S. Eva Nessenius

THE PLANET EMBRYO

Planet formation:

newly discovered coherencies between evolution and the origin of the planet earth

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S. Eva Nessenius was born in 1958 in Erlangen, Germany. At the University of Frankfurt Main she studied biology, palaeontology, geography. After her exam as high school teacher she aquired the methods of goethean natural science in Stuttgart.

Biological and geographical excursions to many parts of the world led her to a clear perception for the natural processes of origin.

In addition to her profession as biology and geography teacher she participated in lectures at the Institute for Geology and Paleontology and at the Max – Planck – Institute for Astronomy in Heidelberg (MPIA) pursuing multidisciplinary research.

Evolution and all questions of origin have always been her main scientific focus. Therefore she also directed her interest towards embryology and molecular genetics as well as paleontology, geology, astronomy and astrobiology. Geobiology has gained in importance due to interesting results of the latest research, also for Eva Nessenius as the first one in the history of natural science, who discovered and described the phenomenon of correlation between the shape of the human cranial bones and the contours of the tectonic plates of the planet earth. Inquiring this phenomenon her aim was to find out, if these correspondences are random similarities or if comparable processes of origin led to the similar shapes.

Her result is an interesting hypothesis that might give an answer to some of the big questions about evolution and the origin of life on earth. In the area of tension between various opinions about evolution, she found out some interesting contexts providing a new level of understanding on a natural scientific basis. However she does not compromise with any creationist or any other determinist conception.

The results of this research-work are new. They do not represent the scientific opinion of any existing group. Eva Nessenius participated in lectures and read publications from representatives of various scientific and spiritual orientations, inspiring her for this pioneering work. Still the subjects of this book are her own discoveries and her own personal considerations she made in order to integrate her new findings into the context of latest biological, geological, astronomic and astrobiologic knowledge.

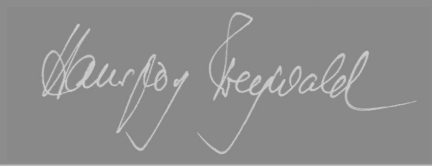
Furthermore her results are suitable to countervail a preceding cultural disruption. Societies in many

culture-areas are dissociating into religious people on one hand, some of them accepting backwardness from modern scientific knowledge, and people thinking in terms of natural science on the other hand, many of them feeling compelled to reject all thoughts about the old myths of their own cultures, so that the access to deeper understanding is getting lost before any real understanding could grow. Due to her multidisciplinary knowledge and overview with this book Eva Nessenius gave a remarkable contribution to the extension of our natural scientific world view also accommodating these questions.

In this publication regarding the origin of the earth and other planets the author rejects the theory of accretion. Her discoveries are pointing to a biogenous origin of the earliest substances that made up the planet earth. The theories found by computer simulations could not answer the open questions about the origin of planets. Now life itself is recognized as the cause for certain processes of origination, as well as physical powers like gravitation, radiation, momentum and electric polarity providing the basis for all life-processes.

S. Eva Nessenius developed her own entirely new theory called “biogenous origin of planets”. According to it the origin of the earth-magma happened in the hot phases of the Paleozoic time. She scrutinizes the theory of plate-tectonics. On the basis of a cool origin of planets the simultaneous forming of the Pacific and Atlantic Ocean can now be explained by earth expansion, without questioning the proved processes of subduction. For the necessary increase of mass new geophysical explanations are mentioned.

The Paleomap from SCOTESE was evaluated anew, applying latest geobiological knowledge with the result that a biogenous origin of the primeval stages of the Pangea must be the reason, why the genetic ancestry of today’s living beings from the Precambrian biosphere is still visible in some of them. Her hypothesis shows new aspects of evolution solving the mystery how life on earth began. It gives a new access to the myths of various cultures speaking of living beings causing the origin of the cosmos. For the first time in the history of natural science the effect of earliest life at the beginning of the planet-origin, becomes visible on a paleobiological and geomorphological basis. It is the living Precambrian planet-embryo, from its biosphere all living beings descend. This is perfectly compatible with our modern sight of evolution.



C O N T E N T S page

2. Introduction

In the beginning of every scientific research there is a phenomenon and its description, which is joined by questions and considerations to find explanations for it. However today many scientific discoveries are preceded by theoretical ideas, because only a context, that has already been thought, can be investigated and eventually proved by scientific methods. Phenomenology and systematic research can bring each other forward. But there is also the problem, that theoretical concepts creating certain expectations can mislead us in the process of research (HOLDREGE 1999). My method is to ask for the real meaning of the findings, investigating independently from grid locked patterns of thought, and to ask for their real importance, instead of just using them to confirm some questionable passed on theories. We have become used to some inconsistencies in such a way, that we almost don't take notice of them any more. Habitual thinking sometimes also stands against the exchange of knowledge between the branches of science. The specialization leads to a point, where some contexts cannot be considered any more, because the multidisciplinary research is hindered by certain contradictions immanent to the subjects. If you want to clarify some questionable points, also the interconnected aspects in the neighbor subjects need to be reviewed and eventually adjusted, until a coherent general view is restored. To be able to understand my new discoveries, it was necessary to proceed this way. I became aware, that many theories continue existing and being taught, although seen in context with the findings of other natural sciences they would loose their consistence.

This book was written in remembrance to ALFRED WEGENER, who had the courage to stick by his discoveries and realisations, which he could only prove partially at that time. Being one of the great discoverers of his century, he was offended by many contemporary scientists and he did not live to see the appreciation of his very important scientific work.

I express my gratitude to all authors, referees and dialogue partners, whose publications were fundamental for my multidisciplinary work. Nevertheless my central discovery devolved upon me alone. I principally deal with common facts, but I put some of them into a new context. I developed my hypotheses all by myself. Due do my findings it became possible that the development of the early earth happened in some way, which is very different from what is taught today. More proves will be found with the growing number of new discoveries in natural sciences, more than the demonstrations I give. In cooperation with innovative thinking scientists this research work will develop further in future times as well.

The two natural phenomena, which I compare to each other here, exist in very different dimensions of size. Therefore one might need to overcome some notional inhibitions first in order to be able to comprehend. The following key-note might be helpful as introduction: Macrocosm and microcosm often function according to the same laws of nature.

But in some natural processes one even emanates from the other, like the egg springs form the living being and the living being originates from the egg. Then the very big and the very small stand beside each other in close alliance. In nature you can see in many cases more or less random similarities of large and small structures. Some are explainable by laws of nature, others are not.

In the year 1998 looking at a beautiful white human skull I realized, that the shape of the cranial bones correlates with the outlines of the tectonic plates of the earth. Nobody before me had ever noticed and described this phenomenon. To me it seemed to be more than a random similarity. Comparing the processes of origin spontaneously I found some parallels, but there was no sufficient explanation for it. As a biology and geography high school teacher I am familiar to the common theories about the origin of the earth and moon and about evolution. Nevertheless at some points I personally come to different conclusions and to completing explanations.

I would like to put it straight: I am not a creationist and no member of the intelligent design movement. I see evolution as a development with many possibilities and an open future not being predetermined. Still one thought came up to me at the moment, when I discovered these correlations: In creation myths of many cultures the human being descends from some cosmic being. The results of scientific research about evolution are contrary to this. There is no doubt that the advanced animals stem from lower beings, and they stem from unicellular organisms. The case would be a little different, if the earth itself could be considered as a cosmic being, from which the lower and higher developed beings descend. Looking at it this way, the contradiction between the modern scientific knowledge about evolution and the old myths could be removed.

Now my question was: Would the development of the earth also be imaginable out of some state of origin in which natural processes were happening, that have a forming effect on recent living organisms as well? Can we figure out a newly forming planet as a living being? If we want to ask these questions, may be the expression „living“ can not be used in the common biological sense. But one can try to figure out some qualities and processes which are part of the characteristics of biological life, which might have existed in former times under different conditions, having effects on the development of the shape of the young planet. The characteristics of biological life are: metabolism, energetic processes, growth and reproduction. New findings in natural scientific research are pointing to the fact, that a substantial amount of all rock stratums is biogenous. They were primarily created by the chemo-synthesis of archaea, bacteria and other sediment forming organisms.

I came to the following consideration: If the first shape of the materials, the early continents were made of, was biogenous, it is possible that corresponding forms in higher developed beings result from comparable biological processes, especially if planets while coming into being go through an embryo-state, which is submitted to some supreme forming principals. If this could be proved right, the earth would not only be the carrier of the biosphere.

It might also be the biological ancestor, all plants, fungi and animals stem from. After all, every genus of the eukaryotes stems from the prokaryotes of the Precambrian biosphere, because in all probability the eukaryotes originated by endosymbiosis of different kinds of prokaryote cells (MARGULIS 1993; SCHOPF 2000; CAMPBELL 2003). This also applies for the human species as a special form of mammal. Common ancestors of our ancestors and closely related animals living at the same time existed on each level of evolution, even on the earliest. Therefore I am going to put up one question first, which is most important concerning my special subject: How do planets come into being?

3. Star-birth, Cosmic Nebula and Origin of Planets

It would be interesting to watch the origin of a planet. This photo from outer space shows a star-forming region, in which stars and planets originate in abundance. But it is still almost impossible to watch those planets. They are too small to bee seen in a distance of 168 000 light years, and they do not radiate like stars. In our home galaxy astronomers have located over 250 extra-solar planets by indirect methods. But these planets are outshined by their central stars, so it is almost impossible to make them visible. We cannot see any phases of origin either, when stars and planets are already fully developed like in our solar system, where the planets are already old. Star forming regions on some of the photos from space telescopes might look like dust, algae or liquid bacterial mucus. But it is most unlikely, that this could be more than an arbitrary association. Looking at minerals, the large crystals usually have the same shape as the minerals they predominantly consist of, for example basalt of augite. The similarity between macro- and microscopic shape is caused by the crystal structure. Looking at photos of outer space possible associations with dust, nebula, slime or algae can definitely not be traced back to such context. The common explanation, this would be dust, is not appropriate either. However the phenomenon should be taken notice of without prejudices. In both dimensions of size we see early stages of origin, this one in a very far space- and time-distance. Astronomers symbolically speak of „star-birth“ and „stellar nursery“.

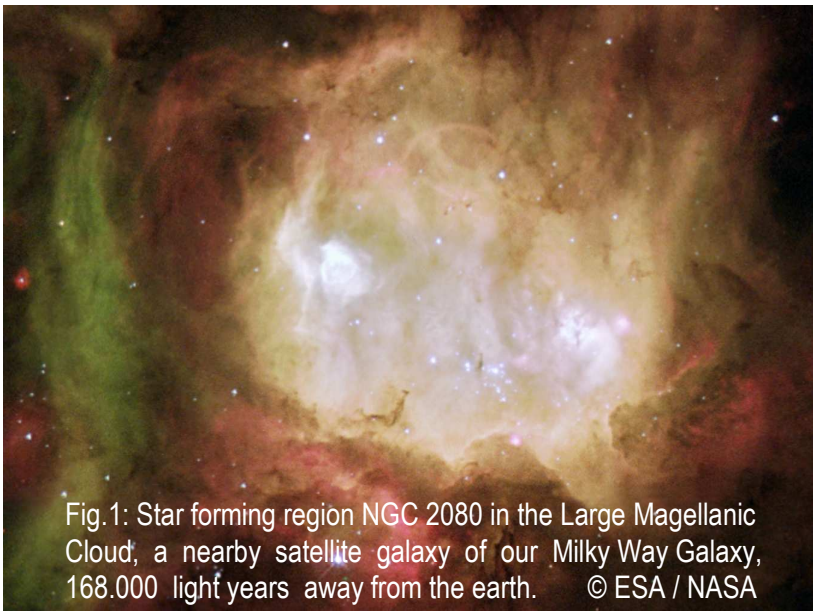


Fig.1: Star forming region NGC 2080 in the Large Magellanic Cloud, a nearby satellite galaxy of our Milky Way Galaxy, 168.000 light years away from the earth. © ESA / NASA

It is important to be aware, that all pictures of outer space taken by the space-telescopes are false-color images. They are actually all taken in gray scales and get artificially colored afterwards. The given colors express for example temperatures or any kind of radiation. Although we have all these magnificent photos from the space-telescopes today, a certain intellectual effort will be unavoidable, if we come to the question how planets originate.

After Laplace (1796) developed his theory about the origin of planets, still some people believed, from particles coming out of the sun or from dust glowing balls could be formed. The sun does not consist of magma or gas but of plasma, which is something completely different. In the environment of the sun are magnetic fields, radiation of an unimaginable intensity, cosmic particles, neutrinos. What has moved far enough away from the sun disperses in space by the high energy of cosmic radiation as cosmic particles, as ions. Because this energy is much too high, ions in space cannot merge to become molecules.

The Max Planck Institute of Astronomy (MPIA) in Heidelberg is involved in the most actual research about the origin of planets with many interesting new results. So I just want to give some of my own very fundamental considerations here: When Stars like our sun come into being a circumstellar disc forms which misleadingly was called a disc of “dust and gas”. In normal language we use the word dust for very small dry particles. In the outer space we would never see dust with a telescope. The word dust evokes a false association. Objects in the size of moons or planets can hardly be seen in far distances. The word dust also evokes the imagination of a state of dryness.

In the universe there is a multitude of hydrogen compounds, many in organic compositions in measurable concentrations. Between the physical states solid and gaseous there is the fluid state too. The density of substances in the universe far away from solid orbs amounts from some thousandth up to millionth fractions of those we find on earth. In the smallest particles of earthly dust the density is comparatively very high. Therefore in astronomy it is much more appropriate to use the words nebula and cloud. Their meaning includes the existence of fluid and gaseous substances, like in fog of water. In proto-planetary discs water can be found in abundance (WATSON 2008), where the distance from the protostar is far enough. Young protostars have a lower temperature anyway. In cold regions of the space non-radiating orbs are only visible, if they are of a considerable size, exist in large quantity, cover the light sources behind them and therefore stand out as dark shadows. Besides the states solid, fluid, vaporous and gaseous we find the state of ionic plasma in hot regions like the sun, which is very different from the gaseous state. Ionic plasma is a physical state by itself, which cannot be referred to as a condition of aggregation. For all these reasons I avoid the outdated language use „gas and dust”.

Fully developed planets are either solid orbs or consist of masses of light-reflecting substances like Jupiter, which is called a gas-planet. The name “nebula-planet” sounds unusual, but might be more appropriate. In outer space there are interstellar nebulas and

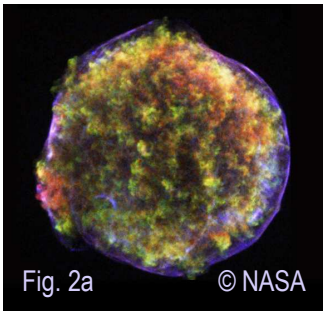
nebulas in the environment of newly originating stars in circumstellar discs, which can also be protoplanetary discs, in which the early stages of young planets form out of the nebula.

The theory of accretion with hypothetical dust as starting material is outdated. It only works in computer-simulations when disturbing cosmic factors are eliminated. The chunks either destroy each other or fall into the central star. After some astronomers in Heidelberg have denoted the accretion-theory as astronomical miscarriage, the theory of turbulent currents was developed by computer-simulations as well. But the hypothetical turbulences are not measurable in space, neither is the dust. STANIMIROVIC showed (2006) in a star-forming region that maximum 1% of the expected amount of dust might exist. Methods were elaborated striving at some preconceived goal: magma-balls or chunks, although we know that it is in the cool spaces and not in hot zones where orbs form. Hydrogen-compounds and silicon were found in high concentrations. On one hand the high water-content is recognized, on the other hand still the development of theories aims at the product of an earthly globe. There must have been watery stages in between. With high temperatures in the beginning, according to the succession of condensation points, first gases of mineral components precipitate. But if mineral components only exist in concentrations of a few parts per million inside of gases, which prevailingly consist of water, they remain aerosols and bring forward the emergence of fog at temperatures around the condensation point of water. So nebula is an indication for temperatures allowing biological life. The computer-simulations need a new goal: The forming of a spherical primordial soup.

It is possible, that a planet-embryo forms in a habitable zone, if large clouds of water provide protection from too high radiation and an equalization of temperature. The emerging of fog can be relevant for the origin of the first smallest living organisms out of prebiotic stages. The precondition is a moderate temperature, where small drops neither crystallize nor evaporate, but have enough energy to stay in the state of abeyance. Even cool water can be in the state of fog. Due to the surface tension the drops dissociate from the surrounding and envelop themselves with a kind of molecular skin. Temporarily frozen drops can assemble CO on their surface. In this skin several substances can assemble for example components of amino acids. They chain, form amino acids and proteins and build membranes. As soon as an interior space is protected by a membrane, inside of which biochemical reactions are possible, the precondition for the origin of a proto-cell is fulfilled.

Due to this forming of the first entities enveloped by membranes, fog is most interesting regarding the origin of life. If a planet consisted of fog in the very beginning, life can already have been there before its masses compacted and consolidated with minerals, before by an increase of gravity, pressure and heat in the interior the mineral substances began to melt. Life can have existed since the very beginning. The billions of early halo-bacteria, archaea and cyanobacteria in the Precambrian time did not descend from “one first cell”. They originated in multitude and variety. Then they multiplied from this variety by cell-division, and then by mutations and evolution more different kinds came into being.

The early planet consisted of liquid and viscous substances of low density at temperatures already allowing life-processes to take place. In outer space we can watch some formations today, looking like things passing through comparable processes. The artificial coloring is supposed to show temperatures or different kinds of radiation. Therefore it is recommended to hold back with associative interpretations as far as they refer to impressions evoked by the colors. This colored image shows the remnant of a supernova discovered by Tycho de Brahe in the year 1572 in the constellation Cassiopeia 7500 light years away from the earth. Its emissions in the spectrum of X-rays are marked in colors.



We know very little about the chemical compounds. The name "Plasma-Supernova" was given based upon pure association. However one thing is for sure: This object is going through some transformation in which something new is formed. Speaking of the "death of a star", regarding a supernova, fails the astronomic reality, because every end is a beginning as well. From one supernova generations of new stars can emanate, also ones that have planets. Reproduction and multiplication processes are some of the characteristics of living beings. If based upon astrophysical methods no other qualities can be measured than those of radiation that does not mean no other qualities existed. They are invisible. This process we can watch today through telescopes dates back 7500 years, because this supernova is in a distance of 7500 light years away. Star-generations are followed by the origin of planets as youngest generation besides the origin of moons. The idea propagated for a long time of the earth once having been a globe of glowing magma at first, cannot withstand any scientific examination. In proto-planetary discs there are no mineral substances in such high density and concentration so that they could melt, not even by accretion. Because the planet-embryo did not origin form molten rock-material or dust, it did not need to be hot to form a ball or a globe.

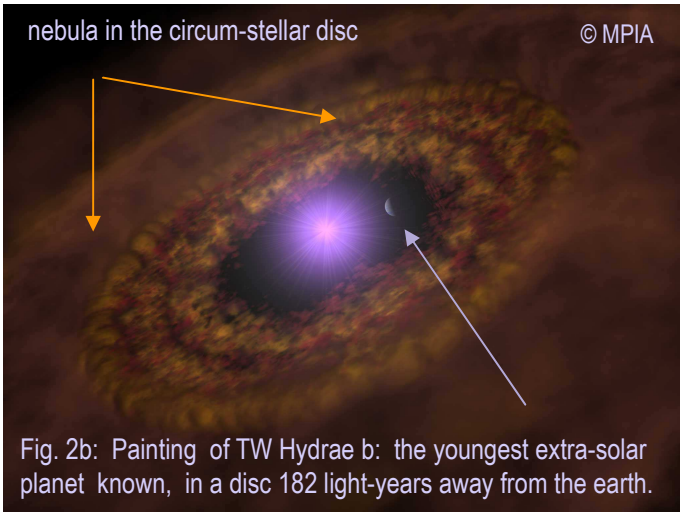


Fig. 2b: Painting of TW Hydrae b: the youngest extra-solar planet known, in a disc 182 light-years away from the earth.

Cool nebulas and liquids like water get a spherical form in space as long as no other center of gravitation hinders them. On this painting of the protoplanetary disc around TW-Hydrae imaginary colors give us the deceiving impression of glowing minerals. But a Planet-embryo only gets under the influence of the heat close to the protostar, after an increase of density and gravity made it move slowly towards the central region, where the nebula is missing

because of higher temperatures. The effect of pirouette enhances its circulation velocity, now centrifugal forces protect it from falling into the protostar. In the beginning the temperature of the protostar is relatively low. There must be a large habitable zone in protoplanetary discs in the region protected by the nebulas, where a planet-embryo can form, already containing organic substances and in which life-processes are already possible.

We know processes on the earth today, where new lithosphere is formed in volcanic regions, as to be seen on Hawaii beautifully. There fluid lava wells up at over 1000°C, slowly cools, hardens and becomes rock. In the lithosphere we find huge masses of magmatic native rocks like basalt, granite, syenite, diorite, gabbro and others. They all went through phases of liquefaction and cooled down, some faster, some slower. Nevertheless we should not let ourselves be misled to unconscious wrong conclusions by that. Fog does not melt, when heated. Fog evaporates. The smelting in the interior of the earth was a process that became only possible a long time after the origin of the planet. In the early formation of fog and gel at first enough mineral substance had to be accumulated, until a certain density was created. The primordial masses of the Precambrian time formed as soft substances a long time before they consolidated into stone under conditions allowing life. They could almost be called etherical.


Fig.2c © Dr. Tsou NASA

An example for a substance of very low density would be the silicon aerogel made by Dr. Peter TSOU. Its density is 10 - 50 milligram per cubic centimeter. Its physical qualities seem unusual for such a light substance, as today in the Neozoic we rarely get in contact with something like that, because this is not typical for our time. But in a planet-embryo there can have been many substances of this kind with various mineral components, having different degrees of solidity, all very light. The largest amount of the components of the upper earth-mantle is silicates and a high percentage of many lithospheric layers are silicates as well. Quartz rock crystal consists of silicon-dioxide. Aerogel and substances with similar characteristics in an early Precambrian time can have been the preliminary stages of starting materials for the later forming of rocks, which can only have taken place under completely different cosmic conditions. The interior of old crystal-druses can have originated from them. Protoplanetary discs seem to have a high content of silicon. The surrounding of very early micro-organisms can have partially consisted of underdensed materials.

The gravitation in the interior of the planet was much lower than today. But in comparison to the empty space it might have been powerful enough to enhance the origin of light substances. In Dr. Tsou's Labratory the silicon-aerogel is made under high pressure and high temperature. "The possibility of the earlier existence of underdensed material of heavy elements like silicates is very intriguing indeed" (Peter TSOU).

Gravitation can have led to an accumulation of substances and perhaps also new elements were created by physical energies. A protostar provides radiation-energy in abundance. According to the formula of ALBERT EINSTEIN $E = MC^2 \longrightarrow M = E / C^2$ energy can be transformed into mass. Therefore even a forming of new mass might have happened, certainly in some different dimension of physical quality but principally comparable to the forming of bio-mass by photosynthesis, which becomes possible because of the radiation-energy of the sun with hydrogen playing a central role as well. By photosynthesis no new mass gets created, but the molecules reach a higher state. Organic substances are formed.

The biosphere of the earliest time, the so called primordial soup, was a primordial fog and then kind of a gel-like warm ocean, which cannot be compared to any ocean of the present time. It contained in dispersion all substrates the archaea needed for their metabolism. The oldest traces of life have been found in stromatoliths. The Precambrian stromatoliths are some of the oldest native rocks on earth. Organic metabolic products and genetic material can rather be found in stromatoliths than in metamorphic rocks, because if a material was exposed to melting processes under pressure later, the traces of life got destroyed. Stromatoliths are only solidified, therefore in them traces of life can still be found. The former existence of prokaryotes living on chemosynthesis and photosynthesis in the Precambrian has been verified. These bacteria formed large colonies giving the first dense mineral substance to the planet by excretion and sedimentation of their metabolic products.

Fig.3: Living colonies of stromatoliths in West-Australia: Recent stromatoliths are formed by cyanobacteria that take carbon dioxid for their photosynthesis out of the water. One effect is the precipitation of calcite. This process is similar to the biogenous forming of Sinter. Such bacteria already lived in the early Precambrian.

Autotroph carbon fixation and products of the carbon cycle have been proved for the early Precambrian already. The atmospheric temperature did not lie above the boiling point of water (CLOUD 1998). Otherwise the primordial ocean would have vaporized. In hot thermal springs today live archaea in water over 90° Celsius and multiply. For many species of archaea water temperatures close to the boiling point are no problem. “Prokaryotic ecosystems evolved shortly after the planet came into being” (SCHIDLOWSKI 1998).

The prokaryote-colonies could have built formations like embryonic states of multi-cellular beings do today like Pandorina and Volvox. In the same way the whole planet could develop the shape of an early embryonic stage comparable to the irregular tissue of a yolk bag. Early prokaryotes accumulated substances from the environment by their metabolism. This way they gave a soft body of protoplasm and then also half-solid mineral substance to the planet-embryo consisting of gel-like underdensed mineral substance, which consolidated much later and then changed into what we find today as Precambrian primary rocks. After the etheric earliest time light substances and mineral-compounds in solution in water were transformed by the activity of microorganisms into more dense materials, especially during the Great Oxygen Event. Only after that consolidated masses in deep layers could possibly start melting and in later phases of earth-history rise towards the surface and cool again. After a cold phase, probably in the Late Precambrian, enhancing solidification, a maximum of temperature in the Early Paleozoic induced a first melting in the interior, changing some of the oldest sediments into metamorphic rocks. There were more cold and hot phases later.

In a protoplanetary disc gaseous and liquid substances do not turn spontaneously into concentrated masses. Concentration can happen in a hydrous over-saturated medium, enhancing precipitation and crystal growth, also by bio-catalysis. The absurd expectation of a conglomeration of cosmic particles into magma or chunks misleads to theories, which are unnecessary if we consider the high content of water. In cooler regions in a distance from the protostar the ions can condense to gases. With further condensation these gases can turn into nebula, not into dust. Then the aerosols are inside of the droplets, not outside. In an early phase of origin the planet must have consisted of a saturated atmosphere only. Fogs contained liquids enriched by substances in solution. Droplets became prototype-cells, because this atmosphere already contained all substances, out of which in Stanley Miller's Experiment-2 amino acids form: H_2, H_2O, CH_4, NH_3 and CO_2 . Besides that H_2S and N_2. The amino acids connected to proteins forming membranes and cytoplasm.

Living nebulas were advantaged in inner regions shielded from cosmic radiation. A certain amount of radiation was necessary as source of energy for biochemical processes. Protocytes assimilated substances from the environment and converted them into their own organic components.

