

Paolo Emilio Amico-Roxas

The mathematician and physicist Paolo Emilio Amico-Roxas in his books *Il problema dello spazio e la concezione del mondo: la teoria endosferica del campo o sistema cosmocentrico* (1960) and *La suprema armonia dell'universo: la teoria endosferica del campo* (1990) he develops a cosmogonic theory partially based on the hollow earth theory but giving a strong scientific basis.

With the aims to resolve some problems of standard cosmogony (like energy conservation in an expanding universe), with geometric exactitude the author exposes an alternative cosmogonic model based on non-Euclidean geometry, in which the Earth is shaped within an hollow sphere that contains the whole universe and that subject to field laws, but that the human being perceives it as described by standard cosmogony through his own sensory experience.

He highlights, according to Einstein's Theory of relativity, that the universe is not Euclidean and the propagation of the light is rectilinear in a non-Euclidean sense (the light rays run on geodetics, which in the Euclidean sense are curviline). Through the application of the transformation by reciprocal vector rays the author shows how it's possible the passage from a convex sphere (called exosphere) to a concave sphere (defined endosphere).

Diagrams from:

Paolo Emilio Amico-Roxas'

The Endospheric Theory of the Field or Cosmocentric System

The Problem of Space and the Conception of the World

and some translated commentary by a Russian guy

Some images from Johannes Lang's book The Hollow World Theory are in here as well.

Compiled by Joe

joe@joedubs.com

<https://joedubs.com/is>

<https://joedubs.com/concave>

Use Yandex or Google Translate browser extension for the websites:

Paolo Emilio Amico-Roxas - The "Problem of Space" and the "Conception of the World", the "Endospheric Field Theory" (or "Cosmocentric System") - Holographic Universe.

<https://emilioamicoroxas.blogspot.com/p/blog-page.html>

Blog on Endospheric Field Theory

<https://teoriaendosfericadelcampo.blogspot.com/>

Blog: La Terre concave vue par le professeur Paolo Emilio Amico-Roxas

<https://cyprustar.wordpress.com/2019/11/22/la-terre-concave-vue-par-le-professeur-paolo-emilio-amico-roxas/>

Video Presentation (Italian)

<https://rutube.ru/video/c6faea40e4fe2b90a765ce565d98046f/>

Video Interview: (English)

<https://www.youtube.com/watch?v=IGPXgTtQv38&t=196s>

The Endospheric Theory of the Field or Cosmocentric System

<https://archive.org/details/>

TheSupremeHarmonyOfTheUniverseTheEndosphericFieldTheory/page/n63/mode/2up

The Problem of Space and the Conception of the World

<https://archive.org/details/>

IlProblemaDelloSpazioELaConcezioneDelMondo/mode/2up

Amico-Roxas, Paolo Emilio (1960). Il problema dello spazio e la concezione del mondo: la teoria endosferica del campo o sistema cosmocentrico

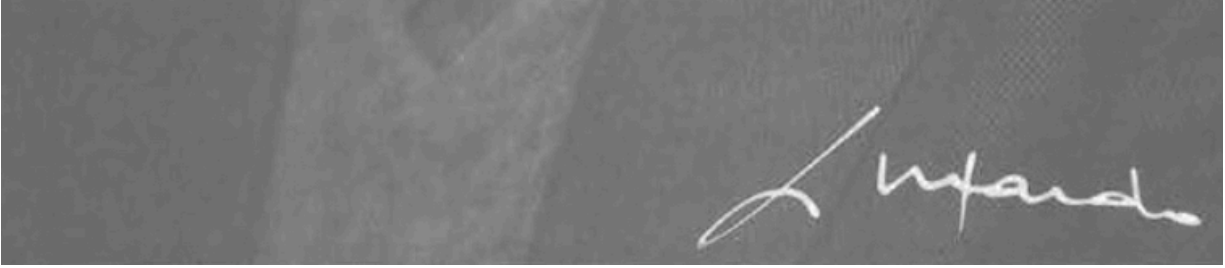
[The problem of space and the concept of the world: the endospheric field theory or cosmocentric system] (in Italian).

Roma: Libreria Editrice Universitaria D'Isa. Retrieved 7 July 2018.

Amico-Roxas, Paolo Emilio (1990). La suprema armonia dell'universo: la teoria endosferica del campo

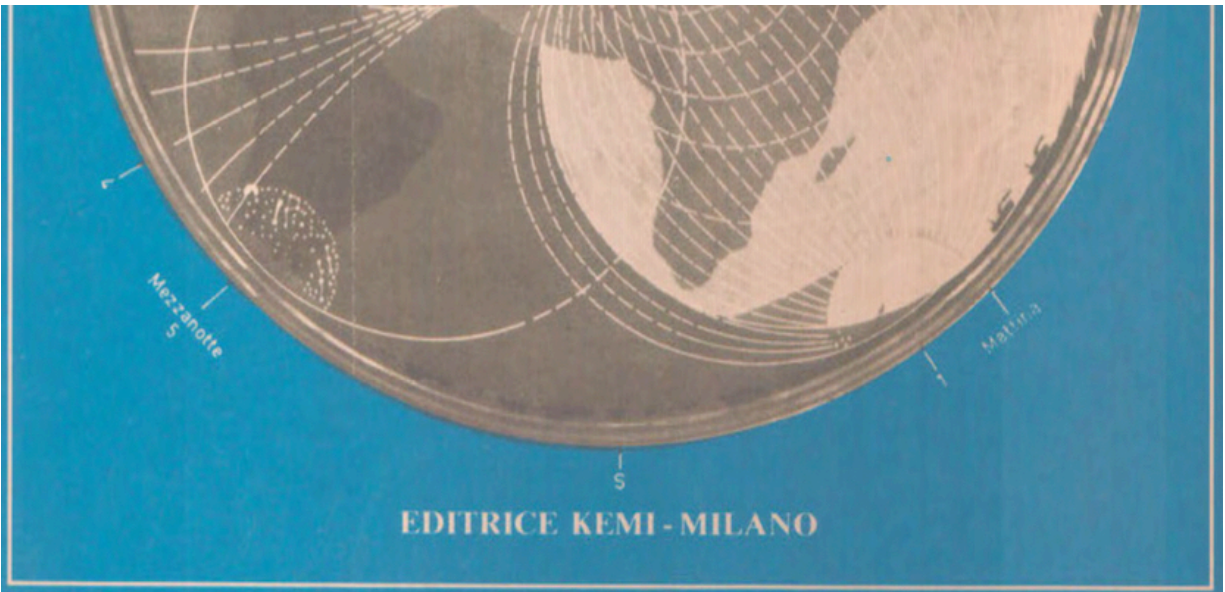
[The supreme harmony of the universe: the endospherical field theory] (in Italian). Milano: Kemi. Retrieved 7 July 2018.





Paolo Emilio Amico-Roxas





PAOLO EMILIO AMICO-ROXAS

IL PROBLEMA DELLO SPAZIO E LA CONCEZIONE DEL MONDO

LA TEORIA ENDOSFERICA DEL CAMPO

o

SISTEMA COSMOCENTRICO

LIBRERIA EDITRICE UNIVERSITARIA D'ISA
VIA DEI MILLE, 24
ROMA 1960

Tav. XVI.

The Endospheric Universe.

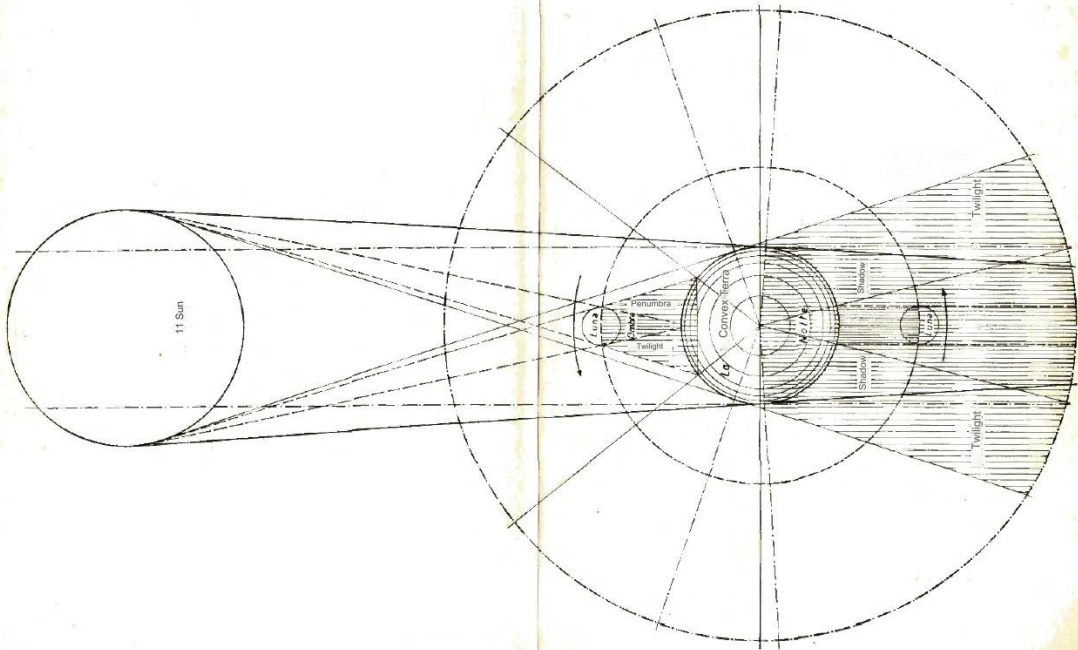
The Stellar Center and the Sole are the worries of the Universal Camp, the line of the forza is also a geodetic line percorsed by the solar radiations. An osservatore posto nel punto « mattina vede allontanarsi e sparire una nave sotto l'orizzonte, cioè sotto la tangente curvilinea percorsa dai raggi luminosi; Then indietro lo sguardo and scorge la cima d'una montagna, i cui piedi restano anch'essi nascosti dietro l'orizzonte. The voltage of the sky, comes across different moments of the giornata (mattina, mezzogiorno, sera, mezzanotte), sono the image of the vero cielo interno (Tav. X). Attorno al Campo also represents the continents and oceans in a superficial concave of the terrain.

(leggasi nelle pagg. 245, 279, 294 and 307)

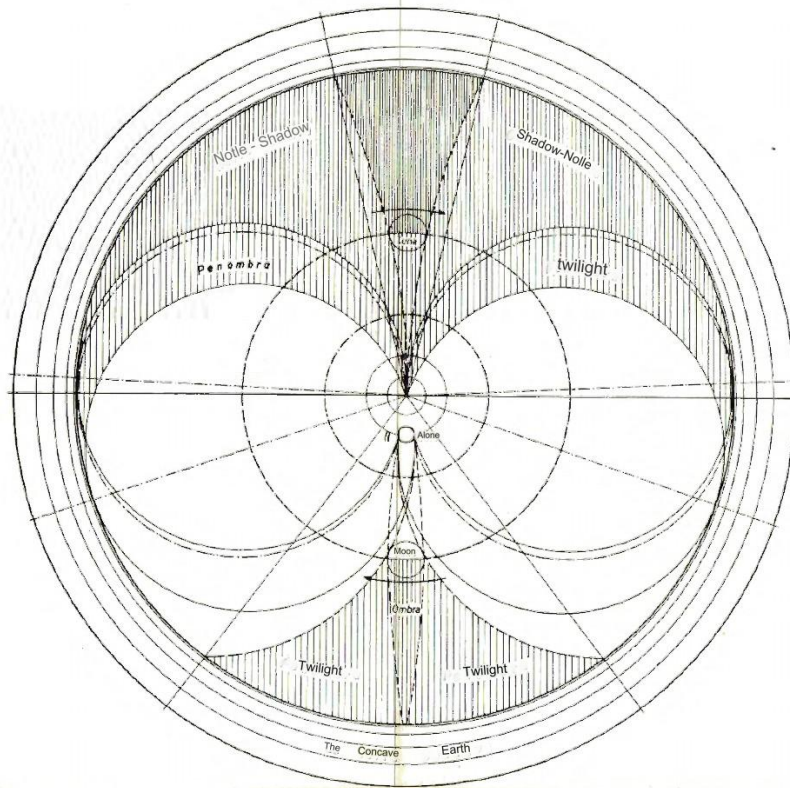


Solar eclipses and lunar eclipses in the heliocentric system.

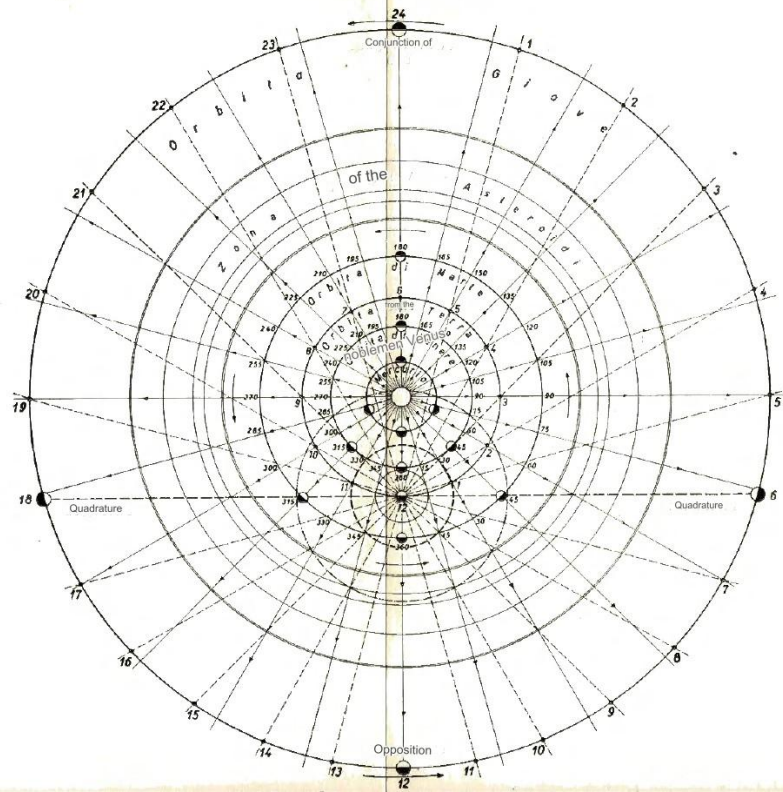
(see pages 283, 285 286)



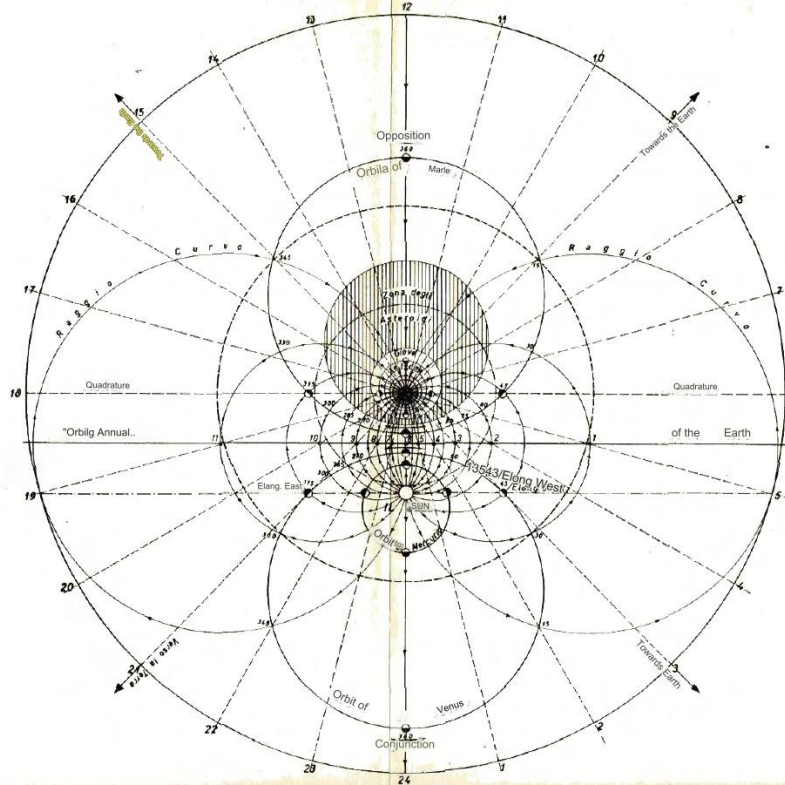
Solar eclipses and lunar eclipses in the Cosmocentric System.
(read on pages 284, 285 and 286)



The Heliocentric System. (read on
pages 250, 262 and 271)



The Cosmocentric System. (read on pages 250, 262 and 271)



Electric field and magnetic field.

(read on pages 250 and 263)

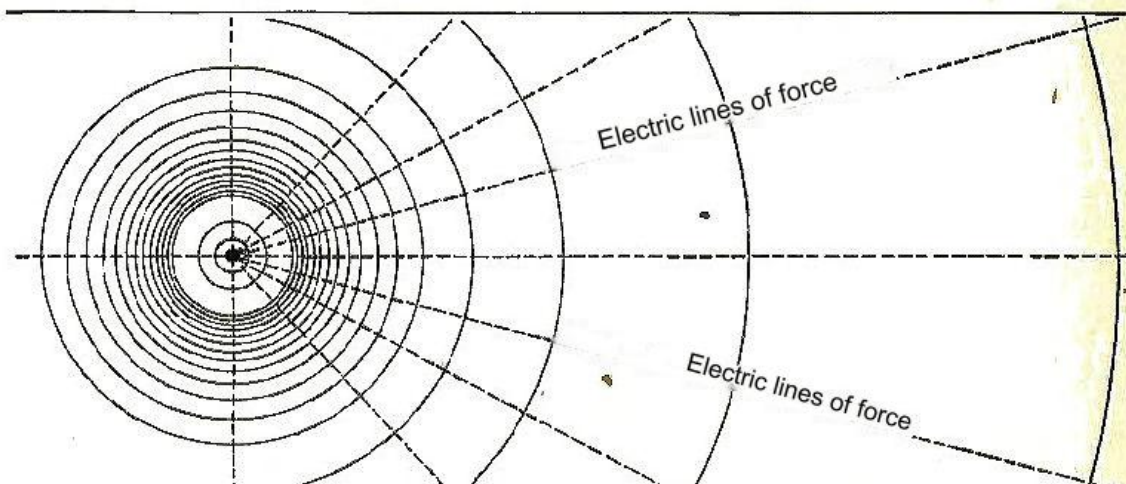
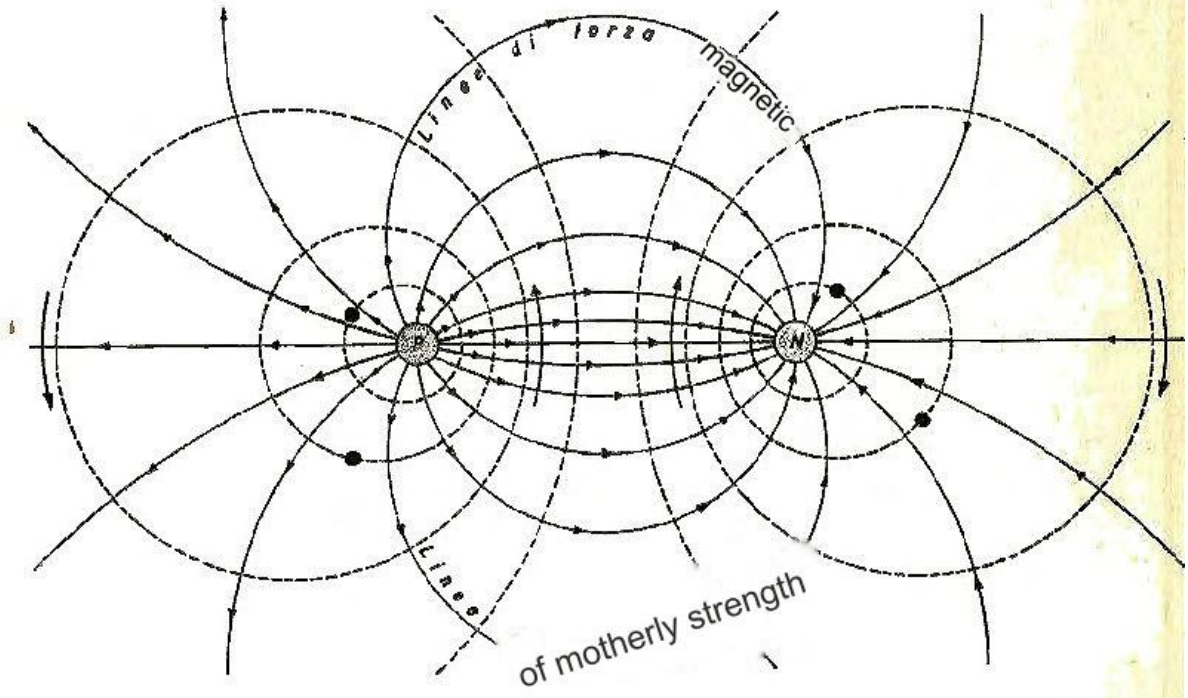
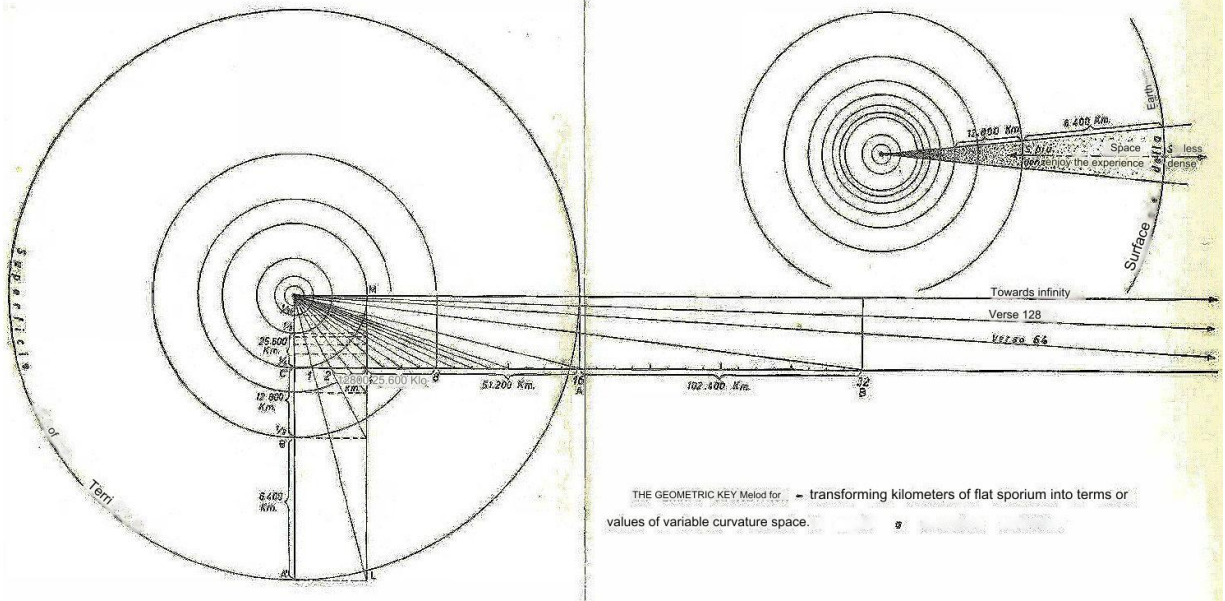


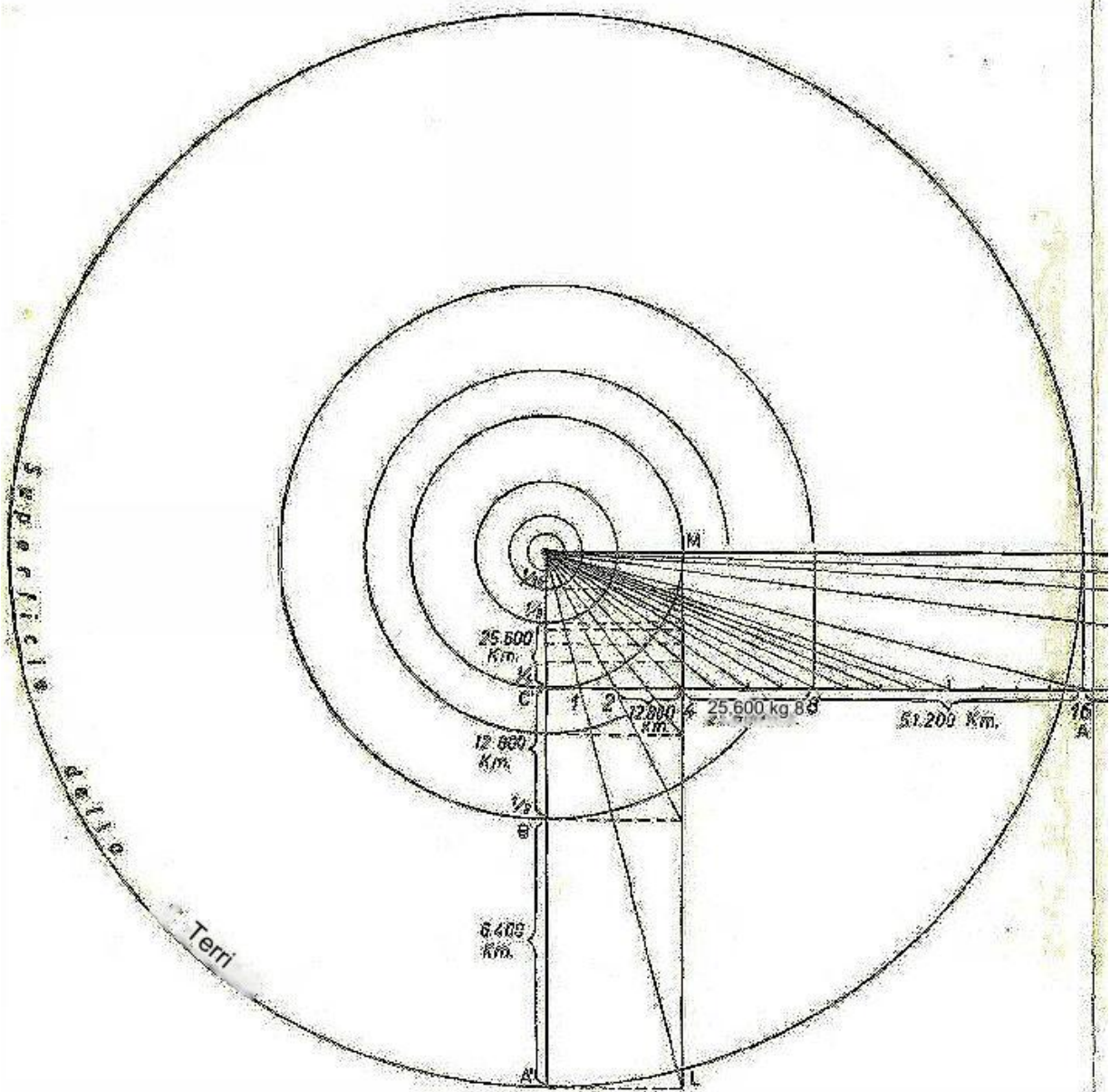
Fig. sup.: Electric charge, electric field at equipotential surfaces.

