

The Hundred Year Detour

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March 20, 2006

"For any speculation which does not at first glance appear crazy, there is no hope." [1]

Abstract.

To understand the process that brings about the effects of gravitation we must change profoundly the way we perceive the world. We must discard the idea of an invisible "field" that causes gravitation and develop in its place the concept of a direct mechanical effect produced by a hydrodynamic ether.

The key intellectual shift involves understanding that the omnipresent ether manifests equally well as open space or as material bodies. Thus objects cease to be separate entities and become local manifestations of the ether. The universal etheric context is always in motion and has a velocity gradient - dv/dr - at every point. It is the direction and magnitude of the etheric velocity gradient that determines the direction and strength of gravitational effects.

This perceptual shift is as difficult and counterintuitive as the shift from the Ptolemaic to the Copernican view. Once mastered, it brings the same clarification to gravitational effects that Copernicus brought to the motions of heavenly bodies.

Essay.

We are unable to understand the mechanism that brings about the effects of gravitation because we do not perceive the true nature of what we see. Our view of the world is not only incomplete, it involves a perceptual blindness that blocks any hope of understanding what is going on around us.

In order to make any progress we must disabuse ourselves of the

notion that gravitation is caused by an invisible presence called a "field." This idea is generally credited to Newton, but that does the Great Man a serious injustice. Newton certainly developed the empirical equations that predict correctly the force associated with gravitation. But he maintained that this force was transmitted directly through the medium of the ether by contact action in accordance with his Third Law. The following statement leaves no doubt on this point:

"It is inconceivable that inanimate brute matter should, without the mediation of something else, which is not material, operate upon and affect other matter without mutual contact. That gravity should be innate, inherent, and essential to matter, so that one body may act upon another at a distance through a vacuum, without the mediation of anything else, by and through which their action and force may be conveyed from one to another, is to me so great an absurdity that I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it." I. Newton. [2]

About one hundred years ago physics went astray and decided to eliminate the ether. The origin of this error has everything to do with two M's -- Michelson and Morley. Their single experiment in July of 1887 yielded a positive result, but the magnitude was much smaller than expected. They reported that the observed ether velocity did not exceed one fourth of the earth's velocity through space. [3] This has since erroneously been reported as a null result that proved the absence of ether.

Finding our way out of this muddle involves a third M who is less well known: Miller. Dayton Miller worked with Morley, and later on his own, to perfect interferometric measurements of the effects of the ether. His many measurements over several years consistently indicated the presence of an ether flow of approximately 10 km/sec, a direct confirmation of the Michelson-Morley result. The logical conclusion is that the ether

is present, but rather than being stationary in space it is moving at almost the velocity of the earth. It is partially entrained. This confirmation of a measurable ether flow has been studiously ignored by academia and has caused no end of grief. [4]

The perceptual problem we must overcome is directly comparable to the difficulty of moving from the Ptolemaic viewpoint to the Copernican viewpoint. In pre-Copernicus times it was perfectly obvious that the earth stood still and all heavenly bodies moved around it in perfect circles. The evidence was clear and overwhelming. How could anyone believe otherwise? The only problem was that this model did not really work. *Some* heavenly bodies behaved oddly -- not moving in circles at all. These anomalies led scientists to postulate that these odd astral bodies must be moving in a smaller circle attached to a big circle. But the resulting model still did not quite work. Further adjustments became necessary.

Enter Copernicus. He realized that the evidence could be interpreted differently. All one had to do was abandon the conviction that the earth was stationary. His new model, however counterintuitive, greatly simplified and clarified our understanding of the true nature of the world. This idea was monumentally difficult to sell.

With time it has become obvious that our way of understanding gravitation simply does not account for observable phenomena. At a loss to explain this, physicists are now compelled to postulate the presence of *something* other than ordinary matter in space -- first dark matter and later dark energy. Although they cannot detect these postulated entities, they *know* they must be there. Otherwise their model would be invalid. Circles within circles again. A more rational approach is to recast our understanding of physical reality in a way that puts the ether back in its rightful place. Future historians of science will refer to the twentieth century as the hundred year detour. The question before us is not "Does the ether exist?" but rather "How does the ether bring about gravitational effects?"

