



SHAPE JOURNAL

THE PROBLEM OF THE REDSHIFT

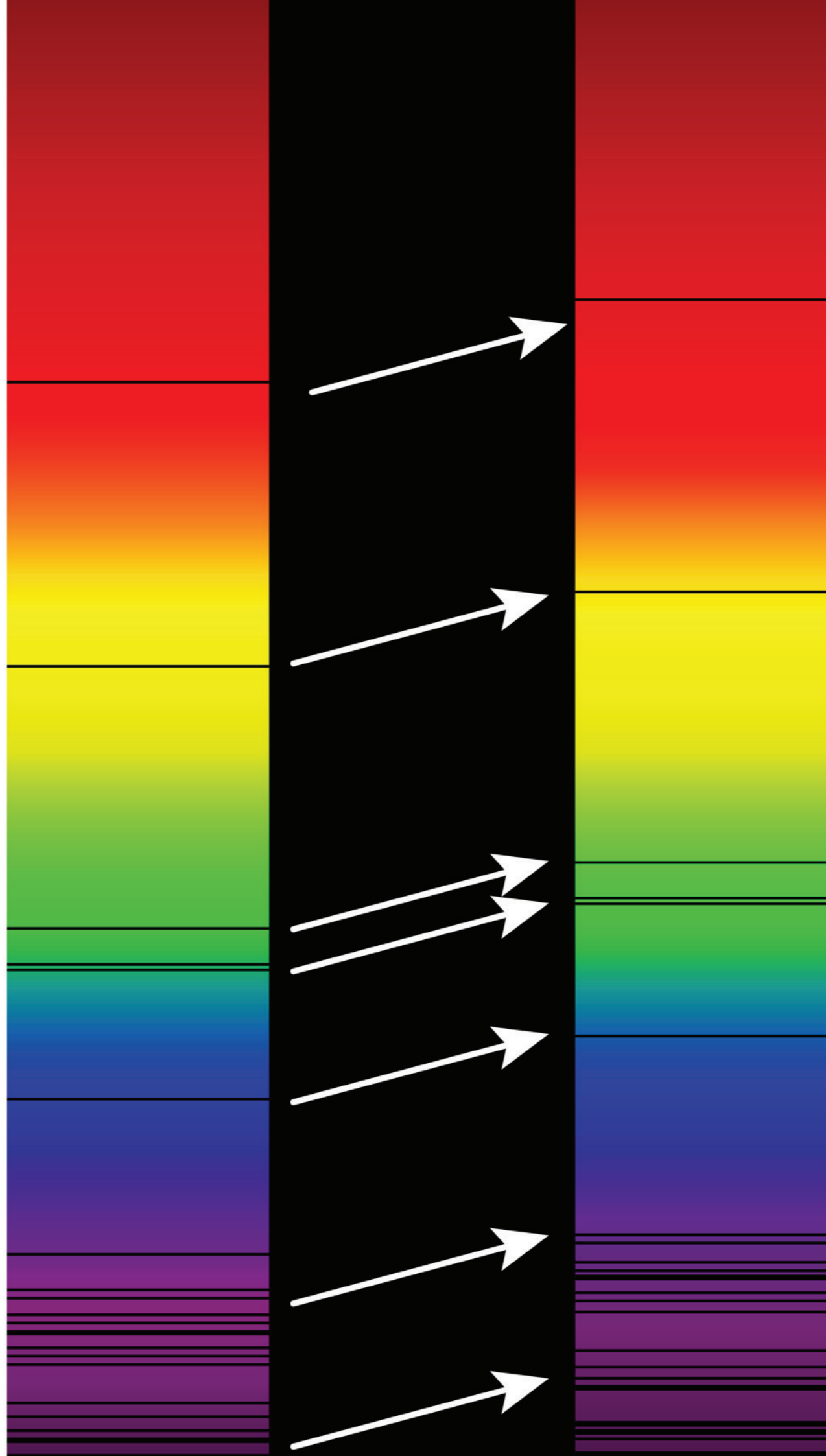
WHAT IS ENERGY / REDSHIFT ILLUSION / THE DOPPLER SHIFT
NEUTRITRON MODES AND PROPERTIES / MULTIPLE MODELS / A NEW THEORY

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The Problem of the Redshift

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Introduction

The Problem of the Redshift



Welcome to Issue 37 of the **SHAPE Journal**.

The assumption that Space is totally empty has many consequences, *theoretically!* For example, it leaves many crucial questions entirely unaddressed – such as the Universe-wide Propagation of Electromagnetic Radiation, and, the even more inexplicable – Action at a Distance.

To those in our discipline, who believe that explanation of phenomena is their primary task, such a shelving of vital questions is completely unacceptable, and always has been. Naturally, Mankind raised his view from everyday problems to consider the meaning of his World, and though his remarkable Thinking was originally created and developed in the everyday problems of survival, he did begin to apply it to such much more intangible questions of cause, effect and meaning. He was, of course, ill-equipped to address such questions, for his remarkable developments had been determined by Natural Selection, as a unique animal – a hunter/gatherer in a hostile World. Nevertheless, though very slowly at first, he did begin the attempt.

He did have an excellent basis for thinking, for unlike almost all other animals upon this earth, he evolved as a biped-with-hands, and as these became ever more appropriate to innumerable manipulations, he not only could handle natural things as “tools”, but also even begin to make them for himself. Such activities consequentially meant that Selection was towards an increasingly, and even greatly, developed brain, and he began to consider his thinking as his most useful means of addressing all the problems he either faced, or chose to address.

Long into this process, he turned his attention to the heavens as well as the conditions in his own world, and attempted to make sense out of both.

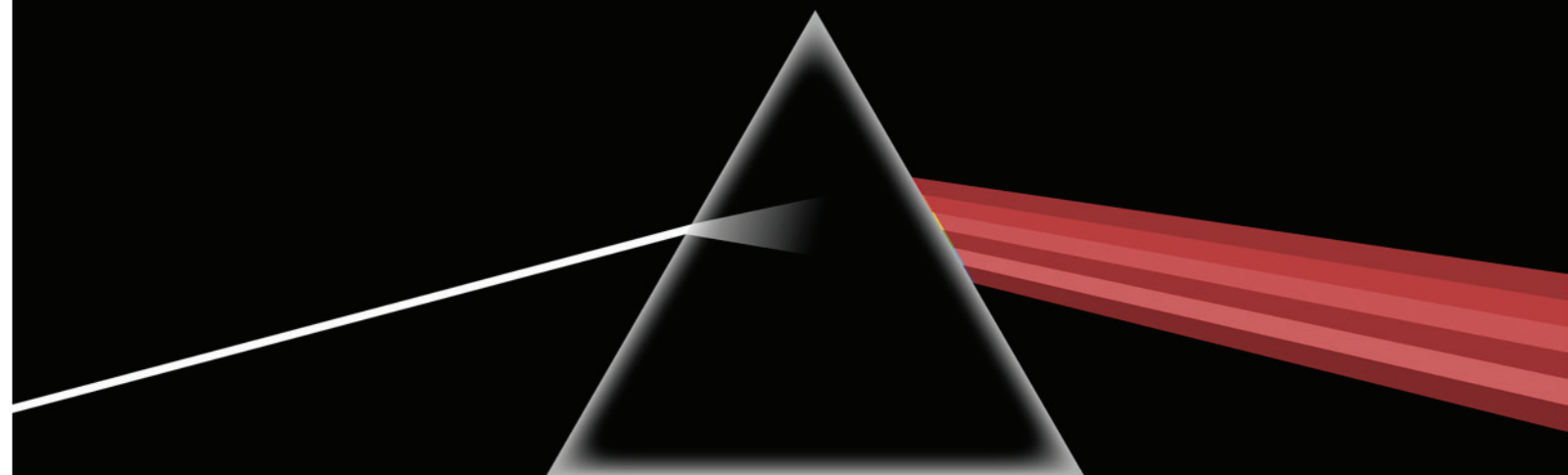
To explain the propagation of Light from outside of his World, he postulated a medium – *The Ether*, which he considered as somewhat like water in the way that it could propagate wave-like disturbances.

