

THE MIRROR



OF CONSCIOUSNESS

Steve Solodoff - February 2020

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PREFACE

This manuscript puts forth the contention that our consciousness resembles and reflects an all-pervading universal consciousness that was born from the manifestation of energy as the monadic agent of our universe. It relates that in the beginning, when energy kinetically came into being, it created, or distributed itself, into three derivative dimensions; that of space-time, materiality and consciousness.

The definition of consciousness herein is that it is constituted from phenomenal attributes that are inherent within space, time and materiality (the other two, dimensional derivatives of energy). Without those attributes (otherwise known as qualia), the universe could not exist – it would be impotent of any ability to have causes and effects, since nothing that existed would have any properties with which to bring about causes on each other. Everything would be the same and thus have no ability to influence or change anything else.

The sum total of all attributes is effectually the consciousness of the physical world. By “tapping into” those attributes, we, through Will (attention), cognition and recognition, accrue to ourselves; consciousness. Therein lies the reflection of the universe, of the physical and phenomenal world. There is a good rendition of a flow chart showing this on page 89.

I find that the best way for me to bring out the features and concepts of these theories is to compare and at times contrast, my theories to those of other notable authors on this subject. In this manuscript I analyze the ideas from a number of authors. Significantly from two of them – David Chalmers and Emanuel Kant. The form I take is to quote the authors in non-italicized type and to place my comments in italicized type.

It is my hope and belief that by adhering to the conception of an externally conscious universe, which is responsible for our selfhood, we will begin to unite the worlds of physics with that of the phenomenal world, which is so obviously as great of a part of reality as physics is. This I believe is a key step toward finally devising a theory of everything – a true unification of our understanding of reality, its laws and its functioning.

On page 90 is an index of various concepts that are discussed in this.

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The question that David Chalmers posed to the world, which came to be associated with the “hard problem” was; Why is there an inner life? *This goes to the uncomprehend-able nature of why we have thoughts, ideas, concepts, and possibly most of all, sensory perceptions.* The “hard problem”, as defined, is that of the mind-body dichotomy. *I like to call this the phenomenal-physical dichotomy. Not only is the question, “Why do we seem to have a separation of mind and body”, but, “Why is there the phenomenal in what seems to be an overwhelmingly physical world?*

Chalmers points out that if one agrees that consciousness is a natural phenomenon, is of the natural world, only not in a physical way, and is therefore subject to natural laws, then there should exist a scientific basis or theory for them, even if we cannot arrive at one ourselves.

Consciousness is a prominent part of nature, of the world and is ubiquitous throughout humans and likely other species. It would be odd if such a pervasive part of nature and the natural order, did not have laws that directed it and that it did not adhere to. *Just by the observation that there is a logicalness and order to our sensory perceptions, speaks of a set of laws that they are effects from. Even our “streams of consciousness”, which seem to be chaotic and disconnected, have within them strings of comprehensibleness to them, bespeaking of an order and a reasoned process of causation.*

Those laws are likely not too similar to the physical laws or laws from other domains (*like space and time*), they likely will be quite different *and will reflect their origin which differs from other domains.* Consciousness is therefore something that, though similar in some respects, is nonetheless at the edge of scientific discovery and scientific reality, *since science, in most views, is only of the physical world.*

Therefore, solving the problem of consciousness may be a scientific-like problem that can only be solved philosophically, *especially since it apparently cannot be tested with physical means and experiments.* Of note though is the history of many scientific discoveries having been discovered through pure reasoning and logic (witness Einstein’s thought experiments). *Maybe phenomenal discoveries cannot be tested and proven by physical means; however, they may prove to be accepted theories, due to an overwhelming coherence with experience and even some physical processes, and thus become signposts that lead the way to other truths. Maybe even finally a theory of everything phenomenal, or at least enough to satisfy man’s curiosity and drive for understanding. This, in a nutshell, is the goal of philosophy.*

I contended above that those laws would likely reflect and be in accord with their origin. But what is their origin then? It is my opinion and theory that there are three fundamental origins which exist ubiquitously in the universe, that were formed at the very beginning of the universe. These “fundamentals” are pervasive throughout existence, and that pervasiveness gives us a clue as to what they are, the nature of them. One of them, which is obvious to us is the physical, material dimension(s), the other two dimensions similarly show evidence of their pervasiveness and fundamental nature throughout existence. Those are space-time and the phenomenal realm.

One of Chalmers speculations is that a theory of consciousness might involve a close relationship between consciousness and information. He goes on to cite pan psychism and questions whether a thermostat has experiences. He states that there is likely experience everywhere; wherever there is a casual interaction there is information, and wherever there is information there is experience.

This is an essential point in claiming that information itself is what consciousness (or experience) is "made of". In this view everything, a rock, an electron, etc. has experience, has consciousness through the relationship with information. Information in this view is the building blocks of consciousness. Note that "information" is not material, nor is it related to time. It has the same character as qualia, it is therefore something to explore further.

In my view though, Information itself is simply descriptive. It is missing that "border" quality of qualia or experience which sits at the boundary of materiality and phenomenalism. To be conscious is not simply to have a description of an object (or subject), which is what information is, the nature of consciousness is something entirely different and unto itself, whole and contained within itself. Although, it enables descriptive powers to be applied to it (information about it), its essential aspect is not description, is not just information.

Information would be better considered as a secondary aspect of qualia, one that is brought on through the interaction of qualia and cognition. The primary aspect of qualia is the direct transformation that has occurred from the existence of energy. Where there is energy there is space-time, materiality and consciousness (in the fundamental form of qualia).

Information is to qualia as effect is to causation. That is; it sits at the boundary between the material (psychological or cognitive) and the phenomenal. It is the interactive aspect of the two dimensions. The third dimension, space-time, relates to these other dimensions in the form of location and duration.

Location is not a simple "where it is" concept regarding qualia and space-time. The essential aspect that space-time gives to qualia (or energy) is that of being ubiquitous as to location and as to time. Qualia cannot be located at a single point in space-time but must rather be located everywhere at once. It is this over-arching aspect of space-time that is an essential part of qualia. If it were otherwise, then the conscious mind could not access the specific qualia unless it was in a particular defined location in relation to where the mind was located. Qualia's connection with space-time enables it to be "available" always, everywhere and everywhen.

So, in the final analysis, information is representative of the building blocks of consciousness, but is not the actual building block itself – it is rather a part of the "bridge" between the three dimensions and therefore a bridge to our cognitive, though conscious, mind.

He goes on to remark The view that there is experience wherever there is causal interaction is counterintuitive. But it is a view that can grow surprisingly satisfying with reflection, making consciousness better integrated into the natural order. If the view is correct, consciousness does not come in sudden jagged spikes, with isolated complex systems arbitrarily producing rich conscious experiences. Rather, it is a more uniform property of the universe, with very simple systems having very simple phenomenology, and complex systems having complex phenomenology. This makes consciousness less "special" in some ways, and so more reasonable.

Causation, he states, has experience underlying it in the brain, though I believe that experience is the effect and not the causation. This is so because relevant information is being produced constantly with neurons firing and so on. On the other hand, it may be that the distinction between active and passive causation (effect) cannot be drawn at a fundamental level, in which case the two might be treated equally. I do not know the answer to this question, but there is an intuition that some sort of activity is required for experience. But this may not be true if experience is a direct and brute thing in and of itself which I believe it is.

The crux of my beliefs is that it is **Will**, not action, that accounts for experience (consciousness). Possibly, Will has as a subset of action to it; this bears investigating; Is Will itself Action? Although you can have "activity" without the use of the Will; that type of activity is of the unconscious variety. An automatic triggering of behavior (action) does take place due to the effect of cognition, but in order to experience the interaction of the Will with qualia - a secondary aspect needs to be involved and interacting with that bridging. That secondary aspect comes from the effect of the application of Will with the cognitive causation of **recognition**. This application of the Will is what accounts for our identification of that as an experience. Recognition begets the identification, cognitively, of experience and it was the Will that caused that recognition through its attention and interaction with qualia.

