS HAVE BEEN MANY OF THE AUTHORS OF THIS SUBJECT. HIS INITIAL PH.D WAS IN ETHICS AND LOGIC AND PHILOSOPHY OF LANGUAGE. HE TAUGHT FOR A WHILE AND THEN WENT BACK TO MEDICAL SCHOOL TO BECOME A PSYCHIATRIST. HIS BOOK "LIFE AFTER DEATH" WAS THE FIRST, AND PROBABLY THE ONE MOST ALLUDED TO WHEN ONE IS TRYING TO RESEARCH THIS PARTICULAR TOPIC. <sup>a later book,</sup> "LIFE AFTER LIFE" DEALS WITH MATERIAL DR. MOODY OBTAINED FROM INTERVIEWS FROM 150 PEOPLE THAT HE FELT HAD NEAR-DEATH EXPERIENCES.

HE DIVIDED THESE NEAR-DEATH EXPERIENCES INTO 3 CATEGORIES:  
(1) PERSONS WHO WERE RESUSCITATED AFTER HAVING BEEN THOUGHT, JUDGED, OR PRONOUNCED CLINICALLY DEAD BY THEIR DOCTOR; (2) PERSONS WHO IN THE

COURSE OF ACCIDENTS, SEVERE INJURY, OR ILLNESS, CAME VERY CLOSE TO PHYSICAL DEATH; (3) EXPERIENCES OF PERSONS WHO, AS THEY DIED, TOLD OTHER PEOPLE ~~WHO WERE PRESENT~~ AND WERE LATER REPORTED TO THE AUTHOR. DR. MOODY HOWEVER, TRIED TO CONFINE HIS REPORT BASICALLY TO THE FIRST 2 CATEGORIES (THOSE WHO WERE THOUGHT TO BE CLINICALLY DEAD AND THOSE WHO HAD COME CLOSE TO PHYSICAL DEATH EXPERIENCE).

OUT OF THESE INTERVIEWS, DR. MOODY CONSTRUCTED WHAT MIGHT BE CALLED A "CORE EXPERIENCE." THIS "CORE EXPERIENCE" IS REALLY A COLLAGE, SO TO SPEAK, OF ALL OF THE ELEMENTS THAT VARIOUS INDIVIDUALS TOLD HIM. HE TRIED TO TAKE ALL OF THIS INFORMATION AND MAKE A SINGLE STORY OUT OF IT. WE MUST REALIZE THAT NO TWO EXPERIENCES WERE EXACTLY ALIKE. NO ONE INDIVIDUAL NOTED ALL OF THE COMPLETE "CORE EXPERIENCE" THAT IS ABOUT TO BE MENTIONED. NO ONE ELEMENT OF THIS "CORE EXPERIENCE" CROPPED UP IN EVERYBODY'S REPORT. HOWEVER, THERE IS NO COMPONENT OF THIS "CORE EXPERIENCE" THAT APPEARED IN JUST ONE INDIVIDUAL'S ACCOUNTING; THEY APPEARED IN SEVERAL. AS WE DISCUSS IT, ONE NOTES THAT THERE ARE MORE OR LESS "STAGES" ONE GOES THROUGH. IT HAS BEEN FOUND THAT HOW FAR ONE PROGRESSES ALONG THESE STAGES DEPENDS ON HOW CLOSE THE INDIVIDUAL ACTUALLY CAME TO APPARENT CLINICAL DEATH. IT IS ALSO TO BE NOTED (AND I SHALL DISCUSS THIS MORE AT LENGTH LATER) THAT THERE ARE PEOPLE WHO HAVE BEEN PRONOUNCED DEAD AND HAVE BEEN RESUSCITATED WHO HAD NO SUCH EXPERIENCE AT ALL. DR. MOODY DID NOT DEAL WITH HOW MANY DID OR HOW MANY DID NOT HAVE THESE EXPERIENCES. ~~BUT OTHER AUTHORS HAVE.~~

