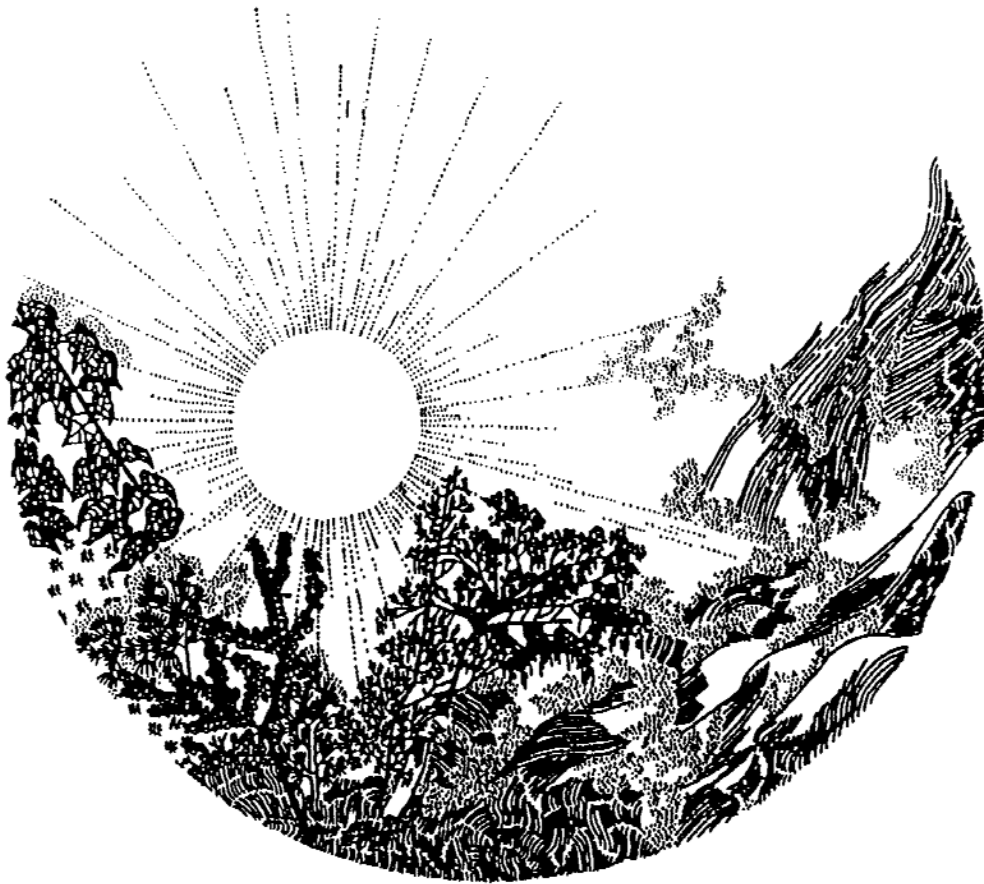


Evolution and Cosmogony

The Achilles' Heel of the Creationists' Position

and

*Einstein, a Solipsist?**



Walter van der Kamp

* Solipsist – one who believes the self can know nothing but its own modifications and that the self is the only existent thing (*Webster*).

Preface

This page is a brief commentary by a former correspondent of the late Mr Walter van der Kamp.

This particular 2-part paper [originally a booklet] was his last work, as he indicates on the next page in a copy of his hand-written letter which he originally sent, along with this paper, to his correspondents, as per the date on that letter.

Mr van der Kamp, who liked to be called "Walter" by his associates and correspondents, was an international speaker on his topic. It is most unfortunate that he was physically unable to attend the conference to which he refers in his letter. I do not know if this paper was presented, "*in absentia*".

You will note that Walter was more of a philosopher than a scientist. He was also, in the opinion of more than a few, a gifted writer and a man who was passionate about Truth and the pursuit of it.

I believe his single greatest contribution in the field of cosmogony was his ability to precisely articulate a challenge for the scientific community to "get honest" about their total lack of proof on what's moving in the cosmos and what, if anything is not.

Indeed, we are now seeing some significant developments on the international scene by scientists who are stepping forward to critique the work of such notables as Newton and Einstein.

I take this opportunity to also pay tribute to Dr. Gerardus Bouw who took over the quarterly geocentricity journal that Walter started several decades ago. Current name for that journal is *Biblical Astronomer*.

With permission of Walter's family, this paper was scanned [from Walter's booklet] into the computer in early 2002. It is being circulated on a not-for-profit basis and recipients are encouraged to photocopy it for further circulation within their own sphere of activity.

As long as I remain functional, copies of this paper are available in photocopy and electronic format from me at . . .

Paul Ellwanger • 1020 Raleigh Dr – Apt 711 • Carrollton TX 75007 • USA

origins10@verizon.net

C O P Y

Walter van der Kamp
3687 - 1507 Queensbury Ave.
Victoria, BC V8P 5M5

Victoria, Aug 26, 1996

Dear Friends:

Allow me to begin with an apology. Most of you haven't heard anything from me for a long time. The reason is that during the last nine months I've been in ill health and unable to keep up with my correspondence. I've also been compelled to decline the invitation again to attend another *International Conference on the Problems of Space and Time* in St. Petersburg, Russia, on the third one of which I presented a paper in 1994. And I've been hard put at least to contribute a paper that, D.V., will be read there "*in absentia*".

It is this paper, "Einstein, a Solipsist", which you'll find enclosed, and that combined with a last appeal to the *Institute for Creation Research*.

There is, however, more. Actually - I'm 83 - I've decided to retire. Mistakenly or not, I think I've shot my last bolt.

Thank you from the heart very much for bearing with me, in many cases for many years. As long as it the Lord's will and I live, I'll treasure the memories of you all and your encouragement for my Tychonian efforts. Of course, I shall always love to hear from you and your labours, but expect from my side no more than grateful responses.

Warmest greetings and a "God speed you!"

In Christo,
[signed]
Walter

The Achilles' Heel of the Creationists' Position

Introduction

When, among us orthodox Christians, evolution and creation come up for discussion, all agree that the final responses to the "Whence, where, why and whither?" of the world and of ourselves have been given by God in His authoritative Word. To leave the matter at this consensus, however, is doing no more than mouthing a platitude. For we, unhappily, differ widely in our understanding and appreciation of the Divine Revelation. Even if we overlook the countless disputes and endless wrangling about dogmatics and doctrines, one deep rift remains that divides us into two camps: our attitude toward the relationship between science and Bible. With our God-given reason, are we to read the Message from Above by the light of human theories, or is it possible by the light of the Message itself? For the present purpose, restricting the argument to Genesis One: shall we study that chapter's creation account advised by modern astronomy and biology, or take it straightforwardly and, wherever necessary, enlightened by the most elementary logic, the validity of which is for our present mode of being assented to by all men? In short: are the theistic and the progressive evolutionists in the right, or do the strict creationists carry the point?