Carbon, nitrogen, silicon, calcium, sulfur, iron and many mineral substances got absorbed into the cytoplasm and assimilated. Some products of metabolism were excreted some were attached as mantle material. Iron-oxidating bacteria changed Fe_2 into Fe_3 by anoxygenous photosynthesis. SiO_2 in solution fell out as silicate. Since Cyanobacteria started producing oxygen, metals in solution in water got oxidated. The Great Oxygen Event lead to a solidification and to a decrease of volume. The maximum oxygen-content in the air in Carboniferous caused by photosynthesis of plants and microorganisms was followed by a further consolidation. Ecologically the Precambrian world of prokaryotes was one entire organism, a symbiotic biosphere being a geosphere at the same time.

So the origin of the planet was based on life processes, therefore it can actually be called a former living being.

The magma, the plutonic rocks and the Precambrian shale as oldest metamorphic rock developed later from its mineral excretions, after primordial sediments melted by generation of heat in the interior under changing cosmic conditions. The same succession of origin processes most probably applies to all other planets consisting of rock.

All limestones were lime accumulating living beings like archaea, foraminifers, sponges, corals, shells, snails, squids and so on. Some crystalline native rocks are known to derive from biogenous sediments. Marble forms by metamorphoses of limestone. It is a crystalline rock of biogenous derivation. Not only metamorphic rocks derive from biogenous mineral substances, but the magmatic native rocks do as well. The earth-mantle predominantly consists of silicon compounds like olivine, pyroxenes, spinel and garnet. In former times diatoms in the early biosphere accumulated silicon. Amongst the lower multi-cellular beings, the parazoa, there are siliceous sponges accumulating silicon as well.

The magma was formed later during climate changes under high pressure in the depth. The more bulky and dense the sediments grew the more thermal insulation they caused. The heat of crystallization in the lower layers could not escape. This might have caused hypothermia inside, activating exothermal chain reactions, resulting in the smelting of the biogenous substance in the interior. A heating up in the Early Paleozoic can have caused a first increase of volume. As we see on the Paleomap (SCOTESE 2003) the Cambrian so-called continental mass Pannotia started to divide. Hot phases may have caused an increase of the volume of the planet-embryo inside, and consolidation caused a decrease.

We do not have any proof that the earth-core consists of iron and nickel. The behavior of seismic waves, measured at the earth-surface, gives no information about the chemical quality of the material, the waves have passed through or of which they got reflected changing their direction. Measurements of the waves reaching at other points of the earth-surface, only give information about the physical quality of the touched material, not about the chemical one. If the results of the measurements would correspond to a reflection on iron and nickel, there can also be some other material causing the same effect.

The gravitation conditions in the lower earth-mantle and in the earth-core are so extreme that the borders of our ability of imagination are surmounted. Under extreme conditions of pressure hydrogen would exist in the form of plasma (KEITH WILSON 2008), so that in the central parts of the earth we might have conditions quite similar to the ones in the sun.

The American researcher KEITH WILSON and some authors he refers to are advancing the view, that under such extreme pressure-conditions an earth-core consisting of hydrogen might even be solid and would bring the same seismological results of wave reflection. I can neither prove this nor do I want to argue about anything, I cannot assess.

The fact, that such considerations are being made in geophysics today, shows me how little we still really know. The magnetic field of the earth could be caused by a hydrogen-core as well. The sun builds gigantic magnetic fields. KEITH WILSON (2008) even suggests the possibility of an increase of mass close to the earth-core by hydrogen nuclei newly generated by nuclear processes, due to absorption of energy from the sun. For the earth of today this is not so easy to figure out. But long as the earth consisted of light materials, liquid and microorganisms without any solid lithosphere beneath, energy from the sun could penetrate easily and deeply into the planet-embryo. Some more contexts with KEITH WILSON´s research work will appear in other chapters of this book.

One subject of my research work are the processes of geomorphogenesis of which the results can be seen today in the lithosphere. For geological research the upper earth-mantle is the deepest layer that can be observed, but only partially and only by indirect methods. Above a half-solid transition layer from the earth-mantle to the lithosphere are hot layers of rock, in which every drill head would melt. This puts a limit to deep drillings. The deepest one on the peninsula Kola went 12.262 meters below zero, only a thousandth of the earth-diameter. The cool layers of rock are closer to the surface.

Many native rocks have mineral structures proving of a former smelting process. Therefore they are called igneous rocks. But this does not mean, magma was their primordial state. Due to the melting they passed through, no traces are left of their biogenous origin. Think of the sediment layers on the seafloor, stemming from lime forming organisms. At subduction zones they are getting pushed down into the depth together with the ocean bed towards the earth-mantle, where they get melted and become magma. Later the same material eventually wells up to the surface elsewhere and comes out again transformed into lava. It can also become a pluton, that one day will get uncovered by erosion and then unquestionably has all the qualities of an igneous crystalline native rock.

Keeping in mind all these considerations, one has to admit, that the commonly accepted conception the primordial land masses were rocks formed out of solidified magma, cannot be appropriate. The Precambrian seafloor did not consist of consolidated lava like the ocean floors of today. It must have been some kind of gel with microorganisms, forming bio-films and colonies, and so did the material, out of which later by diagenesis and metamorphosis the native rocks of Greenland and of the Balticum formed.

A material can be the oldest of its kind on earth. But this does not mean, it already existed as rock shortly after its origin. Native rock is the result of a slow process of consolidation, with or without a melting and cooling down during its long origin processes, as the case may be. Geologists know that metamorphic rocks not only derive from magmatic ones but they can develop from sediments as well. The oldest metamorphic rocks derived from the primordial sediments. Materials of which age determinations have been made, already existed before their consolidation. The dating of their components does not measure the moment of the hardening but the origin of the substances. One exception are the volcanits. Their date of solidification can be determined.

Paleozoic rocks show crystal-fractures due to the tertiary mountain-folding, this only means, they occurred in crystal-structure right before the folding. But it does not mean, they already were crystals when they originated in the Paleozoic. The oldest rocks at the time of origin consisted of gel containing microbes interconnected in the environment of their organic and mineral excretions, building growing forms like cyanobacteria and coral colonies still do today. Their growth was the basis for the primeval stages of Pannotia. On the Paleomap (SCOTESE 2003) you see stages of the planet since the Early Paleozoic in their organic shapes. They were formed at a time, when above the primordial planet-body sponge-reefs, coral-reefs and other sediment-forming organisms had started producing new grounds. Some of them were already partially over water. In seafloors and in continental massifs today there is a deep biosphere, a multifarious world of microbes (JORGENSEN 2003, ONSTOTT 2007). Species of archaea were found bearing temperatures up to 112°Celsius (KEHSE 2007). In continental granite massifs live archaea still using hydrogen as source of energy, living on CO_2, out of which they produce acetate and methane (PEDERSEN 2007). These substrates were already available when our planet originated. Methane is the basis for large organic molecules. GUIDO W. FUCHS (2008) describes the formation of organic molecules on ice-drops in protoplanetary discs. Some genera of bacteria in a laboratory proved to be able to live on Tholin, which was also found in a disc around a young star named HR 4796A. BIEBRICHER, SCHRÖDER and TRINKS (2005) describe some spontaneous synthesis of RNA-molecules in ice-capillaries.

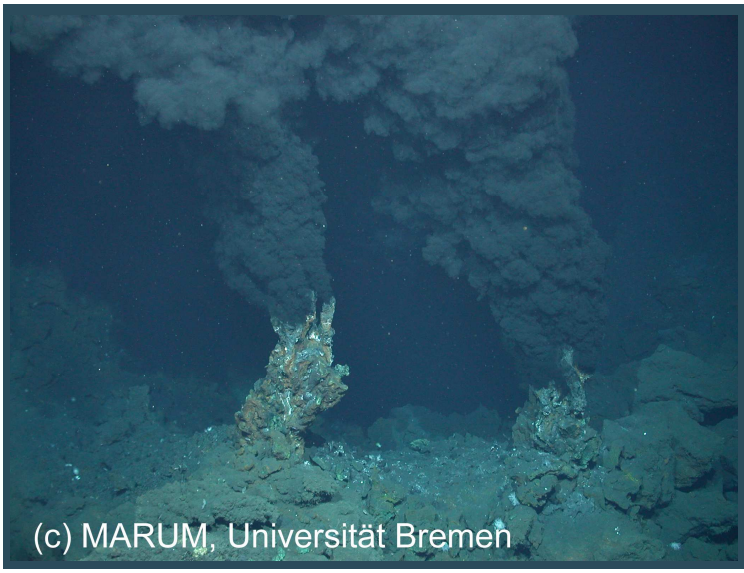


Fig. 4: Two so-called "Black Smokers" on the ocean bed. These very hot thermal springs in the deep sea containing iron and sulfur, arouse the assumption on one hand to be places, where primordial cells grow, „stem cells of the earth", because archaea live in them. These inhabitants have primordial characteristics, but they must be immigrants, because the seafloors are **geologically too young**. How late these ocean floors formed, will be explained in chapter 6, 7 and 10.

To the idea of a red-hot magma ball that cannot have existed at that time, I would like to oppose my conception of the primordial state of our planet, based on astronomic and biological knowledge: the **Planet-embryo**. An embryo is a growing being, assimilating substances and passing through phases of development. After life as an adult a death will follow with the decomposition of its biomass to mineral remnants. The earth crust, the lithosphere of today consists of the transformed skeletons of beings of the old geological

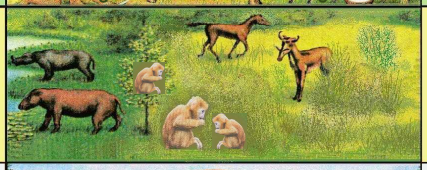
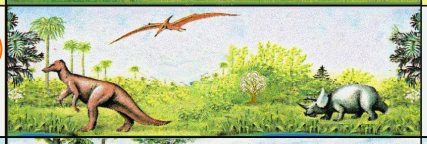
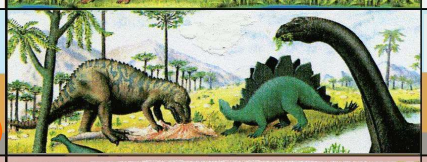
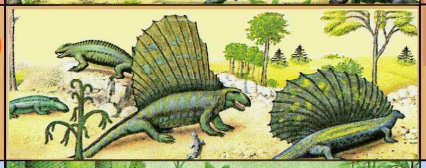
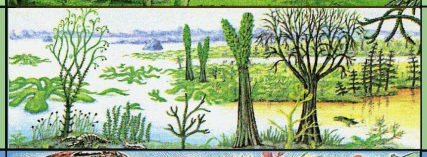
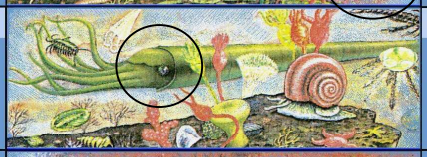
times. An embryo grows and becomes an adult being producing gametes, from which its off-springs come. The progenies of our planet are the multifarious beings of our biosphere. Where the **stem cells** of the planet were generated, will be mentioned later in chapter 9.

Since the end of the Precambrian time the predisposition for the development of spherical form-elements and early embryonic shapes can have been forwarded on the genetic way from organisms of the primordial biosphere. In the course of evolution genetic information went from the prokaryotes into the eukaryotes (MARGULIS 2003), then to the parazoa, metazoa and with the eumetazoa into higher developed animals up to the human beings. The final occurrence of many very different kinds of shape was certainly influenced by many other factors as well. However, life was there much earlier than the rocks.

Taking another look now on the star-forming region on figure 1 the question is no more: „Is there any life out there?" or "Could life come into being there ?" The question can be now: „Is there no more life?" What we see on this image happened 168 000 years ago. That is the time the light needed, to come from a distance of 168 000 light years and reach the retina in our eyes. What is there today, we cannot see. What could be there, we just don't know. If there is a „there" at all, if the „there" is just something that was there in the past, that has already removed itself and changed further for 168 000 years, that would be another question. It is a habit of the layman, to consider the visible space as geometrical space. But the geometrical space has the definition that the points, by which it is appointed, exist at the same time. In the cosmic space that is not the case. We see different fractions of time since the origin of the universe, which present themselves to our eyes coinstantaneously and thus evoke the deceiving impression of some steric reality.

After these retrospections into the far past, it becomes possible to anew scrutinize some phenomena visible today in the Neozoic. I will introduce my comparison of the tectonic plates of the earth to the human cranium bones in chapter 5. Before that I will explain the forming of the human skull and its modification in the course of evolution in chapter 4. Chapter 6 begins with the geodynamic of the lithosphere today. Then I will demonstrate the origin of the shapes of the lithosphere throughout all geological times. First the phenomena of the Neozoic will be examined, then the developments of the Mesozoic. And at last the origin processes since the Precambrian and Paleozoic will reveal the causal coherency. My results rebut the objection the correspondences could be just analogies, even though analogies in the biological sense would be remarkable enough. In all probability there is some genetic inheritance. The places of origin in the evolution of the earliest ancestors of herbal, animal and human beings play a basic role, where the stem-cells of the former living planet came from. I´d like to recommend to all non-geologists amongst the readers to keep opening the geologic time scale page 18 (Fig.5) while reading the following chapters.

Page 18: Fig.5: Geologic time-scale: The global temperatures are taken from STREIF / BERNER 2001; Pictures of the living world are from Seydlitz 1989; geologic layers and inscriptions by NESSENIUS. This time-scale might be incomplete concerning the hot phases (cp. Fig. 60 on page 64).

		Global temperature	Geological times	Fig. 5	
NEOZOIC	Quarternary	14 °C 12 °C		Holocene Pleistocene: = alternating glacial and warming periods	Early Humans
	Tertiary	14 °C 19 °C		Pliocene Miocene Oligocene Eocene Paleocene	Sahelanthropus Apes Monkeys Primates
MESOZOIC	Cretaceous	26 °C		Cretaceous limestone	Mammals Angiosperms
	Jurassic	9 °C ? ?		Malm Dogger L i a s	Birds earliest Mammals
	Triassic	14 °C 24 °C		Keuper Muschelkalk Buntsandstein	Dinosaurs
PALÄOZOIC	Permian	24 °C 12 °C		Rotliegendes Zechstein Permian salt and limestone	Reptiles Conifers
	Carboniferous	11 °C 15 °C		Permo-Carbon-ice-age vegetation that later was turned into cole	Amphibiens Lepidodendron Cycadophyta Filicales Equisetales Lycopodiales
	Devonian	19 °C 14 °C			Fish Arthropods Annelids Squids Snails Shells Acrania Echinodermata Trilobites Corals
	Silurian	14 °C 10 °C		new development: deutero- ← stomia	
	Ordovician	9 °C 26 °C		new development: protostomia with lense-eyes	
	Cambrian	17 °C 14 °C		protostomia with segments Radiata, Bilateria	Jellyfish Ediacara-Fauna
			Precambrian: colonies of Algae and Bacteria, Parazoa		

4. Early Evolution in the Water

The Hebrew word “Adama” means “earth”. “Kadmon” means “primordial”. The creation myth in the bible refers to Adam Kadmon as earliest ancestor of man, which means the primordial earth, the Precambrian living planet. “He” is the ancestor of all plants, fungi and animals. While the first mineral layers condensed and deposited, above them warm oceans flowed. Hollow spaces were filled by water too. From the Cambrian until the Silurian all beings lived under water. In Silurian the grow-over of some shore areas began. But in the watery surroundings there were intra-uterine conditions, when the planet was still alive. In the course of evolution animals developed in oceans and lakes, which carried their embryos themselves in fluid filled hollows in the interior of their own bodies, like for example viviparous skates. During the entire earth history we see in fossils only an evolution of animals with their large variety of appearances made possible by the genome of the planet-embryo. The sudden appearance of man arouses some questions. Monkeys appeared in the Neozoic, but none of them fulfills all criteria, to be considered as a direct ancestor of man. According to the genetic findings, apes and humans must have comon ancestors. Why don’t we have any proper fossils of them? There are some findings, but their taxonomic position is discussed controversially. My understanding of evolution does not orientate on the skeletons alone, but also on the advanced development of organs that you might not see on the fossil. We do not have fossils of all former living beings. In the Cretaceous time due to the high global temperature (Fig.5 page 16) all not calcified remnants of aquatic animals were decomposed completely and many traces were deleted.

Every biologist has learned that according to the basic biogenetic rule (ERNST HAECKEL and others before him) every individual in its ontogenesis passes through its phylogeny. So it makes sense to compare the embryos (I use the word embryo for every embryonic stage of development). According to the basic biological rule the ancestors of the hominids must have been similar to the human embryo, as it develops in the mother’s womb. Its development takes place in the amniotic fluid. According to the aquatic-ape-hypothesis the ancestors of apes and early humans lived in mangrove woods. Floating in the water they could already be in an upright position like a baby in the amniotic fluid. The development of a body shape suitable for upright walking can be explained with this way of living, not being affected by gravity in the water and with the possibility to hold on to the branches in order to get up. The basic shape of the embryo’s head and body develops in the aquatic environment of the womb. A new born baby does not have enough muscular strength and coordination yet, but a suitable build is designed at the time of birth, and the walking reflex is functioning. Later the skeleton forms appropriate for the static requirements. As soon as the bones rich of cartilage are sufficiently solidified, the child willingly learns to walk upright. In order to get up, he needs structures in his environment to hold on to with his hands, like the mangroves in which our ancestors learned to climb and walk upright, after being able to already be in an upright position when floating in the water.

Fig.6: The anthropologist Jean-Michel Brunet and his assistant with the scull of the Sahelanthropus, a finding from the Lake Chad.

The dating of the Sahelanthropus into the Miocene raised the awareness that already in the Tertiary time upright walking hominins lived in Africa. The footprints of Laetoli verify the same.

Why did the early humans have a receding forehead? All animals that can swim and look over the water surface have a flat cranium. This way they can lift their eyes and nostrils above the water surface without any effort. The sequence of scull shapes of early humans shows that the back part of the cranium gains volume while the front part still stays flat. An explanation for this could be that the hominids stem from swimming ancestors, whose back part of the head was still carried in the water while the front part needed to stay flat. The japanese macaques - aquatic apes - spend a lot of time in the water.

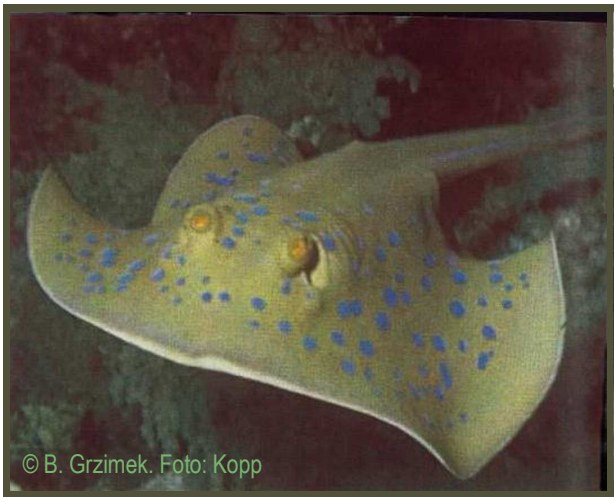


Fig.7: Skates can look over the water surface.

Fig.8: Toad seeing and breathing over water

As biologists we presume, all vertebrates descend from aquatic ancestors, the reptiles from the amphibians and the amphibians from fishes. We act on the assumption that the mammals stem from terrestrial reptiles, which I disbelieve. Regarding the points of time for the transitions of vertebrates onto the land my ideas orientate on the basic biogenetic rule. In my opinion, all mammals descend from aquatic mammals of the early Cretaceous and the primates were the ones, who left the water at last. Fossils of the ancestors of hominids are found in the Oligocene and Miocene. During the transition to land certainly there must have been a phase of crawling on all fours, when they practiced to straighten up against gravity by the help of exterior structures. Very soon climbing became as popular as it is for today's children. Later, when they lived in woods and savannas, they could newly develop the embryonic bulge of the forehead, which gives more space to the frontal lobe of the cerebrum.

These are the reasons for my assumption:
Mammals like dolphins and whales, whose intelligence approaches the one of humans, continue living in the water. Their reduced extremities might have been used once in a phase of amphibian life to move in shore areas. But we ought to keep in mind, that also pollywogs in fact build extremities in the water at a time when they do not have any function as walking organs yet. Elephants are genetically close to sea cows, to aquatic mammals. The head of the elephant embryo at the end of the third month is almost as round as the head of a human embryo. Elephants have a very long gestation time. A long time in the amniotic fluid possibly saves certain degrees of freedom for a special cerebral development. The human pregnancy is relatively long. Still human babies are born in physiological prematurity. Only the development of the head is slightly advanced. Applying the basic biogenetic rule consequently, this means the ancestors of hominids lived in the water for a long time and the development of their body shape suitable for terrestrial life must have happened relatively late in earth history.

Fig.9: Elephant embryo on the 91st day

Fig.10: Bathing baby-elephant

Our hominid forebears saved the grades of freedom for their cerebral development in the water on one hand as mammals with a long gestation time and on the other hand by living as aquatic mammals. Ideal biotopes were all-the-year warm waters of the tropics, like lakes in the basins of Niger and Congo. The missing fossils of real hominid ancestors before the Miocene may lead to the assumption, that they their skeleton consisted of cartilage. But fossils were also not conserved because the humid tropics have optimum conditions for decomposing microorganisms and mycorrhiza fungi, which channel all organic material back directly into the living cycle. Chemical alteration decomposes inorganic marine und limnic sediments completely. Tropic rains flush all fine grained material into the depth. Continual warmth and humidity are ideal environment conditions especially for amphibian living warm-blooded beings during their transition onto land. In everglades and nowadays silted up lakes in Africa lived ancestors of apes and humans of whom no trace is left.

In the Tertiary the African Rift system opened. Fragments sank inside and the shoulders of the Rift Valley rose. The tectonic bulges of the landscapes beyond lifted them up and let lakes dry out. According to the Paleomap (SCOTESE 2003) the region of Jordan River was part of the Tethys Ocean and became land after the Miocene. Until then the depression at the Dead Sea was a marine habitat. There are also geological findings pointing to a drying out of the Mediterranean during the Miocene.

Under changing environment conditions those aquatic hominid ancestors got advantages in survival, whose abilities developed in such a way, that they were capable to life in shore areas, everglades and then on dry land as well. This metamorphosis might have happened in a relatively short time, comparable to the maturing of a pollywog becoming a frog.

The free physical movement of these primates in three-dimensional space, especially in the water, in the mangroves and later on the trees as well, brought forward their capability of multidimensional thinking. Spacious and goal-orientated thinking is essential for climbing and brachiation. Zoologists have counted the occurrence of bone fractures young monkeys acquire, who are still in the learning process. I do not consider selection as the only motor of evolution, but young monkeys and apes are clearly subjected to an undeniable selective pressure. The theories about the origin of bipedal locomotion complement one another. The right forming of the pelvis began in the water, developed in the mangroves and for especially viable variants was made perfect by brachiation in the trees simultaneously with a goal-orientated intelligence giving them the ability to survive in the savannah as well. At first after the transition onto the land the apes went through the same development, but then they lagged behind in a retarded stage. Their genome is identical with the human genome in 95 - 98%. Some DNA-sequences are laying on introns and therefore are not expressed. The genetic similarity of the apes to man allows to term both, humans and apes, hominids. The footprints of Laetoli prove that the earliest human beings already walked bipedal. Today human children start talking as soon as they can stand upright. In all probability the earliest upright walking humans started using some language very soon.

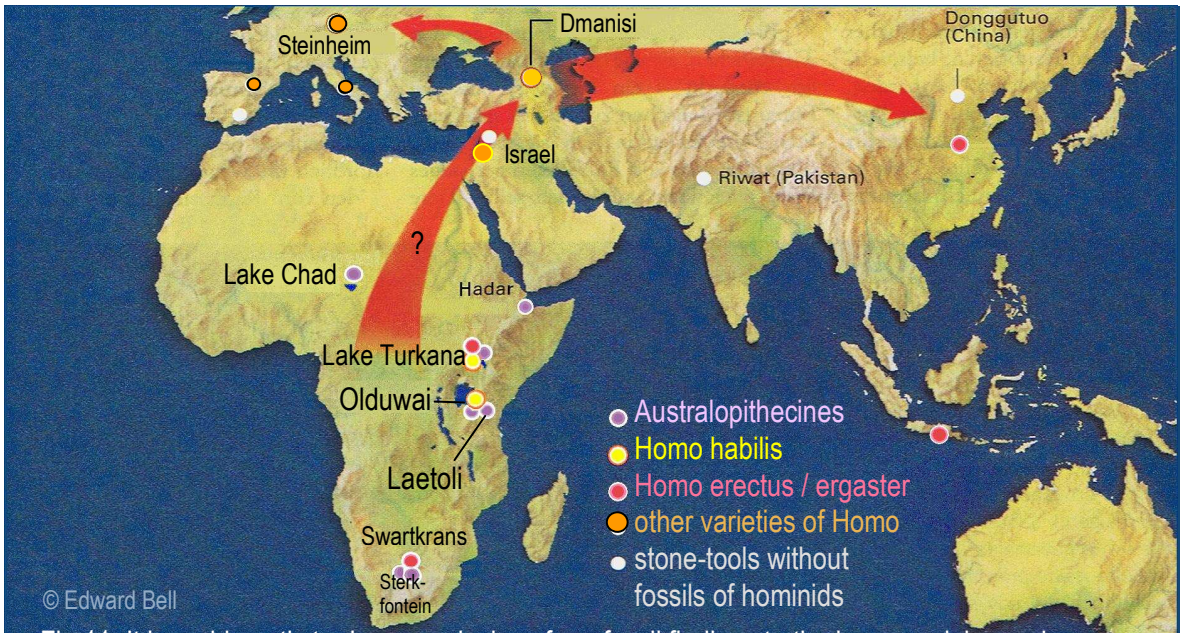
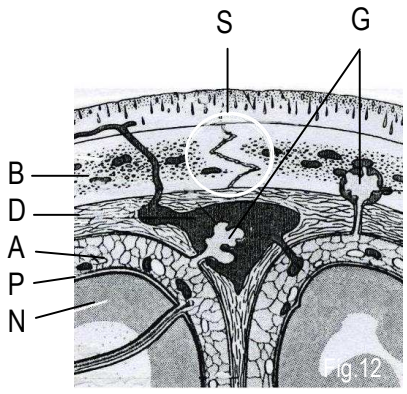


Fig.11: It is problematic to draw conclusions from fossil findings to the human origins and migration, because their conservation is very rare, as it highly depends on many exogenous factors. For the Out-of-Africa-Hypothesis from the Miocene on many proofs have been found. (Map from Edward Bell; SCIENTIFIC AMERICAN 11 / 2003. Additional inscriptions: NESSENIUS).