Yet, try as they might, these thinkers (the scientists), were unable to detect such a medium, no matter how many different ways they employed to do it.

Nevertheless, assuming not only such a medium, but also one with both vortices and electrical particles, the scientist, James Clerk Maxwell, derived a set of equations, which, somehow, survived the subsequent demise of the Ether, which could not be detected, and these are still used to this day.

They are, of course, pragmatically used, without a current theoretical basis, but that is not Science. Even without the physical existence of the Ether, what was contained in Maxwell’s equations, derived from his conception of it, must have contained “some truth” – or to put it more exactly must have had sufficient Objective Content – aspects or parts of the truth, to deliver such useful equations!

Indeed, philosophically speaking, Objective Content is what Science is really about.



There is certainly NO direct route to some final Absolute Truth, and definitely NOT for Mankind: he was not evolved (selected-for) the addressing of such tasks, and would, somehow, have to equip himself to very slowly begin to address them. Even so, Mankind had very early on developed a method of taking aspects or bits of truth, and using them on the basis of constructed (invented) bases, assumptions, and principles, which he believed objectively underlay what he knew. But, of course, these were not, and even their more modern counterparts also still are NOT, the Truth, but can contain enough Objective Content to be valuable and even useful in certain contexts.

It must also be made absolutely clear, that such constructions will also and inevitably deliver barriers to further developments. Though they may well be productive for extended periods of fairly limited uses, they will always, in the end, grind to a halt, in what seem to be insuperable impasses.

Being composed of intelligent beings, Mankind did not let such impasses finish the process, and learned to live with the contradictions that inevitably accompanied such impasses, and use his evidently incompatible concepts when they worked. But, such a Postmodernist approach stopped real, theoretical understanding dead! Certain famous instances were embodied by these impasses for generations of scientists

The two still current, characterised as Wave/Particle Duality, are those revealed in the Double Slit Experiments, and in the Dark Energy implications of the revealed accelerating Redshift changes in light from very distant Galaxies.

So, having succeeded in addressing the first case (The Double Slit Anomalies), here are my initial thoughts in an attempt at addressing the second of these – The Redshift!

Jim Schofield Feb 2015

What is Energy?

Perhaps the most distinctive feature of Energy is its apparent ability to transfer from one recipient or receptacle to another – and even from one mode of existence to another, without any obvious difficulty.

You can see why heat was initially seen as a fluid – called *Caloric*, which could be “poured” between receptacles without any losses.

The principle – “Energy can neither be created nor destroyed”, was quickly established by scientists, as they noticed its ease of transfer from one mode of existence to another, or even to several at once. Even in these abstracted conceptions, such as Heat, Light, or even Electrical Energy, such a Principle seemed to be inviolate.

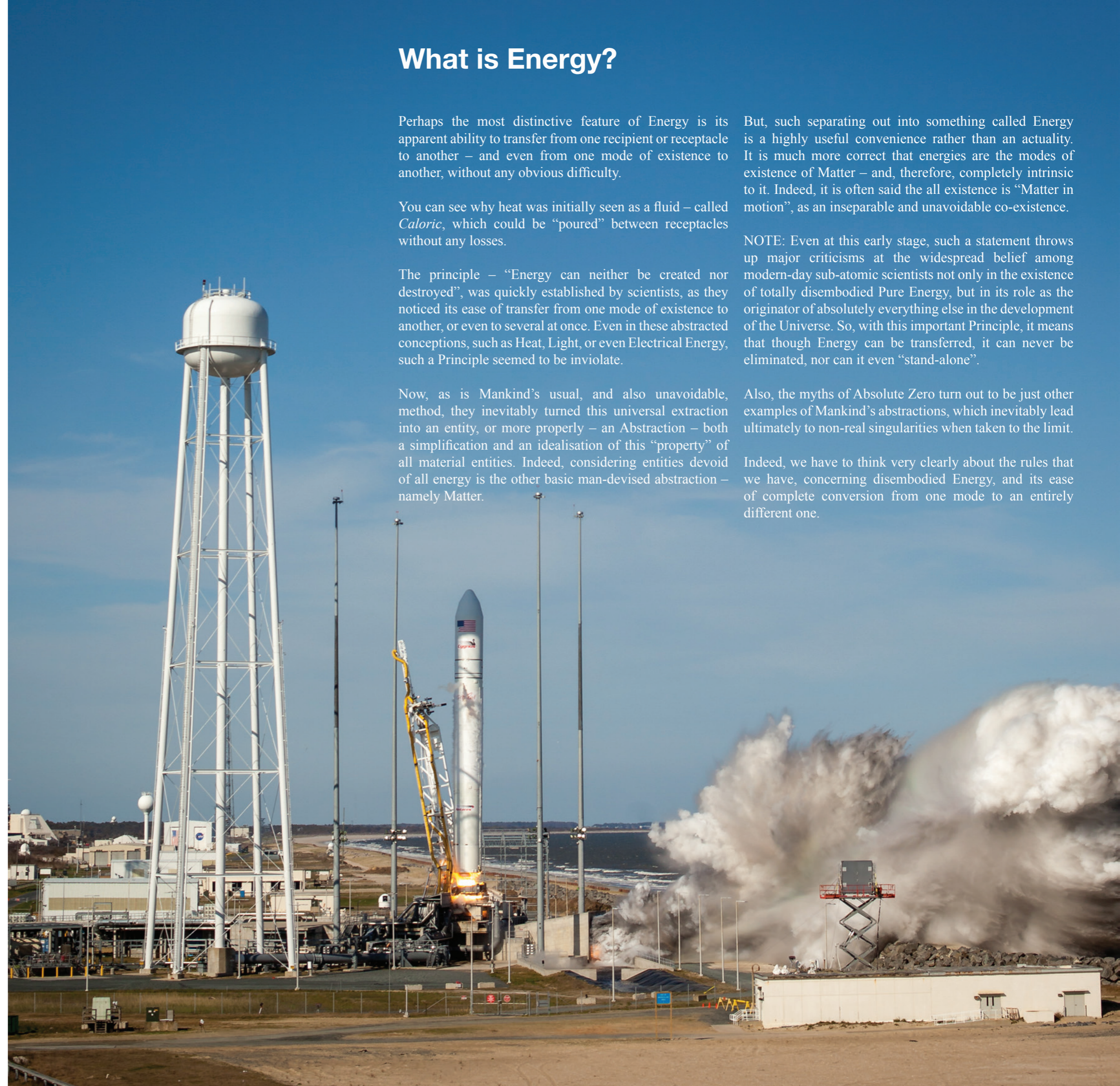
Now, as is Mankind’s usual, and also unavoidable, method, they inevitably turned this universal extraction into an entity, or more properly – an Abstraction – both a simplification and an idealisation of this “property” of all material entities. Indeed, considering entities devoid of all energy is the other basic man-devised abstraction – namely Matter.