But it is more than mere "identification". Identification, here again, is just descriptive and is the same as information. As such it is representative of qualia or experience but is not that qualia or experience itself - it is secondary to it.

The Will is what actually experiences qualia in a direct way. It does this by being the effect of the qualitative (qualia) causation brought on by an outside agency (that is; it is existence with causation). In effect, it "allows", through receptivity, qualia to interact with cognition (which is the effectual agent of behavior or action). For now, it is enough to simply relate Will to that of attention (though ultimately it is more than that).

Attention, with all its effects and abilities (which we will go into later) is the property of the Will (Will's aspect). As such, attention's interaction with qualia results in experience. Attention by itself, without the phenomenal agent of qualia, is only a behavior, an action, an effect of cognition. But when interactive with qualia (like a moving billiard ball interacting with another ball at rest) it results in experiential awareness (experience). It is not the qualia that is experience and it is not the cognition that is experience, but rather it is the cognition of the interaction itself, the transformation, the cause and effect between qualia (cause) and recognition (effect), that results in a conscious experience. This is brought on by attention to the qualia - attention of the Will.

In this sense, it is the transformation between qualia and awareness (through attention) that accounts for experience - the transformation is the boundary condition between the material and the phenomenal. It is a transferring of qualia's essence to attention's cognitive ability, a cause and effect transfer from the phenomenal to the material. Therefore, cognition does play an essential part in experiencing or consciousness - it plays the part of descriptor of what is happening. It is that descriptor that allows our mind to record that something has occurred whose essence, whose cause, is from outside the functionality of the mind.

It is the awareness, through attentive cognition, of the object that allows the reception of qualia (though not materially). In effect, our Will transforms a phenomenon (qualia) into a digestible material

form – cognitive awareness. It was attention (the Will) that was the receiver of the information (which gets interpreted by cognitive recognition). On one side of this “bridge” was the actual qualia, on the other side (due to interaction, due to causation and effect) is the description, the recognition. Because we are describing the phenomenal in material terms, then we relate to it as an experience. It is a material representation of a phenomenal object, and since this type of representation does not involve the closed loop of cognition (which does not have experience as a part of it) it is thus processed as something on the border of the phenomenal and the material – a class unto itself with its own “feeling” of recognition (Physio-phenomenal).

That feeling is the “Bing” of Penrose (Penrose called our “knowing that something happened” a Bing) and thus the recognition and experience of consciousness. Consciousness is in this sense, the cognitive recognition of an entity within, that is neither functional (of cognitive functionality) nor ethereal. Its recognition takes the place of the inherent nature of the outside causation (qualia). Therefore, there is no direct experience of qualia cognitively, there is the indirect, secondary recognition of its essence. Just like in the material realm, we can know an object, but we cannot be that object – we are once removed from it – it is our experience that connects us to it.

The Will can be compared to a mirror. What is special about a mirror is that it takes from the external world appearances and qualities, receives these impressions and then causes them to continue to emanate onward. What is special about that process is that a mediating object (the mirror) is able to allow the flow of sensory information to proceed unmediated and in its original form.

The Will is like a mirror when it is being utilized to target its attention on reality. It will take appearances and qualities from the objective, external world (like a mirror does) but instead of sending these on in an unadulterated, unmediated form, it instead translates that reception (recognition) into psychophysiological form and transfers, and thus transforms, its objective reality into an experience that perfectly reflects (like a mirror) the objective attributes (qualia).

The critique of this is the criticism that the Will, being of cognition, can only be intellectual, psychological, cognitive and therefore subjective and mediately removed from objective reality. But that contention does not ascribe to the Will one of its most powerful abilities – that of pure coherence to the external world.

What is “pure coherence” though? As religion proclaims, “We are made in the image of God”. I would restate this as, “We are made in the image of universal consciousness”. There is a universal, objective reality out there externally. The same elements that enabled the universe to exist, enabled not only universal consciousness to exist, but enabled our individual consciousness to exist – within the construction, over time, of our brain.

The brain is an evolutionary organ and it has been formed by millions of years of evolutionary processes that adapted and thus cohered to the external world (Darwin’s evolutionary process of natural selection and adaptation). In the final analysis, the brain consists of an amalgamation of external coping mechanisms. These “mechanisms” exist due to their coherent psychological matching to the external world as it currently exists. Coherence is thus sympathetic and unified relation to the outer world.

But more than this – we have something we call consciousness – individual consciousness. That feeling of self-awareness. Just like our physical mechanisms that cohere to the external world, our individual

consciousness coheres to the phenomenally conscious world, the world filled with qualia. Our self-consciousness has evolved in accord with what is “out there”. This is the crux of coherence in this sense.

The Will, when it suspends cognitive judgement and diversionary thinking, receives in its purest sense the transformation of qualia. It is that “silent” receptiveness of the Will that equates to coherence with the outer qualia.

The one underlying and constant clue about consciousness is what I call the “hum of consciousness”. That is; after removing all psychological effects and characteristics of our sensory organ (the brain) and after removing any cognitive functionality of our neurons – after emptying our brains of its functionality and those related functional effects – there remains a “feeling” (I call it a hum) – a feeling of existence, of being. That is the quality of our consciousness in its most pure and undifferentiated state. It is also the quality of the amalgamation of the constant and ever-present totality of qualia (that is; all qualia combined) that exists as the universal make-up of universal consciousness.

In that state (remember we can’t think or sense anything) our brain is a perfect mirror allowing all sensory external data (qualities) to be received by it and experienced at once. It is the pure experience of the external. But without the capacity to think or sense (remember we eliminated those) we perfectly reflect, as coherent recognition, a pure objective external reception. This can be called full and perfect awareness (awareness being reception onto our conscious, reactive brain) – it is “the hum” we feel. However, since in that theoretical set of circumstances there can be no recognition (because all brain functionality has been removed) there would be no experience of this theoretical nirvana.

This “reception” is a direct correlation, coherence and duplication of the qualia that the objective realm caused to be reflected and emanated. It is the closest we can come to a reaction of direct experience of the external world. The mediating factor between that external world and our reception, is qualia.

Now, back to our normal state of the brain. The brain is not empty, ever, of psychological and cognitive functionality (though the hum persists in spite of that). Therefore, any reception is “jammed” the same way a radio signal can be jammed by having too many other and competing signals being received at the same time on the same channel.

Here is where the uniqueness of the Will’s abilities comes into play. The Will, through its ability to target attention onto any psychological subject, also has that same ability to target phenomenal subjects - qualities. It does this by suspending its attention onto everything but the phenomenal subject at hand. When it “aims” that targeting at the external sensory qualities (qualia) – or in other words; when it targets the universal, phenomenal reality and appearance (through its interaction with qualia) – it automatically becomes the receptive agent that is akin to the same receptive agent we spoke of above in our example of emptying out all thoughts and psychological functioning of the brain, but only as related to that particular quale.

In other words, under that circumstance, the Will takes over the brain’s functioning, empties it of psychological and cognitive functioning and “jamming”, and thereby allows the brain to experience directly the qualities of the external world – of the quale. I call this process “bridging”. That experience comes in the form of recognition, but recognition without cogitation. This is very much like “Awe” in that awe exists absent any cognitive functionality. So does qualia-caused recognition. It is next when cognitive recognition is triggered, through the release of the Will’s hold on brain functionality at the point of “awe”, that the experience is had consciously.

So, it is this unique ability of the Will that allows it to bridge the gap between mind and body (the hard problem) or in other words between mind and the external world. The Will can be used as a mirror of sorts.

Chalmers entertains the possibility that there might be properties more fundamental than phenomenal properties from which the latter are constituted. We postulate that those “more fundamental properties” are derivatives of energy itself. These are the most fundamental building blocks of consciousness. Regarding whether a thermostat has experience; it does not – simply because it has no bridge that would connect the qualia (heat in this case) to a recognition program (cognition). Functionality is there, but functionality is not necessarily cognition, nor is it experience. Cognition involves a more complex set of processes within – more than just a pointer reacting to heat.