The thesis I am defending and promoting in the present essay is that Christians on both sides of this dispute, theologians as well as laymen, are behind the times. They are with respect to the cognitive power of scientific theories still living in the Age of Reason. In their understanding of the Bible's first two chapters these otherwise more or less orthodox believers differ from each other like the day from the night in the matter of evolution. Yet they agree on a cosmology not implied by the text. To all of them astronomy has "proven" that the Earth circles the Sun, which is a shortsighted position, as the philosophers of science acknowledge again today along with their medieval forebears. For often we may accept statements as "proven", but a physical theory, to quote Stephen Hawking, is "always provisional, in the sense that it is only an hypothesis: you can never prove it", while at the same time "you can disprove a theory by finding even a single observation that disagrees with the predictions of the theory."¹ That should indeed be the hard-and-fast ruling. Yet reigning Scientism and vested Christianity do not consider this verdict applicable to the hypothesis that the Earth is orbiting the Sun. Even for Hawking himself, this is an "obvious" fact.² And so, though it has been repudiated by experiment after experiment, this

¹ Stephen W. Hawking. *A Brief History of Time*, Bantam Books, p. 10.

² *Ibid.*, p. 2.

hypothesis remains the *noll me tangere* of all astronomy. Endeavouring scientifically to unmask this "fact" as a pseudo certainty is hence by all and sundry likely to be considered a fool's errand.

Yet this is what I shall do, for I maintain that the strict creationists' defense of the Bible's inspired account of the creation of Heaven and Earth is half-hearted and logically crippled. Rejecting godless Darwinian evolution for the Earth's biosphere they accept the equally unproven and unprovable Copernican astronomy as "proven" with respect to the observable Heaven surrounding us. And the stranglehold of this misapprehension on these Christians' minds is, sad to relate, strong. Unless I succeed in at least somewhat or somehow first loosening that grip, my logical, historical and scientific reasons for promoting an Earth-centered Universe will be reckoned not worth their serious attention. The only way to manage that is, as I see it, in a preliminary way to approach the issue by means of a roundabout digression from a Biblical perspective on the origin and evolvment of our today clearly disintegrating post-Christian society. Its present godless traits have had a cause, and I hold and shall show that this cause can be pinpointed.

Technology and Theory

When we compare our present Western outlook on life with that of medieval times, we cannot deny that the inductive and empirical "New Science" of Galileo (1564-1642) and Francis Bacon (1561-1626) since it began to make headway, has slowly but steadily been changing our view on the world around us. Especially after the Second World War, with English now being spoken everywhere, the tempo of this metastasis has been accelerating. For research and technical acumen the barrier of the long ago by God imposed "confusion of tongues" has actually been cleared away. Internet and E-mail driven, world-wide instantaneous exchange of information is the watchword of our age. Being again, as before Babel, of one language and of one speech, nothing that modern researchers imagine to do seems impossible to them. For good or evil: a new twist of the supposedly unstoppable mega-evolutionary process is willy-nilly carrying mankind along faster and faster, *it* appears, into a New Age.

We shall, however, do well to keep in mind that the term "science" as it is used today comprises two basically different sets of disciplines – Baconian trial-and-error technology and research on the one hand, and what was formerly called "natural philosophy" on the other. A goldsmith may impress us with his artifacts, but he cannot create gold. A microbiologist may splice cells and recombine genes – he cannot "make", let alone *ex nihilo* create, life and energy. There are more things in heaven and earth than those of force, matter, technology and computerized cyberspace. To be an expert in manipulating these aspects of the present phenomenal world does not concomitantly make a man a trustworthy guide in formal logic and metaphysics. The theoretical airy castles, for instance, which astronomers are building all the time and are wrangling about, often

clearly carry religious overtones. In sounding these overtones those researchers, I hold, exceed their authority. How the materiality they work with came into existence they guess but do not know. They were neither there when somehow the things that are seen appeared out of nothingness, nor can they attest any existence from eternity. Scholars pondering the whence of the world may arrogate to themselves the name of scientists, but when they talk as if they have "proven" their several cosmogonies and cosmologies they likewise go beyond their brief. They can only offer us plausible hypotheses, commonly called theories, which have a limited value, as today's leading philosophers of science again admit. Yet the majority of more or less orthodox Christian standard-bearers and "the man in the street" all still appear to believe in a science that is empowered to give solid answers on whatever questions they want to ask about the aspects of the observable reality. We may have heard that the philosophy of science nowadays has returned to the medieval "not proven, nor provable" for all hypotheses, but we are ever and again inclined to forget it, wont as we are to dislike uncertainties. It has sagely been said: the satisfaction of truly knowing something hobbles our thinking more effectively than that which we consider "known" itself. We shall do well to keep this in mind with respect to what follows here. Discourse aimed at dislodging our convictions we do not like a whit better than the Athenians, who gave that gadfly Socrates, constantly challenging their self-assuredness, hemlock to drink.

The Claims of Mega-Evolution

From kindergarten on we have been told, and therefore "know", that what the Heavens declare and the firmament shows is in fact deceptive. Sun, Moon and Stars do not go around the Earth, but the Earth runs around the Sun. Moreover, centuries of painstaking astronomical research claim to have established that the Universe is billions and billions of years old. Countless galaxies containing innumerable stars are scattered throughout space. Around stars suited for the purpose sets of planets will have emerged. On some of these planets possessing the indispensable collocation of parameters for carbon-based life, as likely as not, forms of life did develop. For on at least one of such planets at any rate we find this to have been the case. After aeons of time, initiated by a Big Bang or some other not yet scientifically unveiled happening, the ongoing evolutionary progress took that next step on our Earth. Starting in an ammoniac atmosphere with an autocatalytic chemosynthetic reaction caused by lightning in a puddle of thereunto somehow predisposed murky soup, time concocted cellular life. Through many punctuated equilibria or some process not yet apprehended, such self-organizing systems led a few million years ago via a from tree to tree swinging ape to *Homo Erectus*. And last, but not yet best, to *Homo Sapiens*, that is to us, who now "know" those prodigious events of the past. Neither is this all. The Genesis of the Secular Scripture does not only divulge the past. Its Gospel, though it leaves us without any hope for a personal life after death in a world to

come, at least offers our descendants great promises. The ongoing evolutionary process will allow them manned missions to other star systems, longer healthy peaceful lives, and what not. The foremost futurists even speculate on mankind, fully come of age, slaking the bonds of matter and mortality, deifying us into life everlasting.

In any case, ask any human, young or old, from first-grader to postgraduate, from Calvinist to Catholic, from agnostic to atheist. They will agree: two times two equals four, and the Earth circles the Sun. Hence, clearly, common sense leaves us no choice. The Sun was there first. Mother Gea did not begin to circle around nothing. In one way or another – the theory of their formation is still a controversial issue – those congealed exudations we call planets came later. The conclusion of the matter is that from an astronomical point of view our home in the heavens is therefore a recent next-to-nothing fleck of dust in an immense cosmic pageant.

