

Cosmic Causation in Geophysics

By

Paul Councel



DEDICATED TO THE SCIENCE OF ORIENTATION
THAT WE MAY LEARN OUR PLACE
IN TIME AND SPACE

COSMIC CAUSATION IN GEOPHYSICS

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*"I don't care what they say about me
so long as they mention my name".*

George M. Cohan

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COSMIC CAUSATION IN GEOPHYSICS

Foreword

The study of a phenomenon is incomplete until a self-demonstrating theory of its accountability has been formulated. Without this, the announcement of phenomenal discoveries is mere sensationalism, which rapidly becomes effete as fresh baubles of the sort pour from the inexhaustible reservoirs of empiricism. For this reason, the empiricist ever lingers in the twilight of truth. He never reaches understanding of the things he finds. Therefore the history of a phenomenon- its origin in time and space- completely overshadows its importance as a thing in itself. For instance, until we date King Tut's reign and reconstruct the world in which he lived, the treasures of his tomb remain but mute objects of child-like wonder with which we are soon bored and, with a yawn, pass to other things to marvel at.

Addressing the formula to this work, your conviction of the logical practicality of the map of the Heavens and the Earth is urgently paramount to the study of any phenomenal evidences it offers. A theory of accountability is as indispensable to one of fact as breath is to life, if truth is sought. The map claims the foundation of pure logic, cemented with analogy. If every line and word of it were pure fiction, it still would be a catalytic instrument for the interpretation of history and for the projection of future probabilities.

But more urgently is such an implement necessary to further progress toward cultural ends of a half-dozen or more sciences. Its first service to them consists in its unimpeachable chronological system with which periodicities in world evolution may be precisely determined, history systematized, and scientific vision acquired.* Without such a pattern of time and space interaction, we shall never understand history, nor be able to employ the priceless values of its lessons to the segregation and government of mankind.

* cf The evolution of intelligence, page 26.

The anthropology of this need is in the time-proved fact that races, nations, and governments pass through identically the same phases of birth, growth, maturity, and death as do individuals. It is imperative to the growth of the culture race that it recognize and appraise these age-phases of human masses. For instance, we must understand the root cause of the trebling of world population since 1830, its significance in the world-enveloping tidal wave of atavism, and its ultimate consequences and disposition. Only such prescience can produce a sound social and political program for the administration of universal justice. Whom do I mean in "we"? The Western hemisphere, of course; for upon it devolves full responsibility for the future history of mankind.

While its full import can not now be imagined, it seems beyond question that the implements required to discharge this responsibility may only be contrived through the coordination of the Heavens and the Earth, such as I have attempted. If cosmic causation of terrestrial phenomena is the truth, it must be pursued - calling it "astrology", or what you will. At the moment, however, it seems more appropriate to identify this field or work as "geographic astronomy", thus signifying the reciprocal operations of theory of fact and theory of accountability in the pursuit of truth. This name also will facilitate the understanding of a somewhat new nomenclature and many unfamiliar word associations.

Geophysics supports the hypotheses of geographic astronomy when all limits are discarded as to what constitutes an agency that modifies the Earth. (I capitalize Earth, Sun, and Moon, regarding them quite as entitled to the dignity as Arcturus or Venus, for instances). When all such limits - usually no more than traditional dogmas or prejudices - are abandoned, cosmic forces can easily be recognized as the prime causes of terrestrial phenomena, or at least be participating agencies. The change of viewpoint demanded amounts to little more than forsaking the pre-Copernican doctrine of an immobile world in a geocentric universe; then seeing the Earth as a sentient satellite of the Sun, moving in a sea of force generated in the firmament, and to which its own multiple motions contribute.

When once the cosmological door is opened, vast vistas of knowledge fade into invisible horizons. Incredible opportunities and possibilities for the advancement of knowledge appear. The code of Natural Law - the Law of God - opens to explain the manifests of Nature. It bears repeating: The scheme would be pure logic without a scintilla of physical evidence to support it.

THE TIME-TABLE OF WORLD EVOLUTION
Notion 5 of the Earth

The timing factor in the chronological system, mentioned before, is that celestial phenomenon commonly known as the "precession of the equinoxes". Its effect is to cause these points to move westward $3\frac{1}{3}$ seconds of time and 50 seconds of space annually. Since the Earth's orbital motion is westward, its arrival at the equinoctial points is that much later in time and westward in space every year. The conventional explanation of this phenomenon is that the Earth is slowed down orbitally by the attraction of the Sun and Moon upon its equatorial protuberances. This is contrary to basical mechanical laws. All rotating spheres tend to bulge at their equators and contract at their poles through centrifugal force, speeding up their revolutions rather than slowing them down. That the Earth conforms with the principle is shown by the difference in its equatorial and polar diameters.

Governors of engines demonstrate the operation of the principle: The greater their diametric expansion (protuberance) the faster are the flywheels' revolutions per minute. Therefore the theory that equatorial bulges account for equinoctial precession is baseless, as also is its prevailing employment to explain the polar cycle- a later subject.

The proper explanation of equinoctial precession uncovers a preposterous piece of human impudence. How dare we think of the Sun as an immobile sphere in space? Possibly the conception has its source in race consciousness, implanted by the eastward rotation of the Earth and the revolution of the Moon in the same direction, i.e., counter-clockwise. Driving the misconception still deeper is the relict in the race mind of the pre-Copernican geocentric universe. The Sun certainly appears to revolve eastwardly around the Earth annually. The combination of these diametrically opposed views appears the most probable cause of the long-delayed solution of the riddle of precession. For how could the phenomenal, that is to say the obviously physical displacement of space eastwardly, as in the motions just cited, be suspected of responsibility for the westward motion of the equinoxes?

What has formerly been ignored is that the equinoxes are not mere mathematical points of intersection of the equatorial and ecliptic lines. It is not these points, but the presence of the

physical Sun that announces the equinoxes. And it can be nothing else but an orbital travel of the Sun itself that sets them forward, or westwardly, year by year.

Both Time and Space elapse westwardly, or clockwise, because the orbital motion of every member of our solar universe is in that direction. The effect of this is discussed later in connection with their mutual displacement. Meanwhile, the fact has too long been obscured that the Sun leads its satellites (planets) in an orbit which, at the mean motion of 50 seconds per year, is circumscribed in 25,920 years. Likewise, such planets as have them, carry their satellites - as the Earth does the Moon - in traversing their lesser orbits within the solar universe. Therefore the term "precession of the equinoxes" has been a misnomer - an expedient that has served its time. Critical world issues today demand illumination of the phenomena. For lack of a better descriptive at this juncture, I use the term, "precession of the Sun", and various synonymous associations of the concept. It is harmful to its import to use the word "backward", as is frequently done, in connection with the motion it describes. That it is "forward" in every sense of the word is as plain in history as in the four seasons of the common year which the solar force inducts.

What grounds support disbelief in solar government of human affairs? Is mankind any more than a superior species of the Earth's fauna? Is not every religion in human history a more or less disguised or prostituted form of solar worship, even Christianity? If you do not believe it, you are not versed in comparative religion and a bit of reading of Frazer's "The Golden Bough" is suggested. Is anything said of God in the Bible, or any other secular or sacred literature, that could not be said of the Sun as the dispenser of life and death and the giver of every good and perfect gift?

A panoramic answer to these questions will be found in the conditions of mankind along the lane described by the ecliptic and equatorial network lines of the map. From the virtual paradise given to man, about five hundred years ago, in the lush American continents, on and on eastward to the depths of the South Pacific Ocean, the evidence is clearly exhibited. Proven by eloquent ruins, great peoples once lived along this belt - mightier than fragmentary history even dimly records. What became of them? And what populated their lands with progressively decadent, degenerate, and hopeless human hives? What happened to the mighty people whose ruins litter the islands dotting 6000 miles of the South Pacific?