When humans were manufacturing tools and when they were pronouncing consciously formed sounds the effect was being planned. Both activities are ways of creativity that begin as soon as the hands are freed from the earmarking of physical locomotion. Thus from the footprints verifying an upright ambulation and from findings of stone tools we may draw conclusions on the communication by language. The evolution since the Miocene is proved by fossils in Africa only. In the depression of the Dead Sea the transition of living beings onto land happened later. Human beings fanned out over large regions of the earth.

The images painted by artists in the sixties of a crookedly walking Homo erectus and homo habilis have been imprinted to our visual memory. But a crooked position would have been statically unfavorable. The apes, whose pelvis is unsuitable for complete erectness, only walk or run short passages free hand. The foramen magnum (Fig.28) of early humans was slightly inclined, because their face was slightly aligned upwards. But the pelvis of the early humans allowed a fully erected bipedal locomotion. This can be seen at Lucy's skeleton. The training of manual skills and the development of intelligence enforced one another. The growth of the cerebrum came along with it. As the speech area of Broca developed, songs and languages were invented in order to pass on all the know-how acquired by experience. Based on that began the cultural evolution. This way the spherical form of the human head evolved, which was progress and at the same time retrogression, because the embryonic shape of the cranium is round. Apes and even elephant-embryos (Fig. 9), when still in the amniotic fluid, have a spherical cranium shape.

5. Cranial Bones and Tectonic Plates: Mysterious Correlations



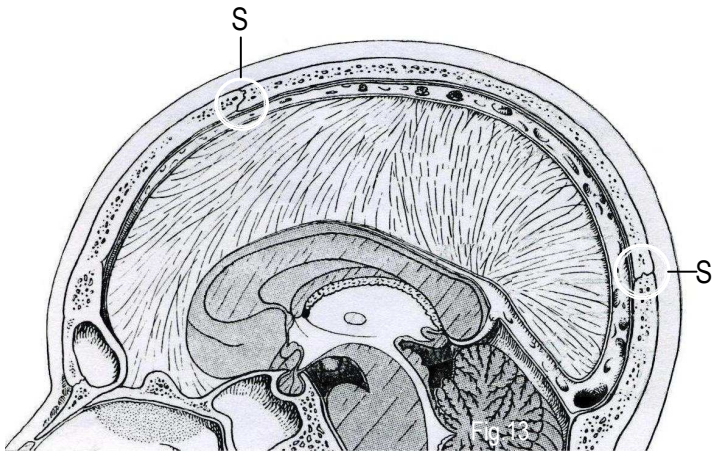


Fig.12: Transverse section through the upper cranium of man in larger scale.
Fig.13: Sagittal section through the head of man in smaller scale.

S: suture = ? = plate boundary
B: bone plaque = ? = earth´s crust
D: dura mater = ? = visco-plastical zone
A: arachnoidea and liquor cerebro spinalis = ? = Moho
P: pia mater
N: cerebral cortex = ? = earth's mantle

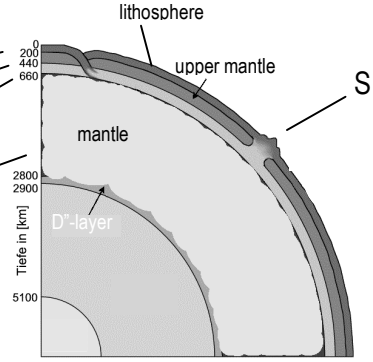


Fig.14: model conception of the earth's interior:

The following comparisons will be suggested at first without any further explanation.
Later I will go into the biological and geological reasons in the following chapters. Independently from each other KLAUS ROHRBACH and I had deliberated on one question: What is the meaning of the correspondences between the interior structure of the earth and the section diagram of the human head? Do the bone plaques of the human cranium correspond to the lithosphere? Underneath the lithosphere are some optical similarities in the sequence of layers, but a comparison would not make any sense from the biological point of view. Independently from each other we both recognized, that the sutures between the bone plaques correlate to the boundaries of the tectonic plates. However ROHRBACH (1997) did not succeed in finding any coherent correlation of the bone plaques and the tectonic plates, because he was looking for a double configuration, as it exists in all vertebrates including the human being. He took the Eurasian plate as a left parietal bone and the North American plate as right one. This is constrained because the tectonic plates neither show any symmetry nor are they arranged double. ROHRBACH´S considerations attracted some public interest for a short time, but his immobile model of the earth was unacceptable for biologists and geologists. Even interested people came to the conclusion that morphologically a head-like nature of the earth can not be visible at all.

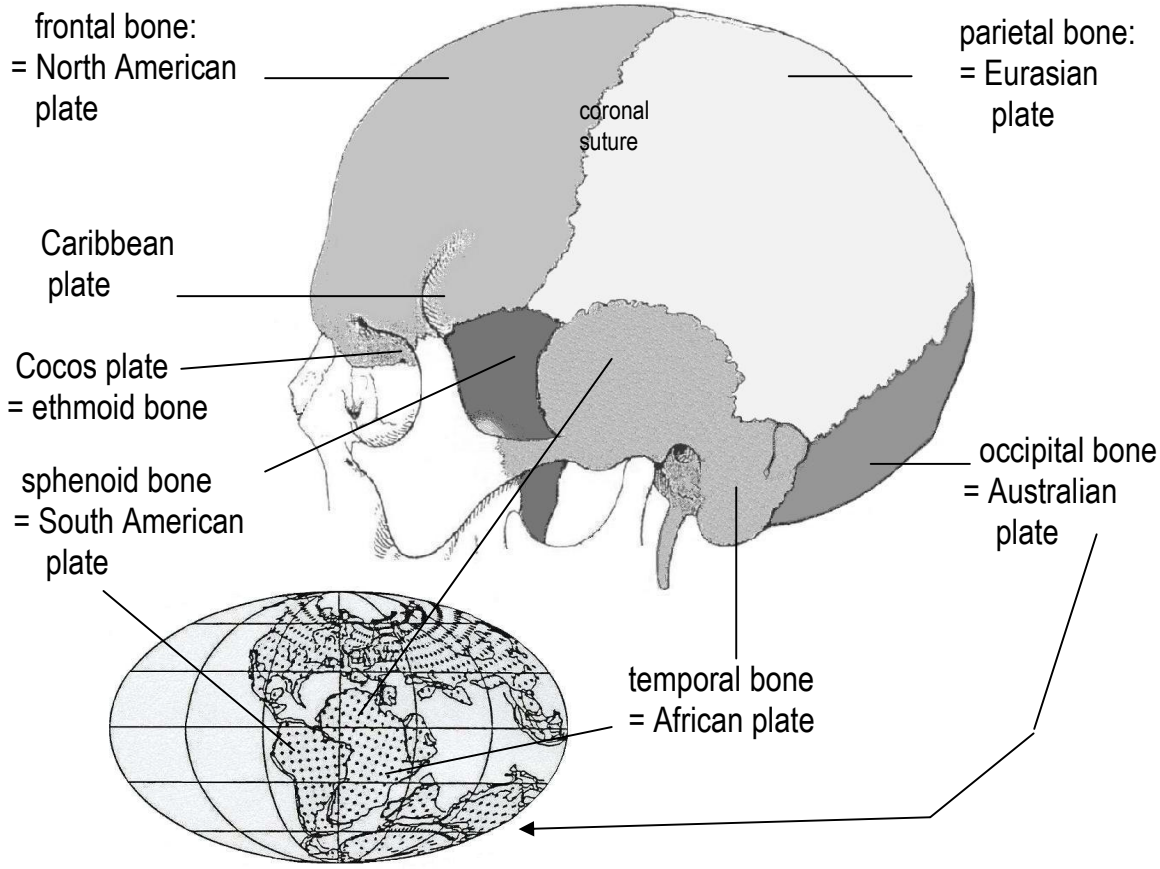


Fig.15: The cranial bone plaques of man. Correlations and inscriptions by NESSENIUS, published for the first time in: „Geomorphogenese und Menschwerdung“ 2006.

ROHRBACH´S work stagnated at that point and he turned towards other tasks. Nevertheless his ideas had inspired me in such a way, that a few years later as a biologist I found, what he had searched for in vain: the real correspondence.

Comparing the human skull with the former position of the continents, I discovered the following phenomenon: The **temporal bone** correlates to the **African plate**, the **frontal bone** to the **North American plate**, the **sphenoid bone** to **South America**, the **parietal bone** to the **Eurasian plate**, one part of the **occipital bone** to the **Australian plate** and the **base of the skull** correlates with **Antarctica**. Is it the contours of continents or of the whole plates? This question will be clarified soon. However, each of these elements exists only once on the planet, while the vertebrates have them paired. What I discovered must have developed from the Precambrian planet-embryo. Now I will describe the phenomena first in all details, by which these correlations are perceivable. The causal coherencies, biological reasons, will become transparent in the later chapters. On the following I will show you a multitude of morphological correlations including their dynamic:

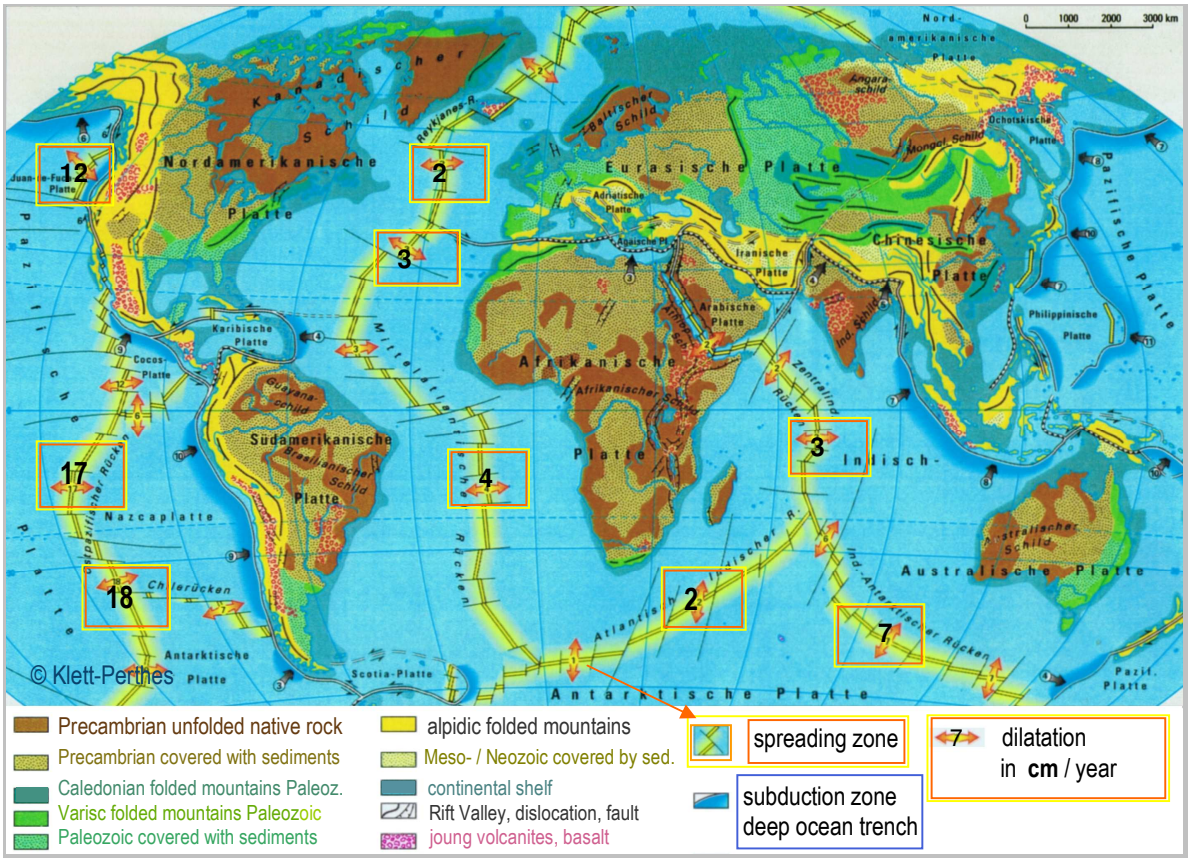


Fig.16: Tectonic plates and processes (KLETT- PERTHES); additional inscriptions NESSENIUS.

The term continental plate is misleading because tectonic plates consist of the Precambrian and Paleozoic continental masses *plus* the ocean floors that were added around them by seafloor spreading. Their borders are the mid-ocean ridges (= spreading zones) and the deep ocean trenches (= subduction zones). The tectonic plates can be seen more distinctly in figure 59 on page 71. To be able to answer the question, why the cranial sutures have similar contours as the outlines of the tectonic plates, it will be necessary to study the development of the plates and their dynamic from the beginning of earth-history until now.

6. The Movement of the Plates

Now you could object the continents are moving. ALFRED WEGENER was the first one who recognized, that they actually do. In 1912 his discovery of the former existence of a so called supercontinent Pangea was rejected by most of the geologists of his time. 40 years later after Marie Tharp had discovered the mid-atlantic ridge on her drawing table, things changed. Today we all know there are tectonic plates which grow by seafloor spreading and they are drifting (Fig.16,17,19). The former supercontinent consisted of the middle parts of today's plates. The extension of the Eurasian and North American plate along the mid-atlantic ridge goes along with North America's movement to the west. The extension of the parietal and frontal bone along the coronal suture correlates to this (Fig.15, 17, 18, 19).

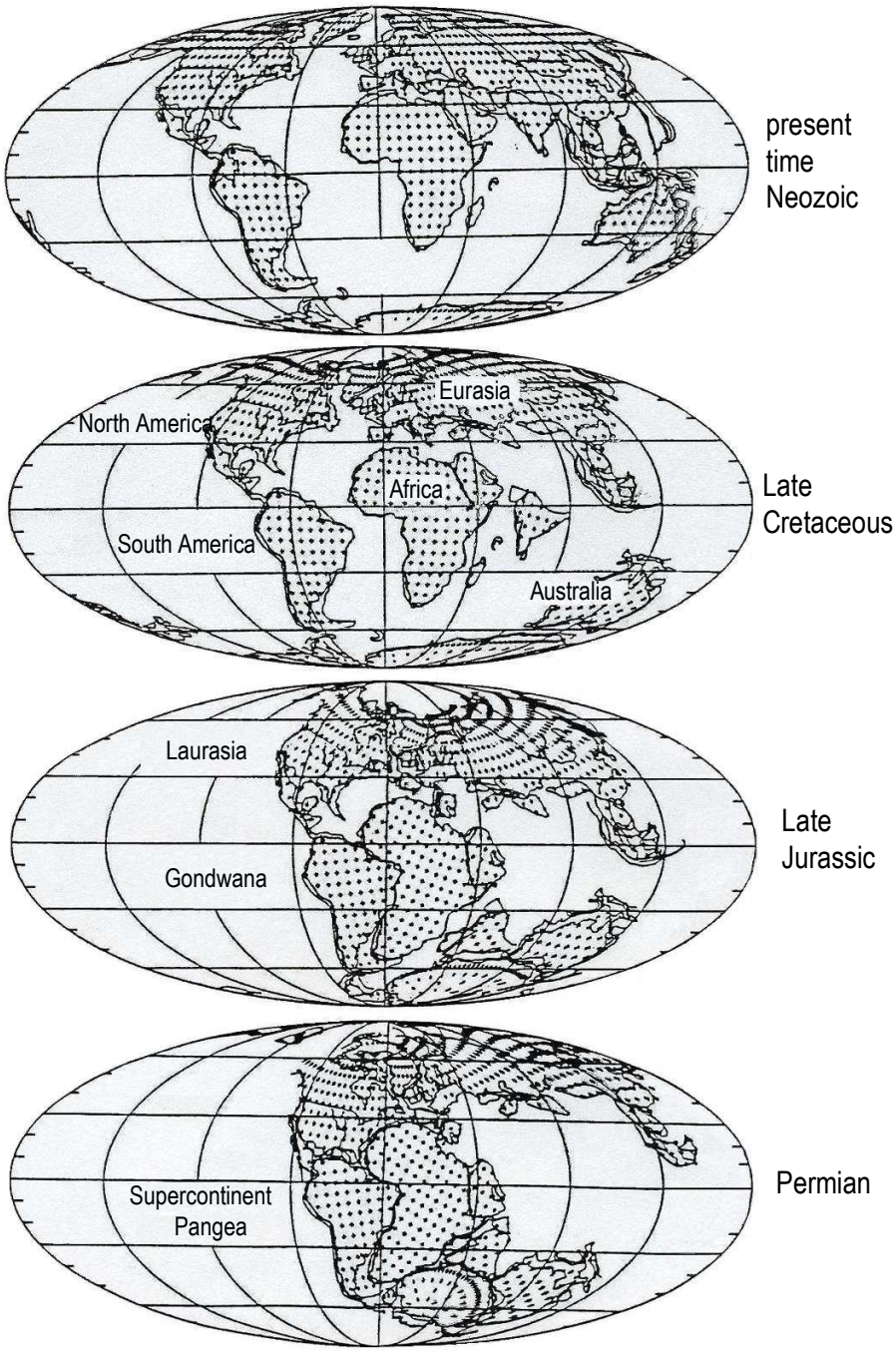


Fig.17: BILD DER WISSENSCHAFT 1980: Special edition on ALFRED WEGENER´S 100th birthday: The position of the continents could be reconstructed by paleomagnetic analysis of volcanic rocks. This is the proof for a former existence of Pangea. Here you don't see the tectonic plates but only today's land masses in their former positions. The changing sizes of the plates are not pictured, because for this analytical method terrestrial volcanites were used. The former allocation of oceans and land masses is not visible here. If the earth always had the same size would be an interesting question.

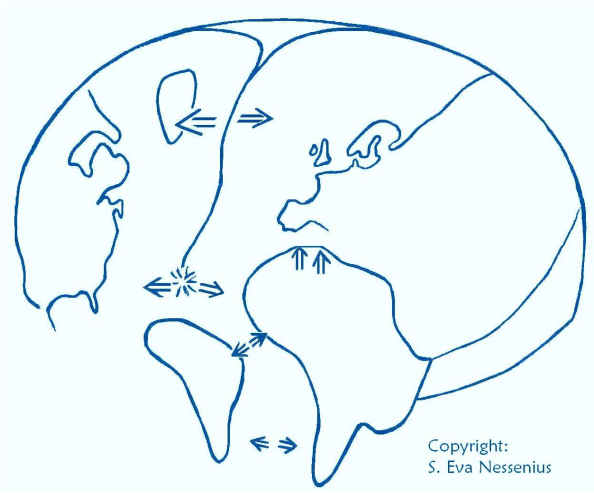


Fig.18: Synoptic hand drawing of the author in 2002. Published for the first time by NESSENIUS 2006.

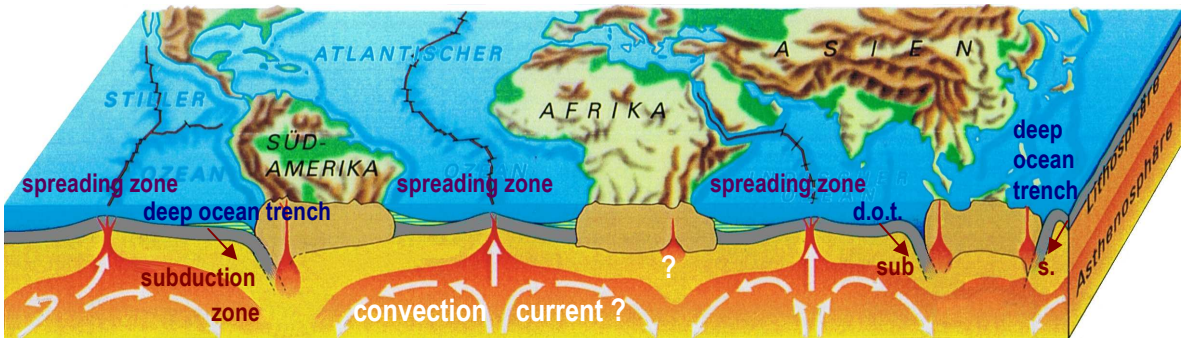


Fig.19: Tectonic processes (KLETT-PERTHES, 2001); additional inscriptions by NESSENIUS.

In the evolution of hominids the extension led to the bulging of the forehead. The cranial bone plaques do not only have a similar shape and placement as the tectonic plates. Their development corresponds to a forming process the continental masses also went through, which was replaced meanwhile by completely different processes. This block-diagram of plate tectonics is based on the conventional old model-conception of convection currents. It is supposed to show some processes happening in the **Neozoic**. The situation in the interior of the earth is certainly more differentiated (ANDERSON / DZIEWONSKI 1988). Probably the convection currents flow in smaller spaces according to the theory of mantle plumes. Yet the direction of the continent-movements, the dilatation zones at mid-ocean ridges (spreading zones) and the compression zones (subduction zones) can bee seen clearly on this picture. In subduction zones the lithospheric material is getting stuffed. The ocean floor (gray) descends into the interior and gets melted. The light continental material gets crumpled under pressure from the adjoining plates. The congestion of rock masses on the borders of plates causes the folding of mountains: Rocky Mountains, Andes and Eurasian folded mountains unto the Indonesian archipelago.

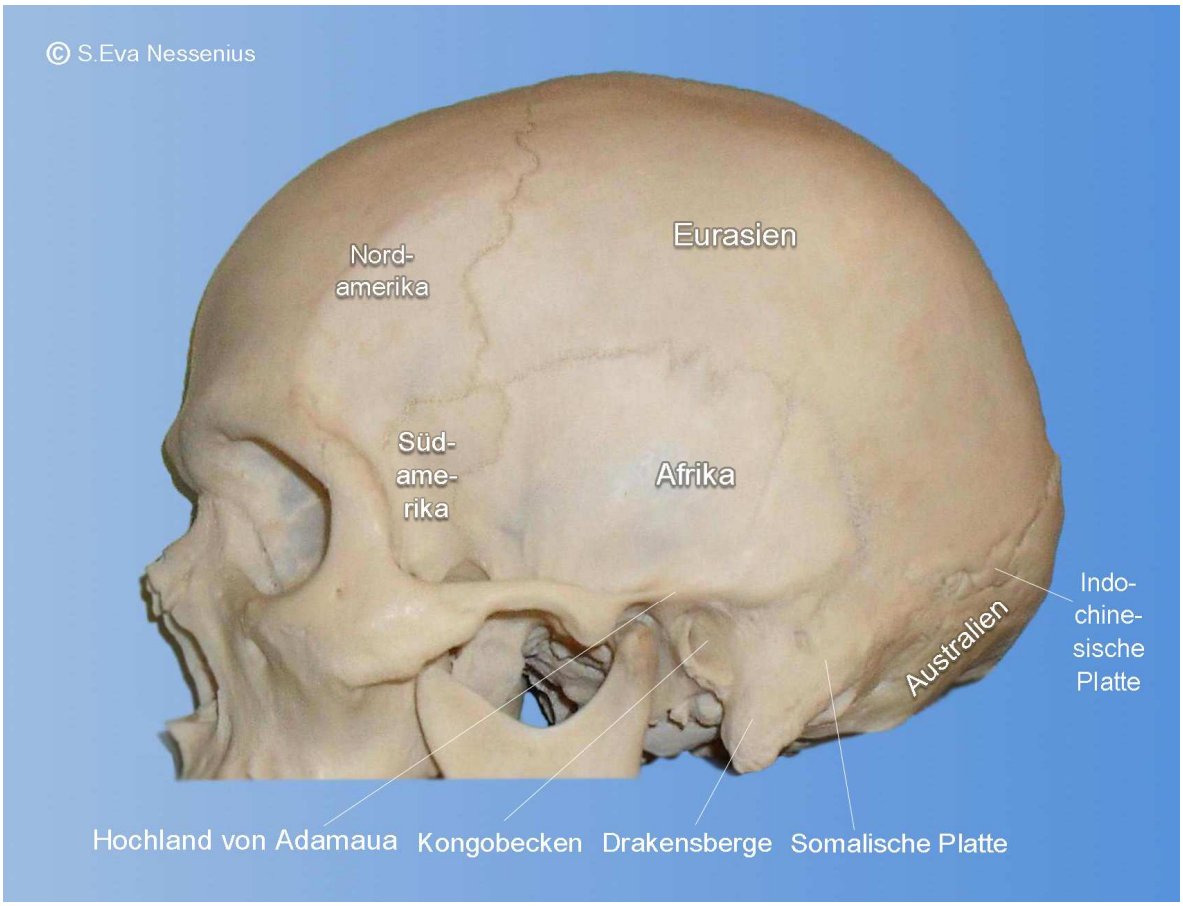


Fig. 20: Morphological correlation, compare to Fig. 59 on page 71.

Only in very early times of origin the forming of the plate-borders had biological causes. Later geo- and astrophysical causes came. Therefore the correspondences can be seen better, the further we go back into the past. Bone protuberances at the sides correspond to regions, where on the Paleomap in Silurian land masses formed, which were frozen in Carboniferous and consolidated much. This especially applies for the petrous portin, the "southern" part of the temporal bone behind the ear. The occipital protuberance correlates to New Zealand (cp. Fig. 47). Where the supra-orbital ridge passes into the zygomatic arch are the west cordilleras of America (Fig.19). Due to co-action of centrifugal force and gravity, in spite of the crust-movements, the earth keeps its shape of a round drop levitating in cosmic space. Because the cranium is carried on top of the spine and it carries the face skull, the sphenoid and temporal bone were formed on the bottom according to static necessities. The occipital bone is rounded on the bottom. This way the human head in its entirety gets its round shape. Almost all information from the sense organs and the peripheral nervous system is channeled to the brain and getting evaluated there, so the spherical head of man functionally becomes kind of a concave mirror, in which the universe can be reflected. The other vertebrate skulls consist of the same elements but some parts are varied in size and shape.

