

An insight into self-organizing processes in geology with respect to Earth expansion

Karl-Heinz Jacob

1. My first encounter with earth expansion and initial doubts on “official geology”

I spent my professional life from 1961 to 2004 at the Technical University of Berlin (TUB): student (for two years elected speaker of students), tutor, assistant, research assistant, senior assistant, senior engineer, professor. I graduated with distinction on a geochemical topic (Jacob, 1974) and was constantly up to date with developments of the mining industry in Germany and all over the world.

Ott Christoph Hilgenberg personally informed me about earth expansion in the mid-sixties. Like me he was a member of the Faculty of Mining and Metallurgy and until 1976 he had his own room in the Institute of Geology which he used as a workshop for the construction of his paleo-globes. Throughout his activity Hilgenberg was patronized by Professor Werner Zeil, a full professor of geology and palaeontology at the TUB. Zeil was an Andean expert who, in his lectures on the geology of South America, railed against the newly emerging theory of plate tectonics basing his arguments on the findings made during his field work in the Chilean Andes. Zeil found no evidence sustaining plate tectonics or even subduction. However, this was not very important during the late sixties, when students in particular had other interests: they shook the arbitrariness and omnipotence of professors at the universities. But even scientists or engineers at the TUB were hardly interested in earth expansion or plate tectonics either. We were all quite indifferent to a possible

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expansion of the earth. Until about the end of the 20th century everyone was allowed to have his own ideas about the formation of folded mountains without having to fear any discrimination.

However, during the early 1970s, a wall map was installed as a blackboard in a lecture hall of the TUB, which deeply impressed me and which led to numerous discussions among students and professors. The map showed the Atlantic Ocean floor. It had been published by the National Geographic Society and is based on drilling data and bathymetric studies performed by Bruce C. Heezen and Marie Tharp of the Lamont-Geological Observatory. We all saw in the enormous undersea mountain ridge with its striking longitudinal and transverse faults possible evidence for the correctness of Hilgenberg's considerations on an expanding globe. Probably Hilgenberg acquired the chart himself and hung it up, because he was still working in the same building of the TUB at that time. But in retrospect, nobody really took the matter seriously. However, it remained in my subconscious.

At the beginning of the 1970s, the well-known Swiss volcanologist Professor Alfred Rittmann came to Berlin as a visiting professor. Following his lecture series, a large volcanological excursion to Italy was organized for students and professors from Berlin. I took part in it as a research assistant and my Italian wife Lucilla as a logistics assistant. We climbed all the important volcanoes of Italy such as Vesuvius, Vulcano, Stromboli and, particularly intensively and over several days and nights, Etna in Sicily, which was then in an active phase.

During the field trips the German professors often uttered opinions on volcanism that were different to those of the Italian scientists from the Volcanological Institute in Catania who accompanied us. The differences concerned origins of the lava and the involvement of upper mantle, lower mantle, convection, temperatures, viscosity. The Italians had personal experience of the volcano that the Germans lacked, so it was they who were always urging us to leave the vicinity.

And so we barely escaped a catastrophe on Etna because of the carelessness and know-it-all attitude of the Germans. We stayed in a refuge on Etna and spent a whole night in the snow and ice at 3000 metres altitude, fascinated by the open gaps next to us as the glowing red viscous lava gushed out. Some Sicilians present took lava from the calmly flowing streams with iron tongs, filling moulds to form small vessels as souvenirs for tourists. All 30 of us enjoyed the natural spectacle very much. The repeated warnings of the Italians to turn back because of danger were not heeded. Suddenly the somewhat higher situated north-east crater became active and threw red-hot

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cinders like firework rockets into the night sky. In the beginning the lava was red-hot and easily visible, but then it cooled down during its parabolic flight and turned black. The now invisible bombs rained down close to us like hot cow patties. Panic was spreading and we ran down the mountain in fear, stumbling, falling and screaming loudly. My wife and I stayed together and suddenly we were standing in front of a red-hot fire mouth of about 5 metres diameter. It was a circular hole, into which we stared in fear for only one moment, until - without any warning - a huge explosion occurred, which made us fear for the worst and made us panic again. Later we learned that it was caused by escaping gases reaching supersonic velocity. None of the participants were seriously injured. Nevertheless, it was a very dangerous experience due to our carelessness. We had experienced volcanism up close without understanding its mechanism. In the following days the excursion led us to the permanently active Stromboli volcano north of Etna. And again the eagerness for knowledge led to reckless indiscipline. One of the participants wanted to stand very close and too long at the crater rim with his stopwatch. And again it exploded unexpectedly so he paid for his curiosity with wounds on his body, but mostly got away with the horror, like on Etna. In the following year - as we learned later in Berlin - the leader of a French student excursion to Stromboli was fatally hit by falling lava or litter. All geologists and nature lovers seem to be ignorant about volcanism and they suffer a lot from it. Some of them therefore want to overcome this condition through personal courage. Frequently they risk their lives in the process.

The German geology professors at the time were of the opinion that the Italian volcanoes were independent local structures that had no connection with each other. They were expected to each have their own magma chamber situated at different depths. There was no serious thought about a possible expansion of the lithosphere or of natural electricity phenomena. Anyhow, in my subconscious, earthquakes, volcanic activity, earth expansion and also electricity were always connected. In later years I experienced minor earthquakes in Italy and active volcanism on Java, in South America and in Africa, whereby my geological worldview became more and more consolidated and I distanced myself from official geology with growing scepticism.

To me the volcano excursion was a key experience that has raised doubts about the solidity of the earth sciences. It was a wake-up call to think for oneself and always to question, doubt, examine. I started by reading old textbooks on geognosy, geology, etc. because I was sure that a great rethinking was needed.

2. Scientific events on earth expansion, attended and partly organized by me

At the TUB earth expansion fell completely into oblivion after the death of Hilgenberg in 1976. Things stood somewhat better in Bavaria. Here, the director of an iron ore mine, Johannes Pfeufer, was a convinced adherent of earth expansion and succeeded in publishing a book with the renowned publisher Glückauf, dealing with orogeny seen as a consequence of earth expansion (Pfeufer, 1981). (Unfortunately, this book is characterized by Pfeufer's very obstinate insights and therefore not very convincing for me). Pfeufer was also a lecturer in applied geology at the University of Erlangen near the city of Nuremberg. A colloquium in his honour was held there in 1995, where I presented a lecture about "*The importance of electricity in geology*". Klaus Vogel from Werdau, Saxony was allowed to make a poster presentation in the corridor. With his transparent globes illustrating the expansion of the earth he attracted a great deal of attention among the numerous participants that came from all over reunited Germany. They wanted to learn more from him and urged him into the lecture hall, which was only hesitantly allowed by the organizers. And thus, after a long time the theory of earth expansion was again discussed in public inside a university. After the meeting in Erlangen, I spontaneously invited Klaus to give a guest lecture at the TUB, an invitation which he honoured a few months later at the Faculty of Mining and Earth Sciences. His exposition was followed with scepticism, but benevolently. At Klaus's suggestion the expansionists from Wrocław, Poland, Stefan Cwojdzinski¹ and Jan Koziar² also came to the TUB for lectures. When, during a second visit, Koziar illustrated his criticism of plate tectonics with caricatures, there was an angry protest in the hall from at least one participant. As a consequence the lecture ended in a chilly atmosphere. To this day I blame myself for that awful event. Because it was the onset of a strong polarization at my faculty, manifest by ostentatious "scientific" ideology, stubborn muteness and tending towards personal hostility.

In the year 2000 a request from INGV (Istituto Nazionale di Geofisica e Vulcanologia) in Rome came to the TUB asking if any event was planned in honour of Ott Christoph Hilgenberg (1896-1976) on the 25-year anniversary of his death. The Italians considered that he and his important work "*Vom Wachsenden Erdball*, Berlin 1933" ("About expanding Earth, Berlin 1933") should be remembered with a tribute. No one wanted to really give an answer to this request, as the

¹ See also the chapter by Stefan Cwojdzinski.

² See also the chapter by Jan Koziar.

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geology professors were reluctant to discuss the topic of earth expansion. I took that opportunity and was successful in inspiring the director of the Lower Saxony Mining Museum from Lautenthal, Harz to organize a “Montanistic Colloquium” in honour of Ott Christoph Hilgenberg.

“Earth expansion – a misunderstood geoscientific theory?” was the motto of the Lauthenthal Colloquium 2001, where Klaus Vogel, Helge Hilgenberg and Giancarlo Scalera were the main speakers. “*New Ideas and Facts in Expanding Earth*” were presented by Scalera and followed with great interest by the audience. Ott Christoph Hilgenberg’s daughter Helge reported on her father’s life and work whereas Klaus Vogel showed and explained his transparent growing globe models. The Prime Minister of Lower Saxony, Dietmar Gabriel, sent a greeting and wished the event every success.

Suddenly the subject of earth expansion had reappeared out of oblivion not the least thanks to the moderation taken over by the meritorious Prof. Max Schwab (Geology) from the University of Halle, Saale and the activity of Giancarlo Scalera from the INGV Rome.

Further events dealing with earth expansion followed: the International Symposium “New Concepts in Global Tectonics” held in 2002 at Otero Junior College, La Junta, Colorado/USA; the colloquium at the Mining and Industrial Museum Theuern, Bavaria (2003; Figs 1-2) and the colloquium held at the University of Urbino under the patronage of Prof. Forese Carlo Wezel immediately following the 32nd International Geological Congress at Firenze, Italy 2004. All events were reported by me in German geoscientific journals, but this had no effect on the basic attitude of geoscientists at

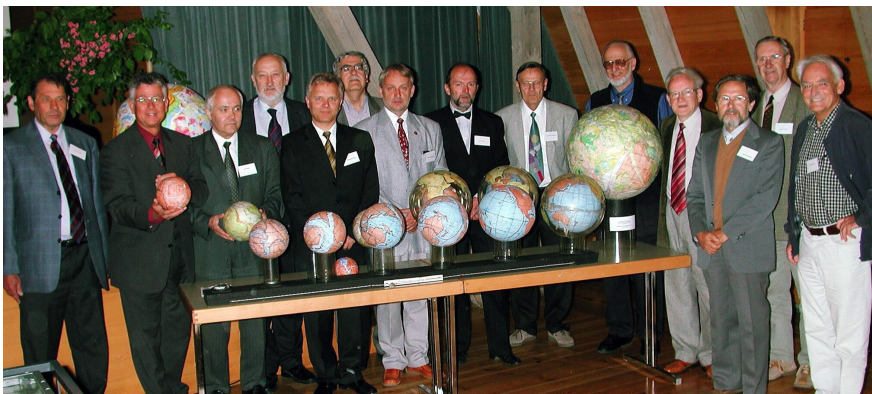


Fig 1. The lecturers at the Earth Expansion Colloquium held in Theuern/Bavaria in May, 2003. From left: Wolf, Nentwig, Koziar, Jacob, Meyl, Scalera, Cwojdziański, Rajlich, Kallenbach, Luckert, Schwab, Gottfried, Vogel, Fritsch.

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Fig 2. *The author (middle) discussing with Eva-Maria and Klaus Vogel during a break at the Theuern Colloquium in the park of the Mining and Industrial Museum, the host of the colloquium, May 2003.*

German universities. Earth expansion remained officially taboo. Under the title “*Why expanding Earth? A book in honour of Ott Christoph Hilgenberg*” (2003) Giancarlo Scalera published the papers of numerous lectures presented at the Lautenthal Colloquium, as well as the list “*Bibliographical sources for the expanding Earth*”, in which more than 1000 printed titles are statistically recorded, titles that had almost all disappeared from libraries.

In 2008 a documentary appeared on German ARTE, ZDF TV with the title “*Und sie bewegt sich doch*” (“And yet it moves”). In it the “Globemaker Klaus Vogel” from Werdau showed his transparent paleoglobes and the specialist in physical fields Prof. Konstantin Meyl from Furtwangen University explained his new field theory (an extension of Maxwell’s theory), which is based on his concept of “neutrino power”. Moreover he assumed Earth’s expansion via the increase in the Earth’s mass by neutrino capture. This theory of Meyl has been controversially disputed for the last 20 years and is still overheating minds. It has something to do with free energy and could gain - provided experiments proof positive - world political significance: Free energy, a pipe dream or reality?

A highlight of international importance regarding “The Earth Expansion Evidence” was the 37th Interdisciplinary Workshop “Ettore Majorana” held in Erice, Italy, 2011. Conveners were: Giancarlo Scalera, Stefan Cwojdzinski and Enzo Boschi. I tried to send the volume with papers presented at the workshop to the director of the Berlin Natural History Museum but it was intercepted by his staff “so as not to cause any disturbances”.

Particularly during the last two decades I have had personal contacts with numerous earth expansionists throughout the world or communicated with them via the Internet or at workshops. Unfortunately, I had no English lessons at school in the former GDR,

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Fig 3. *Post-colloquium “expansionists” debating at Klaus Vogel’s home in Werdau, Saxony (26.05.2003). From left: Jan Koziar (Poland), Klaus Vogel (Saxony), Karl Luckert (USA) and me (Berlin).*

a fact that has inhibited my communication. The exchange of ideas with colleagues in English is still quite tedious. However, I was helpful to them as best I could in printing and spreading their contributions referring to earth expansion. The scientific colloquia on earth expansion in Lautenthal (2001) and Theuern (2003) were an acknowledged success owing in part to my contribution and initiative as well as to my position at the TUB. I strengthened my contacts with Giancarlo Scalera, Klaus Vogel and Helge Hilgenberg¹, which developed into personal friendships. After the Theuern session there was also a post-colloquium meeting of some of the participants at Klaus Vogel’s home, leading to further fruitful discussions (Fig 3). Unfortunately, a few years after the Erice workshop Klaus became ill and died in 2015. But meetings, discussions and PowerPoint presentations are still going on, for instance in 2014 at the Manuela & Heiner Studt Studio in Hamburg (Fig. 4) or in Berlin, at Helge Hilgenberg’s home (Fig. 5).

3. Thoughts on orogeny and Earth expansion

In spring 2009 I sent Klaus Vogel a letter summarising my thoughts on orogeny and earth expansion. In his reply, he returned this summary to me with his comments. An excerpt from my letter with his marginal notes reproduced as footnotes is presented below as a means of expounding our views on the formation of folded mountains on the basis of the theory of earth expansion. Some figures taken to illustrate my laboratory experiments are reproduced from Jacob (2010).

¹ *Helge passed away at the end of 2019 or in the first days of 2020.*

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Fig 4. In 2014 I gave a presentation at the Manuela & Heiner Studdt Studios in Hamburg.

Fig 5. Remembering Ott Christoph Hilgenberg and diving into his archive at his daughter's home in Berlin (2016). From left to right: Heiner Studdt (initiator of the German internet site on Growing Earth <http://www.wachsende-erde.de/index.html>), Helge Hilgenberg, and the author.



Karl-Heinz Jacob
Berlin, March 2009

Earth expansion¹

Earth expansion means increase in volume and probably also in mass of the earth's body, processes whose causes are not well understood. The mere fact that all continents of today's Earth can be fitted together to form a closed granite envelope (of the primordial Earth) on a globe of only about 50% diameter, can be seen as evidence of an originally smaller Earth.² Directly linked to the earth's expansion are tectonic events such as earthquakes, seaquakes, volcanism, and the formation of rifts and deep-sea trenches. Even the generation of oceanic transform faults can be best explained without contradictions by the radially operating earth expansion.³ By an evaluation of the ever growing number of

¹ I'd prefer Earth growth.

² The dissection of the primordial crust is an enduring process. It began in the Precambrian with the fragmentation of the old shields and platforms at about 40% diameter. At about 55% seafloor spreading began at the forming mid-ocean ridges (expansion gaps). This process continues until today by the oceanic expansion.

³ They permit compensating movements to maintain the shape of the sphere.

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NASA measurements at global fixed points, it has been recently recognized that the lithosphere has an oscillating behaviour which permits to measure locally limited subductions or expansions. Global-ring computations indicate annual growth rates in the range between 48 and 120 mm, averaging 80 mm per year. Numerous research projects are underway worldwide to find and validate subduction zones, but there is clear evidence of deception. Many researchers involved in these projects are currently preventing the distribution of information on Earth expansion and claim validity for plate tectonics only.

The formation of folded mountains by involvement of self-organizing processes

According to my concept elaborated since 1996 (Fig. 6), mountain folding is the result of complex dynamic processes involving:

1. bulging (or arcogenesis) of the earth's surface
2. reduction of the curvature angle of the surface
3. tectonic fractures due to collapse of the surface¹
4. heat flow from beneath, causing TEC (thermo-electro-chemical) processes, which on their part are inducing →
5. → diagenetic and metamorphic processes with texture generation due to the predominant state of thermodynamic non-equilibrium (self-organization)²
6. Classic exogenous dynamics of weathering, gravitation, etc.

