

# THE FOUNDATION OF PHYSICS AND THE EXPLANATION OF TIME

By Gerry Klein

Consciousness is defined as the ability to receive and respond to outside stimuli.

All people have existing within the deepest parts of their minds, brains, and consciousness a basic frame of reference with which they judge and evaluate information as it becomes available to them through their sense organs. Most people would accept this and perhaps say that, yes, I can see that my race, creed, religion, heredity and cultural upbringing have instilled within me certain basic views about life and the universe that I now accept as a valid basis for understanding and living my life. Perhaps some would admit further that others might have differing basic views that necessarily conflict with theirs and let it go at that. If you pressed the issue for a person to define and establish what his or her most basic conceptual framework is, the basis upon which they will judge any and all sensory input you would no doubt have many confused and contradictory musings on an item most people have never considered.

“It is not, I believe, too much to say that all the vital problems of philosophy depend for their solution on the solution of the problem of what Space and Time are and more particularly how they are related to each other.”

Samuel Alexander  
Page 35, Space, Time, and Deity

“In our attempt to arrive at an idea of the constitution of the Universe, there are two questions that constantly present themselves to our minds; namely, the question of Time and that of Space.”

Thurman Fleet  
Page 15 Conceptology Ph 3

Luckily Immanuel Kant spent considerable time on this problem and said words to this effect; that the foundation of our comprehension of the sensual world we experience is based on our prior concepts of space and time. Objects (the thing in itself, what constitutes its “real” existence) outside of our conceptions of those objects in space and time are for us unknown. And further that they, objects, will forever remain unknown in their essence as long as that basic conceptual foundation exists because there is no evidence that the objects so considered as we know them even have existence without that framework of space and time which we impose on them in order to see, sense them at all. He established that as long as such a condition exists, the form of our receptivity is space and time, we shall never get any closer to what constitutes the essence of a thing, the thing in itself. He concluded that space and time have no independent existence apart from our conceptions of them in intuition. Kant makes no mention of motion and any applicability of it to the separated definitions he gives to space and time.

As an analogy, what Kant said, was that we see the motion of the sun moving across the sky from east to west and have concluded that the sun moves across the sky from east to west. Yet there is no way to established that that is what is happening at that level, and furthermore that we can never approach any closer by this method, that of observing the sun's motion across the sky, what is the thing in itself, the actual movement of the sun.

The premise of this paper is that there exists a fundamental unifying principle on which the universe we postulate as existing, because we experience it, is itself based. That principle whether comprehensible or not to us at the present time must exist otherwise there could be no interaction between the parts and one thing could not affect any other thing. This universal principle Religion sees as God. Science sees it as a universal Energy. Both of these ideas have common attributes. As presently understood neither is considered to be known in essence, both are seen within their respective domains as responsible for everything that is known to exist or postulated to exist and through admitted law for the interaction of all things. Both have no objective existence apart from objects and their behavior, whose reality we attribute to the God and Energy whose existence we have postulated from inductive reasoning from objects in the first place. And the two concepts have never been successfully integrated at least not objectively although some have always claimed they have accomplished it subjectively.

The objective of this paper is twofold. To show that that situation, a separation of the physical world of science from the non-physical world of theology and religion, is the logical result of a presently held unrecognized, unconsciously assumed to be true basic concept operating within the subjective fabric of the human personality, and to present a new basic concept, the opposite one in fact, and show that that is the one to which nature conforms. To show also that the time aspect of motion gravitates, evolves and manifests as consciousness.

The basic conceptual framework through which mankind interprets the universe he experiences through his sense organs is the idea of the actual existence of a STATIONARY FRAME of REFERENCE independent of his conception of it. The stationary frame of reference; an infinite space where time lasts forever and no motion exists. Nature does not conform to this frame of reference because no such absolute stationary frame of reference has been found to objectively exist. This was the observed result of the Michelson-Morley experiment. As a necessary result then the opposite condition must exist a MOVING FRAME of REFERENCE. The moving frame of reference, where time and space are united in motion as reciprocal aspects according to the formula  $V=S/T$  and motion exists. For example, if the sun is proved to be stationary then the only logical way to explain its APPARENT movement across the sky is to assume that it is the earth that is moving. But the scientists of 1887 were unable to conceive of that type of explanation for a very simple reason. They were unaware of the existence of the stationary frame of reference within their own consciousness and used that framework, stationary, they used it subjectively to explain objectively the results of an experiment that just proved objectively that such a frame of reference is NON-EXISTENT.