But, such separating out into something called Energy is a highly useful convenience rather than an actuality. It is much more correct that energies are the modes of existence of Matter – and, therefore, completely intrinsic to it. Indeed, it is often said the all existence is “Matter in motion”, as an inseparable and unavoidable co-existence.

NOTE: Even at this early stage, such a statement throws up major criticisms at the widespread belief among modern-day sub-atomic scientists not only in the existence of totally disembodied Pure Energy, but in its role as the originator of absolutely everything else in the development of the Universe. So, with this important Principle, it means that though Energy can be transferred, it can never be eliminated, nor can it even “stand-alone”.

Also, the myths of Absolute Zero turn out to be just other examples of Mankind’s abstractions, which inevitably lead ultimately to non-real singularities when taken to the limit.

Indeed, we have to think very clearly about the rules that we have, concerning disembodied Energy, and its ease of complete conversion from one mode to an entirely different one.



For, such “transfers” are an illusion. Energy truly is the mode of existence of Matter. It is most certainly changes in the material entities involved, which makes the Energy look as if it is an independent transferable entity, in itself. Indeed, one such a change in our conceptions is admitted, phenomena such as Resonance take on a very different nature. Why does the energy “change horses” in midstream?

But ultimately, Heat, for example, was explained in terms of increasing the amplitudes of existing oscillations or the promoting of orbits to higher levels, when it went up, and decreasing these, when it went down.

NOTE: Once more, the inseparability of these two aspects of Reality, pose unanswerable questions at zero energy content. Do things no longer oscillate and orbits dissociate totally? And, what would then be the spatial arrangement of the resultant, motionless Matter?

In other words, our abstractions such as Energy were neither an existing separate thing, nor a transferable fluid. Energy was involved in a mode of existence of real, material entities, which could transfer between entirely different forms of Movement to handle the Energy =”as if it was a separable “fluid”.

We found it both useful and conceptually possible to consider it as if it was a fluid being decanted from one receptacle and mode into another. But, it was no such thing! Such abstractions show both the efficacy of their conception, along with the inadequacies that emerge when such ideas are taken to, and beyond, the limits of their applicability.

Perhaps the simplest, yet still sufficiently appropriate description, was that it is a measure of the involved motion of the matter in one of its stable modes As we know it can be involved in the speed of translational movement – Kinetic Energy, or even the potential of movement caused by promotion to a position involving the potential of movement if the current holding restrictions are removed – Potential Energy. It could also be involved in the capture of one body by another, by means of the balance between K.E. and P.E. in an orbit of one body about the other.

In all of these, the amount of Energy will be the amount of movement, real or potential, involved. Oscillations will have their amplitudes increased by extra energy transferred in, and will be promoted to a higher energy level, in such transformations.

So, in this relatively simple narrative, the Energy is a measure of intrinsic movement! But, of course, as abstracters of everything that we recognise as unchanging entities, we will separate Matter and Energy as different abstractions.

We then talk of Energy being transferred from one thing to another, and slip easily, and mistakenly, into the illegitimate extreme of Matter without Energy, and Energy without Matter. But, the question arises – “Can we do that?” Can we really have inert Matter totally without any movement, or movement without any material thing being involved?

From the position outlined here, the answer has to be no.

So, what are we to make of our mathematically-delivered Singularities, such as, the Origin of the Universe caused by an energy-only Big Bang? Or, we could also consider the blithely described Absolute Zero in temperature, which is Matter totally devoid of any real, or even potential, movement? Do they really exist?

Remember, the Big Bang isn’t supposed to be an explosion, but an initial concentration of Pure Disembodied Energy confined to a “dimensionless dot”. Immediately, we seem to have at least a couple of meaningless concepts here. First, Pure Energy entirely without Matter! What is that? And secondly, a “place” that is simultaneously strictly localised into nowhere, yet also manages to include everywhere possible! Thereafter, all sorts of inconceivable processes move these impossibilities until they produce the entirety of our truly massive Universe.

How can all of this possibly be true? Of course it can’t! And, can the holy Second Law of Thermodynamics really deliver an ultimately dead-end and inactive Universe? Again, the only sensible answer has to be, “NO!”

All these conceptions occurred when a particular product of the evolution of Reality, namely Mankind, mistook its helpful ideas for Real Things, and used them to attempt to explain Reality in terms of its own, admittedly brilliant inventions – Abstractions!

Now, these abstractions cause us to miss crucial processes, which do not fit simply into our consequent versions of Reality. For example, - Resonance!

If Energy is available in one mode of matter, how can it move swiftly from where it is to some other, somehow, more “conductive” situation, which because of having certain natural possible oscillations suited to its form or forms, can easily accrue the Energy resident elsewhere into that “ready-to-go” structure?

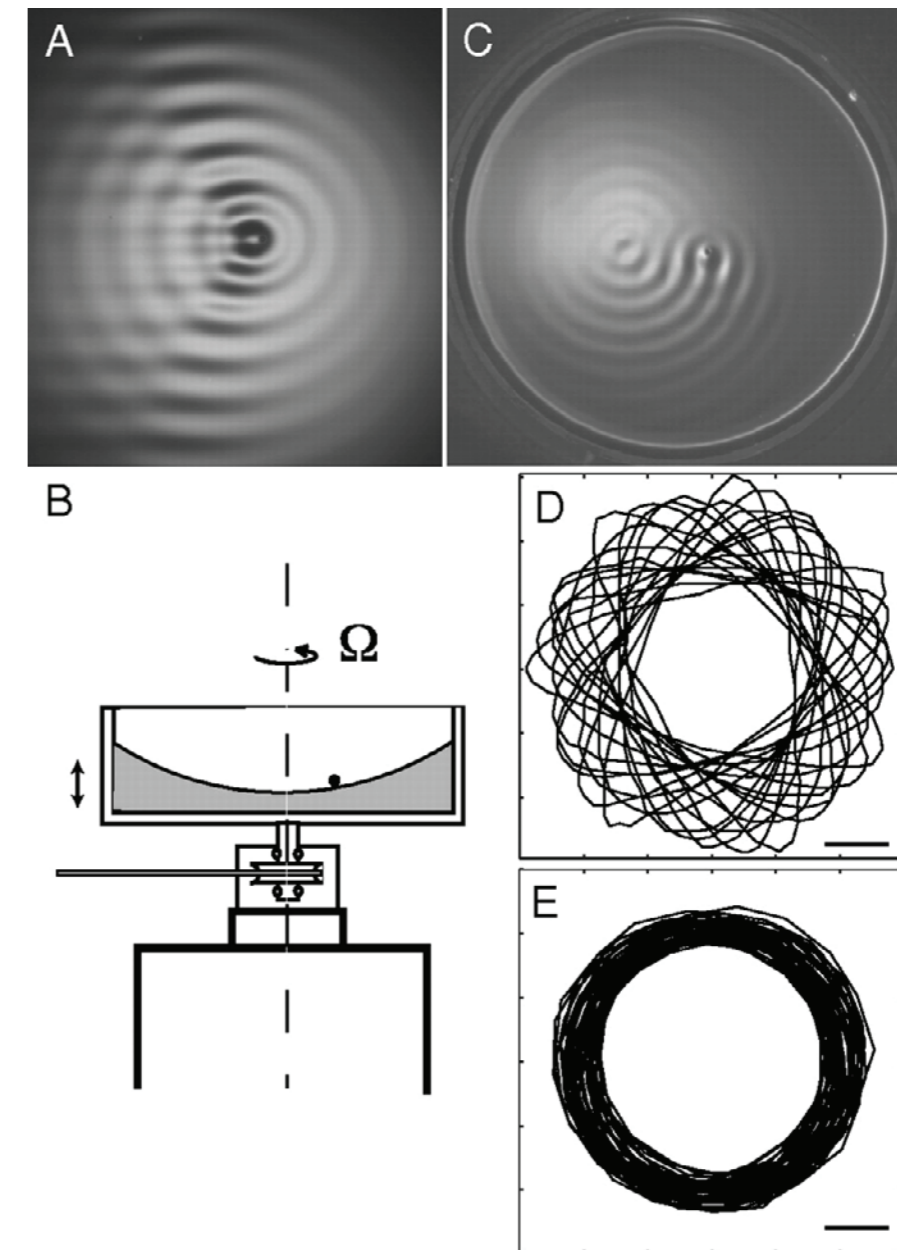
Indeed, a musical instrument is an excellent example. Plucking a thin string tightly held between two fixed bridges, cause it to vibrate, but you cannot hear much. But, with a cleverly-designed instrument, with an appropriate set of resonant surfaces or volumes, that same inaudible pluck of a string, attached appropriately to that instrument, will cause the right parts to resonate, and the resultant sound can be heard, loud and clear across a large room, and even in the open air.