Oh! I think it's becoming much too complicated, so let's try it otherwise:

Folded mountains are called so because the layers in the mountains look like a tablecloth that has been crumpled by pushing it with the hands from the edges towards the middle. For the formation of mountains, current theory therefore requires pushing forces, e.g. two continents drifting against each other. The next step: continental plates ? plate tectonics. The strongest arguments of plate tectonics are therefore the mountains, whose formation must be explained by geology. Where would we be if geology could not explain mountains!?! However, there is still no plausible explanation, it simply does not work.

Prior to plate tectonics, the contraction theory was maintained, which tried to explain the mountains by the shrinking of the earth due to cooling. A baked apple with its shriveled surface served as a pictorial model for this.³

¹ + tensile stresses in the crust, thus clearing the way for points 3 – 6.

² ... and mountain building = uplift from below or, according to Goethe's Faust II-seismology:

Wie stünden eure Berge droben	(How would your mountains stand above
im prächtig reinen Ätherblau,	in splendidly pure ether blue,
hätt ich sie nicht emporgehoben,	if I would not have lifted them,
zu malerisch entzückter Schau.	to picturesque delightful show.)

³ Shrinkage from cooling: The crust is directly exposed to the chill of space. This is where the shrinking begins, while the compact interior of the earth keeps the

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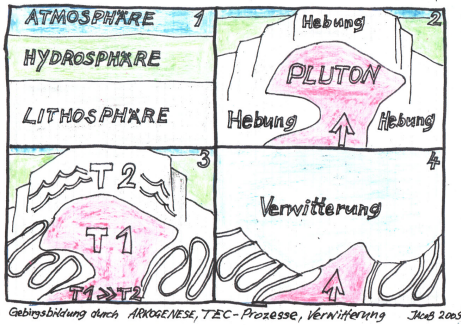


Fig 6. Cartoon showing the four stages of mountain building. 1. normal stratification in the upper part of the planet; 2. Upbulge of the lithosphere above a rising pluton (arcogenesis); 3. TEC processes in the lithosphere triggered by the thermodynamic imbalance that resulted from the high temperature difference ($T1 > T2$) between the pluton and the lithosphere ; 4. weathering in combination with gravity forces.

Until a few decades ago, every geologist had his or her own idea of mountain building. This is no longer tolerated today. The dogma of mountain building by plate tectonics prevails on an international level! Anyone who thinks differently and states it out is threatened with professional marginalization. However, the appearance of mountain building due to plate tectonics is deceptive. The folds in the mountains are not comparable to tablecloth folds. The folds were not caused by the opposing forces of clashing plates. Today's "valid" theory of mountain building is an emergency solution revealing ignorance of the true (physio-chemical) relationships and of experimental findings.

Mountain folds develop in a different mode than currently assumed. They are internal shifts of rock material to banded, often broken or wavy segregations. This has remained largely unknown up to now, but nevertheless can be assumed with a probability close to certainty and can be fairly explained, as done for instance by the 1976 Nobel Prize Winner for Chemistry, Ilya Prigogine, a well-known researcher of textures. In accordance with these new insights:

- mountains are not primarily created by gravity due to mechanical or tectonic forces; they are formed at weak points of the earth by upward bulging (in Russian: arcogenesis) caused by magma pressure from beneath;
- concomitantly the earth is flattening due to expansion;
- in the subsurface a horizontal banding within rock piles takes place due to diffuse material transport above the bulge, caused specifically at this location by the high heat flow generated by the magma flux rising from the mantle.¹

Material diffusion and rearrangement by self-organization into mineral bands, layers, folds (!) are new findings, which have been reported for more heat for the longest time. At the surface (interface) cracks must appear instead of folds. The comparison with the baked apple is completely wrong. The wrinkles are caused by the stiff peel, while underneath water content is boiled out, thus creating a volume deficit.

¹ Cycle: along extension fractures thinning, collapse and sedimentation takes place (geosynclinal stage). Further expansion results in uplift by the earth's internal forces, combined with processes of self-organization, which probably concentrate at the fractures.

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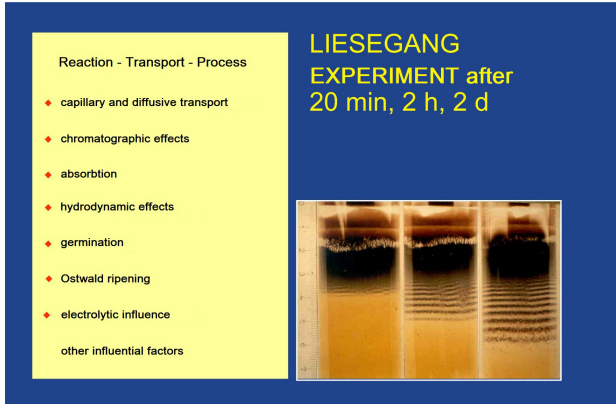


Fig 7. Synergistic factors (left) that influence self-organization processes. Progress of a Liesegang experiment (right) marked at 20 minutes, 2 hours and 2 days after beginning.

than 20 years, among others by the Jacob working group at the Technical University of Berlin (Fig. 7). The findings were included in modern reference books of the 1990s (e.g. Jacob et al., 1994; Krug et al., 1994; Walther et al., 1999). There are also several dissertations on this topic by members of this group. In GEO issue 4, 1993 the process was described as a New Image of the Earth.

Folded mineral structures are thus created by complex processes that run in a strongly synergistic way, also or even primarily driven by energy fronts. These are activated by conversion of thermal energy into electrical energy which further initiates ion dissolution, transport, precipitation and rearrangement of elements from the surrounding rock or from the ground into new ordered structures (metamorphosis). These often have a banded appearance and can thus look very similar to bedded sediments produced by gravity (Fig. 8-9). Lack of information referring to such processes has so far led to a profound confusion in the interpretation of structures. This may be considered a century-mistake. Layered geological formations - i.e. stratified mineral and rock layers – could have formed without doubt by deposition due to gravity (in the gravitational

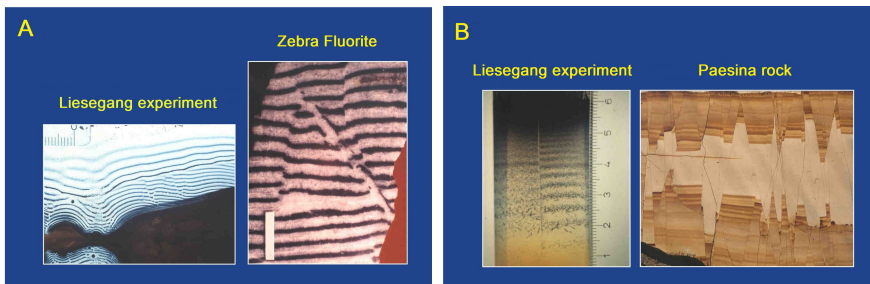


Fig 8. Comparison between experimentally created Liesegang bands (left of the pictures) and natural textures in rocks that are most probably due to the same process: A. Zebra fluorite; B. Paesina rock from Toscana, Italy.

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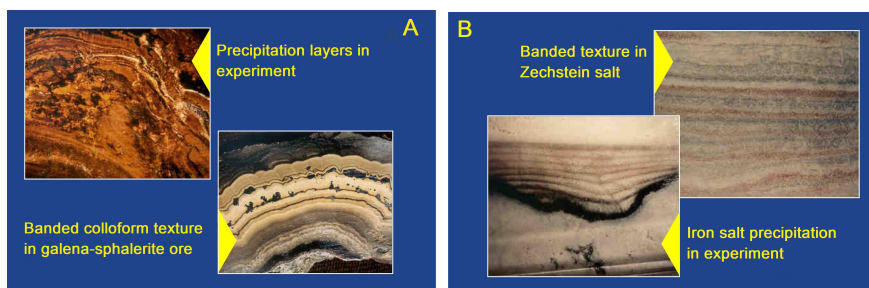


Fig 9. Banded colloform textures obtained experimentally (A. top left; B. bottom left) are almost identical to natural textures (A. Galena-sphalerite ore from Kalusz/Poland; B. Banded salt from the Werra Succession).

field), as is conventionally accepted. But they could likewise owe their origin as mineral bands or layers due to dissolution-redeposition processes taking place under the control of electromagnetic fields.

To conclude:

Many banded rocks are most likely not formed by primary mechanical deposition, but secondarily by electromagnetically induced precipitation fronts of diffusing ions. In the experiment, this happens across the energy flow, which advances front-like. In nature the energy can be represented by a thermic front or an electric flow, most likely by both of them. It is known for 180 years as the thermoelectric or Seebeck effect (1826), which has not yet been considered relevant for geology, much alike the Thomson effect (1854). In general, electricity as a structure-forming force in geology has been only considered by outsiders but was not systematically studied, and far from generally acknowledged, notwithstanding the prediction made by the English naturalist Joseph Priestley in 1767 in his standard work on electricity.

To round up the picture:

The structure-forming forces of the electromagnetically induced self-organization of diffusing elements in the lithosphere and the flattening of the earth's curvature due to earth's expansion near the surface renders the formation of folded mountains possible. Furthermore, weathering processes are still taking effect today.

The forces of uplift and erosion of the mountains compete with each other and can presumably also vary cyclically.

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This is why the Alps, for example, are so sharp-edged, continue to grow today and in the future, and are probably much younger than is currently assumed.
K.-H. Jacob¹

4. Final remarks

I am convinced that earth expansion is real. I am uncertain whether this process goes on continuously or is a pulsating one and whether it takes place with or without mass gain. However, I tend to believe that the earth's mass increases via solar energy, as O.C. Hilgenberg, Klaus Vogel, Konstantin Meyl and others assume. Today's physicists vehemently reject this assumption.

My work as a mining engineer and economic geologist at a technical University has taken me to regions with important ore deposits all around the world for more than 40 years, providing me with important professional knowledge and insights. During the years I have increasingly learned that in general geoscientists are burdened with a historically grown scientific mortgage: I am referring particularly to the conservative and traditional work practices as well as to the handed-down theories on the genesis of rock textures and more generally on the basics of geology, the infallibility of which today nobody doubts or dares to doubt or even criticise.

All these principles were developed centuries ago and passed on over generations. Later findings in other disciplines, like electricity effects, colloidal processes, boundary layer phenomena or self-organisation of ionic elements under thermodynamic non-equilibrium conditions have not been taken into account in geology until today. This is a big shortcoming. The negative consequences are immense and seem almost insurmountable. In my opinion, it's high time for a thorough revision of geological thinking as for an upgrading of the training of young geoscientists at universities. Experience shows that the old are generally not open to innovations. Disciplines such as thermodynamics, electrochemistry, colloid chemistry and others should be integrated into the training of the younger generation of geologists.

In 1984 the geochemist Peter Ortoleva reported on characteristic structures in rocks: "The evidence is growing that many of these repetitive patterns result not from imposed periodicity (such as the seasonal variations of sedimentary layering) but are the result of self-organization processes." In 1987 the physical chemist and Nobel Prize winner Ilya Prigogine together with his collaborator

¹ I subscribe gladly, Klaus

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strengthened this fundamental insight by writing: “Applying ideas of ‘non-equilibrium physics’ to geology will have a profound influence on the interpretation of numerous geological depositions” (Nicolis & Prigogine, 1987). In 2010 I published the results of 20 years of experimental structural research under conditions of thermodynamic non-equilibrium in the German “Journal of Geological Sciences” (ZGW), with the title: *‘About self-organization and its importance to geology’* (Jacob, 2010). The reaction or feedback registered: zero. By the way, despite the fact that there were no objections, no one was willing to change his mind and to express his determination to do something to replace outdated theories and to introduce working methods in concert with the updated knowledge coming from the disciplines mentioned above.

In Erice 2011 I gave the lecture *“Electric field forces and self-organization. From common concepts to new insights”* (Jacob & Dietrich, 2012). It plausibly ascertains that folded mountains do not require plate tectonics for their formation, but may instead be imagined as synergistic self-organization processes taking place under the combined action of electric/electromagnetic and gravitational fields. I consider that the departure from the strongly-defended idea that mountains are linked to crustal compression, gives good reasons to admit that the earth is really expanding.

About the Contributor



Karl-Heinz Jacob was born in 1940 in Halle/Saale (Germany). In 1959, he moved from the GDR to West Berlin, where he studied mining engineering from 1961 to 1967 at the Technical University (TU) Berlin. Before and during the studies he worked as a handyman in underground ore and coal mines and took part in mining excursions to France, England and Italy. After

studying he started his career as a prospector at a copper mine in Norway. In 1974 he received his doctorate summa cum laude from the Institute of Ore Research and Economic Geology at the TU Berlin on a topic regarding the distribution of rare earth elements in fluorspar deposits. From 1972 to 2004 he held the professorship for mineral deposits and raw materials research at the same institute.

His projects on four continents focused on small-scale mining, field methods for the evaluation of ore deposits, applied radiometry and - since 1988 - experimental research on self-organization processes and texture forming in rocks under the influence of low-frequency electric fields.

K.-H. Jacob lives together with his wife Lucilla in Berlin.

This essay was first published as a chapter in the 2020 book, *The Hidden History of Earth Expansion*, which is widely available from good bookshops in both Hardback and Paperback editions, as well as a Google eBook.

The Hidden History of Earth Expansion presents the personal histories of some of the most well-known researchers into Earth expansion in 14 original essays. In addition to furnishing us with their personal histories, as they strived to explore the seemingly overwhelming evidence for confirmation of Earth expansion, the authors' highlight areas where further research is required.

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- Afshordi, N. Mann, Robert, B. and Pourhasan, R. (2014). The Black Hole at the Beginning of the Time. *Scientific American*.311 (2) 38-43.
- Ager, D.V. (1986). Migrating fossils, moving plates and an expanding Earth. *Modern Geology*, 10:377-390.
- Ahmad, F. (1960). Glaciations and Gondwanaland. *Geol. Surv. India. Rec.* 86, 637-674.
- Ahmad, F. (1990). The bearing of paleontological evidence on the origin of the Himalayas. In: A. Barto-Kyriakidis (Ed). *Critical aspects of the Plate Tectonics theory*. Theophrastus Publication, Greece. 1, 129-142.
- Aitchinson, J. C. and 4 others. (2007). Shoshonites in southern Tibet record Late Jurassic rifting of a Tethyan intra-oceanic island arc. *Jour. Geology*. 115, 197-213.
- Alfvén, H. (1942). On the cosmogony of the solar system. *Stockholms Observatoriums Annaler*, 14, 2–1.
- Alfvén, H. (1954). *On the origin of the solar system*. Oxford University Press, New York.
- Alfvén, Hannes (1984). *Cosmology: Myth or Science? For the Golden Jubilee of the Indian Academy of Sciences, representing a culture which has investigated cosmology for four millennia*, edited in *Jour. Astrophysics and Astronomy*, No. 5, 79-98.
- Alfvén, H. (1992) *Cosmology: myth or science? IEEE transactions on plasma science*, vol. 20, no. 6, pp. 590–600.
- Alfvén, H. Arrhenius, G. (1972). Origin and evolution of the earth-moon system. *The Moon*, 5(1-2), 210–230.
- Alfvén, H. Arrhenius, G. (1976). *Evolution of the solar system*. NASA. Document number NASA-SP-345.
- Ali, J.R. and Aitchinson, J.C. (2005). Greater India. *Earth Science Review*, 72, 169-188.
- Allaby, M. (2013). *A Dictionary of Geology and Earth Sciences*. ISBN-13: 978-0199653065.

The Hidden History of Earth Expansion

- Amirmardfar, R. (2012). Relationship Between Gravity and Bio-Evolution - The Increasing Gravity Theory. In Boschi, Cwojdzinski & Scalera - editors (2012). The Earth expansion evidence – A Challenge for Geology, Geophysics and Astronomy.
- Anderson, D.L. Yu-shen zhang, Tanimoto T. (1992). Plume heads, continental lithosphere, flood basalts and tomography. W: Storey B. Alabaster T. Pankhurst R.J. (eds.): Magmatism and the Causes of Continental Break-up. Geol. Soc. Special. Publ. 68: 99-124.
- Anderson, S.F. et al. (1999). Mapping low density galactic: third helium Lyman-alpha forest. *Astronomic* . 117, 56-62. DOI: 10.1086/300698; e-print: astro-ph/9808105 | PDF.
- Antoshkina, A. Königshof, P. (2008). Lower Devonian reef structures in Russia: An example from the Urals. *Facies*. Doi: 10.1007/s10347-008-0135-7.
- Aretz, M. Webb, G.E. (2003). Western European and eastern Australian Mississippian shallow-water reefs: A comparison. In: Proceedings of the XVth International Congress on Carboniferous and Permian Stratigraphy, Utrecht, The Netherlands, 10-16 August, 2003 (Ed. T.E. Wong), *Roy. Ned. Acad. Arts Sci.* 433-442.
- Armijo, R. (1984). Quaternary extension of the Tibet plateau: field observation and technical implication. *International Symposium Geology Himalayas*. 2, 17 (abstract).
- Arrhenius, G. De, B. R. & Alfvén, H. (1974). Origin of the ocean. In *The Sea*, volume vol. 5 (pp. 839–861). Wiley New York, NY.
- Badham, J.P.N. (1982). Strike-slip orogens – an explanation for the Hercynides. *J. Geol. Soc. London*, 139, 493-504.
- Barcelo, C. Liberati, S. Sonogo, S. Visser, M. (2009). Black Stars, Not Holes. *Scientific American* 301 February 46-52.
- Barnett, C.H. (1962). A suggested reconstruction of the land masses of the Earth as a complete crust. *Nature*, 195 (4840), 447-448.
- Becker, G. (1910). *Age of the Earth*. The Smithsonian institution, Washington.
- Beaudette, C.G. (2002). *Excess Heat: Why Cold Fusion Research Prevailed*. Oak Grove Press South Bristol, ME.
- Belousov, V.V. (1979). Why don't I accept Plate Tectonics? *EOS*, 207-211.
- Berhe, S.M. (1999). Ophiolites in Northeast and East Africa: implications for Proterozoic crustal growth. (London: *Journal of the London Geological Society*; V. 147; No. 1, 51-57.