Revelation and Reason

Now contrast this scientific account of the world's origin, and the resultant depiction of its structure, theoretically developed after 1543, with the simplicity of the folk tale of Genesis One. Then, Creationism has concluded, it becomes manifestly impossible still fully literally to accept the latter. And it is hence understandable that even otherwise orthodox Christians whatsoever their dogmatic persuasions, almost to a man are agreed upon some non-literal treatment of the first half of the Biblical Creation story. In fact, even the staunchest expositors of the Book of God shrink back from a simon-pure word-for-word acceptance of the Genesis Cosmogony.

No one can reasonably deny that this revealed account clashes head-on with the extant theories of astronomy, the queen of sciences. What is more, it contradicts those theories with respect to a physical aspect that is open to investigation, to wit: the locale and hence the status of our Earth in the immense pageant of observable being.

For the first time in my life forcing myself to read and re-read the whole of Genesis One in the steadfast literally-believing mood in which my Creationist brethren read the chapter's second half, the process dazed me. I "knew" that the Earth orbits the Sun. I had been told that Galileo only had escaped being burned at the stake by recanting what he had demonstrated to be true. Yet the Old and New Testaments appear to reveal, viewed from the Creator's supra-spatial perspective, an unmoved Earth with respect to the created Heaven around us.

This contradiction, once lodged in my mind, proved incapable of resolution. Try as I might to fit together the pieces of the puzzle, they did not match. Either Scripture is, at least with regards to cosmogony, to be taken with quite a few grains of salt, or science has been leading us by the nose. I agree with those to whom the Bible is no more than a quaint compendium of myths: the Good Book

does not beat around the bush. From Genesis to Revelation it holds the premise of an Earth at the center of a revolving Sun-ruled and star-studded dome to be so self-evident that the matter needs no words to stress this fact's factuality. Yet even Christian astronomers told me in no uncertain terms that it was out of the question to accept and understand the text as affirming the Earth's uniqueness. Doing so would amount to rehashing long-discarded, unthinkable, credulous, pre-Copernican fatuities. Spiritually our Earth is significant, but physically, cosmologically...?

When however, in an attempt to be better instructed, I surveyed the many exegetical reconciliations between scientific "facts" and the constraints on divine inspiration which the theologians have put together, I found only one certainty I could accept. Namely, that what seems plain expository prose in Scripture should be read as plain expository prose, unless there are compelling reasons to understand the wording non-literally. Reasons, that is, not from without but from within the context of the passage under consideration.

My in many aspects "high" view of the Scriptures obliged me to reject all other solutions as ingenious circumlocutions devised to make the Bible play up to Copernicus. Moreover, in all honesty I could not blame the sincere and serious unbelievers who ridicule such tinkering with the clear text in order to let the "inspired" Bible say what it does not say. At bottom there is here an insuperable "either-or" between secular science (loosely defined as an inductive method to approach an understanding of the cosmos) and any form of supernatural information. The issues are not joined and cannot be joined.

Looking for a way to escape this predicament, I felt myself relentlessly driven toward a question I was afraid to ask, a question which would in our age express a doubt too ridiculous to be even pitiable. *What if God's Word with regard to the world's foundation, were to be speaking the truth – and the more I thought about it the less I doubted it – rather than the science of cosmogony and its concomitant disciplines...?* What if all post-Copernican astronomy has to be rejected, lock, stock and astrophysical barrel, because it squarely contradicts Divine Revelation about an Earth that cannot be moved forever?

The Great Deceit

With that question in mind, I ploughed my way through book after book, and soon I began to become aware of a fraud so inconceivable that I could only suppose myself to have lost touch with reality. Whatever I read, whomsoever I asked, nowhere could I find a physically and logically sound refutation of the Bible's Earth-centered picture. The textbooks took our annual revolution around the Sun to be so self-evident that no further verification was necessary. Anyone accosted about the matter assured me that, as everyone knows, Copernicus had settled the point long ago. "Proof?" The answers evoked by all my queries came down to: "Why should we have to prove something we know to be true?" Darwinists, for instance, when looking around for a clincher in a debate with

doubters, are wont to maintain that the evolution of life on Earth is just as undeniable a fact as the Earth's revolution around the Sun.

I quested far and wide, and everywhere I came face to face with a bias, an improper practice that I would not have thought possible. None, but none among the fanciful assertions of the believers in Galileo's Sun-centered astronomical gospel have anyhow or anywhere ever been soundly affirmed, let alone "proven". They are well-nigh the most misleading deceptions ever foisted on mankind. The procedure for bringing this about has been an old but effective one. The late non-lamented Joseph Goebbels, Hitler's henchman for propaganda, used it with great success in Nazi Germany: proclaim a lie again and again as truth, then in due course all people will believe you. Or, to cite C. S. Lewis' Mr. Enlightenment:

*Hypothesis, my dear young friend, establishes itself by a cumulative process, or to use a popular language: if you make the same guess often enough it ceases to be a guess and becomes a scientific fact.*³

I am aware that many a reader at this point may feel obliged to protest against such a sweeping judgment. Scholars, surely, are not such fools as those accusing trumpet blasts declare them to be? Surely theologians are not without reason when they take note of modern astronomy in their expounding of the Creator's report in Genesis 1:1-19?

They are not? Before judging, please reflect for a few moments on the question of the nature of theory, to which I have alluded a few times already.

From Antiquity and until the end of the Middle Ages all men thinking about truth and untruth agreed on a "You never can be sure" with regard to any theory whatsoever. But this changed when during the first half of the seventeenth century the so-called Scientific Revolution began to conquer the mind of *Homo Sapiens*. A new doctrine took charge, "a new theory of the nature of theory; namely, that, if a hypothesis saves all the appearances, it is identical with the truth."⁴ From the days of Kepler and Galileo until about the end of the Second World War this "Science has proven" ruled supreme, though time and again that "proven" was "proven" to have been premature. Today the scholars have happily again come to their senses, and that proud "proven" itself has gone the way of all flesh. Allow me to repeat the apothegm of Stephen W. Hawking already quoted: "Any physical theory is always provisional, in the sense that it is only a hypothesis: you can never prove it." That is to say, as I mentioned earlier, with the exception of the – for his *Weltanschauung* indispensable – proven "obvious" fact that the Earth is orbiting the Sun!