Reaction (action) is a consequence of cognition, not cognition itself. Cognition causes action, but action does not always presuppose cognition. All cognitions produce actions, but not all actions are from cognitions. (Note that an action that has been caused by a cognition can have a continuum of effects ranging from one simple reactive action to many secondary and tertiary actions that can continue to stem from the first reaction until these additional reactions fade away). Also note that cognition’s effect can be just simply the next cognition or thought (an action) – nevertheless, action always follows cognition, even if we are unaware of it.

Action is integral to consciousness as the previous discussion about the Will and its interaction with qualia points out. The action that is attention is key here to understanding the link, the cause and effect, between cognition and attention (Will). What triggers the Will? Actions, reactions and secondary or tertiary continuums of action are like a set of billiard balls where one is hit into another that causes collision (interaction) with another and so on until there are no more balls left to hit or interact with.

The existence of these additional balls (action predicates) are created through memorized logic from past associations with a particular logically oriented cognition, or biological triggers (like survival, hunger, etc.). Attention is one of these “billiard balls” (one of the action-oriented effects), one of these consequential reactions, a type of effect from the cause of cognition. When though does Will or attention come into play? What triggers it?

Will comes into play, is initiated, when there is a biological and evolutionary formed need to react to a pre-programed set of logic that calls for possible protection (attentiveness to a possible danger – we must always monitor the world, which includes our own inner logical programs). It can also be triggered by survival programs like danger, hunger, fear, etc.

As an analogy; attention is triggered as a waking up to cognitive effects that occur and demand attentiveness. So, when we are unaware, we are not using attention, but when an action or reaction from cognition gains a certain level of “importance” to us, then attention is triggered and comes into play. If it is “important” enough, that attention effectively gains the targeted power of the Will and then overrides all other functionality.

What though does “important” constitute? This can be anything from a high-level survival type of trigger to as low of a level as “Interest” might be, or the “need” to finish a thought. As long as there is an circumstantial string of thoughts and logic that calls for monitoring (programmed into us from our past experiences or from our biological necessities) then attention will arise. The Will however is a supra

case in that it is only called upon to accentuate attention to something of greater importance to that string of cognitive logic. That level of attention eliminates any competing thoughts or actions and concentrates on the issue at hand. When this is turned toward the external sensory world it becomes fully receptive due to the elimination of any functional disruptions.

When cognition has resulted in recognition (which is consciousness) then further actions will cease. Cognition however, does not result yet in recognition if the program retains unknowns. It is the unknown, due to its learned necessity of survival (the unknown can be dangerous and result in negative consequences) that necessitates (as part of its internal logical program) – attention to the inputs (cognition and reactions or other unknown objective inputs or recognitions).

It is therefore, the necessity (survival-oriented concern) of attention, in order to complete the reaction program, that triggers the Will. Thus, Will or attention is a survival mechanism that exists in order to interpret and interact with the objective world (or at times with the psychological world). The objective world can be a dangerous place to us, and even if the sensory input is benign, we are programmed to attend to it (just in case – again, a monitoring apparatus).

Not all cognitive triggers will bring about attention as the active agent, many will simply process the program that it has learned or been programmed to process for that particular circumstance (object or logical set of objects). But other cognitive “puzzles” will call for attention to be able to proceed with the program. All objects, from outside (qualia) will produce this effect. Not all will bring about conscious recognition because some may be peripheral to any prioritized effect. But those that have “skin in the game” (i.e.; have an unknown component or a possible reactive effect) will always trigger attention (the Will). Note that the Will can also be triggered by desires. Desires are a subject that bears investigation on its own and will be addressed later in this. But for now, one can consider a desire as a survival-based signal that calls for immediate attention of some level.

So, when Chalmers ponders, “does a compact disk or a thermostat have experiences or consciousness?” – the answer is that it would if it had Will, but it doesn’t have Will or any similar agent.

Note that all these discussions center on consciousness. But there are really two aspects of consciousness that bear discovery and investigation. One is; “Why do I have these inner experiences?” (Chalmers’ “Hard Problem” – Why and how does experience exist? What is the nature of experience?). The other aspect that bears investigation and defining is that of quality; Why does a specific quality exist (what is green?). What is its make-up? Though these are two separate concerns, they are intimately tied to one another. That is because, in the final analysis, all of consciousness is the inner recognition of outer phenomenon, and all outer phenomenon is made up of qualitative characteristics (called qualia).

It is noteworthy to state that the difference between Will and Attention is that one is receptive action (Attention) while the other (Will) is targeted action. The Will includes attention but attention does not necessarily include the Will. Awareness is a better intermediate term to use to differentiate the two different states of attention in that awareness involves attention but targeted attention defines Will. Awareness is not targeted – it is receptive even though awareness can result in behavioral action. Behavioral action is not necessarily targeted behavioral action, when it is, we call it Will.

How do we understand the ontology of the double-aspect view of information? How seriously do we take this talk of information spaces and information states: are these just useful constructs, or are they in some way ontologically fundamental? Is information primary, or is it really the physical and the

phenomenal that are primary, with information merely providing a useful link? *This is a very key question he raises. As we discussed previously – information is merely description and is not fundamental or primary – it is secondary and is part of a link.*

He here continues his thoughts about how information plays in all of this: There are various ways all this might be understood. The most straightforward, and the least adventurous, is to take the physical and phenomenal realizations of information to be wholly separate features, with no ontological link over and above a lawful connection and a sort of structural isomorphism. To get a better grip on this, I will consider one key way in which information can be seen as fundamental to physics.

This approach stems from the observation that in physical theories, fundamental physical states are effectively individuated as information states. When we look at a feature such as mass or charge, we find simply a **brute** space of differences that make a difference. Physics tells us nothing about what mass is, or what charge is: it simply tells us the range of different values that these features can take on, and it tells us their effects on other features. As far as physical theories are concerned, specific states of mass or charge might as well be pure information states: all that matters are their location within an information space. This is reflected in the fact that physics makes no commitment about the way these states are realized. Any realization of these information states will serve as well for the purposes of a physical theory, as long as it maintains the correct structure of causal or dynamic relations between states. After all, as long as the shape of these relations is the same, physics will look the same to our perceptual systems: we do not have access to any further properties of the realization in the external world,

That is an amazing conjecture. It says that just the understanding of the states of physics' components serves enough for us to comprehend physics and the physical universe – we need not be in direct contact with those components. Likely – this is a good characterization of how energy, monadic energy, reflects the entire complexity of the universe – through differentiation and relationships.

However, this is not in my opinion the case in phenomenological experience. Although we are once removed from what qualia actually is, through a secondary facet of information (recognition), as discussed above, without a direct access to qualia with no secondary intermediary, we would not be able to comprehend or experience qualia. Unlike his example of relationally equivalent reality that could exist in the physical world, qualia are not simply laws and relations; it is a specific something that requires contact and actual phenomenal existence to experience.

This sounds as if qualia are objects of sorts, albeit a phenomenological one. What of the fact that we can conjure up a sensation, such as green, simply by closing our eyes and willing it? There does not seem to be an actual phenomenal object in that case. However, in my theory there actually is. In actuality, when we do this willful conjuring of green, we are in reality tapping into a quale that is actually present in time and space.

Qualia, or in this case the quality of green, actually exists everywhere and always – this is due to its time-space component. Energy is of one unified field, that exists everywhere and everywhen, just as an electromagnetic field does. It is not that we have a representation of green within us, though there is that capability within our visual cortex (but not the quality in the cortex alone) – it's more the case that the quality, the qualia of it, is not in our cortex or anywhere else inwardly, it exists in a phenomenal space outside of us, universally. When we conjure up green, we are using our Will to link to qualia that is actually present.