References

- Bird, P. (2003). An updated digital model of plate boundaries. *Geochemistry. Geophysics. Geosystem.* 52, doi 10.1029/2001 GC 000252.
- Blackett, P.M.S., Bullard, E., Runcorn, S.K. (eds.) (1965). *A Symposium on Continental Drift.* The Royal Society, London, x +323 pp.
- Blinov, V.F. (1973). On the hypothesis of Earth's expansion. (In Russian). *FizikaZemli* 1, 27-35.
- Bogolepow (1930), *Die Dehnung de Lithoshare, Zeit, dt, geol. Ges.*, 82: 206-228.
- Boucot. J. and Gray, J. (1987). The Tethyan concept during the Paleozoic. In: K.G. McKenzie (Ed). *Shallow Tethys 2.* A. A. Balkema, Rotterdam, 31-50.
- Bouilhol, P. Jagoutz, O. Hanchar, J. M. and Dudas, F.O. (2013). Dating the India-Eurasia collision through arc magmatic records. *Earth Planet Science Letter.* 366, 163-175.
- Boschi, Cwojdzinski & Scalera - editors (2012). *The Earth Expansion Evidence: A Challenge for Geology, Geophysics and Astronomy. Selected Contributions to the Interdisciplinary Workshop held in Erice, Sicily, Italy, 4-9 October 2011 at the Ettore Majorana Foundation and Centre For Scientific Culture.*
- Brezinski, D.K. Cecil, C.B. Skema, V.W. Stamm, R. (2008). Late Devonian glacial deposits from the eastern United States signal an end of the mid-Paleozoic warm period. *Palaeogeogr. Palaeoclim. Palaeoecol.* 268, 143-151.
- Bridges, L.W. (2002). *Our expanding Earth. The ultimate cause.* Oran V. Siler Printing. Denver Colorado.
- Brownlee, R. & Cox, A. (1961). Early solar evolution. *Sky and Telescope*, (pp. 252–256).
- Brosske (1962). *Wachst die Erde mit Naturkatastrophen? Die 'Expansions-Theorie' (Does the Earth grow with natural catastrophes? The expansion theory.).* 'Sanus' L. Brosske, Abtlg. Verlag, Dusseldorf-Benroth 41.
- Brunschweiler, R.O. (1983). Evolution of Geotectonic Concepts in the Past Century. In: Carey, S.W. (ed.): *Expanding Earth Symposium.* Sydney 1981, University of Tasmania, 9-15.
- Buchan, K.L. Ernst, R.E. (2004). Diabase dyke swarms and related units in Canada and adjacent regions. *Geological Survey of Canada Map 2022A, scale 1:5,000,000, accompanying report 39 pp.*
- Bullard, E. (1975). The emergence of plate tectonics: a personal view. *Annual Review of Earth and Planetary Sciences*, 3(1), 1-31.

The Hidden History of Earth Expansion

- Bullard, E.B. Everett, J.E. and Smith, A.G. (1965). The fit of the continents around the Atlantic. *Philosophical Transaction of the Royal Society of London*, A258, 41-51.
- Burrett, C., Berry, R. (2000). Proterozoic Australia—Western United States (AUSWUS) fit between Laurentia and Australia, *Geology* 28, 103-106.
- Carey, S.W. (1955). Wegener's South America–Africa Assembly, Fit or Misfit? *Geological Magazine*, 92(3), 196-200.
doi:10.1017/S0016756800063548.
- Carey, S.W. (1958). The tectonic approach to continental drift. In: Carey S. Warren (Ed). *Continental Drift – A Symposium University of Tasmania*, Hobart 177-355. Reprinted 1959.
- Carey, S.W. (1961). Palaeomagnetic evidence relevant to a change in the Earth's radius (a reply to Cox & Doell). *Nature*, 190 (4770), 36-36.
- Carey, S.W. (1976). *The Expanding Earth. Developments in Geotectonics*, 10, Elsevier, Amsterdam.
- Carey, S.W. (1978). *A philosophy of the Earth and Universe. Papers and Proceedings of the Royal Society of Tasmania*, 112, 5-19.
- Carey, S.W. (Editor) (1983). *The Expanding Earth. A Symposium* (Ed. S.W. Carey), University of Tasmania.
- Carey, S.W. (1983). Tethys and her forebears. In: *The Expanding Earth. A Symposium* (Ed. S.W. Carey), University of Tasmania, 169-187.
- Carey, S.W. (1988). *Theories of the Earth and Universe: A History of Dogma in the Earth Sciences*. Stanford University Press, Stanford, California, xviii+413 pp. ISBN 08047 1364 2.
- Carey, S.W. (1996). *Earth, Universe, Cosmos*. University of Tasmania, Hobart, pp. 204.
- Carey, S.W. (2000). *Earth, Universe, Cosmos*. 2nd Edition. University of Tasmania, Hobart.
- Cataldi, G. & D., Straser, V. (2016). Solar activity correlated to the M7.0 Japan earthquake occurred. *At New Concepts in Global Tectonics Journal*, V. 4, No. 2, p. 79-85.
- CGMW & UNESCO (1990). *Geological Map of the World*. Commission for the Geological Map of the World, Paris.
- Chatterjee, S., Hotton III, N. (Editors) (1992). *New Concepts in Global Tectonics*. Texas Tech University Press. ix+ 449 pp.
- Chatterjee, S., Scotese, C.R. (2010). The wandering Indian plate and its changing Biogeography during the Late Cretaceous-Early Tertiary period. In: S. Bandyopadhyay (Ed). *New Aspects of Mesozoic Biogeography*. Springer-Verlag, Germany, 105-126.

References

- Chatterjee, S., Bajpai, S. (2016). India's northward drift from Gondwana to Asia during the Late Cretaceous-Eocene. *Proc. Indian National Science Academy*, 82, 479-487.
- Chatterjee, S., Goswami, A. Scotese, C.R. (2013). The longest voyage: Tectonic, magmatic and paleoclimatic evolution of the Indian plate during its northward flight from Gondwana to Asia. *Gondwana Research*, 23,238-267.
- Choi, D.R. (2010). The January 2010 Haiti Seismic Disaster Viewed from the Perspective of the Energy Transmigration Concept and Block Tectonics. *NCGT Newsletter*, 54,. 36-54.
- Choi, D.R. Maslov, L. (2010). Global seismic synchronicity. *NCGT Newsletter*, 55, 66-74.
- Choi, D.S. Showman, A.P. Brown, R.H. (2009). Cloud features and zonal wind measurements of Saturn's atmosphere as observed by Cassini/VIMS. *J. Geophys. Res.* 114, E04007. Doi: 10.1029/2008JE003254.
- Ciechanowicz, S., Koziar, J. (1994). Possible relation between Earth expansion and dark matter. In: F. Selli, M. Barone (eds.), *Proceedings of the International Conference "Frontiers of Fundamental Physics"* (Olympia, Greece, 27–30 September, 1993). Plenum Press, New York and London, pp. 321–326.
- Close, F. (2004). *Particle Physics, a very short introduction*. (Oxford: Oxford University Press. 160. ISBN 0-19 280434-0.
- Colbert, E.H. (1973). Continental drift and the distributions of fossil reptiles. In: D.H. Tarling and S.K. Runcorn (Eds). *Implications of continental drift to the Earth Sciences*. Academic Press, 393-412.
- Colbert, E.H. (1984). Mesozoic reptiles: India and Gondwanaland. *Indian Journal Science*, 11, 25-37.
- Colpron, M., Nelson, J.L. (2009). A Palaeozoic Northwest Passage: incursion of Caledonian, Baltican and Siberian terranes into eastern Panthalassa, and the early evolution of the North American Cordillera. *Geol. Soc. London, Spec. Publ.* 318/1, 273-307. Doi: 10.1144/SP318.10.
- Condie, K.C. (1997). *Plate tectonics and crustal evolution*. Fourth Edition, (Oxford: Butterworth-Heinemann, An Imprint of Elsevier Science Linacre House, Jordan Hill, Oxford OX2 BDP 200 and Wheeler Road, Burlington, MA, USA. 282.
- Copper, P. (2002). Reef development at the Frasnian/Famennian mass extinction boundary. *Palaeogeogr. Palaeoclimat. Palaeoecol.* 181, 27-65.

The Hidden History of Earth Expansion

- Copper, P. Scotese, C.R. (2003). Megareefs in Middle Devonian supergreenhouse climates. *Geol. Soc. Am. Spec Paper* 370, 209-230.
- Cox, C.B. (1975). Distribution of Triassic tetrapods families. In: D.H.Tarling and S. K. Runcorn (Eds). *Implications of continental drift to the Earth Sciences*. Academic Press, 369-371.
- Crawford, A.R. (1979). Gondwanaland and the Pakistan Region. Pp. 103-110 in *Geodynamics of Pakistan*, Ed. A. Farah and K.A. De Jong. Geological Survey of Pakistan, Quetta.
- Creer, K.M. (1965). An expanding Earth? *Nature*, London 205, 539-544.
- Cwojdziański, S. (1995) - Recenzja: R.Dadlez, W.Jaroszewski. *Tektonika*. Wyd. Nauk. PWN. *Prz. Geol.* 43, 3: 255 - 258. /Review of the book R.Dadlez, W.Jaroszewski. *Tectonics*. Sci Publ.PWN/.
- Cwojdziański, S. (2001) Czy możliwa jest dyskusja naukowa w geotektonice. *Przeg. Geol.* 49, 10/1: 856 – 857 / Is the discussion in geotectonics possible ? *Geol. Rev.* 49. 10/1: 856-857.
- Cwojdziański, S. (2003). The Tectonic Structure of the Continental Lithosphere Considered in the Light of the Expanding Earth Theory - A Proposal of a New Interpretation of Deep Seismic Data. *Polish Geol. Inst. Spec. Papers*, 9, 1-80.
- Cwojdziański, S. (2004). Mantle plumes and dynamics of the Earth interior - towards a new model. *Prz. Geol. /Geol. Review* 52.8/2:817 - 826.
- Cwojdziański, S. (2012). Geological Evolution of the Sudety Mts. (Central Europe) on the Expanding Globe. In: *The Earth Expansion Evidence, A challenge for geology, geophysics and astronomy. Selected Contribution to the Workshop, held in Erice, Sicily, Italy (4-9 October 2011)*. 263-273. Post-conference publication edited by Giacarlo Scaleria (editor in chief), Enzo Boschi, and Stefan Cwojdziański. Rome, 492.
- Cwojdziański, S. (2016). History of a discussion: selected aspects of the Earth expansion v. plate tectonics theories. *Geological Society, London, Special Publications*, 442, SP442-24.
- Cwojdziański, S., Koziar, J. (1995) Konferencja międzynarodowa - Zagadnienia ekspandującej Ziemi. Wrocław-Sosnówka, 14-17.11.1994. *Prz.Geol.* 43, 4: 349 - 351.
- Czechowski, L. & Leliwa-Kopystynski, J. (2013). Remarks on the Iapetus' bulge and ridge. *Earth Planets Space*, 65, 929-934. Doi: 10.5047/eps.2012.12.008.
- Daly, R.A. (1917). Metamorphism and its phases. *Geol. Soc. Am. Bull.* 28, 375-418.

References

- Davydov, V.I. (2016). Biotic paleothermometry constrains on Arctic plates reconstructions: Carboniferous and Permian (Zhokhov Island, De-Longa Group Islands, New Siberian Archipelago). *Tectonics*, 35, 2158-2170. Doi: 10.1002/2016TC004249.
- Dearnley, R. (1965). Orogenic fold-belts, convection and expansion of the Earth. *Nature*, 206 (4991), 1284-1290.
- De Celles, P.G. Kapp, P. Gehrels, G. Ding, L. 2014. Paleocene-Eocene foreland basin evolution in the Himalaya of southern Tibet and Nepal: Implications for the age of initial India-Asia collision. *Tectonics*, 33, 824-849.
- De Hilster, D. (2008). *The Growing Earth*. p. 24. At: <www.dehister.com/docs/TheGrowingEarth.ppt>, 77.
- De Lury, J.S. (1931). The auto-traction hypothesis of crustal dynamics and mechanics. *Science* (No. 1900), 73, 590.
- De Lury, J.S. (1941). Correlation of schistosity and tectonic theory. *Am. J. Sci.* 239, 57-73.
- Dewey, J.F. (2015). A harbinger of plate tectonics: a commentary on Bullard, Everett and Smith (1965) 'The fit of the continents around the Atlantic'. *Phil. Trans. R. Soc. A*, 373(2039), 20140227.
- Dewey, F., Bird, J.M. (1970). Plate Tectonics and geosynclines: *Tectonophysics*, 10, 624-638.
- Dewey, J.F. Shackleton, R.M. Chang C. Sun Yin. (1988). The tectonic evolution of the Tibetan plateau: *Phil. Trans. Royal Soc. London*, 379-413.
- Dickins, J.M. (1994). The nature of the oceans or Gondwanaland, fact and fiction. In: *Gondwana Nine*. A. A. Balkema, Netherland, 387-396.
- Dietz, R.S. (1961). Continent and Ocean Basin Evolution by Spreading of the Sea-Floor. *Nature*, London 190, 854-857.
- Dietz, R.S. Holden, J.C. (1970). Reconstruction of Pangea: break-up and dispersion of continents. *Permian to Recent. J. Geophys. Res.* 75: 4,939-4,956.
- Dilek, Y. and Robinson, P.T. (2003). *Ophiolites in Earth History: Geological Society of London Special Publication 218* edited by Dilek, Y. & Robinson, P. T. 723 p.
- Dilek, Y. Shallo, M. and H. Furnes. (2005). Rift-drift, seafloor spreading and subduction tectonics of Albanian ophiolites. *International Geology Review* V. 47. (New York: Taylor & Francis Group. 147-176.
- Dimitriev, L.V. Vinogradov, A.P. and Udentsev, G.B. (1971). Petrology of ultrabasic rocks from rift zones of The Mid-Indian Ocean Ridge. *Philosophical Transactions of the Royal Society of London. Series A*

The Hidden History of Earth Expansion

- Mathematical and Physical Sciences, V. 268, No. 1192. A discussion on Petrology of igneous and Metamorphic rocks from the Oceanic Flore. (London: The Royal Society,). 403-408.
- Ding, L., Maksatbek, S., Cai, F.L., Wang, H.Q., Song, P.P., Ji, W.Q., Zhang, L.Y., Mohammad, Q., Upendra, B. (2017). Processes of initial collision and suturing between India and Asia. *China Earth Sciences*, 60, 635-657.
- Doglioni, C., Green, D.H., Mongelli, F. (2005). On the shallow origin of hotspots and the westward drift of the lithosphere. *Geol. Soc. Am. Spec Paper 388*, 735-749. Doi: 10.1130/2005.2388(42).
- Doglioni, C., Carminati, E., Cuffaro, M., Scrocca, D. (2007). Subduction kinematics and dynamic constraints, *Earth-Science Reviews* 83, 125–175.
- Doglioni, C., Carminati, E., Crespi, M., Cuffaro, M., Penati, M., Riguzzi, F. (2015). Tectonically asymmetric Earth: From net rotation to polarized westward drift of the lithosphere. *Geosci. Frontiers*, 6, 401-418.
- Dorschner, J. (1986). *Planeten – Geschwister der Erde?* Urania Verlag, Leipzig, 128p.
- Dumoulin, J.A., Harris, A.G., Gagiev, M., Bradley, D.C., Repetski, J.E. (2002). Lithostratigraphic, conodont, and other faunal links between lower Paleozoic strata in northern and central Alaska and northeastern Russia. *Geol. Soc. Am. Spec. Paper 360*, 291-312.
- Drayson, A. (1859). *The Earth we inhabit, its past, present, and probable future.*
- du Toit, A.L. (1937) *Our Wandering Continents: An Hypothesis of Continental Drifting*, Oliver & Boyd, London, UK.
- Dziewoński, A.M., Anderson, D.I. (1984). Seismic tomography of the Earth's interior. *American Scientist*. 72: 483-494.
- Egyed, L., (1956). Determination of changes in the dimensions of the Earth from palaeogeographical data. *Nature*, 178, n.4532, 534-534.
- Egyed, L., (1957). A new dynamic conception of the internal constitution of the Earth. *Geol. Rundsch. B.* 46, p. 101–121.
- Eichler, J.B. (2011). A New Mechanism for Matter Increase Within the Earth. *Nexus*, April-May, 43-48; 82.
- Eichler, J.B. (2015). Rhetoric and paradigm change in science: Three case studies. Master's thesis, University of Arkansas at Little Rock.
- Eichler, J.B. (In press). *An Infinite Universe.*