We “explain” this as a mere transference, but that cannot be sufficient. What makes the energy seeming flow into the resonant system?

Now the French, present-day physicist Yves Couder has been investigating resonances for some time, and has recently demonstrated a whole series of important phenomena that quite remarkably have surprising resonances, if a series of oscillations with resonant relationships, which seemingly out of a totally inactive liquid substrate, could produce stable “entities” out of something with no solid surfaces or tuned volumes, but nevertheless produce a system of resonances and recursions to deliver a stable entity which he called a “Walker”.

Then, in a later experiment raking his original set up a bit further, he managed to get his Walkers moving in quantized orbits on the surface of his substrate.

Clearly, he was not simply moving Energy about, but, instead of some Pure disembodied Energy being moved about between bodies, he had marshalled *matter* with its energy by adjusting his set up into delivering stable systems. This achievement doesn’t make sense with entirely separable abstract Energy, and abstract (and totally inert) matter.



An Illusory Redshift

Some Initial Misconceptions

The famed Redshift, found by the astronomer Hubble, when searching the Universe for galaxies, was interpreted as a Doppler-like Shift, due to these galaxies receding away from the observer (Hubble himself), and if this were true, it would give a reliable measure of the distance-away from him that these sources of light actually were.

But, what if it wasn't a Doppler Shift at all, but something else?

For, if that were so, the cause of such a phenomena would have to be situated absolutely everywhere, and NOT be limited to events of take up into propagation, or release from it. Instead, some universally distributed cause would have to be substituted, affecting all light actually in transit. Seemingly, at first consideration, it could only be some kind of universally distributed substrate in Space – an actual Paving of Empty Space!

Now, could this be the case, as has been suggested to solve the many anomalies in the famed Double Slit Experiments? But what could such a paving do to light, which somehow was propagated by it?

Could it actually incrementally reduce the wavelength of the light by some means?

It would, of course, depend upon the mechanism by which it was propagated. It couldn't be simply a slowing of the passage through a medium, which merely delayed its passage in some way. It is usually classically caused by the relative speed of the source with respect to the observer, or alternatively, the speed of the observer with respect to the source.

And, that is the usual interpretation with the source moving away from the observer, so that the peaks of an extended wave arrive at the observer more widely spaced, due entirely to that recession, and hence finally received by the observer at a lesser frequency than was present at the source the renowned Redshift effect.

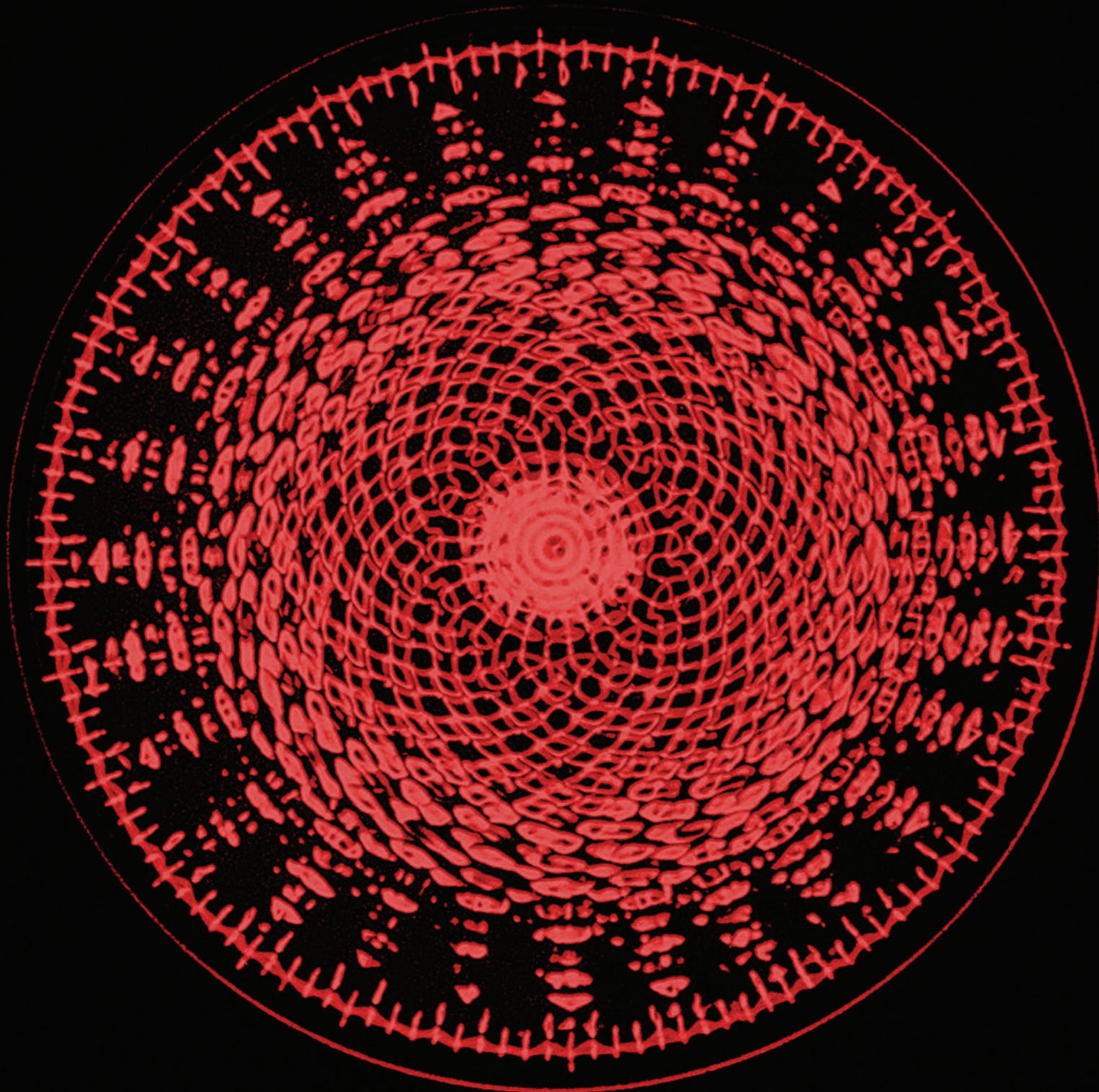
But, all can surely only be true with continuous, space-extended waves, and NOT with actual propagating quanta especially if they were in orbits within the entities.

