

ranchers have all reported remembering the saucer crash on the Plains of San Agustin. There are other promising leads for more information at the present time. Sadly, an elderly woman on her death-bed in a Florida hospital repeatedly told her nurse of a saucer crash on the Plains of San Agustin just days before she died (one of the female students?) Stan has also found others who knew of Grady Barnett's saucer crash tale - on the Plains - not near Roswell.

Verification of Gerald's involvement comes in a letter sent directly from his cousin, a Roman Catholic nun, in Colorado to Stanton Friedman in Canada. She states: "My family has been plagued by this incident for years and it is far beyond time that such should stop. Why Gerald would wish to reopen this is completely beyond me...My father (Uncle Ted) was obsessed with this unearthly horror and kept several journals to prevent others from getting to them...wreckage and debris from the crash...out there near the caves..."

Stanton also managed to track down a stepsister that Gerald had confided in, but then lost contact with for 33 years. She remembered the incident, but very few details. Stanton Friedman and Don Berliner will be putting forth a book on these saucer crashes in New Mexico later this year.

Recently, Gerald borrowed a sophisticated police identification kit to produce photo-like composites of five key figures from that memorable day in 1947. He has urged Stanton to show these to other witnesses because he is certain that they will recognize the faces. Hopefully, "Unsolved Mysteries" will display these composites in a nationally-televised update on their Roswell story that they could run in the fall.

I have observed and listened to Gerald closely. Whenever he recounts his story, the details do not change or expand. He never elaborates or tries to answer questions for which he has no information. He displays a great interest and hope for more data to come forth from others. He is grateful for the warm support and respect from his church, friends and co-workers. They know him!

Skeptics will shoot darts from afar: those who have listened closely to Gerald have experienced his sincerity, sensitivity, intelligence and candor. For Gerald it has been a relief and a long time coming for the events of that bizarre day to be taken more seriously. Like a child on Christmas Eve, he gets excited with new developments. And the search for more truths continues.

LIFE WITH MOTHER

By Eve

"I find that country people still living close to the earth often seem puzzled that anyone should need to make a formal proposition of anything so obvious as the Gaia hypothesis. For them it is true, and always has been."

THE concept of a living Mother Earth has been with us since the early beginnings of man, as is shown abundantly by myth and artifact. I suppose we must be grateful that at least one scientist, J. E. Lovelock, here accords her theoretical value, if not existence! And grateful we can be for J. E. Lovelock's two books, *Gaia: a New Look at Life On Earth*, 1979 and 1987, and *The Ages of Gaia*, 1988, both OUP.

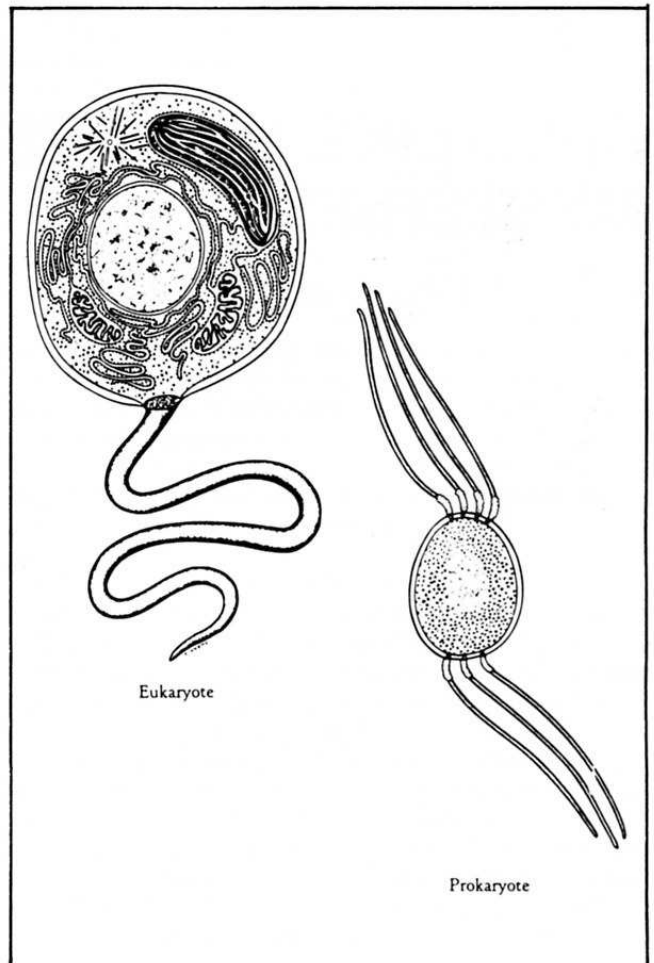
These two books are full of nuggets of accessible scientific information, wonderful confirmations of the instincts of those thoroughly incorrigibly prejudiced people who look for meaning and purpose in the Great Mystery of existence.

Not that James Lovelock dares go quite so far as to commit the cardinal scientific sin of teleology - every science student must recall being slapped down for daring to suggest that the Universe must know what it is about when it sets out to make butterflies out of cabbages - but he does provide the ammunition.

What does seem to be proved, even scientifically, is that Life is not just a passive passenger on a planet which just happens to be suitable for it, but a co-partner in creating and maintaining its viability.

The basic radioactive building blocks of our Earth were created when a Supernova blew up, a vast nuclear reaction which created the debris from which our bodies, our landscapes, our churches and houses, our televisions and all the baubles of our existence, are composed. Somehow, our planet, together with others similar, like Venus and Mars, came under the benign direction of the Sun, and behold - the Solar System!