References

- Eisbacher, G.H. (1983). Devonian-Mississippian sinistral transcurrent faulting along the cratonic margin of western North America – A hypothesis. *Geology*, 11, 7-10.
- Eisenhower, D. (1961). President Dwight Eisenhower Farewell Address. <https://www.c-span.org/video/?15026-1/president-dwight-eisenhower-farewell-address>.
- Elbeze, A.C. (2013). On the existence of another source of heat production for the earth and planets, and its connection with gravitomagnetism. Published online: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3825064/> p.18
- Ellis, M. Watkinson, A.J. (1987). Orogen-parallel extension and oblique tectonics: the relation between stretching lieations and relative plate motions. *Geology*, 15, 1022-1026
- Elliston, J. (2003). Professor S.W. Carey's struggle with conservatism. In Scalera, G and Jacob, K-H. (Editors) 2003. *Why Expanding Earth? A book in honour of Ott. Christoph Hilgenberg. INGV publisher Roma* 97-114. (a reprint from Newsletters. *The Australian Geologist*, 125).
- England, P. Houseman, G. Sonder, L. (1985). Length scales for continental deformation in convergent, divergent, and strike-slip environments: analytical and approximate solutions for a thin viscous sheet model. *J. Geophys. Res.* 90 (No. B5), 3551-3557
- England, P. Jackson, J. (1989). Active deformation of the continents. *Earth Planet. Sci. Ann. Rev.* 17, 197-226.
- Erickson, F.P. (2008). Absolute space, absolute time and absolute motion. 2678. Publisher: Xlibris, ISBN: 978-1599261171.
- Erickson, W.C. (1980). *Orgonomic Geophysics: The Earth as an Orgonotic System*. Unpublished but posted online at Erickson (2001).
- Erickson, W.C. (1982). *Necessary Giants: Gravity and the Evolution of Dinosaurs*. Unpublished.
- Erickson, W.C. (1985). *Rogue Scientist from Down Under*. Unpublished but posted online at Erickson (2001).
- Erickson, W.C. (1988). *Ever Since Wegener: A Brief History of the Expanding Earth Hypothesis*. Unpublished but posted online at Erickson (2001).
- Erickson, W.C. (1989). *Bipedal Hopping and the Origin of Dinosaurs*. Unpublished but posted online at Erickson (2001).
- Erickson, W.C. (1990). *On the Origin of Dinosaurs and Mammals*. Unpublished but posted online at Erickson (2001).
- Erickson, W.C. (2001). *Bill Erickson's Earth Science Web Page*. <https://www.frontier-knowledge.com/earth>

The Hidden History of Earth Expansion

- Ernst, W.G. (1971). Metamorphic zonation on presumably subducted lithospheric plates from Japan, California and the Alps. *Contrib. Min. Petr.* 34, 43-59.
- Ernst, W.G. (1973). Blueschist metamorphism and P-T regimes in active subduction zones. *Tectonophysics*. 17,255-272.
- Ernst, W.G. (1993). Metamorphism of Franciscan tectonostratigraphic assemblage, Pacheco Pass area, east-central Diablo Range, California Coast Ranges. *Geol. Soc. Am. Bull.* 105, 618-636.
- Eskola, P. (1939). Die metamorphen Gesteine. In: *Die Entstehung der Gesteine. Ein Lehrbuch der Petrogenese.* (Ed. C.W. Correns), Julius Springer, Berlin (Reprint 1970), 263-407.
- Evans, J.V. (1958). Insect distribution and continental drift. 134-141. In *Carey (1958)*.
- Ewing, M., Heezen, B.C. (1956). Some problems of Antarctic submarine geology. *Geophys. Monogr.* 1(462), 75-81.
- Fairbridge, R.W., (1964). Thoughts about an expanding globe. In: *Subramanian, A.P. and Balakrishna, S. (eds.): Advancing Frontiers in Geology and Geophysics.* Osmania University Press, Hyderabad, 59-88.
- Farley, K.A. Neroda, E. (1998). Noble Gases in the Earth's Mantle. *Annual Review of Earth and Planetary Sciences*. Vol. 26: 189-218
From:
<http://www.annualreviews.org/doi/abs/10.1146/annurev.earth.26.1.189>
- Felt, H. (2012). *Soundings: The story of the remarkable woman who mapped the ocean floor.* ISBN: 978-0-8050-9215-8.
- Fernandez, M.S. Khosla, A. (2015). Para taxonomic review of the Upper Cretaceous dinosaurs eggshell belonging to the family Megaloolithidae from India and Argentina. *Historical Biology*, 27, 158-180.
- Ferry, J. (1992). Regional metamorphism of the Waits River Formation, Eastern Vermont: delineation of a new type of giant metamorphic hydrothermal system. *J. Petr.* 33, 45-94.
- Fleck, L. (1981). *Genesis and development of a scientific fact.* University of Chicago Press.
- Forsyth D., Uyeda, S.. (1975). On the Relative Importance of the Driving Forces of Plate Motion, *Geophysical Journal of the Royal Astronomical Society* 43, 163-200.
- Fox, S.W., Dose, K. (1977). *Molecular Evolution and the Origin of Life* (Revised ed.). Marcel Dekker, New York, 370 pp.

References

- Fox, S.W, Harada, K., Kendrick, J. (1959). Production of spherules from synthetic proteinoid and hot water: *Science* 129: 1221-1223.
- Frankel, H. (2012). *The Continental Drift Controversy. A Four Volume Set.* Cambridge University Press.
- Frisch, W. Meschede, M. (2005). *Plattentektonik. Kontinentverschiebung und Gebirgsbildung.* Wissenschaftliche Buchgesellschaft, Darmstadt, 196p.
- Galilei, G. (1638). *Two New Sciences.* Holland.
- Ganapathy, R. Keays, R. R. Laul, J. & Anders, E. (1970). Trace elements in Apollo 11 lunar rocks: Implications for meteorite influx and origin of moon. *Geochimica et Cosmochimica Acta Supplement*, vol. 1, p. 1117.
- Ganapathy, R. & Anders, E. (1974). Bulk compositions of the moon and earth, estimated from meteorites. In *Lunar and Planetary Science Conference Proceedings*, vol. 5, pp. 1181–1206.
- Gansser, A. (1973). Facts and theories on the Andes. *J. Geol. Soc. London*, 129, 93-131.
- Gansser, (1991). Facts and theories on the Himalayas. *Eclogie. Geol. Helv.* 84, 33-59.
- Gapais, D. Le Corre, C. (1980). Is the Hercynian belt of Brittany a major shear zone? *Nature*, 288 (No. 5791), 574-576.
- Garzanti, E. Hu, X. (2014). Latest Cretaceous Himalayan tectonics: Obduction, collision or Deccan related uplift? *Gondwana research*, doi: 10.1016/j.gr.2014.1003.1010.
- Gibbons, A. S. and 4 others. (2015). A tectonic model reconciling evidence for the collisions between India, Eurasia and intra-oceanic arcs of the central-eastern Tethys. *Gondwana research*, doi: 10.1016/j.gr.2015.1001.1001.
- Gilliland, W.N. (1964). Extension of the theory of zonal rotation to explain global fracturing. *Nature*, 202, 1276-1278
- Gold, T. (1987). *Power from the Earth.* Dent, London. Pp. 208.
- Gold, T. (1988). *Das Jahrtausend des Methans. Die Energie der Zukunft – unerschöpflich, umweltfreundlich.* Econ Verlag Düsseldorf, Wien, 256p
- Gold, T. (1989). New ideas in science. *J. Sci. Explor.* 3/2, 103-112
- Gong, E. Zhang, Y. Guan, C. Chen, X. (2012). The Carboniferous reefs in China. *J. Palaeogeogr.* 1, 27-42. Doi: 10.3724/SP.J.1261.2012.00004.

The Hidden History of Earth Expansion

- Goswami, A. and 4 others. (2013). A troodontid dinosaur from the latest Cretaceous of India. *Nature Communications*, 4, 1-5.
- Glenn, W. (1982). *The road to Jaramillo. Critical years of the revolution in Earth Science.* Stanford University Press. 459 pp.
- Greenfield, J. (1974). *Wilhelm Reich vs. the U.S.A.* W.W. Norton & Company, New York, 380 pp.
- Gurnis, M. Hall, C. Lavier, L. (2004). Evolving force balance during incipient subduction. *Geochemistry Geophysics Geosystem*, 5, 1-31.
- Gutenberg, B. (1951). *Internal constitution of the Earth*, volume 7. Dover Publications Inc.
- Guy, R. (2005). *The Mysterious Receding Seas.* ISBN: 978-1413439922
- Gurnis, M. Yang, T. Cannon, J. Turner, M. Williams, S. Flament, N. Müller, R.D. (2018). Global tectonic reconstructions with continuously deforming and evolving rigid plates. *Computers & Geosciences*, 116, 32-41. Doi: 10.1016/j.cageo.2018.04.007
- Hall, C.E. and 6 others. (2003). Catastrophic initiation of subduction following forced convergence across fracture zones. *Earth and Planetary Science Letters*, 212, 15-30.
- Hall, R. (1996). Reconstructing Cenozoic SE Asia. In: *Tectonic Evolution of SE Asia* (Eds. R. Hall, D.J. Blundell), *Geol. Soc. London Spec. Publ.* 106, 153-184
- Hall, R. (2002). Cenozoic geological and plate tectonic evolution of SE Asia and the SW Pacific: computer-based reconstructions, model and animations. *J. Asian Earth Sci.* 20, 353-431.
- Hall, R. (2012). Late Jurassic-Cenozoic reconstructions of the Indonesian region and the Indian Ocean. *Tectonophysics*. 570-571, 1-41. Doi: 10.1016/j.tecto.2012.04.021.
- Hallam, A. (1983). *Great Geological Controversies.* Oxford University Press.
- Hambry, M. J. & Harland, W. B. eds. (1981). *Earth's Pre-Pleistocene glacial record.* Cambridge: Cambridge University Press, London.
- Hanmer, S. Vignerresse, J.L. (1981). Mis en place de diapirs syntectoniques dans la chaîne hercynienne: Exemple des massifs leucogranitiques de Locronan et de Pontivy (Bretagne Centrale). *Bull. Soc. Geol. France*, S7-XXII/2, 193-202. Doi: 10.2113/gssgfbull.S7-XXII.2.193
- Hamilton, W.B. (1979). *Tectonics of the Indonesian Region*, US Geological Survey Professional Paper 1078. United States Government Printing Office, Washington, DC, ix + 345 pp.

References

- Hamilton, W.B. (2011). Plate Tectonics began in neoproterozoic time, and plumes from deep mantle have never operated. *Lithos*, vol. 123, no. 1-4, pp. 1–20.
- Hamilton, W.B. (2019). Toward a myth-free geodynamic history of Earth and its neighbors, *Earth-Science Reviews* 198, 102905.
- Harrison, C.G.A. (2016). The present day number of tectonic plates. *Earth, Planet and Space*, 68, doi: 10.1186/s40623-016-0400-x.
- Heezen, B.C., (1959a). Geologie sous-marine et déplacements des continents. *Colloques Internationaux du Centre National de la Recherche Scientifique*, N° LXXXIII, Paris, 295-302.
- Heezen, B.C., (1959b). Paleomagnetism, continental displacements, and the origin of submarine topography. *International Oceanographic Congress. Reprints of Abstracts: Am. Assoc. Advance. Sci.*
- Heezen, B.C. (1960). The rift in the ocean floor. *Scientific America*, 203, 98-110.
- Heezen, B.C., Ewing, M. (1961). The mid-oceanic ridge and its extension through the Arctic Basin: *Geology of the Arctic*.
- Heezen, B.C., Tharp, M. (1965). Tectonic fabric of the Atlantic and Indian Oceans and continental drift. *Philosophical transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 258(1088), 90-106.
- Heezen, B.C., Tharp, M. (1966). *Physiography of the Indian Ocean*.
- Heirtzler, J.R. (1977). A Minority View in Geophysics, *Science* 196, 778.
- Hess, H.H. (1962). History of Ocean Basins. In Engel, A.E.J. James, H. L. and Leonard, B.F. (Editors). *Petrologic Studies. A volume in honour of A.F.B. Boddington*. Geological Society of America 599-620.
- Herndon, J.M. (2005). Whole-Earth decompression dynamics. *Curr. Sci.* 89/11, 1937-1941.
- Herndon, J.M. (2011). Geodynamic basis of heat transport in the Earth. *Curr. Sci.* 101/11, 1440-1450.
- Hilgenberg, H. (2003). The life and work of Ott Christoph Hilgenberg: as seen by his daughter, Helge Hilgenberg. In Scalera, G., Jacob, K-H., (Editors) (2003). *Why Expanding Earth? A book in honour of Ott Christoph Hilgenberg*. INGV publisher Rome. 465 pp with extensive bibliography.
- Hilgenberg, O.C. (1933). *Vom Wachsenden Erdball. (On Growing Earth)* Berlin Giessmann und Bartsch 56 pp.
- Hilgenberg, O.C. (1933/2003). The Formation and development of Earth: contraction or expansion. In: *Why Expanding Earth?* (Eds)

The Hidden History of Earth Expansion

- Scalera, G. Jacob, K. Proceedings of the Lautenthal Colloquium held on May 26, 2001 in honor of Ott Christoph Hilgenberg. Rome (2003).
- Hilgenberg, O.C. (1960?/2003). The formation and development of the Earth: contraction or expansion? (Fragments from the last unpublished manuscript). In Giancarlo Scalera, and Karl-Heinz Jacob (eds): Why Expanding Earth? A book in honour of O.C. Hilgenberg. Proceedings of the Lautenthal Colloquium, held on May 26, 2001. INGV publisher Rome, 53-64.
- Hilgenberg, O.C. (1962). Rock magnetism and the Earth's palaeopoles. *Geofisica pura e applicata*, 53(1), 52-54.
- Hilgenberg, O.C. (1966). Die Paläogeographie der expandierenden Erde vom Karbon bis zum Tertiär nach paläomagnetischen Messungen. *Geologische Rundschau*, 55(3), 878-924.
- Hilgenberg, O.C. (1967/2015). Why Earth expansion? Rheologic evidence of the Earth's expansion.
<https://www.dinox.org/publications/Hilgenberg1967.pdf>
- Hilgenberg, O.C. (1974). Geotektonik, neuartig gesehen. *Geotektonische Forschungen (Geotectonic Research)*, 45, Schweizerbartsche Verlagsbuchhandlung, Stuttgart, 194p.
- Hodgin, R.C. (2008). NASA snaps photo of remote planet. Information by (November 13, 2008). At: [http://www.tgdaily.com/trendwatch-features/40192-nasa-snaps-photo-of-remote-planet-25-light-years-away-using-visible-light-](http://www.tgdaily.com/trendwatch-features/40192-nasa-snaps-photo-of-remote-planet-25-light-years-away-using-visible-light)
- Holland, H.D. (1984). *The Chemical Evolution of the Atmosphere and Oceans*. Princeton, N.J.: Princeton University Press.
- Hole, M. J. & Natland, J. H. (2019). Magmatism in the North Atlantic Igneous Province; mantle temperatures, rifting and geodynamics. *Earth Science Reviews*, [Earth_2018_391]. <https://doi.org/10.1016/j.earscirev.2019.02.011>
- Holmes, A. (1913). *The Age of the Earth*.
- Holmes, A. (1931). Radioactivity and Earth Movements. *Transactions of the Geological Society of Glasgow*, 18, 559-606, 1931, <https://doi.org/10.1144/transglas.18.3.559>.
- Holmes, A. (1944). *Principles of Physical Geology*. Thomas Nelson, xii+532, reprinted 1945, revised and expanded 1965.
- Holmes, A. (1965). *Principles of Physical Geology*. Second edition. Nelson, London, pp.1288.
- Holmes, D., Holmes, A. (1978). *Principles of Physical Geology*. Third edition.