I therefore maintain that there is nothing extravagant or asinine in criticizing the now dominant dicta of cosmogony and cosmology. Not only are the disciplines in all branches of astronomy still by schisms rent asunder and by heresies

³ C. S. Lewis. *The Pilgrim's Regress*, Grand Rapids, Eerdmans, p. 17

⁴ Owen Barfield. *Saving the Appearances*, New York, Harcourt, Brace & World, Inc., p. 51

oppressed, but their hypotheses are without fail founded on, and stand or fall with, the Copernican thesis. Our forefathers and indeed the whole Western world have been bedazzled by the simplicity of a Sun-centered planetary system. The formation of the real world will turn out to be more complicated. There are good reasons, then, why one ought to doubt the validity of modern cosmology, reasons that have to do with reading *Genesis One* in a coherent way and with the failure of experiments testing the Earth's motion, reasons that have to do with the nature of theory. But there is another crucial reason that should cause my creationist brethren to take another look at their assumptions and at what may seem my preposterous position.

The Ruination of Christianity

As the late Arthur Koestler, certainly not a Bible-thumper, saw it: the cosmic quest set in motion by Galileo and his successors

*...has destroyed the medieval vision of an immutable social order in a walled-in universe together with its fixed hierarchy of moral values, and transformed the European landscape, society, culture, habits and general outlook, as thoroughly as if a new species had arisen on this planet.*⁵

Precisely, and I have yet to find one historian of whatever religious or philosophical persuasion who in essence disowns this appraisal or denies that the impact of the Copernican revolution has been far-reaching in its corollaries. Indeed, jubilated for instance the greatest of all German poets, Goethe:

*Among all the discoveries and convictions not a single one has resulted in a deeper influence on the human spirit than the doctrine of Copernicus... Humanity has perhaps never been asked to do more, for consider all that went up in smoke as a result of this change becoming consciously realized: a second paradise, a world of innocence, poetry and piety, the witness of the senses, the conviction of a poetic and religious faith...*⁶

Yes, concludes C. F. von Weizsäcker:

*...the Christian myth was beaten out of the field by the new science.*⁷

Even more to the point in summarizing the final results of that "New Science" is Theo Löbsack, a German popularizer of the progress mankind has been able to make after discarding the Earth-centered outlook of Antiquity and the Middle Ages.

Galileo's way of thinking laid 340 years ago the foundation for the modern science and technology, and into what crisis he since has brought theological thinking is difficult to describe. Until today the Church fights for an inventory of religious truths that are no longer compatible with the insights gained by means

⁵ Arthur Koestler. *The Sleepwalkers*, Grosset & Dunlap, New York, p. 13.

⁶ J. W. von Goethe. *Geschichte der Farbenlehre*, Dritte Abteilung, Zwischenbetrachtung, my translation.

⁷ C. F. von Weizsäcker, *The History of Nature*, Chicago, University Press, p. 67.

*of the inductive method: among them the dogmas and the notion of a Supreme Being, an Almighty Father in Heaven.*⁸

To quote Alexander Koyré, formerly professor at the Sorbonne, about astronomy's progress after Newton's victory and wholesale acceptance of Copernicanism:

*The infinite Universe of the New Cosmology, infinite in Duration as well as Extension, in which eternal matter in accordance with eternal and necessary laws moves endlessly and aimlessly in eternal space, inherited all the ontological attributes of Divinity. Yet only those – all the others the departed God took with him.*⁹

Historians agree: the logic behind the inexorably driving force spurring Galileo's "New Science" has led humanity step by step to the mechanomorphic world view prevalent today.

First Copernicus had turned us into cosmic specks, secondly Darwin robbed us of any privileged position in creation, and finally Freud showed that man is not even master of his own mind, ...

says Brian Appleyard in his recently published *Understanding the Present*.¹⁰ And Freud's vision did . . .

...finally deliver the one clear message that science has wished to pass on to us ever since Galileo applied his eye to the telescope: that we are nothing but trivial accidents and that each man must hope and believe what he can in the grim certainty that nobody and nothing will ever be able to tell him whether he is right or wrong.¹¹ Man has become a "fragile, cornered animal in a valueless mechanism."¹²

Paul Davies, another paragon among contemporary science writers, affirms it in his *The Mind of God*:

"Darwin only completed the revolution begun by Copernicus."¹³ Man, created in the image and after the likeness of God and blessed with the promise to enjoy Him forever in the age to come, has now been found to be no more than a mammal destined to return to dust. Damnation by science has superseded salvation by faith.

⁸ Th. Löbsack. *Wunder, Wahn und Wirklichkeit*, München, C. Bertelsman Verlag, pp. 31-32, my translation.

⁹ Alexandre Koyré. *From the Closed World to the Infinite Universe*, Baltimore, John Hopkins Press, p. 276.

¹⁰ Brian Appleyard. *Understanding the Present: Science and the Soul of Modern Man*, London, Pan Books Ltd., p. 76.

¹¹ *Ibid.*, p. 78.

¹² *Ibid.*, p. 112.

¹³ Paul Davies. *The Mind of God*, New York, Simon and Schuster, p. 18.

“God died in the nineteenth century, and man is dying in the twentieth century”, declares Norman Geisler, a staunch defender of Biblical inerrancy, referring to the theory of evolution,¹⁴ I have no quarrel with this hyperbole; but would like to remind him of Schiller’s proverbial lines:

**Truly, this is the curse of evil done:
It must go on forever bearing evil.**

Why did, as Geisler sees it, God only die after the publication of *Origin of Species* in 1859? The book merely articulated the logical outcome of a trend of thought that began to infiltrate Western man’s mind once the consequences of Newton’s cosmic model came to be realized.

*The Divine Artifex had therefore less and less to do in the world. He did not even have to conserve it, as the world, more and more, became able to dispense with this service, ...*¹⁵

thus to quote Alexandre Koyré, a second time.

I dare say that W. T. Jones in his *History of Western Philosophy* also accurately pinpoints the reason why man, as Man, is dying.

*The theory of natural selection brought home as nothing else could the radical change in Man’s status in the universe, and made dramatically clear the attack on old values that had actually been implicit in the whole scientific development beginning in the sixteenth century.*¹⁶

Einstein Superceding Einstein

Already thirty years ago a founding father of the *Creation Research Society*, Dr. Walter E. Lammerts, considered a geocentric theory to be “purely scientific drivel”.¹⁷ As matters stand at the present, the overwhelming majority of orthodox Christians still agree with him about the necessity of a non-literal interpretation of the sequential *Genesis 1:1-19* account according to which the Earth’s flora had already been created when God made the Sun, the Moon, and the stars on the fourth day of the *Hexaemeron*. For taken *prima facie*, the inspired text causes the reader to believe something that, mankind’s faith in Galileo tells it is not true. Proving the Copernican Solar System by means of experiment may have turned out to be impossible, nevertheless the 1905 Special Relativity Theory [SRT] has shown it to be correct.

Indeed: begging the question by postulating an Earth in motion as “already proven”¹⁸ the SRT “saved the appearances” through the medium of the Lorentz transformations. Using his theory, Einstein claimed, “every optical problem concerning moving bodies is reduced to a series of problems for bodies at

¹⁴ Norman L. Geisler in “Update”, Nov. p. 6.