### CORE EXPERIENCE

HERE NOW IS THE CORE EXPERIENCE. THE INDIVIDUAL, AT THE POINT OF DYING, AND IN HIS GREATEST PHYSICAL DISTRESS, HEARS HIMSELF PRONOUNCED DEAD BY HIS PHYSICIAN. THEN HE BEGINS TO HEAR AN UNCOMFORTABLE NOISE, AND THIS HAS BEEN DESCRIBED AS A LOUD RINGING OR A BUZZING, AND THEN, AT THE SAME TIME, HE FEELS HIMSELF MOVING RAPIDLY THROUGH A LONG DARK TUNNEL. FOLLOWING THIS, THE INDIVIDUAL FINDS HIMSELF OUTSIDE HIS OWN PHYSICAL BODY, BUT STILL IN THE

IMMEDIATE PHYSICAL ENVIRONMENT. HE SEES HIS OWN BODY FROM A DISTANCE, AS THOUGH HE WAS A SPECTATOR, AND HE WATCHES THE RESUSCITATION ATTEMPT FROM THIS UNUSUAL VANTAGE POINT, WHICH IS OFTEN ABOVE THE SETTING AND DESCRIBED AS BEING IN THE CORNER OF THE CEILING LOOKING DOWN. HE NOTES THAT EVERYONE PRESENT IS IN A STATE OF EMOTIONAL UPHEAVAL. AFTER A WHILE, HE COLLECTS HIMSELF AND BECOMES MORE ACCUSTOMED TO THIS STRANGE CONDITION AND HE NOTES THAT HE STILL HAS A "BODY" BUT IS OF A DIFFERENT NATURE WITH DIFFERENT POWERS FROM HIS PHYSICAL BODY WHICH HE HAS LEFT BEHIND. THEN OTHER INDIVIDUALS COME TO MEET AND HELP HIM. HE GLIMPSES THE SPIRIT OF RELATIVES AND FRIENDS WHO HAVE ALREADY DIED, AND A LOVING WARM SPIRIT OF A KIND HE HAS NEVER ENCOUNTERED BEFORE-A BEING OF LIGHT-APPEARS BEFORE HIM. THIS BEING ASKS HIM A QUESTION, NONVERBALLY, TO MAKE HIM EVALUATE HIS LIFE AND HELP HIM ALONG THE WAY BY SHOWING HIM A PANORAMIC INSTANTANEOUS PLAYBACK OF THE MAJOR EVENTS IN HIS LIFE. AT SOME POINT HE FINDS HIMSELF APPROACHING SOME SORT OF BARRIER OR BORDER, APPARENTLY REPRESENTING THE LIMIT BETWEEN EARTHLY LIFE AND THE NEXT LIFE. YET, HE FINDS THAT HE MUST GO BACK TO EARTH, THAT THE TIME FOR DEATH HAS NOT COME. AT THIS POINT HE RESISTS, FOR BY NOW HE IS TAKEN UP WITH HIS EXPERIENCE IN THE "AFTER LIFE" AND DOES NOT WANT TO RETURN. HE IS OVERWHELMED BY AN INTENSE FEELING OF JOY, LOVE, AND PEACE. DESPITE THIS ATTITUDE THOUGH HE SOMEHOW REUNITES WITH HIS PHYSICAL BODY AND LIVES. THIS THEN IS THE CORE EXPERIENCE. MOODY NOTES THAT LATER THE INDIVIDUAL HAS A GREAT DEAL OF DIFFICULTY TELLING OTHERS ABOUT THIS EXPERIENCE BECAUSE MANY OF THESE EPISODES HE DESCRIBES ARE SO VASTLY DIFFERENT FROM ANYTHING HE HAS EXPERIENCED BEFORE THAT THERE IS NOT ADEQUATE LANGUAGE FOR IT.