References

- Hooft, G. (2007). The conceptual basis of quantum field theory. In: *The Oxford Handbook of Philosophy and physics*. (Ed. Robert Batterman, p. 661-729).
- Hoshino M. (1998). *The Expanding Earth: Evidence, Causes and Effects*. Tokai University Press, 295 pp.
- Hu, X. and 5 others. (2016). The timing of India-Asia collision onset – Fact, theories, controversies. *Earth Science Review*, 160, 264-299.
- Huisman, R.S., Beaumont C. (2014) Rifted continental margins: The case for depth-dependent extension, *Earth and Planetary Science Letters* 407 148-162.
- Hurrell, S.W. (1994). *Dinosaurs and the Expanding Earth*. One-off Publishing, 222 pp. ISBN 0952260301
- Hurrell, S.W. (2011). *Dinosaurs and the expanding Earth: One explanation for the gigantic sizes of some pre-historic life*. U.K.: One off, 3rd edition. ISBN 9780952 26037 0
- Hurrell, S.W. (2011). Ancient life's gravity and its implications for the expanding Earth. (Extended abstract). In *Extended Abstracts of the 37th Interdisciplinary Workshop of International School Geophysics. Sicily. "The Earth Expansion Evidence: A challenge for Geology, Geophysics and Astronomy"* Volume: Pre-conference book - Extended abstracts. DOI: 10.13140/2.1.1522.4643.
- Hurrell, S.W. (2012). Ancient Life's Gravity and its Implications for the Expanding Earth. In *The Earth expansion evidence – A Challenge for Geology, Geophysics and Astronomy - Selected Contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics*. Aracne Editrice, Roma.
<https://www.earth-prints.org/handle/2122/8838>
- Hurrell, S.W. (2014). A New Method to Calculate Palaeogravity Using Fossil Feathers. *NCGT Journal*, v. 2, no. 3, September, 2014. p 29-34.
- Hurrell, S.W. (2017). Early speculations about Earth expansion by Alfred Wilks Drayson (1827-1901) and William Thorp (1804-1860).
<https://dinox.org/hurrell2017>
- Hurrell, S.W. (2018). A palaeogravity calculation based on weight and mass estimates of Giraffatitan (=Brachiosaurus) brancai.
<https://dinox.org/hurrell2018a>
- Hurrell, S.W. (2019a). Palaeogravity calculations based on weight and mass estimates of four Tyrannosaurus rex specimens.
<https://dinox.org/hurrell2019a>

The Hidden History of Earth Expansion

- Hurrell, S.W. (2019b). A palaeogravity calculation based on weight and mass estimates of *Acrocanthosaurus atokensis*.
<http://dinox.org/hurrell2019b>
- Hurrell, S.W. (2019c). Palaeogravity calculations based on weight and mass estimates of two *Coelophysis bauri* specimens.
<http://dinox.org/hurrell2019c>
- Hurrell, S.W. (2019d). A Palaeogravity calculation based on weight and mass estimates of *Gigantoraptor erlianensis*.
<http://dinox.org/hurrell2019d>
- Hurrell, S.W. (2019e). A Palaeogravity calculation based on weight and mass estimates of *Ankylosaurus magniventris*.
<http://dinox.org/hurrell2019e>
- Hurrell, S.W. (2019f). A Palaeogravity calculation based on weight and mass estimates of *Euoplocephalus tutus*.
<http://dinox.org/hurrell2019f>
- Hurrell, S.W. (2019g). A Palaeogravity calculation based on weight and mass estimates of *Megalosaurus bucklandii*.
<http://dinox.org/hurrell2019g>
- Hurrell, S.W. (2019h). Palaeogravity calculations based on weight and mass estimates of *Paraceratherium transouralicum*.
<http://dinox.org/hurrell2019h>.
- Hutton, J. (1788). *Theory of the Earth: or an investigation of the laws observable in the composition, dissolution, and restoration of land upon the globe*. Royal Society of Edinburgh.
- Hutton, J. (1795). *Theory of the Earth*. Volume I.
- Hsü, K. (ed.), (1982). *Mountain Building Processes*. Academic Press, London, pp.263.
- Ingersoll, R.V. (1988). Tectonics of sedimentary basins. *Geol. Soc. Am. Bull.* 100, 1704-1719.
- Irving, E. (1977). Drift of major continental blocks since the Devonian. *Nature*, 270, 304-309.
- Ishikawa, A., Pearson, D.G., Dale, C.W. (2011). Ancient Os isotope signatures from the Ontong Java Plateau lithosphere: tracing lithospheric accretion history, *Earth and Planetary Science Letters* 301 159-170.
- Jackson, H.R. and Gunnarson K. (1990). Reconstructions of the Arctic: Mesozoic to Present. *Tectonophysics* 172, 303-322.
- Jacob, K.-H. (1974). Deutung der Genese von Fluoritlagerstätten anhand ihrer Spurenelemente, insbesondere an fraktionierten seltenen Erden (Interpretation of the genesis of fluorine deposits

References

- based on trace elements, with emphasis on fractionated rare earths), TU Berlin, 99 pp.
- Jacob, K.-H. (2010). Über Selbstorganisation und ihre Bedeutung für die Geologie. (About self-organization and its importance in geology). *Zeitschrift für Geologische Wissenschaften (ZGW)*, Berlin, 38, 295-310, 6 plates.
- Jacob, K.-H., Dietrich, S., Krug, H.-J. (1994). Self-organization in mineral fabrics. In: *Fractals and Dynamic Systems in Geosciences* (Ed.: J.H. Kruhl), Springer, 259-268.
- Jacob, K.-H., Dietrich, S. (2012). Electric Field Forces and Self-Organization. From Common Concepts to New Insights. In: *The Earth Expansion Evidence – A Challenge for Geology, Geophysics and Astronomy. Selected Contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics EMFCSC, Erice (4-9 October, 2011)* (Eds.: G. Scalera, E. Boschi, S. Cwojdzinski), 407-419.
- Jagoutz, O., Royden, L., Holt, A.F., Becker, T.W. (2015). Anomalously fast convergence of India and Eurasia by double subduction. *Nature Geosciences Letters*. 8, 475-478.
- Japsen, P. Bidstrup, T. Lidmar-Bergström, K. (2002). Neogene uplift and erosion of southern Scandinavia induced by the rise of the South Swedish Dome. In A.G. Doré, J.A. Cartwright, M.S. Stoker, J.P. Turner & N. White (eds.): *Exhumation of the North Atlantic margin: timing, mechanisms and implications for petroleum exploration*, 299–314. Geological Society, London, Special Publication 162.
- Jardetzky, W.S. (1929). La rotation zonale de la planète et les dérives continentales. *Acad. Roy. Serbe, Glas. Belgrade*, 134, 150-157
- Jardetzky, W. (1954). The principal characteristics of the formation of the Earth's crust. *Science*, 119 (No. 3090), 361-365
- Jiang, S. He, M. Yue, W. Qi, B. & Liu, J. (2007). Observation of ^3He and ^3H in the volcanic crater lakes: possible evidence for natural nuclear fusion in deep Earth. In *8th International Workshop on Anomalies in Hydrogen/Deuterium Loaded Metals, Sicily, Italy: Citeseer*.
- Ji'an S. Mingguo Z. Lüqiao Z. Daming L. (2004). Identification of Five Stages of Dike Swarms in the Shanxi-Hebei-Inner Mongolia Border Area and Its Tectonic Implications. *Acta Geologica Sinica – English Edition*, 78, 320-330.
- Johnson, A. (2019). *The Earth... but not as We Know It*.

The Hidden History of Earth Expansion

- Johnson, B.D. Powell, C. McA. and Veevers. J.J. (1980). Early spreading history of the Indian Ocean between India and Australia. *Earth and Planetary Science Letters* . 47, 131-143.
- Johnson, M.R.W. (2002). Shortening budgets and the role of continental subduction during the India-Asia collision. *Earth Science Review*. 59, 101-123.
- Jones, S. & Ellsworth, J. (2003). Geo-fusion and cold nucleosynthesis in tenth international conference on cold fusion. Cambridge, MA: LENR-CANR. org.
- Jordan, P. (1966). *Die Expansion der Erde*. Vieweg, Braunschweig, 182p.
- Jordan, P. (1973). *The expanding earth. The Physicist's Conception of Nature*.
- Kahle, C.F. (1974). *Plate Tectonics—Assessments and Reassessments*. American Association of Petroleum Geologists. SBN-10: 0891812997. ISBN (electronic): 9781629812182.
- Karna Lidmar-Bergström, Mats Olvmo & Johan M. Bonow (2017). The South Swedish Dome: a key structure for identification of peneplains and conclusions on Phanerozoic tectonics of an ancient shield, *GFF*, DOI: 10.1080/11035897.2017.1364293.
- Kasting, J. F. & Howard, M. T. (2006). Atmospheric composition and climate on the early earth. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 361(1474), 1733–1742.
- Ketner, K.B. (2012). An alternative hypothesis for the mid- Paleozoic Antler orogeny in Nevada. *USGS, Prof. Paper 1790*, 11p.
- Khan, Z.A. and Tewari, R.C. (2016). The concept of Gondwanaland and Pangaea- A appraisal: *Journal of Applied Geology and Geophysics*, v.4, p.44-56. doi: 10.9790/0990-0403024456.
- Khan, Z.A. and Tewari, R.C. (2017). Problems in accepting Plate Tectonics and subduction as a mechanism of Himalayan evolution. *Jour. Applied Geology and Geophysics*. 5, 81-100.
- Khan, Z.A. and Tewari, R.C. (2018). Indus-Yarlung Tsangpo Suture zone concept- A second opinion. *Jour. Tethys*, 5, 218-239.
- Kiessling, W. Flügel, E. Golonka, J. (1999). Paleoreef maps: Evaluation of a comprehensive database on Phanerozoic reefs. *AAPG Bulletin*, 83/10, 1552-1587.
- King, L.C. (1983). *Wandering Continents and Spreading Sea Floors on an Expanding Earth*. Wiley, Chichester, pp. 232.

References

- Keindl, J. (1940) Dehnt sich die Erde aus? Eine geologische Studie. (Is the Earth expanding? A geological study.), Herold-Verlag Dr. Franz Wetzel & Co., Munchen-Sollin, pp.50.
- Klootwijk, C.T. (1986). Greater India's margin: Paleomagnetic evidence for large-scale continental subduction, In: K.G. McKenzie (Ed).Shallow Tethys 2. A. A. Balkema, Rotterdam, 529.
- Kokus, M. (2004). Alternate theory of gravity and geology in seismic prediction. In New Concepts in Global Tectonics; Urbino Workshop 29-31 Aug. Italy.
- Kort, L. (1949). Das Wachen der Earth und die Wanderung der Kontinente. Buchdruckerei, Hannover, pp. 53.
- Koziar, J. (1980). Ekspansja den oceanicznych I jej zwiazek z hipotaza ekspansji Ziemi. Sprawozdania Wroclawskiego Towarzystwa Naukowego, 35, 13-19. [Expansion of the ocean floors and its connection with the hypothesis of the expanding Earth. Reports of the Wroclaw Scientific Society, vol. 35B. Ossolineum, Wroclaw, pp. 13–19.]
- Koziar, J. (1985). Rozwój oceanów jako przejaw ekspansji Ziemi. Geologia nr 8. Uniwersytet Slaski, Katowice, s. 109–114. [Development of the oceans as a manifestation of Earth's expansion. Geology no. 8. The Silesian University, Katowice, pp. 109–114.]
- Koziar, J. (1991). Prace nad problemami ekspansji Ziemi w ocerodku wroclawskim. Acta Universitatis Wratislaviensis, nr 1375, s. 110–156. [Research on the Expanding Earth in the Wrocław scientific community. Acta Universitatis Wratislaviensis, no. 1375, pp. 110–156.]
- Koziar, J. (1991). Nowa rekonstrukcja Gondwany na ekspanduj¹cej Ziemi, na tle rekonstrukcji dotychczasowych. Acta Universitatis Wratislaviensis, nr 1375, s. 357–396. [A new reconstruction of Gondwana on the expanding Earth. Acta Universitatis Wratislaviensis, no. 1375, pp. 357–396.]
- Koziar, J. (1993). Rozwój Pacyfiku i jego znaczenie dla współczesnej geotektoniki. W: J. Skoczylas (red.), Streszczenia referatów, tom II. Polskie Towarzystwo Geologiczne – Oddział w Poznaniu i Instytut Geologii Uniwersytetu im. Adama Mickiewicza w Poznaniu, Poznań, s. 45–56. [Development of the Pacific and its significance to the contemporary geotectonics. (The expanding Pacific). In: J. Skoczylas (ed). Lecture summaries. vol. II. The Polish Geological Society – Poznań Branch and the Institute of Geology of the Adam Mickiewicz University in Poznań, Poznań, pp. 45–56.]

The Hidden History of Earth Expansion

- Koziar, J. (1994). Principles of plate movements on the expanding Earth. In: *Frontiers of Fundamental Physics*. Eds. M. Barone & F. Selleri. Plenum Press. New York & London: 301 - 307.
- Koziar, J. (2003). Tensional development of active continental margins. In: K. H. Jacob (ed.), *Materials of the International Conference „Erdexpansion – eine Theorie auf dem Prüfstand“* (24–25 May, 2003, Ostbayern Schloss Theuern (Germany). Technische Universität, Berlin, pp. 27–35.
- Koziar, J. (2005). Tensyjny rozwój orogénów sródladowych. Czêsc I, Mechanizm. W: J. Skoczylas (red.), *Streszczenia referatów, tom XIV*. Polskie Towarzystwo Geologiczne – Oddział w Poznaniu i Instytut Geologii Uniwersytetu im. Adama Mickiewicza w Poznaniu, Poznań, s. 131–156. [Tensional development of intracontinental fold belts. Part I, Mechanism. In: J. Skoczylas (ed.), *Lecture summaries, vol. XIV*. The Polish Geological Society – Poznań Branch and the Institute of Geology of the Adam Mickiewicz University in Poznań, Poznań, pp. 131–156.]
- Koziar, J. (2005). Tensyjny rozwój orogénów óródladowych. Czêsc II, Przykłady regionalne. W: J. Skoczylas (red.), *Streszczenia referatów, tom XIV*. Polskie Towarzystwo Geologiczne – Oddział w Poznaniu i Instytut Geologii Uniwersytetu im. Adama Mickiewicza w Poznaniu, Poznań, s. 157–196. [Tensional development of intracontinental fold belts. Part II, Global examples. In: J. Skoczylas (ed.), *Lecture summaries, vol. XIV*. The Polish Geological Society – Poznań Branch and the Institute of Geology of the Adam Mickiewicz University in Poznań, Poznań, pp. 157–196.]
- Koziar, J. (2006). Terrany, czyli geologia w krainie duchów. W: J. Skoczylas (red.), *Streszczenia referatów, tom XV*. Polskie Towarzystwo Geologiczne – Oddział w Poznaniu i Instytut Geologii Uniwersytetu im. Adama Mickiewicza w Poznaniu, Poznań, s. 47–98. [Terranes: or geology in a phantoms world. In: J. Skoczylas (ed.), *Lecture summaries, vol. XV*. The Polish Geological Society – Poznań Branch and the Institute of Geology of the Adam Mickiewicz University in Poznań, Poznań, pp. 47–98.]
- Koziar, J. (2007). Tensional origin of the inversion in the Polish Basin with reference to tensional development of the Bohemian Massif. Extended abstract. In: B. Kontny, V. Schenk (eds.), *Abstracts of the 8th Czech – Polish Workshop „On Recent Geodynamics of the Sudety Mts. and Adjacent Areas“* (Kłodzko, Poland, 29–31 March, 2007). Wrocław University of Environmental and Life Sciences, Wrocław, pp. 17–21.

References

- Koziar, J. (2011). Shortening of the Length of Day (LOD) Caused by Big Tsunami Earthquakes on the Expanding Earth (extended abstract). In: S. Cwojdziniński, G. Scalera (eds.), Pre-Conference Extended Abstracts Book of the 37th Course of the International School of Geophysics. Interdisciplinary Workshop on "The Earth Expansion Evidence: A challenge for Geology, Geophysics and Astronomy." (Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Sicily, 4–9 October, 2011). Istituto Nazionale di Geofisica e Vulcanologia, Rome, pp. 55–58.
- Koziar, J. (2012). Expanding Earth and Space Geodesy. Society of Geologist Alumni of Wroclaw University. Wroclaw 2018.
- Koziar, J. (2018). Falsification of the Eulerian motions of lithospheric plates. Circularity of the plate tectonics theory. LAP LAMBERT Academic Publishing.
- Koziar, J. (2018). Geological proofs of significant expansion of the Earth and its broader scientific context. Association of Geologist Alumni of Wroclaw University, Wroclaw, PL. ISBN 978-83-950414-1-9.
- Koziar, J., Jamrozik, L. (1985). Application of the tension–gravitational model of the tectogenesis to the Carpathian orogen reconstruction. In: Proceeding reports of the XIIIth Congress of the Carpatho – Balkan Geological Association (Cracow, Poland, 5–10 September, 1985), part I. Polish Geological Institute, Cracow, pp. 200
- Koziar, J., Jamrozik, L. (1994). Tension–gravitational model of island arcs. In: F. Selli, M. Barone (eds.), Proceedings of the International Conference "Frontiers of Fundamental Physics" (Olympia, Greece, 27–30 September, 1993). Plenum Press, New York and London, pp. 335–337.
- Koziar, J., Muszyński, A. (1980). Spostavki između ekstenzjonnoto razvitije na Sredozemno i Ćerno morje. Spisanje na Blgarskoto Geologiĉesko DruŹestvo, god. XLI, kn. 3, s. 247–259. [Correlations of extensional development of the Mediterranean and the Black Sea. Review of the Bulgarian Geological Society, vol. 41, no. 3, pp. 247–259.]
- Krause, D.W. and 4 others. (1997). Cosmopolitanism among Gondwanian Late Cretaceous mammals. *Nature*, 390, 178–208.
- Krouss, L. (2014). A Beacon from the Big Bang. *Scientific American* 4, 311.59–67.
- Krug, H.-J., Dietrich, S., Jacob, K.-H. (1994). The formation and fragmentation of periodic bands through precipitation and Ostwald ripening. In: *Fractals and Dynamic Systems in Geosciences* (Ed.: J.H. Kruhl), Springer, 269–289.