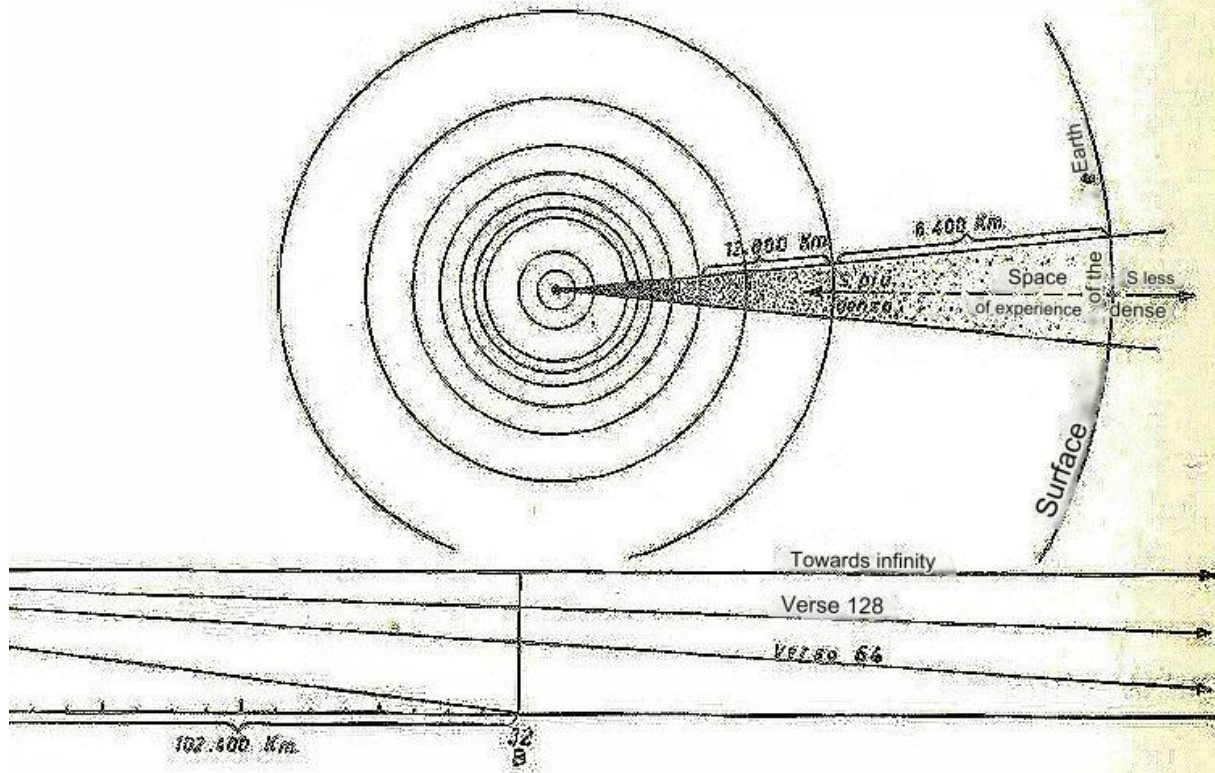
Fig. Int: Magnetic poles, magnetic field • equipotential surfaces,





THE GEOMETRIC KEY Method for - transforming kilometers of flat sporiom into terms or values of variable curvature space.





THE GEOMETRIC KEY - Melod for transforming kilometers of flat space into terms or values of variable curvature space.

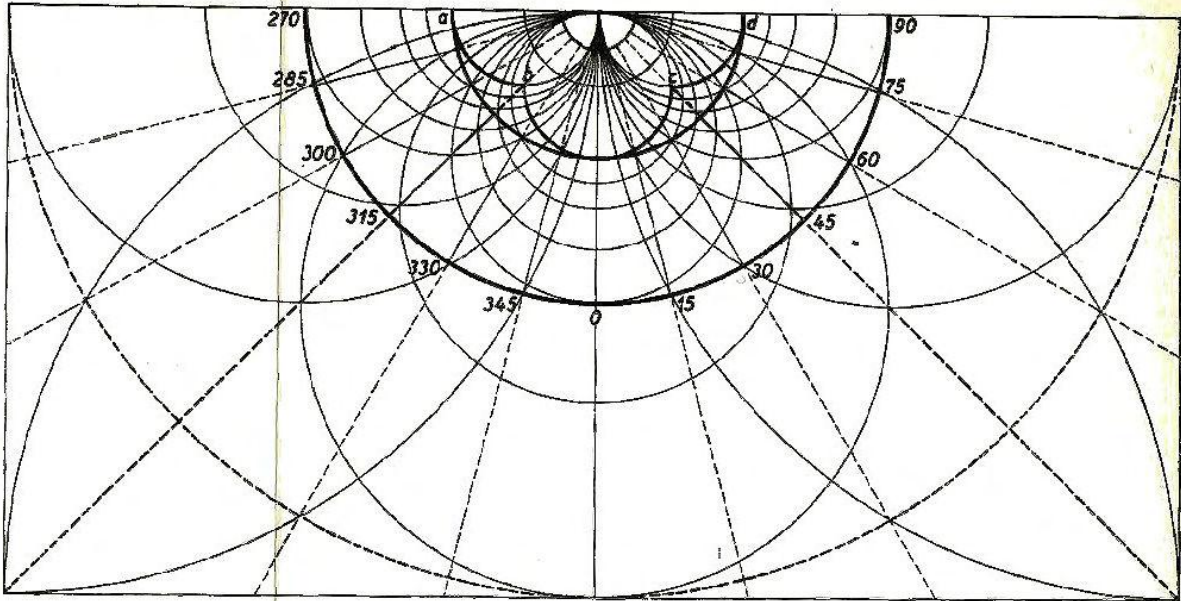
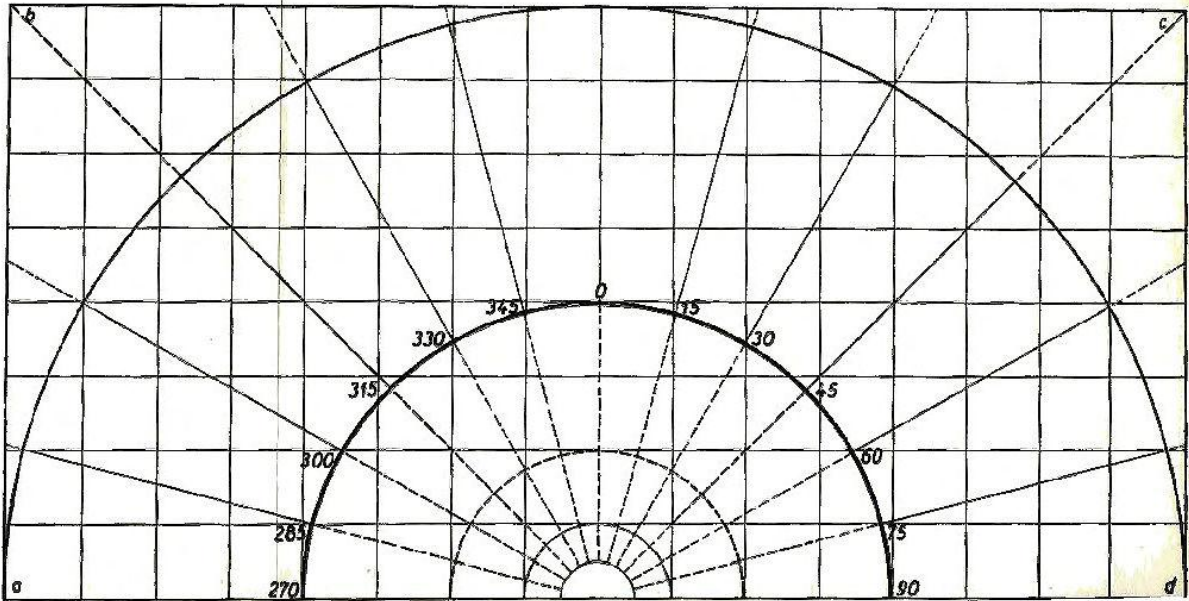


Fig. sup. Space with variable curvature — Non-Euclidean geometry
 Fig. inf Flat, uniform space — Euclidean geometry



Why does the concave Earth appear convex?

(read on page 289)

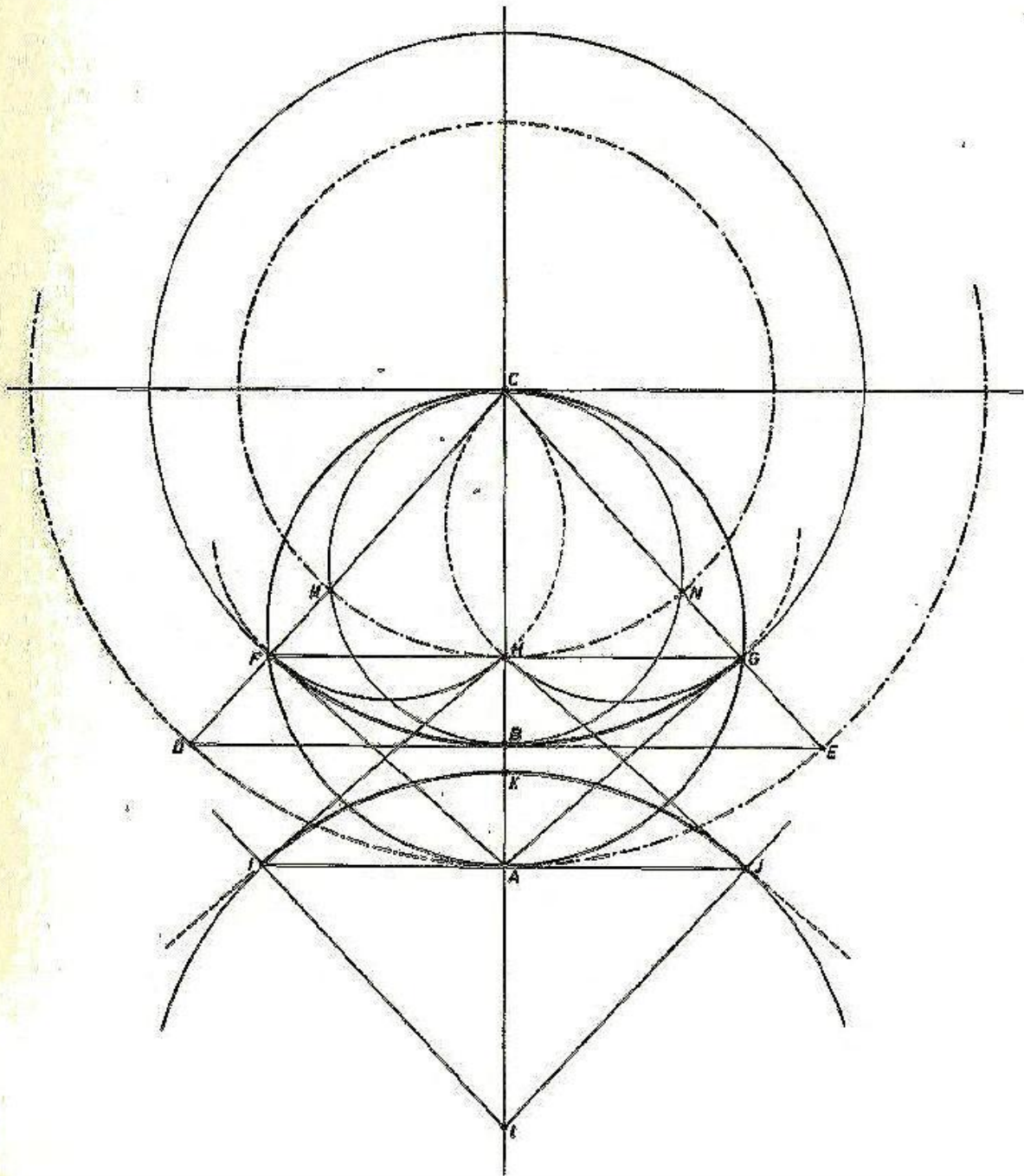
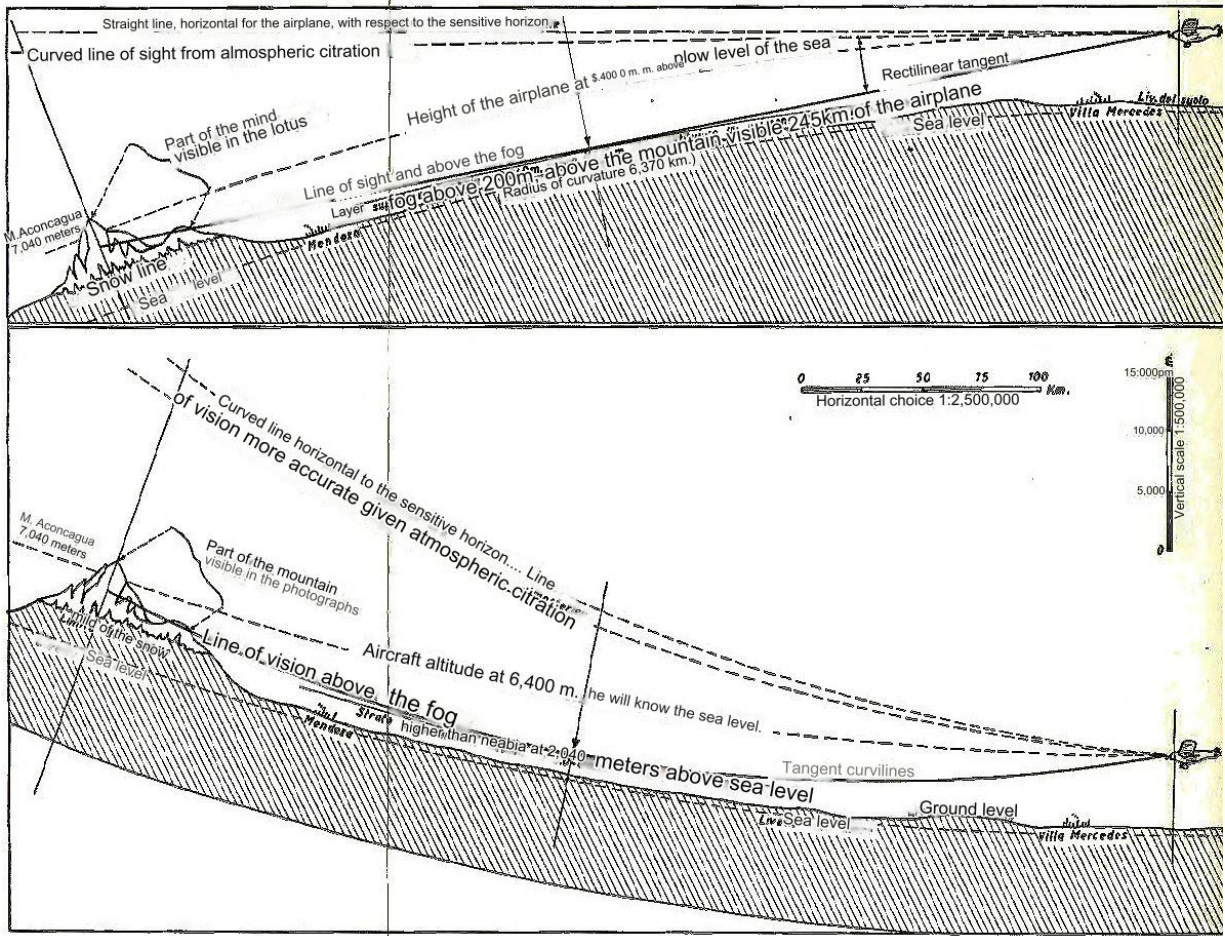


TABLE VI.



An infrared photograph of Mount Aconcagua was taken in 1931 from an airplane 460 kilometers away: the two interpretations, convex (fig. sup.) and concave (fig. int.).

Inversion of figures.

(read on page 261)



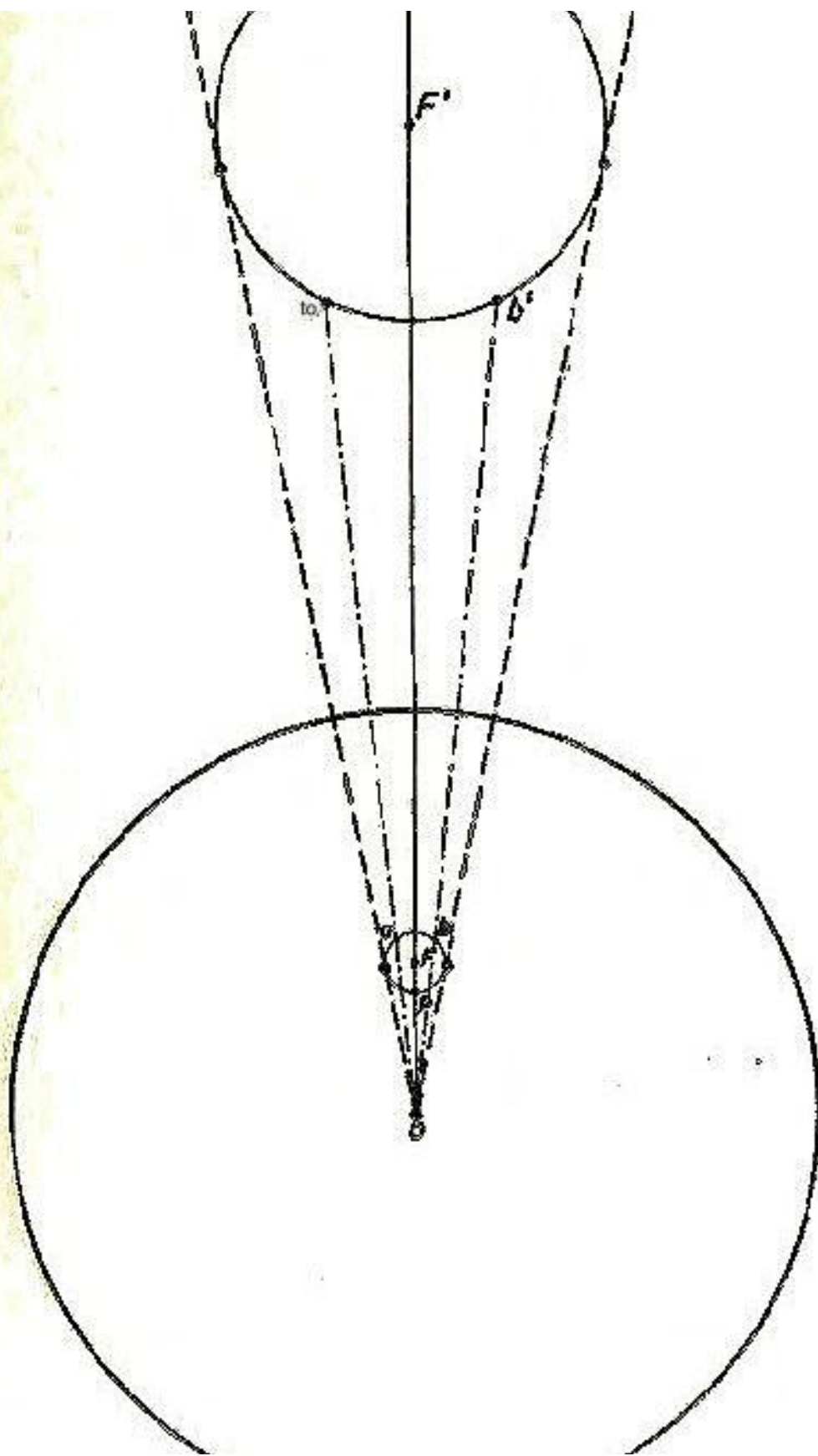


TABLE VII.

The problem of parallaxes.

(read on page 287)

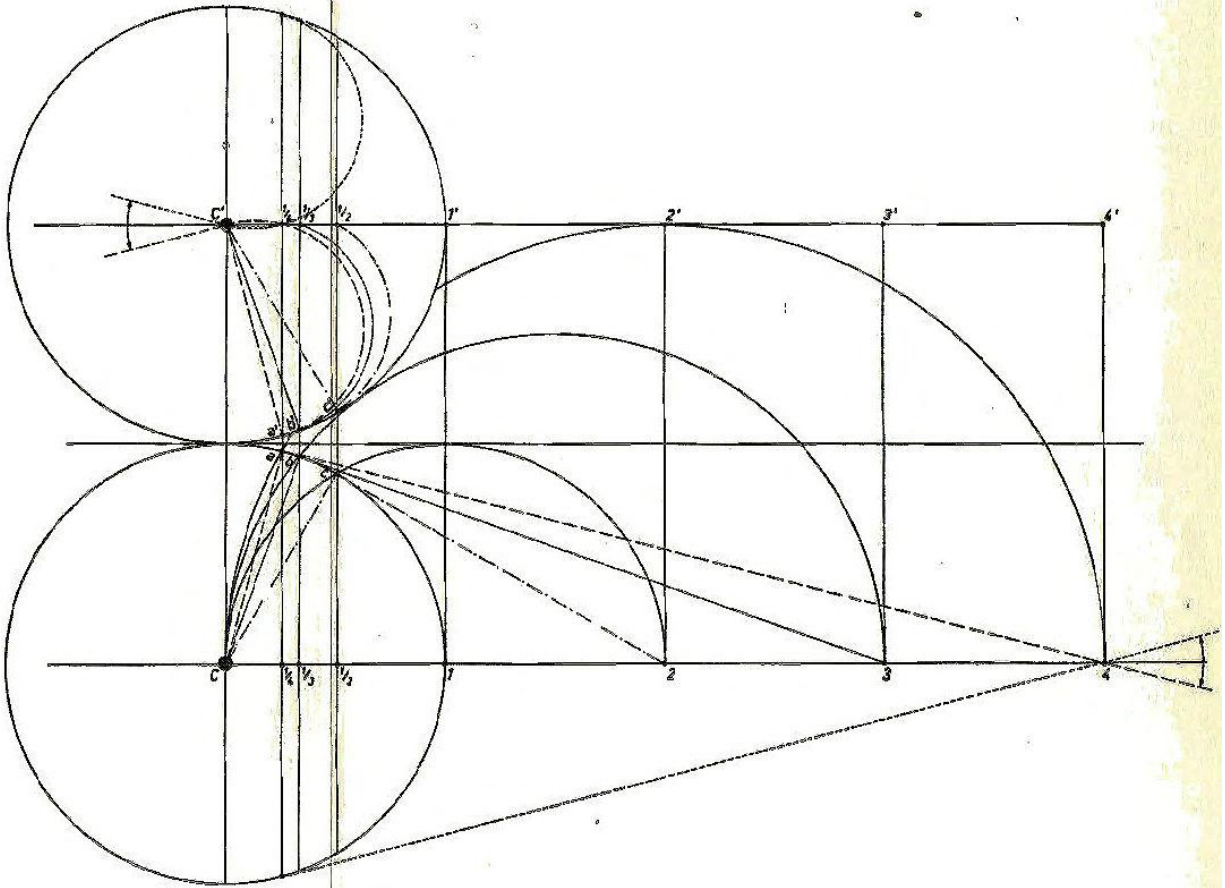
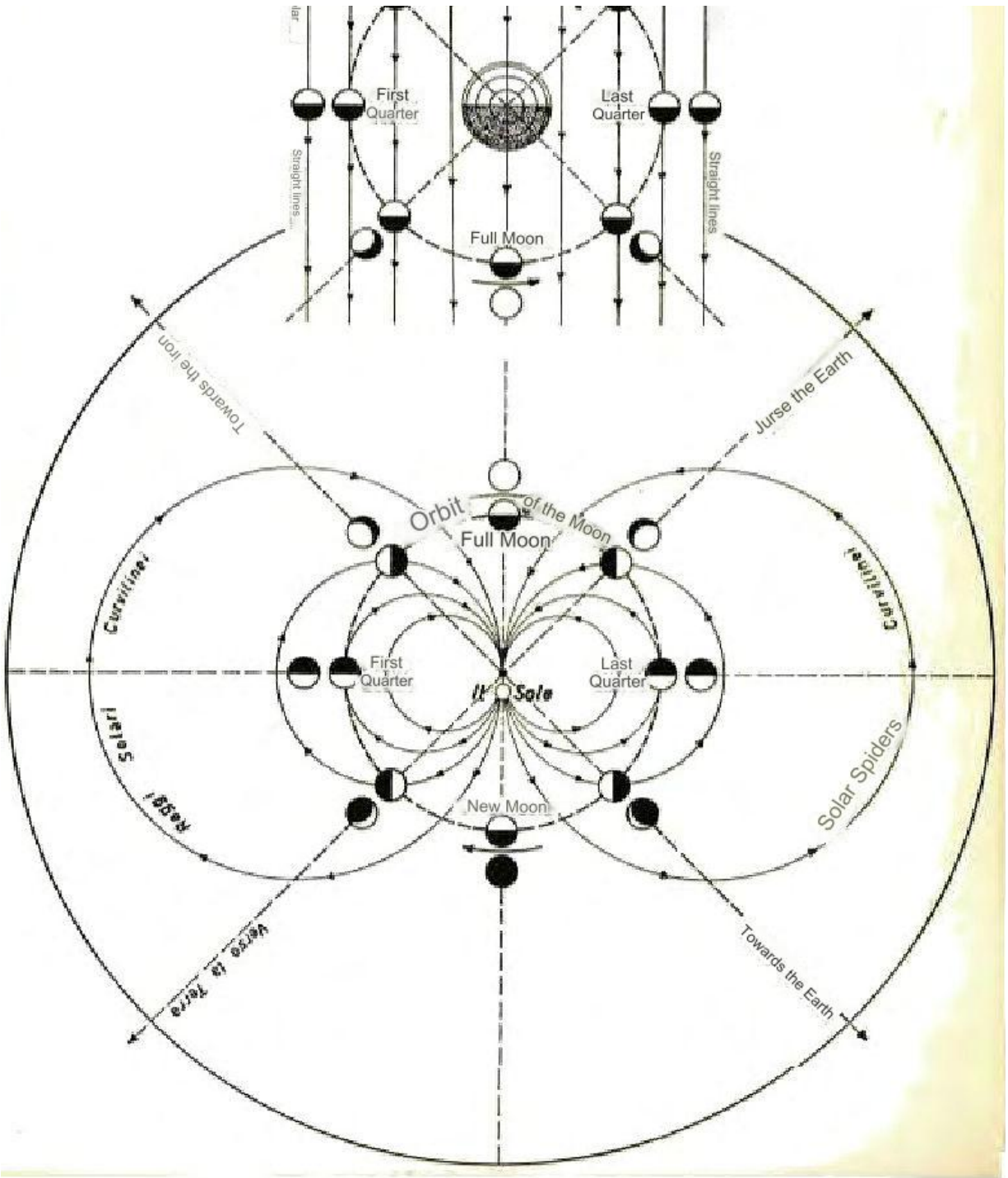


TABLE VIII.

The lunar phases in the two systems.

(read on page 283)





The attractive lines in the two Systems.