THE SENSATION OF MOVING THROUGH A TUNNEL IS NOT ACCOMPANIED BY ANY SENSE OF KINESTHESIA, AND THERE IS ALSO AN ABSENCE OF OTHER SENSATIONS SUCH AS TASTE AND ODOR. MANY OF THE INDIVIDUALS, WHEN THEY ARE APPROACHED BY THE "BEING OF LIGHT," SOMEHOW FEEL NONVERBALLY THAT THEY ARE BEING ASKED THE QUESTION "ARE YOU READY TO DIE" OR "WHAT HAVE YOU DONE WITH YOUR LIFE?" AFTER THIS "CONVERSATION" MANY EXPERIENCE A PLAYBACK OF THEIR LIVES WHICH SHOW SOME OF THE ELEMENTS



THAT THEY ARE PROUD OF AND SOME THAT THEY ARE NOT. SOME SEE INSTANCES OF HOW THEY TREATED OTHERS POORLY, AS WELL AS THOSE WHERE THEY SEEMED TO SHARE LOVE WITH OTHERS. THEY NOTE THAT THERE IS NO SENSE OF JUDGMENTAL ATTITUDE FROM THE "BEING OF LIGHT" OR FROM THE EXPERIENCES PLAYED BACK. MANY HAVE DESCRIBED THESE SCENES AS BEING MORE OR LESS A TEACHING TOOL; SOMETHING THEY FELT WAS DONE TO HELP THEM WITH THEIR LIVES IN THE FUTURE. AFTER GIVING THIS PARTICULAR COMPOSITE VIEW OF EXPERIENCES, MOODY SEARCHED THE PREVIOUS LITERATURE TO SEE IF THERE WERE EPISODES OF SIMILAR EXPERIENCES FROM THE PAST. SEVERAL BIBLICAL CITATIONS WERE NOTED SUCH AS "I AM THE LIGHT OF THE WORLD." HE ALSO MADE MENTION OF PAUL ON THE ROAD TO DAMASCUS WHEN HE SAW THE "LIGHT FROM HEAVEN." IN PLATO'S REPUBLIC THERE ARE SCENES WHICH DEAL WITH DEATH AND WHAT HAPPENS TO THE SOUL. THE MAIN ACCOUNT MENTIONED IN THE REPUBLIC IS THAT OF THE MYTH OF UR, WHERE A GREEK SOLDIER WENT AWAY TO BATTLE AND WAS FELT TO BE KILLED WITH THE OTHER SOLDIERS AND HIS BODY WAS PLACED ON THE FUNERAL PYRE. HIS SOUL WENT OUT OF HIS BODY AND JOINED A GROUP OF OTHER SPIRITS. HE DESCRIBED AN OUT OF THE BODY EXPERIENCE AND THEN BEING EXAMINED AND JUDGED BY A DIVINE BEING. HE THEN HAD A REPLAY OF WHAT HE HAD DONE IN HIS EARTHLY LIFE AND THEN WAS ALLOWED TO COME BACK TO EARTH TO TELL OTHERS WHAT IT WAS LIKE. ANOTHER SOURCE MENTIONED WAS THE "TIBETIAN BOOK OF THE DEAD." THIS BOOK WAS A LENGTHY DESCRIPTION OF VARIOUS STAGES THROUGH WHICH THE SOUL GOES AFTER PHYSICAL DEATH. THE SIMILARITIES WITH THE CORE EXPERIENCE ARE: (1) THE OUT OF THE BODY EXPERIENCE; (2) MEETING A SHINING BODY, AND (3) THE FEELING OF IMMENSE PEACE AND CONTENTMENT.

IN SEARCHING THE LITERATURE HE ALSO FOUND INDIVIDUAL ACCOUNTS OF PEOPLE WHO HAD HAD NEAR-DEATH EXPERIENCES WHO MENTIONED CERTAIN ELEMENTS WHICH WERE IN COMMON WITH THIS CORE EXPERIENCE. THIS THEN WAS MOODY'S EXPERIENCE.

#### AFTER MOODY

DR. ELISABETH KUBLER-ROSS IS A PSYCHIATRIST WHO HAS HAD GREAT IMPETUS TO THIS FIELD. SHE HAS CONTRIBUTED AN ENORMOUS AMOUNT TO

THE POOL OF INFORMATION ON HOW TO WORK WITH DYING PATIENTS. IN HER WRITINGS, SHE MAKES NO BONES ABOUT IT, SHE BELIEVES IN "LIFE AFTER DEATH." HER MAIN CONTRIBUTION HAS BEEN IN HELPING PEOPLE WHO ARE DYING AND HELPING PHYSICIANS DEAL WITH THE DYING PATIENT. SHE DOES NOT GO INTO NEAR-DEATH EXPERIENCES TO ANY DEGREE.