The Hidden History of Earth Expansion

- Kuhn, T. (1970). *The structure of scientific revolutions*. University of Chicago press, 2nd ed edition.
- Kundt, W. (1998). *The Gold effect: Odyssey of scientific research*. arXiv:astro-ph/9810059v1, 54 S.
- Larson R.L. Pitman W.C. (III), Golovchenko X. Cande S.C. Dewey J.F. Haxby W.F. & LaBrecque (mapcompilers) (1985). *The Bedrock Geology of the World*. Freeman & Co. New York.
- Lay, T. Hernlund, J. Buffett, A.B. (2008). Core–mantle boundary heat flow. In *Nature Geoscience*, No. 1, p. 25-32.
- Laya-Pereira, J.C. (2012). *Permian carbonates in the Venezuelan Andes*. Doctoral Thesis, Durham Univ. 330p.
- Leclerc, G-L. (1751). *Theory of the Earth*.
- Le Grand, H.E. (1988). *Drifting Continents and Shifting Theories*. Cambridge University Press.
- Le Pichon, X. (1968). See-floor spreading and continental drift. *J.Geophys.Res.* 73, 12:3661 - 3697.
- Le Pichon, X. (2001). *My Conversion to Plate Tectonics*. In Oreskes, N. (editor), Le Grand, H.E. (2001). *Plate tectonics: An insider's history of the modern theory of the Earth*. Westview Press.
- Lerner, E. (1992). *The Big Bang never happened*. Vintage Books, New York.
- Lewis, C. (2000). *The Dating Game: One Man's Search for the Age of the Earth*, Cambridge University Press, ISBN 0-521-89312-7
- Leyton, M. Monroe, J. (2017). *The Source for Up to Half of Earth's Internal Heat Is Unknown*. Web: https://www.realclearscience.com/articles/2017/08/05/the_source_for_up_to_half_of_earths_internal_heat_is_unknown.html
- Liang Rixuan, Bai Wanji. (1984). *Genesis of ultramafic rocks in Yarlu-Zhangbo ophiolite belt*. *International Symposium Geology Himalaya*, 1, 117-118 (Abstract).
- Lindemann, B. (1927). *Kettengebirge, Kontinentale Zerspaltung und Erdexpansion*. Gustav Fischer Publishers, Jena. 186p.
- Love, J.J. Thomas, J.N. (2013). *Insignificant solar-terrestrial triggering of earthquakes*. *Geophysical Research Letters*. Vol.40, is. 6:1165-1170.
- Lovelock, J.E. (1979). *Gaia: A new look at life on Earth*. Oxford University Press, Oxford, 176 pp.
- Low, F. S. Kristna, S. (1970). *Narrow bond infrared photometry of alfactory*. *Nature*: 3. 23. 13-22.

References

- Lyell, C. (1830). *Principles of Geology: being an attempt to explain the former changes of the Earth's surface, by reference to causes now in operation. Part I.*
- Managadze, G.G., Cherepin, V.T., Shkuratovm Y.G., Kolesnik, V.N., Chumikov, A.E. (2011). Simulating OH/H₂O formation by solar wind at the lunar surface, *Icarus* 215, 449–451.
- Mardfar - See Amirmardfar.
- Makarenko G.F. (1983). *Volcanic Seas on Earth and Moon.* (In Russian), (Moscow, Izdatel's tvo Nedra.
- Marvin, D. (2018). *The Expanding Earth and the Implications on the Geophysics of Earth.* 44p.
- Marvin, J.H. (2003). *The Nuclear Heart of the Earth.* Interview at: <http://www.spacedaily.com/news/earth-03k.html>.
- Marvin, J.H. (2014). *Herdon's Earth and the Dark Side of Science; Perface* at: http://nuclearplanet.com/Herdon's_Earth%20.html.
- Molnar, P. Tapponnier, P. (1975). Cenozoic tectonics of Asia: effects of a continental collision: *Science*, 189, 419-426.
- Manuel K. Oliver (2009). *Earth's Heat Source, the Sun.* At: *Energy & Environment* 20131-144.
<https://arxiv.org/ftp/arxiv/papers/0905/0905.0704.pdf>.
- Mareschal, J-C. et al. (2012). Geoneutrinos and the energy budget of the Earth. *Journal of Geodynamics*, Vol. 54, p. 43– 54.
- Maxlow, J. (1995). *Global Expansion Tectonics: The geological implications of an expanding Earth.* Unpublished Master of Science thesis, Curtin University of Technology, Perth, Western Australia.
- Maxlow, J. (2001). *Quantification of an Archaean to Recent Earth Expansion Process Using Global Geological and Geophysical Data Sets.* PhD thesis, Curtin University of Technology, Western Australia.
- Maxlow, J. (2002). *Quantification of an Archaean to recent Earth Expansion Process using Global Geological and Geophysical Data Sets.* Unpublished PhD thesis, Curtin University of Technology, Perth, Western Australia.
- Maxlow, J. (2003). *Quantification of an Archaean to Recent Earth expansion process.* In Scalera, G and Jacob, K-H. (Editors) 2003. *Why Expanding Earth? A book in honour of Ott. Christoph Hilgenberg.* INGV publisher Roma. 335-349.
- Maxlow, J. (2005). *Terra non firma Earth: Plate Tectonics is a myth.* Terrella Press.

The Hidden History of Earth Expansion

- Maxlow, J. (2014). *On the Origin of Continents and Oceans: A Paradigm Shift in Understanding*. Perth, Western Australia: Terrella Press.
- Maxlow, J. (2015). *Expansion Tectonics: A Complimentary Download*. Terrella Press, 114p.
- Maxlow, J. (2018). *Beyond Plate Tectonics: Unsettling settled science*. Aracne Editrice, Roma. www.aracneeditrice.it
- McCarthy, D. (2003). The trans-pacific zipper effect: disjunct sister taxa and matching geological outlines that link the pacific margins. *Journal of Biogeography*, 30(10), 1545–1561. <https://doi.org/10.1046/j.1365-2699.2003.00929.x>
- McCarthy, D. (2011). *Here be dragons: how the study of animal and plant distributions revolutionized our views of life and Earth*. OUP Oxford.
- McElhinny M.W. Lock J. (1996). IAGA paleomagnetic databases with Access. *Surveys in Geophysics*, 17, 575-591.
- McKenzie, D.P. (1977). Plate Tectonics and Its Relationship to the Evolution of Ideas in the Geological Sciences, *Daedalus* Vol. 106 No. 3, 97-124.
- Menard, H.W. (1986). *The Ocean of Truth: A Personal History of Global Tectonics*. Princeton University Press.
- Meservey, R. (1969). Topological inconsistency of continental drift in the present-sized earth. *Science*.
- Meyerhoff, A.A., Tanner, I., Morris A.E.L., Martin, B.D., Agocs, W.B., Meyerhoff, H.A. (1992). Surge tectonics: a new hypothesis of Earth dynamics. In: Chatterjee, S. and Hotton, N. (eds.): *New Concepts in Global Tectonics*. Texas Tech. University Press, Lubbock, 309-409.
- Meyerhoff, A.A. (1995). Surge-tectonic evolution of southeastern Asia: A geohydro-dynamics approach. *Jour. Southeast Asian Earth Sciences*, 12, 143-247.
- Meyerhoff, A.A., Boucot, A.J., Meyerhoff, H.D., Dickins, J.M. (1996). Phanerozoic faunal and floral realms of the Earth: The intercalary relations of the Malvinokaffric and Gondwana faunal realm with the Tethyan faunal realm. *Mem Geological Society of America* No. 189.
- Miller, E.L. Kuznetsov, N. Soboleva, A. Udoratina, O. Grove, M.J. Gehrels, G. (2011). Baltica in the Cordillera? *Geology*, 39/8, 791-794. Doi: 10.1130/G31910.1.
- Mizuno, T. (1998). *Nuclear transmutation: the reality of cold fusion*. Infinite Energy Press Concord.

References

- Molnar, P. (2007). An examination of evidence used to infer late Cenozoic “Uplift” of mountain belts and other high terrain: What scientific question does such evidence pose? *Journal of the Geological Society of India*, 70, 395-410.
- Moore, E.M. (1991). Southwest U.S.—East Antarctic (SWEAT) connection: A hypothesis. *Geology* 19, 425-428.
- Moore, E.M., Kellogg, L.H. and Dilek, Y. (2000). Tethyan Ophiolites, mantle convection and tectonic historical contingency: A resolution of the ophiolite conundrum. *GSA. Inc. Special Paper #349 in Ophiolites and Oceanic Crust: New Insight from the Field Studies and the Drilling Program*, 349, 3-12.
- Myers, L.S. (2004). Earth expanding rapidly by external accretion expansion. In *Urbino Workshop 29-31 August*.
- Myers, L.S. (2008). A growing and expanding Earth is no longer questionable. (Washington, D.C.: American Geophysical Union, Spring Meeting, . 26a. Myers).
- Myers, L.S. (2015). *Gravity: The Source of Earth’s Water*. Page Publishing Inc. ISBN-13: 978-1682137116.
- Najman, Y. and 9 others. (2010). Timing of India-Asia collision: geological, biostratigraphic and paleomagnetic constraints. *Jour. Geophys. Research*, 115, 1978-2012.
- Neuendorf, K.K.E., Mehl Jr, J.P., Jackson, J.A. (Editors) (2011). *Glossary of Geology (Fifth Edition), Revised*, American Geosciences Institute, Alexandria, Virginia.
- Neiman, V.B., 1962: *Razsirjajuscajsja Zemlja (The expanding Earth)*. Gosudarstvennoje Izdatelstwo Geograficeskoj Literatury, Moskwa.
- Nicolas, A., Bouchez, J.L., Blaise, J., Poirier, J.P. (1977). Geological aspects of deformation in continental shear zones. *Tectonophys.* 42, 55-73.
- Nicolas, A., Poirier, J. P. (1976): *Crystalline Plasticity and Solid State Flow in Metamorphic Rocks*. J. Wiley & Sons, London, 444p.
- Nicolis, G., Prigogine, I. (1987). *Die Erforschung des Komplexen*. Piper, München, Zürich, 384 pp.
- Noel, D. (1986). Nut tree distributions and the expansion of the Earth. [http:// wayback.archive-it.org/1941/20100524190351/http://www.wanatca.org.au/Q-Yearbook/Y11all.pdf](http://wayback.archive-it.org/1941/20100524190351/http://www.wanatca.org.au/Q-Yearbook/Y11all.pdf)
- Noel, D. (1989). *Nuteeriat: nut trees, the expanding Earth, Rottneest Island, and all that—*. Published for the Planetary Development Group, Tree Crops Centre by Cornucopia Press. Reprint available from

The Hidden History of Earth Expansion

- Amazon, <https://www.amazon.com/Nuteeriat-Expanding-Rottnest-Island-P-Book/dp/1982976624/>
- Noel, D. (2012). Inside The Earth -- The Heartfire Model. <http://www.aoi.com.au/bcw/Heartfire/index.htm>
- Noel, D. (2013). Inside the Earth -- The Heartfire Model. <http://www.aoi.com.au/bcw/Heartfire/index.htm>
- Noel, D. (2017a). EP302: The Earth-Expansion Model Part A --The Death of Plate Tectonics. <http://www.aoi.com.au/EP/EP302.htm>. [A revision of “Fixed-Earth and Expanding-Earth Theories -- Time for a Paradigm Shift?” <<http://www.aoi.com.au/bcw/FixedorExpandingEarth.htm>> 2004.]
- Noel, D. (2017b). EP303: The Earth-Expansion Model Part B -- Answers to A Hundred Puzzles. <http://www.aoi.com.au/EP/EP303.htm> [A revision of “Fixed-Earth and Expanding-Earth Theories -- Time for a Paradigm Shift?” <<http://www.aoi.com.au/bcw/FixedorExpandingEarth.htm>> 2004.]
- Noel, D. (2017c). XT807: The Concore Model of planet and star interiors. <http://www.aoi.com.au/Extracts/XT807.htm> [An extract from Inside “The Earth -- The Heartfire Model”. ref. 9, 2012]
- Norin, E. (1946). Geological expedition in Western Tibet: Report Sino-Swedish Expedition, Stockholm, 1-229.
- Nutman, A.P. Clark R.L. Friend C.R.L. Bennett V.C. McGregor V.C. (2004). Dating of the Ameralik dyke swarms of the Nuuk district, southern West Greenland: mafic intrusion events starting from c. 3510 Ma. *Journal of the Geological Society*, 161, 421-430; DOI: 10.1144/0016-764903-043.
- Ogrisseg, J. (2009). Dogmas may blinker mainstream scientific thinking. <https://www.japantimes.co.jp/life/2009/11/22/life/dogmas-may-blinker-mainstream-scientific-thinking/>
- Ollier, C.D. (1969). ‘Weathering’, Oliver & Boyd, Edinburgh, 304.
- Ollier, C.D. (1981). *Tectonics and Landforms*, Longman, Harlow, 324.
- Ollier, C.D. (2002). The structure and origin of mountains: Pre-planation and post-planation gravity structures. in Dramis F. Farabollini P. Molin P. (Eds.) Large-scale vertical movements and related gravitational processes. In: Proc. International Workshop, Camerino-Roma 21-26 June 1999, Studi Geologici Camerti, Numero Speciale; pp.147- 155, Edimond,
- Ollier, C.D. (2003). The origin of mountains on an expanding Earth, and other hypotheses. In Scalera,G. & Jaob, H. (eds) *Why Expanding Earth*. 129 – 160 . INGV Publisher, Rome.

References

- Ollier, C.D. (2004). The evolution of mountains on passive continental margins. 59 – 88 In: Slaymaker, O. and Owens, P. (eds.): *Mountain Geomorphology*. Edward Arnold, London, Città di Castello (Italy).
- Ollier, C.D. (2006). A plate tectonics failure: the geological cycle and conservation of continents and oceans. *Annals of Geophysics*, Supplement to Vol. 49, N. 1, Chapter 8, 427-436.
- Ollier, C.D. (2007). Exceptional planets and moons, and theories of the expanding Earth. *New Concepts in Global Tectonics*, 45, 52-54.
- Ollier, C.D. (2012a). Dykes, crustal extension and global tectonics. In Scalera, G. Boschi, E. and Cwojdzinski (eds.) *The Earth Expansion Evidence – a challenge for Geology, Geophysics and Astronomy. Selected Contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics EMFCSC, Erice (4-9 October 2011)*, 207 – 304.
- Ollier, C.D. (2012b). Extension everywhere: rifts, continental margins and island arcs. In Scalera, G. Boschi, E. and Cwojdzinski (eds.) *In The Earth Expansion Evidence—a challenge for Geology, Geophysics and Astronomy. Selected Contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics EMFCSC, Erice (4-9 October 2011)*, 61 – 76.
- Ollier, C.D., Koziar, J. (2007). Dlaczego cykle geologiczne tektoniki p³yt nie sprawdzaj¹ się? *Przeegląd Geologiczny*, tom 55, nr 5, s. 375–382. [Why the plate tectonics rock cycles do not work? *Geological Review*, vol. 55, no. 5, pp. 375–382.]
- Ollier, C.D. Pain, C.F. (2000). *The Origin of Mountains*, Routledge, London.
- Ollier, C.D. Pain C.F. (2019). Neotectonic mountain uplift and geomorphology. *Geomorfologiya*. 2019;(4):3-26. <https://doi.org/10.31857/S0435-4281201943-26>.
- Öpik, E. (1971). Cratering and the moon's surface. In *Advances in Astronomy and Astrophysics*. Elsevier, vol. 8, pp. 107–337.
- Oreskes, N. (1989). *The Rejection of Continental Drift: Theory and Method in American Earth Science*.
- Oreskes, N. (editor), Le Grand, H.E. (2002). *Plate tectonics: An insider's history of the modern theory of the Earth*. Westview Press.
- Orlando, T.M., Jones, B.M., Aleksandrov, A.B., Hibbits, C.A., Dyar, M.D. (2018). A Solar Wind Source of Water in the Polar Regions of the Moon? *Lunar Polar Volatiles 2018 (LPI Contrib. No. 2087)*.
- Orlenok, V. (2010). *Global volcanism and oceanization of the Earth and planets*. Kaliningrad: I.Kant State University of Russia Press, 167.