This new basic conceptual frame of reference is applicable to all because of its universal nature. The stationary frame of reference on the other hand is only applicable to the evolutionary stage man has presently reached. It is totally subjective and the result of homo sapiens reaching the self-conscious stage of his evolutionary progress. This unique position, the self-conscious stage of evolution, is characterized by separation and that separation is caused by the basic frame of reference with which we conceive of our universe. Space and Time we separate, define independent of each other, and as a result our world is fragmented for with motion Space and Time are unified.

The necessary result of the acceptance of this stationary frame of reference as the foundation for building upon is that all the buildings built on it will necessarily be separated from each other because the foundation itself is a separation of the most fundamental existents of the universe, space and time.

The moving frame of reference where time and space and motion are unified as in the natural foundation can support meaningful interaction at all levels because with only one foundation all building will be in harmony. And seeing as how nature conforms to this way anyway (we just don't see it because of limited concepts), it will be readily accepted once understood.

Now if it can at this point be realized that the space aspect of motion condenses, gravitates into MATTER, (we see matter gravitate), and the time aspect of motion condenses, gravitates into CONSCIOUSNESS, (in a reciprocal relationship what applies to one applies to the other), and that both are evolved expressions of motion, the sole existent constituent of the universe, you will have a one sentence explanation of what are the benefits of seeing the world through the frame of reference that corresponds to nature. Matter and consciousness, quantity and quality are thus united within a meaningful relationship. One that is as exact and predictable as in motion itself because it is just that same motion evolved. 10 miles per hour is an exact and predictable relationship between space and time and motion. After one hour you have traversed 10 miles of space or reciprocally after you have traversed 10 miles of space, time in the amount of one hour has passed and you are in motion. If you double the speed you half the time distance remaining the same. Without such a conceptual understanding of motion  $V=S/T$  there could be no relationship at all between time and space and the motion of objects even which we sense as their movement, (again because of the idea within of a stationary frame of reference), across our field of vision, would be incapable of explanation. This is the motion with which Galileo and Newton each expanded on objectively, motions of objects. The whole point of this presentation is to apply that objective idea, the existence of motion as universal, the moving frame of reference, subjectively also and then the whole situation, (our perceived position within the universe) clears up very dramatically. To take what we know about motion from studying objects moving and apply it, the same reciprocal relationship between space and time in motion, apply it to just motion, the existence of motion without objects. Then will your subjective and objective worlds have the same foundation, motion.

There is one major stumbling block to most people and that is it involves the MOTION of NOTHING. Motion prior to something. This is again the moving frame of reference where the frame of reference is itself motion. What's that you ask, "How can nothing move if there's nothing to move?" Well how can you say it's not moving. If there is nothing there at all how can you say it is not moving? Who can tell the difference between nothing moving and nothing not moving if there is nothing? The answer is you can't so either frame of reference is just a concept existing in our minds! The big difference however is that the moving frame of reference corresponds to the natural objective existing frame and is not just a creation of our mind. As an analogy the difficulty of communicating this concept is similar to Abbott and Costello's skit, Who is on first? Or Who is on first!

Again, at present all peoples have within them the same basic frame of reference already and that frame of reference is presently not understood, because it is unrecognized, and is the single factor that renders the present inability of both science and religion to solve the problems facing humanity. It prevents the two from uniting in meaningful relationship because it is based on the idea of separation. The objective inductive reasoning of science and the subjective deductive reasoning of religion are not in the harmonious rapport that the existence of one universal principle presupposes.