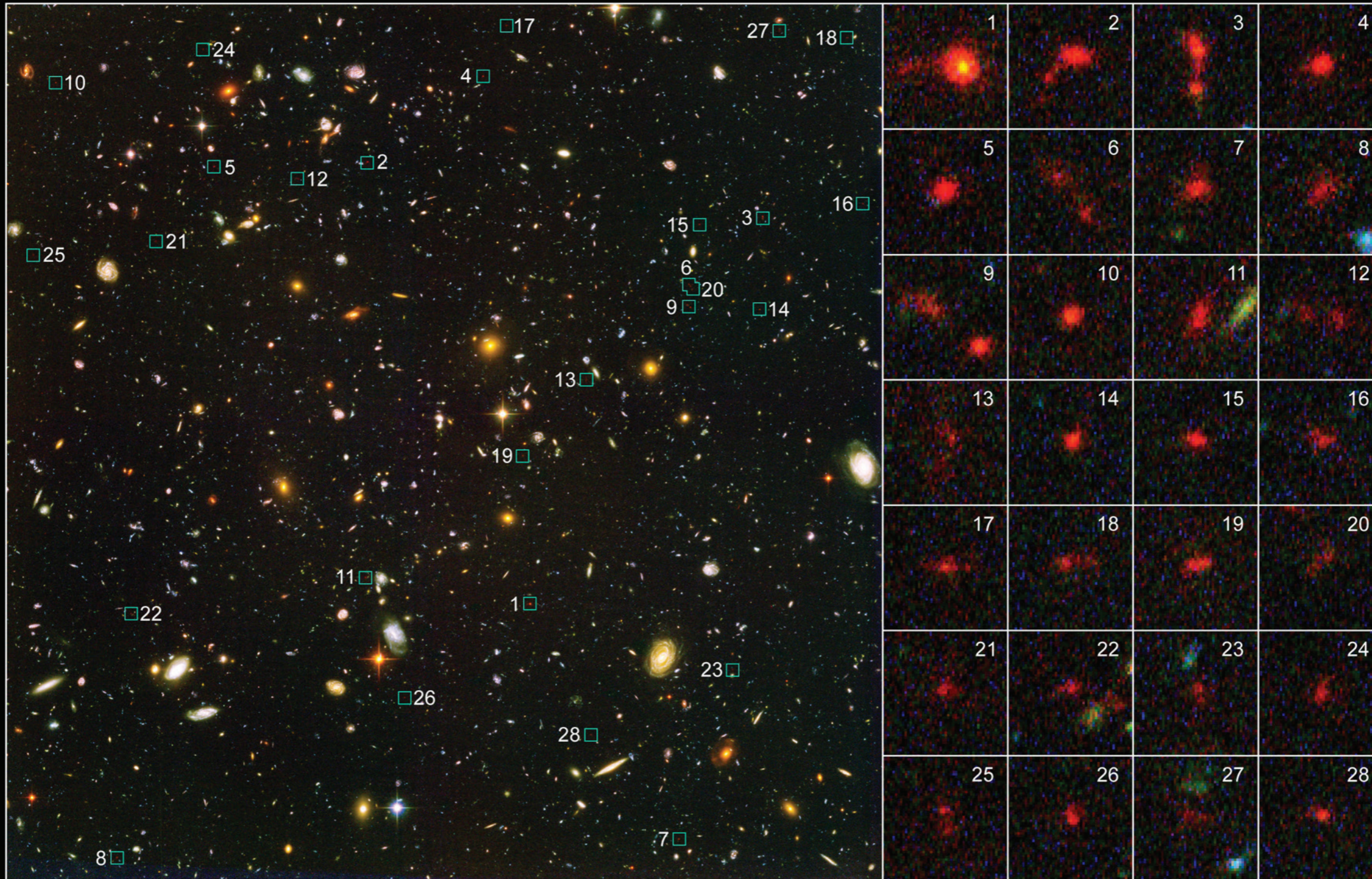
So, could something about a substrate deliver similar effects? If something was actually significantly slowing the propagation, but we assumed the speed was everywhere a constant value – C , then we could perhaps be misinterpreting it.

After all, why should there be a universally constant Speed for Light?

What about if we are not seeing what we see due to the relative speeds of the source and observer, BUT it is instead due to the propagating "medium"? Would that not by slowing the delivery of the wave, also give a Red Shift – the peaks would appear to be further apart, with an assumed constant "Speed of Light" But, that quite definitely assumes a continuous and extended propagation, when it, most definitely, comes in gobbets, with delays in their speed of transmission. They will be slower, but would come in pulses of correct waves with gaps between them, while the light was being physically carried to the next unit carrier.

How would an incorrect assumption of the Speed of Light affect that?





Distant Galaxies in the Hubble Ultra Deep Field
 Hubble Space Telescope • Advanced Camera for Surveys

The Doppler Shift

With a Universal Paving of Space

This paper was suggested by the success of considering a universal paving in explaining the anomalies that occur in the range of Double Slit Experiments. So, if the only reason for the existence of the Quantum in the propagation of Light turns out to be in the nature of the carrier in a substrate paving, and, that carrier is composed of mutually-orbiting pairs of particles consisting of one electron and one positron (the neutritron), then the quantum of energy that is carried can only be of a single frequency, and is delivered by the promotion of the internal, shared orbit to a higher energy level. At no point would that contained oscillation be travelling as extended waves in a medium, but as quanta of energy at a particular frequency within those internal orbits, and in no way expressed as a translational movement of the carrier, or of its overall substrate. So, in spite of considering the suggested substrate as a paving of such particles, they DO NOT deliver a medium – the actual individual elements of the paving do not oscillate in a pattern with all others adjacent to them, as would have to happen in a medium to deliver its assumed properties. Indeed, though the proposed substrate is certainly NO medium, it is entirely possible that it could, nevertheless, act as TWO distinct systems.

System ONE: This is the wholly internal system of each composing unit, carrying one quantum only of electromagnetic energy as an internal promotion of that orbit.

System TWO: This consists of a Paving of these units, with no interventions between them that could be capable of being seen as an overall wave. Yet, there would be nothing to stop the individual particles having extra overall movements, but the main purpose of such whole unit properties would be to do with the forming and maintenance of a paving and little else!

Now, if these suggestions are true, we cannot have the usual extended and continuous wave explanation of the Doppler Effect in such a substrate, for the usual relation between the speeds of source and observer, and the intervening wave-propagating medium no longer applies.

The frequency when communicated to the first unit of the paving from its source, will be at a frequency determined by the energy delivered by that source AND will never be spread out as a wave, but immediately converted into the promotion of an already existing internal orbit, and will NOT be, thereafter, changed by simple bucket-brigade transfers to subsequent units of the paving. Similarly, on finally giving up the quantum of radiation at that unchanged frequency, it will again never be spread out in time as a continuous wave, but must likely delivered

directly into the electron orbit in a receiving atom. This version of propagation does not make the frequency of the quantum dependant upon the various speeds of the other entities involved. ALL transfers will be at a “speed of transfer” and will be a property of that process.