Now we must confront our current perceptual blindness. We

perceive the world as made up of separate objects with nothing in between. We persist in this belief despite pervasive evidence to the contrary. Hold an object in front of you and release it. It is grabbed by something and propelled downward. That something -- the ether -- is present and in constant action everywhere. The trick is to learn how to see it.

Imagine you are standing in clear, still water that comes up to your shoulders. Hold your arms out at waist level, about eighteen inches apart. With your right hand make a sharp pushing motion toward your left hand. After a moment you feel a swirl of water push against your left hand. Something is there. It moves across the space and causes an effect. But though you are looking directly down at it you cannot see it. It is all clear water: top, bottom, inside, outside -- nothing but water. It has an identity, yet it is in no way different or separate from the stuff of which it is formed. It is an *action* of the water.

Now imagine that your perceptions work differently, perhaps like Doppler radar. With this enhanced perception you can see action but you cannot see stillness. So you see the swirl as it moves between your hands. It seems to be unsupported. It appears to be a separate entity, moving and acting alone. Yet we know that it is nothing other than water, and that it is not separate from the surrounding medium.

So it is with the perceptual situation in which we find ourselves. We perceive objects as being separate things. The intellectual leap we must make is to see that all material objects are actually manifestations of, and totally immersed in, the single substance of the universe: the ether. This is by no means a new idea. About a hundred years ago many scientists suspected something like this to be the case:

"...we arrive at what may be one of the grandest generalizations of modern science -- of which we are tempted to say that it ought to be true even if it is not -- namely, that all the phenomena of the physical universe are only different manifestations of the various modes of

motion of one all-pervading substance -- the ether." A.A. Michelson [5]

In truth, not only is the ether present, but *only* the ether is present. It is not "material" in the usual sense. It is a meta substance which can manifest as matter. Nevertheless, it can be thought of as a continuous compressible fluid. At certain points sinks exist. We call such ether sinks "mass." The ether flows into a sink from all directions. In deepest space etheric pressure tends to be high and velocity low. It gains velocity and drops in pressure as it nears the sink. Thus the ether flow has a velocity gradient -- dv/dr in spherical coordinates. The general case must take many sinks into consideration -- galaxies, stars, planets, baseballs, protons, etc. The local etheric velocity gradient is the vector sum of all the dv/dr 's associated with each of these masses. This aggregate dv/dr determines the local "down" and is the underlying cause of all gravitational effects. [6]

Here is the path for returning physics to a sound footing. An ether sink has the characteristic that it can translate smoothly through a stationary ether field. It does this by increasing the flow into its leading edge and decreasing the flow into its trailing edge by the same amount. It *must* be the same amount; otherwise the net volumetric inflow rate would change, which is equivalent to saying that the mass would change. This is a key point, as made clear in the next paragraph. The rearrangement of flow lines into a sink takes place due to a physical interaction with another sink. That is, something pushed it. Once this rearrangement of flow is in place it persists indefinitely with no tendency to revert to the completely symmetrical state. This is the basis of Newton's First Law.

The ether sea is always accelerating at every point. This makes the situation more complex. An accelerating ether sea has, at any given location, a velocity gradient. In spherical coordinates this is dv/dr . . If an ether sink is held stationary here the background etheric velocity gradient makes it impossible to adjust the leading edge and the trailing edge to exactly match the ether velocity at both edges. The result is an irremediable force in the positive direction of dv/dr . This is the direct kinetic cause of gravitation.

It is important to note that the velocity of the local ether flow is not related to gravitation. A sink can adjust for the fixed velocity. In this sense the ether velocity disappears. It is the velocity *gradient* that does the trick. [6]

This approach brings clarity to the question of gravitation. The question it leaves us with is "Where does the in-flowing ether go?" The answer to this requires an even greater intellectual leap. One can envision our realm, where ether sinks make up the structure of the physical world, as one side of a much larger picture. Coexisting with our realm is a mirror realm where ether sources manifest as the basis of physical reality. Every sink here is a source there. Everything balances. There is no gap anywhere. There is only the One Thing.

References:

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