Fig. 21: Homo habilis KNM-ER 1813

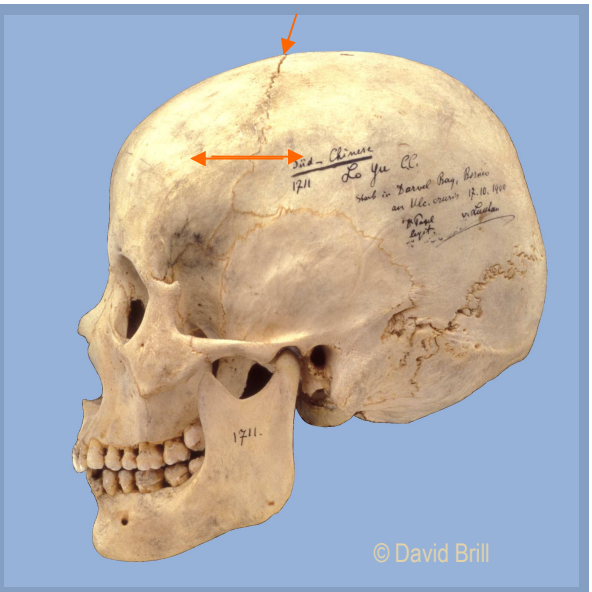


Fig. 22: Homo sapiens 1711 “Lo Yu”

The frontal and the parietal bone of Homo sapiens are larger and more convex than the ones of his early ancestor homo habilis. The face skull and mandible becomes smaller in relation to the cranium. This extension of the cranium bones in the course of human evolution correlates to the extension of the tectonic plates along the mid-atlantic ridge and other dilatation zones (Fig.16, 18 and 19). The causes for these organic forming only complied until the Paleozoic. Later the growth or dilatation went completely different ways.

The small cavity at the temple with several small sutures correlates to a subduction zone at the Caribbean plate with a deep ocean trench east of the Antilles.

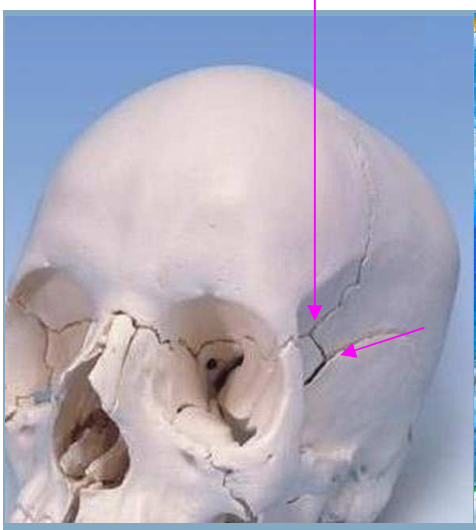


Fig. 23: Sutures at the temple

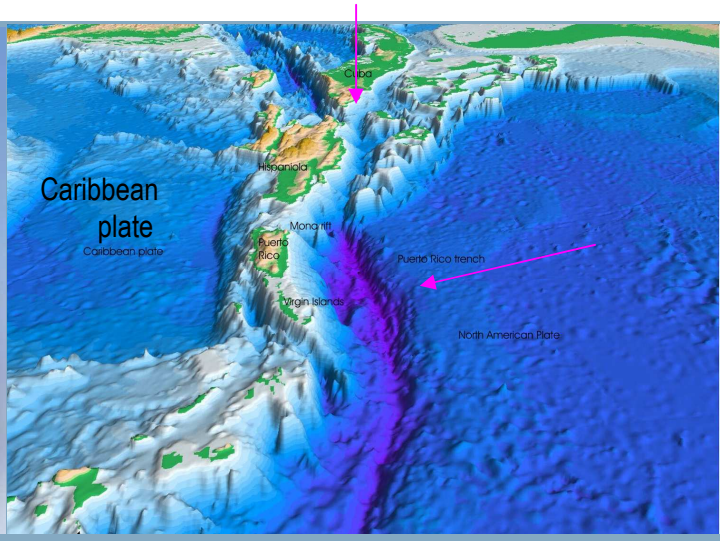


Fig. 24: The Puerto Rico oceanic trench east of the Antilles

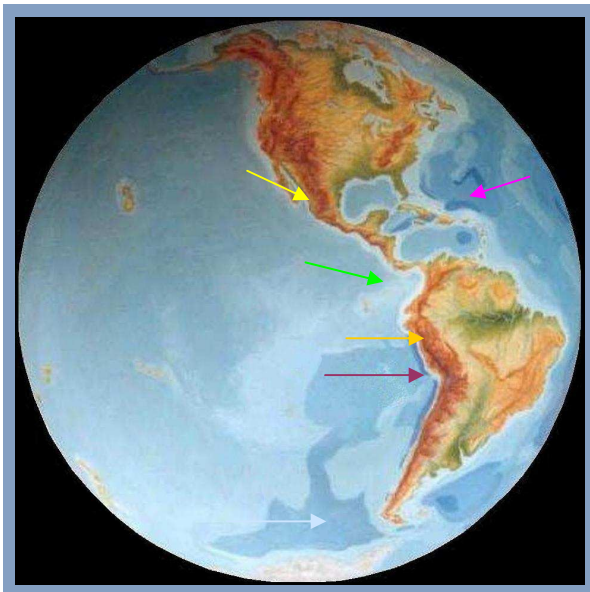


Fig. 25: Deep ocean trench between Nazca Plate and South American Plate

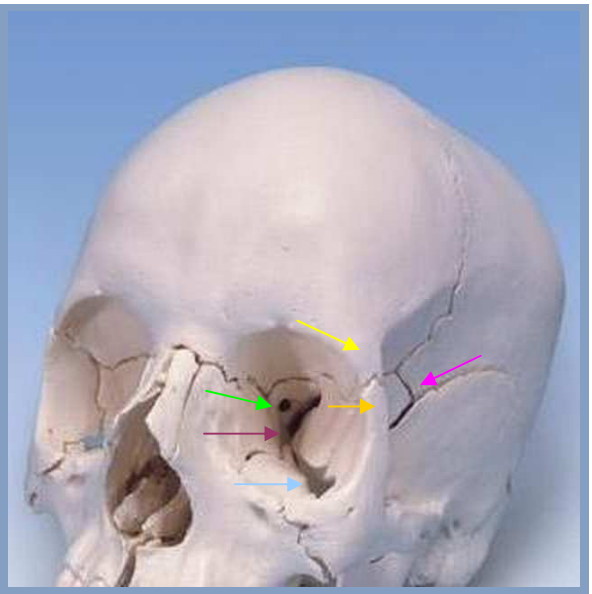


Fig. 26: Orbital fissure at the inner edge of the sphenoid bone

The eye socket is a cavity in the frontal and sphenoid bone. In it lies a gap at the inner border of the sphenoid bone, called orbital fissure. This is the correspondence to the subduction zone west of South America with the Peru-Chile oceanic trench. The ethmoid bone correlates to the Cocos plate (Fig.16 and 59).

The occipital condyle next to the foramen magnum (Fig.28) correlates to the Scotia plate (Fig. 47 and 59). Between the border of the parietal bone and the border of the base of the skull there is a small protuberance correlating to the Chinese plate with the Indonesian archipelago. The small cavities around it between the parietal bone, the base of the skull and the occipital bone correlate to the subduction zones at the Sunda oceanic trench and the Mariana and Philippine oceanic trenches.

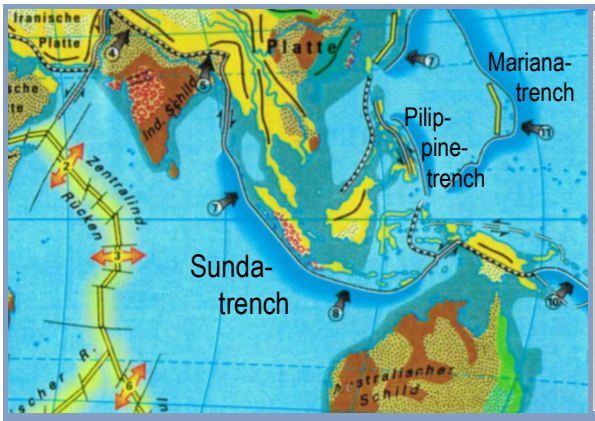


Fig. 27: deep ocean trenches at the Indonesian archipelago

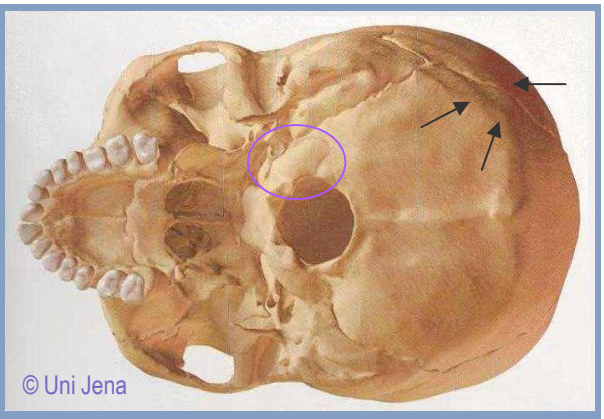


Fig. 28: base of skull

As even in details morphological correlations are highly visible, the question is to be taken seriously, if plants, fungi, animals and human beings descend from a living primordial planet. You might be tempted to look for its torso and limbs. But on the Precambrian stages of evolution there was no segmentation, so neither spine nor limbs could have developed. The former planet lived in a time, when evolution was on a stage of protozoa and parazoa.

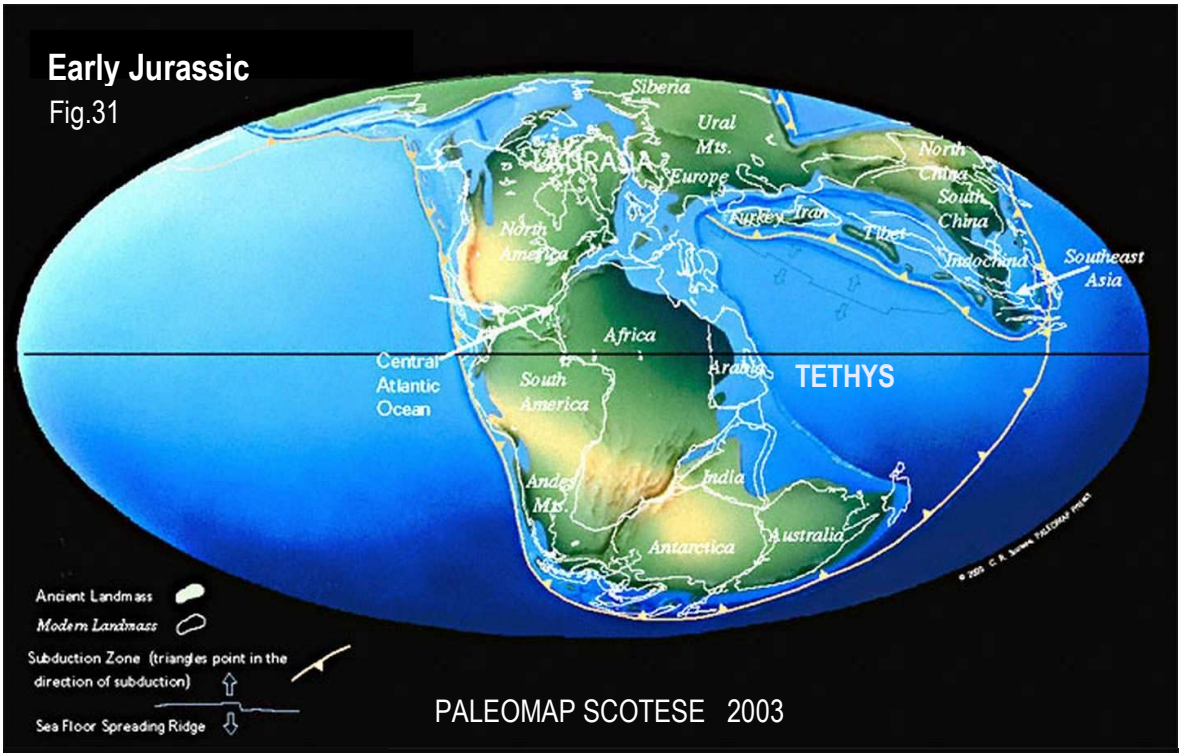

Fig.30: Edrioaster lived in Ordovician © J.K.

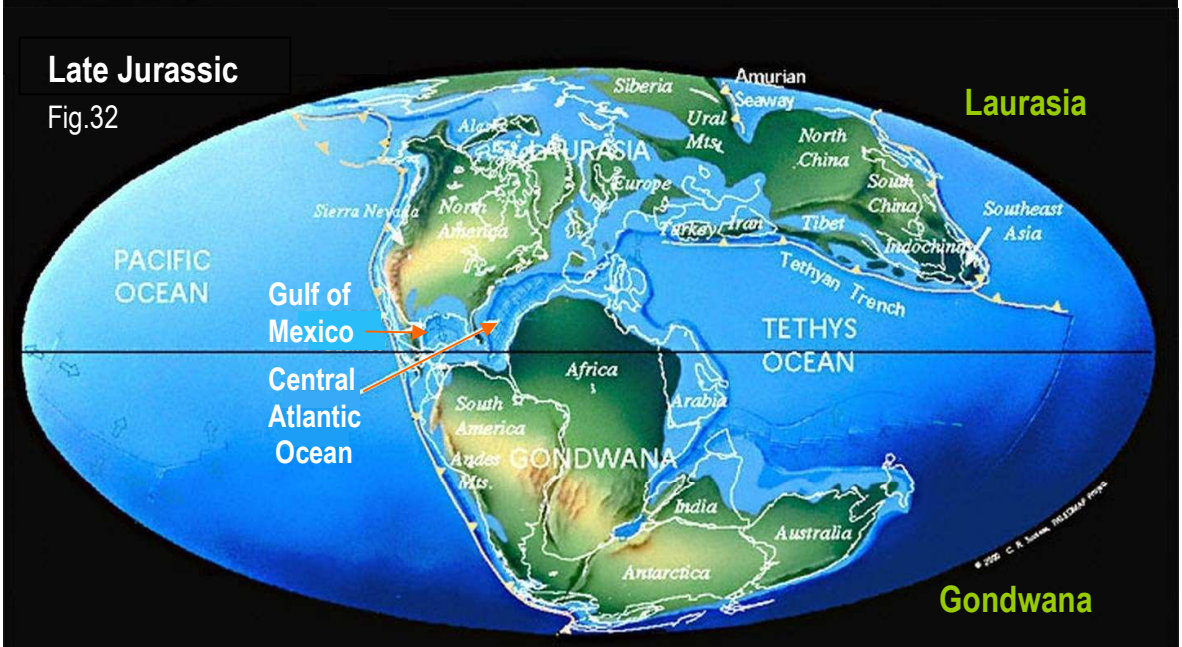
The Early Paleozoic was a time of radiata: Jelly fish resemble to the gastrula stage of the embryo. Echinoderms, for example sea urchins, are a higher developed taxon. Sea urchins are head and torso in one. Their tentacles are body axes and at the same time limbs. Characteristic for limbs is their radial order. Sea urchins have integrated them in their body ball. In the same way the limbs of the planet-embryo can be figured out as linear zones of growth on a globe. When sediments consolidate like on the Cambrian Pannotia, the stage is comparable to the stage of the sea urchin.

While the bilateral Eumetazoa came into being the primordial biosphere was slowly dying. The few parts of the lithosphere which already were above the sea level consolidated by and by. During some hot phase in the Paleozoic Pannotia divided into Laurentia, Siberia, Baltica, Avalonia and South-America, into form-elements which are rebuilt later in the embryonic heads of the vertebrates.

On the solidified earth of today there are also regions that have the character of extremities in one sense: Looking from north onto the ocean floors you see the radial order of mid-oceanic ridges: One is close to the North Pole (Fig.35 and 47). Others run meridional in curved lines around the globe. They are like symmetrical axes for the expansion of the ocean floor. The seafloor spreading along the lines resembles to the growth of the sea urchin-tentacles. Both have an increase of surface while the round form is maintained, although the growing processes have different causes today. Concerning the limbs the planet remained retarded in some comparable stage.

After this insertion two stories will be compared: The movement of the lithospheric masses and the development of the shape of the cranium during evolution, first for the **Mesozoic** and then for the **Paleozoic** also. On every stage of evolution there was one phylogenetic line of common ancestors of animals including humans, the so-called hypothetic primordial animal. As hominins have conserved or regained the primeval embryonic spherical head form, they are eligible for a comparison. Before that I begin with the super-continent that existed in Permian: At the beginning of the Jurassic time the Pangea divided in the area where the Central Atlantic Ocean and the Gulf of Mexico opened (Fig. 31, 32). Gondwana got separated from Laurasia. Gondwana already had some fissures at the end of Permian (SCOTESE 2003), obviously after a hot phase.





The original interpretation of the Paleomap should be read on the website of Professor CHRISTOPHER SCOTESE (2003). My own conclusions in this book comply with them only in main parts, because of my new idea of the biogenous origin of the Pangea. Independently from that, his cartographic presentation of the former continents and oceans is of high value for all further considerations, as it is based upon the new findings of geological research. In my opinion the tectonic explanation for the geomorphogenesis applies since the lithosphere had hardened. Before that during to the cool origin some biological morphogenesis must have taken place.

On the Paleomap after the Early Jurassic time you see an ocean opening up between Laurasia and Gondwana slowly growing larger. The gigantic volcanism happening along the rifts, which accompanied the movements, is not shown. The primordial continental masses with the layers of the Triassic on top opened to broadening rifts out of which lava flew and later hardened to flood basalt. Upwelling convection currents transported the north- and the south continent away from each other. The change over from Triassic to Jurassic was a period of worldwide mass mortality. Geologists found Iridium in those layers (KEHSE 2005). So an impact of one or more meteorites can have provoked this natural disaster at the end of the Triassic, but this conclusion is not necessary. In previous decades of geological research, another worldwide natural disaster had been already proved for the end of Cretaceous. Many species died out including the dinosaurs. In the boundary layer at the change over from Cretaceous to Tertiary Iridium had been found before, which can be caused by meteorite impacts but not necessarily.

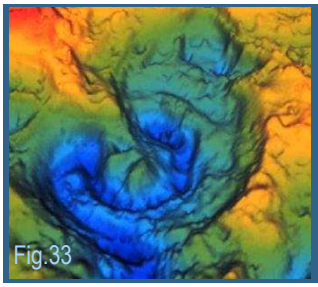


Fig.33

When the central cone of the Chicxulub asteroid was located near Yucatan under the sea sediments, spontaneously this impact was associated with the natural disaster at the end of Cretaceous. In periodicals was propagated now, the Chicxulub impact had broken the Pangea at the end of Cretaceous. But in fact before the Cretaceous the Pangea did not even exist any more. Geological drillings showed recently, that some cretaceous lime lays above the impact breccias.

The worldwide investigation of the ocean floors led to the recognition that the Pangea had divided earlier. Now the importance of impacts for the origin of rift-valleys is estimated lower. Big impacts can cause earthquakes and impel tectonic processes. But today the worldwide dating of the ocean floors (Fig. 35) gives a new basis for time-classifications. From the age of the ocean floors we can draw conclusions about the sequence of the movements. The tectonic plates do not move primarily but they broaden at their edges. This leads to a dislocation of the mainland. By the blue painted areas on Fig. 35 we see, where the division of the Pangea began in the Early Jurassic. These blue areas are the oldest ocean floors on earth. On the Paleomap (Fig. 31, 32) Pangea is surrounded by some large Panthalassic Ocean. Its dimension cannot be confirmed because according to Fig. 35 the Pacific ocean-floors originated at the same times as the Atlantic ocean-floors. Both are nowhere older than Jurassic, therefore they must have originated simultaneously. Geologists date the Chicxulub impact into the late Cretaceous today. Still not all of the experts agree upon this. If you want to consider impacts as cause for the division, the Caribbean Sea must have opened after the Chicxulub impact, because that area was Pangea mainland before. The Jurassic ocean floor in the Gulf of Mexico can only have welled up after the Pangea had started to divide. On most of the coasts being in touch until

then, the Jurassic ocean floor is missing. This means, no separation happened at first, neither between South America and Africa nor between North America and Eurasia. Only in the Caribbean Sea, on the east coast of North America and on the west coast of Africa

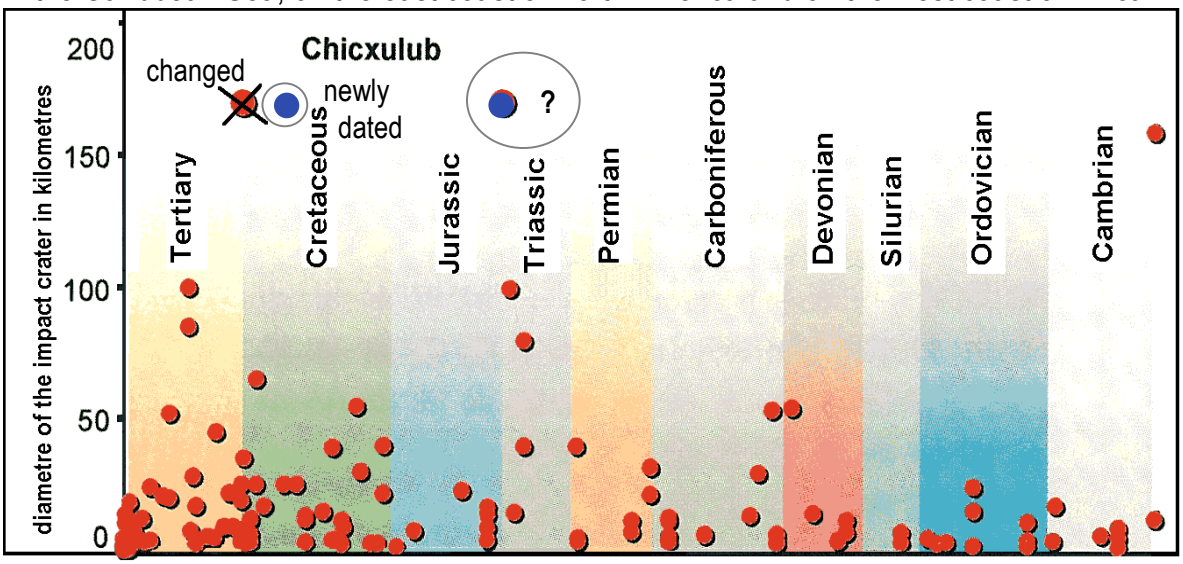


Fig.34: Large meteorite-craters according to the data of a Canadian Geologic Institute. One change: New time-classifications ● of the Chicxulub-impact. This inscription was added by NESSENIUS.

a lot of ocean floor formed in the Jurassic time. On the African east cost and on the border of Antarctica the Pangea opened too but slowly. If you want to consider the Chicxulub as cause, it would be only logic to relate it to the end of the Triassic, because in this area the separation of the northern from the southern continent began in the Early Jurassic.

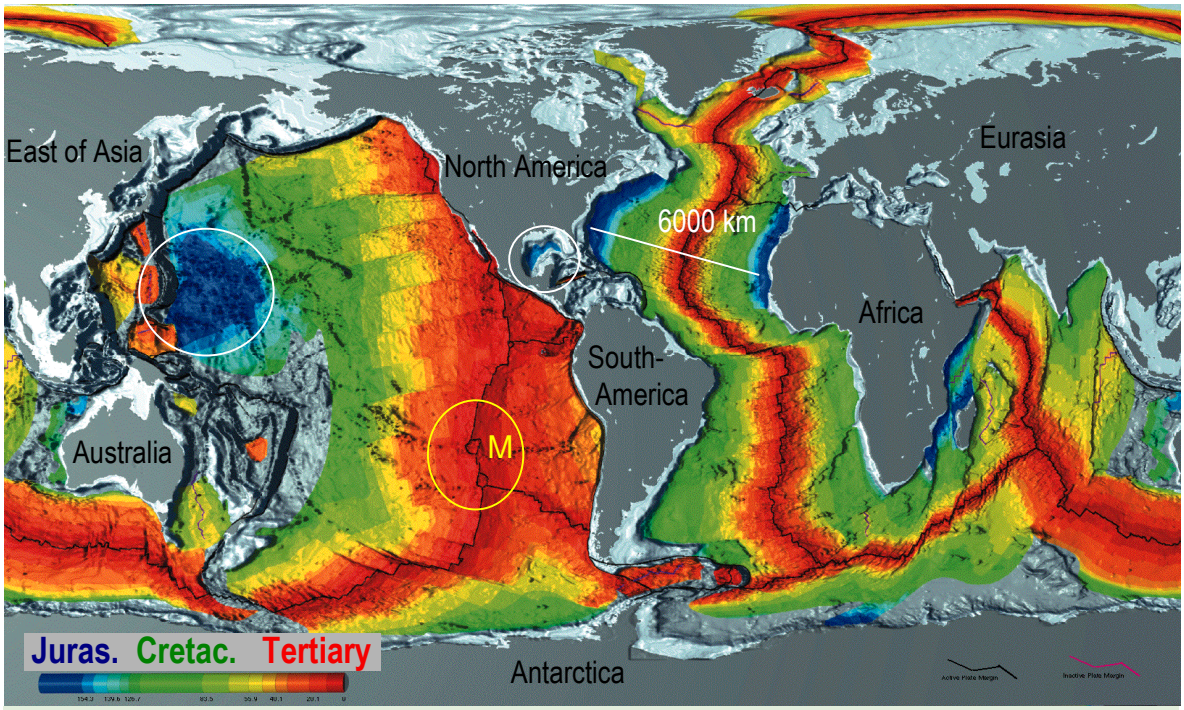


Fig. 35: Times of origin of the ocean floors. Signatures and inscriptions by NESSENIUS. The theory of plate-tectonics was over-interpreted by John Tuzo Wilson 1970. The theory of Wilson-Cycles is still taught, although it cannot withstand the new findings about the age of the Pacific ocean-floor.

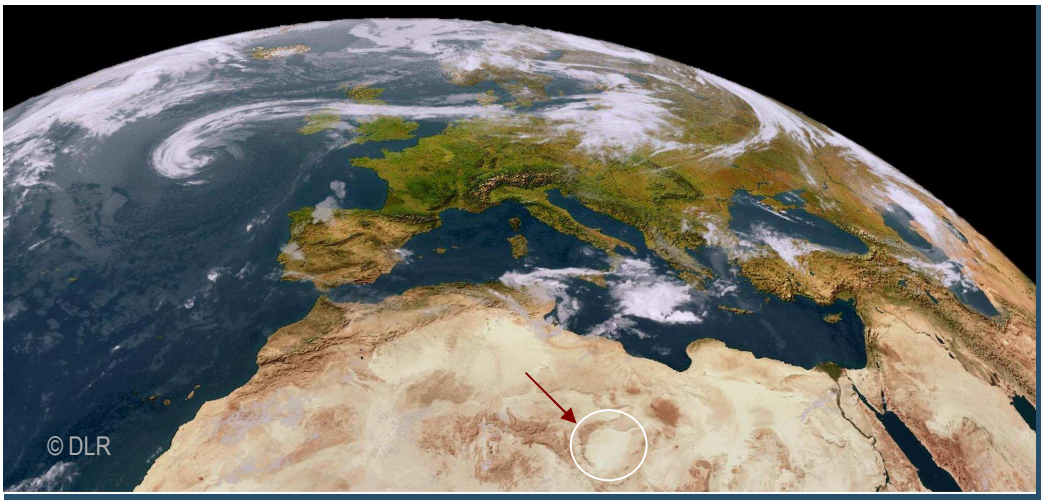


Fig. 38:
I don't know any literature about this crater.