Is it better to continue in child-like wonder about these things than to experiment with the idea that the Sun giveth and the Sun taketh away?

Station 1-B of the map denotes the geographical position of the vernal equinoctial Sun, the focus of civilization, and the direction of world evolution, as in 1932. With that in mind, I can say emphatically that had this station developed across the Atlantic, I would have abandoned the project then and there. But I was working on a premise of far removed emplacement. An accumulation of lore weaved the hypothesis that the Great Pyramid was oriented to some star. It was finally proved to my satisfaction that this star was Aldebaran, of the Hyades cluster in the 15th degree of the constellation of Taurus. At the rate of 50 seconds a year, plus secular motion, the positive equinox was found to have been in conjunction with that star in 3240 B.C. This established the entire spread of the heavens. Station 1-B fell on the equator of 1932 in longitude 35° 50' west, the extreme eastern tip of Brazil. Can it be doubted that this point is the mean geographic and spiritual focus of civilization and world evolution today?

By "positive" equinox is meant that occurring in the zodiacal segment through which the precessional Sun is moving, commonly called the vernal. The negative naturally is in the opposition segment, thus establishing polarity with the opposite side of the world. This distinction between the equinoxes is important; for it is the positive equinox that determines the theocratic pattern which shapes the creed, ritual, and symbology of the dominant religion of a cultural Age. An even superficial review of these institutions of Christianity will discover the ruling influence of Pisces upon history since A.D.O. Then the precessional Sun moved from Aries to Pisces. Preceding Aries was the Age of Taurus.

The dominant religion, the spiritual moulder of an Age's culture, invariably has begun to disintegrate into progressively anarchical civilizations about seven hundred years before its end.* The book of Exodus chronicled the dissolution of the Taurian theocracy of Egypt (11 to 12). That of Jeremiah records the captivities and dispersion of the theocratic dispensation of Aries- Arian or Aryan, historically the Hebrews, whose geographic domain of 12 to 1 centered in Algiers. And the Reformation doomed the Holy Roman Empire, the temporal embodiment of the theocratic power of

* Culture is considered the condition of spiritual and religious discipline; civilization the product of education. To the extent man may be devoid of spirituality, he is an educated beast of relative potentialities.

Catholicism, the mother church of Christianity. It is noteworthy here that Pisces spreads over the Atlantic, hence was unavailable as a domain for the new theocratic culture. To this is attributable the differentiation of Jew and Gentile. Jewish Israel was first given the refusal of the new doctrine. Upon its rejection, the religious dispensation of Pisces was appropriated to the "Greeks and Barbarians" of Europe.

But a mightier event occurred at A.D.O than a relatively frequent change of ages. That date also identified the Alpha and the Omega, the beginning of a new and the end of an old precessional cycle of the Sun. Several Greek and Roman celebrities anticipated this wondrous epoch. Virgil, a generation before, was minutely specific in the first stanza of his Fourth Eclogue:

Come is the last of the ages, in song Cumaen foretold.
Now is the world's grand cycle begun once more from of old.
Justice, the Virgin, comes, and Saturn's kingdom again;
And now from the heavens descends a new generation of men.

The geographic focus of the event was station 1, longitude 11° west, latitude $10^{\circ} 20'$ north. Then and there a completely exhausted civilization died in barbarism, to be re-born in a new Plato's Year* of 25,920 common years, beginning with the precession of the Sun into the constellation of Pisces.**

This cycle is the time-table of world evolution, its subdivisions consisting of: the hemicycle of 12960 years, the quadrantal epoch of 6480, the cultural age of 2160, the human span of 72 or one degree of precession, and the generation of 36 years. Every one of these measures of time constitutes a cycle of periodic activity. The limitations of parallel cerebration rather foggily conceive this to be the mere matter of "history repeating itself". And thinking will continue to make it true until the 3rd and 4th dimensions of mind are reached.

Its cultural age is described by solar precession through the thirty-degree arc of a constellation, dismissing the controversy over their apparent varying extent. This unit of 2160 years is the inviolate chronological key to both history and futurity. While it has been called superficial, the periodicities of our World Wars with the Punic Wars in the cycle offer interesting and arresting applications of the key:

Subtract the beginning year of the first Punic War, 264 B.C., from 2160, yields the remainder of 1896. The first World War, beginning in 1914, was therefore eighteen years late. The second

* Tycho Brahe calculated this to be 25,816, Cassini 24,800, Ricciolus 25,920 - in agreement with Egyptian symbology.

** This was the "Saviour" of a spiritually dead and lost world.

World War was three years early: 2160, less date of second Punic War 218 B.C., comes to 1942, whereas the war began in 1939. But should there be grounds to link our Spanish-American War of 1898 with World War I, as there may be, its periodicity would have been only two years late. Then if the Pearl Harbor massacre should be the true beginning of World War II, as well it might, its periodicity would be exact. The third Punic War began in 149 B.C. Subtracted from 2160, indicates 2011 as the periodic incidence of World War III.

Another and more exact demonstration of the time-table was reported by Herodotus.* The Egyptian priests informed him that from their first king to the reign of Sethos there were three hundred and forty one generations of Egypt. According to Rollin's chronological tables, Sethon ascended the throne in 719 B.C.** Thence to 24 hours civil time of the year Zero B.C., is precisely 720 years. 360 is the number of the completed cycle. To Sethon there were 340 generations; from him 20, which, at 36 years per generation, is 720 years. This completed the hemicycle of solar precession in northern latitudes, 7 to 1. Thence it moves south. In this manner the Egyptians anticipated our Gregorian calendar.

To correlate the seasonal activities of the present with historical and legendary times, I have compiled a monthly calendar of the solar cycle which quite accurately shows the precession of the seasons. Spring and Fall in northern latitudes are now 27 days later than at A.D.0, beginning April 17th and October 20th respectively. If solar precession followed a fixed equator, no climatic effects would be felt. But the equator itself is changing plane at the rate recorded in star catalogs as "precession in declination". Because of this, the equinoxes are now $10^{\circ} 20'$ south and north, respectively, of the equator at A.D.0. Thus they are 27 days later in solar warmth for latitudes commensurate with stations 1 and 7. The difference is plotted by the equatorial (dotted) lines between 1 and 1-B and 7 to 7-B. The long-time effects will be that the equinoxes will arrive at 4-A and 10-A, preempting the solstices, in 6480 A.D., the Winter and Summer solstices then supplanting the equinoxes of A.D.0 in longitudes 7-A and 1-A. And at 12960 A.D. the equinoxes and solstices will be exactly reversed.

Probably these phenomena offer the most vivid of all phenom-

* Rawlinson's Translation, p. 181. Tudor Publishing Co., N.Y., 1939.

** Rollin's Ancient History, 1731. Undated translation from the French, published by Worthington Co., N.Y., old. Since the two authorities agree on the story and both identify this king as a priest of Vulcan, the different spelling of his name does not deny that they were speaking of the same man.

enal evidence of cosmic causation in geophysics. For most certainly nothing on Earth can remain the same as the forces of these cardinal stations of the Sun move upon its face. A mightier power is in command than the human mind of this age has heretofore conceived. We may think to push God out; but since He is impervious to the anarchy, it is we who are eliminated.