I have used this framework mostly to discuss simple perceptual experiences, such as color experiences. It is not obvious how one would extend it to deal with more subtle experiences, such as complex emotional experiences or the experience of occurrent thought. Can this extension be made?

Just because we might look upon different qualities as having various levels of complexity does not mean that the underlying qualia need be similarly complex. Each quale might very well be simple on its own and it's our subjective opinion or judgement that gives unto it a complexity that it does not inherently have. This is the case I believe. I believe that all quale have an equal complexity factor, and more so, that they are simple at their fundamental functionality.

Seemly more complex forms of qualia, that is; emotions, also come from a cognitive cause. This takes the form of a reaction to an emotional stimulus. This could be an emotional reaction to a logical functionality or it could be a reaction to a desire. In either case, the same set of cause and effect actions and reactions takes place with one of the caused effects being the quale of that particular emotion (a sadness quale, an excited quale, etc.), or the emotion begotten from the functional logic that caused that desire or emotion. A chain of reactions is set off from the logical set that we associate with an emotion or a desire. Without the qualia effect or sensation, we would have no sensation of that emotion – we would in effect be a zombie. The chain of actions would take place inwardly and functionally, but no experience of it would happen. A sad state of events would not result in the feeling (quale) of sadness.

A good question to investigate that he does not mention is ... Why is it that separate humans have the same qualia experiences? Is it the processing mechanism or something more fundamentally connected to the universal that accounts for the ubiquity of experiences?

It is precisely the ubiquity of qualia that deposits the identical effect in separate people (or likely an animal also). Thus, it does not mean that the quality of what we "see" or experience is identical. Since the totality of the experience is through a linking of the phenomenal qualia and our inner functionality (as bridged and recognized through the use of the Will and attentive recognition), any slight difference within us functionally will result in a correlate difference of the experience to the extent that there was a functional difference. Although this may be too slight to notice (were we able to notice within another person what they see or feel). This can take an extreme version, as with synesthesia patients who may hear a sound upon viewing a color, etc. The trigger (the quale) is identical, but the receptive recognition functionality differs, in the extreme in that type of case.

*Chalmers goes on to ruminate about the connection between quantum mechanics and consciousness. He claims that quantum theory alone cannot tell us why consciousness exists. That may be somewhat correct however it might tell us **how** it exists (probabilistically, wavelike, etc.). He goes on to point out that the only remotely tenable criterion that has been proposed is that a measurement takes place when a quantum system affects some being's consciousness. This would indicate the inter-activeness of separate dimensions (space, time, universal consciousness) which I have postulated.*

There would exist a large-scale superposition if there is no consciousness in the vicinity. Before consciousness evolved, the entire universe was in a giant superposition, until presumably the first speck of consciousness caused its state to suddenly collapse. This may sound crazy, but it is a direct consequence of the only tenable literal interpretation of the principles of quantum mechanics. I hope this helps to bring out just how strange quantum mechanics is, and how serious the problems posed by its interpretations are.

This is interesting in that it could follow that if a “speck of consciousness” was a coherent to qualia in relation to what was being measured (qualia therein being more than just applicable to individual consciousness but more so applicable to all material objects), then for instance the coherence to an electron spinning either up or down would be causing the collapse and therefore the manifestation in the physical world.

However, he goes on to state ... If consciousness is associated even with very simple systems, then on this interpretation collapse will happen at a very basic level and very frequently. This is inconsistent with the physical evidence, which requires that low-level superpositions often persist un-collapsed for a significant time. *However, if that significant time is a function of not yet being coherent, then it would make sense why collapse doesn't just immediately happen to simple wave functions at the beginning of their evolution.*

More generally, the whole process of collapse sits uneasily with the rest of physics. Taken literally, it is an instantaneous, discontinuous, temporally asymmetric, nonlocal process that is entirely unlike every other process that physical theory gives us reason to believe in. It seems odd that such a strange process should exist alongside the straightforward, continuous, temporally symmetric, local Schrödinger equation. Indeed, compared to the elegance and power of the Schrödinger equation,

Perhaps though those qualities mentioned here are the exact characteristics of consciousness. That is; the fundamental form that qualia take is one of instantaneous, discontinuous, temporally asymmetric and nonlocal. These particular characteristics would be from the effect and inter-relatedness of space and time's portion and contribution to qualia.

There is something very awkward about the idea that the world has two such entirely different sorts of dynamics at its basic level. *But I submit that this would not be so when looking at the differences between the dimensions of space, time and consciousness – energy's facets will differ substantially, yet have connections to each other, in this case phenomenologically.*

Chalmers asks why it is that superposition, on another viewpoint, is everywhere. Why then does the world appear discrete? *My answer to this is that it is discrete due to coherence because coherence itself is discrete. Remember, the world “appears” only after a coherent collapse. When all there is, is superposition, then no coherent collapse has occurred and no “appearance” manifested.*

Returning now to the question of the make-up of consciousness and that of qualia, he states; We can say that a mental state is conscious if it has a qualitative feel —an associated quality of experience. These qualitative feels are also known as phenomenal qualities, or qualia for short. The problem of explaining these phenomenal qualities is just the problem of explaining consciousness. This is the really hard part of the mind-body problem. Why should there be conscious experience at all?

This is my major premise; we maintain that qualia are the characteristic of the building blocks of consciousness (universal consciousness) in relation to our individual consciousness (through our Will). So that, there is conscious experience because we tap into qualia, and by so doing we experience it. The fact that there are qualia in the external world, and the fact that we can experience it accounts for why we are conscious. It is a thing of itself.

He goes on to say; And we would like the theory to explain how it arises, so that the emergence of consciousness seems intelligible rather than magical. In the end, we would like the theory to enable us

to see consciousness as an integral part of the natural world. Currently it may be hard to see what such a theory would be like, but without such a theory we could not be said to fully understand consciousness.

Yet, this is the same case as it is for space, time or materiality – but we do not question what they are. I guess that is because consciousness has such a personal attribute to it (unlike space, time or materiality), an “investment” of our-selves. Therefore, the search for what consciousness is seems to take precedence over a search for what space or time are. We seem comfortable in assuming space, time and materiality are simply a priori entities and background givens, but not so comfortable in leaving the mystery of consciousness alone.

The fact is that with any fundamental building block, whether that be a quark or a segment of time and space, we generally cannot reduce these to a theory of what they actually are. This is why the more we break something down (to atoms, then quarks, etc.) the more we can further break it down. Once we come to the most indivisible part, we can no longer find any constituent to it and therefore cannot develop a physical theory of what that is. In this case, the fundamental part is energy, and beyond that is the geometric effect upon potential energy. But as to a theory of what potential energy actually is – we will forever be silent. This is the same for energy’s derivatives – space-time, materiality and consciousness.

He poses the question; What is mysterious is why that state should feel like something; why it should have a phenomenal quality? Why the causal role is played and why the phenomenal quality is present are two entirely different questions. The functionalist analysis denies the distinctness of these questions, and therefore seems to be unsatisfactory.

However, looking at the opposite side of Functionalism, perhaps all experience, including casual relationships to behavior, are stimulated and even carried out by some form of qualia. Therefore, the “choice” to go out in the rain would not be based on casual motivations of desire or enjoyment, etc., but rather would be in relation to a “feeling” and such feeling resulting in a desire and then casual behavior. Therefore, qualia are the progeniture of all mental states including those that account for behavior.

However, in his view: Conceivably, some deep analysis might reveal a fundamental link between the phenomenal and the psychological, but this would be a nontrivial task, and is not something to be accomplished by prior stipulation. To assimilate the phenomenal to the psychological prior to some deep explanation would be to trivialize the problem of conscious experience; and to assimilate the psychological to the phenomenal would be to vastly limit the role of the mental in explaining behavior.

This might be semantics though. I believe I have revealed the fundamental link between the phenomenal and the psychological, as discussed previously. The deep explanation is revealed to be the three facets of energy and how they manifest in the universe, both phenomenally and materially.

