

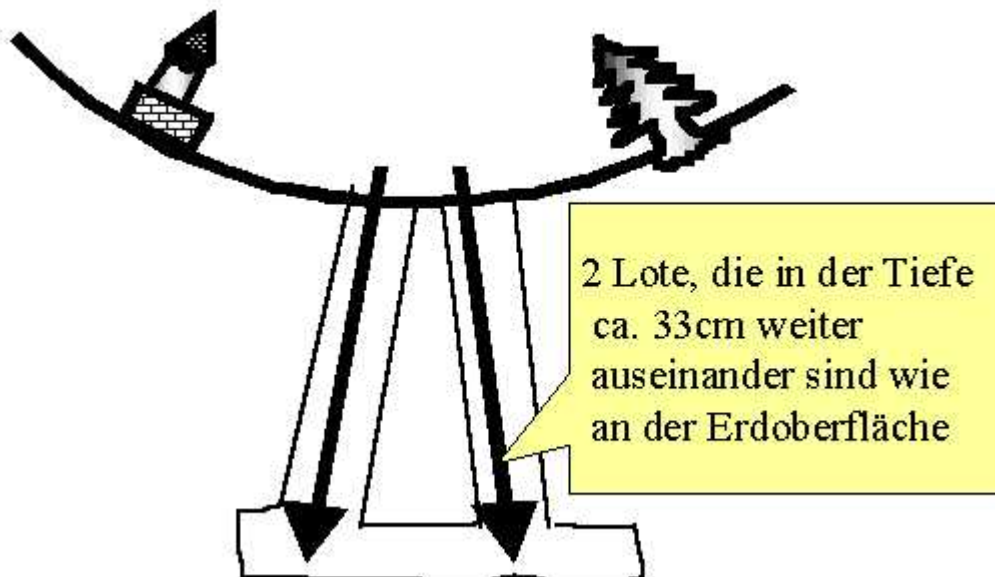
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Earth's "Center of Gravity - Up or down?"

Why was it that at the turn of the century, the Geodetic Survey Departments of both the French and United States governments made certain tests, which upset the Copernican theory, than decided that they should be kept secret? What, actually, were these tests, and should they be repeated today, under the most severe test conditions?

If you've ever watched a bricklayer at work, you've seen him use a plumb bob to determine the perpendicular so that his wall will be erect and straight. A plumb bob is simply a weight suspended on the end of cord. It acts on the principle of the attraction of gravity, or mass, and the weight always points toward the center of gravity, which in the case of spherical Earth is its exact center. A line formed by the cord of a plumb bob is at precisely a right angle from the horizontal.

It is a division of a plane surface into two 90° angles.



2 plumb lines, which in a deep shaft below are 33 cm (13 in.) farther apart than at the surface

By simply laying his bricks parallel to the line of the plumb bob, the bricklayer builds a wall that is precisely erect.

If he did not use a plumb bob, there would be many more leaning towers of Pisa in the world.

However, the plumb bob is not used only to erect buildings, but it is used to measure the distance of the sun or any planet. This is done by measuring a precise horizontal distance on the Earth (which is naturally a curve, because the Earth is round), and since we know the circumference of the Earth, the distance around it, thus we can calculate an exact base for our proposed triangle to be used in measuring the distance of the sun. Then, by use of a sextant, we can "shoot the sun" from both ends of this base line, and get a pair of angles which are slightly less than 90° angles because they are obviously not parallel to the perpendicular as determined by the plumb bob. We know that, given one side of a triangle, and two of its angles, we can calculate the length of the other two sides. Thus, we can tell how far the sun is from the Earth.

It isn't quite this simple, because we don't know the precise size of the Earth, and thus, the difference in parallelism of the two perpendiculars we have achieved at both ends of our base line. It should be obvious to the reader that since the plumb bobs point at the center of the earth lines projected into space would continually move further apart.

Thus we have a great interest in exactly how far it is to the center of the Earth, in order to be absolutely sure of our two important angles in figuring interplanetary distances.