The Hidden History of Earth Expansion

- Ortoleva, P. (1984). *Geochemical Self-Organization*. Oxford Monogr. Geol. Geophys., 23, 411 pp.
- Owen, H.G. (1976). Continental displacement and expansion of the Earth during the Mesozoic and Cenozoic. *Philosophical Transactions of the Royal Society of London*. A 281, 223-291.
- Owen, H.G. (1983). *Atlas of continental displacement 200 million years to the Present*. Cambridge Earth Sciences Series. Cambridge University Press. i-x, 1-159, 76 maps.
- Owen, H.G. (1984). The Earth Is Expanding and We Don't Know Why. In *New Scientist*, No. 22, Nov. 22, 1984. 27-
- Owen, H.G. (1996). Boreal and Tethyan late Aptian to late Albian ammonite zonation and Palaeobiogeography. *Mitteilungen aus dem Geologisch-Paläontologischen Institut der Universität Hamburg*. 77, 461-481.
- Owen, H.G. (2012). Earth expansion - Some Mistakes, What Happened in the Palaeozoic and the Way Ahead. In Scalera G. Boschi, E. and Cwojdzinski, S Editors. *The Earth Expansion Evidence – A challenge for Geology, Geophysics and Astronomy Erice, Sicily, 4-9 October 2012*, 77-89.
- Owen, L.A. (2004). Cenozoic evolution of global mountain systems. 132 – 152 In: Slaymaker, O. and Owens, P. (eds.): *Mountain Geomorphology*. Edward Arnold, London.
- Patriat, F., Achache, J. (1984). The Indian-Eurasian collision. A synthesis of oceanic magnetic anomalies and the comparison with continental paleomagnetic studies. *International Symposium Geology Himalayas*, 2, 14 (abstract).
- Peale, J.S. (1999). Origin and Evolution of the Natural Satelits. *Annu. Rev. Astron. Astrophys.* 37:533–602.
- Peishong, Bao and Wang Xibin. (1984). The two suites of volcanic in the Yarlung-Zhangbo River ophiolite belt - a discussion on the emplacement mechanism of ophiolites. *International Symposium Geology Himalaya 1*, 103-105 (Abstract).
- Pfeuffer, J. (1981). *Die Gebirgsbildungsprozesse als Folge der Expansion der Erde*. Glückauf, Essen, 125 pp.
- Pisarevsky, S. (2005). *Global Paleomagnetic Database (GPMDB V 4.6)*. Tectonics Special Research Centre of the University of Western Australia Web site (<http://www.tsrc.uwa.edu.au/>).
- Pitcher, W.S. Atherton, M.P. Cobbing, E.J. Beckinsale, R.D. (1985). *Magmatism at a Plate Edge*. Blackie, Halstead Press, Glasgow, 328p.
- Playfair, J. (1802). *Illustrations of the Huttonian Theory of the Earth*.

References

- Poirier, J.P. (1976). Crystalline Plasticity and Solid State Flow in Metamorphic Rocks. J. Wiley & Sons, London, 444p.
- Popper, K. (1963). Science as falsification. In *The Growth of Scientific Knowledge* (pp. 33–39). London: Routledge.
- Prasad, G. R. Verma, O. Flynn, J.J. and Goswami, A. (2013). A late Cretaceous vertebrate fauna from the Cauvery basin, South India: Implications for Gondwanian paleogeography. *Jour. Vertebrate Paleontology*, 33, 1260-1268.
- Pratt, D. (2000). Plate Tectonics: A paradigm under threat. *Jour. Scientific Exploration*. 14, 307-352.
- Priestley, J. (1767). *The History and Present State of Electricity*. London.
- Puchkov, V.N. (2009). The evolution of the Uralian orogen. (London: Geological Society, Special publication, V. 327, 2009), 161-195. DOI: 10.1144/SP327.9.
- Rage, J.C. (2003). Relationships of the Malagasy fauna during the Late Cretaceous: Northern of southern routes? *ActaPaleontologicaPolonica*, 48, 661-662.
- Rage, J.C. (2016). Gondwana, Tethys and terrestrial vertebrates during Mesozoic and Cenozoic. In: *Gondwana and Tethys*. M.G. Audrey-Charles and A. Hallam (Eds.). Geological Society of America Special publication 37, 255-273.
- Raiverman, V. (1992). Trans-Asiatic lineaments and Himalayan orogeny, In: A. K. Sinha (Ed). *Himalayan Orogen and global tectonics*: Oxford & IBH. Publication, New Delhi, 121-156.
- Raiverman, V. (2002). Foreland sedimentation in Himalayan tectonic regime: A relook at the Orogenic process: B.S. M. P.S. Publ, New Delhi, 1- 378.
- Rattliffe, H. (2017). A review of Anomalous Redshif Data. In: *The Galileo of Polmar*. Essay in memory of Alton Arp edited by Christofer C. Fulton and Martin Cocus.
- Reading, H.G. (1980). Characteristics and recognition of strike-slip fault systems. In: *Sedimentation in Oblique-Slip Mobile Zones* (Eds. P.F. Balance, H.G. Reading), Internat. Assoc. Sedimentol. Spec. Publ. 4, 7-26.
- Reich, W. (1945/1982). *The Bioelectrical Investigation of Sexuality and Anxiety*. Farrar, Straus and Giroux, New York, xi + 161 pp.
- Reich, W. (1949/1951/1973). *Ether, God and Devil/Cosmic Superimposition*. Farrar, Straus and Giroux, New York, 308 pp.

The Hidden History of Earth Expansion

- Reston, T. (2007). Extension discrepancy at North Atlantic nonvolcanic rifted margins: Depth-dependent stretching or unrecognized faulting? *Geology* 35, 367-370.
- Rickard, M.J. (1969) Relief of curvature on expansion - a possible mechanism of geosynclinal formation and orogenesis. *Tectonophysics* 8(2): 129 - 144.
- Reitan, P.H. (1968a). Frictional heat during metamorphism: quantitative evaluation of concentration of heat generation in time. *Lithos*, 1, 151-163.
- Reitan, P.H. (1968b). Frictional heat during metamorphism: quantitative evaluation of concentration of heat generation in space. *Lithos*, 1, 268-274.
- Reitan, P.H. (1988). Global dynamics and the temperatures of metamorphism. *Bull. Geol. Inst. Univ. Uppsala, N.S.* 14, 21-24.
- Rogers, (1985). Quote given in Carey (1988).
- Romanowicz, B., Gung, Y. (2002). Superplumes from the Core-Mantle Boundary to the Lithosphere: Implications for Heat Flux." *Science* 96.5567. (Stanford, CA: Highwire Press, 2002).513-516. DOI: 10.1126/science.1069404.
- Romans, B. (2008). Subduction Denialism, Part 1: The Backstory. <https://clasticdetritus.com/2008/11/14/subduction-denialism-part-1-the-backstory/>
- Roques, M. (1941). Les schistes cristallins de la partie sud-ouest du Massif Central Français. *Mém. Serv. Carte géol. France*, 512p.
- Rubin, V.C. (1988). Dark matter in the universe. *Proceedings of the American Philosophical Society*, vol. 132, no. 3, pp. 258–267.
- Runcorn, S.K. (Ed.). (1962). *Continental drift*. Elsevier.
- Runcorn, S.K. (Ed.). (1969). *The Application of the Modern Physics to The Earth and Planetary Interiors*. (N.A.T.O. Advanced Study Institute)
- Rust, J. and 15 Others. (2010). Biogeographic and evolutionary implications of a diverse paleobiota in amber from the early Eocene of India. *Proc. National Academy Science*, 107, 18360-18365.
- Sarwar, G. and Khalil, Y.S. (2017). The saga of India's drift and supra-subduction origin of the ophiolites on its northwestern margin, Pakistan. *New Concepts in Global Tectonics Journal*. 5, 27-47.
- Scalera, G. (2003). Samuel Warren Carey. Commemorative memoir. In Scalera, G. and Jacob, K-H., (Editors) 2003. *Why Expanding Earth? A book in honour of Ott Christoph Hilgenberg*. Proceedings of the 3rd Lautenthaler Montanistisches Colloquium, Mining Industry Museum,

References

- Lautenthal (Germany) May 26, 2001 (INGV Publication, Rome), 85-95.
- Scalera G. (2003). The expanding Earth: a sound idea for the new millennium. In: G. Scalera and K.-H. Jacob (eds.): *Why Expanding Earth? – A book in Honour of Ott Christoph Hilgenberg*. Proceedings of the 3rd Lautenthaler Montanistisches Colloquium, Mining Industry Museum, Lautenthal (Germany) May 26, 2001 (INGV Publication, Rome), 181-232.
- Scalera, G. (2003). Bibliographical sources for the expanding Earth. In: G. Scalera and K.-H. Jacob (eds.): *Why Expanding Earth? – A book in Honour of Ott Christoph Hilgenberg*. Proceedings of the 3rd Lautenthaler Montanistisches Colloquium, Mining Industry Museum, Lautenthal (Germany) May 26, 2001 (INGV Publication, Rome).
- Scalera, G. (2006). The Mediterranean as a slowly nascent ocean. *Annals of Geophysics, Supplement to V. 49, No. 1*, 451-482.
- Scalera, G. (2008). Great and old earthquakes against great and old paradigms – paradoxes, historical roots, alternative answers. *Advances in Geosciences*, 14, 41-57.
- Scalera, G. (2009). Mantovani and his ideas on the expanding Earth, as revealed by his correspondence and manuscripts. *Annals of Geophysics*, 52(6), 615-648.
- Scalera, G. (2011). South American volcanoes and great earthquakes. Article Cwojdzinski. Rome, (2012), 492.
- Scalera, G. (2011). The Earth Expansion Evidence, A challenge for geology, geophysics and astronomy. Contribution to the Interdisciplinary Workshop, held in Erice, Sicily, Italy (4-9 October 2011). Post-conference publication edited by Giancarlo Scalera (editor in chief), Enzo Boschi, and Stefan Cwojdzinski. Rome (2012), 492.
- Scalera, G. (2013). The vague volcano-seismic clock of the South American Pacific margin. *Advances in Geosciences*, 35, 89-103.
- Scalera G., Braun, T. (2003). Ott. Christoph Hilgenberg in twentieth century Geophysics. In Scalera, G and Jacob, K.-H., (Editors) 2003. *Why Expanding Earth? A book in honour of Ott Christoph Hilgenberg*. INGV publisher Roma. 25-41.
- Scalera, G., Jacob, K.-H., (Editors) (2003). *Why Expanding Earth? A book in honour of Ott Christoph Hilgenberg*. INGV publisher Rome. 465 pp with extensive bibliography.
- Scalera, G. (editor in chief): Hilgenberg, O. C. (2003/1933/1939) Formation and development of the: contraction or expansion. In Giancarlo Scalera, and Karl-Heinz Jacob (eds): *Why Expanding Earth?*

The Hidden History of Earth Expansion

- Proceedings of the Lautenthal Colloquium, held on May 26, 2001
Honour off OttChristoph Hilgenberg. INGV, Rome 2003.
- Scalera, G., Boschi, E. and Cwojdzinski (Editors) (2012). The Earth Expansion Evidence – A challenge for Geology, Geophysics and Astronomy. Selected Contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics EMFCSC, Erice (4-9 October 2011), Aracne Editrice, Rome, 494pp.
- Schaer, J.P. and Rogers, J. (1987). The Anatomy of Mountain Ranges. Princeton University Press, Princeton, N.J. pp.298.
- Sharaf, M. (1983). Fury on Earth, A Biography of Wilhelm Reich. St. Martin's Press, New York, xiii + 550 pp.
- Schirber, M. (2005). Core of a Supernova Goes Missing. At: <http://www.space.com/1168-core-supernova-missing.html>.
- Scholz, C.H. (1980). Shear heating and the state of stress on faults. *J.Geophys. Res.* 85 (No. B11), 6174-6184
- Scholz, C.H. Beavan, J. Hanks, T.C. (1979). Frictional metamorphism, argon depletion, and tectonic stress on the Alpine Fault, New Zealand. *J. Geophys. Res.* 84 (No. B12), 6770-6782
- Schwinner, R.G. (1924). Scherung, der Zentralbegriff der Tektonik. *Cbl. Miner. Geol. Paläont.* 469-479
- Sciama, W. D. (2012/1959) The unity of the Universe. Courier Corporation ISBN 0486135896 p. 256.
- Scoppola, B. Boccaletti, D. Bevis, M. Carminati, E. Doglioni, C. (2006). The westward drift of the lithosphere: A rotational drag? *Geol. Soc. Am. Bull.* 118/1-2, 199-209. Doi: 10.1130/B25734.1.
- Scotese, C.R. (1994). Paleogeographic maps. In: Klein, G. D. ed. Pangea: paleoclimate, tectonics, and sedimentation during accretion, zenith, and breakup of a supercontinent. Geological Society of America Special Paper, 288.
- Scotese, C.R. (2014). Atlas of Permo-Carboniferous Paleogeographic Maps (Mollweide Projection), Maps 53-64, Vol. 4, The Late Paleozoic, PALEOMAP Atlas for ArcGIS, PALEOMAP Project, Evanston, IL.
- Seclaman, M. (1982). Semnificatia genetica a liniatiilor minerale in sisturile cristaline din Carpatii Meridionali. *St. Cerc. Geol. Geofiz. Geogr.Ser. Geol.* 27,8-17.
- Seebeck, T.J. (1826). Über die magnetische Polarisation der Metalle und Erze durch Temperaturdifferenz. *Ann. Phys.*, 82/3, 253-286.
- Shannon, M. C. & Agee, C. B. (1998). Percolation of core melts at lower mantle conditions. *Science* 280, 1059 – 1061.

References

- Shehu, V. (1971). The age and origin of the porphyry granite of Fierza. (In Albanian).Bul.Of Sc. Tirana Univ.No 1 p 127 - 141.
- Shehu, V. (1988). Developing Earth. (In Albanian). Tirana, Albania. Sht. Bot. 8 Nëntori, 180.
- Shehu, V. (2004). The Earth, a sample of universe in our hands, according to the Earth expansion through growing and developing processes. New Concepts in Global Tectonics. Urbino Italy: Workshop, Aug. 29- 31.
- Shehu, V. (2005). The Growing and Developing Earth. No. Charleston, S.C.: BookSuege, LLC (2005), ISBN 1-4196-1963-3, USA, 218.
- Shehu, V. (2009). The Growing and Developing Earth. (In Albanian).Tiranë, Albania: Sht. Bot. Dudaj. 361.
- Shehu, V. (2012/2011). Earth Expansion through Activity of the Earth Core-Kernel as an active cosmic Object. In: The Earth Expansion Evidence, A challenge for geology, geophysics and astronomy. Selected Contributions to the Interdisciplinary Workshop, (held in Erice, Sicily, Italy 4-9 October. 2011). 243-262. Post-conference publication edited by GiacarloScalera (editor in chief), EnzoBoschi, and Stefan Cwojdzziński. 263-273. Rome.
- Shehu, V. (2016). The Earth's Core, an Energetic Cosmic Object. Printed by Create Space, An Amazom.com Company. USA 2016. 80p. <https://www.amazon.ca/Earths-Core-Energetic-Cosmic-Object/dp/1512290874>.
- Shen, W.B, et al. (2008). The expanding Earth: evidences from temporary gravity fields and space geodesic GEPH. Research Abstracts V. 10 EGU2008-A-0473.
- Shields, O. (1979). Evidence for initial opening of the Pacific Ocean in the Jurassic. Paleogeography, Paleoclimatology, Paleoecology 26, 181-220.
- Shields, O. (1997). Is plate tectonics withstanding the test of time? Annali di Geofisica, Vol XL, 1-8.
- Smiley, C.J. (1992). Plaeofloras, faunas, and continental drift: Some problem areas. In: S. Chatterjee and N. Hotton (Eds). New Concepts in Global Tectonics. Texas Tech. University Press, 241-257.
- Smith, A.G. (2006). Tethyan Ophiolite emplacement, Africa to Europe motion, and Atlantic spreading. In: The Tectonic Development of the Eastern Mediterranean Region. A.H.F. Robertson and D. Mountrakis, (Eds.). (London Geographical Society, Special Publication 260, 1-9.
- Smith, A.G. and Hallam, A. (1970). The fit of the southern continents: Nature, 225, 139-144.