THE FOUR SEASONS OF THE PLEIADES

The primary and most powerful implement of solar world government resides in the quadrantal segmentation of the Earth to this star cluster. Its geographic focus is at station 11-B, longitude 21 east, latitude 24 north— the longitude of Bengasi Libya and the vortical center of the African theater of the present war. Based on the physical evidences abounding in its four zones, this cluster is the cosmic destroyer of the quadrantal races after their zenith, denoted by the conjunction of the precessional Sun with the prime meridian of their lands. These meridians are considered to be the four points of the compass, based on the Great Pyramid. Aside from remarking on the well-known fact that this pattern equally quarters the land and water areas of the Earth, further discussion of the point must yield to far more important evidence.

The operations of the Pleiades are resolvable into this formula: When in such longitudes and times that the positive equinox is in conjunction, quadrature, or opposition to this cluster, cataclysmic changes take place in the body of the Earth and throughout all Nature. These sensitive belts are conservatively considered to be 15° degrees wide, centering on the culminating longitudes below:

11-B, the conjunction, 21° east; the last in 2520 B.C. This is consistent with the consensus of geophysicists as to the time of the last deluge. Its longitudinal belt cuts Rhodesia, Libya, the Balkans, Poland, and the Gulf of Bothnia.

2-B, the quadrature, 64° west; the next in 3960 A.D. Geographically, the central axis of South America, West Indies, and Nova Scotia. The last, 21,960 B.C., indicating the relative antiquity of the cultural ruins on the southern continent.

5-B, the opposition, 159° west; the next in 10440 A.D. Geographically, Alaska, Hawaiian Islands, Cook Is., South Seas. The now observable rising of the ocean floor in that area hints at the re-emergence of the Lost Continent, considered to have sunk in the previous opposition, 15,480 B.C.

8-B, the quadrature again, 116° east; the last in 9000 B.C. Geographically, Siberia, Mongolia, China, Borneo, and western coast of Australia. Bipolar action of the negative equinox is now producing in this belt the physical counterpart of the western race.

It seems hardly possible that these belts run true north and south, but rather that they are bent to the pole of the magnetic sphere, now between stations 13-X and Y.

The geologic, geographic, racial, and political fissions in these areas offer exhaustless physical evidence of periodic explosions of cataclysmic natural forces. It is general knowledge that these belts are the predominant volcanic regions of the world, the most prolific in seismological upheavals, in atmospheric convulsions, and in human strife. If you should be vague on such statistics, classify according to this pattern the World Almanac's record of major volcanic eruptions, earthquakes, tidal waves, storms, political revolutions, wars, etc. We need not wait 6480 years to trace their geneses to the Pleiades. It is hardly extravagant to say that this star cluster is the prime source of most of today's news. Virtually the whole of this World War has been fought in its belts, wherein also are the biggest problems of the peace-makers. Here is the evidence that the real war started in them:

In May 1941 there was an abnormal congress of planets in belt 11-B, therefore in conjunction with the Pleiades. The year following proved the most horrible in history: Hitler completed the conquest of Europe and the Balkans, invaded Poland, and but for a military miracle would have taken Egypt and Suez - all in belt 11-B. Japan swept the Orient to northern Australia, 8-B; wrecked our navy, and paralyzed us at Pearl Harbor, Hawaii, in belt 5-B. And South America revolted against taking any part in the war, finally involving herself under pressure of severe sanctions alone - the Argentine Republic maintaining pro forma neutrality to the end. These phenomena are quite as appropriate to this belt 2-B of the Pleiades as are the events occurring in their other belts.

Coincidences or not, the correspondences demand the serious attention of scientists and political leaders - particularly the significance of station 1-B in Pan-American relations. Never again will South America countenance the waging of a foreign war by her northern sister. It is abhorrent to her destiny consciousness of becoming the spiritual center and sanctuary of the world. For her's is the land through which the precessional Sun shall pass.

THE POLAR CYCLE

Motion 4

It is to be understood that the production of the polar network on a Mercator map is greatly distorted. Also it will be realized that a detailed discussion of these interlacing lines - the product of the 5th, 6th, and 7th motions of the Earth - would be too involved and extended for this intended-to-be popular treatment of the subject. The statistics upon which the three circuits were projected appear in the polar cycle panel on the upper left side of the map.

The cycle 13-G-I-A is the concept of modern astronomy. But, because of being projected from the pole's present position, rather than its starting point in A.D.0, its elongation due south is too great by $10^{\circ} 20'$ - the amount of its displacement of latitude since that date. Its mean diameter of 47° is maintained by shifting the axis of elongation to the west, somewhat in the design of the other cycles. In short, this line is entirely imaginary and meaningless. It is inserted simply for the comparative value of a familiar figure, and for later demonstration of the correct period of the cycle. Circuit 13-F-J-B-E is schematically correct for the period of 12,960 B.C. to B.C.0; that of 13 E-H-C-D for the period A.D.0 to 12,960 A.D.

Although a phenomenon of the precessional Sun, through being enforced by the changing plane of the equator, the polar network presented is far more prominent and arresting than its parent cycle for one incredible feature, if nothing more. It offers the solutions of many problems which have harrassed astronomers for several hundred years, and supports them with no less than five astounding visable facts.

(1) The pole traverses its circuit twice in a precessional round of the Sun. That is to say, it makes its round in 12,960 years. Visual mechanical proof of this may be gotten from the map in this manner, bearing in mind that the pole must always be 90° from, i.e., perpendicular to the equator. To an observer in 6480 B.C. at station 10-A, 47° north, the pole appears at 13-A, 43° north in the opposite hemisphere - thus 90° away. At A.D.0, the observer at station 1, $10^{\circ} 20'$ north, will find the pole at 13 G-I*, latitude $79^{\circ} 40'$ obverse. Nowhere else will maintain the 90° distance. Obviously the pole has made a half circuit in 6480 years. And an observer at station 4-A in 6480 A.D. would find the pole

* On a globe these lines intersect at that station of the pole.

back at 13-A, having completed the circuit in 12,960 years. As previously cautioned, cycle 13-A was used merely for the simpler demonstration of polar time. An explanation of the phenomenon will be given in the later treatment of mutual time-space displacement.

(2) Since the pole is but the imaginary extension of the Earth's axis, it follows that the changing plane of the equator rotates the tilt of the axis in a double cornucopia movement outward from the Earth's center. Ice surrounds both ends of the axis because of inertia at such hubs and the lack of solar heat. Other motions cause the ice fields to be visited upon every square foot of the Earth's surface during the period of its 7th motion, unless there are exceptional areas such as contemplated in the later discussion of that cycle.

(3) In plotting the polar path, I assumed that the astronomical center of 18 hours of right ascension to be correct, which the following evidences fortuitously confirm overwhelmingly. As projected from the base line of the Great Pyramid, 18 hours or 270 degrees of right ascension has the geographic coordinate of 101° west longitude. This is virtually the center of the land area of North America. Therefore, at this period of Motion 6, the entire polar path lies over this continent. The hitherto unsuspected frequency of polar visitation upon it seems explanation enough of its virgin state when discovered, as also does the south pole account for that of Australia.

(4) The Norsemen were not the sort of people to give up and turn back. Repeatedly they attempted colonization of the northeastern abutments of a weird and sepulcred land. But after numerous voyages from 985 to 1011 A.D., they must have decided the continent then unfit for human habitation. And there is little doubt that it was totally uninhabitable, at least to the Mexican border, in 650 B.C.—the earliest authentic American date.* Since of Maya origin, this could not have been far north of Panama. Historical scientists may now recognize the time and place origins of the Cliffdwellers, Moundbuilders, and the Indians. When the mountain sides emerged from ice and water, the Cliffdwellers came from the south; when the plains appeared, the Moundbuilders trekked into them and built their strange homes. But they did not circumvalate them for defense. They did so to keep them dry and for sanitation. For a later reason, these people alone could have been the ancestors of the American Indian.