AFTER MOODY, THE SUBJECT BECAME VERY POPULAR AND IT IS INTERESTING TO NOTE THAT IN 1977 THERE WAS A SYMPOSIUM OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION ENTITLED "COMMUNICATION WITH THE DEAD; NEW DATA OR THE SAME OLD STORY?" I WON'T GIVE YOU ANY OF THE INFORMATION FROM THIS, BUT USE IT ONLY TO ILLUSTRATE THAT DR. MOODY'S PAPER WAS ~~HURISTIC~~ <sup>HEURISTIC</sup>. IN 1979 THERE WAS A BOOK PUBLISHED BY DR. ROBERT KASTENBAUM ENTITLED "BETWEEN LIFE AND DEATH." THIS DEALS WITH VARIOUS CONCEPTS OF DEATH, LIFE AFTER DEATH, SUICIDES, AND CONCEPTS OF CHILDREN TOWARD DEATH. THIS IS A COMPILATION OF MANY AUTHORS AND I WOULD SUGGEST ANYBODY WHO IS INTERESTED IN THIS SUBJECT TO EXAMINE THIS EXCELLENT SOURCE.

THE FIRST CHAPTER IS BASICALLY A WASTE. IT DEALS WITH PERSONAL ENCOUNTERS OF NEAR-DEATH. THEY ARE SENSATIONALISTIC FOR EXAMPLE, AN INDIVIDUAL WHO FELT HE WAS DYING OF CANCER REFERRED TO "POWERFUL DEMEROL SHOTS WHICH WOULD CAUSE HIM TO LOSE CONSCIOUSNESS AS SOON AS THE NEEDLE WAS WITHDRAWN." ONE WITH ONLY A RUDIMENTARY KNOWLEDGE OF MEDICINE WOULD KNOW THAT MEDICATIONS DO NOT HAVE AN EFFECT INSTANTANEOUSLY AND THAT THE EXPERIENCES THIS MAN WAS REPORTING WERE MORE EMOTIONAL THAN OBJECTIVE. OTHER CHAPTERS IN THIS BOOK HAVE SOME "MEAT ON THEM."

CHARLES A. GARFIELD ATTEMPTS TO EXPLAIN SOME OF THE MATERIAL TOLD HIM BY A GROUP OF 215 CANCER PATIENTS. HE QUOTED LAING IN 1972 SAYING "EGO IS THE INSTRUMENT FOR LIVING IN THIS WORLD; IF THE EGO IS FRAGMENTED OR DESTROYED (BY THE INSURMOUNTABLE CONTRADICTIONS OF CERTAIN SITUATIONS, BY TOXINS, BY CHEMICAL CHANGES, ETC.) THE PERSONS EXPERIENCING THIS TRANSFORMATION MAY BE EXPOSED TO OTHER WORLDS, AS "REAL" BUT DIFFERENT FROM THE MORE FAMILIAR TERRITORY OF DREAMS, IMAGINATION, PERCEPTIONS, AND FANTASY." HE HAD BEEN WORKING WITH A GROUP OF 215 CANCER PATIENTS AND 22% OF THIS GROUP TOLD HIM

OF ALTERED EXPERIENCES THEY HAVE HAD. (1) SOME EXPERIENCED A POWERFUL WHITE LIGHT AND CELESTIAL MUSIC AS WELL AS AN ENCOUNTER WITH A RELIGIOUS FIGURE OR DECEASED RELATIVE; (2) ONE GROUP EXPERIENCED A VOID, TUNNEL, OR BOTH; (3) SOME SEEMED TO BE DRIFTING OUT OF THEIR BODY. SOME OTHER EXPERIENCES WHICH HAD NOT BEEN BROUGHT UP IN MOODY'S WORK WHICH ARE MENTIONED IN THIS ARE A FEW INSTANCES OF DEMONIC FIGURES, NIGHTMARES, ETC. IN COMMENTING ON THIS, SEVERAL AUTHORS HAVE NOTED THAT THEIR SAMPLING POPULATION NOTED A DEFINITE DIFFERENCE BETWEEN THE NEAR-DEATH EXPERIENCE AND PREVIOUS DREAMS AND NIGHTMARES.