Regarding both psychological and phenomenal states, he asserts: ... having both a phenomenal and a psychological component. Pain provides a clear example. The term is often used to name a particular sort of unpleasant phenomenal quality, in which case a phenomenal notion is central. But there is also a psychological notion associated with the term: roughly, the concept of the sort of state that tends to be produced by damage to the organism, tends to lead to aversion reactions, and so on. Both of these aspects are central to the commonsense notion of pain. We might say that the notion of pain is ambiguous between the phenomenal and the psychological concept, or we might say that both of these are components of a single rich concept.

And this is what we set out previously – that the integration and linking, and recognition that occurs, through the Will connecting the phenomenal quality and the psychological functionality is that single rich concept. Yet, it should not be over-looked that only one of these concepts, the phenomenal, causes an experience. The other, though key in identifying that experience, in reflecting on it, in reacting to it, etc., is not the experience itself. And thus, attributing them both to a single rich experience is somewhat lessening the “richer” importance of the phenomenal aspect. It is the experiencing of pain, not the understanding of it, that matters most.

He continues; When we want to be clear, we can simply stipulate whether it is the psychological property, the phenomenal property, or a combination that we are concerned with. Still, some of these dual concepts lean more strongly toward the phenomenal, and some lean toward the psychological. Take the concept of sensation, which is closely related to the concept of perception and which also has both phenomenal and psychological components.

Emotions have a much clearer phenomenal aspect. When we think of happiness and sadness, a distinct variety of conscious experience comes to mind. It is not quite obvious whether the phenomenal aspect is essential for a state to be an emotion, however; there is clearly a strong associated psychological property as well. As usual, we need not make any decision on this matter. We can simply talk about the psychological and phenomenal aspects of emotion, and observe that these exhausts the aspects of emotion that require explanation.

This is true; however, it is noteworthy that a key assumption to this line of reasoning is that these aspects (in this case emotion) need explanation as the primary completion of the “full” experience. That kind of thinking leads one to tend to place functionalism on the same level as phenomenalism when considering experience. That is mis-led thinking though because one must keep in mind that the primary and over-riding aspect of an experience is that of the phenomenal qualia of it – adding to this experience an explanation or further cognitive associations does not more fully form the experience itself – it only serves to mentalize it. Functionalism misses the main mystery of the hard problem and by using it as parcel to experience it tends to mis-represent it. There are separate functions that account for the phenomenal and the separate psychological aspects of emotion – one driving a functionality (psychological) and the other causing a phenomenal qualitative recognition.

But Chalmers goes on to agree with me; Some would argue that this leaves something out, and that something over and above the relevant sort of psychological process is required for belief. In particular, it leaves out the experiential aspects of believing, which some have argued are essential for anything to count as a belief. For example, Searle (1990a) has argued that the intentional content of a belief depends entirely on the associated state of consciousness, or on a state of consciousness that the belief can bring about. Without consciousness, all that is present is “as-if” intentionality. *“As-if” being quite inferior to “As-is”.*

But then he goes right into, again, the compromised view that I do not subscribe to when he states; Intentional states, such as desire, hope, and so on. All of these states have a psychological and a phenomenal aspect, and we need not legislate which is primary, although a strong case might be made for a psychological analysis. What counts is that there is no aspect of this state that outstrips both the psychological and the phenomenal (with perhaps a relational component thrown in). Psychology and phenomenology together constitute the central aspects of the mind.

Although greenness is a distinct sort of sensation with a rich intrinsic character, there is very little that one can say about it other than that it is green. In talking about phenomenal qualities, we generally have to specify the qualities in question in terms of associated external properties, or in terms of associated causal roles. Our language for phenomenal qualities is derivative on our non-phenomenal language. As Ryle said, there are no “neat” sensation words.

When we learn the term “green sensation,” it is effectively by ostension—we learn to apply it to the sort of experience caused by grass, trees, and so on. Generally, insofar as we have communicable phenomenal categories at all, they are defined with respect either to their typical external associations or to an associated kind of psychological state.

This I find to be the opposite “concern” that would be more applicable to this study of phenomenal vs. psychological, or mind vs. body. He is saying that without a psychologically based language with which to interpret experience, then such experience is lessened and missing their richness. He goes on here to say that we depend upon our psychological associative abilities to make logical sense of our experiences. I find that this may be somewhat true from a cognitive vantage point, however, the whole purpose of solving the mind-body problem is not in coming to terms with the cognitive basis for thinking about an experience, it is the mysterious ability to experience outside of the mind, bereft of cognition and logic. So, to talk in terms of the fuller “need” for language and logic to understand experience is a circular argument in that; we think about our experiences and thereby come to understand them. This is a closed loop and approaches nothing about the overwhelming contribution from the actual experience itself – brute and direct.

For me, the mind-body issue comes down to the following query; What is it that is not of the mind but is parcel to us? It’s not to differentiate and explain the separate characteristics of mind and then of body, of the physical and then the phenomenal. We know the body and the physical quite fully. It is to investigate into the mystery of what the phenomenal is. Ascribing equal merit to both the physical and the phenomenal in the investigation of experience is over attributing one contribution (that of the physical) and under attributing the other (phenomenal).

Then though, he goes on to contradict himself and effectively to say exactly what I said above; The division of mental properties into phenomenal and psychological properties has the effect of dividing the mind-body problem into two: an easy part and a hard part. The psychological aspects of mind pose many technical problems for cognitive science, and a number of interesting puzzles for philosophical analysis, but they pose no deep metaphysical enigmas.

The phenomenal aspects of mind are a different matter. Here, the mind-body problem is as baffling as it ever was. The impressive progress of the physical and cognitive sciences has not shed significant light on the question of how and why cognitive functioning is accompanied by conscious experience. progress leaves the question of conscious experience untouched.

He continues; The hardest part of the mind-body problem is the question: how could a physical system give rise to conscious experience? We might factor the link between the physical and conscious experience into two parts: the link between the physical and the psychological, and the link between the psychological and the phenomenal. As we saw above, we now have a pretty good idea of how a physical system can have psychological properties: the psychological mind-body problem has been dissolved. What remains is the question of why and how these psychological properties are accompanied by phenomenal properties: why all the stimulation and reaction associated with pain is accompanied by the

experience of pain, for instance. Following Jackendoff (1987), we can call this residue the mind-mind problem. Current physical explanations take us as far as the psychological mind. What remains ill understood is the link between the psychological mind and the phenomenal mind.

I agree with all that except that he seems to put psychological reactions and processing of psychological impressions ahead of the experience of pain itself. This is reversing the order of cause and effect, or at the least it is not giving due to the importance of the order of cause and effect. The Cause of any psychological reactions is the actual phenomenal experiencing of the pain – the psychological reactions are the effects. It is important to know the correct order because it is the identification of causation that leads us to the discovery of the building blocks of a certain reality (in this case phenomenal reality, consciousness's reality). Knowing the building blocks is the paramount step in understanding that reality. Focusing on the effects tends to obfuscate the study.

But he finishes with; In later chapters, I will argue that the link is an extremely strong one and that the factoring strategy is valuable in approaching the mind-body problem. If so, then understanding the link between the psychological and the phenomenal is crucial to understanding conscious experience.

Though posing an investigation on this egalitarian basis (the combined holistness of the psychological with the phenomenological) is certainly an important study, I think it is more important to keep our eyes on the key element that draws us to study this – the phenomenal aspect and it's "weirdness" in our cognitive understanding (or better put; our non-understanding). That is the true question and issue at hand.

In the next section Chalmers discusses the concepts of attention and awareness. These are important areas for study, if for no other reason than in Chalmers theory, awareness is a substitutive concept for consciousness, and in my theory, attention is the key concept for the Will and thus for the link between the psychological and the phenomenal, the mind and the experience.