The frame of reference, to which we all adhere, unknowingly is the STATIONARY FRAME of REFERENCE. By this frame of reference it is possible to say that the rabbit running across my field of vision is in fact moving. I know the rabbit is moving because somewhere within my mind is the IDEA of the existence of a place, a space which contains no things and time exists forever or time is stopped forever, same thing. Again you have within your conceptual framework the IDEA of a space where in there is no motion and as a result there is no something moving. Thus you can conceive of the independent (independent of you) motion of the rabbit. This is where time and space are separated and because of this separation both space and time acquire independent definitions. For what else is stationary, but no motion and the only way to have no motion is to take the entities that make up motion, space and time, according to the formula  $V=S/T$  and see them as separated non-related existents. This then is the albeit unknown, stationary framework through which mankind is and has been viewing itself and the world around it. This framework has been established (unquestioned and assumed to exist outside and independent of the observer) by the acceptance of the evolving human race of a basic idea that this is a universe of matter existing within an independent framework of space and time. Space is an independent container for the matter in it and time flows on independent of that space. Thus the attention has always been on matter and not on the basic concept used to comprehend the matter, the idea of the stationary frame of reference. With the basic concept one of matter the next question is, what is the nature of the motions that apparently animate the matter we see? Or what causes the motion of anything? The answer then is understood with the only frame of reference available the assumed to be stationary one where in time and space are separated resulting in no motion so that motion must be introduced from the outside in the form of an UNKNOWN be it GOD or ENERGY. So that our attempt to understand this universe

is based on only one polarity, one of no motion, with results comparable to trying to use a flashlight by connecting to only one side of the battery.

It appears that our perception of reality is a direct function of the basic concept through which we view that assumed independent reality. If the assumed basic conceptual framework through which that reality is viewed is the stationary frame of reference which is itself a separation of motion into the opposites of space and time resulting in independent and unrelated definitions for both space and time then why be surprised that the concepts we hold within our mind's eye divorce us from reality.

The concepts you hold act as a preconceived plan that governs and limits your definition, knowledge of law and principle and even the experiments you conceive of to prove out your knowledge. The conclusions are interpretations one draws from experimental truthful, observations. These interpretations are always in harmony with your concepts at the time and are not necessarily in harmony with the observed results of the experiment. This is the reason for so many theoretical explanations, interpretations of the same physics. This is the reason that your concepts with which you judge, not just experiments, should be universally applicable by conforming to the way nature is. You will know how universal your concepts are by the harmony you experience when you compare diverse parts of your science and religion and, or, your life.

The preconceived plan that mankind has been operating under is one of separation and has not been recognized because it operates at the subconscious level. The reason the universe makes as little or as much sense as it does is because of that basic concept of the separation of the most fundamental concepts through which we view that universe, space and time.

This preconceived plan, the stationary frame of reference, evolved unconsciously and as a necessary result of consciousness reaching to the self-conscious level and it expresses outward as our present conceptual knowledge of the world we inhabit. In other words our present conceptual knowledge conforms to this unconscious, and unrecognized preconceived stationary frame of reference. This we have been totally unaware of. Further all of our attempts to rise above the opposites, good-bad, my way-your way, creator-no creator, science-religion, waves-particles, have been based, up until the present time, on this stationary frame of reference which has as its base the separation of the most basic of opposites of motion, time and space so that no relation between them is at all possible. At least no relation that conforms to the reciprocal aspects of time and space in motion.

“The only relation between space and time of which we have any actual knowledge is motion, and in motion space and time do have a reciprocal relation.”

Dewey Larson, Preface xi Nothing but Motion

Will that not give us the feeling of isolation and frustration we experience separated off from a real universe where all is motion and the conceptual base I view it through is STATIONARY.

The stationary frame of reference does not conform to reality, the moving frame of reference does and this is what the MM (Michelson-Morely) experiment discovered.

The MM experiment was an experiment about motion not about the behavior of light. The light itself is just an indicator of the motion back of it. The observed result of the experiment was that no interference fringes were seen. As a result of that observation conclusions were developed and used to explain what was thought to be a unique characteristic of light (electromagnetic radiation) only and as such the conclusions only applied to high speed and not to our low speed everyday existence. And through those conclusions relativity and quantum science came into existence and the link between the laws of science and everyday experience grew more separate. Rather the experiment revealed a unique characteristic of motion. From the observed results conclusions were developed that were in harmony with the idea that the experiment determined something about the nature of light, it did but only in the way a crushed bullet reveals that at the end of its journey it hit something. The bullet hitting or missing its target is an indicator of the motions, trajectories which it lawfully follows according to the laws of motion back of it. The observations of the light are only results of the motion back of the light. Any conclusions must therefore refer to motion itself because the experiment was set up in the first place to determine motion, the motion of the earth through a supposed stationary ether. In the same way that the motion of projectiles analyzed by Galileo and others was not an analysis of the projectile per se but of the motions back of it of which the projectile is only an indicator of. Galileo was able to divorce the projectile itself from the motion the projectile described and it was the motion that was analyzed.