¹⁵ Koyré, *loc. cit.*

¹⁶ W. T. Jones. *History of Western Philosophy*, New York, Harcourt, Brace & World, p. xviii.

¹⁷ Ronald L. Numbers. *The Creationists*, New York, Alfred A. Knopf, p. 238.

¹⁸ A. Einstein. “Zur Elektrodynamik Bewegter Körper”, *Annalen Der Physik*, Vol. 17, p. 891.

rest.”¹⁹ And, all and sundry agree, constant observations affirm this theorem. We appear not to be in motion, though we think we “know” that we move. Time and thought, however, do not stand still. Especially we should not underestimate the radical change in our conceptions of space and time brought about by Einstein’s 1915 all-embracing General Relativity Theory [GRT]. These concepts may or may not turn out to be the optimum of understanding of which the human mind is capable in our present age. Certain it is that today physical theorists almost to a man go along with Einstein’s vision. “We know now”, says Sir Fred Hoyle, “that the difference between a heliocentric and a geocentric theory is one of motions only, and that such a difference has no physical significance.”²⁰ In fact, these views, “when improved by adding terms involving the square and higher powers of the eccentricities of the planetary orbits, are physically equivalent to one another.”²¹ That is to say, “Since the issue is one of relative motion only, there are infinitely many equivalent descriptions referred to different centers. In principle any point will do, the Moon, Jupiter...”²²

Indeed, that is what the GRT must insist on. Unhappily, to the best of my belief nobody has yet realized the irony arising out of this necessity. For while the SRT may take Copernicus in its stride, the GRT turns the tables on him. What is more, and I shall demonstrate this: the latter’s paradigm shows the amended Geocentric Theory of Tycho Brahe to be the only one possible for the space and time in which we find ourselves.

It is for these reasons that I present the following considerations to my brethren at the *Institute of Creation Research*. Their radical turnabout from allowing “scientific” input with respect to *Genesis 1-19* to spurning it for verses 20-27 I cannot justify. It is the Achilles’ heel of their position and will before long put them to shame.

Perhaps a note of warning about the following pages is in order here first: they were written separately for delivery in St. Petersburg, Russia, at the *Fourth International Conference on Space, Time and Gravitation*, September 16-21, 1996. They therefore repeat some of the argumentation of the previous section, before taking the argument a step further.

Einstein, a Solipsist?

“Give me but one firm point on which to stand, and I will move the Earth”, Archimedes (287-212 B.C.) exclaimed, thereby putting a finger on the irremediable shortcoming of all empirical astronomy. This science is ostensibly

¹⁹ *Ibid.*, p. 915.

²⁰ Fred Hoyle. *Astronomy and Cosmology*, San Francisco, W. H. Freeman & Company, p. 416.

²¹ Fred Hoyle. *Nicolaus Copernicus*, New York, Harper & Row, p. 88.

²² *Ibid.*, p. 1.

unable to point out somewhere in space a solid platform from which to judge matters of motion and rest.

Antiquity and the Middle Ages, owing to the lack of any evidence to the contrary, adhered to a static Earth. Today, however, we have convinced ourselves that we know better. For Einsteinian relativity, it is assumed, has caused Science to return to the position Archimedes hinted to be inevitable. The case for astronomy, as Sir Fred Hoyle has said, is "one of motions only."¹ In keeping with this way of thinking the late Isaac Asimov assures us that in cosmology "any object or system of objects (any frame of reference, that is) can be taken with equal validity as being at rest. There is no object, in other words, that is more really 'at rest' than any other".² As far as our Solar System is concerned there at first sight appear to be no problems with this assumption. Even Newton already somewhat reluctantly admitted: "It may well be that there is no body really at rest to which the places and motions of others may be referred."³ But what about the stars?

It stands to reason that any theory of the Cosmos also has to render an account of its predictions with respect to the system of countless luminous objects wheeling night after night from East to West around us.

Twentieth-century astronomy gratefully grasped Einstein's special relativity to countermand the Earth-centered model affirmed by all experiments that vainly tried to show our "planet" to be in motion. Unbelievable though it may sound, however, the profession has never yet paid much attention to the role of the stars in the economy of the Solar System. With respect to the status of the Earth this oversight is therefore still leading to contradictory aphorisms about our position in the entire scheme of being. Stephen W. Hawking holds on to an "obvious"⁴ Sun-centered Solar System, but for Asimov's understanding of Einstein this is going a bit too far. According to him an Earth-centered hypothesis, using Hoyle's dictum, "is as good as anybody else's – but no better".⁵

In any case, a geocentric Universe remains "unthinkable".⁶ Physically considered, the Earth, surely, is as a matter of fact next-to-nothing in the stupendous realm of the far and widely scattered stars. To suggest that it could be the kingpin around which Sun and Moon, and the stars also, are just dancing attendance for the benefit of mankind would be downright preposterous, surely?

¹ Fred Hoyle. *Astronomy and Cosmology*, p. 416

² Isaac Asimov. *Understanding Physics*, Vol. II, p. 249

³ Dorothy Michelson Livingston. *The Master of the Light*, p. 253

⁴ Stephen Hawking. *A Brief History of Time*, p. 1-2

⁵ Hoyle. *Frontiers of Astronomy*, p. 304

⁶ Ronald W. Clark. *Einstein. The Life and Times*, p. 80

Well, no, it is not, and what is more: this updated Tychonian configuration of the world, taking the stars into account, will turn out to be the only one ontologically and logically possible in our present mode of being.

When we consider the Heavens we instantly come up against Asimov's credo and the necessity to choose between two views, both of them encompassing the whole of discernible reality. Do the Sun and the starry dome "out there" diurnally rotate and annually revolve with respect to the Earth, or does the Earth rotate with respect to the system of Sun and stars? We clearly see the former motions occur, but have been conditioned to believe the latter. That is to say: learned and unlearned alike are convinced that if they could levitate themselves to a secure anchor in space they would find this consequence of Copernicus confirmed. Mother Gea is no more than a satellite of a humdrum star in the Milky Way, we feel sure.

There are, however, problems with this subconscious mental exercise. To quote no one less than a famed philosopher, the late Bertrand Russell (1872-1970): *Whether the Earth rotates once a day from West to East as Copernicus taught, or the Heavens revolve once a day from East to West, as his predecessors believed, the observable phenomena will be exactly the same.*

And that, Russell concludes ...

*...shows a defect in Newtonian dynamics, since an empirical science ought not to contain a metaphysical assumption which can never be proved or disproved by observation.*⁷

What is more: even this unpermitted supernatural assumption is already in itself an invalid argument. The late Michael Polanyi made this trenchant remark: "Every object we perceive is set off by us instinctively against a background taken to be at rest."⁸ But to set off an Earth not empirically proven to be moving against a Universe instinctively taken to be at rest, and this with respect to a space we have no hold on – whatever that means – it certainly does not clinch the matter for him who keeps Archimedes in mind.