(read on page 269)

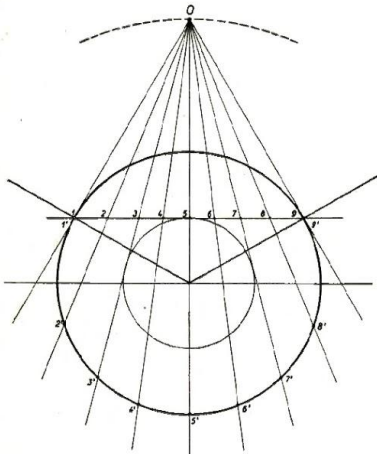


Fig. sup.: An object, located on the of 6,400 km by straight attractive lines. Earth, is connected to it at a distance

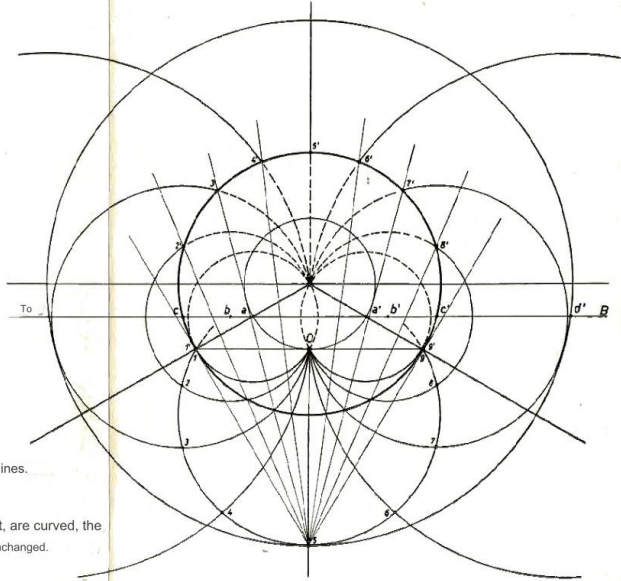
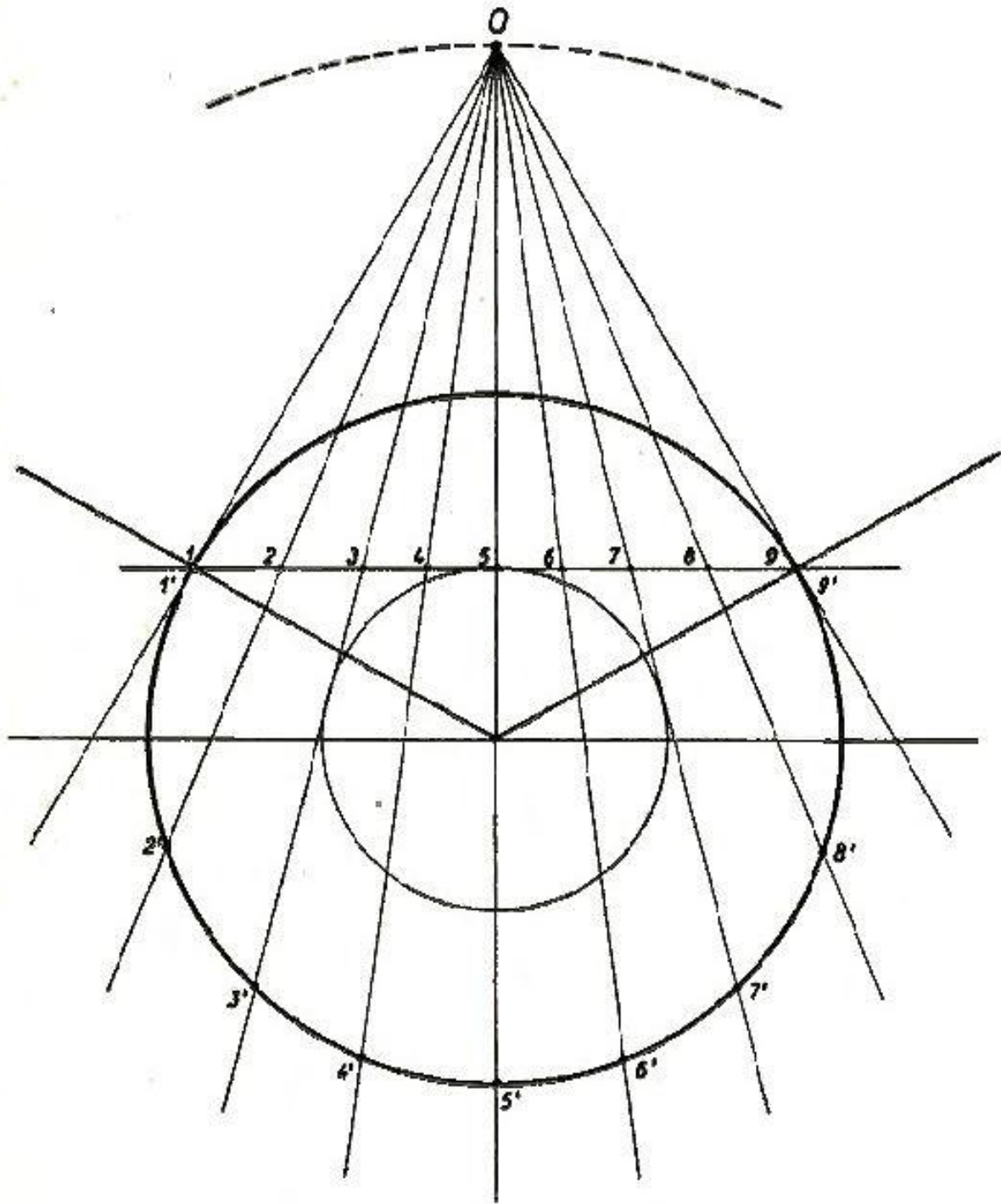
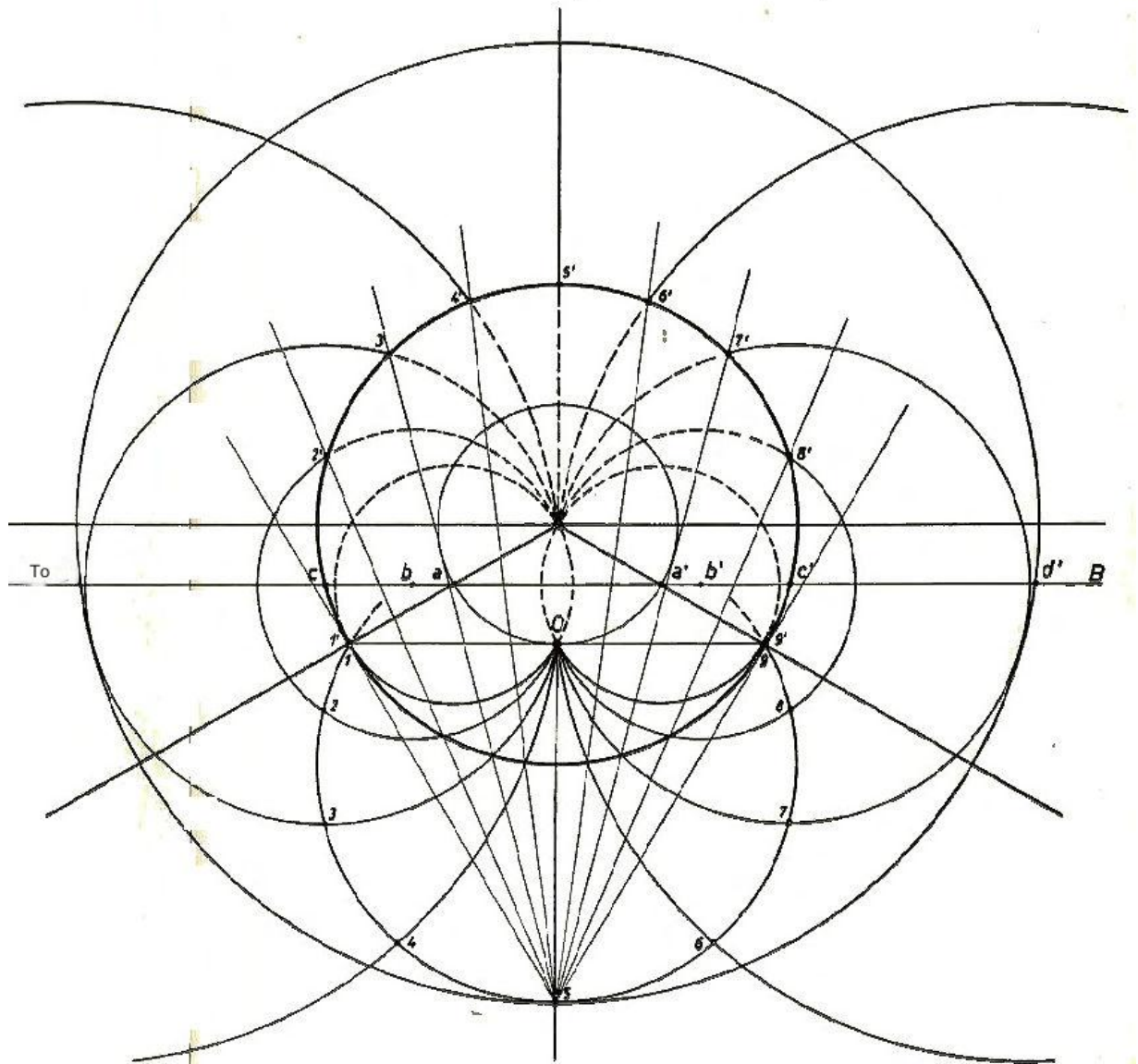


Fig. right: The same lines of attraction, in the endospheric concept, are curved, the angles under which they intersect the concave surface of the Earth remaining unchanged.

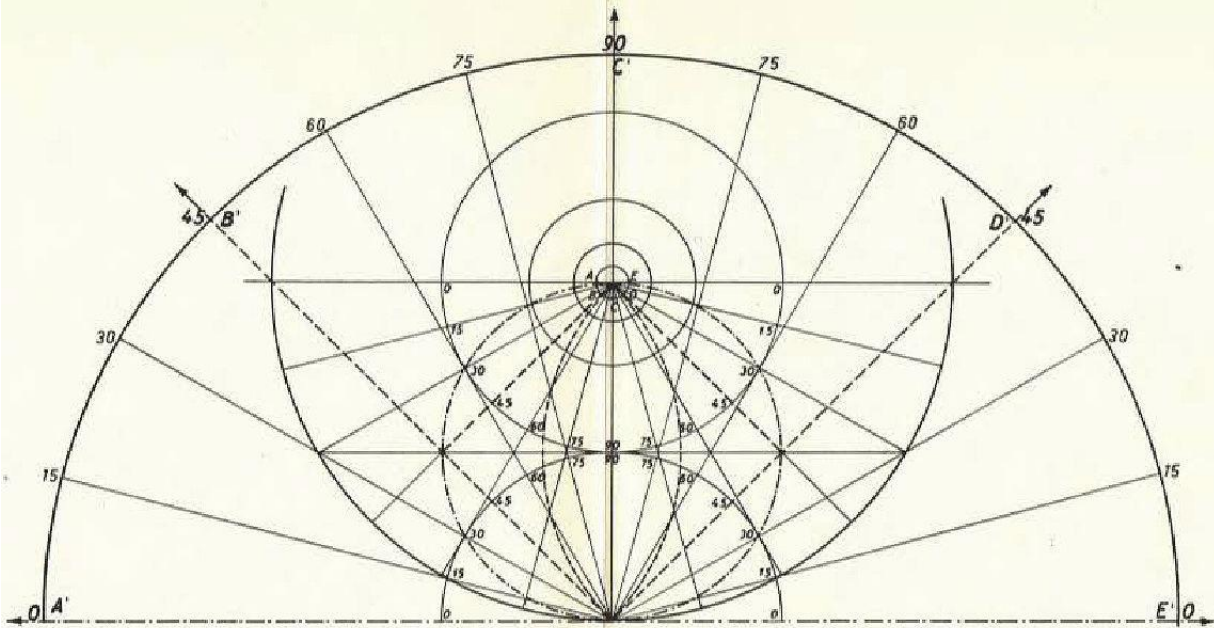




The vault of the sky in the two Systems.

TABLE X.

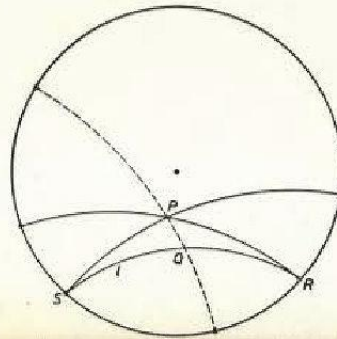
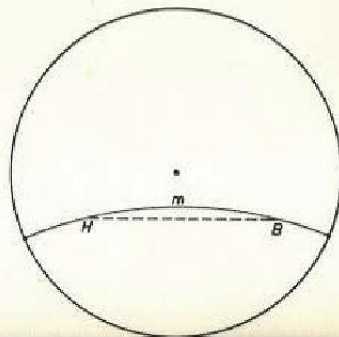
(read on pages 245 and 280)



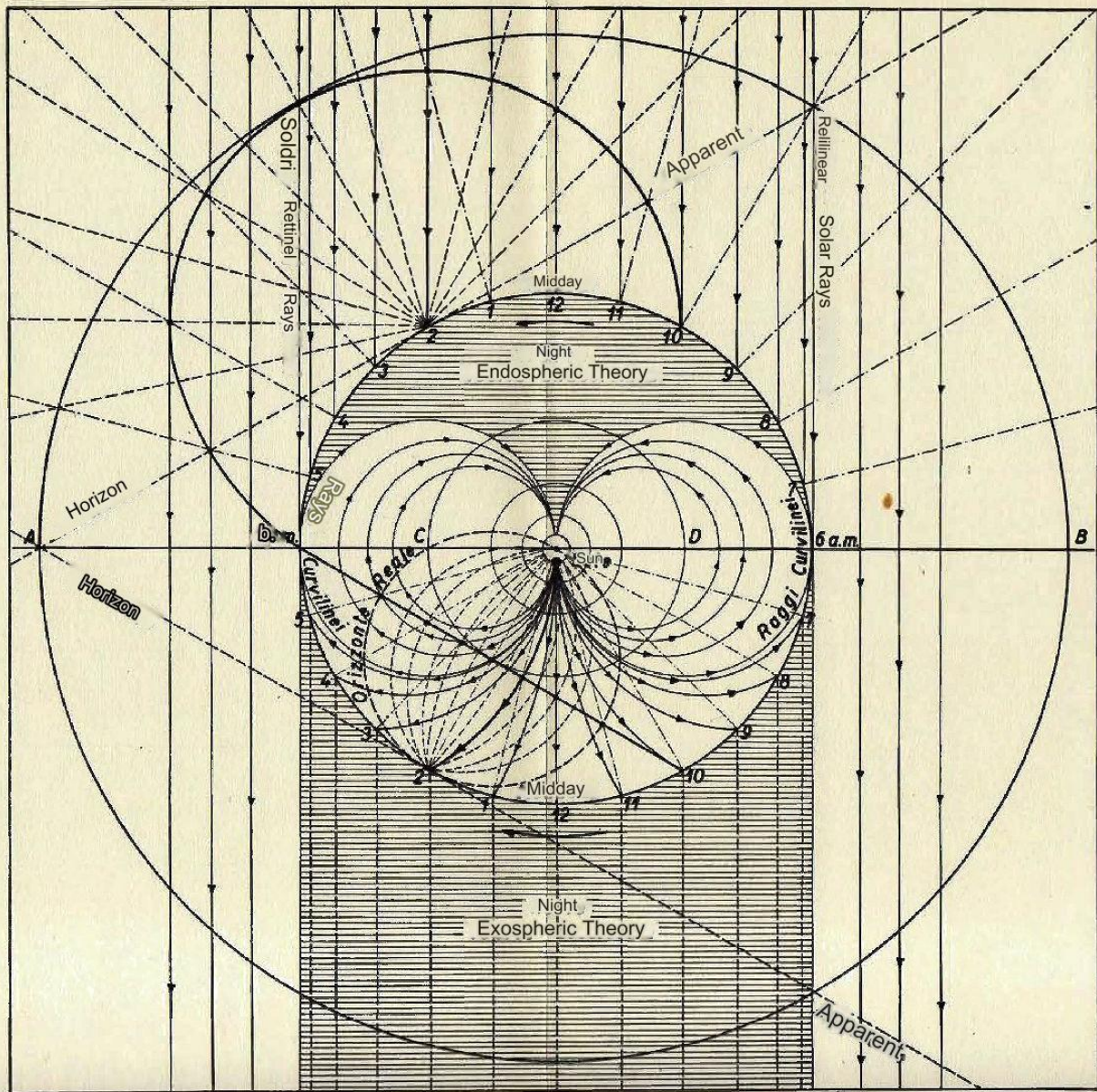
THE HORIZON SYSTEM The method for coordinating the celestial degrees of the arc of the apparent vault of the sky with the degrees

Poincaré's Non-Euclidean World

(read on pages 43 and 57)

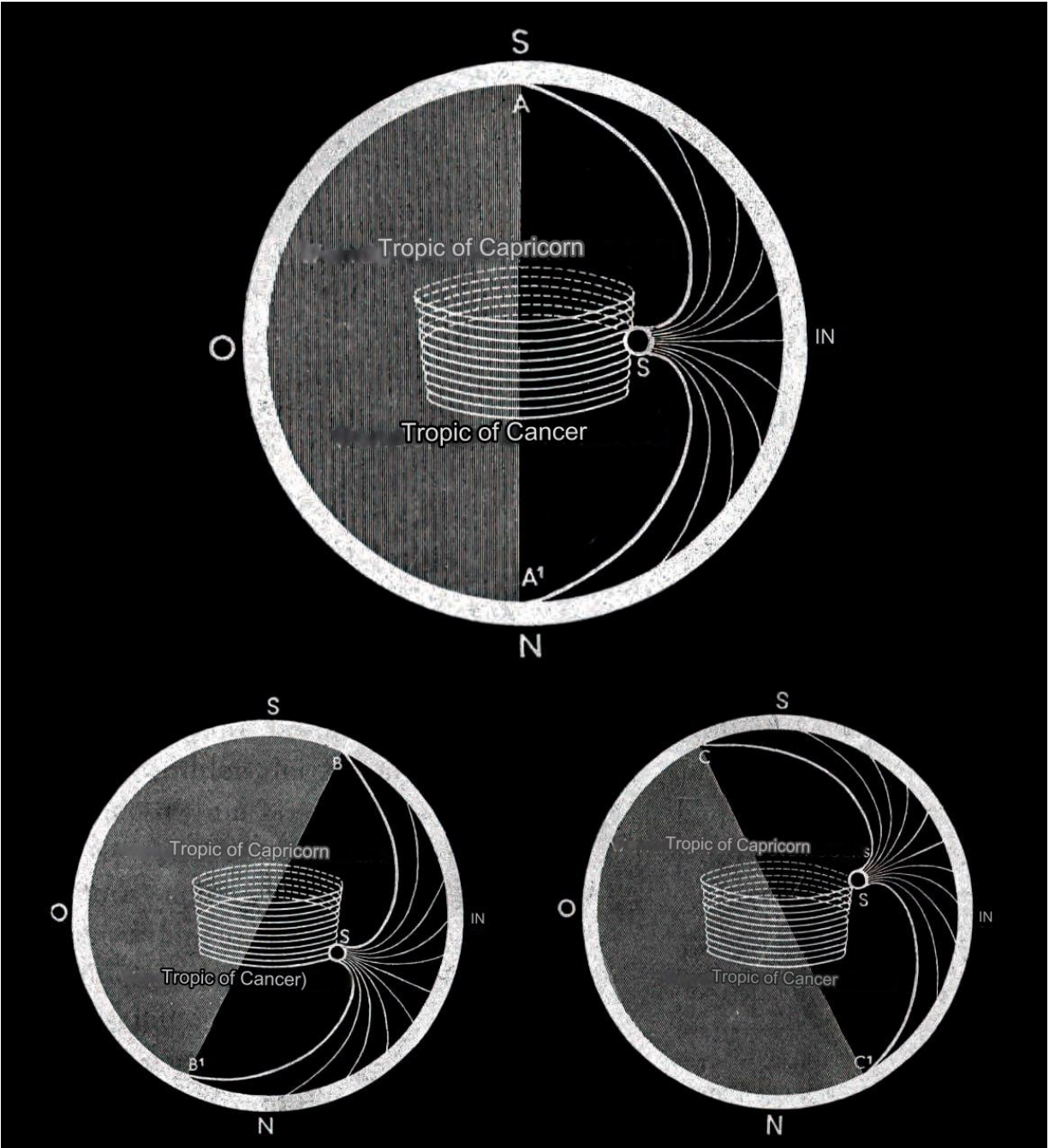


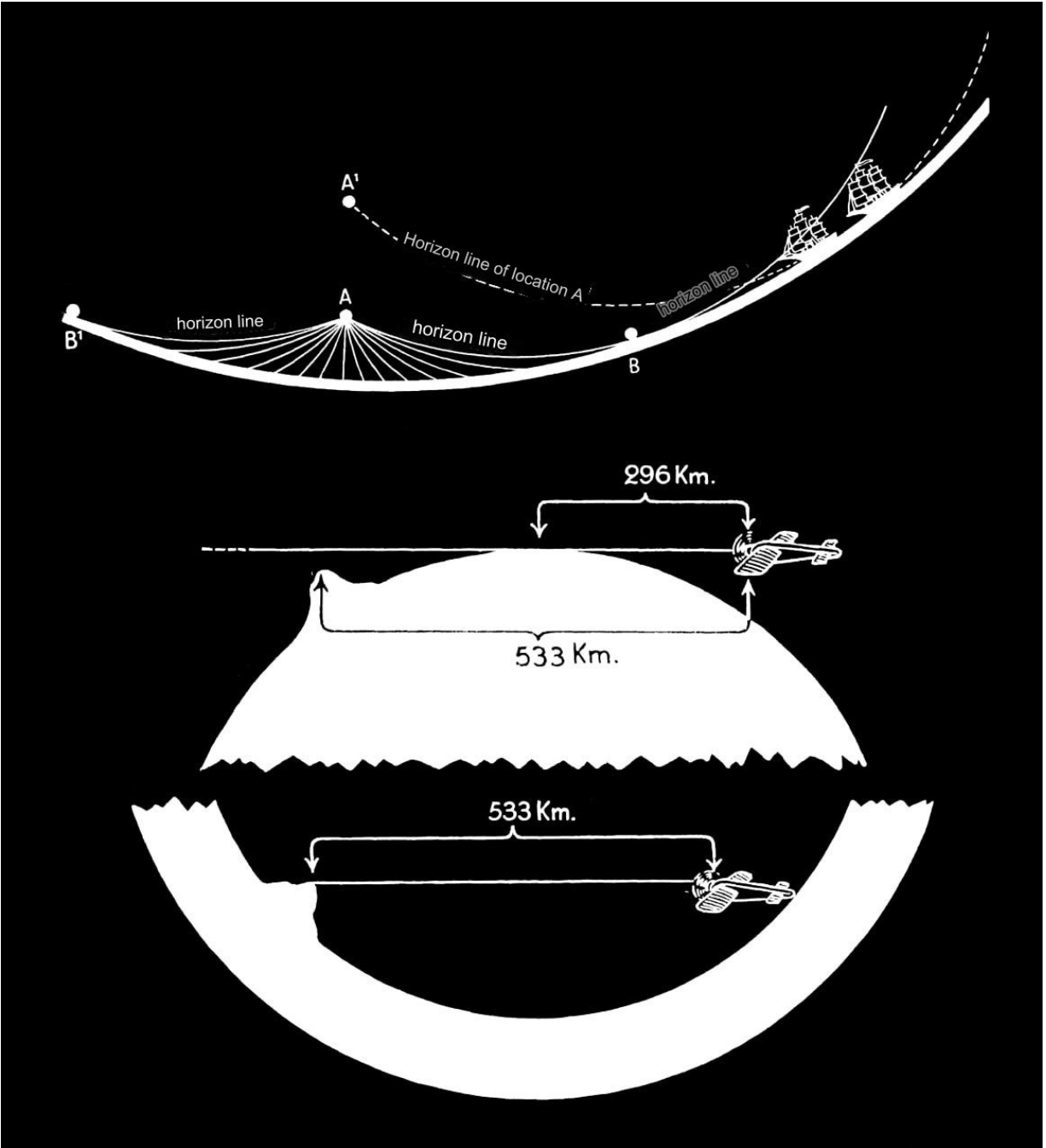
Day and night in the two Systems.
(read on pages 248, 263, 279 € 307)



TAV. XI.

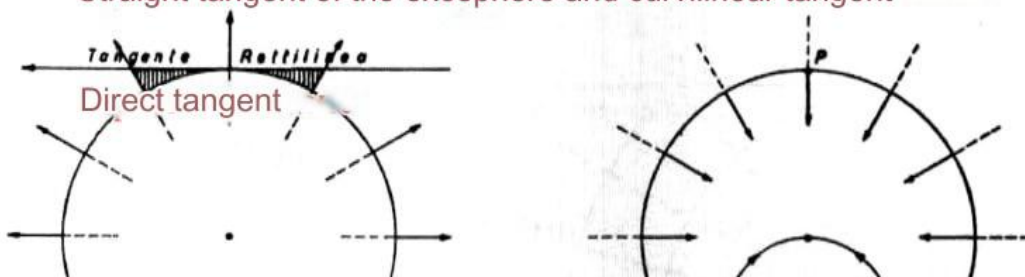
DAY and NIGHT in the 2 SYSTEMS

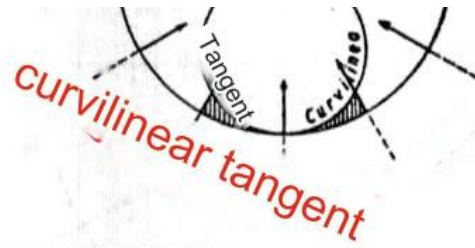
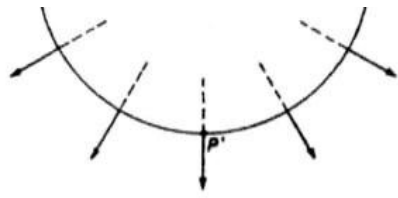




The exospheric rectilinear tangent and the endospheric curvilinear tangent.

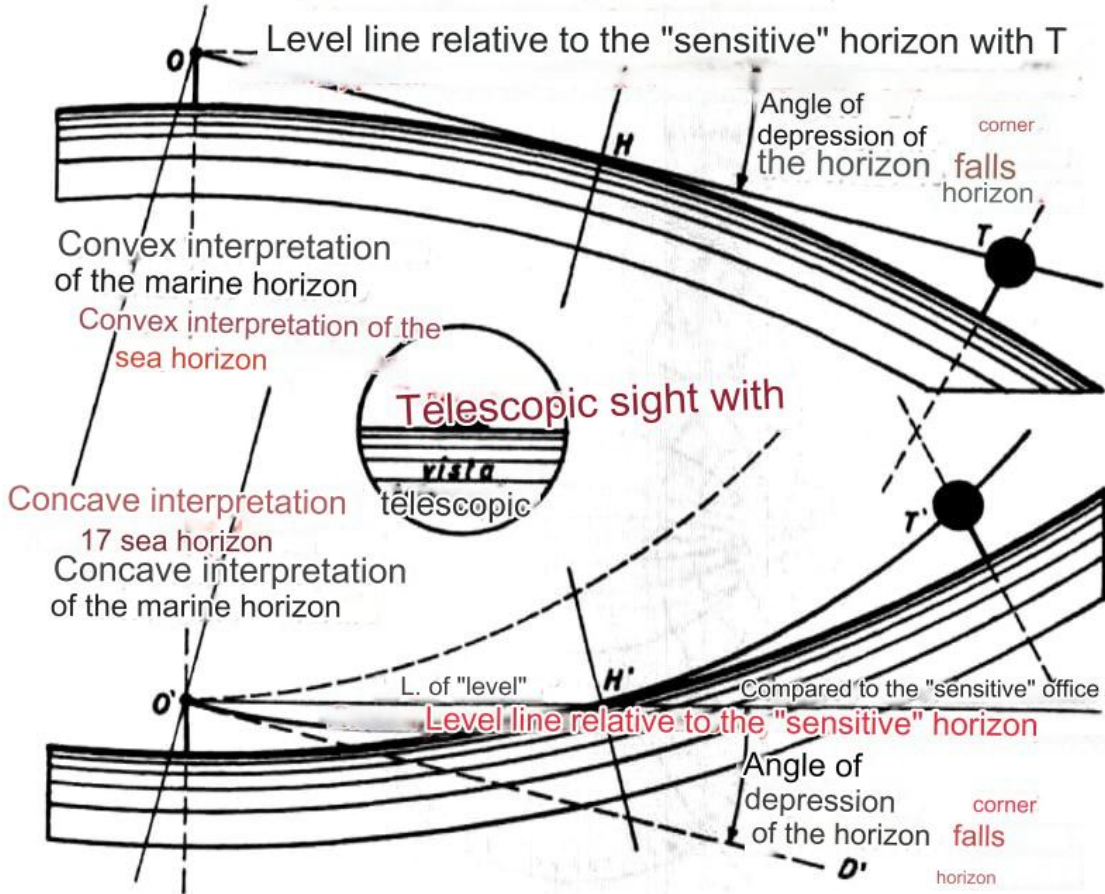
Straight tangent of the exosphere and curvilinear tangent





curvilinear tangent

The "proof" of the shape of the Earth.