RUSSELL NOYES, JR., IN A CHAPTER IN THIS BOOK ENTITLED "NEAR-DEATH EXPERIENCES-THEIR INTERPRETATIONS AND SIGNIFICANCE" FOUND THAT ONLY 33% OF PEOPLE WHO HAD SOME EXPERIENCE NOTICED A SENSATION OF THE BODY BEING APART FROM THE SELF, AND ABOUT 30% HAD COLOR VISIONS, ABOUT 19% HAD THE FEELING OF JOY AND 45% HAD A RECAP OF THEIR PREVIOUS LIVES. DR. NOYES FELT THAT THESE ACCOUNTS BY INDIVIDUALS IN THE NEAR-DEATH EXPERIENCE WERE BASICALLY DUE TO "THE DEPERSONALIZATION SYNDROME."

SANDOR B. BRENT DESCRIBES AN EXPERIMENTAL APPROACH TO OUT-OF-THE-BODY EXPERIENCES. HE TAKES A GROUP OF PEOPLE THROUGH WHAT I WOULD CALL EITHER HYPNOSIS OR STRONG SUGGESTION AND LEADS THEM THROUGH AN OUT-OF-THE-BODY EXPERIENCE

THE LATEST AVAILABLE BOOK DEALING WITH THIS SUBJECT IS ONE I THINK IS THE BEST THUSFAR. IT IS ENTITLED "LIFE AT DEATH, A SCIENTIFIC INVESTIGATION OF THE NEAR-DEATH EXPERIENCE" BY DR. KENNETH RING, PH.D. OTHERS HAVE BEEN PUBLISHED BUT ARE NOT AVAILABLE LOCALLY. ONE OF THESE IS A BOOK BY DR. SABOM. DR RING APPROACHES THIS TOPIC IN A MORE SYSTEMATIC WAY. HE RECORDS THE TYPES OF INTERVIEWS, THE QUESTIONS ASKED, AND PULLS TOGETHER SOME FIGURES THAT WE CAN NOW COMPARE WITH OTHER DATA. HE STARTS WITH THE COMPONENTS OF MOODY'S CORE EXPERIENCES AND THEN ASKS QUESTIONS: (1) HOW OFTEN DO PEOPLE EXPERIENCE THIS PHENOMENA?; (2) ARE THE EXPERIENCES DIFFERENT DEPENDING ON THE TYPE OF NEAR-DEATH EXPERIENCE? (BY EXPERIENCES HERE HE MEANS THOSE EXPERIENCED NEAR-DEATH IN ILLNESS OR ACCIDENT COMPARED WITH THOSE EXPERIENCED IN SUICIDE ATTEMPT); (3) WHAT IS THE RELATIONSHIP



BETWEEN ONE'S RELIGIOUS BACKGROUND AND THE CORE EXPERIENCE, AND  
(4) WHAT LIFE CHANGES TAKE PLACE IN NEAR-DEATH SURVIVORS.