Einstein's 1905 paper salvaged the Copernican Revolution. It won astronomy over by mathematically – courtesy of Lorentz – underpinning the "we move, but cannot prove it" of Poincaré and his "principle of relativity". Nicholas of Cusa (1401-1464) expressed a medieval precursor of this idea: we are in a Universe of which the center is everywhere and the circumference nowhere. The view that *de facto* the Earth occupies this center is hence theoretically, says Sir Fred Hoyle, "as good as anybody else's – but no better."⁵ Or, to quote him a second time:

*Since the issue is one of relative motion only, there are infinitely many exactly equivalent descriptions referred to different centers – in principle any point will do, the Moon, Jupiter ...*⁹

⁷ D. W. Sciama, *The Unity of the Universe*, p. 102-103.

⁸ Michael Polanyi. *Personal Knowledge*, p. 12.

⁹ Hoyle, *Nichlaus Copernicus*, p. 1.

It is with this assurance that the misapprehension of all post-Copernican theorizing reveals itself. Einstein's General Relativity Theory may well be the closest to the truth we presently have for the Universe *in toto*. Yet applying it to the interaction of Earth and stars shows the heliocentric hypothesis to be completely erroneous. Not only that: all cosmological extrapolations founded on that premise are beside the mark. This may sound unbelievable, yet in what follows it will be proven. Neither by empiricism nor by theorizing of which, I agree with Hawking, "you can never be sure,"¹⁰ but by logical disproof.

In Shakespeare's "Merchant of Venice", Lorenzo asks his Jessica to see "how the floor of heaven is thick inlaid with patins of bright gold."¹¹ Four hundred years ago that was still an allowable view, as well as poetically up to par. Actually it comes nearer to the reality than we are now conditioned to believe. It is not for nothing that Hawking holds on to an "obvious" with respect to the Earth going around the Sun. All modern cosmology stands or falls with this concept being true, even though, to quote a text approved by Einstein himself:

We can't feel our motion through space, nor has any experiment ever proved that the Earth is in motion.¹²

It is well-known how, after the probing efforts of Fitzgerald, Lorentz and Poincaré to overcome this contrariety, in 1905 Einstein resolved the problem to almost everybody's satisfaction. We cannot prove the Heliocentric Theory, it is agreed, but of course it is true. The 149.5 times 10⁶ km semi-major axis of the Earth's orbit furthermore provides us with a solid base for determining the distance to many nearby stars. More still: starting from these measurements cosmology has been considered able to map out the Universe by estimating, inferring and intelligently guessing one thing after another.¹³ Yet these procedures have engendered a hodgepodge of weird and implausible hypotheses, their devisers squabbling about them *ad infinitum*.

Einstein's 1915 General Theory, however, overthrows our well-worn certainties with respect to our Solar System, with the world of the stars around us, and not less with respect to our place in the over-all design of being. Which should not surprise us, for hanging on to an Earth "obviously" orbiting the Sun and also holding to Einstein's magisterial insight with respect to the Universe is a feat contrary to reason. It comes down to professing Mother Gea's mobility to be the proverbial exception that confirms the rule – a procedure not akin to sound science.

It is these considerations which lead to the thesis of the present paper. To wit: the General Relativity Theory demonstrates by indirect proof that an updated

¹⁰ Hawking. *Brief History*, p. 10.

¹¹ Act V-1.

¹² Lincoln Barnett. *The Universe and Dr. Einstein*, p. 73.

¹³ George Abell. *Exploration of the Universe*, p. 378

and amended version of the geocentric theory proposed by Tycho Brahe is for our present mode of being the only one

possible. Applying Einstein's profound vision to the Solar System interconnected with the stars puts Copernicanism in a deadlock of absurdity.

Reducing the matter to its essentials, the annexed Figure 1 will make this evident. Avoiding any theoretical position with respect to parameters of spaciality, the simple drawing two-dimensionally betokens a section of the Ecliptic.

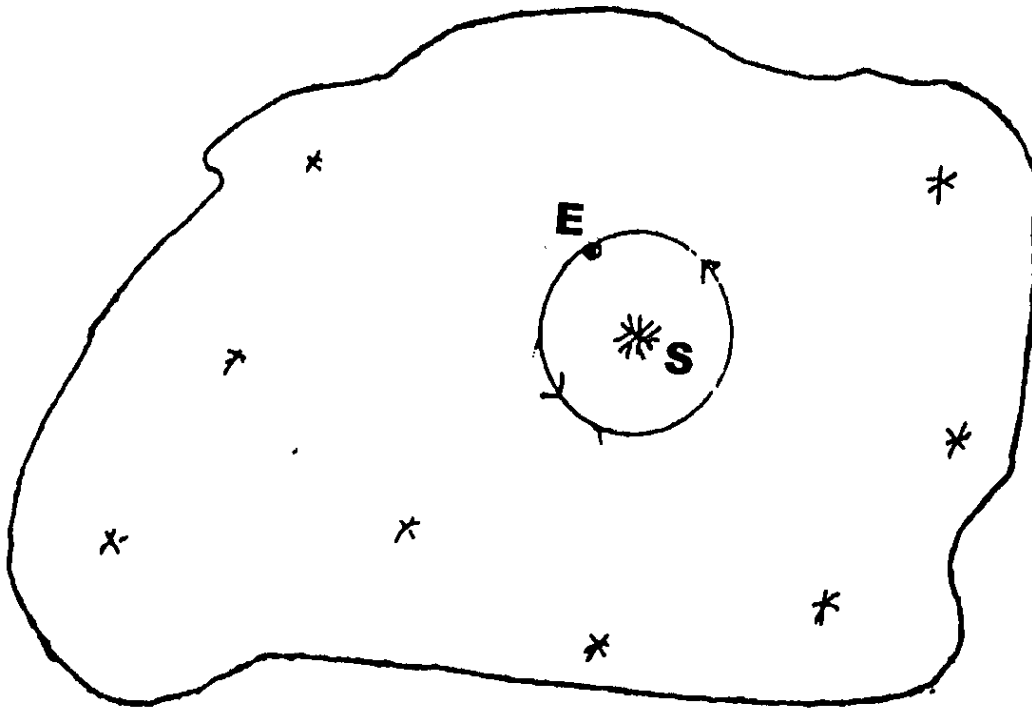


Figure 1

It shows the Sun encompassed by the orbit of one of her satellites, in this case the Earth, and a few fixed stars of the Zodiac. Now take a pencil, the point of it representing our "planet", and trace with that point our trajectory around the Great Light. Then all definite observable facts duly will support the truth of the Copernican Revolution of 1543. Mankind, with its habitation rotating and revolving and gyrating through the Heavens, daily sees the Universe turning around us, and we observe the Sun yearly traversing the Twelve Signs of the Zodiac. Only two particulars remain to be accounted for. As James Bradley discovered in 1726: the stars do not completely stand still, but annually describe small circlets of equal size. These "aberrations" can, however, plausibly be explained. They are only apparent; our orbital velocity of 30 km/sec around the

fixed star Sol requires us to tip our moving telescopes slightly forward. The other phenomenon is that of a number of stars exhibiting still secondary very small circuits. These so-called "parallaxes" are considered to originate from the observance of stars so near to us that by triangulation their distance from the Sun can be calculated.