Two interpretazioni "evidence"
 and the two "proofs"

TAV. I
 table AND

Electric and magnetic field.

Table 1 - b

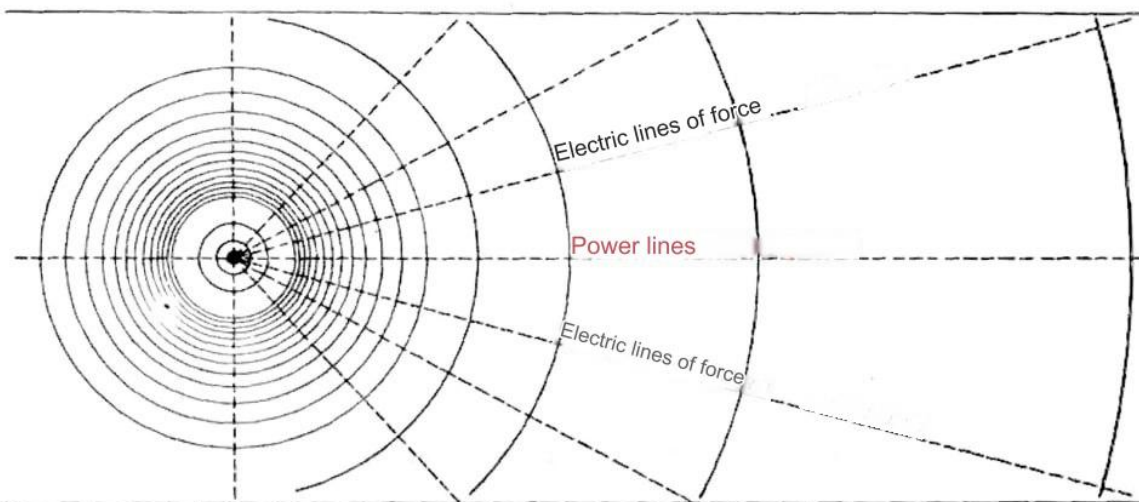
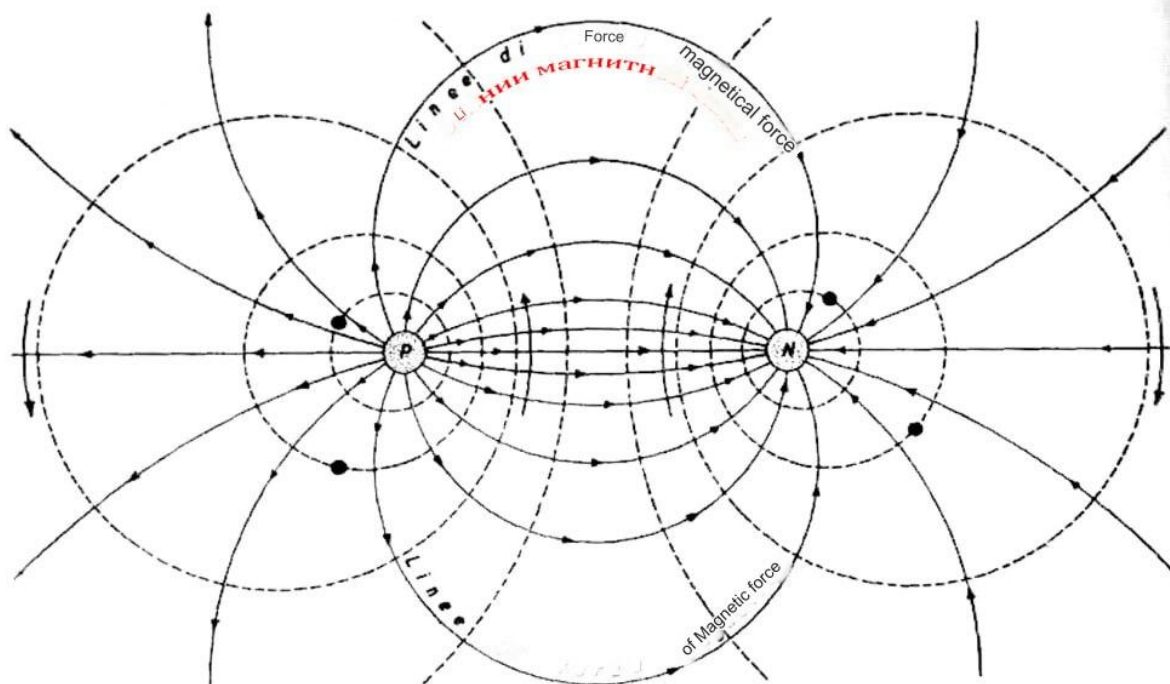


Fig. top. Electric charge, electric field and equipotential bond. Fig. sup.: Electric charge, electric field and equipotential bond.

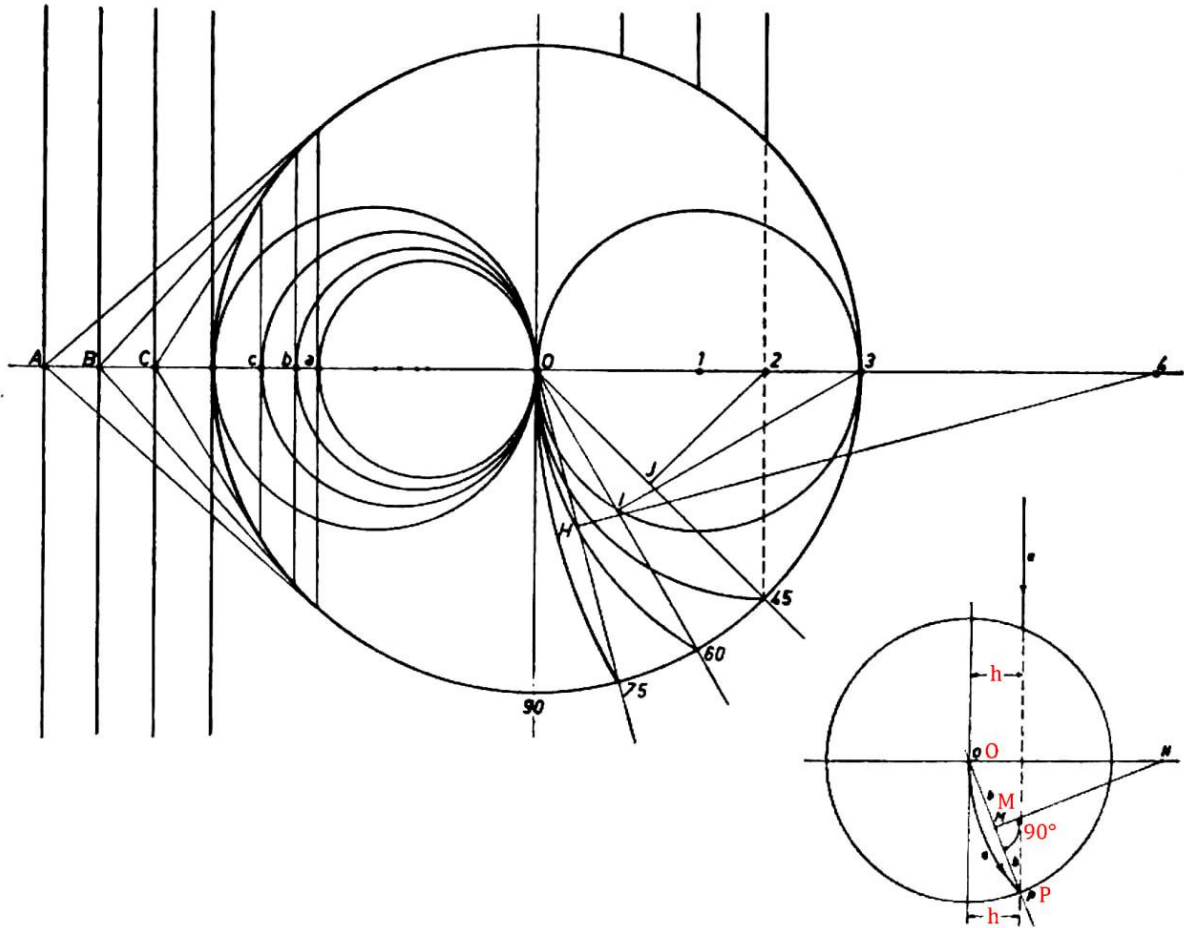
Fig. lower. Magnetic poles, magnetic field and equipotential surface.



Methods for finding the inverse positions and centers of solar ray arcs.

Methods for finding the inverse positions and centers of solar arcs

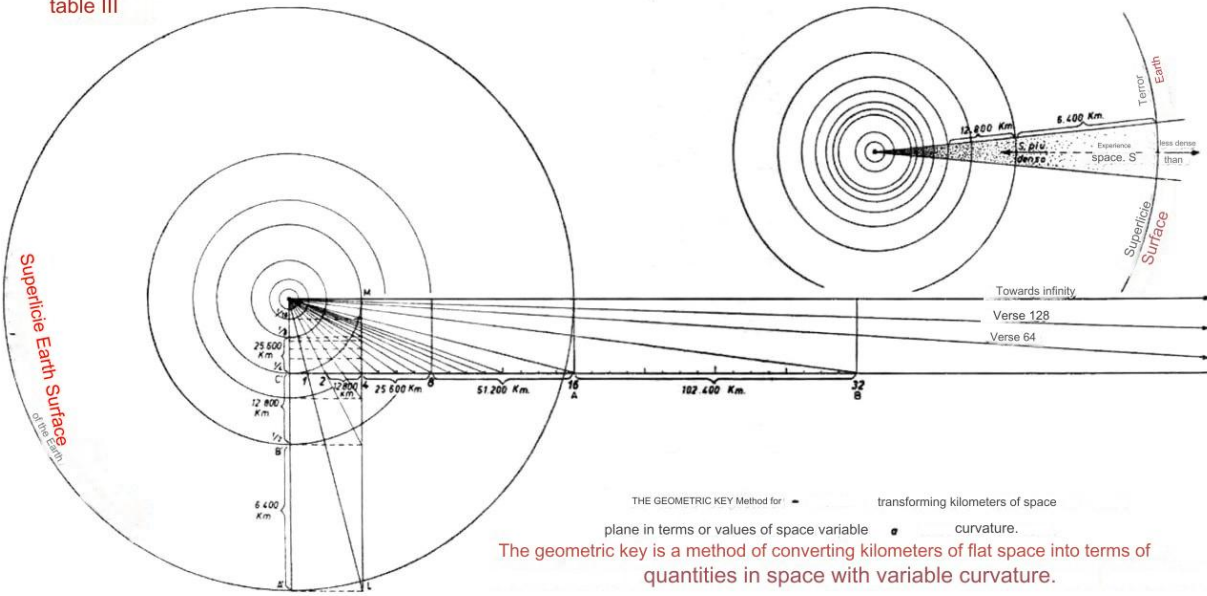
table II-V



Geometric space and physical space - Euclidean geometry and non-Euclidean geometry.

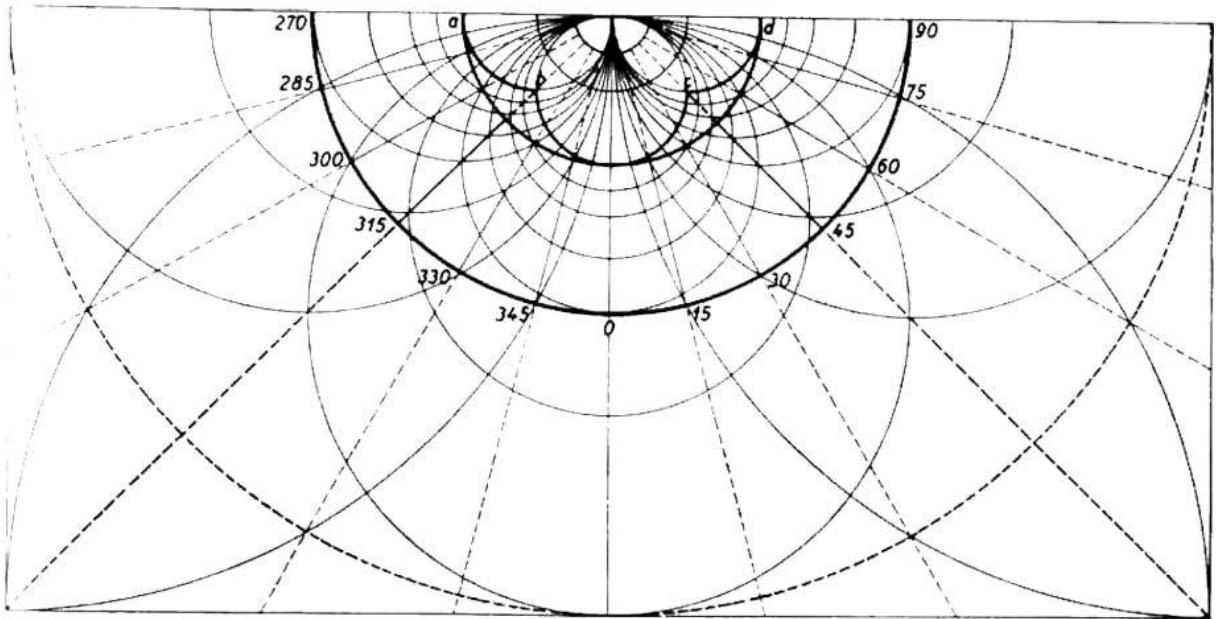
Geometric space and physical space Euclidean and non-Euclidean geometry

table III



Two spaces.

The straight tangents ab , bc , cd of the Euclidean space (lower figure) correspond to the curvilinear tangents ab , bc , cd of the non-Euclidean space of variable curvature (upper figure); the non-Euclidean parallels correspond to the straight Euclidean parallels; the angles at which the Euclidean straight lines and, correspondingly, the non-Euclidean straight lines intersect are equal.



Upper Fig.: Space with variable curvature Non-Euclidean geometry Lower Fig.: Flat, homogeneous space Euclidean geometry

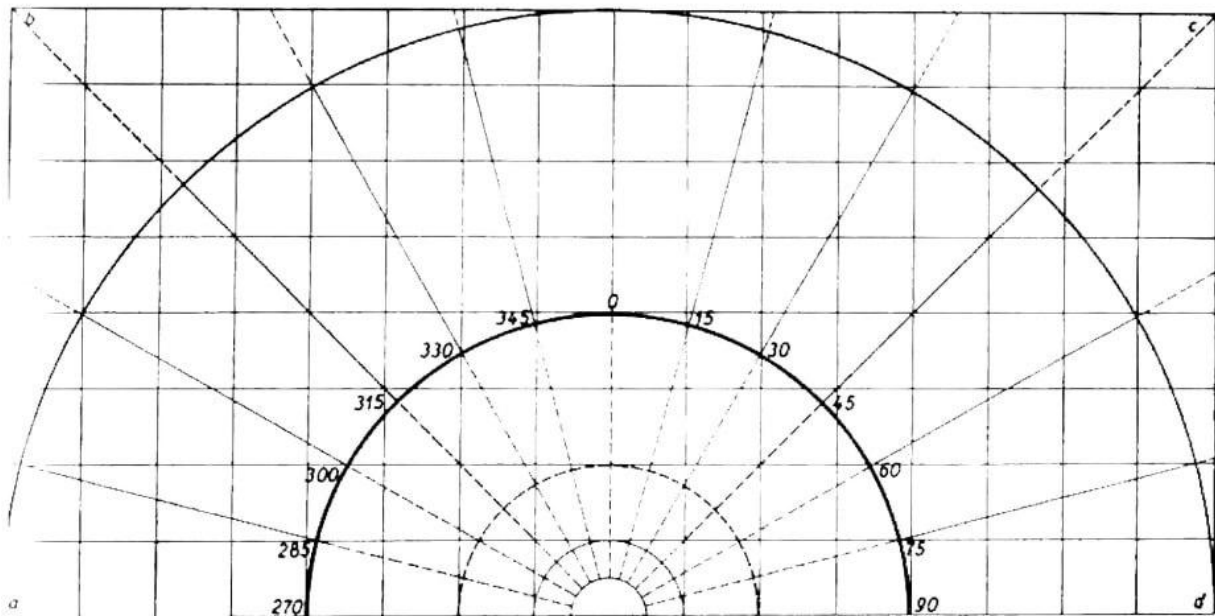
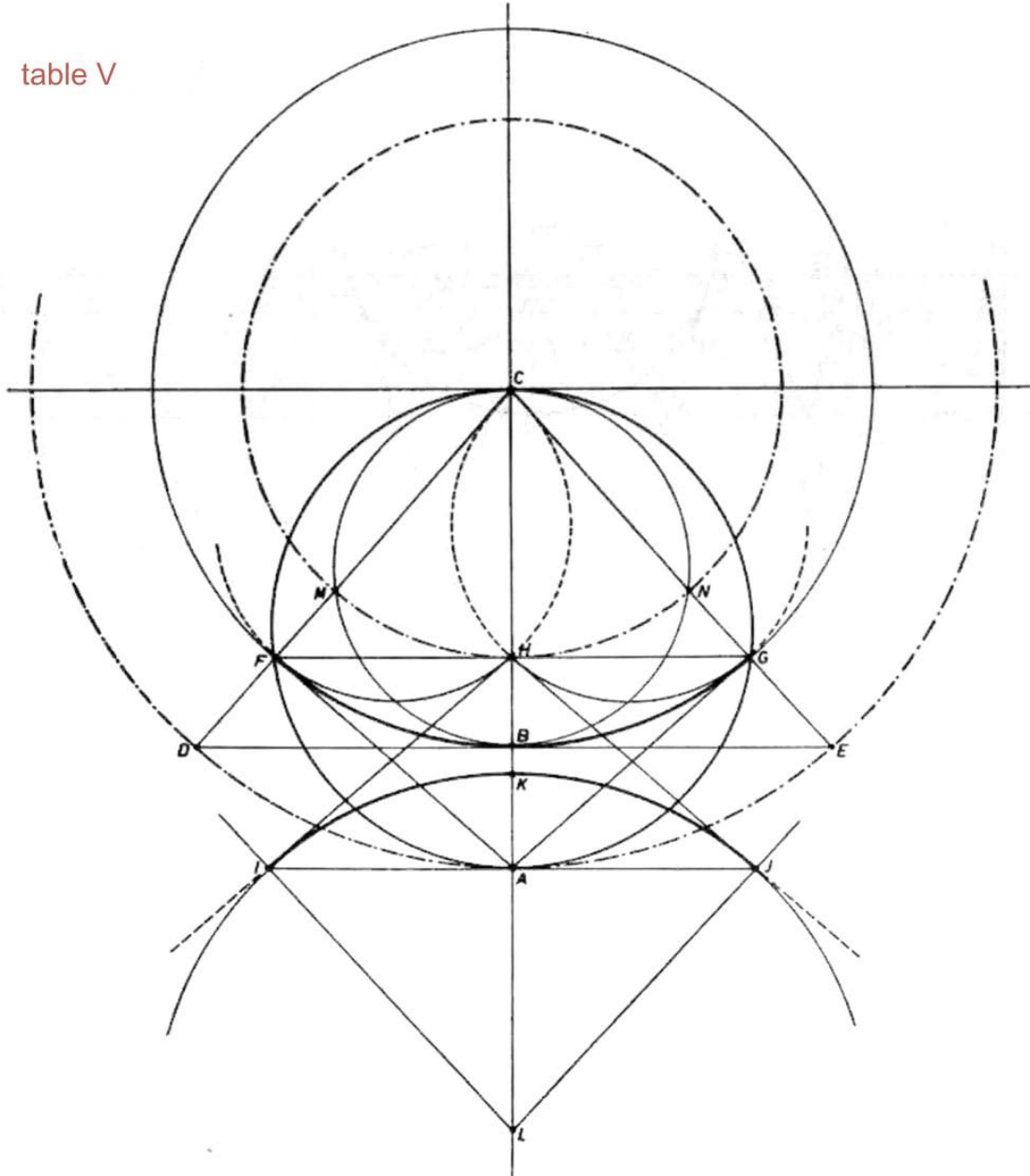


Table 1 , IV

Why does the concave Earth appear convex?

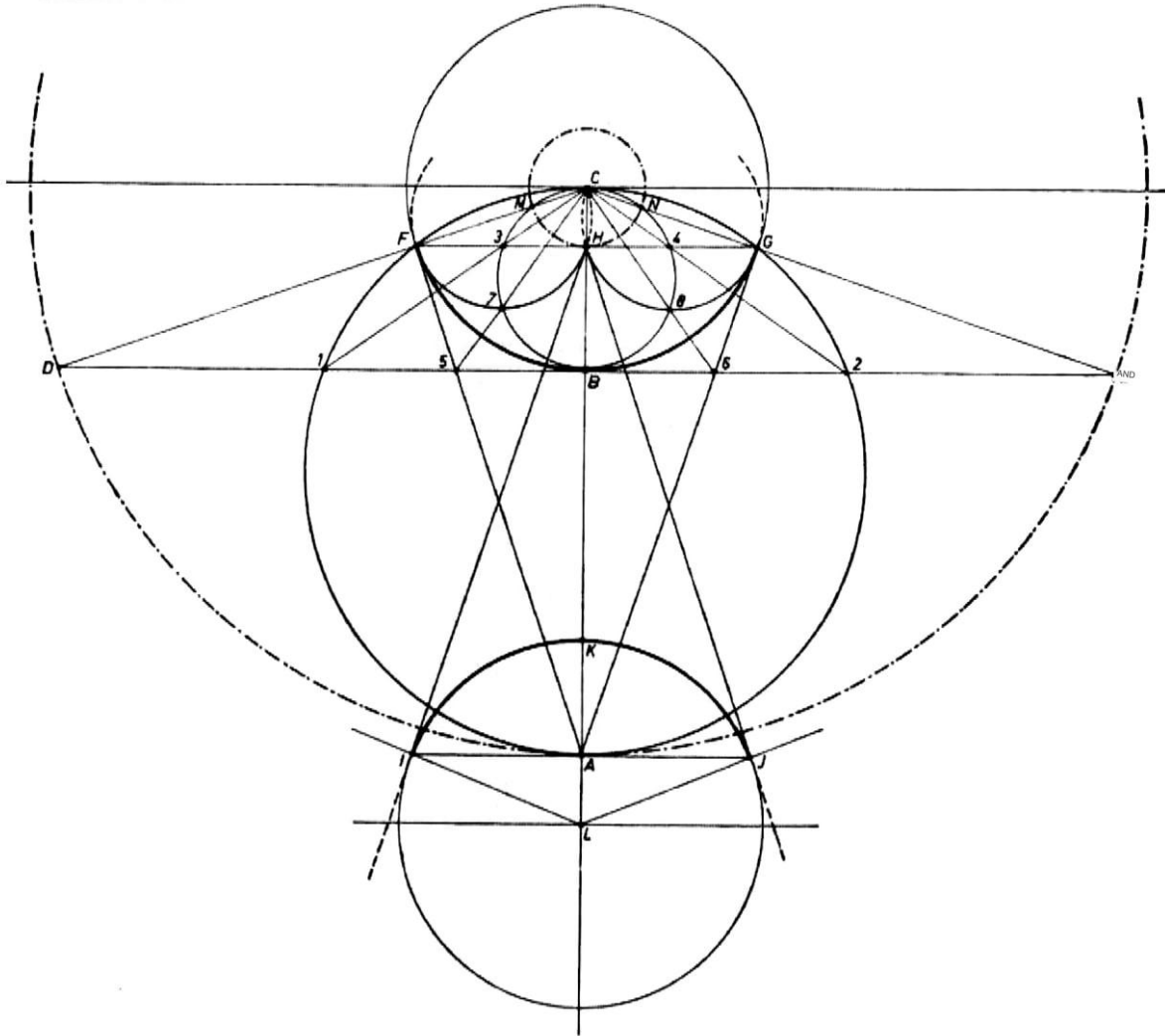
Why does the concave Earth appear convex?

table V



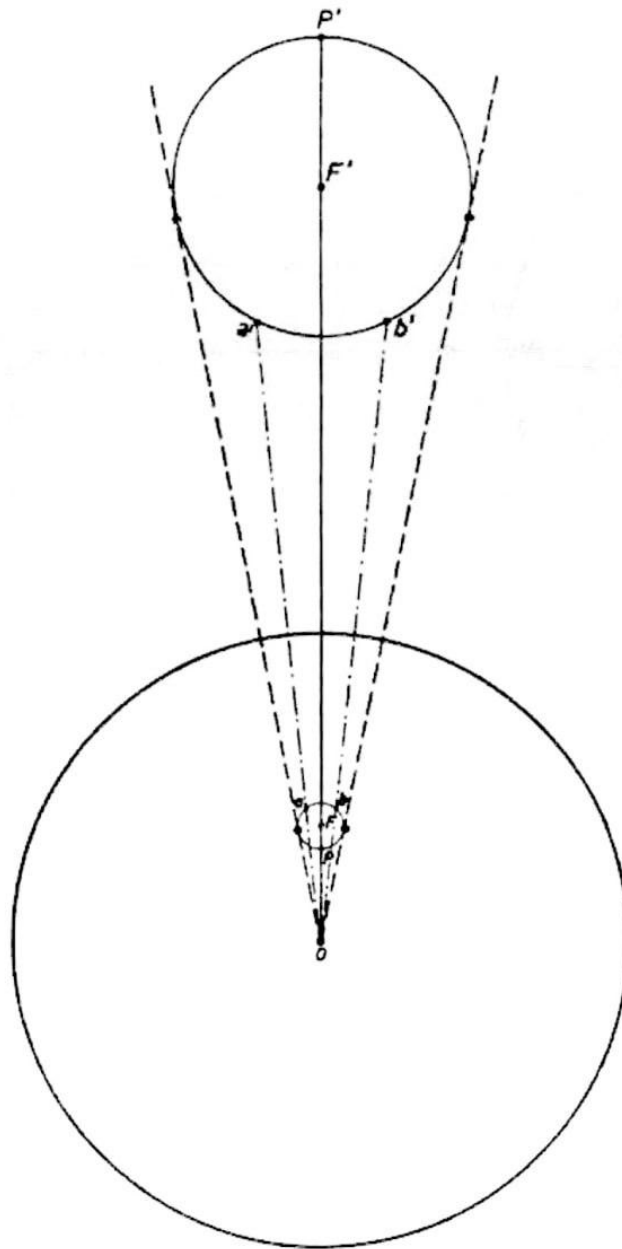
What the concave Earth would look like when viewed from the Moon or the Sun.
What would a concave Earth look like when viewed from the Moon or the Sun?