* Ancient Civilizations of Mexico and Central America, Spinden.

In periodicity with 6480 B.C., the continent will again be totally uninhabitable in 6480 A.D., the pole having completed its circuit to station 13-C. Then it will be in proximity to the town of Edmonton, Alberta Canada, the arctic circle extending to latitude $31^{\circ} 5'$. From this it may be estimated that the circle will reach New York City in about 1500 years. The ice fields are not drifting south. That the ocean is freezing is the fact.

(5) Over-all proof of the soundness of these deductions is in the complete lack of evidence that any civilization of our sort, or comparable to that to which South American ruins testify, ever has lived on this continent. But it would be unsound reasoning to believe so. There must have been such periods as the present when North America was as populous, enlightened, and prosperous as we are today. We must conclude, therefore, that such civilizations were periodically wiped out through the submergence of the land in ice fields, such as now prevail in the arctic.

Further evidence of the mutual effects of solar-polar precession is found by taking an imaginary tour of the world in the lane established by the equatorial and ecliptic network. It will first be observed that this lane coincides closely with the belt in which the evolution of mankind has proceeded as far back as there is either historical or archaeological record. The distribution of population conforms strikingly with the pattern. Latitudinal density in Europe, in perspective, appears about the declination of the ecliptic ($23^{\circ} 27'$) north of the density line in America. This far more northern inhabitability of the former must be attributed to the spread over its longitudes of the northern hemicycle of the ecliptic by which a greater heat reserve would be stored in the Earth. The contribution of the Gulf Stream could hardly be felt in Scandinavia, the Baltic States, Russia, and middle Europe.

The fossil beds in Siberia and North America also offer significant contrasts. Those in the former region must be later than such discoveries in the latter by as much as a half cycle of Motion 6, or statistically, 165 thousand years. At that time the ecliptic and equatorial belt was reversed. The summer solstice would have been in the western hemisphere and, according to Motion 7, 24 degrees higher than it now appears at station 10-A, thus: 47° , plus correction of $2^{\circ} 36'$, plus 24° for diminution in obliquity during the interim six rounds of solar precession, equals $73^{\circ} 36'$ as the latitude of the positive solstice at that time. In that great epoch, the north pole was in the eastern hemisphere,

16° 24' north of the present equator, i.e., 90° from the solstice and in the longitudes of India. The equatorial climate, then prevailing over America, easily accounts for fossil beds in Alaska and southward through the Pacific states. With the passing of the epoch, the continent froze from east to west, driving all life ahead and blocking its southward migration. This should dispose of the theory that the Indian migrated over the Alaskan bridge.

Modern computations of polar place and motion i.e., its position in Space and Time, have manifestly been based on the pole's present station, without regard for the base point of the beginning and ending of its cycles. Obviously this deficiency could never be cured except through the coordination of celestial and terrestrial phenomena. The present work has accomplished this in a manner quite adequate to the elementary stage of the subject.

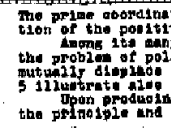
THE EARTH'S MAGNETIC SPHERE

Motions 1, 2, 3, and 6

The first three motions of the Earth are its diurnal rotation, the revolution of the Moon, and the orbital circuit. Their commonly named time-cycles are the day, month, and year. The uncommon element is the introduction of the lunar revolution as the second motion of the Earth. This intrudes the highly controversial atomic theory, applicable here to whether the structure of the atom is the pattern of the universe. Taking the affirmative that the Earth is an atom with one electron, the Moon, yields an analogy sufficient to our need, and disposes of the problem so far as this work is concerned. These three motions postulate the 6th and declare its indispensibility.

By what compulsion is the Earth-atom carried around its orbit of some 560 million miles at the speed of 1500 thousand miles a day? Does it 'float'? with which explanation most authorities are satisfied? Is it pulled by the separate or joint action of the Sun and Moon, or some other force, as others have thought? Or does it wheel itself around in some hitherto unsuspected manner?

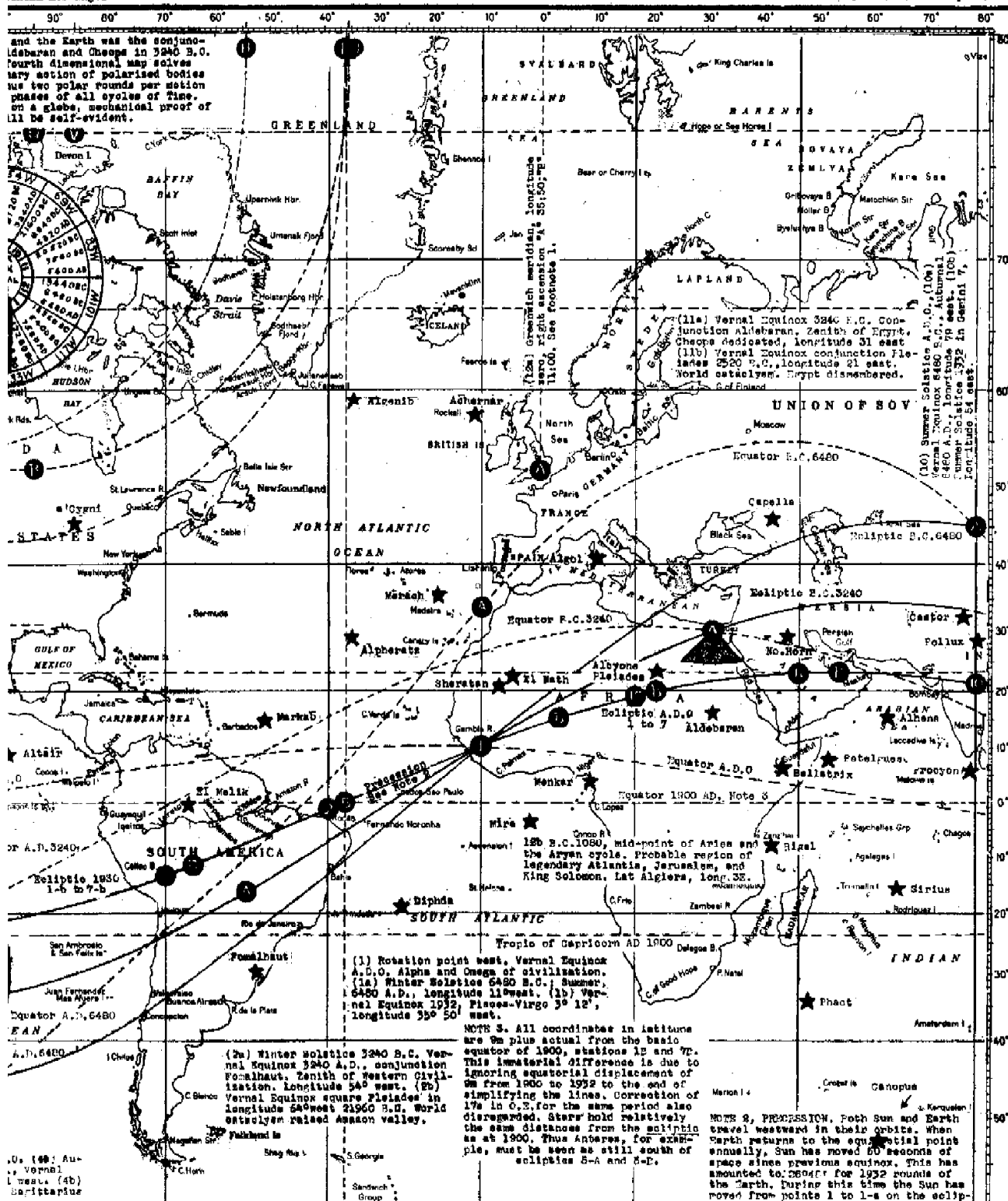
To imagine that the Earth floats through space is obnoxious to all known laws of celestial motion. A floating object is an impotent, directionless, menacing object. Not even a comet, and certainly not our world, could be thought such a derelict. Comets have their orbits and periodicities, and the orderly round of our days, months, and years, convince us of a disciplined universe. Awareness of this prods us to recognize the hand of a sentient intelligence, a Deity, in the coordination and administration of the vast activities so plain to us in the skies.