So far, so good and not much room for doubt left if only we could complete the Copernican picture by verifying the Earth's orbital velocity. But we cannot get this done.¹⁴ And it is here that special relativity is supposed to put things straight. Wherever we are and whatever we do,

our experiments will always inform us that moving we do not move. As among professionals the saying goes: Einstein is "every day proven in the lab". Nevertheless, to hold that the Earth is at rest and that everything in the Heavens revolves around us – under the auspices of General Relativity – this is a theoretical position of equal validity, and for a Copernican-style Solar System the GRT will be shown incompatible with the case.

To begin with: rotating the paper, *i.e.* the Cosmos, with respect to the pencil point, *i.e.* the Earth, does not work, for we will not see the fixed star Sun annually traversing the Zodiac. "True", it will be conceded, "but what about visualizing the Earth's orbit by shuffling the paper in such a way that the pencil point stays at rest and yet traces out our planet's orbit?" At first sight this seems to vindicate Einstein's 1905 justification of the – he wrongly wrote – "already proven"¹⁵ Copernican view. On reflection it will become clear, however, that here the wish has been the father of the thought: the principle of relativity is again irrelevant to the case under consideration. With our Earth comparatively at rest no motions will be measurable for the great majority of the stars making up our supposed Milky Way Galaxy. Only for nearby ones our telescopes may observe small annual circuits, which these fixed "lesser lights" will traverse concordantly with our Great Light's trajectory. Perversely: this is not what we behold. We cannot, untrue as we think we know it is, – to quote a well-known textbook on astronomy – "avoid the impression that the sky is a great hollow spherical shell with the earth at the center" and "the stars embedded in it like tiny jewels."¹⁶ That is to say: Bradley's avouched, but never yet positively verified, "apparent" aberrations have now become actual astral orbits of about equal size, indicating (see Figure 2) the stars to be arranged in such a spherical shell, the Stellatum of old. Clearly: Hoyle's GRT argument about a difference of motions only falls to the ground.

¹⁴ See my "The Bradley-Airy-Einstein Syndrome in Astronomy", St. Petersburg, 1994.

¹⁵ A. Einstein. *Zur Elektrodynamik Bewegter Körper*, p. 891.

¹⁶ Abell. *Exploration*, p. 11-12.

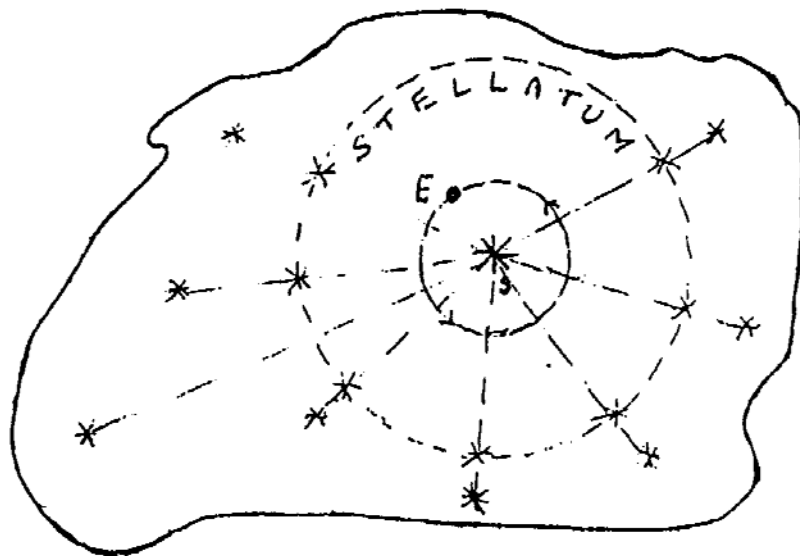


Figure 2

Preparatory to drawing a few conclusions, which logically follow from the foregoing, it may be well to quote a *caveat* of Sir Arthur Stanley Eddington (1882-1994), one of the first theorists accepting Einstein's 1915 General Relativity Theory.

*For the reader resolved to eschew theory and to admit only definite observational facts, all astronomical books are banned. There are no purely observational facts about the heavenly bodies. Astronomical measurements are, without exception, measurements of phenomena occurring in a terrestrial observatory or station; it is only by theory that they are translated into knowledge of a universe outside.*¹⁷

Translating those in the foregoing relegated phenomena into knowledge about the status of our Earth, we find ourselves in an awkward position. Either the General Relativity Theory rules supreme, and consequently there is something

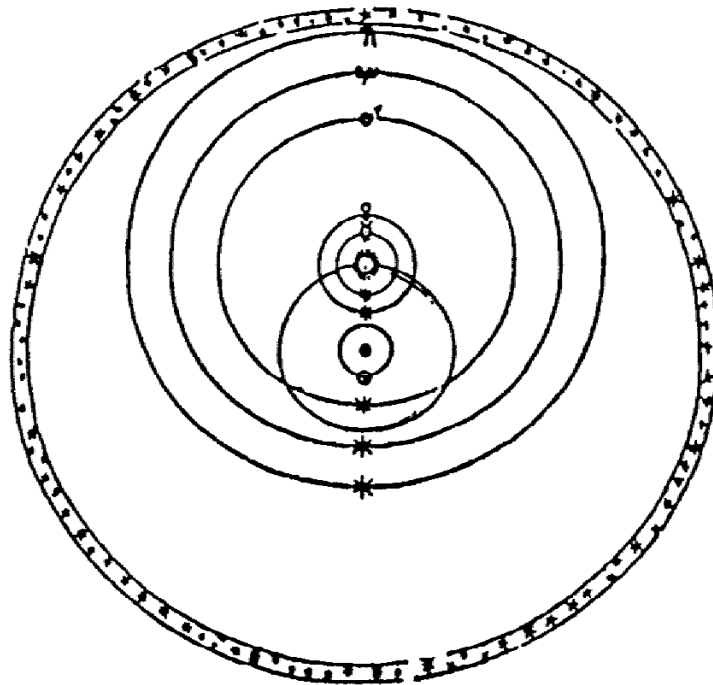
¹⁷ Edward R. Harrison. *Cosmology*, p. 226

seriously amiss with our concepts of the Solar System and the starry sky. Or those concepts are accurate, and then Einstein leads the scientific establishment by the nose.