Has it been disco-vered already ?

When the Chicxulub impact happened on earth there might have been a series of impacts at the 22nd degree of latitude. On the same degree of latitude in the south west of Lybia lies a round depression with a diameter of 300 km, filled by the sand desert Edeyin Marzuq. Today the geotectonic relevance of impacts of this size is not estimated as high as it still was 20 years ago.

7. New Knowledge about the Causes for Geodynamics

As a large part of the earth- surface is covered by oceans, the majority of impacts remain hidden to the human eye. If and at what extent they may have had an effect on the conti-nental drift is questionable. Marine volcanism and anoxic events are the reasons why the lowest layer of the Jurassic, known as Lias, has got its dark-gray color coming from sapropel on the seafloors. The dislocation of Laurasia and Gondwana went along with an expansion of the Tethys ocean floor, which indicates endogen processes. Stefan GÖTZ says, the flood-basalt-events are in a most direct time-correlation with the periods of mass extinction, and so is the one at the end of Cretaceous. During the flood-basalt-events the oceans floors arose at the mid ocean ridges. Therefore a reduced volumetric capacity of the ocean-basins caused the sea-transgressions over the mainlands during the Triassic, Jurassic and Cretaceous.

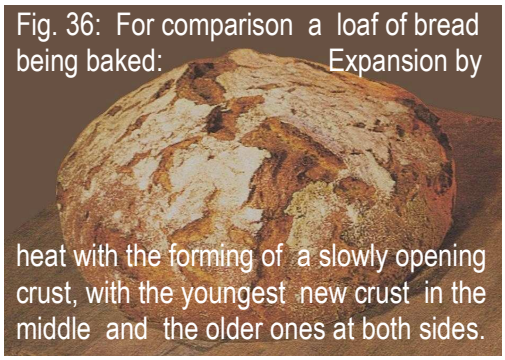


Fig. 36: For comparison a loaf of bread being baked: Expansion by heat with the forming of a slowly opening crust, with the youngest new crust in the middle and the older ones at both sides.

As alternative to the theory of convection currents alone driving the plates away from each other also an increase of volume and pressure caused by nuclear processes in the earth's interior would be an explanation for the flood basalt events. After a cool biogenous origin the precondition for this is fulfilled. A weak hot phase in the Early Paleozoic was followed by anintense heating of the earth's interior in Permian, which had as after-effect the opening and synchronic expansion of the Pacific and Atlantic ocean-floor. On the basis of a cool biogenous planet formation the knowledge of earth-expansion gets a paleobiological and geophysical basis. Before Permian there was neither Pacific nor Panthalassic Ocean.

From the Paleozoic until the Neozoic again and again flood basalts were spread under seas as well as on the mainland. On the ocean-floors this caused anoxic events leading to mass-extinctions in the marine fauna. The flood basalt events could have been an effect of interior expansion-processes, with an increase of pressure in the earth-mantle leading to these enormous eruptions of lava and to the dilatation-processes by which ocean floors originated. Reasons for an earth-expansion will be explained in detail in chapter 10. KEITH WILSON (2008) suggests an increase of mass and volume coming from the lower earth-mantle, for which some plausible geophysical explanations will be given later.

Table: Continental Flood Basalt Events and Oceanic Plateaus

Columbia	End of Early Miocene ?
Ethiopa and Jemen	End of Early Oligocene ?
North Atlantic Volcanic Province (phase 1)	End of Paleocene = Early Tertiary
Deccan	**End of Cretaceous**
Madagascar, Caribbean Plateau, Ontong Java (phase 2)	
Rajmahal, Kerguelen, Ontong Java (phase 1)	
Parana and Etendeka	
Karoo and Farrar	
Central Atlantic Magmatic Province	**End of Triassic** (Begin of Jurassic)
Siberia	**End of Permian**
Emeishan	Guadalupian, **Permian**
Viluy, Siberia	End of Frasnian, **Devon**

My Consideration: The maximums of global temperature in Fig. 5 according to STREIF/BERNER (2000) are overlapping with the times of big flood basalt events. If a rhythmic change of hot and cool phases happened in temporary coherency with the maximums of global temperature, the flood basalt events and the phases of expansion, if this could be verified, this would indicate one reason for all three of these phenomena. The term „hot phase“ is commonly used in geology. Dates for table: Courtillot & Renne: Comptes Rendus Geoscience 335 (1) 2003, from the lecture from Dr. Stefan GÖTZ, Institute of Geology and Paleontology, Heidelberg University 2008.

Several causes for the division of the super-continent Pangea come into consideration.

1. In Precambrian there were biogenous causes, which will be explained in chapter 9.
2. Since Paleozoic and Mesozoic also geophysical causes came in addition:
a) Endogenous: nuclear processes, increase of pressure, dilatation of the ocean floors, hardening and eventually shrinking of the lithosphere by drying and metamorphosis.
b) Exogenous: Big impacts opening the lithosphere so that secondarily convection currents can well up. Impacts only work punctually and can only have some trigger-function.
3. One cause has not mentioned yet, which will be explained in chapter 10.

By the natural disasters in hot phases also higher developed beings in the Tethys Ocean were affected (Paleomap 31, 32 and Fig. 35). Anoxic events caused a deterioration of the water-quality and a selective pressure on the oceanic fauna. Animals able to rise above the water surface and cover long distances flying had an advantage. The air-quality above the mainland was a problem too, but flying animals could leave disaster-areas quickly and reach hide-aways. From the Early Jurassic we know fossils of flying dinosaurs. Be aware of the sea floor spreading in the Tethys, which was the only ocean till then, providing the entire oceanic fauna.

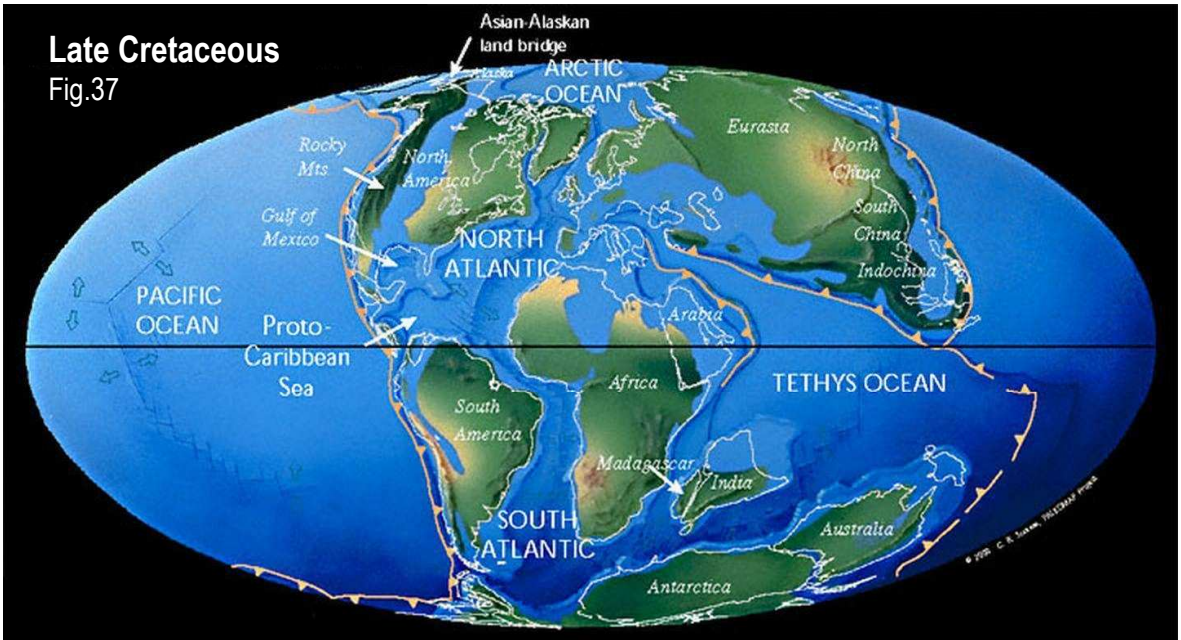
Due to expansion-processes since Triassic and Jurassic the oceanic lithosphere continued growing. In the Atlantic Ocean it grew in meridional direction first (Fig. 31, 32, Fig.35, blue). In Cretaceous South America divided from Africa and an east-west-dilatation began (green ocean-floors Fig. 35). The opening of the South Atlantic Ocean had already started in Late Triassic and went on from south to north. In Late Cretaceous Eurasia separated from North America. Since then the continents drift apart in west-east-direction, while the pacific and Atlantic ocean-floors continue growing.

The enlargement of the cranial bones in evolution, enlarging at the occipital-bone first and then also the forehead, correlates to this only morphologically. At that stage the caueses were completely different. The coronal suture developed in the area, where the mid-atlantic ridge lies on the planet. Beneath that suture the senso-motoric cerebral cortex developed in the brain, while the Atlantic sea-floor formed.

On the green marked ocean floors Fig. 35 you see, that the drifting apart of the southern continents, Antarctica, Australia, Africa and South America had already been going on in the beginning of Cretaceous. In the northern part of the North Atlantic Sea the cretaceous ocean floor basalt is missing. Laurasia divided very late in the Early Tertiary into North America, Greenland and Eurasia. This way the continents formed as central parts of the plates growing by sea-floor-spreading. Due to the dilatation of the ocean floors by seafloor-spreading, the disaster-areas at the mid-atlantic ridges around Africa moved further away from the mainland. The area around Greenland, Iceland and the British Islands with the Rockall-Plateau divided at last. Due to the flood basalt event in Deccan end of Cretaceous the Tethys Ocean became anoxic as well. In the beginning the areas around Greenland,

Iceland and the British Islands with the Rockall Plateau were not affected yet and became hideaways for the aquatic and amphibian fauna. This area got destroyed in the beginning of Tertiary. Then new hideaways could be found in over-flooded parts of Europe, later in South-Asia and then in Africa as well, after the Ethiopian flood-basalt-event hat calmed down. The global temperature in Cretaceous was 26°Celsius. Swimming beings could let themselves be carried by sea-currents. Also in North- and South-America shallow seas and lakes were reachable as hideaways for swimming and amphibian or flying beings. The ancestors of primates might have been amongst them.

In the White Jurassic (Malm) there are fossils of sharks and skates. Skates have hind limbs already. They are very intelligent. The viviparous kinds have a prototype-placenta and nine month of gestation time like humans. In Jurassic early ancestors of the mammals lived at the stage of cartilaginous fish in the Jurassic ocean. Their ancestors came from the Tethys, which was conjoint with the Jurassic Ocean. From Malm to Paleocene our ancestors could spread out in shallow seas from Europe to South of Central Asia and in the Eocene they could reach North Africa along new shallow zones.



Because of volcanism undersea the oceans were not always as blue as on this schematic map. At the end of Cretaceous again flood-basalt welled up in enormous masses. Large areas of the oceans were affected by anoxic events with mass extinctions again.

8. New aspects about Evolution

The skeleton of a human baby in the amniotic fluid, consists of cartilage. According to the basic biogenetic rule we may expect similar ancestors in evolution. Can we consider beings like skates, cartilaginous fish, as early ancestors of mammals, although the lungfish are bonefish already? Lungfish have much more DNA than humans. Today's existence of the mudskipper shows the possibility, that comparable steps in evolution like from fishes to amphibians can happen several times, in this example once in Devon-Carboniferous from lungfish and then again in the Neozoic. If amongst died out cartilaginous fish there were ancestors of aquatic placentalia like skates, one can figure out, that bony fishes stemming from them can also have a rich DNA-equipment without necessarily having to be our ancestors. Cartilaginous fish then come into consideration as ancestors of later amphibians and aquatic reptiles, having an amnion and being viviparous like skates, which did not any ossified skeleton and therefore did not leave any fossils in Cretaceous, and such as ancestors of mammals. Genes should be examined under the aspect of a possible variation of time regarding evolutionary steps. Embryonic cells are less differentiated than the genetic information they contain.

The adaptive radiation is a multitude of specializations by reductions and overemphasis of characteristics especially required by terrestrial life or under less comfortable conditions in the water. There genetic information gets reduced secondarily. In optimal watery environments the embryonic multi-potency is rather being maintained allowing new developments. Primarily it lies in the germ-line. Gametes are aquatic unicellulars living either in exterior water or in the interior of the body. Genes do not only change by mutation but also by an horizontal transfer of genes smuggled in by viruses and endosymbionts.

Regulation processes in the nuclei decide, which parts of the DNA will be on introns and which on exons. Genes laying on introns are passed on as sleeping genes without any expression. Furthermore there is multi-potency in embryonic development, where inside the tissues signal-proteins decide which parts of the genome will get expressed in this individual life via regulation of genetic activity. This primarily only has an effect on the phenotype, but this is where the selection interferes, aligning or stabilizing. An embryo in the uterus, protected from all exterior selection-pressure, is being stabilized in its qualities, if they are new ones, and if they are primordial, it is getting stabilized as well. This is the cause of fetalisation. New characteristics can evolve a long time before they function as adaptations. According to the biogenetic basic rule, which also applies for development-potential, less differentiated cells maintain more of their future potential to evolve.

Terrestrial life is accompanied by a selection- and specializing-pressure, which can not affect an organism living in an optimal aquatic surrounding. A high content of stem cells in the tissues is an embryonic quality pointing to closeness to the origin. Amphibians have a higher ability for regeneration than reptiles.

The webbed hands and feet of human embryos point to their aquatic ancestry. In an early stage of its embryonic development, after the gastrulation, every vertebrate embryo is still a protostome. In late neurula stage vertebrates develop a completely new part of the head, protostomes don't have, in which a brain and a face are developed on the opposite side of the blastopore lip (Abb.56). It was called „new head" and in my opinion this is a new segment grown in forward direction as well as the eye. Segments grown in cranial direction often have the shape of a ball, which is a shape from the past, while segments formed in downward direction or to the sides grow more in a radial shape. The vertebrae have a medium position with the vertebral canal as empty space similar to the one in the cranium with radial elements at both sides having the character of limbs, especially if ribs are connected to them. Because, according to the knowledge about the metamorphosis of the vertebrae, the cranial bones are formed out of the same elements as the vertebral bodies. So they are a further development of something that existed before and now manifests as a new relatively large segment transforming to the cranium.

Regarding the earth the basic shape of Pangea with its several continental parts was not there from the beginning, as you see on the Paleomap showing the stages of the planet-embryo since the Cambrian. The planet-embryo first formed the primordial mass Pannotia, dividing in a first hot phase in the Paleozoic. After that successively more masses arose from the water forming the Pangea. Until Permian the lithosphere was still alive in some regions due to the humid climate of Carboniferous. On the basement preformed by the Precambrian and Paleozoic sediments coral reefs grew, forming a **geomorphologic cast**.

In the Paleozoic the genetic information for the shape of the Precambrian basement had already been conserved in the genes of certain descendants of the Precambrian biosphere. Cranial bones form late in embryonic development. On earth solid tectonic plates formed since Permian when another hot phase caused a drying out, consolidating and dying off of the lithosphere. The land-reptiles of that time lost the closeness to the origin. Complete hornification is a characteristic of accelerated ageing. This does not indicate that they could be the ancestors of the following higher developed vertebrates. The land-reptiles have a high specialization for an adaptation to arid climate. They do not have the qualities of genetically multi-potent generalists any more. The size of their brains in comparison to their body shape and the consolidation of their skeleton do not indicate any significant cerebral development-potential.

Amongst their ancestors, already splitting up into several phylogenetic lines in the ocean, were ancestors of Archaeopteryx and of the transitional fossils between reptiles and mammals stemming from aquatic transitional forms living in the Tethys. The transition onto land was enforced by the drying out of waters or by oceanic anoxia events, which both created a high selection-pressure in direction to terrestrial life or life in the airspace. Only those marine living beings could stay in the water, which were living in oceanic regions, where they would not be affected by the toxic substances getting produced under anoxia conditions, occurring regularly during the flood basalt events.

Many Reptiles had already changed over to terrestrial life in Permian, when adaptations to dryness where necessary. Still the terrestrial mammals cannot not stem from land-reptiles but from aquatic viviparous beings developing further their heart and circulation-system. The later new animals left the water, the more advanced they were. The oldest mammal-fossil Hydraconium wui lived in Jurassic and so did Castrocauda. So the placentalia-stage was already reached in the Jurassic descending from the skate-like ancestors.

The primates developed from beings, which escaped from the natural disaster in the beginning of Tertiary leaving the hide-away habitat in the North Atlantic towards Asia, Africa and America, and then lived in shallow seas and tropical lakes like the Congo- and Amazon basin. Warm waters were the exterior womb for their further development, while as viviparous beings they could shelter their embryos in the uterus from selection pressure. Until the middle of Tertiary many new genera descended from them, some reaching a more advanced stage. The ancestors of hominids lived on land since the Tertiary. Their ability to shelter their children from selection pressure must have been an important factor too.

Volcanic ashes reduced the global solar irradiation. The drift of the African plate towards north and its docking to Europe changed the oceanic circulation. Before this dislocation the Tethys extended unto the Mediterranean Sea. The elevation of young folded mountains created glaciers reflecting the solar irradiation. This had an additional cooling effect. Both were some of the causes for the approaching beginning of the ice age. On the geological time scale the paleoclimatic global temperatures are inscribed according to STREIF and BERNER (2000).

9. Newly Discovered Causes for the Development of Tectonic plates

After the theory of convection currents was established, it was said, they would break the continents (John Tuzo WILSON 1970: „Wilson-Cycles“). According to this the African continent would break in two one day. Yet the rift system can not open further, because the African plate is circularly surrounded by mid-ocean ridges in the west, south and east. Upwelling convection currents beneath the ridges push from all three directions and keep the plate together. The resulting force makes Africa move towards north, where it meets the resistance of the Eurasian plate. In the African plate along the rift system a dilatation from inside takes place. Therefore there are active volcanoes. But at the same time an external centripetal pressure holds the plate together, so it cannot divide. Later one came to the view big asteroid impacts would divide the lithosphere. Thus the movements would have a punctiform starting basis. We need to keep in mind that the Jurassic and Cretaceous sediments at first existed as reefs and alluvium in ocean beds. So no steep plates were moving but lithospheric masses with more compact central parts broadening on their edges by seafloor spreading, which led to a dislocation. Only for the Neozoic “tectonic plate” is a perfectly adequate labeling everywhere. The theory of Wilson-Cycles presupposes only solid plates and continuous convection currents as activator and driving force, while

subduction and dilatation keep each other in balance. This is outdated. Nevertheless the sea-floor-spreading and dilatation seem to happen exactly in the described way (Fig. 19):

Under the mid ocean ridges the earth-mantle bulges due to a release of pressure. The measurement of thermal radiation and gravity shows, that the magma lies closer to the surface there and forms mantle plumes. On the inclined surfaces of the mantle plumes a momentum is created, discharging into the opposite horizontal directions, so that the plates slightly move away from each other. This is enhanced by the horizontal convection currents on the sides of the mantle plumes. Thereby gaps open: the Rift Valleys. From underneath lava flows into the gaps, cools down and fills them with basalt. This happens repeatedly and makes dilatation of the ocean floors a continuous process. The continental plates stay in touch, as the leaking out lava fills the new fissures. This way the plates grow at their edges. On the opposite sides of the plates compensation follows at the deep ocean trenches, which are subduction zones. There the plates consisting of ocean floor basalt are getting pushed under the proximate plates and melted in the earth-mantle.

A special case would be a sudden broad band-shaped opening in which magma can well up in enormous masses, because the weight of the upper layers is suddenly missing. So powerful currents can well up and cause fast and wide drift-movements. This was the case at the end of Triassic and end of Cretaceous during the hot phases. As the magma cooled, the process slowed down. Large surfaces of basalt were formed. At the subduction zones next to the deep ocean trenches the folded mountains arose. The higher they became the more draft they got, like icebergs. The draft has a braking effect on the submerging plates. This way the movement slowed down once more. From both facts we may draw the conclusion, that in former times the continents were drifting at a significantly higher velocity or to say it differently: the central parts of the tectonic plates were dislocated at a higher speed due to the growth of the sea-floors at their edges.

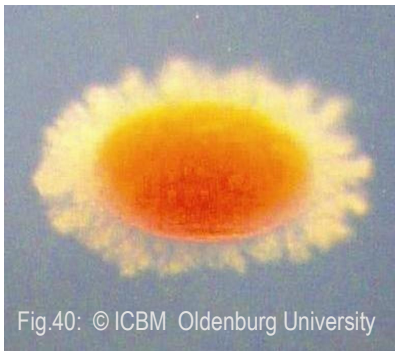


Fig.40: Colony of anaerobe bacteria from the Juan de Fuca Ridge.

Growth is the amplification of a mass maintaining a certain immanent order, in which added materials get integrated. The growth of the tectonic plates today is no life process. But in Precambrian and Paleozoic time a growth by life processes was possible, when the primordial shapes of the undersea continental masses were formed.

Today under the mid-oceanic ridges magma heats the water in hollows between the sea bed rocks, creating hydrothermal springs (Fig.4). In them and also in the ocean floors lives a multitude of archaea-species. In all probability they have been living there for a long time. Their environmental conditions are similar to the primeval conditions. Such organisms amounted a large part of the former living world in the Precambrian.

In the **Precambrian** on the edges of prokaryote biotopes large as continents lived primeval microbes in highly loosened textures of less differentiated cells with high cell division rates. These mellow zones were living zones of growth. Along these lines in the planet-embryo in Precambrian and Paleozoic the ground of prospective landmasses could open easily. For certain methane producing microbes in the deep biosphere today environmental conditions improve by earth-quakes. Movements of the environment enhance their reproduction activity (KEHSE 2007). On the Paleomap given colors provoke the impression of a distinct separation between sea and land. But wide areas were swamplands, peat-bog and shallow water zones. The prospective land masses undersea were full of life. They did not all consist of solid rock yet. In Precambrian the shapes of the deeper basement had grown because of microorganisms, on which since the Cambrian and Ordovician coral reefs built layers of sediments (cp. back-cover). Comparing maps of the Paleozoic you see, how early land masses broaden beginning from central zones by adding new material at their edges, partially arising over the water-surface and becoming land. This was a biological process. In a similar way the cranial bones of mammal embryos grow at their edges along the epiphyseal zones. Now I will focus on three geological stages chosen exemplarily in order to compare them with the embryo's head:

In **Silurian** the material to create preliminary continental masses increases in such a way, that it already begins to partially elevate above the surface of the primordial oceans in insular forms. In the human embryo in the seventh week all tissues are soft and have high water content. Mellow tissues of the head are visible that partially condense. They correlate to the regions with the oldest native rocks on earth. The watery transparent zone correlates to the ancient Paleotethys Ocean (Fig. 41 and 42).

In **Carboniferous** the continental masses begin to appear as large areas, especially Siberia in the north and the prospective North America in the equatorial zone. The prospective Africa, South America and Antarctica are connected with it on the southern hemisphere. The primeval Amazon-basin is visible as shoal semi-enclosed sea with its former connection to the pacific. In the south east very far away from it, the prospective Australia appears. In between lies the Paleotethys. The ice flood in the south indicates a consolidation. On the human embryo you see the embryonic connective tissue with the anlage for the head shell slightly consolidating in the area of the prospective temporal bone. The anlage for the occipital bone appears in large distance far behind like Australia (Fig. 43 and 44). In between lies the broad very watery area correlating to the Paleotethys.

In **Permian** almost the whole Pangea emerges. The Paleotethys becomes smaller for the benefit of land masses in the south-west. On the embryo the shape of some not yet ossified cranial bones is adumbrated. Sphenoid, temporal and occipital bone form a Gondwana. The watery tissue between occipital and parietal bone correlating to the Paleotethys decreases. The anlage for the cranial bones becomes prominent. From the twelfth week on in a delicate way the ossification slightly begins (Fig. 45 and 46).

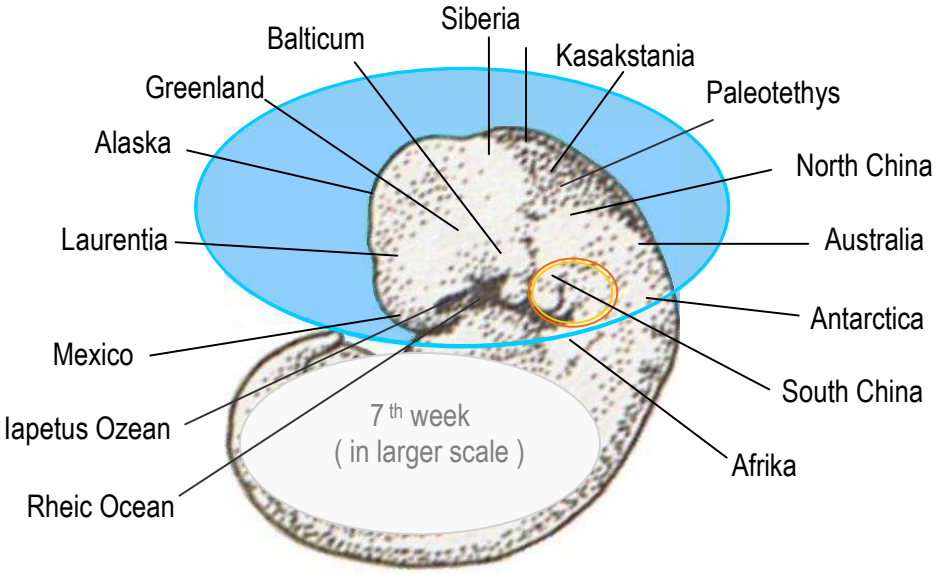


Fig.41: Human embryo in the 7th week = tissue from the blastopore lip (cp. to Fig.56)
Torso and limbs are not ought to be regarded here, but only the tissues belonging to the head.