THE SUBJECTS THAT DR. RING INTERVIEWED WERE SURVIVORS WHO HAD COME CLOSE TO DEATH OR HAD BEEN RESUSCITATED FROM CLINICAL DEATH AS THE RESULT OF ILLNESS, ACCIDENT, OR SUICIDE ATTEMPT. THE SURVIVORS HAD TO BE SUFFICIENTLY RECOVERED FOR HIM TO DISCUSS THEIR EXPERIENCE COHERENTLY, HAD TO SPEAK ENGLISH, AND BE AT LEAST 18 YEARS OLD. HE NOTED THAT HE GOT HIS MATERIAL BASICALLY FROM HOSPITAL REFERRALS, THOUGH HE DID HAVE A SMATTER OF PATIENTS UNFORTUNATELY, WHO WERE GOTTEN BY ADVERTISEMENT IN THE NEWSPAPER. HIS POPULATION SAMPLED WERE: 102 RESPONDENTS, AMONG THESE 54 WERE REFERRED FROM THE HOSPITAL, 5 BY PHYSICIANS, AND 16 BY NONMEDICAL SOURCES. HE HAD 21 THAT HE OBTAINED BY ADVERTISEMENT IN NEWSPAPERS. THERE WAS ABOUT AN EQUAL SAMPLING OF MALES AND FEMALES. HE HAD VARIOUS RELIGIOUS GROUPS IN HIS SURVEY ALONG WITH 7% WHO WERE CLASSIFIED EITHER AGNOSTIC OR ATHEIST. EIGHTY-FOUR SUBJECTS HAD AT LEAST HIGH SCHOOL EDUCATION AND 11 WERE COLLEGE GRADUATES. IN LOOKING AT SOME OF HIS RESULTS IT WOULD APPEAR THAT ABOUT 30% OF THE PEOPLE THAT HAVE HAD A NEAR-DEATH EXPERIENCE HAVE ANY SORT OF EXPERIENCE THAT THEY CAN REPORT AFTERWARD. IN OTHER WORDS, 70% OF THE PEOPLE WHO HAVE A NEAR-DEATH EXPERIENCE DO NOT RECALL ANY OF IT. ALL OF THE RESPONDENTS FELT THAT THIS WAS NOT A DREAM. DR. RING DIVIDED THE CORE EXPERIENCE INTO 5 STAGES, EACH ONE FOLLOWING THE OTHER:

- STAGE 1: SENSATION OF PEACE;
- STAGE 2: BODY SEPARATION OR OUT-OF-THE-BODY EXPERIENCE;
- STAGE 3: ENTERING THE DARKNESS;
- STAGE 4: SEEING THE LIGHT;
- STAGE 5: ENTERING THE LIGHT AND THEREAFTER

IN COMPARING PATIENTS HAVING NEAR-DEATH EXPERIENCES FROM ILLNESS OR ACCIDENT, AND THOSE FROM SUICIDE, HE FOUND THAT THE SUICIDE PATIENTS NEVER REACHED STAGE 4 AND 5.

IN HIS SECTION ON THE EFFECTS OF THE EXPERIENCE ON THE INDIVIDUAL AFTERWARD, HE NOTES THAT "THE INDIVIDUAL EMERGED WITH A HEIGHTENED

SENSE OF APPRECIATION FOR LIFE AND A DETERMINATION TO LIVE LIFE TO THE FULLEST AND A RENEWED SENSE OF INDIVIDUAL PURPOSE IN LIVING."

I COULD NOT READ THIS WITHOUT THINKING OF A MOVIE STARRING BURT REYNOLDS AND DOM DELEWEESE WHERE BURT REYNOLDS IS TRYING TO COMMIT SUICIDE AND SWIMS OUT IN THE OCEAN AND, AFTER SWIMMING A LONG WAY OUT, DECIDES THAT HE HAS CHANGED HIS MIND, AND TURNS AROUND AND STARTS TO SWIM BACK IN. HE DOESN'T THINK HE IS GOING TO MAKE IT SO HE STARTS TALKING LOUDLY TO THE LORD ON HIS SWIM IN AND PROMISES THE LORD 1/2 OF ALL HE POSSESSES AND 50% OF HIS INCOME. AS HE NEARS THE SHORE THE PERCENTAGE PROMISED THE LORD CONTINUES TO DWINDLE REACHING ABOUT 5% BY THE TIME HE STEPS ON THE SHORE. ABOUT THIS TIME, DELEWEESE TRIES TO KILL HIM WITH A KNIFE AND REYNOLDS BEGINS RUNNING TALKING TO THE LORD AGAIN RAISING THE PERCENTAGE TO ABOUT 50%. IN SHORT, I AM SAYING THAT I WOULD LIKE TO SEE THE RESULTS OF THESE CHANGES OF BEHAVIOR ABOUT 5 YEARS DOWN THE ROAD RATHER THAN BASED ON THE INITIAL INTERVIEW WHICH WAS CONDUCTED A SHORT TIME AFTER THE NEAR-DEATH EXPERIENCE.