Sometime prior to 1901, the French Government, wishing to determine more accurately the actual size of the Earth, so that they could revise and refine their calculations regarding the distance to the sun, hit on a way to measure the difference in distance apart at the top of two lines perpendicular to the surface of the Earth and the bottom of those same two lines. They wanted a pair of lines long enough to give them an appreciable measurement. Obviously they could not erect two parallel poles a mile high, but they did feel they could suspend two plumb bobs a mile deep into a mine shaft, and thus be able to measure the distance apart at the top and the distance apart at the bottom, which would be slightly less. They wanted to know exactly how much less.

The result of these tests was very strange. So strange that the French Geodetic scientists contacted the scientists of the American Geodetic Survey and conveyed their results to them, with the request that similar tests be conducted in this country. Officially, nothing was done for some years. But in 1901, one of the Geodetic surveyors happened to be working in the vicinity of the Tamarack mines near Calumet, Michigan. He contacted the chief engineer at Tamarack, and informed him of the information transmitted by the French government.

Two mine shafts were selected, and plumb lines exactly 4,250 feet long were suspended in each mine. At the end of these lines a sixty pound bob was hung. In order to prevent movement through a horizontal direction, each bob was suspended in a tank of oil placed at the bottom of the mine shafts.

In this way, it was reasoned, magnetic forces could not effect them. The lines used to suspend the bobs were No. 24 piano wires. For twenty-four hours the lines were allowed to hang, so that there would be no possibility of movement from putting them in place still remaining in the lines.

The measurements were begun.

It was then that it was discovered that the French Geodetic engineers had not made a mistake.

Careful re-checking proved that the lines, contrary to expectations, were **farther apart at the bottom than at the top!**

There can be only one implication to such strange result – the center of gravity is not, as previously believed, at the center of the Earth, but in fact, it must be above the surface of the Earth, somewhere in Space! If these two lines, formed by the suspended plumb lines, were to be extended upward, they would meet somewhere in the void away from the Earth, and that point, by all the rules of gravitational attraction, should be the center of gravity of this planet!

Greatly puzzled, and not a little disturbed, the Tamarack engineer sent for Professor McNair of the Michigan College of Mines. With McNair there to check his results, the experiment was repeated, the measurements gone over again, and both men were convinced that no error had been made. Professor McNair suggested that the plumb bobs be changed to a non-magnetic metal to overcome any possibility of magnetic attraction or repulsion due to a magnetic ore body nearby. But when this was done, the same figures were arrived at. If magnetic influences had been at work, they would have varied with different metals, but they did not.

Now, suggested McNair, it would be a good idea to prevent air currents from traveling up and down the mine shafts which might be affecting the plumb lines. Thus, both mine shafts were sealed at the top. Once more the figures remained the same.

After trying many methods to vary the figures and failing, Professor McNair gave up in complete bewilderment.

These series of test had not gone on in complete secrecy, and it was inevitable that news of them leaked out.

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It leaked to a reporter of the Milwaukee (Wisconsin), Sentinel, who published the story. It stated the crux of the situation as follows: "The wires were supposed to hang parallel to each other (the reporter made an error here, because this is not a fact – they should have hung closer together at the bottom), but were farther apart below the surface than they were at the surface and no one has suggested anything that seems to cover the question."

Professor McNair, when questioned stated for publication that he had proved that magnetic attraction from the Earth or the sides of the shaft did not cause the strange divergence. Then he went back to the Michigan College of Mines and wiped the whole thing from his mind.

Apparently this is true, for he made no effort to contact his colleagues or scientists to call attention to the fact that what they were teaching about gravitation and plumb lines did not actually hold true when put to a conclusive field test. However, we can forgive Professor McNair for his reluctance to pursue the matter further, because its implications are tremendous indeed. They are totally shattering to our concept of the universe, and in fact, if they can be made to hold true, make a shambles of all our physical sciences. Obviously Professor McNair was unwilling to so upset his daily routine. Nor were the United States and French governments – for as the French put it, "the value of the franc will remain unchanged, and bridges and buildings, can still be built, so why make an issue of it?"

However, Professor Hallock of Columbia University was of a different mind. He heard of the experiment through a professor at the Michigan College. He held that this actually was attraction upon the plumb lines and in a very astute article, told how easily the matter could be settled by using phosphor bronze wires instead of piano wires, and lead bobs for iron bobs.