We here hence seem to be saddled with two contradictory statements. Of course, and in the nature of being, that cannot be the case. In very truth Einstein is right, and Copernicus was wrong. And all cosmological hypotheses extrapolated from the latter's misapprehension of reality will have to be revised or discarded.

Already mentioned, but not yet enunciated: there is a third phenomenally viable model of the Cosmos, that of Tycho Brahe (1546-1601). Today it remains only remembered as an historic curiosity. With respect to the Solar System it "is in reality absolutely identical with the system of Copernicus, and all computations of the planets are the same for the two systems."¹⁸ *In fact Tycho held and holds the key to the only (in our mode of being logically possible) integration of all branches of astronomy and cosmology that are now at loggerheads with regard to the all-round applicability of the General Relativity Theory.*

In this Dane's Geocentric System Moon and Sun circumrotate a static Earth, and the planets revolve around the Sun. (See Figure 3). Only in one aspect his model has to be updated. Tycho anchored the sphere of the fixed stars on the Earth. Actually, as Bradley observed but refused to believe, the Sun is at the center of the astral dome and carries it along when orbiting our abode in the Heavens.¹⁴



¹⁸ J. L. E. Dryer. *A History of Astronomy from Thales to Kepler*, p. 363

Figure 3

Under the aegis of General Relativity “there are infinitely many exactly equivalent descriptions referred to different centers – in principle any point will do, the Moon, Jupiter ...”, thus Hoyle.⁹ What should be realized but unfortunately is overlooked: this is only correct on one condition: Copernicus has to be rejected. As I have demonstrated: his model cannot be fudged into the GRT’s, the totality of being overarching, schema. But try this fudging for Tycho’s Sun-centered Stellatum oscillating around our Earth, then it all tallies.

Lastly: allow me a tongue-in-cheek approach to the matter at stake from a bizarre perspective: It is an either-or: Einstein’s view and Hawking’s “obvious” cannot be reconciled. Imagine a solipsist Nicolas of Cusa mentally producing a Universe and cosmical framework in which Eddington’s “observational facts” affirm the GRT. Centering his Copernican System on any of the countless stars relatively “at rest”, then, viewed from that star, the Earth will be seen year after year describing a minute circlet around the static star Sun, the size of that orbit depending on the chosen star’s distance from our “planet”. Conversely, when our Solipsist makes the Earth the pivot of the Solar System, then mankind’s astronomers will behold all the stars displaying small circlets of a size inversely proportional to their distance from our telescopes.

If this were the state of affairs in the Universe as it is, the GRT would be established and together with it the heliocentric theory vindicated. Unhappily that is not what we Earthlings observe. Notwithstanding their supposedly widely varying distances from us, the so-called “aberration” is the same for all stars. Only by therefore rearranging those heavenly pinpoints of light in a Stellatum controlled by the Sun, our model-making fantasy will bring the truth in line with Einstein. But that at the cost of renouncing Copernicus and all his works! But Einstein is no solipsist: the GRT is correct!

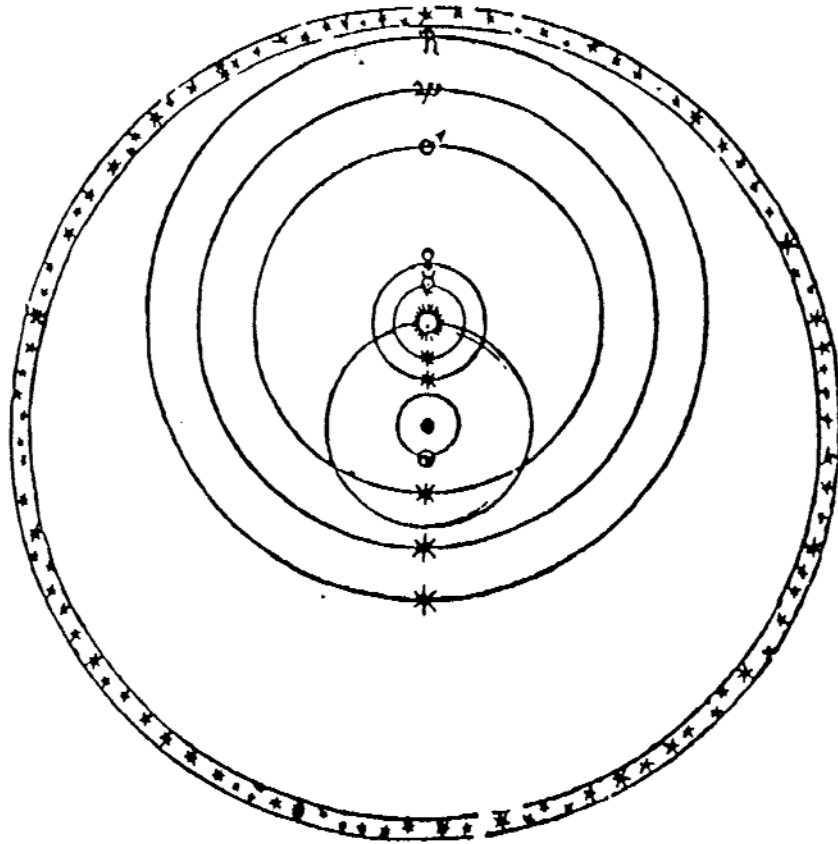
To sum up the ins and outs of the foregoing: he who accepts the verisimilitude of the General Relativity Theory is obliged also to accept a Geocentric Theory about the status of the Earth and a Stellatum, a spherical stratification of the fixed stars. That is to say: the observable finite Cosmos in a finite Universe is centered on the Sun. This Sun orbiting an Earth “hung upon nothing”¹⁹ – as Aristotle would have agreed with Job – has been assigned the labour of dividing the day from the night and of doing this with the Cosmos in its train.

Whether, witnessed “from outside” the Universe of space and time, either the Earth or the Cosmos diurnally and annually rotate with respect to that Universe is another question. For reasons set apart from any science I prefer it to be the Cosmos, and General Relativity allows me to do this. What here concerns us are

¹⁹ Job 26:7

two theoretical conclusions, affirmed by the logical law of excluded middle. With the Copernican misapprehension no longer disorienting its efforts, Cosmology can be rebuilt on a solid foundation. And Solar Astronomy at last will come into its own – the first inklings are already appearing in the literature! It can begin to research how, wondrously fine-tuned, the Planetary System upholds, protects and regulates the life on Earth, for which task it was called into being.

*Nova Mundani Sytematis Hypotyposis
ab Authore nuper adinuenta, qua tum vetus illa
Ptolemaica redundantia et inconcinnitas, tum etiam
recens Coperniana in motu Terra Physica absurditas,
excluduntur, omniaq,
Apparentiis Cœlestibus aptissime correspondent.*



From the second issue of the *Progymnasmata* (1610)
This diagram first appeared in Tycho's
De Mundi Aetherei recentioribus Phænomenis (1588).