IT IS OF INTEREST THAT DOCTOR MOODY AND DOCTOR ROSS IN SEARCH OF THE PREVIOUS MATERIAL DISCLOSED NO MENTION OF ANY EXPERIENCE THAT HAD ANY CONITATION OF A "HELL." IN ROSS' OWN PATIENTS ONLY 2% FELT THE ENTIRE EXPERIENCE HAD EVEN A HEAVEN OR HELL SORT OF CONITATION DESPITE THE FACT THAT MOST OF THEM (AS MENTIONED ABOVE) HAD A RELIGIOUS BACKGROUND. THE ONLY INDIVIDUAL THUSFAR, TO HAVE MENTIONED FINDING ANY INSTANCE OF A "HELL-LIKE" SITUATION WAS A CARDIOLOGIST IN FLORIDA NAMED DR. MAURICE RAWLINGS WHO REPORTED THESE ON THE TELEVISION SHOW "P.M. MAGAZINE" IN MARCH. MOST OF THE OBSERVERS HAVE COME AWAY FROM THE NEAR-DEATH EXPERIENCE DESCRIBING IT AS ONE WHICH IS NOT UNPLEASANT.

DR. ROSS WAS INTERESTED IN SEEING HOW PEOPLE WITH A PREVIOUS KNOWLEDGE OF THE NEAR-DEATH EXPERIENCE REACTED WHEN THEY HAD A NEAR-DEATH EXPERIENCE. IT TURNS OUT THAT ONLY 19% OF THE PEOPLE WHO KNEW ABOUT NEAR-DEATH EXPERIENCES HAD SUCH AN EXPERIENCE WHEN THEY FACED A NEAR-DEATH EXPERIENCE AND OF THOSE WHO HAD NO SUCH INFORMATION 37% OF THAT GROUP HAD SUCH AN EXPERIENCE.

ETIOLOGIES

NOW LETS PAUSE A MINUTE TO TALK ABOUT THE ETIOLOGIC FACTORS. WHAT CAUSES ONE TO HAVE SUCH AN EXPERIENCE? FIRST OF ALL, I THINK WE WILL HAVE TO LUMP WHAT I'LL CALL THE SUPERNATURAL IN THE FIRST CATEGORY. THE SUPERNATURAL ARE THOSE EXPERIENCES WHICH ARE DUE TO A SUPERNATURAL BEING OR FORCE (A GOD OR DEVIL-LIKE FIGURE) WHICH BRINGS THESE SITUATIONS INTO PLAY. MY ABILITY TO DISCUSS THIS SORT OF THING RAPIDLY COMES TO AN END SINCE I DON'T POSSESS THE BACKGROUND TO JUDGE THIS SORT OF AN EXPERIENCE. THERE ARE ALSO THOSE I AM SURE IN THE AUDIENCE WHO FEEL THAT SUCH EXPERIENCES SHOULDN'T BE JUDGED ANYWAY. THE OTHER POSSIBILITIES WHICH WE WILL MENTION AND WHICH I AM ABLE TO DISCUSS, ARE BASED ON WHAT I FEEL IS CURRENT SCIENTIFIC INFORMATION. IN THE PROCESS OF HAVING A NEAR-DEATH EXPERIENCE, THE USUAL SET OF EVENTS INVOLVES SOME FAILURE IN THE CARDIOVASCULAR AND PULMONARY SYSTEMS. <sup>there is</sup> ~~DUE TO~~ COMPROMISE OF THE AMOUNT OF BLOOD FLOW AND OXYGENATION TO THOSE VITAL STRUCTURES AND THE BRAIN. WHAT THE CONSEQUENCES ARE OF A DIMINISHED OXYGENATED BLOOD-FLOW TO THE BRAIN ARE VERY DIFFICULT TO ASCERTAIN. WE KNOW THAT IT DOESN'T TAKE LONG TO PRODUCE UNCONSCIOUSNESS. WHETHER OR NOT UNDER THESE CIRCUMSTANCES, IN THE STAGE BEFORE UNCONSCIOUSNESS, CERTAIN CHEMICAL MEDIATORS ARE RELEASED WHICH COULD CAUSE EXPERIENCES SUCH AS THE ONES MENTIONED BEFORE IS UNKNOWN. MOST OF THE AUTHORS THAT I HAVE PREVIOUSLY CITED ARE NOT PHYSICIANS. THIS IS GOOD AND BAD. IN MY SITUATION IT IS BAD IN THAT THEY ARE UNABLE TO DISCUSS THIS AT A LEVEL WHICH I WOULD FIND INTERESTING. THEY HAVE ONLY NOTED THAT CHEMICALS USED AT THE TIME OF RESUSCITATION MAY PLAY A PART AND THEY MENTION VARIOUS AGENTS USED IN ANESTHESIA WHICH CAN PRODUCE HALLUCINATORY TYPE OF EXPERIENCES. THERE ISN'T ANY EXPLANATION IN THE LITERATURE <sup>however</sup> ~~THAT~~ THESE TYPES OF EXPERIENCES BEAR ANY RESEMBLANCE TO THE CORE EXPERIENCE. HOWEVER, THERE IS SOME EVIDENCE IN THE NEUROLOGIC LITERATURE THAT TEMPORAL LOBE SEIZURES, WHICH CAN BE BROUGHT ABOUT BY IRRITATIVE STIMULI TO THE TEMPLE LOBES, CAN PRODUCE WHAT IS CALLED AUTOSCOPIC PHENOMENON. THIS IS THE INDIVIDUAL SEEING HIMSELF AT A DISTANCE OR AN APPARENT OUT-OF-THE-BODY EXPERIENCE, IF YOU WILL. THIS IS ONLY ONE OF THE MANY ELEMENTS OF THE CORE EXPERIENCE AND I DON'T BELIEVE PROVIDES ANY SATISFACTORY ANSWER.