Before getting to Chalmers comments I want to point out a few concepts from my own viewpoint about attention and awareness. The subject at hand concerns the linkage between the physical-mind world and the phenomenal-qualia world. That linkage being of the form of attention and awareness (depending upon whose theory we are discussing). Linkage is an interesting concept. In general, the nature of linkage is that each "side" of the link contains an element of the side it is linking up to. For example; take a male into female link-up, the contra distinctive form of the male hook-up is the female form and vice versa – they fit together and have elements of each other (even though that element is in the form of an opposite). Other linkages have the same dynamical form, a key and a lock, a car hook and a trailer hook, etc.

It is ironic that is the case of attention or awareness and phenomenal or physical linkage, and it bears no different form of shared elements like the examples given above. The irony is that, in Chalmers description of how this linkage works he posits that awareness is the linkage agent that connects the physical (or psychological) world with qualia (or the phenomenal world). Here, awareness, though a part of our mentality, is a phenomenal agent or effect of the physical mind and it is linking together the phenomenal qualia to the physical mind thus producing consciousness (the phenomenal in the physical body). So, the link is one that goes from a physical object (the brain) and utilizes a phenomenal based agent of its own making (awareness being of the mind) and links this up to the phenomenal (qualia) producing consciousness. Psychological using Phenomenal to access the Phenomenal.

In our theory it is not awareness that is the link, but is attention (the Will) that is the linkage. Here we have again a physical or psychological object connecting to a phenomenal one (qualia) by using a phenomenal agent of its own making. These dynamics then are rendered more likely due to their similarity with the nature of linkage in general (as discussed above).

Now for Chalmers comments on awareness; Attention; we often say that someone is conscious of something precisely when they are paying attention to it; that is, when a significant portion of their cognitive resources is devoted to dealing with the relevant information. We can be phenomenally conscious of something without attending to it, as witnessed by the fringes of a visual field.

He seems to be saying that attention is not always or even primarily responsible for consciousness. Instead he states that we just use attention as a descriptor of consciousness. He cites non-attention on fringe impressions in the visual field as proof of this.

I believe that although this is an Interesting point about attention, my belief is that we can be unconscious of our “auto pilot” use of attention with all impressions of qualia, whether we have recognition to the qualia or not. Attention or Will operates whenever qualia is present, which is how qualia enters our physical sensory apparatus, and it is recognition that accounts for our awareness of this phenomenological process.

It is not the awareness that is consciousness itself, rather it is the brute transfer of qualia, through the Will/Attention operating (whether we are aware cognitively of that mental initiation of it or not). Awareness, is the receptive cognition of the actual experience.

Here is an example of my schemata:

- 1) An object emanates its qualia aspect onto our sensory apparatus (like the retina, auditory center, etc.).*
- 2) If we are not attending to it then it is recorded on our visual cortex (or the like) but we have no awareness or recognition of it (for example; we drive and many things enter our vision, but so much of the input is not conscious in us because we did not utilize our attention to it and therefore no awareness occurred).*
- 3) When the emanation of the quale has a certain level of “importance” to us of some nature (see previous discussion on this topic of importance levels and how they work), we attend to it (utilize attention or the Will) and the experience happens which we are aware of through the physical process of recognition (here it was this third happening that accounted for and was responsible for consciousness – the targeted attention caused the linkage to occur as a cause bringing about conscious perception as its effect).*
- 4) Awareness or recognition then occurs (being the effective agent of attention – cause and effect) and we react to this within our cognitive process – either resulting in action or simply recording it with our neurons.*

*So, the order is; The objective **Qualia** aspect, coupled by **Attention** (or you can reverse this and consider it attention coupled by qualia), then **Recognition**, followed by **Action** or Recording (which includes memory) - also see previous discussion about the Will and attention concerning this as well as about awareness.*

In Chalmers schemata, the order is; **Qualia**, then **Awareness** (which is consciousness according to him) and then he is silent as to what happens after awareness. So, my contention is that awareness is a phenomenologically based receptive agent of cognition, while attention is an active, targeted agent of cognition and is always active (though not always free of competing cognitive inputs). Once again, for Chalmers, attention is just a descriptive word.

Chalmers: Awareness can be broadly analyzed as a state wherein we have access to some information, and can use that information in the control of behavior. One can be aware of an object in the environment, of a state of one's body, or of one's mental state, among other things. Awareness of information generally brings with it the ability to knowingly direct behavior depending on that information. *Though one can be "passively aware"*. This is clearly a functional notion. In everyday language, the term "awareness" is often used synonymously with "consciousness," but I will reserve the term for the functional notion I have described here.

In general, wherever there is phenomenal consciousness, there seems to be awareness. My phenomenal experience of the yellow book beside me is accompanied by my functional awareness of the book (*also accompanied by attention to the book, again; awareness is passive while attention is targeted*), and indeed by my awareness (*and attention*) of the yellow color. My experience of a pain is accompanied by an awareness of the presence of something nasty, which tends to lead to withdrawal and the like, where possible. The fact that any conscious experience is accompanied by awareness (*through attention*) is made clear by the fact that a conscious experience is reportable. If I am having an experience, I can talk about the fact that I am having it. I may not be paying attention to it, but I at least have the ability to focus on it and talk about it, if I choose (*that is semantics*). This reportability immediately implies that I am aware in the relevant sense. (*No, that you attend to it in the relevant sense*).

I don't agree with the above. I see that as only true when awareness is accompanied by attention. Though he considers these states (awareness and attention) as psychological and not phenomenal, I see that singularity as not necessarily true. Attention has qualia of these experiences as progenitures of the ability associated with recognition or awareness. This means that the "feelings" brought on by attention themselves are in the form of qualia (have a specific quality). That without that qualitative experience through attention, we would not be aware (and could not "report it"). Here again is the concept that qualia are in everything that constitutes consciousness - we just do not always recognize it or define it as that and instead we define it as a psychological functionality.

At this point in his book he talks about moral issues and their make-up.

According to Moore (1922), nothing about the meaning of notions such as "goodness" allows that facts about goodness should be entailed by physical facts. In fact, Moore claimed that there is no conceptual connection from natural facts to moral facts, where the natural may include the mental as well as the physical.

As for my theories about moral issues – see my book, "Mirrors" and its detailed explanation concerning the true nature of morality, good vs. evil, etc. To describe this theory in a nutshell; it is the correlation, or the coherence with energetic waves, which quantumly are Schrodinger wave-like constituents of moral effects from pure energetic causes, such coherence being the most efficient path of energy. This is an objective morality and does not reflect different subjective opinions of what is moral or good. We contend that coherence and the path of least resistance of energy accounts for the moral and aesthetic characteristics and choices.

These antirealists argue that because moral facts are not entailed by natural facts and are not plausibly “queer” further facts, they have no objective existence and morality should be relativized into a construct or projection of our cognitive apparatus. The same strategy cannot be taken for phenomenal properties, whose existence is forced upon us.

Although I agree with the spirit of what Chalmers says here (that of morality being forced upon us and thus objective) – the coherence with physical energy waves precisely is entailed by natural facts, and thus, objectiveness is that nature. His considering morality as a phenomenally objective thing is incorrect though in that energy waves are physical. As far as being forced upon us- they are not, they are probabilistic and can manifest in any construct including non-moral forms. It is only through coherence with the most efficient wave shapes that we act and believe in conjunction with an absolute morality. But again, my book “Mirrors” has a very full exposition of this subject that is worth looking into.

As regards “aesthetics” – they too obey the path of the least resistance of energy waves, but those paths may differ according to the person (they are initiated by a cognitive process) and are thus subjective, which is brought about by different histories (i.e.: experiences) which affects the shape of the energetic wave and thus the least resistant path.

Therefore, aesthetics is open as to judgement and absoluteness Though aesthetically pleasing is a function of certain harmonics as is music, and thus is a priori determined as is then the path of least resistance. What can vary is the particular harmonic preference as determined by the individual.