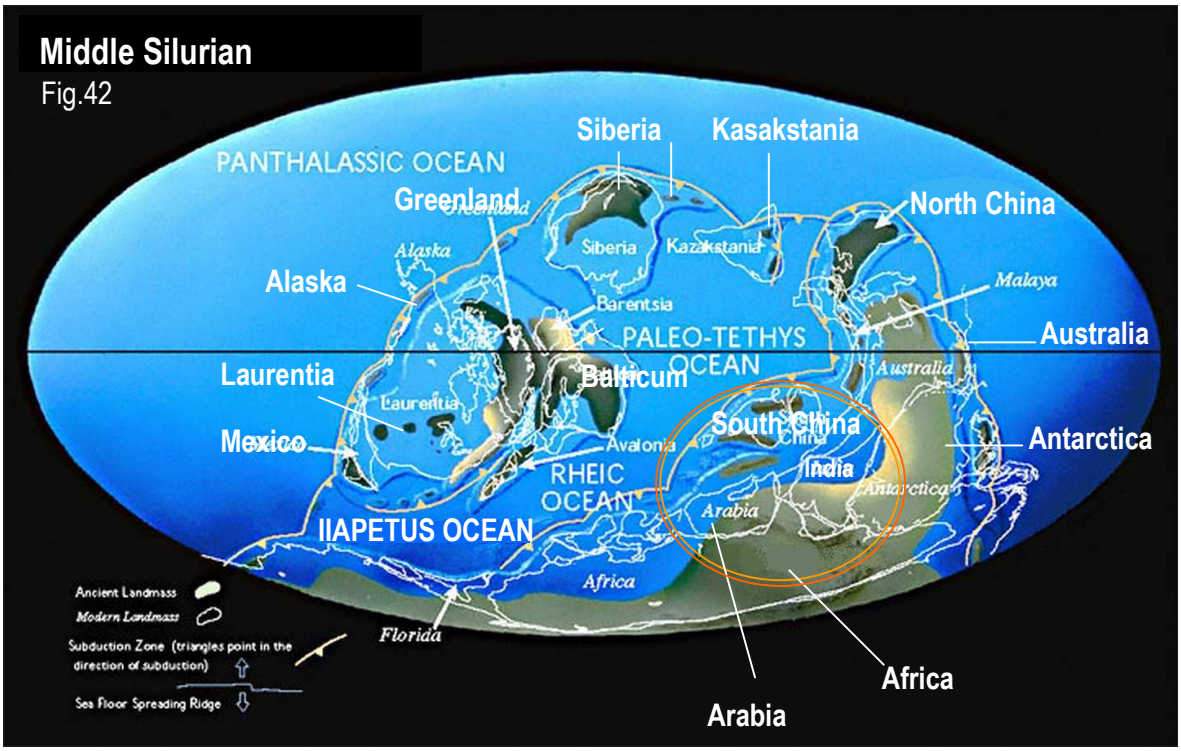


Fig.42: Paleomap SCOTESE 2003: Silurian. Larger inscriptions added by NESSENIUS. The painted Panthalassic Ocean did not exist. The planet-embryo only consisted of the area surrounded by SCOTESE (for other reasons) with the fine serrated line. The flat painting is only a projection. You can also figure the whole thing without the Panthalassic Ocean very well as some round planet-body.

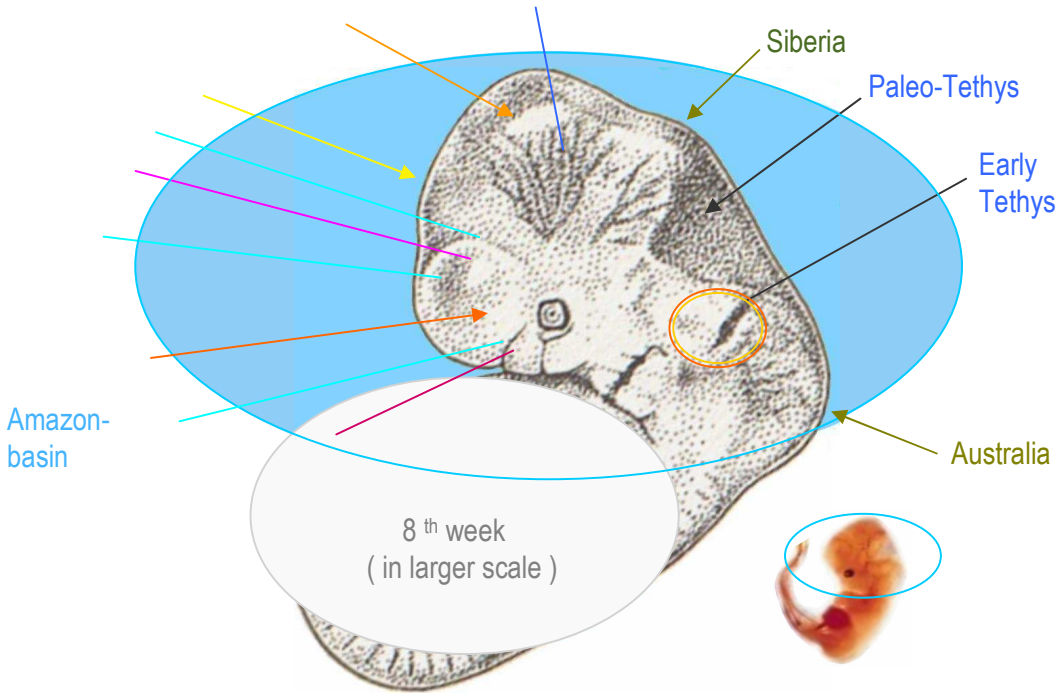


Fig.43: Human embryo in the 8th week. = underneath was the blastopore lip = early Tethys
Torso and limbs are not ought to be regarded here, but only the tissues belonging to the head.
The same color of arrows on the pictures above and below means morphological correlation.

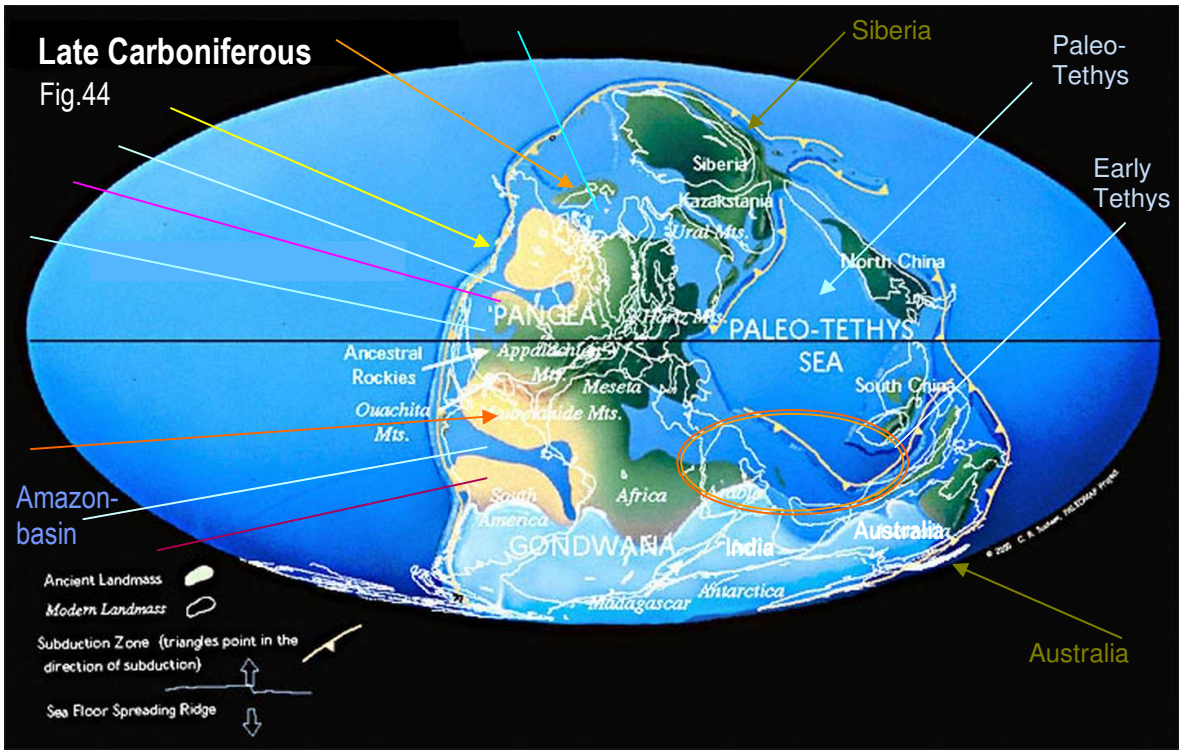


Fig.44: Paleomap SCOTESE: Late Carboniferous. Larger inscriptions and arrows by NESSENIUS.

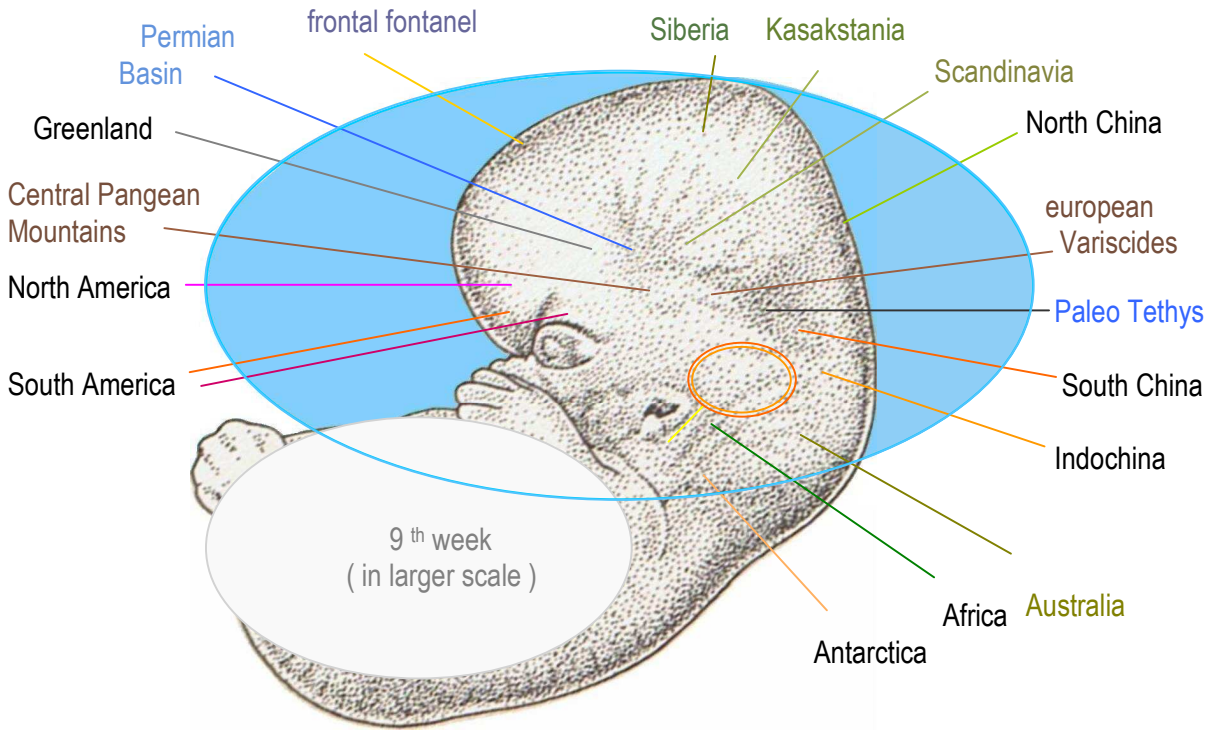


Fig.45: Human embryo 9th week = in here underneath once was the blastoporc lip = Tethys. The torso and limbs are not ought to be regarded here, but only the tissues belonging to the head.

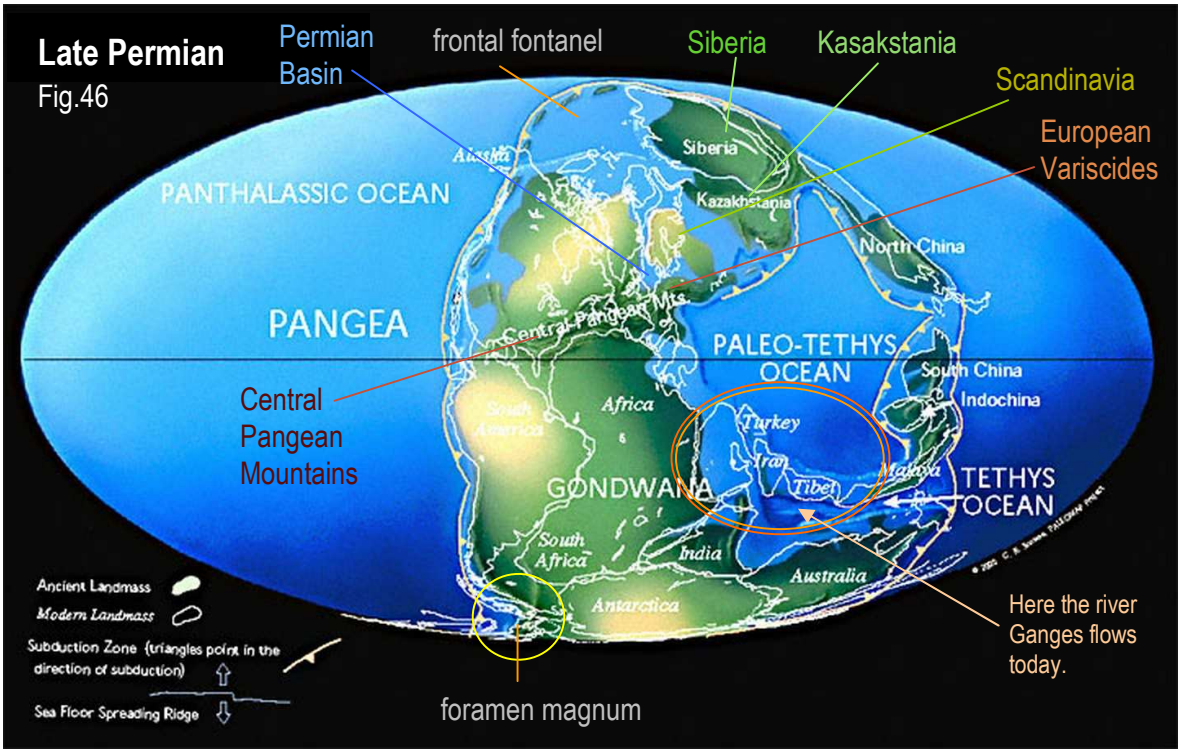


Fig.46: Paleomap SCOTESE: Late Permian. Yellow lines and colored inscriptions by NESSENIUS.

In the Precambrian biosphere there must have been an entirety of genes, being passed on in various fractions to its multifarious descendents, to the diverse early phylums originating during the Cambrian radiation. They developed further only the fraction they had received, like from tissue stem-cells that – in contrast to gametes or spores - can only activate some reduced fraction of genes. The bearer of this entirety of genes was the hypothetical ancestral vertebrate. His genes where present in one single segment, which still was no segment but just one gigantic spherical planet-being with a complete organic equipment as you find it in jelly fish and in shells. Some of his early descendants were the jelly fish, having their entire equipment of organs just inside their „head".

Ediacara beings and Coelenterate-colonies then built the prototypes for segmentation as a new construction principle. Later on segments specialized, reduced some fractions of their entirety of genes and developed other ones further. From the Annelids upwards the forming of colonies happens inside the embryo itself, inside one individual when the segments originate. The entirety of genes of the primordial biosphere was a gene-pool, as many prokayotes are able to perform horizontal gene-transfer. According to SCHAD (lecture) the criteria to call it one species are fulfilled by this. This species was the hypothetical ancestral animal at the same time, although it was not an animal, because it consisted of foto- and chemo-autotroph prokayotes, about which it has become clear, that they are no singular beings but they form associations as colonies and biofilms, as biocoenose, not fulfilling the criteria of real tissues but having comparable ecological team-work-functions.

These colonies of halobakteria, chemo-autotroph bakteria, cyanobacteria and archaea lived in one entire global formation as one global organism. All the eukaryotes stem from them, beginning with the Protists, continuing with the Parazoa all the way up the line of higher development unto the vertebrates. According to the theory of endosymbiosis the eukaryote-cell consists of combinations of cells from the Prokaryote world (MARGULIS). In them genetic information has become functionally conjoint. Evolution science only pays attention to the separations into different phylogenetic lineages. We should consider the fact with the same priority that genetic information of seemingly separate organisms can conjoin in a higher developed one, as you see in the eucyte and also in segmented beings, where specialized segments work cooperatively in one organism. So the spherical human head by reactivation of an entirety of genes develops a shape, the planet-embryo had as a global being. Planets form from a spherical pending primordial soup with living cells in it.

As theories of planet origin, the theory of accretion and also the theory of turbulent currents do not show any experimental repeatability in nature. The only proof is some repeatable computer-simulations, only leading to the wished result, when disturbing cosmic factors are eliminated. Thus the computer-simulations themselves are proving, that these theories are not appropriate. The theory of accretion has led the paleo-biologists to all the problems, they have today. And this is not the fault of the astronomers, because geologists wanted some magma-globe, and the astronomers did their best, to satisfy this wrong expectation.

It seems like we need to create the living out of the dead, although everyone can see, that the succession is just the other way round everywhere in nature. Wanting to make the living originate from dead material is a construct, the more so as it is methodically incorrect to use “deeds of god” as an excuse when our own theories become incomprehensible. We can explain life by the means of natural science quite well, acknowledging the fact, that life precedes death – always and every-where. This is the scientific regularity I am referring to. If we reject abiogenesis saying „omnis cellula ex cellula“ why then should we try to make life originate on a former glowing globe sterilized by heat? Or we figure spores from outer space bringing life to earth, on the other hand emphasizing destructive effects of radiation in space. Why should we transfer the same old problem to another planet? The question, where the water came from, would still remain unsolved. „Decades of heavy rain“ is no answer, if there weren’t any clouds. A biogenous origin of planets from watery nebulas in a protoplanetary disc around a young protostar in a habitable zone is the logical explanation. Life in that stage would be to understand in the broadest sense as explained on page 6.

On some Protists a plasmatic heredity of surface-structures can be seen. The planet-embryo passed on some predisposition for intramembranous osteogenesis, but young embryos still don’t have any bones. From the gastrula-stage as soon as they have a mouth they are a head. In later stages some have got a brain in it, some don’t for example jelly fish or shells. The basic shape of the planet-embryo can still be seen at the skull-bones of most fetalized vertebrates. But the shale formed by metamorphosis out of primordial sediments and the coral-reefs, having grown on them, are not homologue to the skull-bones. The way each if them is mineralized is completely different. On the planet-embryo sediments were solidified in cold phases, baked in hot phases inducing metamorphosis while being solidified drying out. On the basement shape descendent organisms produced solid materials i.e. reefs and thus gave to it some corset by which a **geomorphologic cast** of the living planet-embryo’s former existence is conserved. The planet-embryo slowly died. Some off-springs stayed generalists continuing the phylogenetic lineage of the hypothetical ancestral animal unto the hypothetical ancestral vertebrate. Much later in evolution the vertebrates developed a special kind of cells called osteoblast-cells able to integrate some stabilizing material into the inherited homologue shape of skull-bone tissue. The material is Apatit, which can also be found as a mineral in the lithosphere.

The primordial planet-being consisted of unpaired form-elements. Otherwise there wouldn’t be only one of each continent. His consciousness must have been on a state comparable to the consciousness in our asymmetric intestinal organs, working well without being connected to a central nervous system. With the Cambrian radiation the Bilateria appeared as a completely new stage in evolution. They formed many tissues and organs now in duplicate, that had been unpaired before, and they developed new life-forms, which can be derived from the multifarious ancient ones by looking at them thoroughly.

Now it has become evident, that the embryonic development of the cranium correlates to the geological development of the planet regarding the shape that in both cases life processes have led to this shape and that ancestry is the reason. If our genetic memory remembers the primordial shapes so well, the continuously developing common ancestor of animals and humans (=hypothetical ancestral animal), representing one phylogenetic lineage, must have been existing from the very beginning. The animals have specialized and modified in various ways. The human being maintained the primordial shapes. Life did not origin on a dead earth out of germs from outer space. It derived from a living primordial planet. Components of amino- and nucleic-acids in comet- and meteorite-material approve the biogenous origin of all cosmic rocks.

There are more formerly living cosmic orbs that were changed into rock in the same way, where you see, that they have construction-elements of a primeval head. If you can see this, depends on a few factors, for example if the features are covered by an atmosphere as on Venus, or of they are freely visible, if one can approach an object close enough, to take a photo of its surface without loosing the overall view because of the size. Exogenous forces and sedimentation on Mars have reshaped its surface, but still some sutures are visible. For a really good close-up overall view on an picture the Comet Temple 1 was proper because of its small size. Herewith I am <u>not</u> saying, that the anatomic labeling

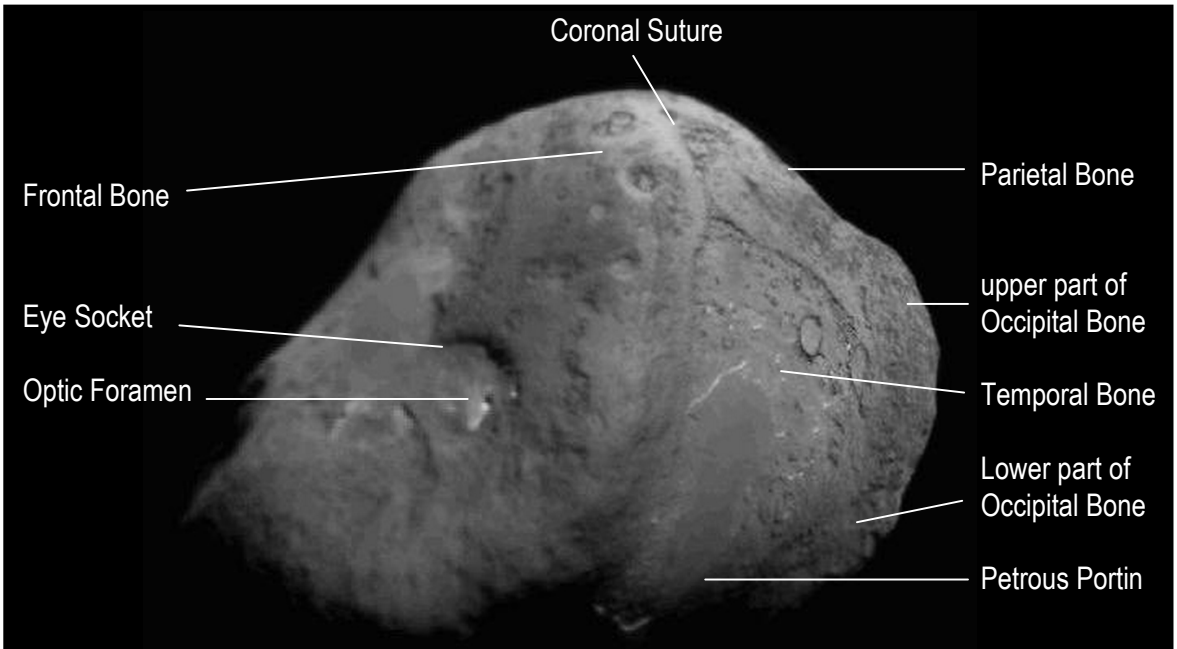


Fig. 46b: Comet Temple 1: This is not a phantom but a formation of biogenous rock. © NASA

I am using here would have been appropriate in any way for this former living being. These inscriptions were added only in order to show, that in former very different living beings the same shape-elements already existed, that there was some kind of homology before.

The multitude of genomes of the early so called lower plants and animals can be explained much better with a derivation from a living planet-embryo having a rich equipment of multifarious tissues, (I am not using the word tissue in the conventional sense here), than with a sowing of hypothetical spores resistant to heat and radiation coming from outer space as organisms only having a short circular-DNA or RNA with very little genetic information. According to the theory of panspermia as well as according to the idea of cell-origin in black smokers such genetically very poor germs would have to be the ancestors of all the existing organisms. The question, how during the Cambrian Radiation such a multitude of organisms evolved in such a short time, can be answered much more plausible with the poly-phyletic ancestry from many different „tissue stem-cells“ .

10. An Unpaired Pangea?

It is remarkable, that each of the tectonic plates exists just once, although the cranial bones are double. Shouldn't the earth-skull also have two halfs? It doesn't for some traceable causes: Earth does not stem from the vertebrates. It is the other way round. The super-continent formed one-sided.

According to the theory of Wilson Cycles the Pacific Ocean would have been larger before the continents drifted apart. Its area should diminish. But the research of the Pacific ocean-floor shows that it emerged by sea-floor-spreading and nowhere is anterior than Jurassic (Fig.35). This theory only works, ignoring the east-pacific mid-ocean-ridge. Presupposing an earth-origin from some magma-globe, paleogeographic maps were just drawn as if there had been an ocean of such extent ever since, although there are no features indicating this. The Pacific ocean-floor formed by sea-floor-spreading in the same time, when on the other side the Atlantic Ocean opened and its area dilated. On figure 35 „age of ocean-floors“ you can see clearly, how small the pacific still was in the Early Jurassic. At that time it only covered this small area east of the Mariana trench painted in dark blue on the map. In the Late Jurassic the light gray-blue area east of Australia was added.

The “old hole” lies on the same geographic latitude as the Gulf of Mexico and has the same age. Did any impact go down there at the change-over from Triassic to Jurassic time or was there already some lack of material? Independently from the open question about the trigger for this opening, one thing is visible: The activity in producing new basalt ocean-floors in Jurassic, Cretaceous and Tertiary was significantly higher in the Pacific Ocean than on the side of the Atlantic. Even today the east pacific rise is still much more active than the mid-atlantic ridge (Fig.16). At the equator and in the northern parts the east-pacific rise does not lie in the middle. The subduction at the “eye socket” was very strong and so the right side of the ocean floor (in the northern part including the ridge itself) disappeared under America.