THERE IS A CLASS OF DRUGS WHICH CAN PRODUCE A SENSE OF WELL-BEING, A SENSE OF BEING OUT OF THE BODY AND MANY OTHER AUDIOVISUAL PHENOMENON. AN EXAMPLE OF THIS IS OPIUM.

RECENTLY A CLASS OF DRUGS CALLED "ENKEPHALINS OR ENDORPHINS" HAVE BEEN DISCOVERED WHICH ARE FOUND IN THE ANTERIOR PITUITARY AND AREAS OF THE CENTRAL NERVOUS SYSTEM AND CAN BE RELEASED BY PAINFUL STIMULI. THE EFFECT OF THESE ENDOGENOUS OPIOIDS ARE PROBABLY ROUGHLY THE SAME AS EXOGENOUSLY ADMINISTERED OPIUM. THEY CAN ALSO BE ANTAGONIZED BY DRUGS WHICH ANTAGONIZE OPIUM FOR EXAMPLE NALOXONE IT IS MY CONTENTION THAT THESE ENDOGENOUS PRODUCTS WHICH ARE ONLY RECENTLY DISCOVERED COULD ACCOUNT FOR SOME OF THE CORE EXPERIENCE BUT THE AMOUNT OF THEIR CONTRIBUTION TO THIS PHENOMENON AWAITS FURTHER TESTING.

#### SUMMARY

I HAVE ENJOYED TALKING WITH YOU THIS EVENING ABOUT THE NEAR-DEATH PHENOMENON AND HAVE TRIED TO HELP YOU UNDERSTAND WHERE THE AVAILABLE INFORMATION. WE HAVE DISCUSSED SOME OF THE POSSIBLE EXPLANATIONS BOTH PHYSIOLOGIC AND PSYCHOLOGICAL FOR THESE EXPERIENCES. I HAVE NOT GIVEN YOU A PRE-PACKAGED TOPIC WHICH IS DEVOID OF CONTROVERSY. YOUR OPINION OF THIS PHENOMENON IS AS GOOD AS MINE OR ANYBODY'S. I WOULD LIKE TO LEAVE YOU WITH THIS QUOTE FROM OMAR KIAM "STRANGE IS IT NOT? THAT OF THE MYRIADS WHO HAVE BEFORE US PASSED THE DOOR OF DARKNESS THROUGH, NO ONE RETURNS TO TELL US OF THE ROAD, WHICH TO DISCOVER WE MUST TRAVEL TO."



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