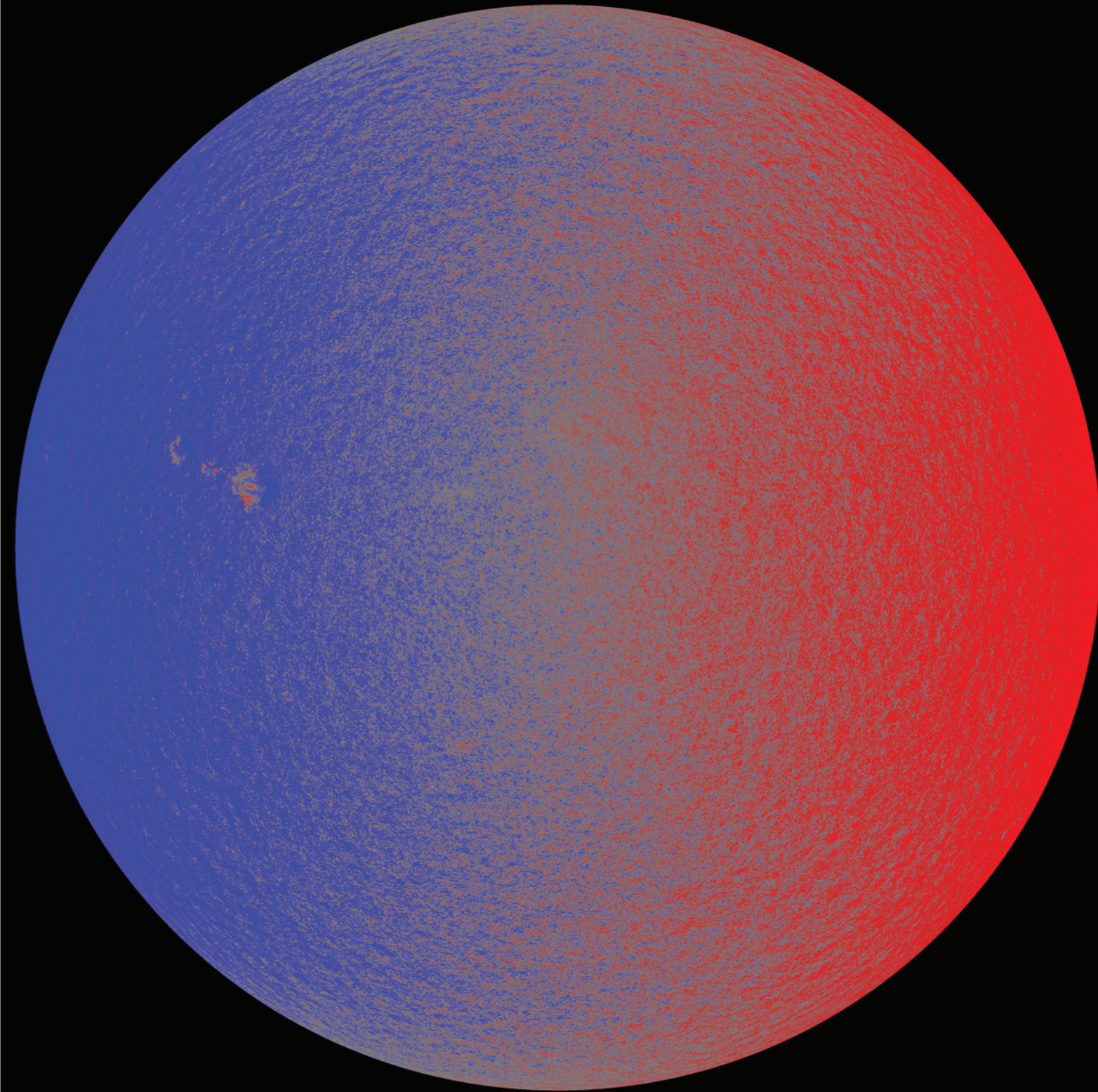
NOTE: We can, and later on indeed, will, consider intermediaries between the elements of the paving as deliverers to it and acceptors from it, where these conclusions will NOT apply. But in the direct transfers described above, no evident Doppler shift seems possible. But, for a while, let us play devil’s advocate and attempt to describe some sort of Doppler Effect in such a paving!

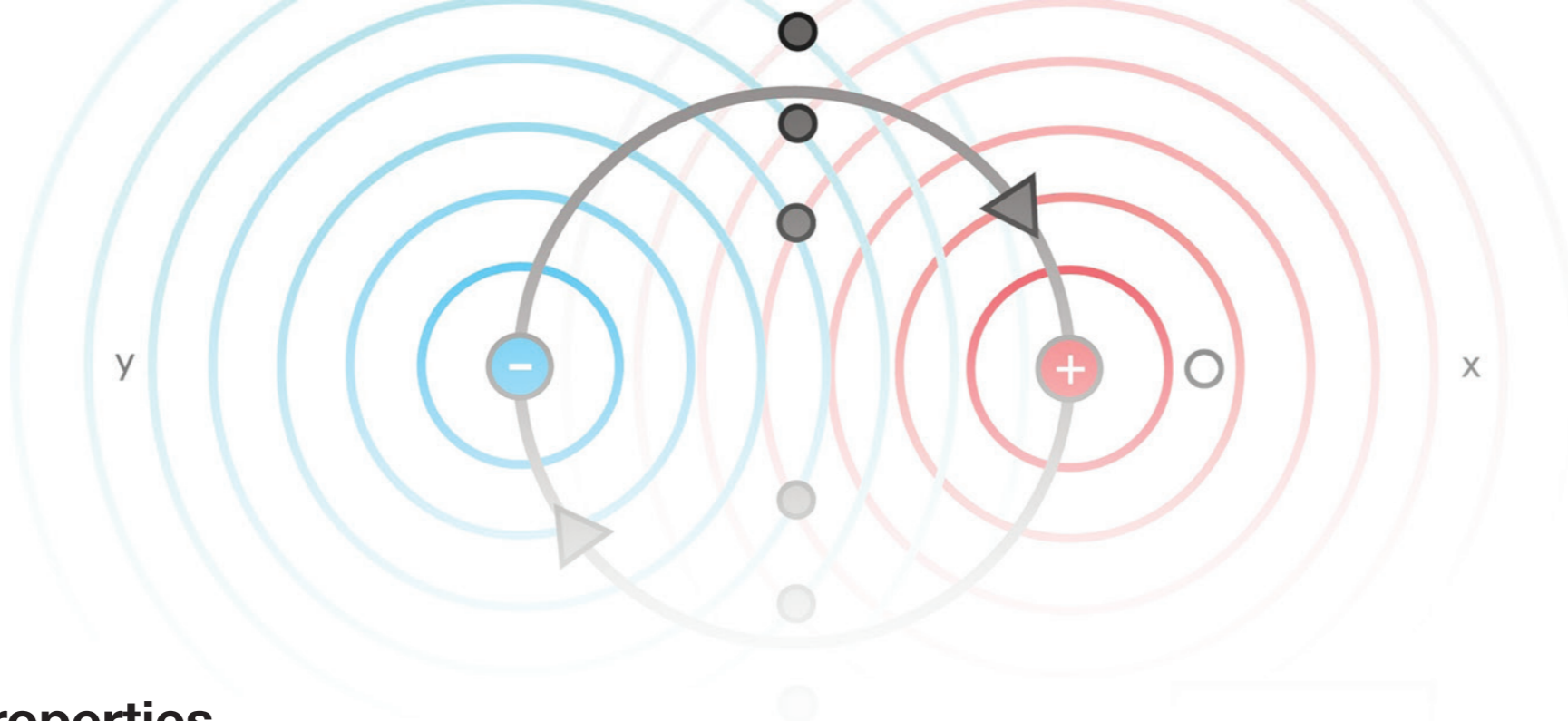
So, this might suggest that the neutritrons of the paving will not usually move in any way that takes them beyond their unified existence within the overall paving. But, this seems unlikely as a totally exclusive rule. Perhaps, the same effects could be produced by the paving being stationary, and the observer moving. But, this is not the same as the observer moving with respect to the source at all. And, using the same reasoning in reverse, if the paving was stationary and the source which originally delivered its energy to it was moving, then the frequency delivered to that unit would indeed be determined by that speed, This being the case with the source’s speed being significant in what is delivered to the paving, and the observer speed with respect to the paving being significant in what frequency is received, we do have the possibility of a Doppler Effect caused by the relative motions of source and observer, even though the individual carriers will not change their load. Clearly, if our units of paving are relatively still, there will be no influence on the frequency delivered from one unit to the next: It will remain exactly the same!