But if it is discordant with harmony then it still will not be aesthetic. Harmony itself requires, therefore, a certain parameter and explanation of where it comes from, as well as an explanation of whether it evolves (does art evolve, etc.?). This is the Pythagorean approach to the “spheres”. Is there an absolute harmony or is harmony only subjective? I posit that harmony is a function of a coherence of wave shape with discordant waves being non-harmonious. There is then a continuum of harmoniousness with perfect coherence (wave matching) as perfect harmony. In that sense therefore, aesthetics can be objectively judged by coherence.

In any case, it is interesting that, in my system, all these concepts which we normally consider as being from the phenomenal, subjective realm, are actually based in a very different realm, that of energy, and they are fully objective.

Part two of his book concerns what he calls “The irreducibility of consciousness”. He starts off with the concept that consciousness cannot be explained in physical terms; Almost everything in the world can be explained in physical terms; it is natural to hope that consciousness might be explained this way, too. In this chapter, however, I will argue that consciousness escapes the net of reductive explanation. No explanation given wholly in physical terms can ever account for the emergence of conscious experience. This may seem to be a negative conclusion, but it leads to some strong positive consequences that I will bring out in later chapters. I agree with this. This is because consciousness is a third dimension of energy (space-time, materiality, consciousness) and is thus not physically based. It is explained only in reliance to energy.

Can a zombie be conscious; or in other words; is there a function or “place” within our brain/mind that accounts for us being conscious? Where does green exist inside us and how do we recognize it (react to it)? I say that there is a coherence within us between “outside qualia” (universal consciousness’s specific

qualia) and my inner qualia match (through the process I have outlined previously that results in a conscious recognition). But what is that match? Is it physical? Or is it phenomenal itself and a transformation from a complex compendium of functionality within my brain/neurons? Is it local to the area that is processing it (i.e.: color has qualia matching within the visual cortex, sound in the auditory, etc.?) Where is the “Bing” of Penrose? (Penrose defines consciousness, defines knowing as “The Bing of knowing”)

I contend that it is the irreducible singularity of qualia in the universal that we experience. When that singularity is matched (coherent) then experience comes into our existence from the outside as real as a reflection of green off a surface enters into our cortex from the outside. So, object results in an inner object that does not exist “inside” but rather our inside bridges to the outside universality.

The “Bing” is the ringing of the universal bell (it’s actually the attentive recognition). And just as a scene encompasses the entirety of our experience of that scene inwardly, so does a match with the universal qualia. Qualia does not “enter us”, we “enter It”; and thus, consciousness is not an inner state but rather is the experiencing of the universal consciousness – the universal state. This is the exact description of “the soul” (that of at-one-ness with the universal). Therefore – consciousness is of the soul; and the soul is not inner to us but is “outer” to us – non destructible and forever.

Would a zombie then have a soul? The answer to this leads to some very interesting conclusions. The attention of the Will is partly an organic functionality, that is; the linking up to the outer qualia must match coherently to that qualia - must be made of the same “stuff” - must be begotten from energy. Silicon programming, as in the case of a zombie or a computer (Artificial Intelligence) is not comprised of energy’s facets, its dimensions – it is more comprised of a program. That program, though on the border of phenomenological and functional, is nonetheless not comprised of energy’s facets/dimensions. Because it is not, it cannot cohere with qualia and therefore cannot have a conscious experience. It can only produce a mimicking of behavior, of action. Thus, the nomenclature; “Artificial”. Note that energy’s facets are; Space-time. Materiality and Universal Consciousness. If the faculty that experiences is not begotten from this distribution of energy (as are organic objects), then no experience phenomenologically can occur (as is the case of a silicon robot).

I would posit nevertheless that as long as the zombie has the facility of bridging to the universal through some sort of organic functionality which could cohere to that of energy’s qualia (the Will?) then qualia matching would take place and a soul would exist. This then speaks of a “level” of functionality (complexity and the component’s make-up – from energy’s facets) where consciousness (and soul) come into being. But here again – it’s cart before horse due to our vantage point. It’s not that the soul comes into being, the soul is always there (universally) – it’s that the facility for the soul to manifest physically or psychologically deals with a specific configuration of mentality, but must also have the proper make-up of energy. Rocks don’t have this facility, but mice do, etc.

What that facility is, again goes to the heart of the question of what is consciousness. I say that if the universe is indeed conscious (through the interrelatedness between space-time, materiality and consciousness, i.e.: energy) then everything in the universe has potential consciousness in it to some degree (yes, rocks too). Only the simpler, non-organic objects do not have the ability to bridge or link (therefore this is not Pan psychism). So, it is this ability, borne of the Will (the bridge) that accounts for what we call self-consciousness. Here again a very detailed explanation of what Will is made up of begets the final definition of what we call consciousness. By the way, the above concepts do not support Pan psychism precisely because we clearly state that consciousness does not occur in everything, just potentially.

Chalmers underscores the uniqueness of consciousness when he says that even if we knew every last detail about the physics of the universe—the configuration, causation, and evolution among all the fields and particles in the spatiotemporal manifold— that information would not lead us to postulate the existence of conscious experience. My experience of consciousness that forces the (hard) problem on me.

Here, the mistake he makes is considering a priori that it is my experience that causes the problem of understanding consciousness. If it isn't mine, then there isn't a problem of the same nature. A good analogy is if a cell considers its identity as singular, it would not be able to conceive of why its functional objective is such and such (a particular functionality within the larger system). However, if the cell understands its identity as part of a larger whole, then its functionality would be comprehensible to itself. A cell does not have the facility to understand though – such facility being comprised of the ability to cohere with outer consciousness – qualia.

He believes that: Our knowledge that conscious experience exists derives primarily from our own case – but I believe that our knowledge that consciousness exists derives from the universal case. And this makes a huge difference in the nature of the discussion.

*A very key point he makes is thus: For consciousness to be entailed by a set of **physical facts**, one would need some kind of analysis of the notion of consciousness. In other words, it is a circular problem – to know what it is, one must know what it is!! However, I would submit the following logical argument; It is unknowable by us because we only have accessibility to the dimensions of space-time and materiality, and since consciousness is of a third and completely different kind (as different as space-time is to materiality) then we cannot know it directly, it is outside of our ability to understand and recognize its nature.*

However, if one can eliminate every possible conceivable explanation of something (as is the case with consciousness) then, yes, it is unknowable by us, but – it is knowable that it is unknowable, and that known fact (of the un-knowable-ness of the subject), tells us that the subject is of a kind that is not of our material notions (or space-time notions) and therefore must be non-material, and something other than material (or space-time) must exist, just not within our reach of knowability.

But if we “know” the unknowable does actually exist, then we can deduce that the “notion of consciousness” exists and thus, we could potentially analyze it in terms of what it entails in the negative sense and eventually come to a “notion” of what it is like. And by coming to a “likeness” notion we can then grasp other facets that it likely has, and so on. We can come to know things through analogy.

For example; if we only have knowledge of the numbers of 1 to infinity and we want to have a notion of zero, by eliminating all the possibilities that it is any of the numbers between 1 and infinity, we would “discover” that it is not a number and that number-ness is not one of its qualities. We then could ruminate on what qualities a non-number would have and eventually come upon the discovery that zero-like fits with this abstract concept (as did the Mayans).

So to address Chalmers, in the final analysis, we could indeed come to the conclusion that consciousness can be entailed by a set of physical facts, or at least partially comprised of physical facts – the same way we can conclude that a part of consciousness has to do with the physical (material), which it does (through inter-dimension relatedness). Yes, we still do not know the inherent nature of consciousness,

but we do know something about it; that it has a connection to the material and to space and time. If we further discover that space-time and materiality is derived from energy, we could rightly conclude (but never definitively know) that consciousness is also derived from energy, at least in part. That's probably as far as we could go since no experiment could dissect energy into those three components for us to view. But we will have discovered a key characteristic of consciousness which may very well lead us to a number of answers to our questions.

Chalmers then comes to a key quality of consciousness. He states; Although conscious states may play various causal roles, they are not defined by their causal roles. Rather, what makes them conscious is that they have a certain phenomenal feel, and this feel is not something that can be functionally defined away.