AND THE EARTH

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1° - CAPRICORN - 30° Longitude 101 W to 69 W Equinoctial Epochs A.D. 4390 - B.C. 21600	1° - AQUARIUS - 30° Longitude 69 W to 39 W Equinoctial Epochs A.D. 2260 - B.C. 23760	1° - PISCES - 30° Longitude 39 W to 11 W Equinoctial Epochs A.D. 0 - B.C. 25920	1° - ARIES - 30° Longitude 11 W to 17 E Equinoctial Epochs B.C. 2160 - A.D. 0	1° - TAURUS - 30° Longitude 17 E to 47 E Equinoctial Epochs B.C. 4390 - A.D. 0	1° - GEMINI - 30° Longitude 47 E to 79 E Equinoctial Epochs B.C. 6480 - A.D. 0
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The idea that the Earth is pulled around its orbit, as an inert ball of matter, is equally unacceptable. Besides, what force would pull it? It is hardly imaginable that either or both the Sun and Moon could perform that function. Our knowledge of meteorites leaves no doubt that the Earth would be burned to a clinker by atmospheric friction if hauled naked at such speed by any conceivable cosmic forces - or even under its own power. While we do not know the speed of a meteorite, not knowing where it started, it is quite impossible to believe that any solid body, falling or propelled, could survive the orbital speed of the Earth in either form or function.

We are left with only the 6th motion to explain the 3rd. Stated hypothetically, the Earth does wheel itself around its orbit, but it is encased in a magnetic sphere whose circumference is substantially the mileage of its daily travel. Reverting to the atomic theory, the diameter of the Earth atom is conceived to be that of the orbit of its electron, the Moon, or 478 thousand miles. Multiplied by π , the peripheral track is found to be 1501 thousand miles. Now applying π to the mean diameter of the orbit, currently estimated to be 178.5 million miles*, and dividing the result by 365-1/4 days, indicates a daily speed of 1532 thousand miles. The final check is to find the daily mileage at the orbital speed of 17.5 per second - the mean between loosely used round figures. The product is 1512 thousand miles per day.

These figures are close enough to constitute evidence that one revolution of the sphere safely whisks the Earth the dizzy distance of 1500 thousand miles a day without its loss of a heart beat - its sluggish rotation of a mere thousand miles an hour undisturbed. One degree of western space and 3m 56s of sidereal time are displaced daily. This produces the bi-annual revolution of the Earth's sphere shown in the Pyramid Clock on the back cover.

Its great circle represents the ecliptic wherein lies the zodiac of the Sun and the magnetic sphere. The four large inner circles depict the zodiac conceived to be imbedded in the Earth's sphere. In analogy with the reversal of images on a camera plate, the zodiacs are seen in reverse order between the heavens and the Earth. If we view the clock, facing north, we will see the celestial order of the zodiacal constellations from east to west, represented in the great circle of the clock. Facing south, we have the terrestrial and more familiar view of their order, from west

* The conventional figure of 98 million miles as the mean distance of the Sun has been superseded. Its only significance now is its measure of the so-called "astronomical unit".

to east, which space did not permit showing in full in the large inner circles. The table gives the figures that demonstrate a complete revolution of the sphere in a half-revolution of the orbit. The only suspicion of what propels the diurnal rotation and the orbital revolution of the sphere is some machine-like gearing to it of the Earth in the ratio of 1 to 360 - one rotation of the latter moving the sphere one degree.

The Earth now assumes dimensions never before imagined. Accustomed, as we are, to thinking of it as a rather inferior planet of some eight thousand miles diameter, we now see its space displacement multiplied about sixty times into a sphere of activity nearly a half million miles in diameter. Expanding the idea, are we not justified in assuming that the other planets of our system, even the outer stars possibly, have the same construction? If it should be true, then we should appear to an observer on another planet as a luminous body of the dimensions of our newly found cosmic sphere. Then it may be that we are seeing other bodies in the same light and, in consequence, are not seeing all of their actualities. At any rate, the theory supports the assumption that the ponderable body of a planet or star is minute indeed compared with its imponderable magnetic field. Such fields then must be laden, packed, with characteristic qualities of its own self-generated electronic energies. Obviously this would endow each with personality, influence, and function. Here then is the prime source of astrological evaluation of the zodiac and the members of our solar universe.

However, this hypothetical sphere introduces an argument negative to the case for cosmic causation in terrestrial affairs, which must be disposed of. How can sidereal energies penetrate this protecting shell, literally to fashion the Earth and to govern it, as fatalistic astrological philosophy proclaims? This can not be true, for already we have conceded the Earth's personality, influence, and function. The tentative explanation is that the firmament is imbedded in the perimeter of the magnetic sphere through polarization, or simple reflection, of the lights of its bodies. Then, in a quite literal sense, the sphere and all its impregnated energies become the creative matrix of the Earth which no outer physical body can approach, much less penetrate. It thus seems certain that it is our Luna, not some derelict of space, that pelts us now and then with meteorites.

We must therefore consider this shell as a field of potential

and infinitely diverse qualities of magnetism which the Earth contacts affinitively, captures, and transforms to serve its own creative functions. The ordinary exchanges of influence between human personalities is analogous to the selectivity of the Earth's responsiveness to outer forces. And nothing quite so well illustrates the process as the selectivity of wave allotted a broadcasting station, with complete freedom of choice on the receiving end. How external energies pass through the shell is not difficult to understand. A convenient illustration is the penetration by heat, light, and vision of transparent substances which will stop high-powered bullets. The irradiation of milk and food stuffs to improve their value, the various therapeutical rays, and the astounding performance of the newly discovered black light, should satisfy the most skeptical.

But perhaps the most exact analogy to the penetration of the Earth's shell by cosmic rays was provided by the late George W. Crile, famed anatomist and surgeon of Cleveland Ohio.

In 1925, Dr. Crile announced results of his investigation of the source of heat in the human body.* His conclusion was that we contain billions of microscopic suns, ranging up to 6000 C in heat content. It is general knowledge that human personality generates a magnetic field about itself of varying extent and intensity. The President of the United States, for instance, has developed a protective shell - personalized by guards, aides, secretaries, and so forth - which only strict mutuality of interests, or a commensurately powerful personality can possibly penetrate. Every created thing logically must be the focus of the entire cosmos to the extent of its comprehension of it. Illustratively, the three more recently discovered planets may be suspected of having no prior effect on human life. It is therefore quite logical that the human sphere or aura is encased in a shell of infinitely varying sidereal quality and density, which finally determines the relative strengths of its character.