NOTE: But, clearly, a solution has to be in the mechanisms of transfer to and from both elements of the paving, as well as from some external source, and to some external recipient.

The deciding feature has to be whether the frequency involved, is delivered over a noticeable time, and hence received differently to how it was being delivered.

The big question is just how do these quanta get delivered (and received) when at both ends of the transaction they exist NOT as extended waves, but as orbiting charged particles at some promoted energy level, or as oscillations of some kind. Work elsewhere by Yves Couder seems to suggest that these transactions may well involve both resonances and recursions, as well as totally fixed possible quantized orbits for such things to be coped with in this way.





Neutrion Modes & Properties

A Preliminary Muse

Having assumed a receptacle for radiative electromagnetic energy – namely the *neutrion*, we then have two possible modes of propagation. The first assumes a moving shower of such particles, carrying their gobbets of energy – the quanta, within internal orbits. But then, the Speed of Light becomes impossible to achieve, as the carriers, having matter within them, could never travel at such a speed. This doesn't invalidate such a possibility, but certainly NOT for propagation across the Cosmos.

So, we come to the second possibility, which assumes a relatively stationary substrate, where the small movements that may well occur would certainly be wholly irrelevant to the actual process of propagation, which has each individual entity merely passing on its quantum of separable electromagnetic energy in a bucket-brigade fashion without any bodily movement of the particles being at all necessary.

Now, these are very different possibilities and involve quite different physical features. The easiest form to conceive of for such receptacles, (and the current consensus), is that of moving yet disembodied “Photons” – still some sort of shower alternative, for it requires NO medium or substrate and would perform like any other particle. EXCEPT, of course, that without mass, it is hard to see how such entities would be “impelled” to move, and at such a colossal speed. Frankly, I can see no way that such clearly abstract entities could even exist, never mind move at the Speed of Light across the vast distances of an entirely Empty Space. Even the fixed speed of Light poses unanswerable questions with this conception. It would seem more likely that moving “Photons” would move at any speed. The only

way a constant speed could be imposed would be if some universe-wide substrate with all local steps at a speed defined by the locally defined mechanism involved. It also seems inconceivable that straight-line propagation could be achieved (as seems to be the case), without some initial and directing mechanism having initiated that track! You do not get movement without first a cause and an energetic impulse!

Yet, this lame abstraction is the current “belief”! You may well ask why! Such photons, without any Kinetic Energy, move through Empty Space carrying gobbets of electromagnetic energy at a particular frequency of oscillation and at the speed of light!!! It is clearly a placeholder, of course! And, as with all such placeholders, it allows a sum of properties without them being in any way compromised by how they are achieved!

Now, the alternative shower of physically existing neutrion particles carrying the electromagnetic energy in the contained mutual orbits of its electron and positron components, though no longer a placeholder, does have very similar problems in requiring the energy of translational movement (for it contains mass – both ordinary matter and antimatter), while it also beautifully delivers a sound receptacle (modelled on the atom), and hence allows both contained energy, and the usually possible promotion and demotion of its orbits with a consequent change in carried energy.

Clearly, the neutrions major problem is its mass and consequent need of Kinetic Energy and possible speeds vastly lower than the Speed of Light.

So, it rather surprisingly comes around to the seemingly very unlikely alternative, of existing as a universal and stationary substrate!

Why is this even considered, and how does it remove the other difficulties outlined above?

It is because no K.E. is required as nothing actually moves. And secondly, the Speed of Light merely becomes the speed of transfer, from one element of the stationary substrate to the next!

Now, it must also be admitted that we just might have both forms of the neutrion even when propagation is taking place! Though, at this stage, it is entirely theoretical! It certainly doesn't seem impossible. And, it is easy to imagine different properties of a free moving neutrion as distinct from such a particle embedded in a stationary substrate. They will be as unlike as a gas atom and the same situated in a solid crystal. We have no problem with such modes in normal Physics, and we should expect individual free moving neutrions in a high-speed accelerator, though it they wouldn't reign long!

We may well have to consider these new particles existing in various modes depending upon circumstances. And, they may well have similar causes, such as the availability of ambient energy in various situations.

So, in the case of the neutrion, maybe this analogy might have legs there too. Let us muse!

In very low energy situations maybe neutrions form (somehow) into a universal substrate, but at higher ambient energies, the individual components might be free-moving in some sort of looser associations (like a liquid?), or even totally free and moving around without noticeable constraints (like a gas?)

NOTE: Various possibilities have been suggested, allowing neutrions to be a reservoir for electromagnetic energy, so that energy above that necessary for the internal orbits to exist, could be distributed throughout a region of the substrate, but could be accessed where needed, and replenished from elsewhere very quickly. Indeed, such a “resident energy” makes sense in electrostatic and gravitational force, for the claimed-to-be sources of these effects are invariably undiminished by their undoubted effects.



Emery Walker ph. sc.

J. Clerk Maxwell

Multiple, Analogistic Models of the Same Thing?

In considering the possibility of a complete space-filling paving to attempt to explain crucial phenomena such as the propagation of electromagnetic energy across seemingly totally Empty Space, a problem has arisen. It concerns the integrity of quanta of energy passed from unit-to-unit of such a paving.

The original supposition was that this integrity was absolutely assured, but various problems with explaining things such as the Red Shift of light from distant galaxies, and a particular anomaly with the most distant, posed a particular possibility. The proposed elements of this paving were joint particles – consisting of an electron and a positron, mutually orbiting one another.

Clearly, the model for this was the atom, but as the two components were equal and opposite, the dominance of one over the other, as occurs in the atom, with the much larger nucleus sub particle as the determinator would NOT be the case in this entity, and the imposition of energy Levels for the mutual orbits would not be determined as they are in the atom. But, as such units of paving received their carried energy load from an atom, where quantization definitely occurs, the frequency of the energy transferred to the neutrutron would still be so determined, NOT as a quantization in that unit of paving, but from its source – the atom. Indeed, atoms are limited in what radiation they can absorb and release, but the units of a universal paving would have to be able to accommodate ALL frequencies to be able to act as a propagator.