One thing WEGENER could not know: The west cordilleras of North and South America not only emerged and folded because of the external pressure from the Atlantic side but mainly

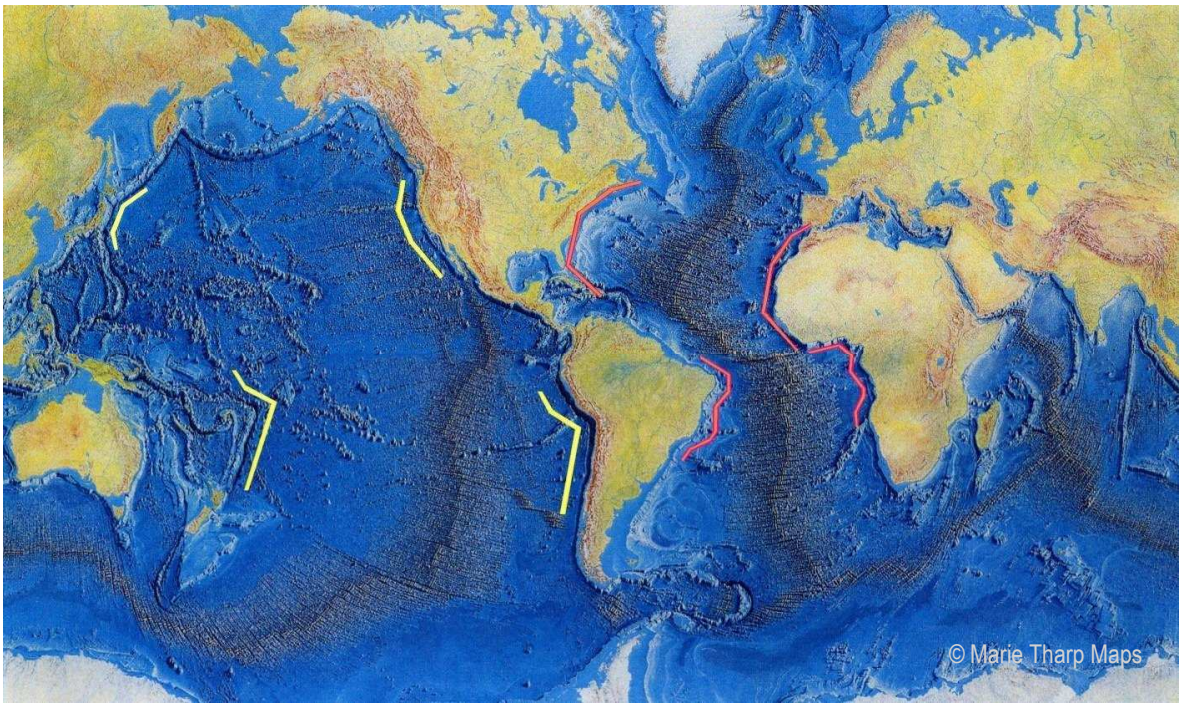


Fig.47a: World Ocean Floor (HEEZEN and THARP 1999). Red lines: parallel coasts of the Atlantic. Yellow lines: parallel ancient coasts on both sides of the Pacific (the lines drawn by NESSENIUS).

because of the enormous dilatation of the ocean floor in the Pacific. This pressure was sufficient to pile up high mountains like the Rocky Mountains and the Andes, while some ocean floor from the Jurassic and Cretaceous obviously submerged under the American continents (Fig.35). For WEGENER the parallel coast lines of Africa and America were the initial point for his research. In Fig. 47a they are adumbrated with red lines. As the Pacific ocean-floor emerged at the same time as the Atlantic, there must have been parallel coast lines on both sides of the pacific as well. I drew them in yellow colour. On the west side they are on submerged coasts. Before these ocean-floors formed, the earth was smaller. For an increase of volume no meteorites are necessary. Presupposing secondary heating, since the Paleozoic several hot phases can have caused processes leading to an increase of volume and pressure in the planet's interior, while dried out bulky lithosphere-masses on the surfaces caused a thermic isolation of the interior.

This caused the tearing open of the lithosphere along the biogenous epiphyseal zones. In Permian flood-basalt was spread in such masses like never before in earth history. This explanation works on the basis of a cool origin. Whenever the planet cooled after some hot phase, the expansion ceased. A possibility is a simultaneous decrease of volume in a soft lithosphere still full of plant-microorganisms drying out during the hot phases. The term "earth-crust" was chosen well by the geologists (Fig. 36). The activity at the mid-ocean-ridges never ceased completely but it came to lower velocities at which the dilatation could be compensated by subduction and the folding of mountains.

However, the researcher KEITH WILSON, who developed a network of people exploring this area, says, a thermic expansion alone would never be sufficient to explain the entire increase of volume. It would be very likely, that the interior of the earth contains more hydrogen than scientists presumed until now. Measurements showing the behaviour of seismic waves at the borders of the earth-core, give no information about its chemical compounds but only about its physical qualities. Therefore atomic reactions of hydrogen in the earth-mantle and -core are becoming most interesting in this context. KEITH WILSON, referring to S.W. CAREY, V. LARIN and C.W. HUNT, says, the hydrogen-atom in the state of plasma not having an electron, has almost no volume, because only the orbital of the electron creates the volume. Under the extremely high pressure in or close to the earth-core (> 1 mio atm) there must be hydrogen in plasma-state. When plasma-substances rise up into areas, where the pressure decreases, there would be a certain level of pressure where the hydrogen-nuclei gain their electron, and therefore an enormous increase of volume takes place, which could be compared to the expansion of a football to the size of a football-field. He says, a visible problem with the idea of an expanding earth was, that with an equal mass and less volume in former times the earth-density would have been higher and so would gravity. But there are indications for a lower gravity in early times. Therefore the mass must have been less as well. So again it seems like we would have a problem with the question, where an increase of mass could have come from. Now the geologist C.W. HUNT describes some processes - and this is just WILSON´s idea - indicating that under extreme gravitation-conditions in inner parts of the earth components of hydrogen-nuclei could be created anew. Some might get worried now keeping in mind the law of conservation of mass and energy. But EINSTEIN´s formula says clearly: energy and mass can be transformed two-ways into one another:

$E = MC^2 \longrightarrow M = E/C^2$. Solar radiation is available in abundance. The solar radiation increases and decreases periodically also in longer time-cycles. To say it symbolically: Mother sun is not so far away and can give her mother's breast. So some reception of energy getting transformed into new atomic particles or sub-particles in the interior of the earth would be imaginable, even though we still cannot describe the chemical-physical process exactly. Giving an example: A baby does not gain weight because he can tell all the chemical formulas of the compounds of the milk and analyse all the biochemical processes in the interior of his body. Principally it does not matter, why the earth expanded. If something happens or not, does not depend on the question, if we can already explain precisely what happens on the chemical and physical level. An apple also falls from the tree, if you have never heard Newton's name. The fact of an earth-expansion after the Permian can be seen by the age of the ocean floors. Knowing about the Atlantic, that where today the blue, green, yellow and red coloured basalt from the Jurassic, Cretaceous and Tertiary is found, that before that time there was just nothing, no land-bridges or sunk continents, what we have considered right since a long time, why then should we start the whole discussion regarding Pacific all over again ? The east-pacific-rise has been discovered already.

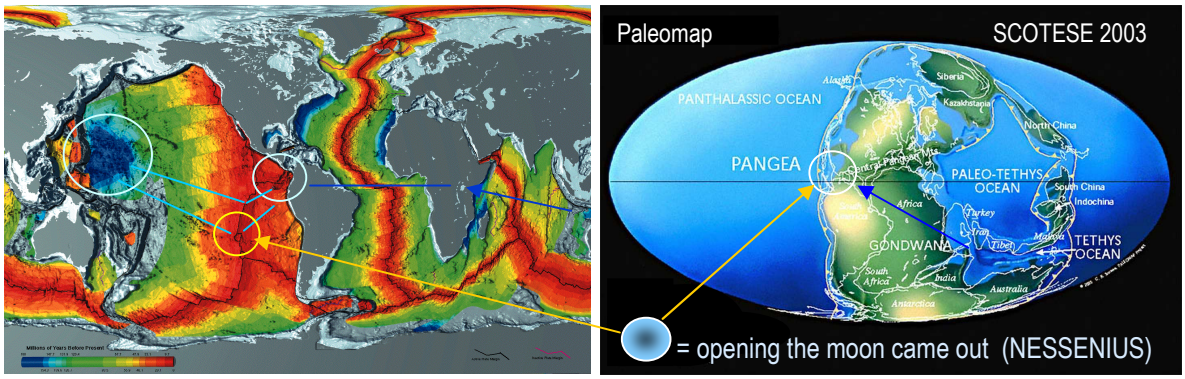
On one hand scientists doubt, if the ocean- floor basalt can really submerge into the heavier magma of the earth-mantle. On the other hand it is being proclaimed, an ocean-floor area of half of the size of the earth (extension of the Pacific or Panthalassic Ocean when the Atlantic did not exist yet, if the earth would have had the same size as today) such an amount of ocean-floor basalt would have disappeared by subduction under East of Asia and under America. We do not have one single geological indication for this. BRUCE HEEZEN who worked out the map "World Ocean Floor" together with MARIE THARP (Fig.47a) had some causes to suggest an earth-expansion. For none of the astronomers it would be a problem to imagine a cosmic orb changing its volume. Isn't the earth a cosmic orb as well? Should we prefer to deny this fundamental fact against our better knowledge instead of letting these paintings in journals, just be what they are: products of fantasy. Absorption of energy was easier until Carboniferous, because until then the planet was less dense, more watery and more permeable. So before Permian an increase of mass could have been due to an increase of bio-mass by photosynthesis too.
Now you can do some looking exercise with the really precious map on the next page: The earth in the Late Permian drawn by Professor CHRISTOPHER SCOTESE according to the latest geological findings. SCOTESE drew a light continuous line around his Pangea, so that you can also consider the Panthalassic Ocean as coloured background, not necessarily being part of the former earth globe. What you see surrounded by his bordering line, this is what my embryonic earth-head corresponds with as you see on Fig. 45 and 46a. That is no skull but a soft young little head. Every geographer knows how to reverse the projection of a mapped globe into the plain back again into a globe. Now you have two possibilities: Either you choose the contoured head only and figure it being round as a globe. Or you choose the entire blue egg-shaped plain with the little "head" on it, and look at it as a globe. Which one of these two things is more likely and makes more sense, concerning weight distribution on a slowly rotating globe not getting out of its axis? I am not saying, SCOTESE meant it this way. I am just saying, that you can look at it this way. Now looking at the figures 43 – 46a once more imagining away the „Panthalassic Ocean", which never existed in that size, you will be able to see the geomorphologic cast of the former existence of the cosmic primordial being, mentioned in the myths of many cultures and in Hebrew is called Adam Kadmon.

The birth of the moon:

According to a common theory the moon formed after a collision of some big orb with the earth, after which the chunks would have conglomerated in an earth-orbit. But knowing the earth did not consist of rocks yet, but rather of nebulas and a primordial non-salty ocean in which mineral substances were condensed by and by, an orb coming from outside could have penetrated without development of heat. Nothing could have led to an evaporation of rocks, orbiting around the earth as cooling chunks, simply because no rocks existed at that time. Masses do move towards their gravitation centre, but an impact cannot create an own gravitation centre beyond the earth-gravity field. Mass has gravitation, but that does not have the offhand effect to make rocks melt and become a globe.

All experiences show that collisions in nature never lead to any generation of organised structures. If rocks would merge so easily, there would be no asteroid belt. When an orb is forming, gravity was there before. When stars form, first gravity singularities origin and then masses flow into them and condense. Material must be in the fluid state to become a ball. What sense does the best computer simulation make, in which the merging of cold chunks of lava is shown, if no lava existed at that time?

Since the Precambrian the lunar material belonged to a living entity still consisting of earth and moon together, because the material of the moon was inside. Aerogel of silicon-dioxide has a density of 10 - 50 milligrams per cubic centimetre. There were chemical compounds with very low density. Today's crystalline materials were light. The mass excreted, was not submitted to today's conditions of gravity. Light minerals and organic compounds allowed the arising of the moon-substance. When the moon was still under the earth-surface, it had a higher density than the average earth-mass. The unbalance between moon and Pangea enhanced its emersion when the earth-rotation was accelerated because of concentration of its interior due to the melting-processes in hot phases. The centrifugal forces declined with the growing distance, so did the retarding effect of the earth-gravity. Today moon and earth are still circling around a common centre of mass. The moon-basalt war formed later by secondary meltings in hot phases also moon and mars were affected by, because the sun-earth-interaction-system is part of an interaction-system of all planets affected by the periodic fluctuation of solar radiation. Due to secondary heatings on the moon no traces of organic life are left. Even in Permian the life on earth was protected by its atmosphere. The opening of the Pacific was caused by the emersion of the moon in Permian.



The "old hole" (dark blue) once was located west of South / Middle-America. There the moon detached from the earth. The age of the moon's rocks is no contradiction. The moon originated inside the Precambrian planet-embryo very early and therefore has the same age. Due to the sea-floor-spreading the "old hole" has been pushed away in both directions east and west. The place where the opening for the moon happened is still the centre of the east-pacific-rise. On the map World Ocean Floor (Fig. 47a) you see on the strike-slip faults that the "old hole" once was located in the centre of the east-pacific-rise.

Before the moon welled up, it moved along under the surface in almost horizontal direction. In order to see its path, you may imagine away the cretaceous and tertiary ocean floors (green, yellow, red) under the Atlantic and under the Pacific as well, letting the expansion process reverse. Only the round blue area needs to be left over. Before the Pacific ocean-floor expanded, the area of the Cocosplate (Fig. 59) was laying so close together with the area east of the Mariana trench as the coasts of Africa with those of America. Imagining the extension of the cretaceous and tertiary ocean-floors in reverse direction, the blue hole ends up right in front of the west-coast of South / Middle-America. Along the dark blue lines, I have drawn, the moon moved along under the surface. It prepared the later opening of the Pangea at the East Coast of America and the West Coast of Africa by its motion from inside. On the Paleomap the area where the moon came out is left open by SCOTESE as some water hole, which is truer than SCOTESE might know.

The eye of the human embryo in the 8th and 9th week moves along in the same way, as it dislocates from the side of the face to the front (Fig. 43 , 45). The eye socket with the optic foramen (Fig. 26) corresponds to the place where the moon came out.

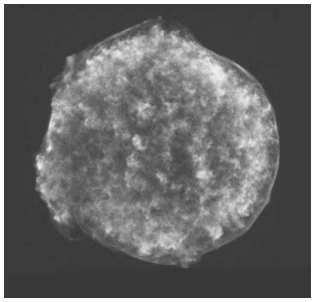
After the moon was detached, the hole was filled with basalt from the bottom. Therefore no older rocks can be there. The decrease of pressure caused by the loosening of the moon triggered the process, which made the interior of the earth expand probably caused by hydrogen-reactions. This explains why in Permian such huge masses of flood basalt welled up and afterwards the division of Pangea began. To combine the loosening of the moon with the beginning of the earth-expansion is my own idea. In 1925 AMPFERER suggested „the tearing off of the moon“ as cause for the continental drift. He could not give a reason. As one explanation for expansion must be right, because earth-expansion is a visible fact, my combination gives a plausible geophysical basis to AMPFERER´s assumption.

Since the Triassic several ocean-transgressions came alternating with ocean-regressions, indicating waves of expansion in hot phases and times of a calming down in cooler phases. The Pleistocene and Holocene belong to the cold phases, which you can also see at the colours on the map Fig. 35 “age of the ocean floors”. In the lines of the mid-ocean-ridges only the colour of Tertiary is being used, because the sea-floor-spreading afterwards was comparatively very little. This allows the conclusion that the drift-velocity today must be significantly slower than in the hot phases.

After the detachment of the moon the biogenous preliminary phases of Pangea, in some areas still undersea, developed further and hardened. In the “old hole”, which is the primeval Pacific Ocean, no metamorphic rocks were formed. There and at the biogenous epiphyseal zones were mellow zones which opened easily, when processes in the interior of the earth caused increases of volume. The primordial biosphere had born an offspring, which was attracted by its own gravitation-singularity, rose up, died far away from the protecting earth-atmosphere, and then in far distance from the earth hardened and became, what it is today.

In Silurian the centre of moon-origin laid south of the southern-chinese formation beneath the early Tethys that means in the area which corresponds to the one, from where the induction of the eye begins. Looking at the planet in Silurian (Fig. 41) without Panthalassic Ocean, the distance from South-China to the Iapetus Ocean shortens as the line goes through the interior. So the moon must have come out of the region, the optic foramen corresponds to. The seeing-pigment in the vertebrate retina Rhodopsin still contains the photosynthesis-pigment of halo-bacteria: Retinal. The blue hole was the first salty ocean. That our tears are salty might have some deeper reasons in context with our ancestry.

In embryonic development of mammals we find the phenomenon of expansion inside the embryo too, but in some non-corresponding much earlier embryonic stage having nothing to do with expansion in hot phases. It happens, and that would be some correspondence, by infiltration of water from the surrounding. This water is molecular H_2O, as to be expected in all biological organisms. But obviously here the “sunny” expanding quality of hydrogen is also working. Every biologist will certainly recognise osmotic processes as cause for this. That might be a useful thought for further considerations concerning the theory of earth-expansion, and also for my Aerosol-Theory of Planet-Origin, if you would base the thoughts on the hypothetical idea, that some laws of nature work in physically completely different stages and dimensions of quality still in some corresponding ways adequate for each.



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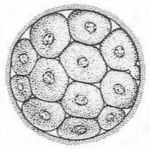


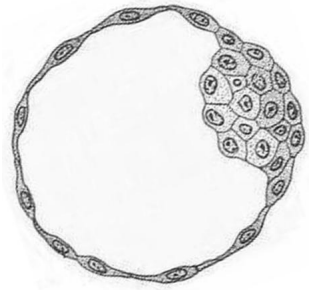


Fig. 2a „Plasma-Supernova“ Embryo in the Morula-stage Embryo in the stage of Blastocyste

In order to understand the origin of planets from the beginning, you need to go back to the forming of the central-star as a young star emanating from a supernova. An embryo goes through comparable stages. The only difference is, that this happens on the same level, on the cellular level, which does not apply for the forming of stars. In the early embryo certain processes are reproduced on the cellular level. Regarding the comparability under aspects of natural science this seems incomprehensible. The embryonic origin does not only remind us to early stages of evolution (Pandorina, Volvox) but also to things happening a long time before the beginning of biological life. Die individual embryo also comes from only a few certain cells in the blastocyste in a following stage, while the tissues shown on the image here will become embryonic mantle-tissues, that will be thrown away at the time of its birth like something only belonging to the past.

In the soft little head of the human embryo there is some liquid, becoming the cerebral fluid. The increase of its volume is limited in order to prevent a hydrocephalus. The image on the right side shows where the cerebral fluids flow in order to provide oxygen and nutrients to all regions of the brain-surface, also in hollow spaces of the brain. In our context this is not relevant, because the planet-embryo certainly did not have any brain. But surely some movements of fluids did happen too. A comparison between the adult human beings head and the earth of today would definitely not be accurate. Yet a comparison between planetary embryonic stages and human embryonic stages does make sense.

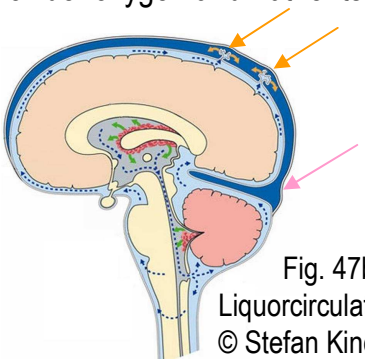
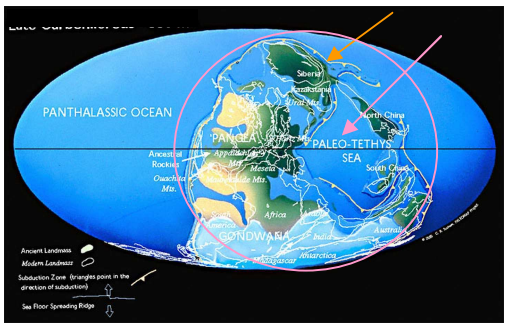
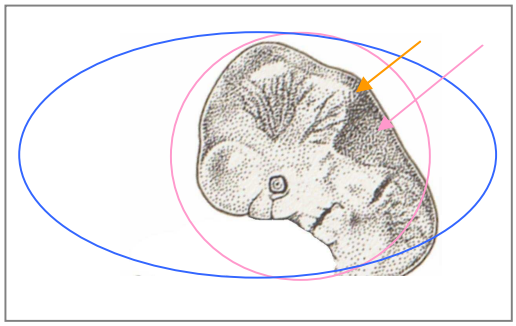


Fig. 47b
Liquorcirculation
© Stefan Kindel



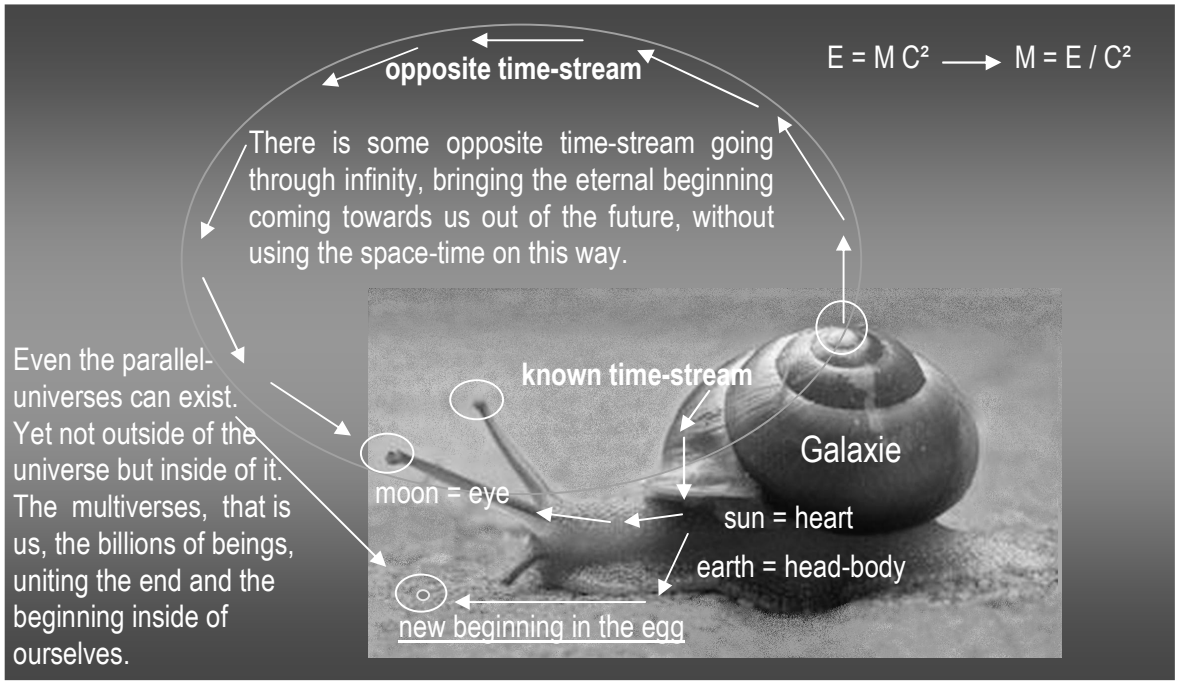


Currents of fluids in the planet-being could also have had the effect, that some areas were predestined to become mellow zones suitable for eruptions. Regions in the later earth-crust corresponding to places above the arachnoidal granulations might have become magma-hearthes or hot spots like in volcanic zones in East-Siberia, cp. Fig.12 G. However it would not be possible here to deduce any direct context with the geologic development, because the Mesozoic and Neozoic have reshaped lithospheric structures. Still the embryonic heads have a space filled with water exactly where on the planet-embryo the Paleotethys was. In East-Siberia the first flood-basalt-event happened. The Paleotethys was not an ocean like the oceans of today. But certainly there was a lot of water.

KEITH WILSON's Idea that the earth gained of volume by creation of hydrogen inside, refers to very different processes. When the planet-embryo slowly died, gravitation and heat were predominant factors. A correspondence in living beings to the hydrogen created by the energy coming from the sun would be the water from the arterial blood, entering into the cerebral fluid trough the plexi choroidei. The oxygen inhaled was set free by energy from the sun in plants, in the chloroplasts. It derives from the division of water-molecules for the photosynthesis caused by the photons.

The physical levels are different and not comparable. The principle sun - water - growth is repeated. If you have further features to corresponding phenomena, please let me know.

This research work should be developed further interactively. Many pages should be left empty here for the new research results of the next decades from scientists liberated from the theory of accretion. In this book I kept some things short. Already well known facts in natural science can't be explained here anew in detail. Otherwise the book would become as long as the history of the universe. Fortunately in this universe some things happen at the same time. This gives us the possibility to read in the grand book of nature more than we ever expected until now. I will give you an example: You can read a lot about these topics in astronomic literature. Yet you can watch some essential things also on a little snail and its development from the egg, where some fundamental processes are reproduced on the cellular level.



As the mass depends on the correlation between energy and the squared speed of light, an increasing mass would result, where the physical energy grows in relation to the C^2. You could see the C^2 in context with something some so called spiritual energy corresponds to. If some spiritual energy as divisor would increase in relation to the physical one, because the physical one decreases, the mass on the other side of the equal-sign would decrease. My view differs from the creationist. I don't believe the universe has been created according to some unchangeable plan. It created itself and the living beings on earth themselves as inheritors and carriers of these creative energies now are the creating forces.

The transformation of the asymmetrical planet-embryo into the earth with its mysterious interior leaves many open questions. On world-maps only the exterior results are visible. I reduce my descriptions on what doesn't completely abstract itself from perception. Probably during the steps of transformation not only changes of shape but also very fundamental changes of physical quality took place, about which still very little can be said here.

In the Precambrian the surface of the planet-embryo formed like the beings of which it consisted. The protozoa and parazoa do not have any symmetry yet in the construction of their colonies and pseudo-tissues. The planet-surface could be compared to the irregular tissue of a yolk bag. The prokaryotes were capable of lateral gene transfer and therefore they were a global gene pool. The genetic information of these organisms, which were interconnected in a world wide symbiotic ecosystem, imported the asymmetric unpaired forming of the colonies. So the moon-earth-being lived like these colonies with asymmetric shapes. So did the preliminary phases of Pannotia and Pangea. Colonies belonging to ancestral phylums like the prokaryota and the pseudo-tissues of early Eukaryota do not have any mirror-symmetry in their physical construction.

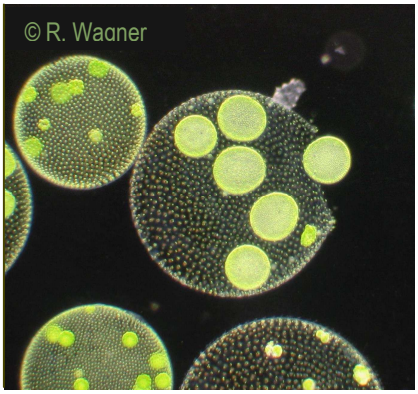


Fig.48: Volvox: After releasing the daughter colonies, the mother colony dies.

Fig.49: Calcareous sponge and

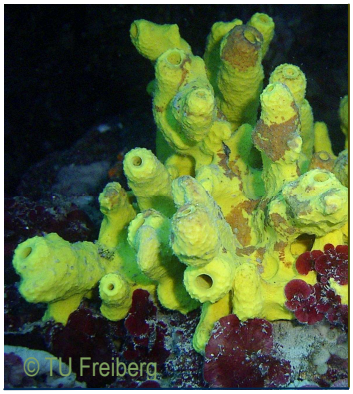


Fig.50: Silicon sponge (asymmetric construction in sediment producing parazoa)

Unicellular beings do not know natural death. Their life merges in the life of the daughter cells. When the moon started to form inside, the primeval biosphere started dying by and by. At the end of the Precambrian cold phases changed the biosphere. The planet-being gave out its life like a Volvox, while in thermal springs in the Early Tethys new embryonic beings formed. From them many off-springs descended who had special new qualities.