All of these evidences considered, why could not Dr. Crile's microscopic suns be the reflection in the human body of the firmament, in correspondence with its reflection in the Earth's shell? Should his work in that direction be continued, or will he be forgotten, as the world has long since forgotten King Tut and his treasure laden tomb? Are we to merit St. Paul's ridicule of the

* Condensed in his paper, "A Bipolar Theory of Living Processes", published in 1926. Dr. Crile was founder and director of the Cleveland Clinic Foundation from 1921, and surgeon at Cleveland Clinic Hospital from 1924 to his death in 1944.

people of Athens, "forever trotting and trudging about to see and hear some new thing"?

The other mechanical function of the magnetic sphere is performed as the vehicle of the Earth's 6th motion. Its pole is that of the heavens, i.e., that of the ecliptic. This denotes a distance of $23^{\circ} 27'$ from the geographic pole which, of course, means that its revolution is in the plane of the arctic circle. Its position is now at station 13-X, based on present astronomical reckoning for that of the geographic pole. Somewhere between these poles lies that unstable whirlpool of force known as the magnetic pole. We may imagine it to be a gyrating vortex, analogous to that produced by the opposed propellers of two ships - the geographic pole rotating eastward; the magnetic, to the west. This vortex is considered the prime mover of the revolution of the path of the geographic pole in 311,040 years, the statistical cycle of the 6th motion. Its unit of space-time displacement is 15° in 12,960 years. Employing that equation, the polar center was in the longitude of Greenwich a trifle over 87 thousand years ago.

But the figure described by the 6th motion is not a circle. In fact, no such thing as a circle ever can be associated with celestial motion. Even the rotation of the Earth is not on a dead center, like a Ferris wheel. This is because of its enormous diurnal space displacement. All orbits and motions throughout the universe are, therefore, pericyclic or spiral, appearing in plane as loop-the-loop figures. Disregard or unawareness of this factor has stumped generations of physicists in accounting for the deflection of light. Mercury, for instance, crosses its perihelion point farther west in each revolution because of solar precession. Therefore, the pericyclic revolution of the pole's path performs two functions: it moves the pole itself longitudinally westward, and its "diminishing circles" record the effects of the 7th motion in its reduction of the obliquity of the ecliptic.

THE PERICYCLIC REVOLUTION OF THE POLES

Motion 7

The first hint of this motion was found on the formerly mentioned page of The History of Herodotus. After converting Egypt's generations into years at three to the century, he relates that the priests said that no god had ever appeared in human form dur-

ing the entire time. "The sun, however, had within this period, on four separate occasions, moved from his wonted course, twice rising where he now sets, and twice setting where he now rises. Egypt was in no degree affected by these changes; the productions of the land and of the river remained the same; nor was there anything unusual in the diseases or the deaths". Sequentially he discusses the claims of the priest's that Egypt had been ruled by gods in human form in anterior times.

But whether or not they ever did is immaterial to my position that the priests were discussing both the 4th and 7th motions which Herodotus confused. Relative to the former, they were telling him the generations of Egypt as measured by the Polar Cycle; in the latter, the age of human life as measured by the pericyclic revolution of the poles, through which alone could the reported anomalies of the Sun have been produced.

The capacity to comprehend these wonderful cosmic activities is determined by intelligence. The intelligence quotient of world humanity is as 12960 to 1945 as 72 is to X, or 10.8 years. That of the quadrantal Western Race, twice that: 6480 to 1945 as 72 is to X, or 21.6 years. Thus the revelations of the cosmos are specifically addressed to us. To receive them demands distinguishing knowledge and wisdom. The avenue to the former leads forward and to destruction if without wisdom. Search for the latter leads backward - fearlessly probing history, tradition, legend, and myth.

But was it myth or history that the priests related to Herodotus? Vast records are inscribed in Cheops, yet to be translated understandingly. If the priests had a record of the generations of Egypt susceptible to such proof in this day and age as we have seen, there may be hidden in Cheops just as authentic a record of the solar anomalies as any birth record in this country. That they reported two, not one three or four, such periods is reassuring. At any rate, it gives us a catalytic figure for the age of human life on this planet: twice motion 7 less its unfinished arc represented by the present obliquity of the ecliptic, $23^{\circ} 27'$, fixes the age of humanity at 4,513,644 years. In 151,956 years the poles of Heaven and Earth will coincide, bringing to perfection the 4th root race (two for each round) when gods in human form may again govern the Earth. Indeed they would be gods to our minds today.

The mathematical build up of this cycle consists in the following simple equations: The cycle of motion 6 (the revolution of the magnetic sphere) is based on 15 degrees for each cycle of the

4th motion (the revolution of the geographic pole), thus: 15×24 (360) \times 12960, equals 311,040 years. The cycle of motion 7 is 7.5 rounds of 6, or 2,332,800 years. Calculated on the diminution of obliquity at the rate of 1° per quadrant, or 4° per motion 8, i.e., $360 \div 4 \times 25920$, amounts to 2,332,800 years.

The one other innovation, in modern times, toward solving the mystery of the diminution in the obliquity of the ecliptic, was introduced by Drayson* about 1870. His theory postulated the precession of the pole, but which he called the Earth's "second motion". This he considered to be the revolution of the pole on a dead center, $29^\circ 25' 47''$ from the pole of the heavens. From the geocentric view, this would cause an apparent rocking of the ecliptic from a minimum obliquity of $23^\circ 25' 47''$ to $35^\circ 25' 47''$; its period 31,600 years.

Many evidences of the fundamental unsoundness of his theory have previously been presented in this work, which may here be emphasized by the inconceivability of its two basical premises. We can not imagine a "dead center" in the heavens that we have come to know. And, for the same reasons, the static import of a "rocking motion" invalidates appearances of its actuality. Moreover, such a jerrybuilt chronology could not be of the least practical service to its implied functions. Nevertheless a considerable literature and following have rallied to this doctrine, categorized as "Draysonia". And I, too, honor Captain Drayson for his progressive spirit and militant attitude toward the perversion of the restraining function of orthodoxy into obstructive defeatism. His loss is my gain in very tangible values accruing from his works, which I hope others also will find to some extent in mine.

While the various factors employed remain to be proved mathematically, the triangulation of the Great Pyramid offers substantial records of the Earth's 7th motion. My primary theory is that Cheops never had a physical capstone. This is not new, for many students of its religious significances hold belief that its flattened apex was "The Hotep, or Altar of Offering". The biblical authority is Isaiah 19:19-20. The viewpoint taken here is that, at certain times, the stars Aldebaran and Antares appeared alternately at the apex of Cheops to observers centered at its northern and southern bases, respectively. The design on the front cover poses Aldebaran in that position in 3240 B.C., with the equinoc-

* Captain A. W. Drayson, F.R.A.S., former Instructor in Surveying and Astronomy, Royal Military Academy, Woolwich.

tial Sun in perfect conjunction with the apex. This triple conjunction is taken to identify the completion and dedication epoch of this mightiest work of human hands.

Harking back 12960 years, we see its foundations being laid. Either Herodotus misunderstood the priests, or his translators have traduced him in perpetuating the nonsensical period of twenty years as its construction time. They were some two thousand years in building the Temple of Amen at Karnak. Constantine founded Saint Peter's in the 4th century, and twelve hundred years later Michelangelo was working on it. And all the famous cathedrals of Europe were under construction from two to five hundred years. The case for Cheops having been built in twenty years is, therefore, farsical.

In its archetypal design, Antares would have been plotted to appear as its luminous apex to an observer at the center of its southern base. The arrival of the precessional Sun would thereupon complete the schematic triple conjunction, and mark the epoch of the laying of the cornerstone of Cheops which 360 generations of Egypt would build. Since Egypt was then in her swaddling clothes, so to speak, the building operations must have been initiated by scientists and engineers of Mu from station 5-A. The probability of this supports the date of 15500 B.C. for the sinking of the continent, i.e., 700 years after the founding of Egypt in the Pyramid. The mathematical basis of these assumptions is perfectly apparent in the angle of the entrance, which is also the descending passage.