NOTE: also, maybe the atom has a different context to the neutrutron. We have considered that the inner spaces of atoms might well be “filled” with neutrutrons too, and these extra components, may, along with the effects of the nucleus of the atom, set up the quantized energy levels (just as Couder found with his “Walkers”, when a rotation was added into his experiments.)

For, this sort of complication wouldn’t apply in a neutrutron itself. Hence no quantization of energy levels would be involved. Literally, all frequencies might well be accommodated.

Also, with such units in Empty Space, we have the problem of Kinetic Energy, as well as internally carried energy due to promoted orbits.

Clearly, such a particle could move, and would then be certain to involve K.E too.

But, in Space, occupied only by this paving, from what and how would they get this energy of movement? It seems impossible for contained, internal energy to somehow be used to “move” that same particle – thus reducing what is

carried internally, but also leaving unanswered what could possibly determine the direction of such movement! Yet, it seemed to be essential to somehow involve such a process occurring.

Now, the only possible way, to achieve such a thing, requires another presence in Empty Space. For example, a particle (say, an electron) could take a quantum of energy from a unit of the paving, and, as it isn’t in any orbit, it could only cause it to move faster in its previous direction, and hence increase its K.E. Once in this form, the electron could interact with another electron to change its K.E, and this second electron could thereafter give up this changed energy to a unit of paving, this time, once again, as internal promotion of it’s orbits.

This, it must be admitted, all seemed like pure invention until we consider James Clerk Maxwell’s analogistic model of The Ether, which he used to generate his famous electromagnetic equations. Its forms have been long forgotten, in spite of the appropriateness of the derived equations. Yet, somehow Maxwell’s conceptions did indeed throw light upon his studies and maybe also could do the same for our problem too?

Maxwell’s model had vortices and electrical particles, which most certainly, can be analogistically mapped onto neutrutrons and electrons, say. So, maybe his ideas were not so far-fetched! The success of Maxwell’s equations cannot be disputed, yet they undoubtedly came from his odd model of vortices and “electrons”. Such a remarkable achievement cannot be put down to coincidence and good luck. It really must reflect some important Objective Content in his physical model.

Now, as we know, many such models can be built, which have this property of delivering something almost indistinguishable from Reality – as the Ptolemaic idea of the form of the Solar system managed to do (not, of course, with the same form, but with a very different one, which could deliver the same predictions). But, in that case, it differed significantly from Maxwell’s achievement, for he didn’t have the equations beforehand, and it was his invented analogistic model that actually delivered them. So, we have to endow Maxwell’s contribution with sufficient necessary Objective Content of the real situation, and maybe the neutrutrons plus electrons are yet another aspect, version or model of the same thing. Clearly, in Maxwell’s model, he had interactions between his vortices - with each other, and with moving electrical particles.

The vortices didn’t move translationally, and here we are considering something very similar with our neutrutrons – also NOT moving translationally, but the intermediary “electrons” certainly being able to

Redshift by Energy Loss

Additions to the New Theory

A major problem, with the Waves-in-Nothing model of electromagnetic radiation, is that it cannot dissipate its carried energy. And, the now accepted alternative of Quanta-in-Nothing isn't much better.

The reason that this is important is that phenomena, like the Redshift in electromagnetic radiation from distant objects, is that only a Doppler explanation is possible. Likewise, when far distant galaxies appear to have a fast increasing Redshift in the light we receive from them, the only explanation is that they, for some as yet unknown reason, were accelerating away.

Now, we are not talking about some little particle, rock or even planet, but many complete galaxies, so the mass involved, and any force to deliver such acceleration, must be absolutely gigantic. Unless, of course, that phenomenon is being misinterpreted.

Could the phenomenon be actually due to the opposite – Energy Loss?

For then, the problem with our models becomes clear. We lock ourselves into a limited set of consequential theories, based upon seemingly indisputable concepts and principles, that get more confusing and even contradictory all the time.

Some 200 years ago the German philosopher Frederick Hegel, in his “Thinking about Thought” studies, revealed that all our conceptions are unavoidably based upon only partially true bases, and that the proof of this was the inevitable emergence of pairs of contradictory conceptions, even though they had arisen from the very same bases. Way back then, he even managed to develop a methodology for overcoming such impasses in thinking. But the scientific World were not listening then, and are deaf to such ideas still!

The thing about not losing energy could, if not true, allow other explanations.

Now, neither model seems to deliver it, currently, and for quite different reasons. Primarily, in the attempt to explain the anomalies in the Double Slit Experiments, another model has been devised and applied in those contexts.

It replaces a suggested medium (the Ether of old) with a paving of Space consisting of individual, undetectable particles, called positroniums (that in these circumstances are entirely stable). These particles do not necessarily move, but can both hold and pass on individual quanta

from one paving unit to the next, and thus not only deliver propagation, but can also act as an unseen intermediary in many of the anomalies revealed in the Double Slit Experiments.

Now, with such a starting point, this theorist set himself the task of adding to the basic model to deliver a situation, in which energy could be lost, and hence delivers a Red Shift by entirely different reasons.

Of course, the suggested paving is an analogistic model, and, as with all other such attempts at explanation, will inevitably be replaced at some stage by something better, but, in spite of that fact, we should not, as modern physicists now do, discard all attempts at explanation, on the ground that they are incorrect. For, such a stance reveals a total lack of understanding of what such attempts both involve, and achieve.

They are not unfounded speculation, but on the contrary, well-founded attempts with ever-larger complements of Objective Content. Such means are the only ones we have, and do, indeed, deliver ever-closer explanations to what is actually happening.

So, rather than a total rejection, if some aspect is found to be either misleading, or just plain wrong, the correct approach must be to attempt to improve these models by considering various possible modes and accompaniments to the basic model, and in this case of the “contents of empty space”, we should consider alternatives or additions to the proposed contents, to address each and every anomaly as they become evident!

So, let us take our original ideas further. Clearly units involved in “filling space” can be directly adjacent to one another, and could in such circumstances propagate quanta of energy without any needed movement of the paving units involved.

On the other hand, they could be a little further apart, and therefore require some movement to bring units of the paving close enough to be able to transfer their carried quanta.

Finally, they could be so far apart as to make propagation very difficult, if not impossible! Yet, even these alternative modes would not yet address what we seek.



For, we are considering that at least some of the contained energy being passed from unit-to-unit, clearly other entities and processes in addition to paving unit movements would certainly have to occur!

Now, the successful explanation of the Double Slit Experiments with fired in electrons, involved transfers of energy both from and to electrons and paving units. So, we could, in these considerations, also allow the electrons (or other intermediaries) to play a role as well as the paving units themselves.

For, as in the Double Slit, transfers to such intermediaries would take energy in the form of K.E., from a paving unit, so that thereafter this could be partially dissipated in collisions, before finally being delivered to the next available paving unit, where a reduced energy gobbet would be passed on.

At the same time increased energy intermediaries would generally escape the locality, so that only the reduced energies would continue the propagations, and the held frequency would be lower.

An alternative reason for Redshift would then be possible – ranging from zero with closely adjacent paving elements, to ever larger as the density of the paving decreased. Indeed, a certain threshold could be passed beyond which the losses would be significantly larger. And, this might well be an alternative explanation not only for the Red Shift generally, but also for the excessive increase for galaxies in the far distance.

S H A P E **E**

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