The MM experiment revealed a characteristic of motion that was so unexpected (its existence apart from objects) and light itself, the indicator of the motion so mysterious, that the two concepts have been forever entwined. The observed result of that experiment and others have established that  $c$ , the speed of light is a universal constant and is measured at 186,000 miles per second regardless of the motion of either the source of the light or the motion of the observer. So that what was established was that it was the speed, 186,000 miles per second that was constant (not the light) and that speed, motion, was independent of either the motion of the source (an object) or the motion of the observer (another object). This should have been the conclusion that was reached, the real existence of a motion of 186,000 miles per second independent of any objects so involved. But if that's the conclusion what possible interpretation can there be and what are the implications. Well the consensus was and still is that the experiment showed that there is no stationary absolute frame of reference from which to establish who or what is really moving and how. No motion was shown not to exist objectively. The stationary frame was shown by inference from observation to not exist objectively. So if that was what was shown to be non-existent, then what must be existing? No motion was shown not to exist objectively yet this concept was viewed through the subjective concept of a stationary frame of reference residing within the minds of the interpreters of the

experiment and prevented the idea of the concept of pure motion, motion without objects from coming through. The answer, as to what must have been shown to be existing is motion. Motion was objectively shown, the primary stuff of the universe was shown to exist and it was motion, and it was absolute, and it was independent of objects and it was unrecognized as such. And to be motion it must be in motion and it is, expanding outward from all locations at 186,000 miles per second an exact reciprocal relationship between time and space. This the experiment discovered, the outward constant expansion of space and time at 186,000 miles per second irrespective of the relative movement of any location toward any other location. This constant expansion of space and time in motion travels outward like the expanding surface of an inflating balloon. This constancy of expansion, this space time progression, the motion of nothing is from all locations whether occupied or not and is the reason no motion of objects could be related to this meaningfully, there is no stationary frame of reference that exists. A nothing not moving, the ether, does not exist. Thus what does exist and is moving and is motion and is absolute can now be used as a frame of reference, THE MOVING FRAME of REFERENCE. This corresponds to reality. Now when you can match that objective result with your subjective concepts you have got it, objective reality is in perfect harmony with your subjective concepts. This equates and evolves to bringing the quantity of the world in harmony with the quality. Quantity is always spatial, matter is objective and quality is always temporal consciousness is subjective.

We know that all galaxies are rushing away from us and each other so space is expanding far away from us but the reciprocal of space is time and time we sense as rushing by us right here exactly the reciprocal result to be expected when time and space are viewed as aspects of motion.

Again this is what happened. The successive interpreters of the Michelson-Morely experiment have been unaware of the existence of the stationary frame of reference within their own consciousness and used that framework, stationary, they used it subjectively to explain objectively the results of an experiment that just proved objectively that such a frame of reference is NON-EXISTENT.

An example to consider

$$E=mc^2$$

Energy in its essence is unknown except as expanded mass. Mass in its essence is unknown except as condensed energy. Both are related in the equation  $E=mc^2$  and in that relationship the only thing that is known in its essence is motion. The motion of an exact reciprocal relationship between time and space of 186,000 miles per second.

The equation  $E=mc^2$  shows the relationship between mass and energy is governed by the speed of light. Most people think that it has something to do with light or electromagnetic radiation. It does not. The connecting link is motion at 186,000 miles per second and not light. It is  $c$ , the SPEED of light that is the defining link. The connecting link between mass and energy and the only reason each can be converted into the other is motion. The

connecting link between them is what they are composed of. The two entities are changeable one to the other through motion because the essence of both is motion. And the most primary motion is the space time progression. The motion of nothing as the basic fundamental existent of the universe. Space and Time, and their evolved aspects, quantity (Matter) and quality (Consciousness) united logically, mathematically, conceptually and reciprocally in motion.  $V=S/T$ .

A word about the sources of the ideas developed and presented here.

The idea of the moving frame of reference, the motion of nothing, is from the work of Dewey B. Larson and his Reciprocal System of Physical Theory. This Portland Oregon engineer wrote a series of books detailing the results of his 50 year investigation of the idea that motion itself, not matter, is the sole basic constitute of the universe. He arrived at such a position when he realized that the only way to give meaning, a conceptual understanding, to mathematical formula he had derived from an investigation into properties of chemical compounds was to assume that time is the reciprocal of space. This itself he says was initially meaningless and confounding to him until he realized that in motion (the only real knowledge we have of the relationship of space and time) space and time are reciprocally related.