Naturally the first work of the builders was the Pit and the horizontal extension of the passage 52 feet 9 inches beyond. Coming out of the Pit, the passage was built at the angle of $26^{\circ} 18' 9.63''$. There can be no doubt that this angle is the record of the obliquity of the ecliptic in that epoch. Philosophically, it may also be considered the record of the obliquity of humanity at the time from which it must ascend to the perpendicular of righteousness, symbolized by the at-one-ment of the poles some 152 thousand years hence.

In the panel of the map given to "Precession in Obliquity", the obliquity of the ecliptic at 12960 B.C., according to scale, was $25^{\circ} 45'$. Its correction for 3240 years is a half degree, thus indicating the obliquity to have been $26^{\circ} 15'$ in 16200 B.C. This is only $3' 9.63''$ less than the actual declination of the passage. The difference this makes of 340 years is unimportant in the dead

reckoning of a span of over 18000 years. Very likely it would disappear if the base figure of A.D.0 could be precisely determined.

The popular concept that the angle of this passage oriented the Pyramid to Alpha Draconis- the supposedly North Star at the time of its building- is open to serious doubt. For Draconis to have figured in such a manner, it would have been in the same or opposition longitude of Aldebaran- mindful of the latter having then been the positive equinoctial station 11-A. Instead, it held 143° of right ascension relative to Aldebaran's equinoctial zero. Therefore, the equinox must move 37° of arc for Draconis to culminate as the pole star. Calculated by precessional motion, this occurred in 980 B.C. The same mathematics fixes the culminating date of Polaris as about 1938 A.D. On the other hand, Vega, sometimes proclaimed a future pole star, is much too far below station 13-C ever to become one in this epoch of motion 7; for the pole is now receding through the diminution of obliquity.

Obviously, the station of the pole star is a most inconstant one, having been occupied by a succession of stars at long intervals during which the post, so to speak, was vacant. It is therefore impossible to believe that the architecture of Cheops incorporated any such inconstant factor. It is far more likely that the passage inclined in the declination of Antares, in precise opposition of Aldebaran. This encourages the suspicion that the Pit and dead end of the passage symbolizes and dates the sinking of the great South Pacific continent.

It will be recalled that Herodotus also reported the consequences of the reversed horizons of the rising and setting Sun. The normalcy of the productivity of the land and rivers, and the conditions of life, are indeed difficult to reconcile with the most obvious implications of this cycle. For, of course, there would have been periods when the poles rotated in the plane of the ecliptic. The Sun would then shine directly on them, its rays, enormously magnified by polar inertia, should then have made them as hot as they are now cold. Logically, the pole of the magnetic sphere must maintain its cyclic distance from the geographic pole as diminishing obliquity may determine. This would mean that the sphere, at the same minute rate of change, would experience mutation of the celestial pattern which we have assumed to be imbedded in its periphery. In other words, the pole of the sphere is actually the pole of the heavens as far as the Earth is concerned, regardless of the ecliptic. Consequently, when the Earth's poles

lie in its plane, Alcyone, Aldebaran, Antares, Regulus, Fomalhaut, etc., would be eligible for pole star positions.

The prime significance of these deductions is that the creative cosmic brew within the magnetic shell is just as slowly, yet constantly, having its characteristics refined toward the universal end of evolution: "Omne vivum ex ovo", the hoary formula describing the process. The goal of evolution has hardly been better formulated than Browne has done:*

"Evolution is a continuous process and the primal impetus back of the great on-flowing ocean of life that acts infinitively. It is not terminated when life has succeeded in perfecting a form, for the perfection of forms in themselves is not the end of vital activity. *The end of evolution is the complete spiritualization of matter.* So that it does not matter how perfect a form may be, either subjectively or in its adaptation to environments; it does not matter how faultless a medium for the ensouling life it may be. There is ever the eternal necessity that life must drive it back over the path of its genesis until it shall be transmuted into pure spirit".

Since it hardly could be thought that the Earth was anywhere near such a state, its destruction would not be threatened when its polar axis has lain in the ecliptic plane. There would be a central belt, comparable to our temperate zones, from which the temperature would gradually rise to the inferno of heat at the poles. This argues that there is a central axis where the extremes are never felt, hence always are inhabitable—though they may be geographically variable at different polar angles.

There are reasons to suspect this. Granted the Earth to be a sentient body, it must have a heart. Some have speculated that various aspects of the orientation of Cheops suggest that it was built over the heart of the Earth, which would polarize the axis of climatic constancy with Antares. The appalling tragedy to the continent under it has nothing to do with the matter of climate. In fact, relatively, that was a second-rate geophysical phenomenon, the inconceivable activities (Job 38-41) of the 7th motion in mind. Astronomer Maedler held that Alcyone of the Pleiades was the central star of our galactic universe. This cluster also is in the longitudes of Egypt upon which it may release its "sweet influences" in such times of the 7th motion.

We thus arrive at something in the nature of an explanation of the otherwise blank mystery, left by the priests of Egypt in their curious report to Herodotus of the anomalies of the Sun and the geophysical consequences of them.

* The Mystery of Space, p. 227, by Robert T. Browne, E. P. Dutton & Co., New York, 1919.

SPACE, TIME, AND INTERVAL

Space is the repository of history, recorded in the language of cosmic causation, and manifesting through the creative properties of Time. Thus Time appears as the first dimension of Space. And, since all Space is spherical or ovoidal, how many other dimensions those forms may have is immaterial. We can dice a cube of three dimensions from a potato, but it yields not the slightest idea of what the original object was like. Nor can any material form yield the least clue to the conformation of the cosmos of which it is a part. Moreover the Time dimension is neither interminable nor constant. Therefore, since we can not apprehend eternity, the only proper and useful concept of Time is Interval, of which every moment is of different constituency. This implies displacement, mutation, and concomitant lapses from the cognition of Time in human consciousness.

Interval measures a comprehensible beginning and ending of a period of Time to which we must attribute creative properties consistent with observed effects. Day and night, the weekly phases of the Moon, and the seasons of the year are our most familiar examples. Time would be meaningless if we had perpetual darkness or everlasting light. If there were no such intervals as the seasons, modern man would soon keep company with the horizontal vertebrates and eventually the protozoa. The incentive of seasonal vicissitudes would be absent. And if the Sun were immobile, which the precession of the equinoxes deny, the world would still be "without form, and void" for lack of the developmental agencies of solar light, heat, and energy.

The prime dimension of interval is, therefore, duration of form. Form, in the sense of duration, may be anything: The spell of a day-dream over one's mind, the influence of another person, the useful life of a building or machine, a political party or governmental regime, a nation, race, planet, sun, or star.

But neither Time nor Interval is of universal effect, which was demonstrated in the section, "The Time-Table of World Evolution". The mutations of the seasons are lesser evidence of the geographic focus of solar time. Planting time begins in the northern and stops in the southern hemisphere as cosmic forces, transmitted by the Sun, may decree. Consequently, the phenomenal events in the orbital path of both the annual and precessional Sun, must

have their sources in the creative properties generated by the Sun in a given celestial coordinate of geographic space.