Volvox is a green flagellate colony that correlates to the blastula stage. By inversion it forms daughter colonies. This begins like a gastrulation but is continued in a different way. In the Cambrian lived many jelly fish, they are animals on the gastrula stage. The colonies of coelenterates now prepared a new coming principal: segmentation. The next embryonic stage is the neurula. In it the segmented longitudinal axis and mirror symmetry are formed. In evolution now came a time, when in the first organisms their blastula developed into a symmetric gastrula and neurula. This means each cell of the two-cell stage now became part of an organism staying connected in the middle with its mirror-symmetric twin: The gains of bilateral symmetry are not only a second organ in resource and a better orientation in the space, but mainly the development of a consciousness, that only becomes possible with a twin nervous system.

After the first cold phases some progenies of the planet-being went through this change in their embryonic development. Now every individual became a coadunate pair of twins that kept on sharing only the still unpaired asymmetric visceral organs. The evolution of bilateria began (Fig. 54, 55). Along came a multiplying trick, by which already during the embryonic development a chain of such symmetric beings was formed, that stayed conjoined like a colony of coelenterates: The segments originated.

Now the segments performed diverse specialisations and reductions. They stayed infused with connections and worked based on division of labour, so that out of them superordinate individuals came into being (Fig.53). From the Cambrian and Ordovician we know a plenty of fossils of shells, snails and squids. Although molluscs are called unsegmented, the chitons (polyplacophora) show the beginning of segmentation very clearly. Squids have mellow segments in their gorge. The chambers of Nautilus are a beginning segmentation as well. Segmentation and bilateral symmetry began after the first eumetazoa came into being in the Paleozoic. Both characteristics represent the beginning of a fundamentally new development. While these new steps in evolution were taken, in the world's ocean floors the asymmetric basic shapes of Pannotia and the prospective Pangea had already been formed biogenously a long time ago and regarding this nothing chanced any more.

Fig.51: Human morula

Fig.52: Jelly fish = gastrula stage

Fig.53: Cambrian trilobite

During global cold phases at the turnover to the Paleozoic - the exact times are still being discussed - when on the surface most of the living beings were eliminated, the new forming of bilateral-symmetrical beings can have begun in cryptical hydro-thermal springs of the Early Tethys. Their segmented longitudinal axis and the mirror-symmetric sides of the body contain this form of a cross for the first time in the history of evolution, while the planet-being slowly goes through its death and its resurrection by the birth of its novel off-springs. In the Ediacara-Fauna are earliest forms of bilateral-symmetry. Then the Cambrian Radiation began with the appearance of most major groups of complex and advanced animals.

Fig. 54: Floating sea slug Clione limacina

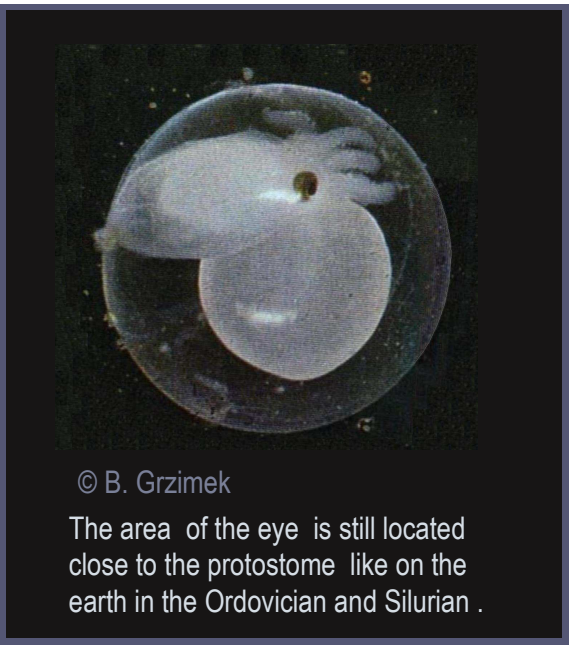


Fig. 55: Embryo of a cuttlefish

The hypothetical ancestral vertebrate cannot have belonged to the Acrania. Squids are the neurologically most advanced and intelligent invertebrates. The octopus is well known for its amazing capability to learn. Protostomes and deuterostomes are related. Both develop a connection from the interior of the head to the segments downwards from the blastopore lip. The vertebrates in addition develop a brain upwards and also a face on the other side. The eye is the earliest segment and as lens eye a very advanced characteristic. The lens eye was already born on the stage of cephalopods and was being retained in evolution. In deuterostomes it moves by induction from its origin in direction to the new face. Some primitive chordates own neither head nor eyes. But in such cases we deal with reductions or phylums, in which those organs never evolved, with branch lines. The vertebrates must stem from some ancestral animal that advanced its head-development and at the same time developed a torso as well in the same way as the other chordates did.

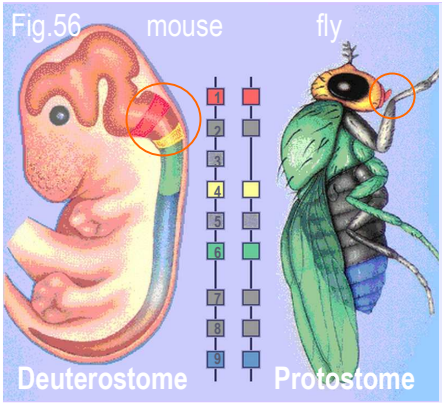
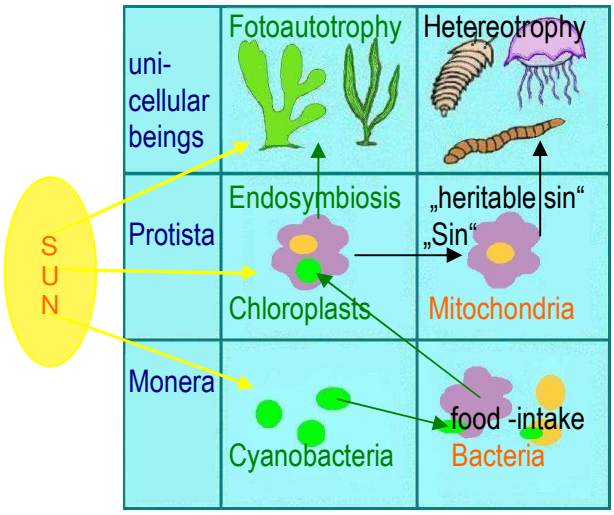


Fig. 56: Hox-genes determine the development of particular body regions. The difference in the early stages of embryonic development between proto- and deuterostomes was over-estimated in taxonomy. The correlation of the hox-genes to the body regions allows us now to recognize the common basic construction that proves the cognation. Dorsal- and ventral part are exchanged, but the front and rear end are not. In segmented deuterostomes the blastopore does not become the anus, but it becomes the connection to the first segments.
◯ = head tissues developing directly from the blastopore-lip.

The eye-lens initiates the induction of the eye. It correlates to the gravitation-singularity that attracted the moon-mass inside the planet-embryo. Now I will make an interconnection to some subject of humanities: Seeing a planet-being in the beginning of evolution, a meaning of the genesis becomes comprehensible, evolutionists and people believing in the bible can agree to: From the substance of the living planet Adam Kadmon something was taken and Eva (ocean, moon, fertile beings) was formed. The kept its influence on the movement of waters, the earthly womb. Since the moon formed inside, earth was no longer a paradisiac place entirely filled with life, where autotroph organisms lived in peace. The beginning of heterotrophy with lower fungi and animals, the first carriers of neurocytes this is meant with eating the fruit from the tree of consciousness. The loss of the ability to gain metabolic energy from solar radiation, out of the "divine source", was a separation from it, the "sin".



With multi-cellularity death came along (Volvox). The snake is a symbol for segmentation, playing an essential role in the evolution of advanced beings. Bilateral-symmetric nervous systems and brains brought about awake-consciousness. In the myth since the banishment from paradise was passed on by giving birth to children, by new generations. The evolution of the bilateria leads to the ability to feel sympathy, love, and a deliberating consciousness. The physical basis, the heart and central nervous system, form in the embryo beginning at the blastopore-lip. The correlating Tethys was a centre of evolution in Paleozoic. The Ganges-valley and Jordan Rift, both in the Tethys until the Tertiary, are considered as holy places today as some more places in these former marine environments. Evolution and the creation myth are not contradictory, if you don't only use the reading-glass but also the microscope, telescope and photos from satellites. This open-minded view allows an overview including some spiritual truths as well. Now the exiting question comes, how the time scales comply.

11. Geologic Time Scales: Did it all go faster?

Between the few millenniums, creationists provide for their development of nature and the billions of years, the evolution scientists have gotten lost in, there must be some realistic measure of time, some rhythm, in which it all came into being. Recording the geological times we are content with some probability, that the age determinations allow an approach to reality. The efficiency of the geologic analyses should not be put into question. Still there are reasons, why the geological time scale needs to be pushed together: First geologists believed, America and Eurasia-Africa had divided at the change-over from Cretaceous to Tertiary. Today we know that this only applies for the northern part of the North Atlantic. Today's low velocity of the continental drift was supposed to be constant. With radiometric age determination methods a duration of 65 million years was calculated for the Tertiary.

The radiocarbon-dating was utilised, before the temporal variations of CO_2 were known more precisely. Scientists hoped to find a measuring unit for the time scales. Later some reasons were recognised why the continental drift must have been quicker in former times. Where today drifting velocities of a few centimetres yearly are measured, the annual movement must have been some metres. To pile up high folded mountains a stronger force must have worked than what is generated today with a few centimetres yearly. Earthquakes still happen, but the elevation has become so slow, that it can not compensate the degradation any more. Secondly the division of the super-continent already started in Permian and is distinctly visible since Jurassic. Therefore the calculation of a time period derived from drift-velocity and distance must include Cretaceous and Jurassic as well. Along comes the much faster drift. Since the beginning of the Jurassic between the east coast of North America and the west coast of Africa a distance of 6000 kilometres has grown. With a starting drift velocity of only 10 meters per year and a final velocity of 3 centimetres, a little over zero, with a constant slow down a middle velocity of 5 meters yearly would result. Herewith a distance of 6000 kilometres grows in 1.2 million years from the beginning of the Jurassic until today (Fig.35). The starting velocity is not clear yet. The slow down was not constant. But the example shows, which dimensions of time must be chosen, if we want to approach the geologic reality. Such realizations have consequences for the calculation of geological times lying further back in the past.

But the scales for radiometric dating have been calibrated by 65 million years of Tertiary. And what if the Tertiary was shorter? The opening of the African Rift, the volcanism, the elevation of mountains, the cooling down of the climate and beginning of the Pleistocene ice age might be in some direct coherency regarding time and causes.

Everyone knows, how extrapolations get distorted, if some initial values are not precise. Small errors are getting multiplied and arisen to higher power. For the Paleozoic numbers result with some decimals powers of ten higher. The rates of radioactive decomposition seem to be constant under all physical conditions that can be simulated. But does that mean, all physical conditions possible for a planet under changing cosmic conditions can be figured out and simulated under today's conditions? We still have no proper calculating method involving variable velocities. If the polarity-reversions of the earth's magnetic field correlate with the Milankowitsch cycles, their duration has to be regular. The findings are still far away from this. Phases without sedimentation cause temporal gaps in stratigraphie, where the ultimate truth has not been found yet. We can do without passed on numbers. The stratigraphic sequences keep their validity and can be used without any numbers as pages of our geological calendar just as well. If we compress the time scale according to these realizations, we understand that our ancestors living one million years ago, were no glacial men. They were the ancestors of mammals in the Jurassic on the evolutionary stage of skates with a simple placenta. In Cretaceous they went through some reptile stage as aquatic placentalia without any hornification of the skin but with an advancement of their

cardio-vascular system. They could not leave any fossils at a global temperature of 26°C, the more so as their skeleton was not ossified. The next evolutionary stage were aquatic mammals and amongst them the ancestors of primates living in tropic waters. In Tertiary descended from them monkeys, apes and humans as one phylogenetic unit. As the genetic variability in the populations themselves is larger than the exterior differences between the varieties of skin colours, there are no human races according to the biological definition.

The homo sapiens forms a world-population and he has not lost all genetic information from the living primordial planet, as you see on the shapes of his skull bones, which are not the only feature of his paradisiac derivation. Today in regions of human origin things happen mirroring a disordered relationship of humans towards themselves. When the human being can feel his true derivation again inside of himself, not only sticking to religions and traditions, but to his natural ability to feel inner peace, to understand, to forgive, to forget and to love, as essentials in his nature, exterior peace will become possible as well.

Changing cosmic conditions were responsible for changes of climate having an influence on many parameters at the same time. This brings about multicausal textures of factors. The orbits of suns around the centre of the galaxy secure a calculable recurrence of certain balances of power in long periods of time. The distance of the suns to the galactic centre, which is a centre of gravitation, changes because of the elliptic form of the orbits. This way, solar systems get close to it at certain times and then depart again. Thereby they go through changes, because their features concerning gravitation, radiation, temperature, momentum and electro-magnetic fields are changing. Changing cosmic conditions have effects on the origin and forming of planets, and their global climate must be in a temporal coherency with the advancements in evolution and geologic processes. When this time-coherency has been found, it will become possible to make some pretty precise age determinations for the development of living beings and geologic formations. The multitude of life-forms and the forming of new animal phylums in the course of earth history came about in context with cosmic processes. The astronomers could surely deal with a shorter geological timescale, and they could also help to make it more precise.

12. SUMMARY: Biogenous Origin of Planets

This new theory was found by S. Eva Nessenius 1998. It explains the origin of young planets with a condensation of nebulas in protoplanetary discs by their mineral compounds working as aerosols. Here she also refers to the aerosol-theory for the forming of first living cells. Her knowledge is based on latest research results indicating a high content of water in protoplanetary discs. According to this in habitable zones aerosols make water vapor condense forming a watery primordial atmosphere. These droplets would already contain all the substances out of which in the Miller-Urey-Experiment-2 in a simulated primordial atmosphere amino-acids form. So the first living cells could have formed as protocytes

inside these nebula-droplets of the primordial atmosphere already, while it was condensing to a primordial soup. For the origin of the earliest earthly substances aersols and aerogels come into consideration, and then extremophile archaea living in or on them. Their metabolic products would have become primordial sediments. Thus at spherical pending primordial soup would have been in the beginning, filled with life, being a Precambrian biosphere and geosphere at the same time, without having passed any stage of a glowing magma-ball before. According to CLOUD and SCHIDLOWSKI the oldest traces of life have the same age as earth itself. Regarding the long established conception of the origin of the earth as a magma-globe (theory of accretion) the results of CLOUD and SCHIDLOWSKI put up the question, how a glowing globe can have cooled in such a short time. The theory of a cool planet-origin developed by S. Eva Nessenius, starting with a pending spherical primordial atmosphere and then primordial soup, could give an answer to this, because according to her idea the planet-embryo was not so hot when is came into being. The origin of the earth-magma is explained by S. Eva Nessenius in the following way:

The accumulation-activity of microorganisms and the Great Oxidation Event led to a consolidation and release of water. In a cold phase around the end of Precambrian or in the Early Paleozoic most of the unicellular organisms and the lower organisms descending from them died. The sediments solidified more. Consolidated exterior layers led to a termical isolation of the interior of the planet. In the Early Paleozoic the planet-embryo warmed up during a cosmic climate-change, so that some exothermal chain-reactions in its interior caused a first melting and partial metamorphosis of the primordial sediments. A later maximum of temperature in Permian caused a boiling of the planet's interior, the forming of magma and energetic processes causing an increase of volume in the interior, which going along with flood-basalt-events was followed by a successive tearing open and drifting apart of the Pangea and the simultaneous forming of the oceanic crust of the Pacific and Atlantic ocean. The cooling afterwards led to the densification of the oldest native rocks on earth, the Precambrian shales, into the form we know today.

The theory of biogenous planet formation is a plausible explanation for an expanding earth, which was rejected until now, because the increase of mass did not seem explainable. The simultaneous forming of the lithosphere of the Pacific and Atlantic ocean would remain an unsolved question, the more so as sufficient proves for a former existence of a Panthalassic ocean in the size of the Pacific are missing. Supposing a cool biogenous origin the increase of volume would not come from outside from meteorites. It could be caused by a thermal expansion in the interior. Energy from the sun can penetrate and be transformed into mass in a planet-embryo developing out of permeable fluids and light substances. However my explanation for the increase of volume is nuclear processes in the interior starting with the emersion of the moon in Permian. On the surface the lithosphere still full of microorganisms dried out in the hot phases loosing volume. Absorption of energy was easily possible until Carboniferous, because until then the planet was less dense, more watery and more permeable. So before Permian also an increase of bio-mass by photosynthesis can have been an important factor for the increase of the planet-mass.

The subduction of certain tectonic plates starting after Permian is not put into question. After the hot phases the expansion almost ceases. In cold phases the subduction and folding of mountains compensate the slowed down expansion at the mid-ocean-ridges.
The discovery of the correlations of shape were the trigger for this investigation, as they point to a biogenous origin, which would apply for all cosmic orbs consisting of rock formed in habitable zones. On the basis of this new theory, the multitude of lower plants, fungi and animals coming up so quickly during the Cambrian radiation, can be explained very well with the polyphyletic ancestry from tissue stem-cells of a living planet-embryo. There were specialized genetically reduced stem-cells, from which the multitude of genera descended, that did not reach advanced forms but which are highly developed concerning their ecological cooperation. And there were also stem-cells with a complete genetic equipment, which like gametes or spores passed on the entire genome of the planet-embryo or a main part of it to a hypothetical ancestral vertebrate.

The human being as the bearer of the genes for the primordial shape-forming of the head, which corresponds to the one of the planet-embryo, even regarding embryonic stages of development, is considered – as well as other mammals – as descendent of aquatic beings, which were not ossified until Cretaceous and therefore did not leave any fossils. As some examples show, equal steps of evolution from one stage of development to a higher one can happen several times, so did the transition onto land.

In the common phylogenetic lineage of the aquatic early ancestors of primates and their closely related aquatic animals on the same stages of evolution the genes of the planet-embryo for the shape-forming of the head was conserved entirely due to the fetalisation and passed on from the Precambrian until the Neozoic. After a biogenous forming had designed the primeval stages of Pangea, a large part of the colonies of organisms forming it, died off during events of mass-extinction in the Paleozoic and at the change-over from Triassic to Jurassic. The earth became a rock-planet, richly infiltrated with microorganisms, covered by oceans, filled with magma and plasma inside, and its geomorphogenesis now happens just as the theory of plate-tectonics explains it adequately for the Neozoic.

Heidelberg, February 2008 S. Eva Nesemann

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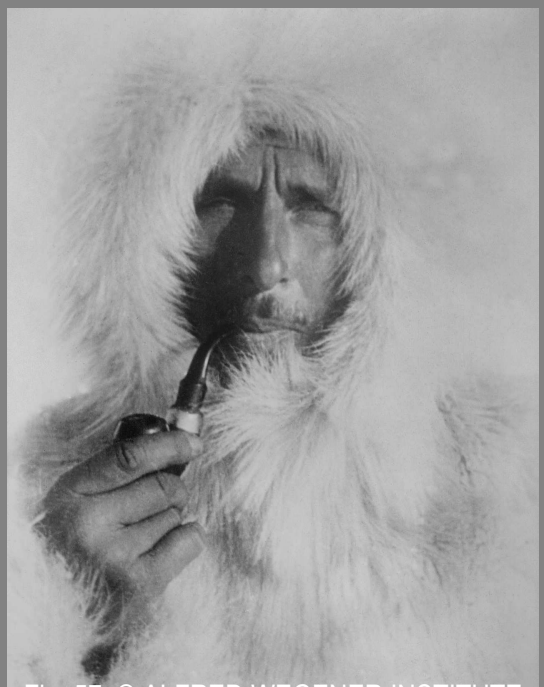


Fig. 57 © ALFRED WEGENER INSTITUTE

Alfred Wegener lived from 1880 to 1930. This was one of his comments in view of the doubts of other scientists who were against his theory of continental drift: „They will realize it one day“. To figure out that our continents, lying in such distance from each other today, once were one single super-continent, just surpassed the comprehension of the people of his time. Today this is verified. I frankly admit that the scenario of earth history, which I describe in this book, takes me to the limits of my own comprehension. It is okay for me as a natural scientist to also deal with subjects that demand to broaden my own horizon. For astronomers a quite familiar situation. In future decades things will be realised about the origin of life and our planet, which today almost nobody can imagine. From a critical point of view you might object, I had developed my argumentation in order to get a confirmation for my assumption, because of that, it could be a circular reasoning. WEGENER did the same and still was right. Wilhelm HERSCHEL once said: For the natural science it is good to question things, everyone considers to be self evident.“ It will always be necessary again, to develop our systems and models of thinking further.

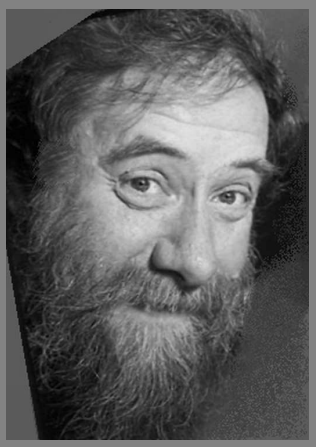


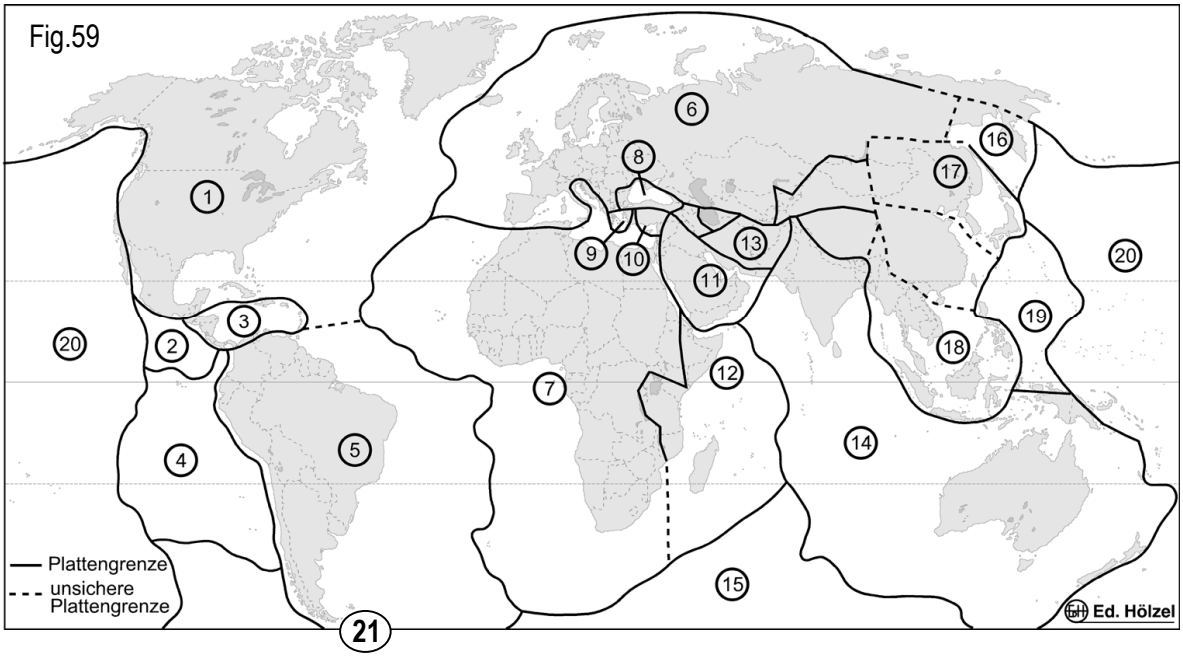
Fig. 58 © SCOTESE

Professor CHRISTOPHER SCOTESE had been working on his Paleomap Project for many years, when he gave me his permission to print off some of his precious maps here. But I could not tell him about my idea, to compare the early stages of the earth with human embryonic stages, because I needed to keep my results secret until I could publish them. So I used his Paleomap without knowing, if he would appreciate my new hypotheses or not. By his Paleomap Project my discovery of the comparable development-stages of the earth and the embryo’s head was made possible. When my realizations find the common consent, the Paleomap will gain even more importance.

Heidelberg, November 1st in 2008

Eva Nesemius

Map of the Tectonic Plates



I decided to use this world-map from Ed Hölzel, because it shows the smaller tectonic plates too, that are relevant for the comparison with the human skull Fig. 20 and 28 .

1. North American plate
2. Cocos plate
3. Caribbean plate
4. Nazca plate
5. South American plate
6. Eurasian plate
7. African plate
8. Black Sea plate
9. Aegean plate
10. Anatolian plate
11. Arabian plate
12. Somalian plate
13. Iranian plate
14. Indian-Australian pl.
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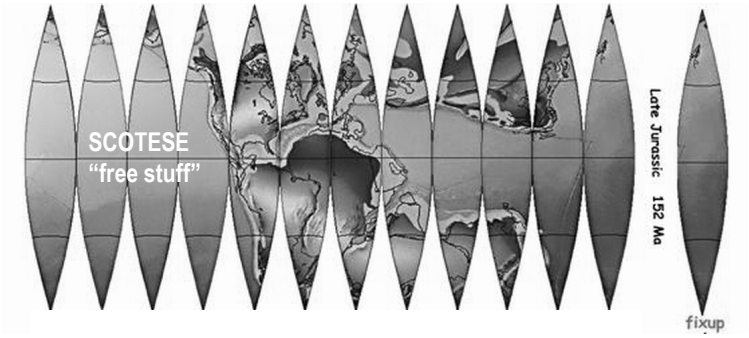
21. Scotia plate



We have become used to the proportions on this kind of euro-centric world maps, and we might be tented to forget, that these spaces lie on a globe. On this rectangular picture the areas far in the north and south are enlarged by contortion due to the map-projection. You can project them back onto a globe, imagining you would wrap the paper of this world map around a ball and press it to it. Around the equator it will stay flat, but on top and on the bottom it will be scrunched up and its space will be significantly smaller. You can also take this prepared world-map from Scotese. The goal is to see the earth again as a three dimensional orb. If you succeed in doing this with the maps of the Palaeozoic using a certain key, a secret can be revealed to you. You will only know how to use this key after reading this book.

Your feed-back is most welcome. This research-work is an embryo still needing to grow and to differentiate itself more. Even critical comments can bring forward its development. Please let me know, which considerations came into your mind when you were reading this book.

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