The Hidden History of Earth Expansion

- Smith, A.G. Briden, J.C. and Drewry, G.E. (1973). Phanerozoic World Maps. In Hughes, N.F. *Organisms and Continents through time. Special Papers in Palaeontology*. 12, 1-43.
- Smith, A.G. Hurley, A.M and Briden, J.C. (1980). *Phanerozoic Palaeocontinental World Maps*. Cambridge University Press Earth Science Series. 107 pp.
- Smith A. G. Smith D. G. & Funnell B. M. (1994). *Atlas of Mesozoic and Cenozoic coastlines*. Cambridge University Press.
- Soja, C.M. Antoshkina, A.I. (1997). Coeval development of Silurian stromatolite reefs in Alaska and the Ural Mountains: Implications for paleogeography of the Alexander terrane. *Geology*, 25/6, 539-542.
- Spencer, E.W. (1977). *Introduction to the Structure of the Earth*. McGraw-Hill, Paperback, 640p.
- Steiner, J., (1967). The sequence of geological events and the dynamics of the Milky Way galaxy. *Jour. Geol. Soc. Australia*, 14, 99-132.
- Steiner, L. (2014). Von der alpinen Schub- zur Gleitdecke. (From Alpine thrust nappe to downsiding thrust sheet). *Z. geol. Wiss.*, 41-42, 185-196.
- Steinhorsson S., Thoraninsson S. (1997). Iceland. In: Moores E.M. and Fairbridge R.W. (eds.) *Encyclopedia of European and Asian Geology*. Chapman & Hall, London, 341-352.
- Stern and Gerya (2018) Subduction initiation in nature and models: A review, *Tectonophysics* 746, 173-198.
- Stevens, G. (1988). John Bradley: a New Zealand pioneer in continental drift studies. *Geol. Soc. New Zealand Newsletter*, No 17: 30–38. Quoted in Frankel (2012) Volume II.
- Strick, J.E. (2015). *Wilhelm Reich, Biologist*. Harvard University Press, Cambridge, MA, 487 pp.
- Stille, H. (1936). The present tectonic state of the Earth. *Bull. Am. Assoc. Petrol. Geol.* 20, 849-80.
- Storetvedt, K.M. (1997). *Our evolving planet: Earth history in a new perspective*. Alma Mater, Bergen, pp. 456.
- Storetvedt, K.M. (2010). Falling plate tectonics–rising new paradigm: salient historical facts and current tuation. *NCGT Newletter*, 55, 4-34.
- Strong, D.F. Hanmer, S.K. (1981). The leucogranites of southern Brittany: origin by faulting, frictional heating, fluid flux and fractional melting. *Can. Mineralogist*, 19, 163-176.
- Strutinski, C. (1987). Strike-slip faults – what are they really standing for? General features with exemplifications from the Romanian

References

- Carpathians. *Studia Univ. Babeş-Bolyai, Geologia-Geographia*, XXXII/2, 47-59.
- Strutinski, C. (1990). The importance of transcurrent phenomena in mountain building. In: *Critical Aspects of the Plate Tectonics Theory, Volume II* (Eds. V. Belousov et al.), Theophrastus Publ. S.A. Athens, 141-166.
- Strutinski, C. (1994). An orogenic model consistent with Earth expansion. In: *Frontiers of Fundamental Physics* (Eds. M. Barone, F. Selleri), Plenum Press, New York, 287-294.
- Strutinski, C. (1997). Causal Relations between Crustal Transcurrent Systems and Regional Metamorphism, with Reference to the Upper Proterozoic - Cambrian Formations of Central Dobrogea. Doctoral Thesis (Unpublished, in Romanian), Universitatea Bucuresti, 288p
- Strutinski, C. (2012). Contradictory aspects in the evolution of life hinting at gravitational acceleration through time. In: *The Earth Expansion Evidence. A Challenge for Geology, Geophysics and Astronomy*. (Eds.: G. Scalera, E. Boschi, S. Cwojdzinski). Selected contributions to the Interdisciplinary Workshop of the 37th International School of Geophysics EMFCSC, Erice (4-9 October 2011), Aracne Editrice, Rome, 343-364.
- Strutinski, C. (2013). Wachsende Schwerkraft – Triebfeder der Evolution? <http://www.wachsende-erde.de/web-content/bilder/strut/Strutinski-Wachsende%20Schwerkraft.pdf>
- Strutinski, C. (2015). Zwei Jahrhunderte Geologie. Von Abraham Gottlieb Werner zu Samuel Warren Carey. http://www.wachsende-erde.de/web-content/2_material6strutinski1.html
- Strutinski, C. (2016). Massenextinktionen aus Sicht der Hypothese eines wachsenden Erdballs. <http://www.wachsende-erde.de/web-content/bilder/strut/massenextinktionen5.pdf>
- Strutinski, C. (2017). An alternative view on subduction zones. Powerpoint presentation at the 2nd International Physics Conference, Brussels, 28-30 August 2017. *J. Phys. Chem. Biophys.* 7/3 (Abstract), 64. Doi: 10.4172/2161-0398-C1-023.
- Strutinski, C. (2018a). Fragmentation of the northeastern paleo-Indian oceanic domain by a creeping lithospheric current : Evidence from the Ontong Java Plateau. *J. Phys. Chem. Biophys.* 8 (Abstract), 74. Doi: 10.4172/2161-0398-C2-031.
- Strutinski, C. (2018b). Plattentektonik passé. Wie Mantelströme und Erdwachstum den indopazifischen Raum gestalten. Eigenverlag, Saarbrücken, 127p.

The Hidden History of Earth Expansion

- Strutinski, C. (2019). Orogene auf einer wachsenden Erde („Vergiss dein Schulwissen – die Erde ist anders“). Powerpoint to the Presentation held in the Heiner Studt Studio, Hamburg, 18.10.2019.
- Strutinski, C. Paica, M. Bucur, I. (1983). The Supragetic Nappe in the Poiana Rusca Massif – an argumentation. *An. Inst. Geol. Geofiz*, LX, 221-229.
- Strutinski, C. Puste, A. (2001). Along-strike shearing instead of orthogonal compression: A different viewpoint on orogeny and regional metamorphism. *Himalayan Geol.* 22/1, 191-198.
- Strutinski, C. Stan, R. Puste, A. (2003). Geotectonic hypotheses at the beginning of the 21st century. In: *Why Expanding Earth? A Book in Honour of Ott Christoph Hilgenberg* (Eds. G. Scalera, K.H. Jacob), INGV, Rome, 259-273.
- Stuart, F.M. Lass-Evans, S. Fitton, J.G. and Ellam, R.M. (2003). High $^3\text{He}/^4\text{He}$ ratios in picritic basalts from Baffin Island and the role of a mixed reservoir in mantle plumes. *Nature*, 424, 57-59.
- Sudiro, P. (2014). The Earth Expansion Theory and its transition from scientific hypothesis to pseudoscientific belief. *History of Geo-and Space Sciences*, No 135-148. Web: <https://www.hist-geo-space-sci.net/5/135/2014/hgss-5-135-2014.pdf>.
- Suess, E. (1889). *Dass Antilitz der Erde*, 2, Pt. 3, Die mere der Erdee, Vienna. 704p.
- Sullivan, W. (1974). *Continents in motion; the new Earth debate*. New York, NY: McGraw-Hill.
- Sylvester, A.G. (1988). Strike-slip faults. *Geol. Soc. Am. Bull.* 100, 1666-1703
- Szpak, S. Mosier-Boss, P. Gordon, F. Dea, J. Miles, M. Khim, J. Forsley, L. (2008). LENR research using co-deposition. In *Proc. the 14th Int. Conf. on Condensed Matter Nuclear Science*, Washington, DC (pp. 766–771).
- Tarling, D.H. Runcorn, S.K. (1973). *Implications of Continental Drift to the Earth Sciences*. (NATO Advanced Study Institutes) Symposium, University of Newcastle, England April 1974. Academic Press. Volume 2, 1184 pp.
- Tchalenko, J.S. (1970). Similarities between shear zones of different magnitudes. *Geol. Soc. Am. Bull.* 81, 1626-1640.
- Tchudinov, J.W. (1998) *Global Eduction Tectonics of the Expanding Earth*. VSP. Utrecht, the Netherlands.
- Tebbe, J. (1980). Print and American culture. *American Quarterly*, 32(3), 259–279.

References

- Tharp, M., Frankel, H. (1986). Mappers of the deep. Natural history. New York NY, 95(010), 48-48.
- Thompson, D.W. (1917/1966). On Growth and Form. Cambridge University Press, xiv + 346 pp.
- Thomson, W. (1854). Thermo-electric currents. Trans. Roy. Soc. Edinburgh, 21, 123-171.
- Turcotte, D.L., Oxburgh, E.R. (1973). Mid-plate Tectonics, Nature 244, 337-339.
- Tuttle, R.J. (2012). The Fourth Source: Effects of Natural Nuclear Reactors. Universal Publishers, 580p.
- Van Andel, T.H. 1984. Plate Tectonics at the threshold of middle age. Geologie en Mijnbouw, 63, 337-341.
- Vanderhaeghe, O., Teyssier, C. (1997). Formation of the Shuswap metamorphic core complex during late orogenic collapse of the Canadian Cordillera: Role of ductile thinning and partial melting of the mid- to lower crust. Geodinam. Acta, 10/2, 41-58. Doi: 10.1080/09853111.1997.11105292
- Vanderhaeghe, O., Burg, J.P., Teyssier, C. (1999). Exhumation of migmatites in two collapsed orogens: Canadian Cordillera and French Variscides. In: Exhumation Processes: Normal Faulting, Ductile Flow and Erosion (Eds. U.Ring, M.T. Brandon, G.S. Lister, S.D. Willett), Geol. Soc. London, Spec. Publ. 154, 181-204.
- Van der Voo, French, A.R. (1974). Apparent polar wandering for the Atlantic-bordering continents: Late Cambrian to Eocene. Earth Science Review. 10, 99-119.
- Van Hinsbergen, D.J. Steinberger, B. Doubrovine, P. V. and Gassoller, R. (2011). Acceleration and deceleration of India-Asia convergence since Cretaceous: Roles of mantle plumes and continental collision. Jour. Geophysics Research, 116, doi: 10.1029/2010JB 008081.
- Van Steenis, C.G.G.J. (1963). Pacific Plant Areas, Vol. 1, Monograph 8, Manila: National Institute of Science and Technology.
- Vauchez, A. Nicolas, A. (1991). Mountain building: strike-parallel motion and mantle anisotropy. Tectonophys. 185, 183-201
- Veevers, J.J., Powell, C. McA. and Johnson, B.D. (1980). Sea-floor constraints on the reconstruction of Gondwanaland. Earth and Planetary Science Letters. 51, 435-444.
- Verhoogen, J. (1980). Energetics of the Earth. National Academy of Sciences, Washington, D.C. 139p.
- Verma, O. and 4 Others. (2016). Historical biogeography of the Late Cretaceous vertebrates of India: Comparison of Geophysical and

The Hidden History of Earth Expansion

- Paleontological data. In: A. Khosla and S. G. Lucas (Eds). Cretaceous Period Biotic Diversity and Biogeography. Bull. New Mexico Museum Natural History and Sciences, 71, 317- 330.
- Vine, F.J., Matthews, D.H. (1963). Magnetic Anomalies over Oceanic Ridges. Nature London 199, 947-949.
- Vogel, K. (1983). Global Models and Earth expansion. In Carey, S.W. The Expanding Earth – A Symposium. Sidney, 1981. University of Tasmania 17-27.
- Vogel, K. (1984). Beiträge zur Frage der Expansion der Erde auf der Grundlage von Globenmodellen. Z. geol. Wiss. 12, 563-573.
- Vogel, K. (1990). The expansion of the Earth - an alternative model to the plate tectonics theory. In: Critical Aspects of the Plate Tectonics Theory; Volume II, Alternative Theories. Theophrastus Publishers, Athens, Greece, 14-34.
- Vogel, K. (2003). Global models of the expanding Earth. In Scalera, G and Jacob, K-H. (Editors) 2003. Why Expanding Earth? A book in honour of Ott Christoph Hilgenberg. INGV publisher Roma, 351-356.
- Vogel, K. (2012). Contribution to the Question of Earth Expansion Based on Global Models. In: The Earth Expansion Evidence, A challenge for geology, geophysics and astronomy. "Selected Contributions to the Interdisciplinary Workshop," (held in Erice, Sicily, Italy 4-9 October. 2011). Post-conference publication edited by Giacarlo Scalera (editor in chief), Enzo Boschi, and Stefan Cwojdzinski. 161-172. Rome.
- Wallin, E.T. Noto, R.C. Gehrels, G.E. (2000). Provenance of the Antelope Mountain quartzite, Yreka Terrane, California: Evidence for large-scale late Paleozoic sinistral displacement along the North American Cordilleran margin and implications for the mid-Paleozoic fringing-arc model. Geol. Soc. Am. Bull. Spec. Paper 347, 119-131. Doi: 10.1130/0-8137-2347-7.119.
- Walther, H.J., von Gehlen, K., Haditsch, G., Maus, H.J. (1999). Lagerstättenkundliches Wörterbuch. GDMB, Clausthal, 688 pp.
- Wang C. Jin A. (2006). Mechanism of the Mafic Dyke Swarms Emplacement in the Eastern Block of the North China Craton. In: Hou G. and Li J. (eds.) Precambrian Geology of the North China Craton. Journal of the Virtual Explorer, Electronic Edition, ISSN 1441-8142, vol. 24, paper 3, doi:10.3809/jvirtex.2006.00161.
- Wegener, A. (1912). Die Entstehung der Kontinente und Ozeane. Geologische Rundschau 3, 276-292.

References

- Wegener, A. (1912). *The Origins of continents and oceans*. (Dover Earth Science: 1915). Originally presented at A Yearly Meeting of the German Geological Society (6 January, 1912).
- Wegener, A. (1915). *Die Entstehung der Kontinente und Ozeane* (The Origin of Continents and Oceans). *Sammlung Vieweg Nr. 23*, Braunschweig, 94p.
- Wegener, A. (1924). *The Origin of Continents and Oceans*. (trans. 3rd ed.). Methuen, London; Dutton & Co. New York, pp.212.
- Wegener, A. (1966). *The origin of continents and oceans* (trans. 4rd ed.). Dover Publications, New York.
- Welsh, W.E. Doyle, L.R. (2013). World with two stars. *Scientific American* 309 (5): 4. (Nov. 2013). 40-47. DOI: 10.1038/scientificamerican.1113-40.
- Wenbin S, and Sung-Ho, N. (2017). Atmospheric acceleration and Earth expansion deceleration of the Earth rotation. *Geodesy and Geodynamics*. 8, 421-426.
- Wertenbaker, W. (1974). *The Floor Of The Sea: Maurice Ewing and the Search to Understand the Earth*. ISBN: 978-0316931212.
- Wilhelm Reich Infant Trust.
<https://www.wilhelmreichtrust.org/biography.html>.
- Winchester, S. (2001). *The map that changed the world*. Viking, pp.338.
- Wingate, M.T.D., Pisarevsky, S.A., Evans, D.A.D. (2002). Rodinia connections between Australia and Laurentia: no SWEAT, no AUSWUS?, *Terra Nova* 14, No. 2, 121-128.
- Wood, J.A. (1968). *Meteorites and the origin of planets*. New York: The McGraw Hill Companies, 117.
- Wood, R.M. (1979). Is the Earth getting bigger! Some geologists believe that our world is expanding. *New Scientist* 8 February 1979. p 387-388.
- Wood, R.M. (1985). *Dark Side of the Earth*. Harper Collins Publishers.
- Wright, L.A. Troxel, B.W. (1969). Chaos structure and Basin and Range normal faults: Evidence for a genetic relationship. *Geol. Soc. Am. Abstracts with Programs*, 1/7, 242.
- Wright, L.A. Troxel, B.W. (1973). Shallow fault interpretation of Basin and Range structure, southwestern Great Basin. In: *Gravity and Tectonics* (Eds. K.A. de Jong, R. Scholten), Wiley, New York, 397-407.
- Xiao W., Songlian A O., Yang L, Chunming H Bo W, Zhang J E, Zhang, Z Y, Rui L, Zhan Yu C and Soong S H (2017) Anatomy of composition and nature of plate convergence: Insights for alternative thoughts for terminal India-Eurasia collision. *China Earth Sciences*, 60, 1015-1039.

The Hidden History of Earth Expansion

- Yano, T. Vasiliev, B.I. Choi, D.R. et al. (2011). Continental rocks in Indian Ocean. NCGT Newsletter 58, (Australia NGCT.org, 2011). 09-28.
- Yuecheng, C. et al. (1998). A new interpretation of the Himalayan orogenic belt. Chinese Science Bulletin, 43.1, 83-84. DOI: 10.1007/BF02885523.
- Young, C. J. Lay, T. (1987). The core-mantle boundary. Earth Planet Science Annual Review, 15, (1987).25-46.
- Young, T.E. (2010). Cloudy with a chance of stars. Scientific American V. 302. 34-41.DOI:10.1038/scientific American 0210-34.
- Zagorevski, A. et al. (2008). Tectonic architecture of an arc-arc collision zone, Newfoundland Appalachians. Annals of Geophysics, Supplement to V.49, No. 1. Special Paper #436 in Draut A. Clift, P.D. and D.W. Scholl (Eds.). Formation and application of the sedimentary record in arc collision zones. (Boulder, CO: Geographical Society of America, Inc. Special Paper #346,). 309-334.
- Zheng, H. Powell, C.M. Zhou, Z.A.J. Dong, G. (2000). Pliocene uplift of the northern Tibet Plateau. Geology, 28, 715-718.
- Zolensky, M.E. et al. (2006). Mineralogy and petrology of Comet 81 P/Wild 2 Nucleus Samples. In Science, V. 314, No. 5806. (Stanford, CA: Highwire Press, 2006).1735-1739.