Just as the interval of planting and cultivation attends the passage of such times to the northern hemisphere, and the passage to the southern of the times of harvest and death in Nature, so do the intervals mutate in the great precessional cycle. Time stops when the awareness of interval is obliterated— either through its passing, or in unconscious states, in sleep, in atavism, or in death. It stopped for Rip Van Winkle. It likewise has stopped for reactionary minds who would maintain the status quo. And Time is no more for nations and even entire races who have ceased to grow. Periodically, Mother Nature cleans them out for her health's sake. The ruins of bygone ages confirm this, and the signs of the moment proclaim the beginning of another such period. The geographic focus at station 1-B testifies that Time has stopped for peoples eastwardly to 7-B, where the negative equinox is evolving a race in equilibrium with that proceeding under the former. Only the most fantastic chauvinism could conceive of changing the ways of life of the intervening hordes of spiritually decadent, moribund, or dead mankind.

The evolution of intelligence to comprehend and cope with world conditions and movements of such magnitudes, proceeds in strict geometrical proportions. Memory consciousness of the cell corresponds to the Line, by which invertebrates subsist and reproduce through fission. Simple consciousness of the horizontal vertebrata adheres to the Plane, living by the associational or parallel mode of cerebration. Self-consciousness is identified with the vertical spine of man, denoting the third dimension of elevation and vision expressed in the Cube. The fourth estate of mentation is Time-consciousness, appropriate to the Sphere in employing all dimensions in the affairs of Life. It sees or apprehends Time as the cause of the effects which make both history and futurity. It is commonly apprehended as "prescience", its rare appearances conceived to be phenomenal good judgment or common-sense. But this feeble conception offers no hint of how the gift may be cultivated into scientific vision, although the textbook is wide open to the mind awakened to such aspirations.

For Time to shape history and mould futurity immediately endows it with an infinite gamut of specifically characteristic properties. To dispute this is equivalent to arguing that summer and winter, spring and fall, have no distinguishing features, and that

the calendar reports no more than a meaningless sequence of days, months, and years. Since geophysics immediately throttles such an argument, we are free to attribute all terrestrial phenomena to the several and peculiar creative patterns of the cosmos which at least germinated their gestation in the Earth. This is supported by man's a'priori conception of the nature and function of Time. From the dawn of life, man has ordered his existence by the stars.

And whenever the modern agriculturists and livestock breeders throw away their almanacs, which pedantic experts say they should do, the world would toboggan to starvation within a decade.

This view of cosmic organization, function, and activity reveals clearly that the works of man and the manifests of Nature are insensate and meaningless until translated by the properties of Time that produced them. Mere dates tell us nothing but the phenomenal. The absence of its causes and significances impairs the value of history- whether written in books or stone- as the immediate guidebook for the intelligent planning and management of life- individual or collective. The utility of the knowledge of cause and effect operating periodically was demonstrated on page 5 in identifying the periodic incidence of the disintegration of the three theocratic cultures. Another example was the periodicity of the Punic and modern World Wars- all fought for the same purpose- world domination by the racial blood of the Holy Roman Empire. This has nothing to do with the Church, which I hold to be the salvaging hope of civilization and culture. A third employment of the principle of cosmic causation in geophysics discovered the longevity of the North American continent- in the seasonableness of the polar cycle, geographically pitched.

The entire history of the world and of humanity, from their beginnings, is written in the starry pattern of celestial energy that moulded their minutae and magnitudes every step of the way. Therefore, given date and place of a phenomenon, its creative elements can be plotted and its history be translated to serve the evolution of intelligence. For all visable and invisable substances of the universe carry the signature of Time.

Credit is due astrology for the preservation of the rudiments of the science, through fair weather and foul, for 3000 years or more. For this, and its solace to the natural hunger to penetrate the mysteries of life and futurity, its ridicule and persecution should cease. They are inconsaistent with the tenets of Western Culture, for astrology is a personal religion- as old as mankind.

DIURNAL DISPLACEMENT OF TIME AND SPACE
Analogical demonstration of
Polar Motion 4

..... March 20th

Zones	Greenwich	60° west	120° west	Dateline
Time	12 hrs N.	4 hrs P.M.	8 hrs P.M.	0 hrs A.M.
Space in long.	0 "	4 "	8 "	12 "
Mutual	12 "	8 "	16 "	24 "

..... March 21st

Zones	Dateline	120° east	60° east	Greenwich
Time	0 hrs A.M.	4 hrs A.M.	8 hrs A.M.	12 hrs N.
Space in long.	12 "	4 "	8 "	0 "
Mutual	24 "	8 "	16 "	12 "

..... March 22nd

Zones	Greenwich	60° west	120° west	Dateline
Time	12 hrs N.	4 hrs P.M.	8 hrs P.M.	0 hrs A.M.
Space in long.	0 "	4 "	8 "	12 "
Mutual	12 "	8 "	16 "	24 "

EXPLANATION

Each day begins on the Dateline at zero Civil Time there. This corresponds to 12 hrs., or Noon, Greenwich the day before. But zero time at the Dateline is 180 degrees of longitude, or 12 hours of Space, from Greenwich. Therefore a half rotation of the Earth will add 12 hours of Space to the former and 12 of Time to the latter, mutually displacing 24 hours. All polarized bodies produced the same phenomenon. The Pyramid Clock demonstrates it for the year, from which the precessional cycle can be imagined.*

The effect of the diurnal cycle is the often cited experience of west and eastbound travellers across the Dateline. In the above example, the westbound loses the 21st because it began at Noon Greenwich the day before while he was still in the unfinished 20th. The eastbound finds himself on the other side in the afternoon, Greenwich Time, the 20th; hence gains a day.

* "Kepler discovered and Newton proved mathematically that if two bodies are revolving around each other under the force of gravity, the line joining them sweeps out equal areas in equal times". From "Stars and Men", p. 84, by Stephen A. and Margaret L. Ioanides. The Bobbs-Merrill Company, Indianapolis and New York, 1939.

The PYRAMID CLOCK For WASHINGTON
R.A.M.C., Long. B, 293:56, Capricorn 22:09

Demonstrating the Principles on which Pyramid Time rests
and illustrating the mutual displacement of Time and Space

Sun	R.A.	Interval	RAMC	Sphere	Earth	R.A.	Interval	RAMC
Cap 22	293:56	- x 00	293:56	Cap 22	Can 22	113:56	x - 180:00	293:56
Aqu 22	324:32	PMx 30:36	355:08	Pis 25	Leo 22	144:32	AM- 149:24	355:08
Pis 22	352:48	PMx 58:52	51:40	Tau 24	Vir 22	172:48	AM- 121:08	51:40
Ari 22	20:29	PMx 86:33	107:02	Can 16	Lib 22	200:29	AM- 93:27	107:02
Tau 22	49:43	PMx 115:47	165:30	Vir 14	Sco 22	229:43	AM- 64:13	165:30
Gem 22	81:26	PMx 147:30	228:56	Sco 22	Sag 22	261:26	AM- 32:30	228:56
Can 22	113:56	x - 180:00	293:56	Cap 22	Cap 22	293:56	- x 180:00	293:56
Leo 22	144:32	AM- 149:24	355:08	Pis 25	Aqu 22	324:32	PMx 30:36	355:08
Vir 22	172:48	AM- 121:08	51:40	Tau 24	Pis 22	352:48	PMx 58:52	51:40
Lib 22	200:29	AM- 93:27	107:02	Can 16	Ari 22	20:29	PMx 86:33	107:02
Sco 22	229:43	AM- 64:13	165:30	Vir 14	Tau 22	49:43	PMx 115:47	165:30
Sag 22	261:26	AM- 32:30	228:56	Sco 22	Gem 22	81:26	PMx 147:30	228:56