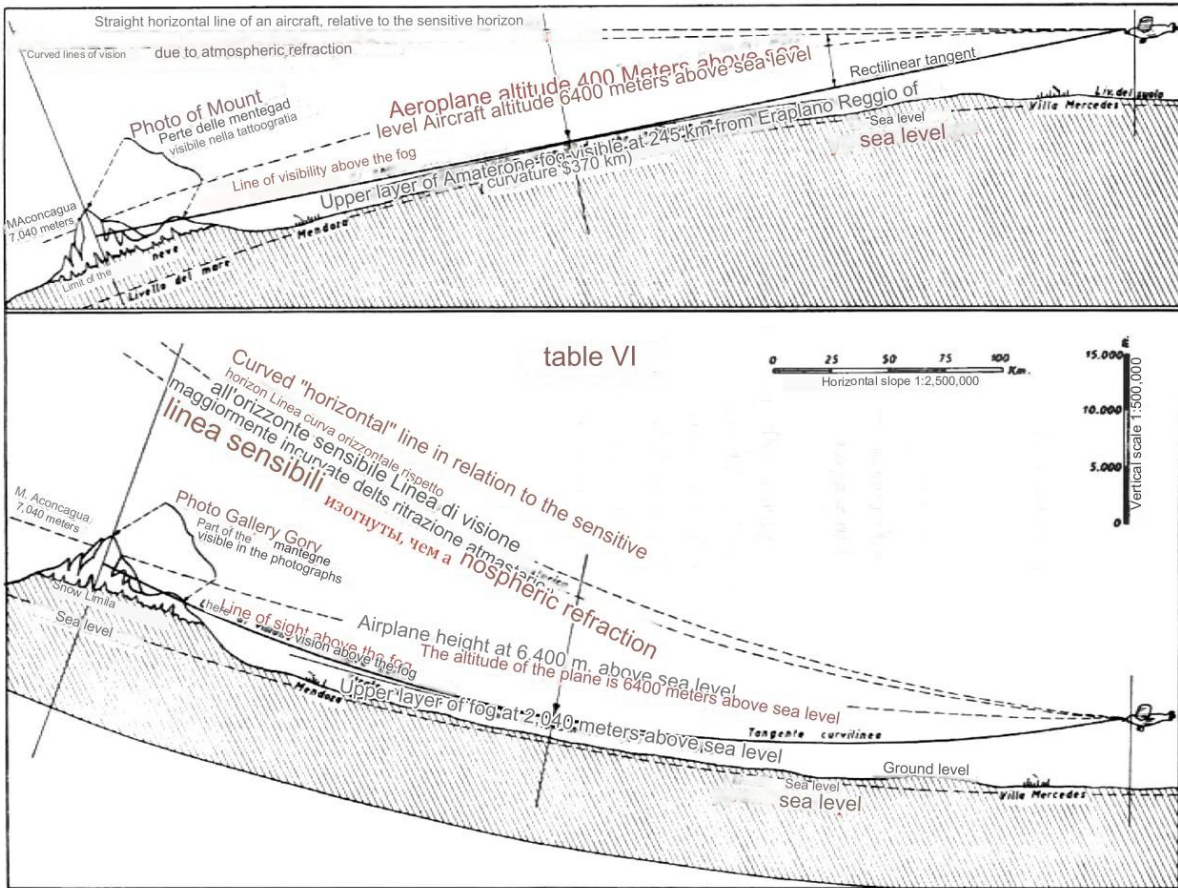
table V-b



Inversion of figures.
Inversion of figures

Table 1 . VII



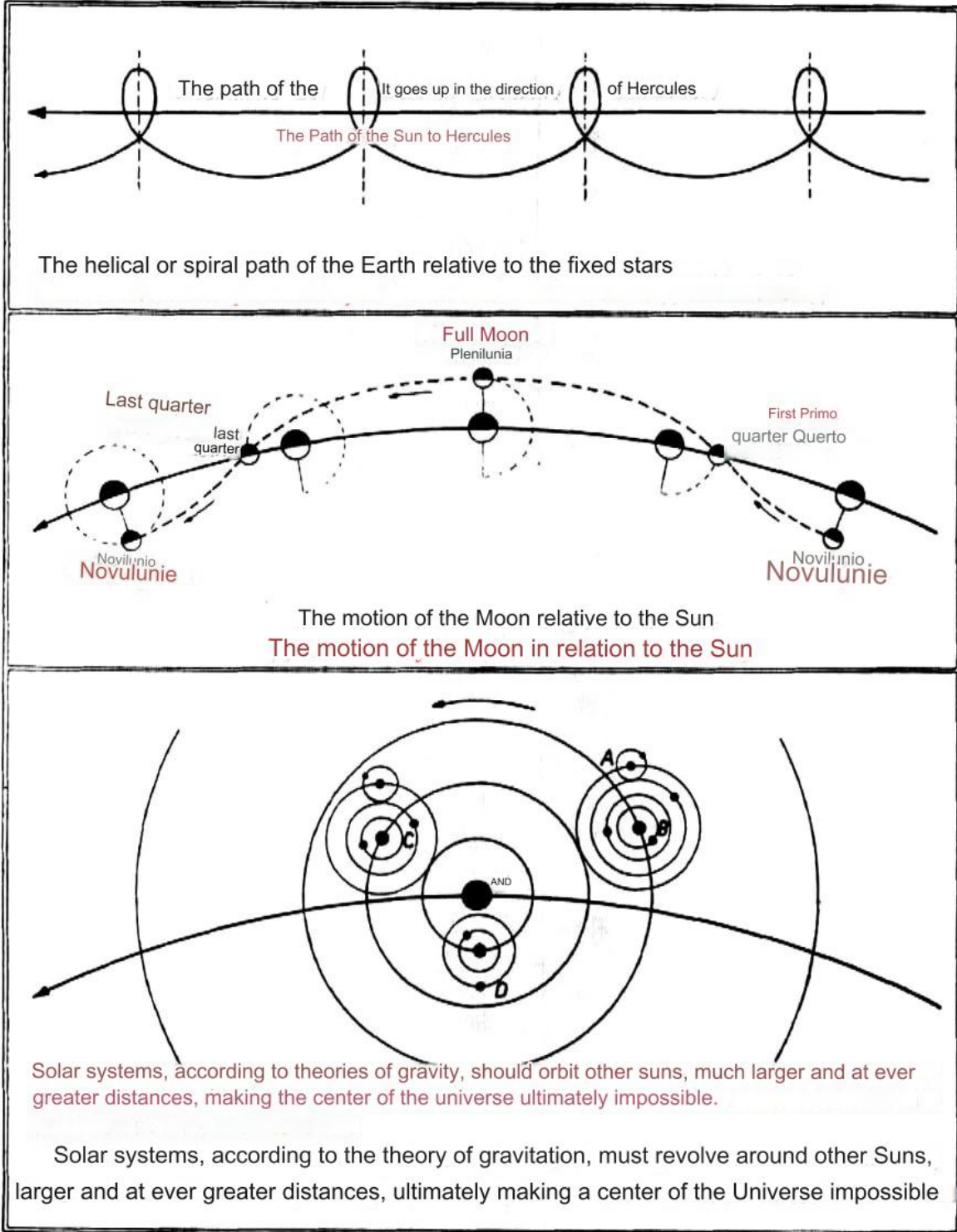


An infrared photograph of Mount Aconcagua was taken in 1931 from an airplane, at a distance of 460 kilometers: two interpretations, convex and concave. An infrared photograph of Mount Aconcagua was taken in 1931 from an airplane at a distance of 460 kilometers: the two interpretations, convex (fig. above) and concave (fig. below).

Newton's law applied to Euclidean exospheric space. Newton's law applied to Euclidean exospheric space.

I move the stars in the classical system The motions of the stars in the classical system

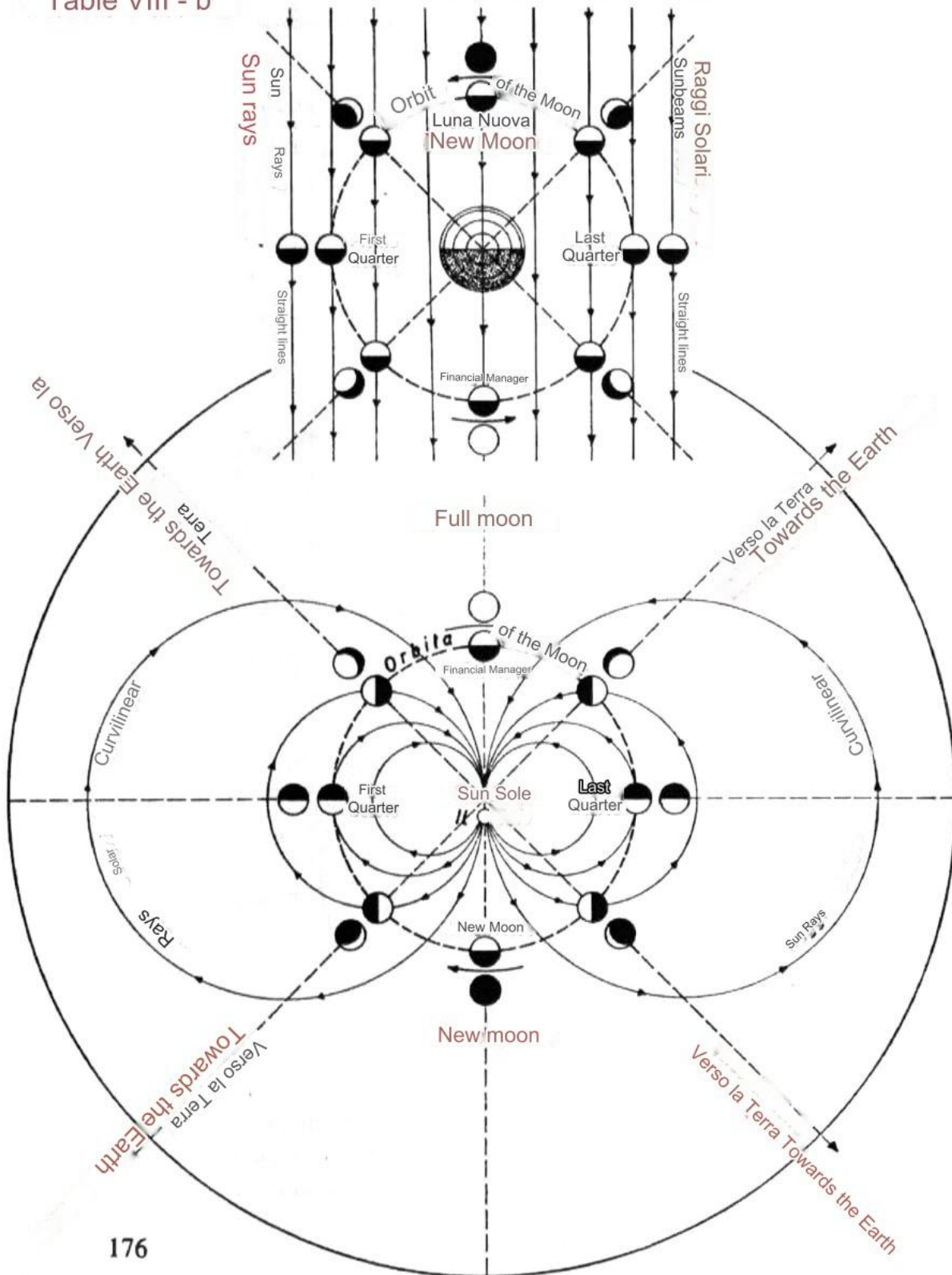
Table 1 . VIII



The lunar phases in the two systems.

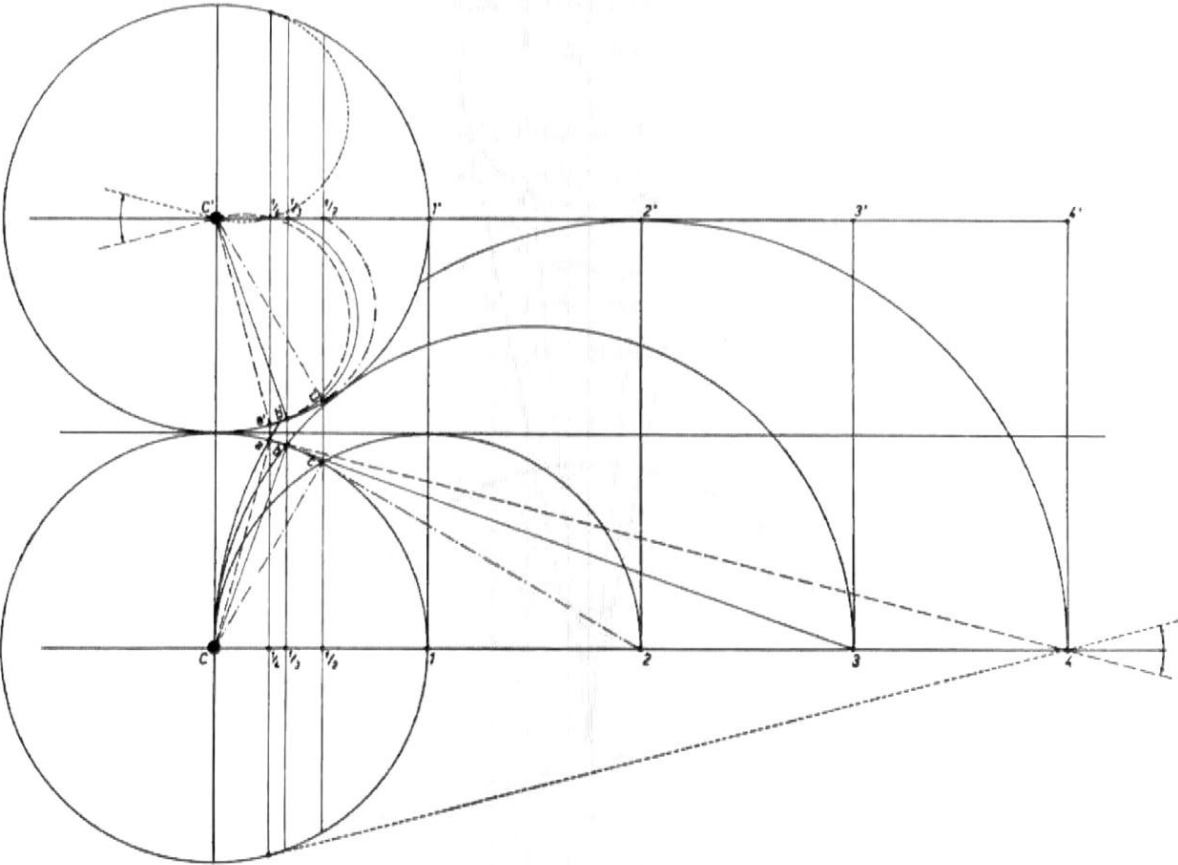
Phases of the Moon in two systems.

Table VIII - b



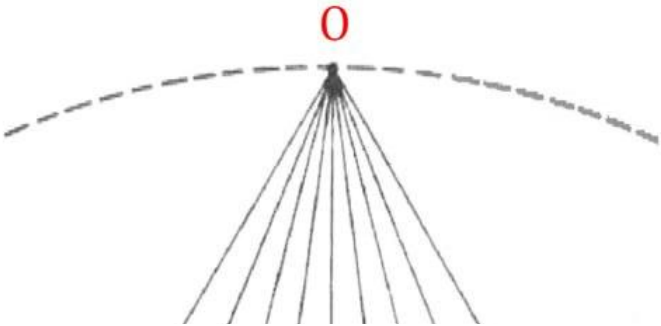
The parallax problem.

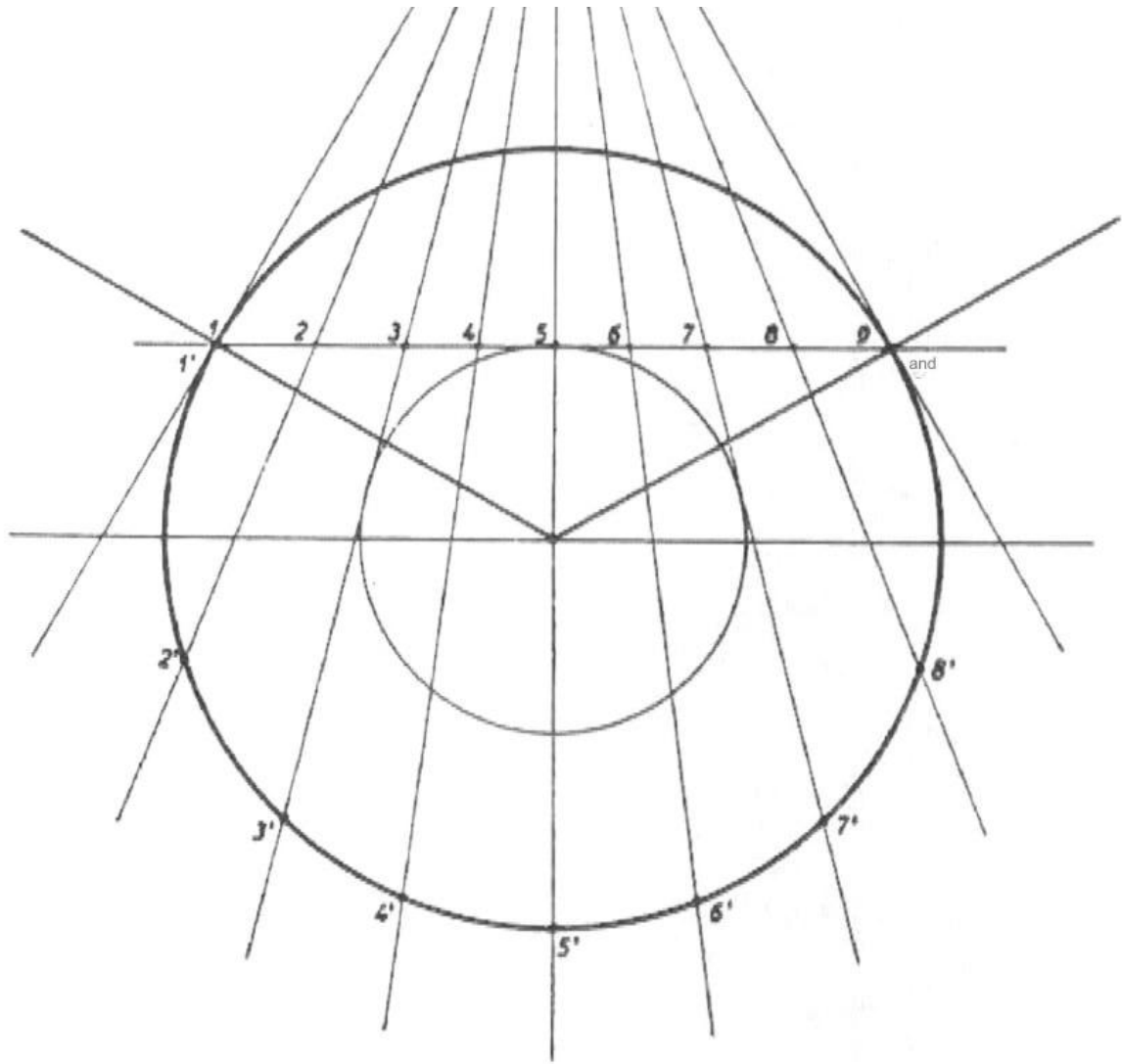
Table 1 . VII - b



An object located at a distance of 6400 km from the earth and connected to it by direct lines of attraction

tab. THEM

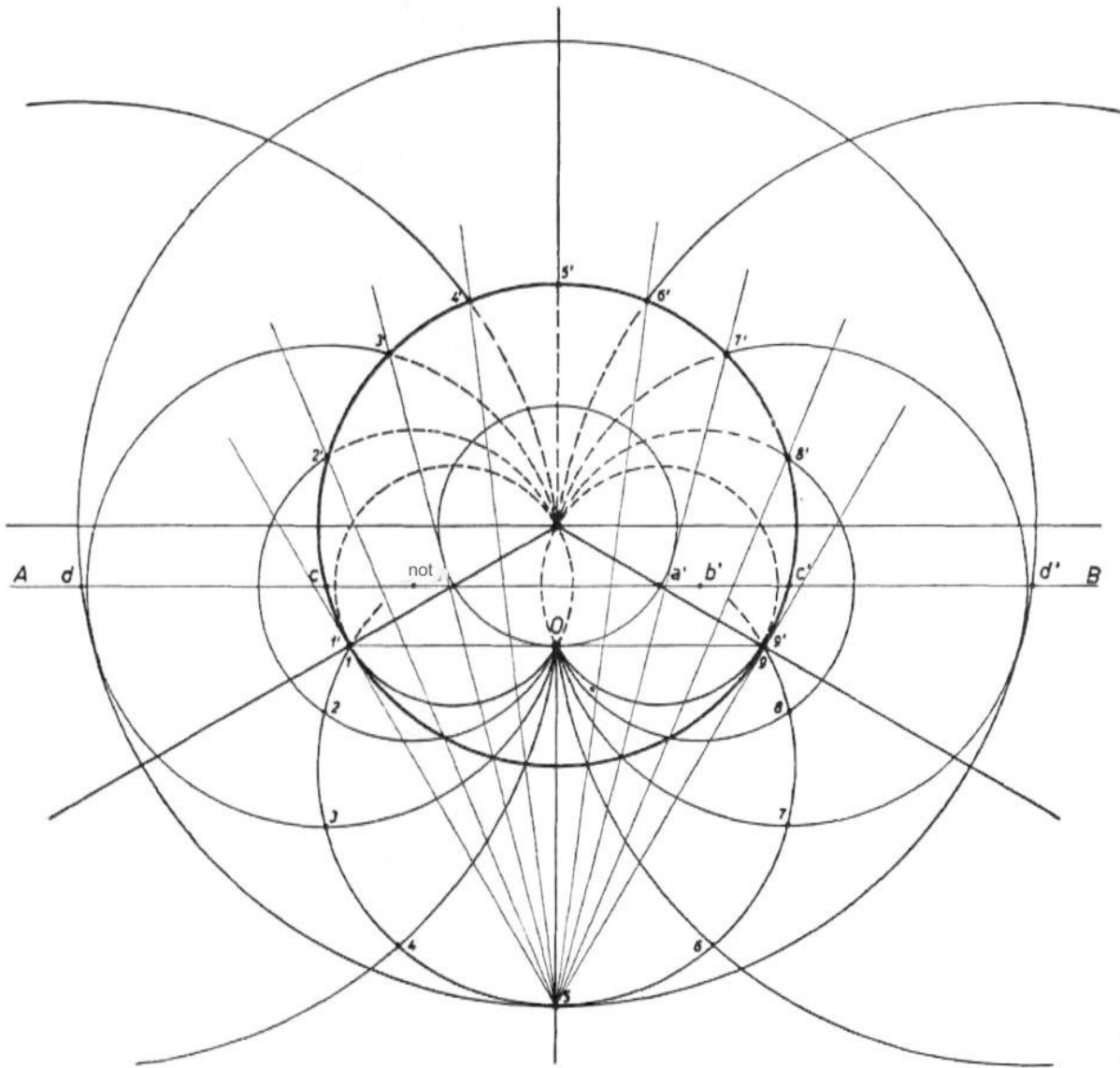




tab. THEM - b

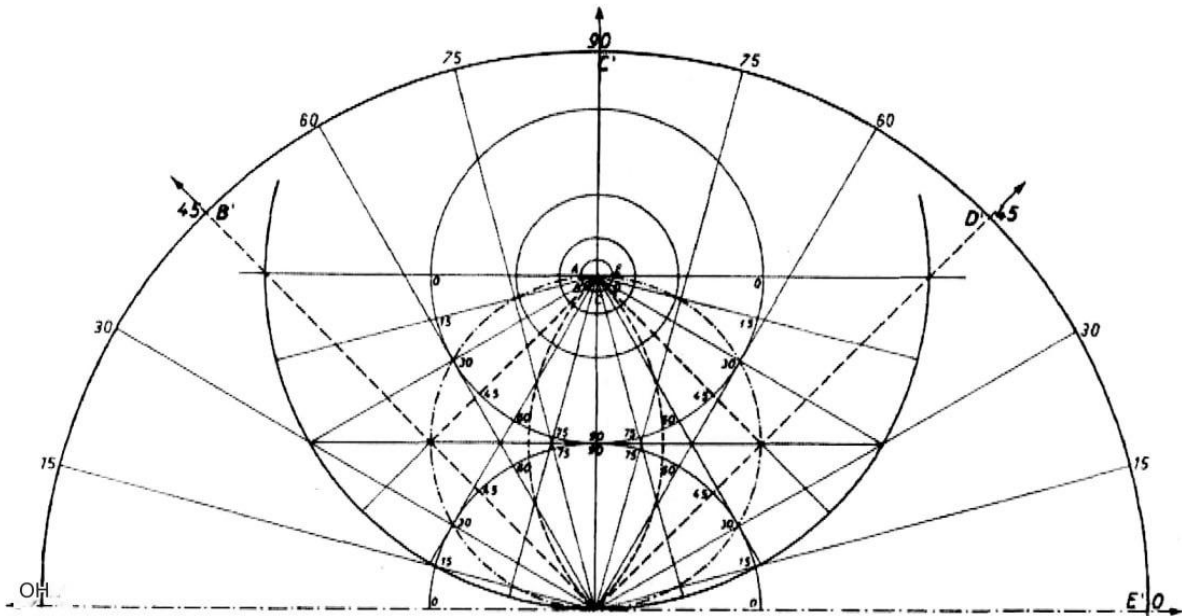
The same lines of attraction in the endosphere concept are curved, the angles at which they intersect the concave surface of the Earth.

Attractive lines in two systems.



The vault of the sky in the two Systems.

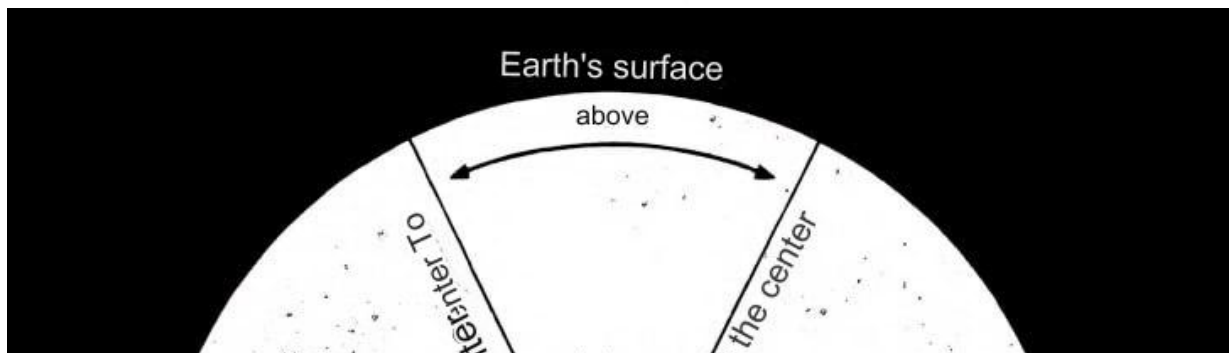
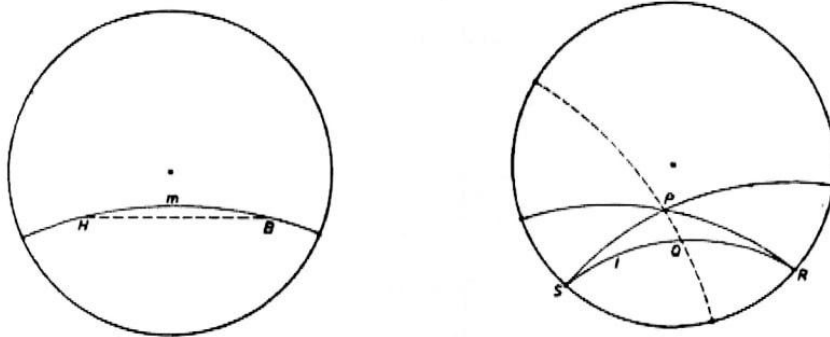
The celestial vault in two systems.