The tamarack engineer, delighted at an opportunity to clear his mind of its confusion, followed instructions to the letter and came up with precisely the same measurements as before. When Professor Hallock was informed of this result, he retired into a dignified and stony silence. No so the Tamarack engineer. He had decided that something

was causing this phenomena, and he was going to find out what it was.

Plumb bobs suspended in a single mine shaft gave too delicate a difference in measurement, and after all, were not accurate enough to give any reliable figures on the amount of deviation (for instance, per mile) and whether or not the deviation had any relation to the size of the earth. After all, it had originally been the purpose of the French Geodetic Survey to refine the actual size of the Earth as then known to a more accurate figure. They had something in mind concerning artillery, as well as astronomy.

A second series of experiments were conducted at Calumet. This time two elevator shafts into the mine were used instead of one, those numbered two and five.

These two were 4,250 feet apart, and were also 4,250 feet deep. They were connected at the bottom by a perfectly straight transverse tunnel.

Now, plumb bobs were hung in each shaft, and measurements were made. This time it was found that the plumb lines were 8.22 inches (21 cm) farther apart at the bottom than at the top.

It did not take the Tamarack engineer long to discover the divergence that would be necessary to complete a 360° spherical circumference. There was only one difficulty – as expressed by the plumb lines, it would be the circumference of the inside of a sphere, and not the outside; Further, the center of gravity, as expressed by the angles formed by the plumb lines, would be approximately 4,000 miles out in space!

Obviously this could not be true, because if the Chinese were to make calculations based on a similar pair of mine shafts in their country, on the opposite side of the globe, the center of gravity would be found to be 4000 miles in the other direction. The center of gravity, according to the plumb lines, was a sphere's surface, some 16 000 miles in diameter. Any place, 4 000 miles up, was the center of gravity.

Can we blame the Tamarack engineer for going down in his mine and maintaining a grim silence from that moment on?

The United States Geodetic Survey crew for two years conducted further experiments, among them measuring the surface of a long lake in Florida on the theory that water conforms to the true curvature of the Earth's surface regardless of how the land may be, thus giving a true level – only to find that the water curved uphill in each direction rather than downhill. Can we blame them for deciding that to give these startling figures to the world would have no bearing on the practical problems of life, and was therefore best forgotten, since an explanation was beyond them?

However, others were making similar experiments, among them a mystic named Koresh, who claimed he was the Christ, come for the second time. In spite of his mysticism, his scientific measurements and experiments were not in the least mystic. He used the plumb bob to great advantage, for proof that the Earth's curvature was the reverse of that usually accepted as true, and thus claimed that we lived on the inside of the globe, rather than the outside. He accounted for the sun, the planets, the stars, the moon, gravity, etc. in a very elaborate set of theories, but in spite of this, his discoveries also went by the board, and are scarcely remembered today, and never mentioned in scientific circles.

Yet, the facts remain. Plumb lines are farther apart at the bottom than at the top. What does it mean? What is wrong with our concept of gravity, mass, electro-magnetism, the Earth's size and shape, our position in relation to other bodies in space, the very nature of physical reality?

From this point on, this article, we will deviate from facts, and merely theorize. We ask no one to take what we say seriously, as being presented as an explanation. The statements we will make we make only for the purpose of argument, and possibly to point a way toward further experiment in an effort to solve the mystery.

First, the Earth is a sphere (with certain very minor irregularities). We live on the outside of it. The Moon circles the earth, and the Earth circles the Sun. Some force holds them all in orbit and in their relationships to each other. It is said that gravitation is that force. It is said the Moon's orbit is maintained because the attraction of mass of both bodies is exactly counterbalanced by centrifugal force. The Earth system is maintained in its orbit about the sun by the same delicate balance. Could it be that there is no such thing as "attraction of mass?" Would not such a quality in mass have resulted, eons ago, in the whole Universe being gathered together in one crushing single body?

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Some scientists say this is what did happen, and that there was a resultant terrific explosion, and that the Universe is now expanding (as proved, they say by the "red shift" which shows the distant galaxies to be receding in every direction at a constantly increasing speed, the more distant at something like 90 000 miles per second). Does not this increasing speed disprove their own theory, because shouldn't the speed of retreat from the central point (strangely enough our own solar system!) decrease as greater distances were reached?