Note the operative word, system. Once a system is set up, the changes within it are balanced by others, so that the system is maintained. This we can understand. The picture I had until I read these two books was one in which life had arisen once the planet was in place with the right conditions - the right distance from the



Eukaryotic and prokaryotic cell structures. The earlier bacteria — prokaryotes — have no nuclei but the later eukaryotes incorporate earlier forms, mitochondria and chloroplasts.

Sun, with the right atmosphere, and so on. But things are not so simple.

Our planet Earth is NOT at just the right distance from the Sun to provide the right temperature for life to exist. The reason that the temperature is right is because the atmosphere keeps it that way, and the atmosphere is right because living things have made it so. Without living things the surface temperature of the Earth would be 240°C to 340°C, and all water would long ago have boiled away. Living things need water, but the oceans depend for their existence upon living things! What is more, the Sun has been heating up since Life began, and the surface temperature of the Earth has remained more or less constant.

Then there is the question of oxygen. Without life, the atmosphere of the Earth, as are those of Venus and Mars, would be almost 100% carbon dioxide. It is now a mere 0.03%, having evolved through the action of plants to the point where there is 21% oxygen and 79% nitrogen. That 21% of oxygen is critical, for at 25% the whole world would catch fire!

The first bacteria did not breathe oxygen, and they serve us still, as the anaerobic bacteria that deal with our waste matter. Indeed, one way or another, our bodies incorporate earlier forms of life in their very cells; the mitochondria, for instance - once independent cells - which complete the breakdown of the carbohydrates we eat to provide our energy.

It is desperately important for Life that the sea shall not become more salt. How can it be therefore that the salinity has remained constant since the beginning of Life, when salt is being dissolved from rocks all the time? Oversimplified, it seems that the build up of limestone reefs by the living and dying of shellfish around continental shelves walls off gigantic evaporating pans. Even more astonishing, the limestone thus

created may account for the development of the system of plate tectonics, which in turn results in the recycling of the Earth's crust and the reburial of the salt in the Earth's molten interior - to say nothing of folding mountains and producing earthquakes!

Wherever we turn, we find all phenomena to be interdependent, as though Gaia were a living creature, whom Life serves as kidneys, heart and lungs. By contrast, Venus and Mars are dead, scarcely evolving or changing.

Gaia has millions of interactions which keep her healthy. James Lovelock describes those above, and many, many more. But he admits that human beings present a threat to the well-being of the Earth. Like AIDS, we undermine her immune systems, decimating the forests which could clean up our carbon dioxide emissions, stripping the Earth of its humus in the name of hygiene whilst fouling and despoiling the seas. Whether our technology is primitive or sophisticated it will devastate our habitat if we have no sense of awe or respect for Mother Earth.

Gaia will recover from her sickness, but will Mankind? Gaia could wipe us out. Man has chainsaws, but her systems include hurricanes, earthquakes, wind and ice ages. She can also muster to her side cohorts of bacteria and viruses, her primitive children. Famine and cholera can be depended upon to help her out, and Man himself can always be depended upon for a few wars.

Could it just be, perhaps, that Gaia really is alive, and in releasing so much new information into our minds via the computer she is awakening us to our plight? Readers who wonder about our place in the Cosmos cannot fail to be interested in what James Lovelock has to say.

CELL-LIKE UNIVERSE UNVEILS NEW MYSTERIES

By Paul Whitehead, FSR Director and Consultant

A new discovery that the Universe is cell-like in structure has cast doubts on the *Big Bang* theory of how the Universe was created. It could even force scientists to re-think all previous creation theories.

A study of distant galaxies by a team of British and American astronomers suggests a large-scale pattern which defies the popular notions of how the Universe started.

During its seven-year project, the team used powerful optical telescopes to study 200 galaxies in a "slice" of the Universe 6,000 million light years across. The latest results from this project showed that the galaxies were evenly distributed in "clumps", each of which were about 400 million light years apart.

The scientists concluded that the Universe may be cellular in form, with each cell diameter as large as 300-400 million light years. The team included Dr. Tom Broadhurst, of Queen Mary and Westfield College, London. Further studies are planned to try to gain a greater grasp of the implications.

Note by FSR:- There have been suggestions that the Universe is "sponge-like" in appearance, with a lot of empty space between galaxies. Dr. Paul Davies, well known to FSR readers for his own theories in the nature of reality, has in the past suggested the Universe may be a many-dimensional structure, perhaps con-

taining millions of parallel worlds each interconnected in some strange way.

The latest news that the Universe appears to be built of cells, not dissimilar in many respects to the structure of living matter, is intriguing. Equally intriguing is the theory (also already well aired in FSR) that it may be possible to transfer information simultaneously between galaxies—with distance no barrier, and no time lag involved.

Interestingly, the March 17th, 1991 issue of *New Scientist* theorises about the existence of negative (*not* anti) matter in our Universe. If it does exist, it could explain the existence of the "bubbles" or voids, the writer (Robert Forward) states. The "bubbles" are sharply defined by large number of galaxies that "seem to lie on the surfaces of the bubbles". Few galaxies are found in the voids/bubbles, but those which are found are very bright and highly active.

The effect of the negative matter would be to push the positive particles (comprising the Universe we can see) to the surface of the voids, where they attract to form galaxies, stars, planets and us, the observers of it all.

Forward writes that the "frothy" structure of the Universe could indicate that the Universe was formed with equal amounts of negative-matter particles and