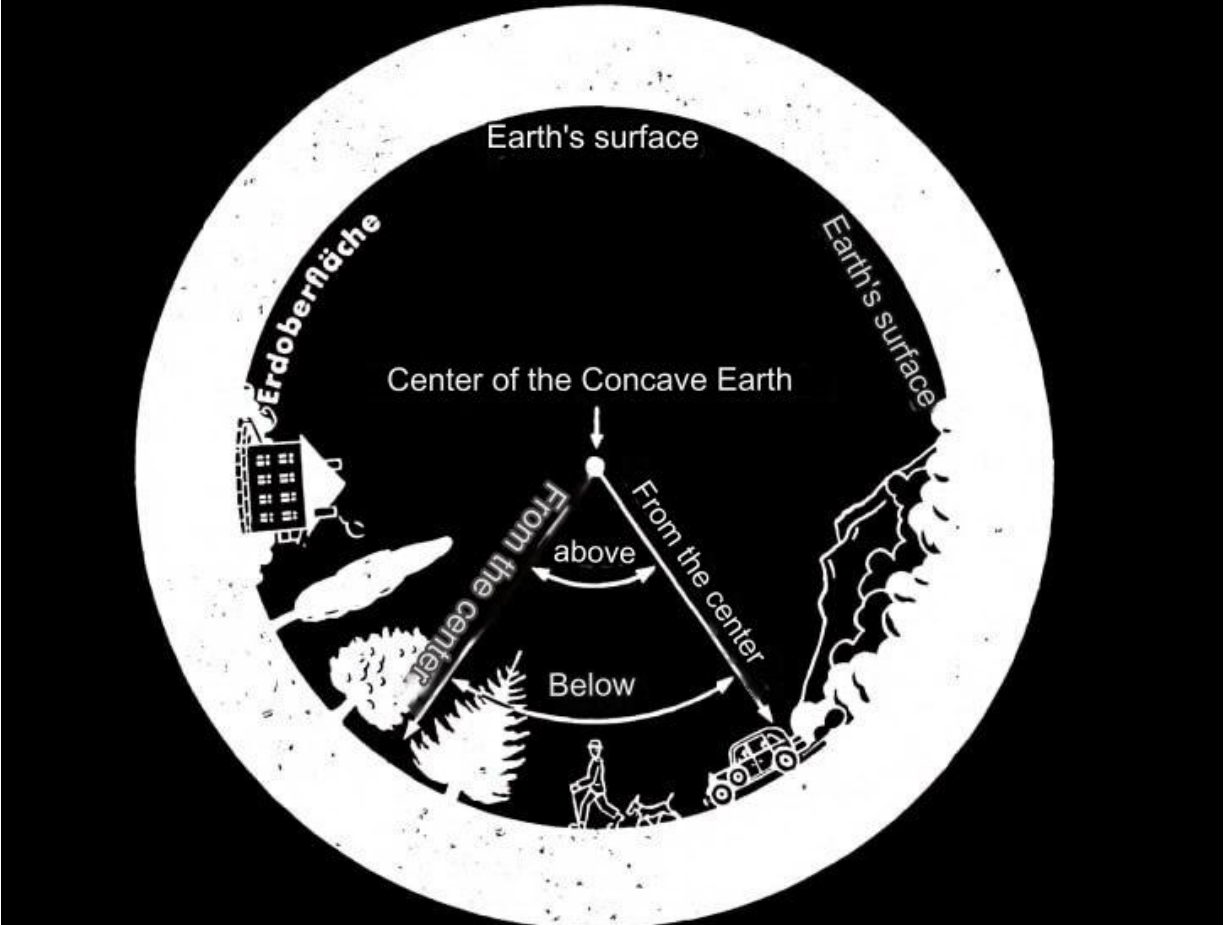
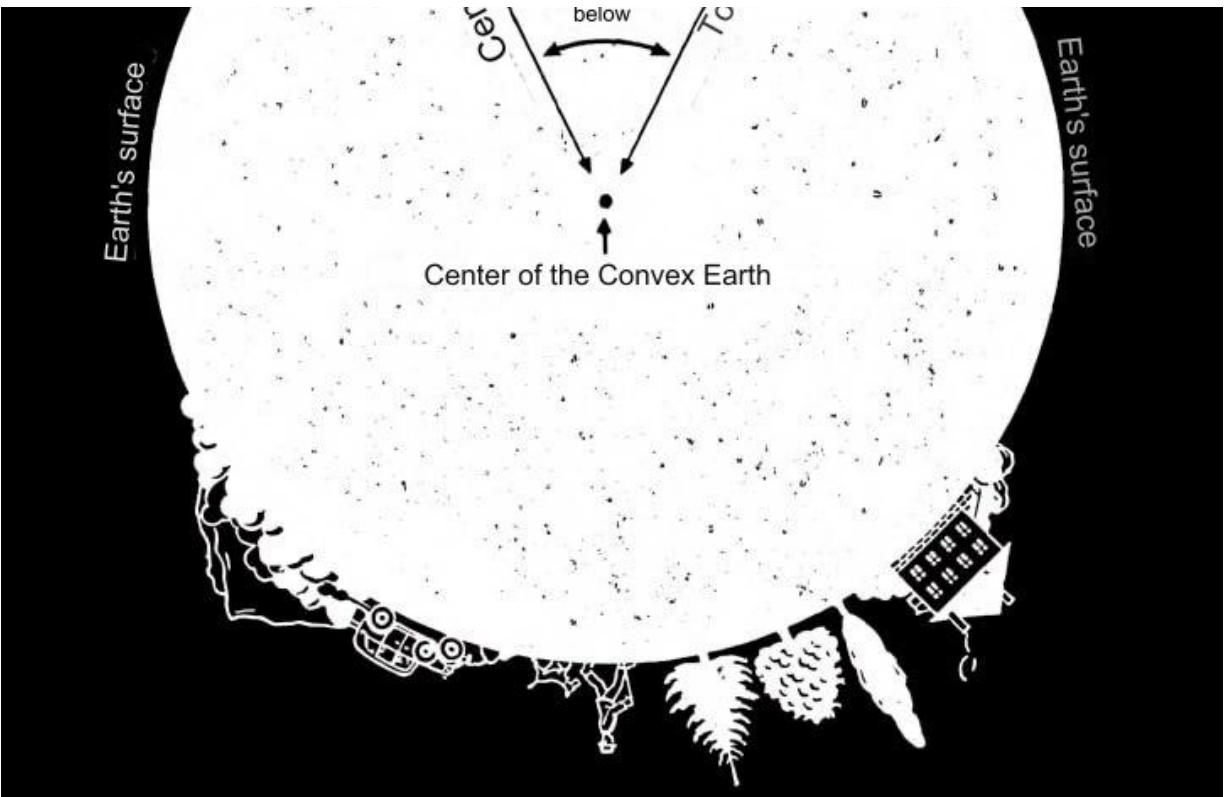


HORIZON SYSTEM - A method of reconciling celestial degrees with degrees of arc of the visible sky.

Poincaré's non-Euclidean world.

Non-Euclidean world according to Poincaré.

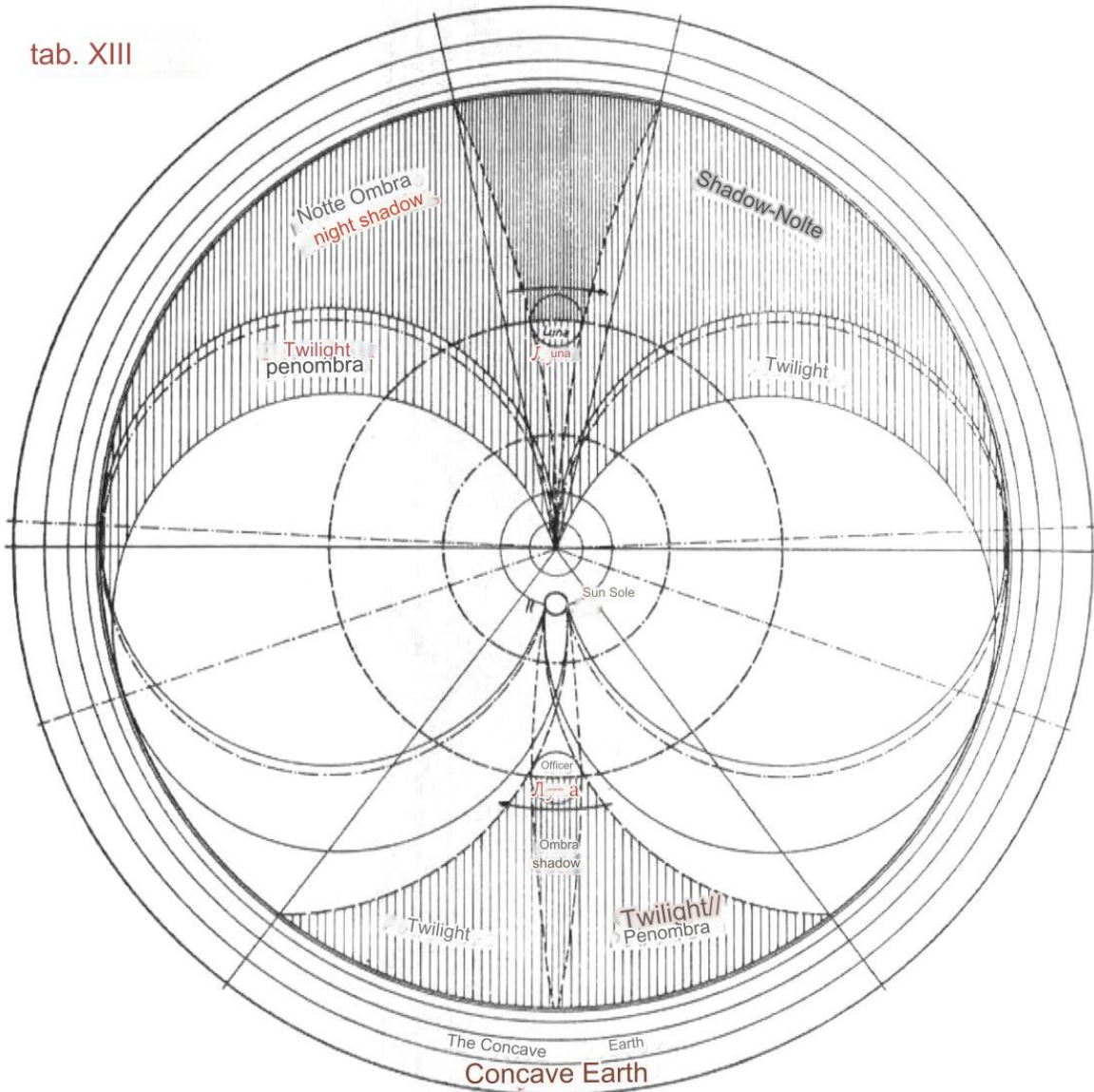




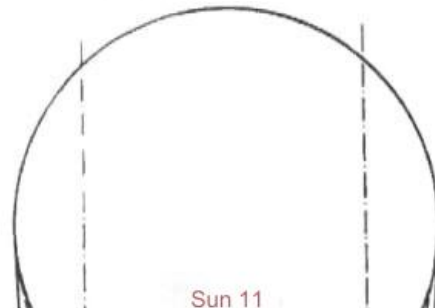
Solar eclipses and lunar eclipses in the Cosmocentric System.

Solar eclipse and lunar eclipse in the cosmocentric system.

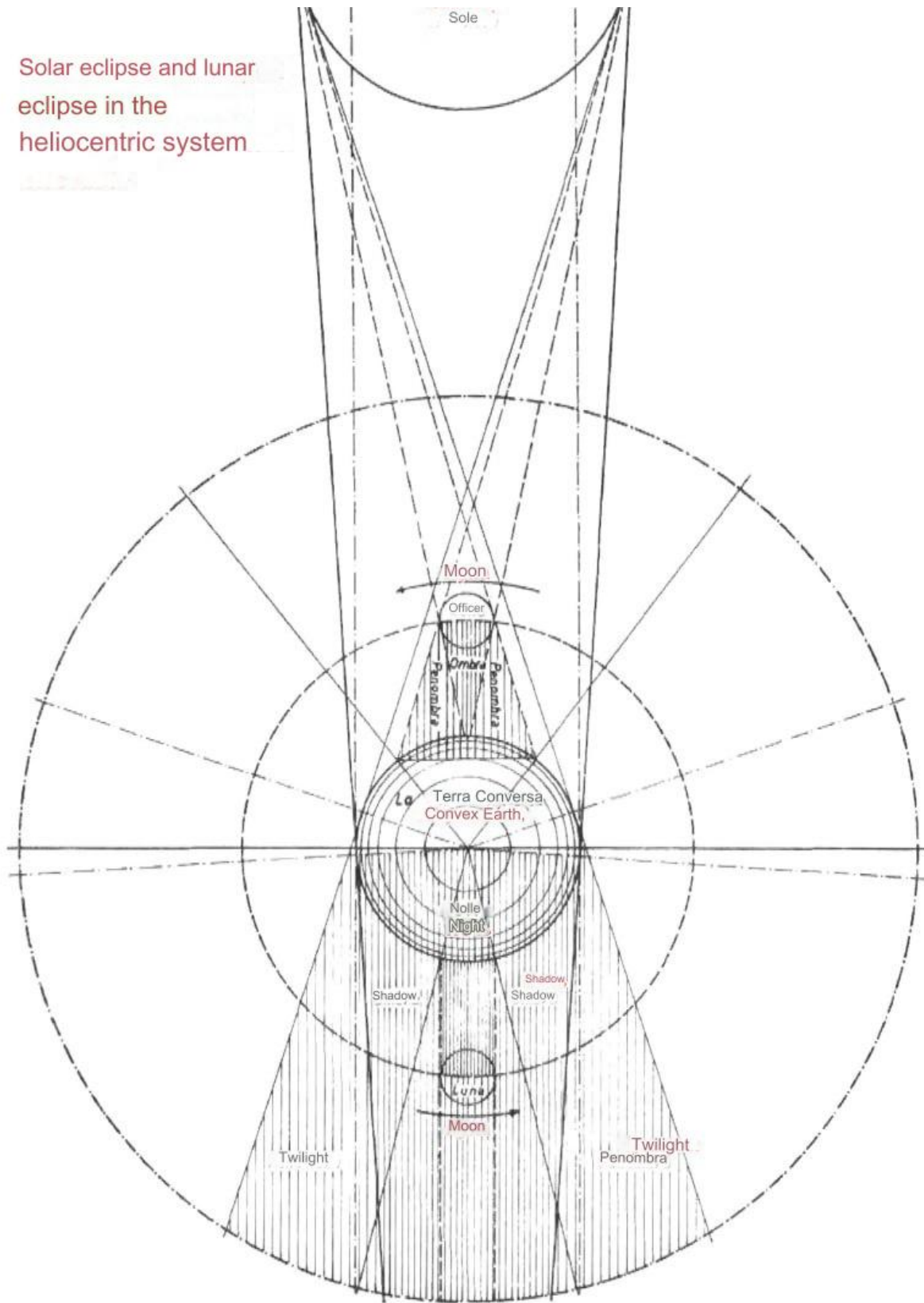
tab. XIII



tab. XII

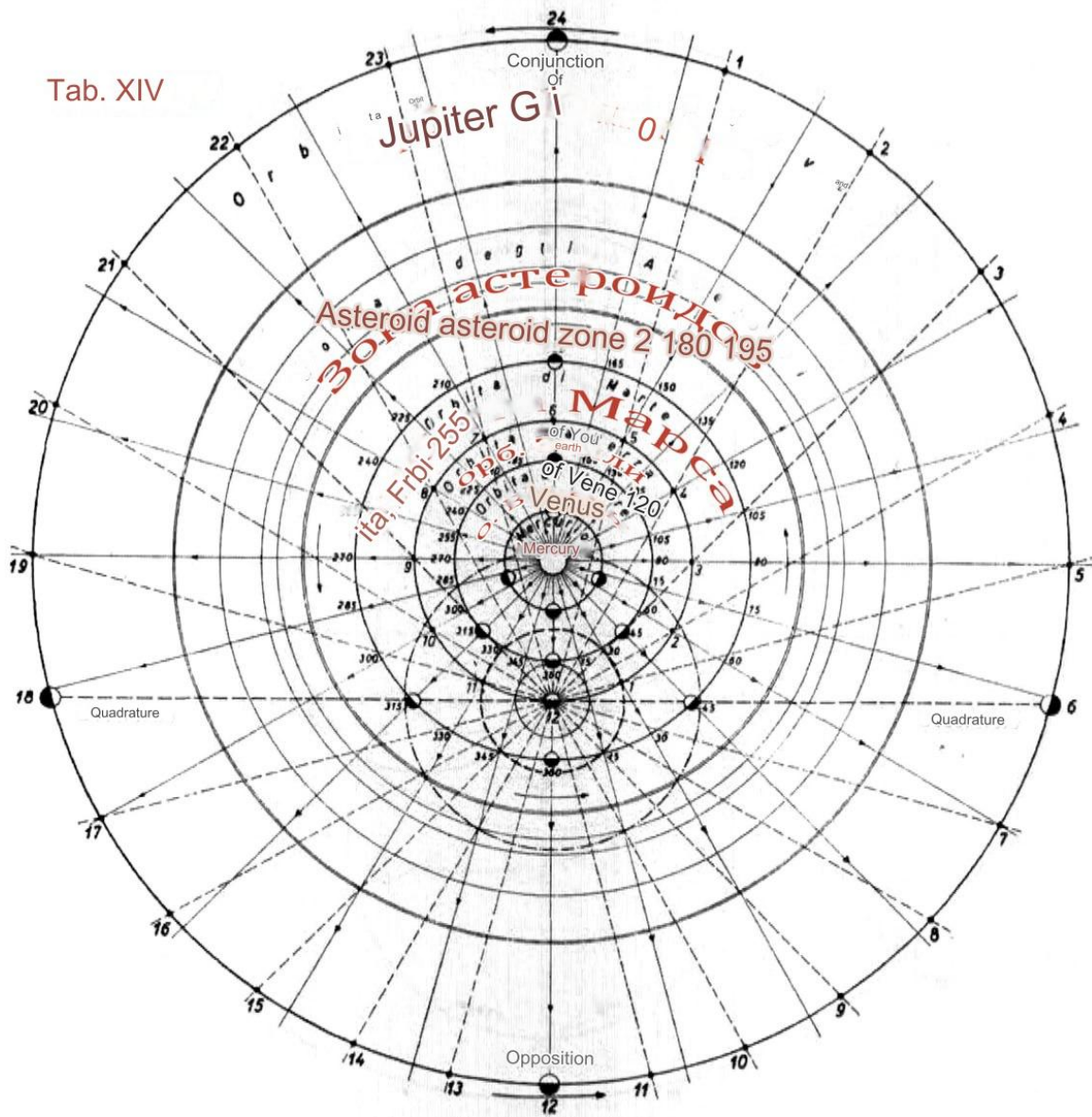


Solar eclipse and lunar eclipse in the heliocentric system



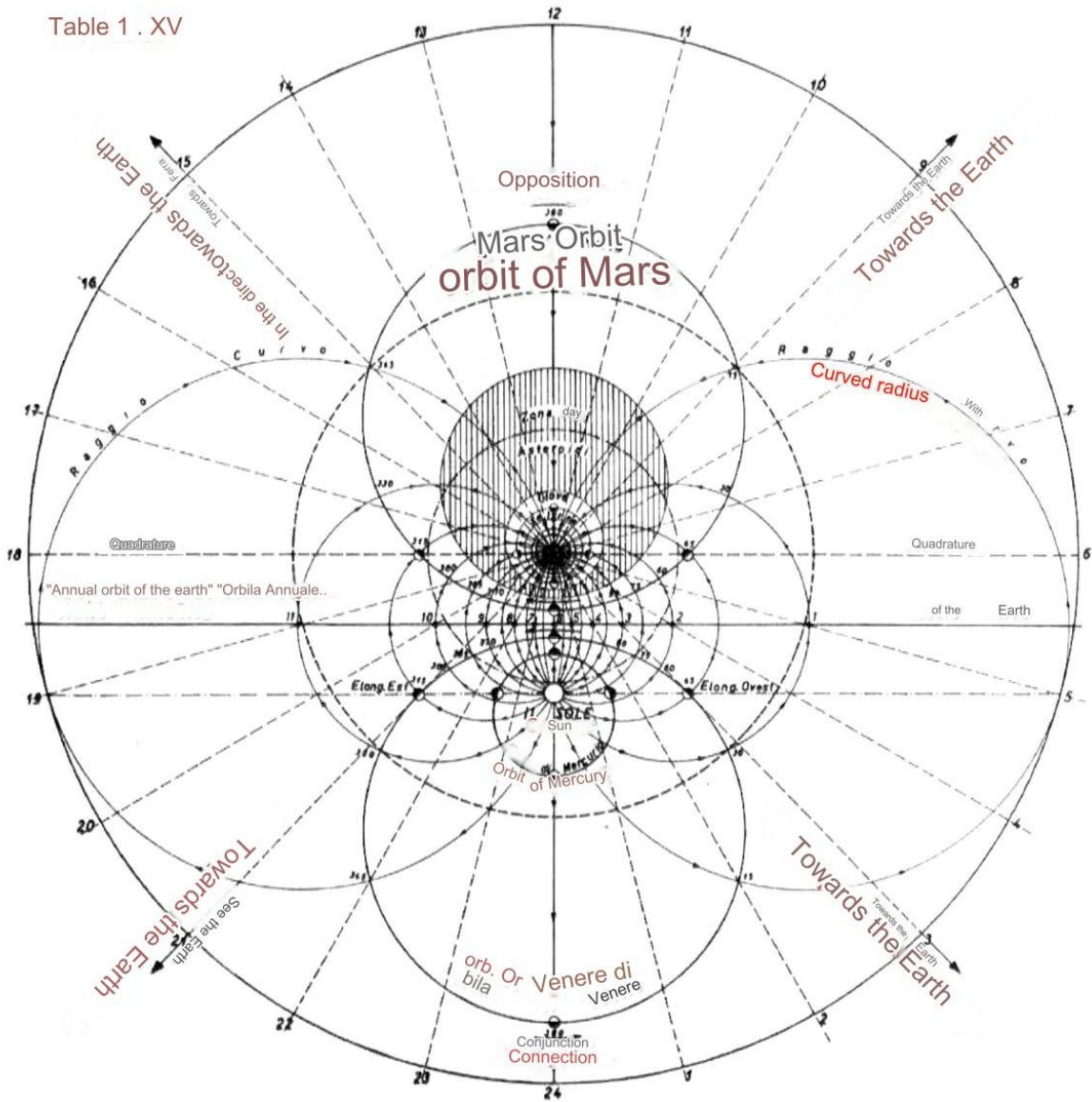
The Heliocentric System.
Heliocentric system.

Tab. XIV



The Cosmocentric System.
Cosmocentric system

Table 1 . XV



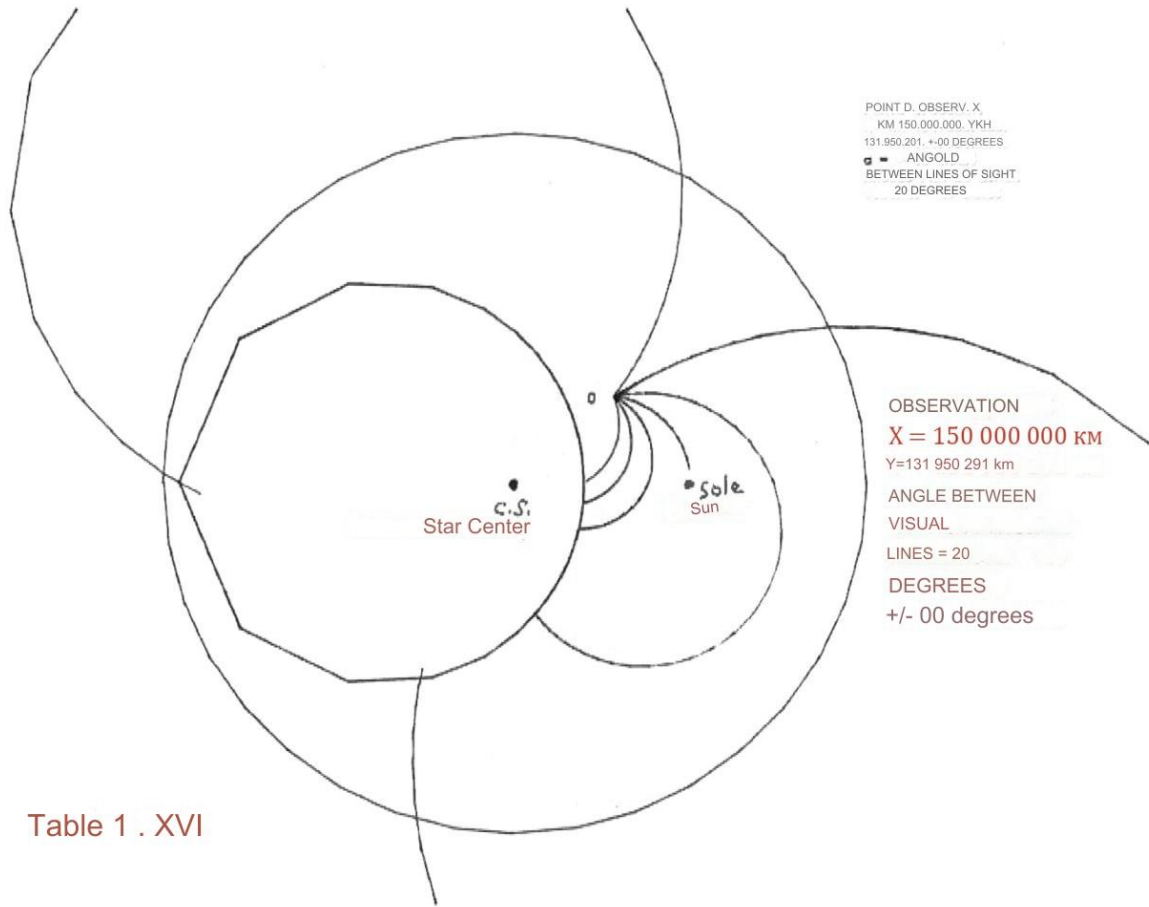
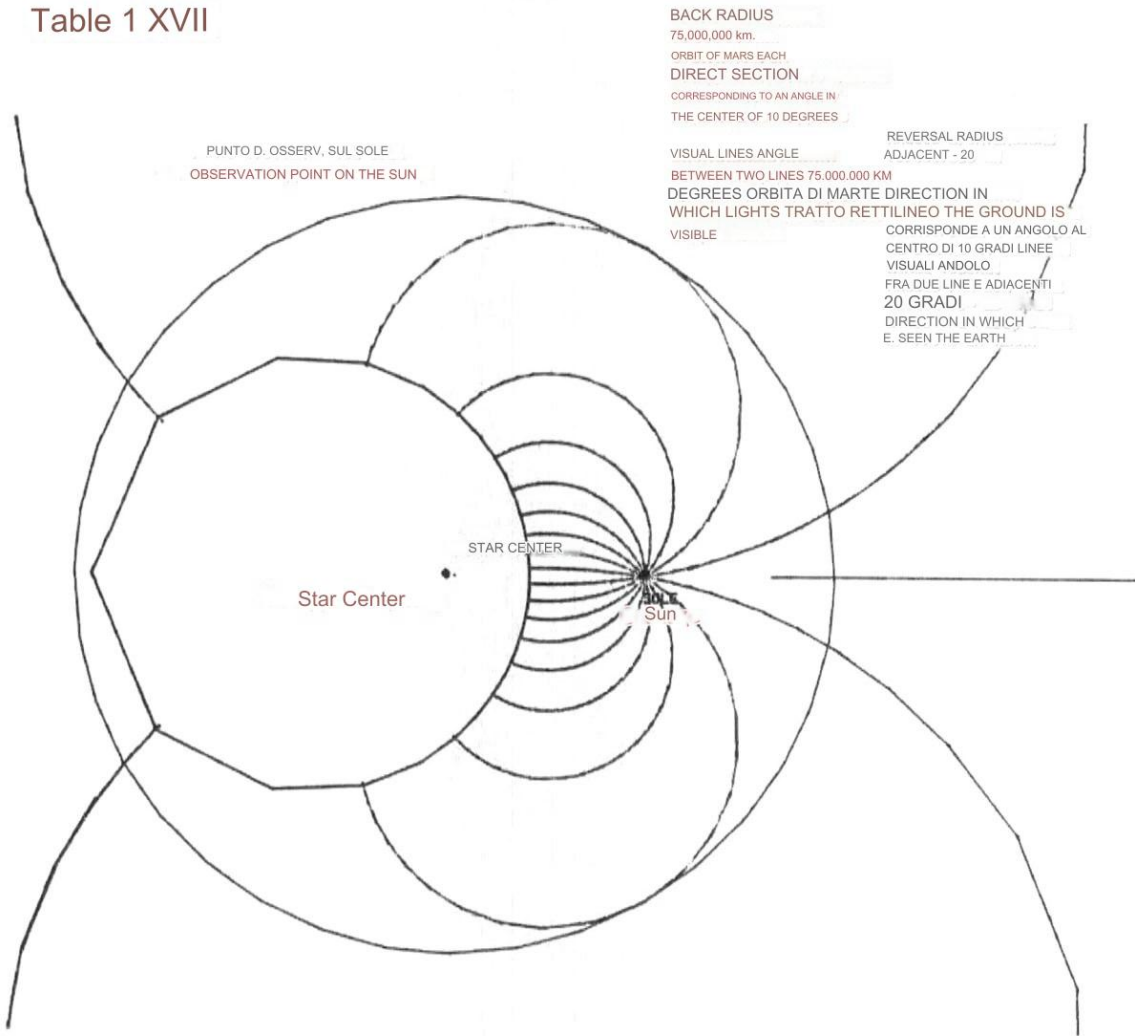


Table 1 . XVI

Table 1 XVII



BACK RADIUS

75.000.000 km.