If there is no such thing as attraction of mass, then we are not bothered with any center of it. Could it be that the presence of mass (regardless of properties) merely causes a distortion in its immediate area such as the curvature of light noted (as predicted by Albert Einstein) around the sun during a solar eclipse? Thus, wouldn't a plumb line be deviated in proximity with mass simply by reason of the intensification of that mysterious agent of creation, an electromagnetic field? The best theory of creation to date is the theory of an electromagnetic field being placed in rotation, and thus the driving to its center, in a literal condensation process, of matter, to form a central body and planets.

Anyone who has watched a whirlpool, or a whirlwind, has noted the polar "holes" in both ends. If the Earth was so formed, would it not be mandatory that it have a hole at both poles, and possibly even be hollow? Do all planets have such holes? Do we see evidence of them in the polar caps (clouds hiding the opening, just as clouds perpetually shroud our own poles) of Mars, and the mysterious "hole clear through" Mercury, the mysterious "red spot" of Jupiter, the rings of Saturn, etc.?

If gravity (as Einstein finally said when he formed his last theory, the electromagnetic field theory) is really not a thing at all, but merely manifestations (along with magnetism) of something else (the electromagnetic field in motion), then can we not account easily for the experiment of the plumb bobs and its strange result?

Is there actually no gravity out in space (outside the whirling electromagnetic field) and also, no inertial mass, so that the recent proposal to "sail through space" on aluminum sails which catch the infinitesimal energy of the photon (light particle), and thus require no engines at all, is reasonable and practical?

Is it not true that the plumb lines are not straight at all, but follow a curve dictated by the lines of force of a whirling electromagnetic field? Is it true, that the sun is seen not via light coming to us in a straight line, but actually a gigantic curve dictated by the master vortex of the Solar System's whirling electromagnetic field? Thus it would be considerably nearer than the 93 000 000 miles we believe its distance to be?

If there is no such thing as a "straight line" in this sense of the words, then are not all our measurements of astronomical distances based on initial error inherent in the incompatibility of angles and lines in a perpetually whirling "curved" electromagnetic field?

Are gravity, magnetism and inertia only illusions induced as properties of electromagnetic fields? Is that why the plumb lines do not behave as they should; why gyrocompasses do not work within 150 miles of the "pole;" why it is proposed to "sail" the seas of space merely by the propulsive force of the "wind" of light photons; why we are developing an "ion-thrust" engine for space travel in spite of the fact that its thrust is comparable to that of a pocket flashlight?

The sun, they say, has a very weak electromagnetic field. The Moon none at all. Does this mean no gravity on the moon? No inertia? No magnetism?

A thousand questions arise from the stimulus of these two vexing plumb lines whose effects have been so disturbing on the minds of those whose lips remain sealed – because "it will not effect the value of the franc." Anyone with any basis in physics at all will find them thronging through his mind. We present these few only to provide that "initial thrust" to your thinking, and to challenge the owners of francs whose value is dubious in any event.

Lastly, might we suggest to the scientists at Vandenburg Air Force Base, where the polar satellites are launched, that here, in the doubt cast on the scientific concept of gravity, mass, and inertia, exists perhaps an explanation for six straight failures to even locate a perfectly launched missile after it passes into mysterious polar reaches. That failure is due to the inertial guidance system that depends for its function on remaining in an electromagnetic field. At the poles, might it be that there are "holes" in this field, and that your rockets are being lost in these holes, propelled by too much rocket thrust acting on little or no mass at all (inertia-wise)?

The whole thing is something to think about, and certainly not to be hidden beneath a pile of francs.

Would it be too much for us to ask that a body of recognized savants be assigned the task of conducting these experiments again, in the light of present – day knowledge and experience and implements, to correct our impressions concerning gravity, the true nature of electromagnetism, and such relatively simple things as whether or not a body of water's level curves up or down?

After all, it is our money that is being spent shooting at a target that may not even be where we think it is! A record of 100% misses for Vandenburg is subject to questioning and reevaluation!

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