Larson says:

“The root of the present trouble is conceptual. The elaborate and versatile machinery of modern science has been unable to solve the more difficult problems of the universe of space, time, matter, electricity, and so on simply because all its efforts have been based on erroneous assumptions as to the nature of these entities---space, time, matter, electricity, etc.---with which it is dealing.”

#### Page 24 New Light on Space and Time

The erroneous assumptions have been a result of the unconscious belief in the existence of a Stationary Frame of Reference operating as the basic concept within our consciousness.

Hence the philosophy of Concept Therapy, working with concepts, fixed ideas. The idea of the necessity of a new conceptual interpretation of existing phenomena is based on the course of study called Concept Therapy and Conceptology. This course of instruction was developed over a fifty-year span by Dr. Thurman Fleet of San Antonio Texas and as the name implies is the study of the relationship and resultant situation that exists between concepts, fixed ideas in the mind, and the environment in which such concepts necessarily find outward expression. It has explored fully this relationship and has as its working premise the evolution of consciousness, which proceeds within the human psyche by corrected concepts through the use of self-directed reason. This is conscious evolution.

It is more important to know how you think, Know Thyself, than to know what to think. For if you know how to think, you will very soon know what to think about.



Larson's claim that the reciprocal system of physical theory is the "complete theoretical explanation of the physical universe" balances with Fleet's contention that consciousness is existent within the most basic unit of both matter and energy and evolves consciously in mankind through corrected concepts in harmony with natural law through his physical form. The physical, matter, and the non-physical, consciousness exist together and can only be separated theoretically for purposes of analysis by the human mind just like space and time in motion. The physical world is the space aspect of motion condensed into matter and is reciprocally balanced by the Non-physical, the time aspect of motion condensed into consciousness. Fleet has done to consciousness what Darwin did for the evolution of physical forms and Concept Therapy qualifies as the missing science of consciousness referred to below. So that a true science of matter is mated to a true science of consciousness and knowledge of one aspect becomes knowledge of the other as in any reciprocal the product is one, UNITY. Example; Space has 3 dimensions therefore time being the reciprocal of space in motion must also have 3 dimensions. So that if matter in space manifesting as the movement of things is 3 dimensional, consciousness in time is also 3 dimensional manifesting as actions, causes of movement, based on instinct, reason and intuition within the evolved forms of that matter. "The Spirit of God moved...." And is still moving. The space time progression, the motion of nothing.

Multiple interpretations of diverse phenomena are only possible because the one law to which all the phenomena are applicable is not clearly understood or perceived. Example, the movement of the planets etc. and projectiles on earth were never clearly understood until the same law, universal gravitation united them. When the law governing all things is clearly understood only one interpretation will fit and that is the correct one.

"For physics to be able to accommodate something that is as foreign to our current physical picture as is the phenomenon of consciousness, we must expect a profound change---one that alters the very underpinnings of our philosophical viewpoint as to the nature of reality."

From page 406 *Shadows of the Mind A Search for the Missing Science of Consciousness* by Roger Penrose

Missing, hardly, unrecognized definitely.

The change from a subjective stationary frame of reference to a subjective moving frame of reference, the one that conforms to nature objectively and was discovered by the Michelson-Morely experiment of 1887 is just such a profound change. And the two systems of thought of Larson and Fleet when they combine reveal the logical extension and the necessary result of just such a dramatic but applicable change of the basic concept. For either one to attempt to go it alone at this point is to continue the separation, male and female must still combine for new original creation. Holding on to one polarity only can never deny the other but it does prevent conception and creation. The inductive and deductive aspects must necessarily combine when their respective evolution to the mature stage is reached. The induction of an evolved consciousness with the deduction of an evolved science of matter.

One shows exactly how to work with ideas (evolved consciousness) and the other has the correct basic ideas (a science of matter based on motion that is so naturally lawful that it becomes a deductive science such as mathematics) necessary to work with to change from where we are to where we need to go. From a dualistic separated world of space and time, science and religion, to a world, a universe unified. Our individual worlds and our collective world made whole, a unity. By motion.

The history of physics is the history of the study of motion. It is the history of the evolution of the ideas, the evolution of our concepts, of motion. Why stop now?