ORBIT OF MARS EACH

DIRECT SECTION

CORRESPONDING TO AN ANGLE IN

THE CENTER OF 10 DEGREES

VISUAL LINES ANGLE

BETWEEN TWO LINES 75.000.000 KM

DEGREES ORBITA DI MARTE DIRECTION IN

WHICH LIGHTS TRATTO RETTILINEO THE GROUND IS

VISIBLE

REVERSAL RADIUS

ADJACENT - 20

CORRISPONDE A UN ANGOLO AL

CENTRO DI 10 GRADI LINEE

VISUALI ANDOLO

FRA DUE LINEE E ADIACENTI

20 GRADI

DIRECTION IN WHICH

E. SEEN THE EARTH

Table 1 . XVIII

OBSERVATION

X = 150 000 000 KM

Y=627 949 702 km

ANGLE BETWEEN PUNTO D. OSSERV.
VISUAL X-KM 150,000,000

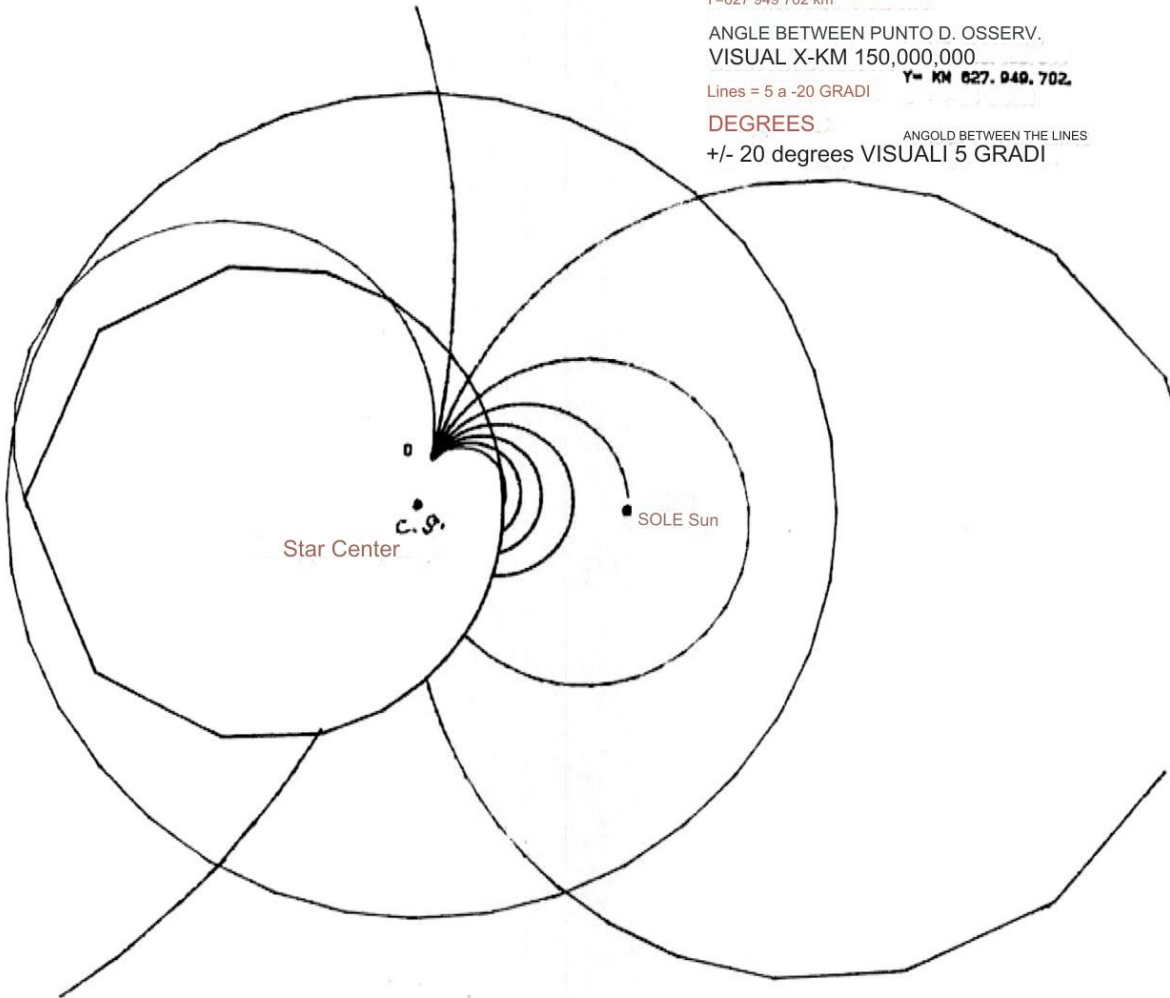
Lines = 5 a -20 GRADI

Y= KM 627. 949. 702.

DEGREES

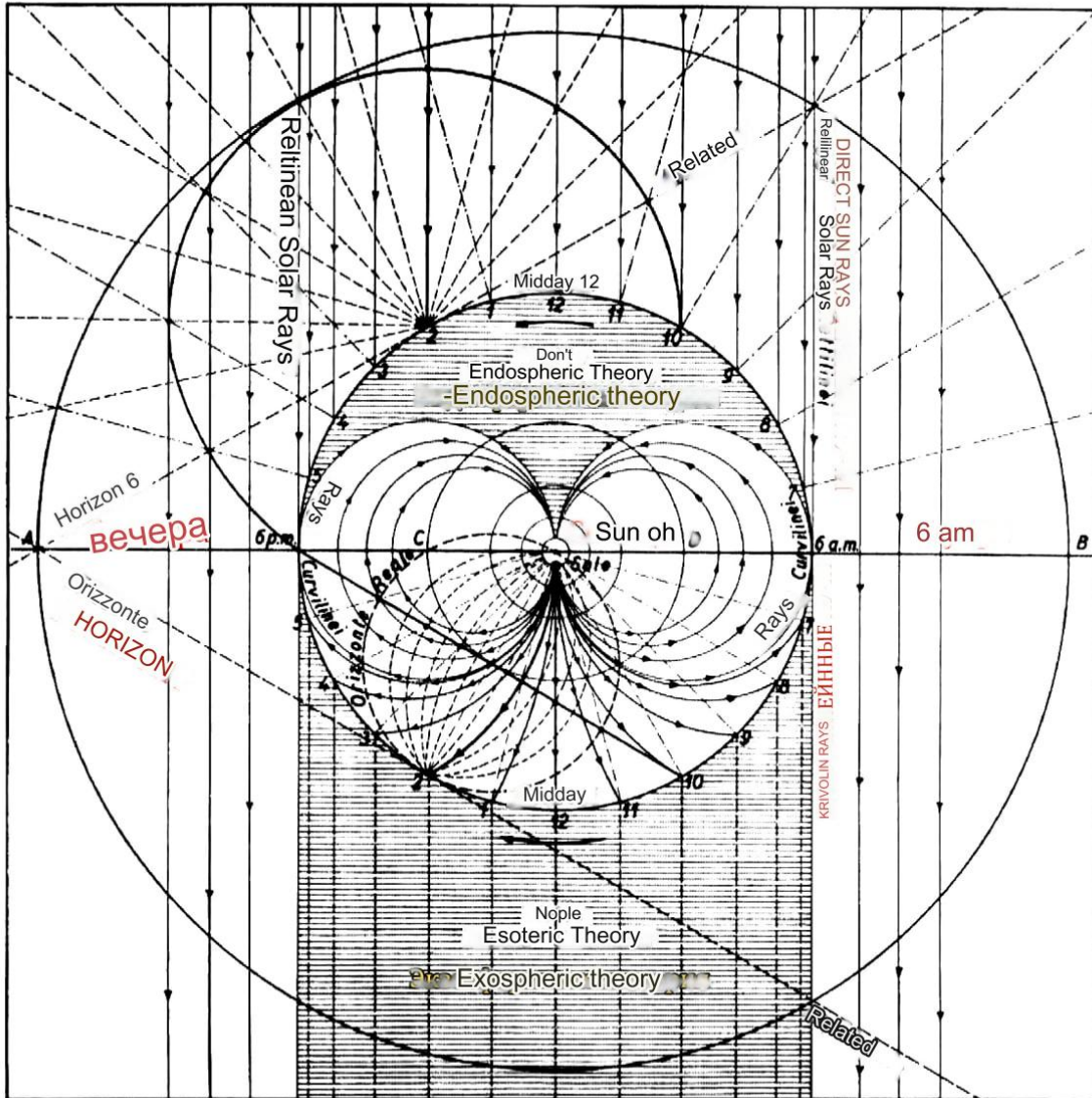
ANGOLD BETWEEN THE LINES

+/- 20 degrees VISUALI 5 GRADI

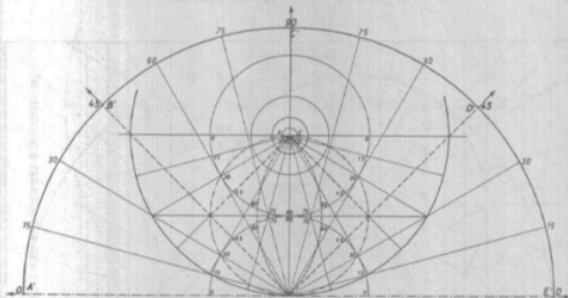


Day and night in the two Systems.
DAY AND NIGHT IN TWO SYSTEMS

tab. XI

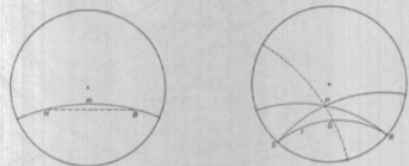


The vault of heaven in the two Systems.

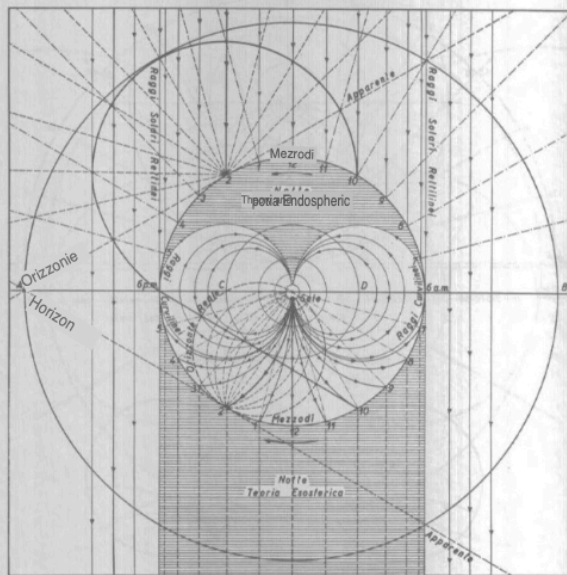


THE HORIZONTAL SYSTEM_ Il way to coordinate celestial degrees with degrees of the erce of the apperent vaults of the sky.

The non-Euclidean world of Poincare.

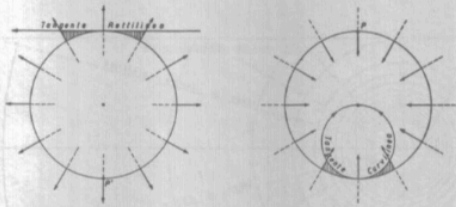


Day and night in the two Systems.

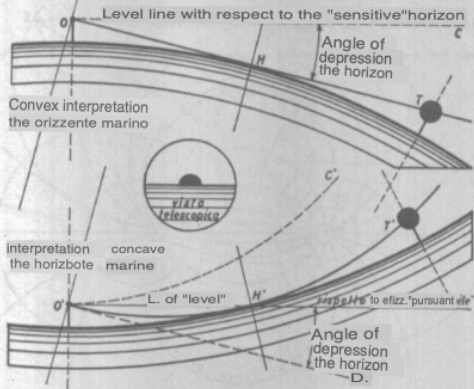


TAV. I

The Exospheric Straight Tangent and the Endospheric Curvilinear Tangent.



The "proofs" of the shape of the Earth.



The two varying interpretations

the two "tests"

TAV follows. I

Electric field and magnetic field.

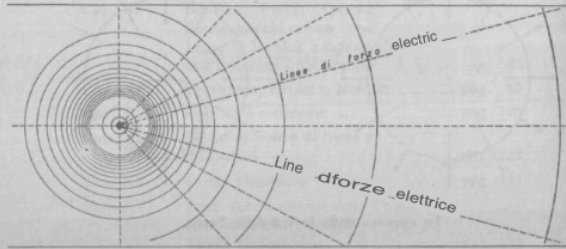
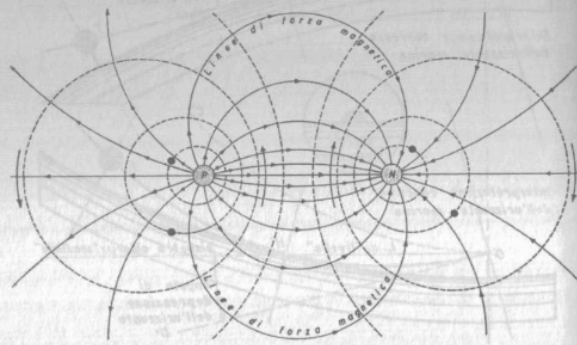


Fig sup.: Electric charge, electric field and equipotential surface.

Fig.int: Magnetic poles, magnetic field e superficie equipotential,



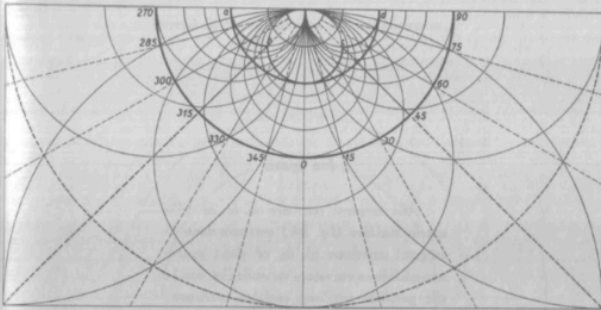
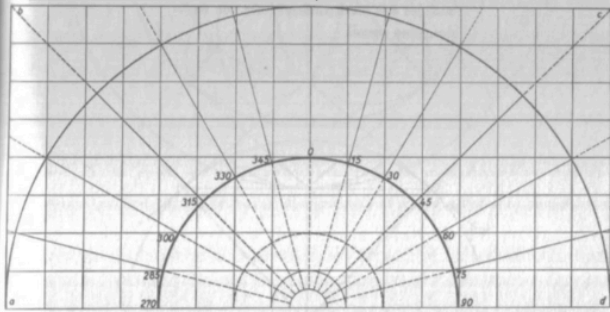


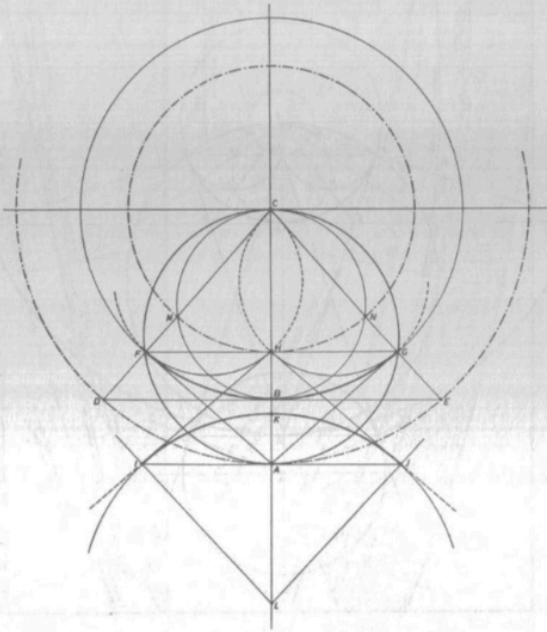
Fig. sup.: Variable curvature space-Euclidean Geometry
 Fig int.: Flat, uniform space-Euclidean Geometry



The two spaces.

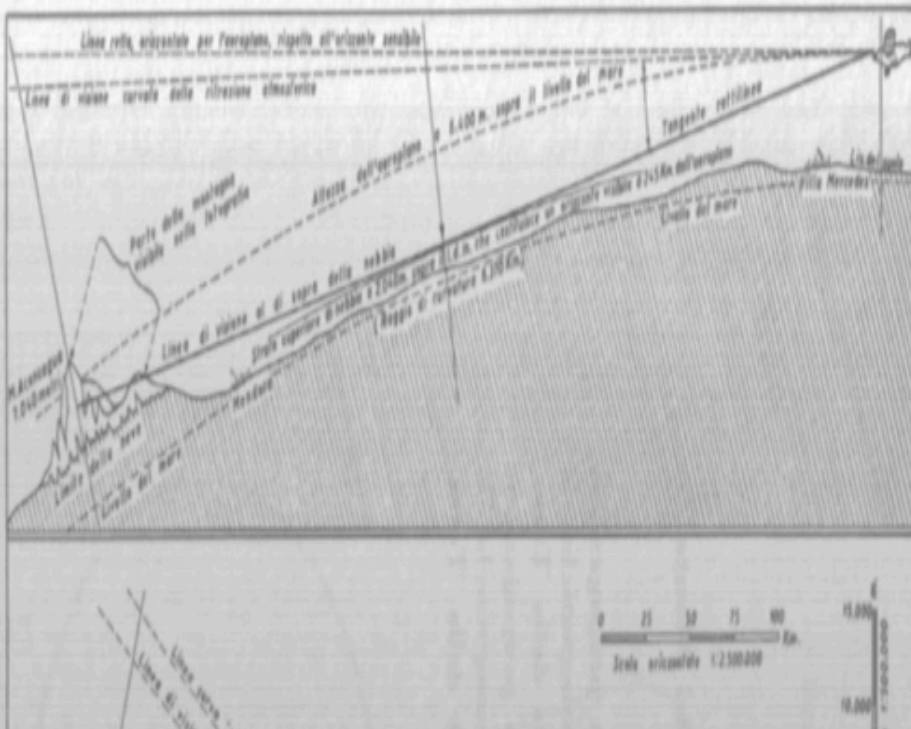
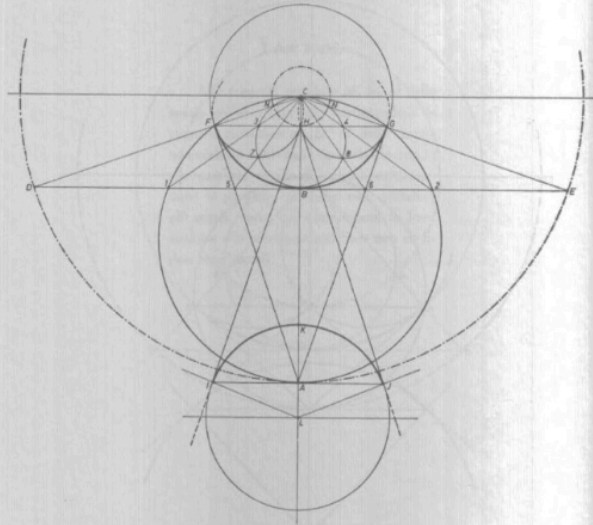
To the straight tangents ab, bc, cd of the euclidean space (fig. inf.) correspond to the curvilinear tangents ab, bc, cd of space non-euclidean variable curvature (fig. sup.); the Euclidean rectilinear parallels correspond to the non Euclidean curvilinear parallels; the corners, under which the lines intersect euclidean and the corresponding non-euclidean lines-dee, they're the same.

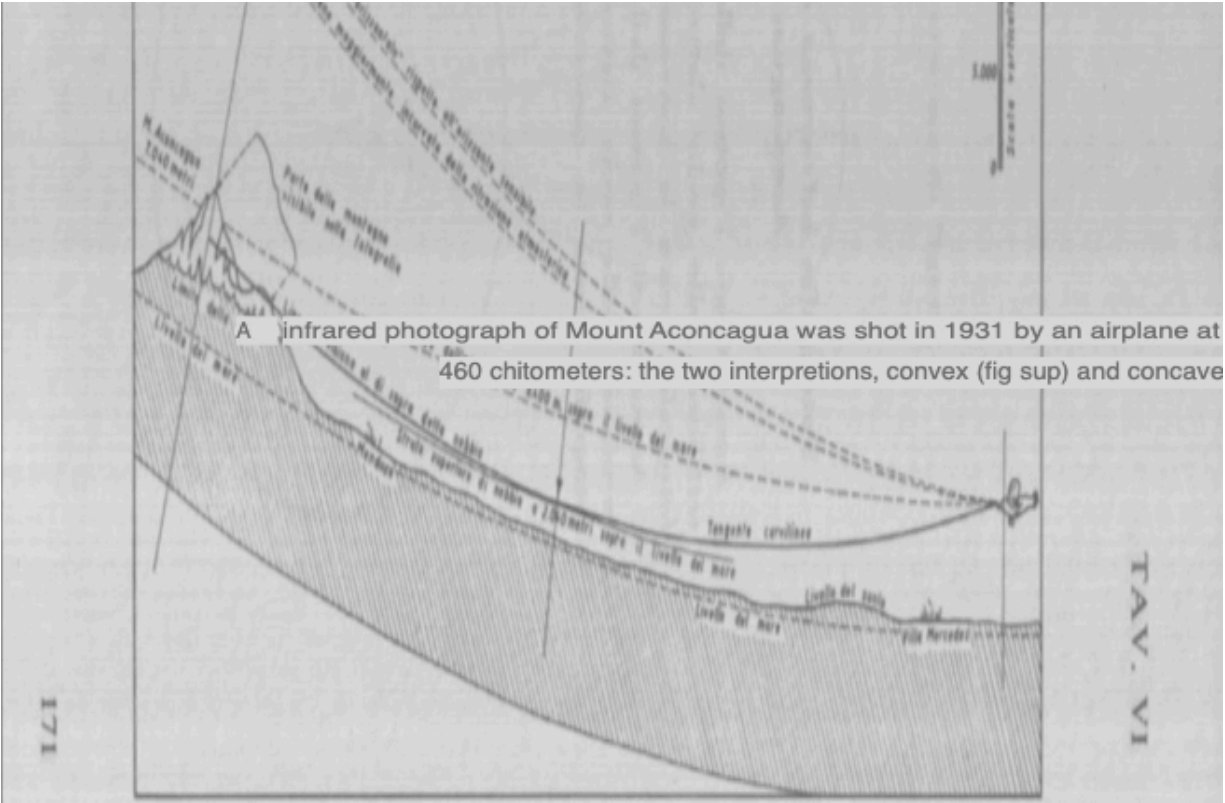
Because the concave Earth appears convex.



TAV follows. V

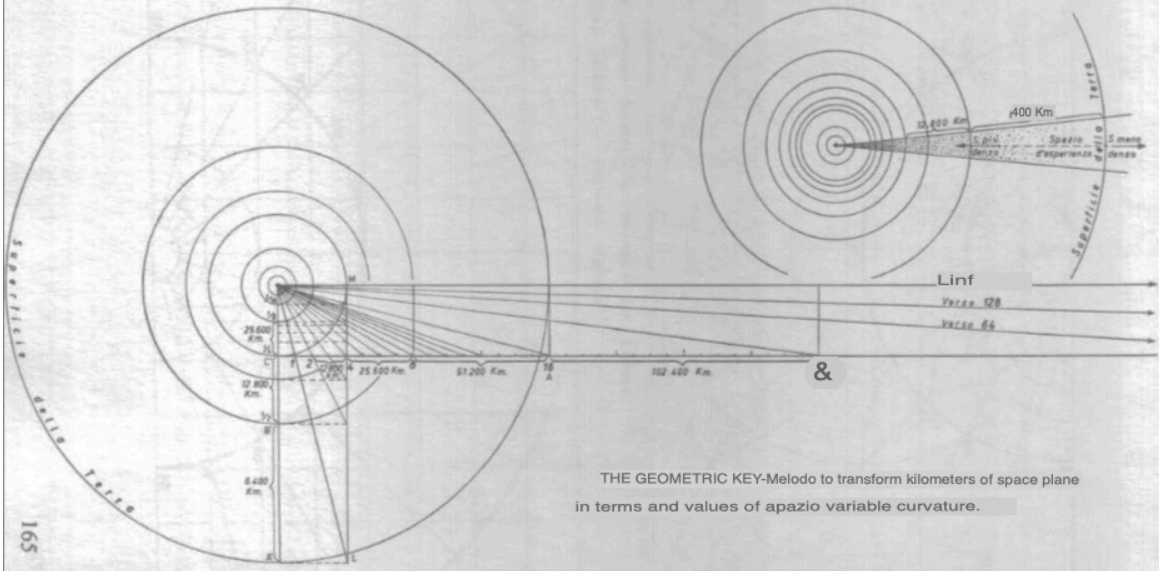
How the concave Earth would look as seen from the Moon or the Sun.





Una fotografia infrarossa del Monte Aconcagua fu scattata nel 1931 da un aeroplano ad una distanza di 460 chilometri: le due interpretazioni, convessa (fig sup.) e concava (fig inf.).

Geometric space and physical space-Euclidean geometry and non-Euclidean geometry.



THE GEOMETRIC KEY-Melodo to transform kilometers of space plane in terms and values of spazio variable curvature.

165

TAV. III

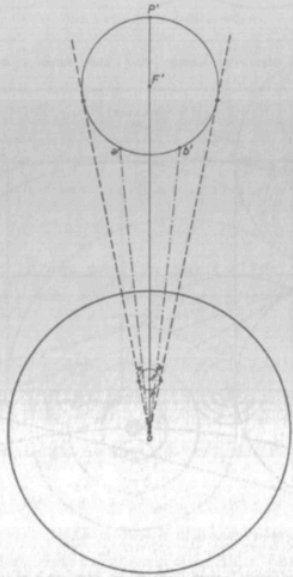
Infrared photograph of Mt Aconcagua.

Accepting the hypothesis of propagation the electromagnetic wave rectilinear photography proves the convexity of the Earth.

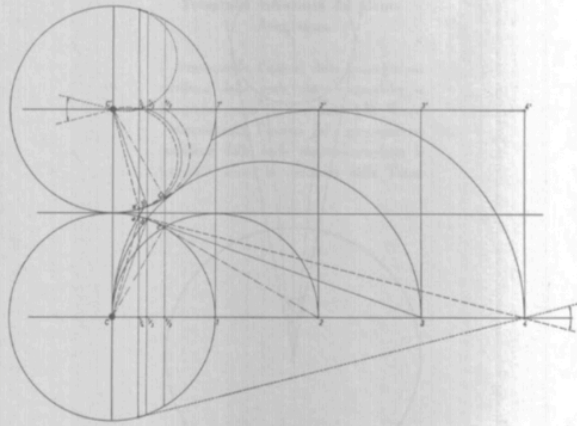
Accepting the hypothesis of propagation the

curve of electromagnetic waves photography
proves the concavity of the Earth.

Inversion of figures.

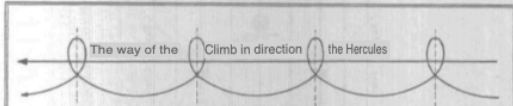


The problem of parallax.

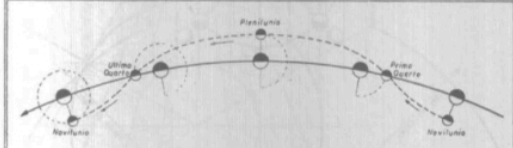


Newton's law applied to Euclidean exospheric space.

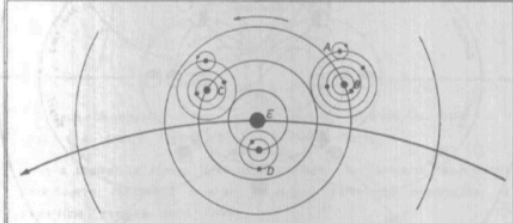
the motions of the stars in the classical system



The epicycloidal or spiral path of the Earth with respect to fixed stars

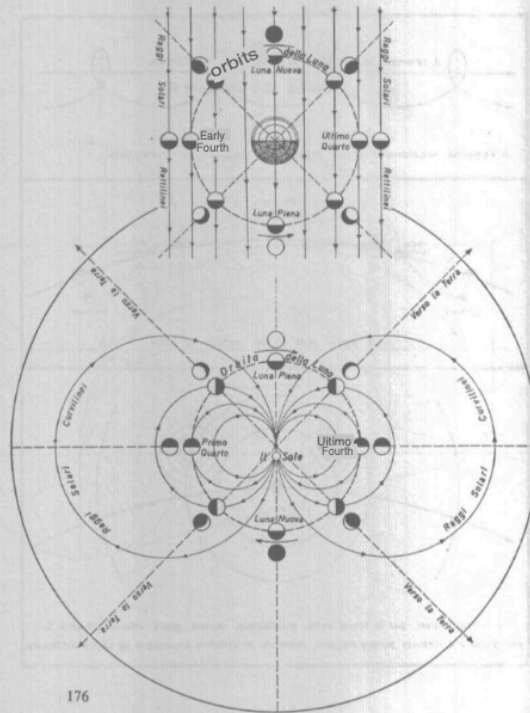


motion of the Moon with respect to the Sun



Solar systems, for the theory of gravitation, must revolve around other Suns, and at ever greater distances, ultimately making a center of the Universe impossible

The phases of the moon in the two Systems.



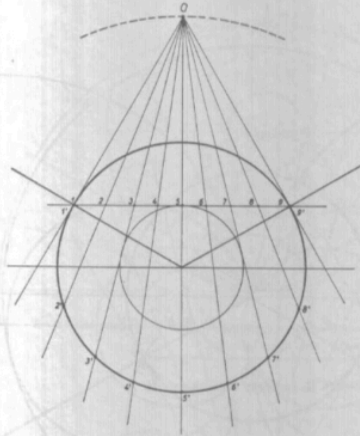
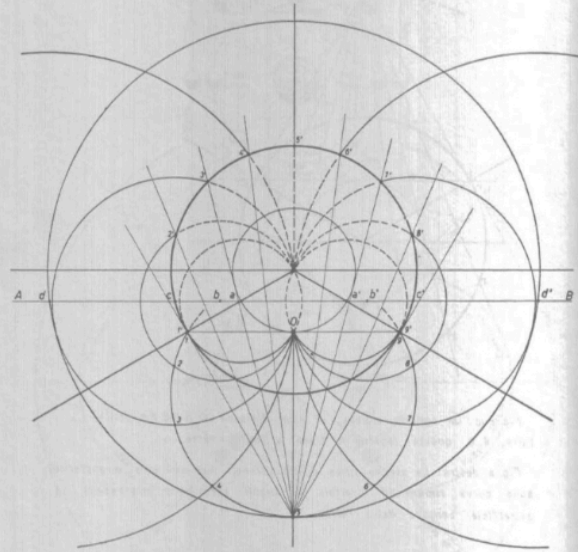


Fig sup.- An object, torpedoes at a distance of 6,400 km. from earth, is bound to this by straight attractive lines.

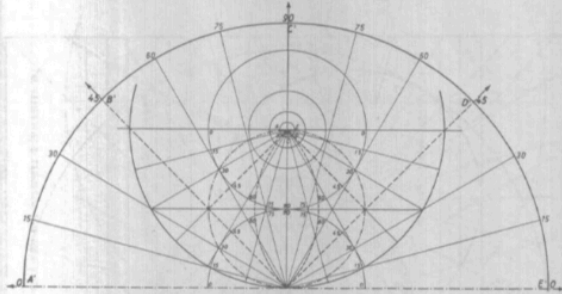
Fig on the right: The same lines of attraction, in the endospheric concept, are curves, remaining unchanged the angles under which they intersect the concave surface of the Earth.

The attractive lines in the two Systems.



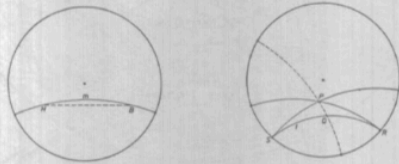
TAV. X

The vault of heaven in the two Systems.



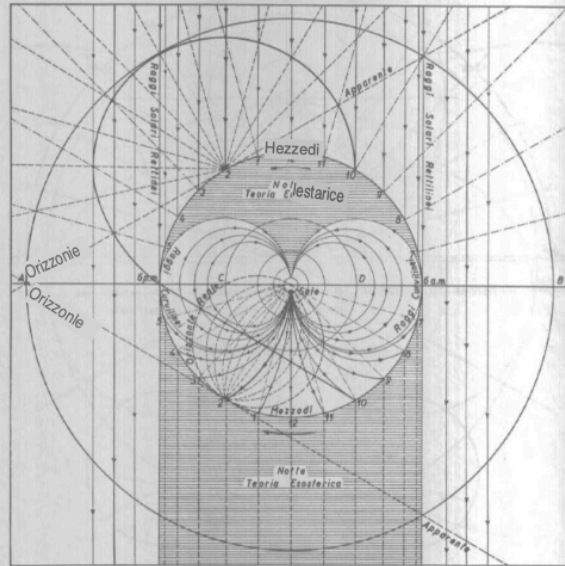
THE HORIZON SYSTEM ... The method of coordinating celestial degrees with degrees of the arc of the apparent volta of heaven.

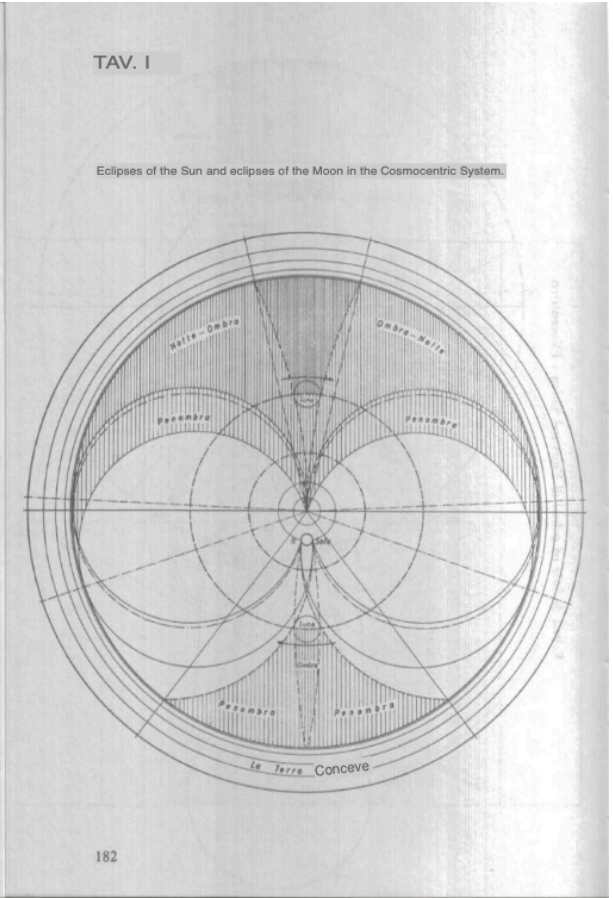
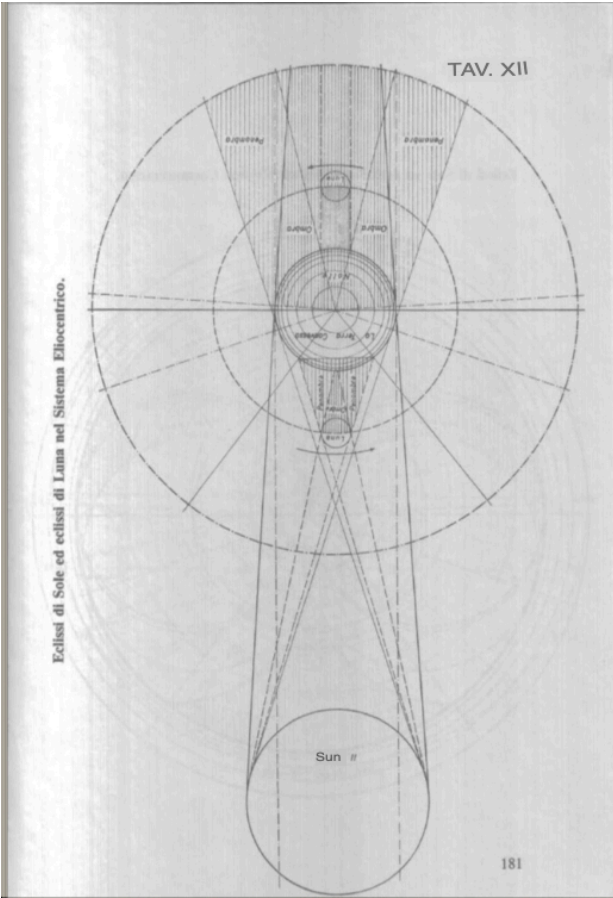
The non-Euclidean world of Poincare.



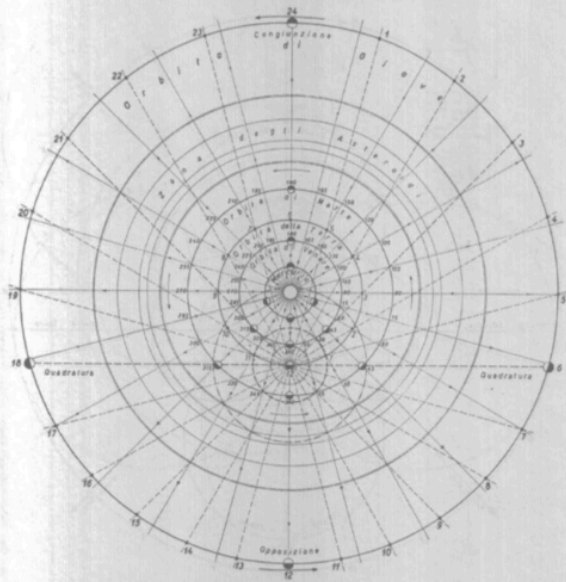
TAV. XI

Day and night in the two Systems.

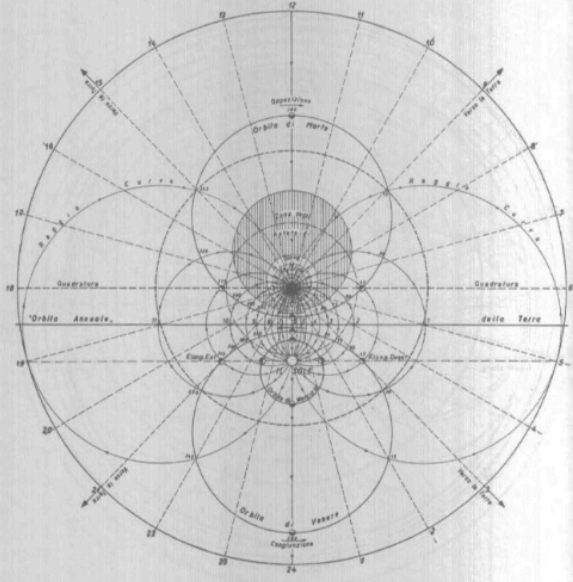


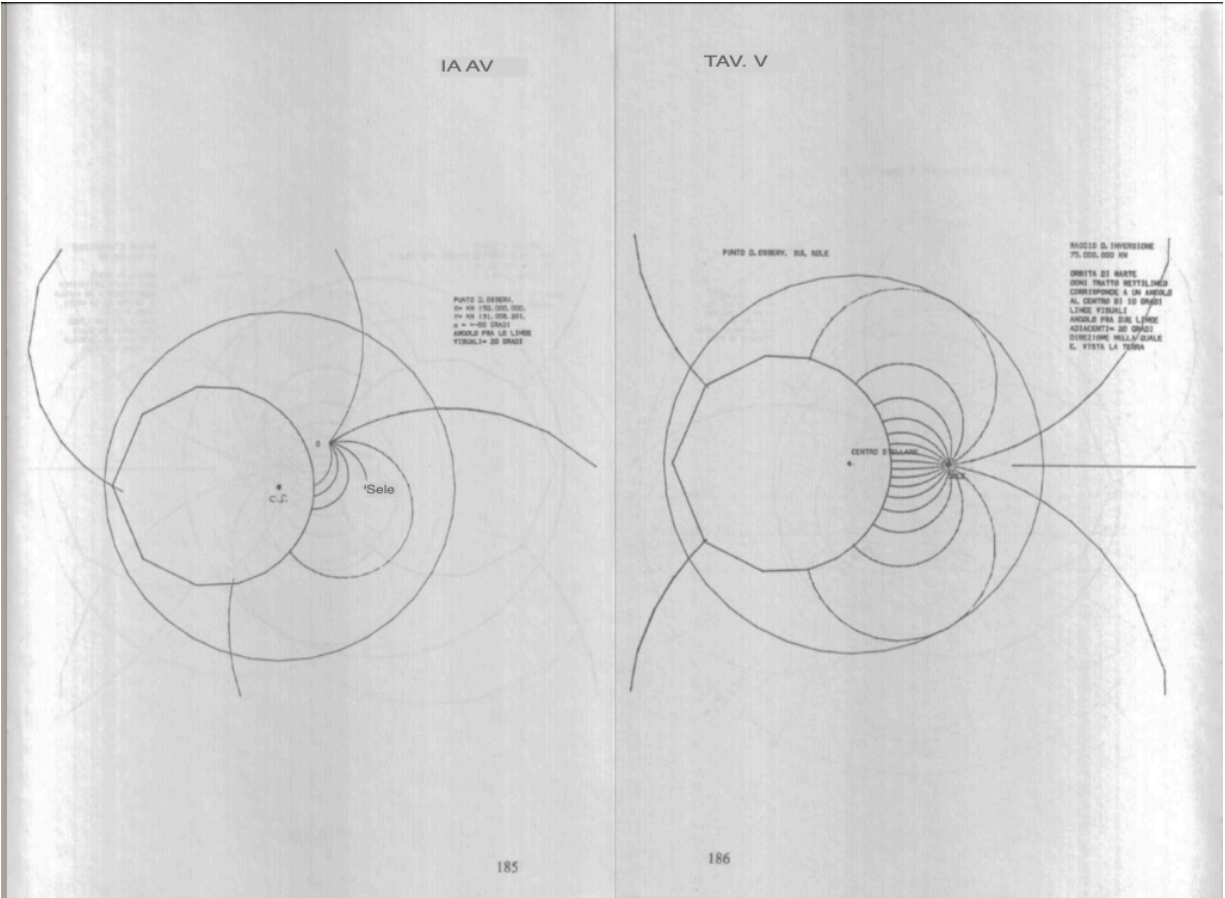


The Heliocentric System.



The Cosmocentric System.





Extra:

<https://hronir.blogspot.com/2011/01/la-teoria-endosferica-del-campo-o.html>

Translated from Italian

Endospheric field theory or Cosmocentric system

hronir.blogspot.com/2011/01/la-teoria-endosferica-del-campo-o.html

«Let's take a simple example. Suppose, as in the Fitzgerald contraction hypothesis, that lengths in one direction are shorter than in another direction. [...] Does such a hypothesis have any meaning? [...] To discover the change that has occurred, one cannot resort to ordinary systems of measurement: one must resort to methods like the Michelson-Morley experiment, in which the speed of light is used to measure lengths. Then it still remains to be decided whether it is simpler to suppose a change in length or a change in the speed of light

. The experimental fact is that light, in covering what the measuring instrument indicates as a given distance, takes longer in one direction than in another; or, as in the Michelson-Morley experiment, that it should take longer and instead does not. You can adapt the measurements to a fact of this kind in various ways; whatever system you choose, there will always be an element of convention. This conventional element survives in the laws arrived at after a decision has been made about measures, and often takes elusive and elusive forms. Eliminating the conventional element is, in fact, extraordinarily difficult; the more the

subject is explored, the greater the difficulty to be overcome appears.»

I could not resist the temptation to begin with some of the words with which Bertrand Russell touches, in his beautiful *The ABC of Relativity*, on the subtle question of the geometry of the universe (the italics in the quote are mine). The central element for what I will discuss is the inevitable presence of arbitrary elements in this procedure, a fact that must always be kept in mind when we want to understand how the world is made independently of how we can (or want to) represent it.

Russell, being on the subject of general relativity, refers to the geometry of space-time. To simplify a bit and to get closer to the issue we will discuss, we can think of the geometry of space alone. Bianca Sangiorgio and Roberto Ceriani, in *Modelli e Realtà 1 – La fisica e l'arte di comprendere il mondo*, write:

«There are only two possible paths, and both are based on assumptions of a non-experimental nature.

The physicist can freely choose the rules for measuring spatial intervals. Once this choice has been made, the geometric structure of physical space must be determined experimentally. [...]

The physicist can freely choose the structure of physical space, but then he must modify the rules and the instruments of measurement on the basis of empirical facts.
[...]

Whatever path is chosen, it is clear, however, that at its base there is a conventional choice. We must then say that the geometry of physical space is not only the result of experience, but also depends on the convention we choose to use. In other words, the world appears to us to depend, in some way, on how we imagine it to be.»

Classically ("everyday") we assume that the world is of the Euclidean type and that the length of objects does not change when the position of the object itself changes, and this assumption gives a good account of our experience. In fact, however, if we thought of physical space in a "non-Euclidean" way, we could equally account for the data of experience by adapting the measuring rods to our choice of geometry for space. For example, if we supposed, with Russell, that a millimeter rod pointed north is only half as long as the same rod pointed east and that the same thing is true for all other bodies, we would be able to account for experience to exactly the same extent as we can classically: we would only have

to say that the rod is not a good instrument for measuring the "true" length of bodies because its "true" length changes in relation to its inclination, but then, since we would only be interested in the "false" lengths measured by that same rod, we would act daily in the same way as we actually act.

Once we realize this, we will avoid racking our brains in the search for the "true" spatial length of bodies and will limit our investigations to the non-arbitrary elements of the description of the world.

Somewhere in my memory lay all dusty the memory of a physics lesson in the first year of high school in which, en passant , within a speech now submerged in oblivion, my professor - that same Roberto Ceriani of Models and Reality - mentioned a curious doctrine called "of the hollow world" according to which the Earth was indeed spherical and not flat, but such that the valleys and mountains that we inhabit are turned towards the inside of the spherical surface, an interior that contains all the stars and clouds and phenomena that hang over our heads. I believed, and still believed until a few days ago, that these were ideas advocated in a not so recent past, comparable to the alchemical conceptions of philosopher's stones or elixirs of long life.

It lay — this memory — all dusty in some recess of my memory whose existence I was completely unaware of, when I happened to come across, wandering as I usually do through the library of the Faculty of Physics, a book by a certain Paolo Emilio Amico-Roxas entitled The Problem of Space and the Conception of the World — The Endospheric Theory of the Field or Cosmocentric System . Leafing through the plates collected in the appendix, I found myself looking at a drawing in which a landscape of the concave earth was reproduced and directly compared with a more usual reproduction of the same landscape, convex . It didn't take long for me to, in an instant, become aware of that recess of memory again, the thick layer of dust was removed and the remote memory resurfaced from oblivion. At first I thought that the book was quoting the "hollow world" doctrine, but a second glance at the title and a quick scan of the index convinced me that the book claimed to defend this conception of the world. And it dated back to 1960, no less! How could anyone think that the Earth was curved upward, three years after the launch of the first Sputnik? How could anyone think that the Moon was contained inside the Earth, a year after a probe crashed into our natural satellite and another sent us the first images of its

far side?

I didn't think twice, and decided that I would read that book.

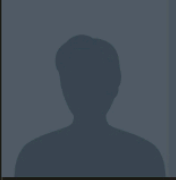
Let's take another example. Let's consider a spherical surface with center O and radius r in an ordinary three-dimensional Euclidean space. It determines a subdivision of the space into two regions: the internal one and the external one. There is a simple geometric transformation that puts every internal point of the sphere in correspondence with one and only one external point (in reality there are many, but let's consider one, for simplicity: the one that puts in correspondence with a point P at a distance d from O , the point P' that lies on the line PO , and that is r^2/d from O). In this transformation, the point O does not find a correspondent in space (it is sent to infinity), but this is an irrelevant detail. Furthermore, the transformation, although continuous, does not preserve distances: the length of a ruler, fixed in the starting space, assumes values in the arrival space that depend on the distance from the center of the sphere on which it is positioned. In this transformation, the spherical surface considered is a locus of united points (that is, the points of the sphere are sent into themselves by the transformation).

Now identify the sphere with the surface of the Earth: what have you obtained? The "inversion" transformation that we have described moves all the internal points outside the Earth and vice versa! Here is the brilliant idea: explain the "hollow world" theory with a geometric transformation that connects the Euclidean space normally experienced with the inverted one of the theory that we intend to defend! The "true" geometry of the universe is that which conceives the Earth as hollow with the ground that extends infinitely under our feet and the sky that finds itself enclosed by the Earth itself in the volume of a finite sphere. Why do we experience exactly the opposite? But why do we use common rulers to measure distances, which deform when they change position exactly by the amount needed for the "false" geometry that we deduce to be the Euclidean one!

another take:

Slevin88

🕒 4 Years 7 Months ago #33982



AUTHOR OF THE DISCUSSION

Offline

User



↓ Moreover

Reply from [Slevin88](#) to the topic [Endospheric Field Theory! Paolo Emilio Amico Roxas](#)

Yes, in short, according to the theory, space would be non-Euclidean with variable curvature. The fundamental point is that the book contains a complex geometric/physical discussion based on some mathematical assumptions. If we admit a space with variable curvature, we realize that our representation of the optical universe (that is, of all the bodies we observe with a telescope or with the naked eye), but which are not part of our "tactile" universe (because we are not able to physically reach them, now), is flawed by the assumption that the universe is an object with Euclidean space and consequently we place the bodies we observe on a line that is directly perpendicular to the observer.

We observe a body in the sky, a distant star, a planet, a galaxy and so on, and mentally, assuming a Euclidean universe, we are convinced that that body is at a certain distance from us in a straight line (let this distance be 100 km, 1000000 km, 1 light year, 1 million light years).

The thing that must be underlined is one: to date there is no experiment or empirical demonstration that demonstrates that space is Euclidean, it is only an assumption of astronomy. Therefore the vision of space that astronomy gives us is only a representation of data obtained from observation, not a physical reconstruction of a tactile universe that we are able to touch (in the sense of going there physically).

The fascinating thing is therefore that the theory is coherent and correct in analyzing the data obtained from astronomical observation, and in giving it another interpretation (and this is the reason why this theory fascinated me and not a little).

For this reason I would be interested in knowing more about the author and his life, but I found very little.

Please [Login](#) to join the conversation.

I would like to try to give you some clarification on non-Euclidean space: let's start from the assumption that all the geometry we know is Euclidean geometry, therefore all mathematical applications are formulated on the basis of Euclidean axioms, where, to make it very short, but also very clear, the straight line is a straight line and the curve is a curve.

When we began to understand that light can be attracted by mass (large masses are needed, but that's exactly how it is, light is attracted by mass) we understood that its trajectory can no longer be considered always linear, especially in the presence of large masses, precisely. So how can we establish the position of a distant object, such as a star, if its light passes near a galaxy and therefore modifies its path according to a curvilinear trajectory? Can we still conveniently use classical geometry to define a space that is all crooked and poorly defined?

Someone thought it would be a good idea to consider these cases according to a different type of geometry, a geometry where the considerations of Euclidean geometry do not apply.

So a straight line in a Euclidean field is a curve in a non-Euclidean field and a curve in a non-Euclidean field can very well be the shortest distance between two points.

Think of non-Euclidean geometry as space-time deformed by mass, because that's exactly how it is.

If I can make a musical comparison, it's like changing the key at the top of the staff!

Returning to the theory, seeing the Earth as concave would be equivalent to "giving reason" to those of the hollow Earth, where inside there is not the "little Sun", but the Universe itself...

Mathematically perhaps there are no differences, I don't know, I'm not that prepared, but the relationship between distances that a theory of this kind highlights is suggestive; practically then more than the "outside" we should look for the "inside".

At the moment, however, it remains a Theory because to account for a possible concavity of the Earth, it would be necessary to find some equally interesting idea for the interior, which at the moment does not seem to exist.

Mig25 Foxbat



We sided with the dictators because on the side of the democrats everyone was tied up and gagged.