I agree, it cannot be defined in the positive sense (that is; functionally) but as I said above – it can be defined through its negative sense (what is it that is non-functional, what is non-functionality?) and that type of analysis would bring us closer to knowing what it is, or at least what it is like. Remember, we never interact with consciousness or qualia directly, but only secondarily through recognition functionally – that is the “what it is like” aspect of it.

He goes on to state: It seems that the concept of consciousness is irreducible, being characterizable only in terms of concepts that themselves involve consciousness. But here he gives little attention to the stressing of a key point – the point, as I brought out above – is that he has determined that consciousness is irreducible (through rejecting all other types of reductive explanations) and thus has discovered something about consciousness, has discovered an attribute. And by then looking into what other “things” are ultimately, completely irreducible, one may come to further conclusions and knowledge of what consciousness is. A non-reducible thing is a fundamental thing (like forces, etc.) and thus consciousness is a building block fundamental of the phenomenal realm.

The hardest problem for a theory of consciousness, is that no physical theory will take us all the way to qualia: This suggests a need for an approach to the problem of qualia. As a basis for a theory of consciousness, it is sensible to assume that, just as in ourselves, qualia exist in other conscious human beings, whether they are considered as scientific observers or as subjects. . . We can then take human beings to be the best canonical referent for the study of consciousness. This is justified by the fact that human subjective reports (including those about qualia), actions, and brain structures and function can all be correlated. After building a theory based on the assumption that qualia exist in human beings, we can then look anew at some of the properties of qualia based on these correlations. It is our ability to report and correlate while individually experiencing qualia that opens up the possibility of a scientific investigation of consciousness. (Edelman 1992, p. 115) As before, because this theory is based on the assumption of correlation, it is clear that a reductive explanation of experience is not on offer. Most of the time Edelman claims only to be explaining the processes that underlie conscious experience; he does not claim to be explaining experience itself.

Interesting approach by Edelman and one that we agree with. We cannot know qualia directly, only indirectly through the recognition process we outlined previously, such recognition as a secondary, non-direct relationship. And this passage also underlines what I said before; that through exploring analogous avenues that are either not characteristic of consciousness, or are correlated in some way with it – we can discover much about the nature of consciousness. In the case he points to above; we can explore human reactions (both psychologically and functionally) to consciousness or qualia, and learn much about its nature and operative functionality.

Sometimes it is held that the key to the explanation of consciousness and fields in the spatiotemporal manifold, is in undergoing complex processes of causation and evolution. An opponent might agree that nothing in this sort of physics entails the existence of consciousness, but it can be argued that there might be a new kind of physical theory from which consciousness falls out as a consequence. *This touches upon my approach to a theory; a new kind of physical theory – that of energy.*

It is not easy to evaluate this claim in the absence of any detailed proposal. One would at least like to see an example of how such a new physics might possibly go. Such an example need not be plausible in the light of current theories, but there would have to be a sense in which it would recognizably be physics (*which in my theory, the “physics” of energy certainly is*). The crucial question is: How could a theory that is recognizably a physical theory entail the existence of consciousness? If such a theory consists in a description of the structure and dynamics of fields, waves, particles, and the like, then all the usual problems will apply. And it is unclear that any sort of physical theory could be different enough from this to avoid the problems.

Not if the physics is new and revolutionary. Nonetheless, it would not at that point be considered “physical” in the material sense. It would be however, comprehensible in a wider sense. Maybe called supra-physical or some other nomenclature that captures the “physics” of energy.

The trouble is that the basic elements of physical theories seem always to come down to two things: the structure and dynamics of physical processes. Different theories invoke different sorts of structure. Newtonian physics invokes a Euclidean space-time; relativity theory invokes a non-Euclidean differential manifold; quantum theory invokes a Hilbert space for wave functions. And different theories invoke different kinds of dynamics within those structures: Newton’s laws, the principles of relativity, the wave equations of quantum mechanics. But from structure and dynamics, we can only get more structure and dynamics. This allows the possibility of satisfying explanations of all sorts of high-level structural and functional properties, but conscious experience will remain untouched. No set of facts about physical structure and dynamics can add up to a fact about phenomenology. This seems to be a priori true and the nature of the term phenomenological.

I submit that this is not entirely true. If physicalness is begotten from a different reality (energy’s character), and if phenomenology is also made from that same character of energy – then through commonality, a theory can arise that is subsumed by that of energy. If C contains A, and C contains B, then C is the common set and a more precise and holistic description of A & B (it’s a basic Venn diagram). So, even though it seems that by using physical definitions to a phenomenological reality seems to preclude a physical solution – it does not preclude a different type of solution which the physical would correlate and adhere to, a solution that subsumes the physical and the phenomenological.

Of course, there is a sense in which the physics of the universe must entail the existence of consciousness, if one defines physics as the fundamental science from whose facts and laws everything else follows. This construal of physics, however, trivializes the question involved. If one allows physics to include theories developed specifically to deal with the phenomenon of consciousness, unmotivated by more basic considerations, then we may get an “explanation” of consciousness, but it will certainly not be a reductive one.

However, a theory that subsumes physics as we know it can, and does, have an irreducibility to it. In fact, the theory of energy is one that is purely monadic and irreducible. Being subsuming of the physical and the phenomenal – they too inherit irreducibility as their main component.

He mistakenly uses the following as an example of utilizing the physical to explain the phenomenal; For example, Penrose (1994) suggests that the key to understanding wave function, leading to a nonalgorithmic element in the laws of nature. Drawing on the ideas of Hameroff (1994), he suggests that human cognition may depend on quantum collapses in microtubules, which are protein structures found in the skeleton of a neuron. Indeed, Penrose and Hameroff suggest that quantum collapse in microtubules may be the physical basis of conscious experience.

What is really happening here though is that Penrose and Hameroff are attempting to subsume the phenomenal with the physical. However, one does not subsume the other, they are both subsumed by a third, non-physical and non-phenomenal entity (energy) that better defines them. So, Penrose's explanation of the linkage between consciousness and physical functionality leaves out the common nature of the two. He explains how consciousness could appear in us physically, but misses defining what consciousness actually is. His physical description is thus only reserved for a physical explanation of that side of a combined process (as Chalmers contends), he says nothing about the other side of the combined process, that of the phenomenal aspect of consciousness. It is thus a bad example of a complete theory, yet a good example of Chalmers' point about physical solutions do not transcend the physicalness.

As a side note that addresses Penrose's theory, it is the problem of location that I believe invalidates his theory. The location of qualia must be everywhere in order to always be accessible, and with Hameroff it has only a singular, specific location. In my theory, the location is everywhere, and the time is everywhen. This is a result of its derivation from space-time as one of its facets. Space-time begets and encompasses all of space and all of time at once (this doesn't mean time in the past and the future, but rather time being ubiquitous everywhere). With Hammeroff's theory; in order to realize greenness, one would have to be within that quale's location, and unless the greenness quale is located everywhere and always, one could not access it if one were in another place at another time.

Chalmers notes: Why should quantum processes in microtubules give rise to consciousness? The question here is just as hard as the corresponding question about classical processes in a classical brain. This underlines the fact that Penrose has not explained consciousness – just the link.

Penrose's answer to that criticism is that it is "The Bing" that gives rise to consciousness, to self-knowing. However, he does not explain how psychologically and cognitively, the transformation from qualia to mental takes place. He only defines where physically it happens but not where psychologically it happens (as our recognition concept does). We contend that "The Bing" is actually a recognized feeling, cognitively processed, which is itself begotten from a quale of "Bing-ness".

"Feel" is one of the keys to consciousness experience inwardly – to expound on this; Green has a subtle feel to it upon recognition, an experience that is not of the visual cortex, is not a sight, red a different feel, etc. They are a "Feel" that is below the level of cognitive recognition, but there just the same. Thus, a better rendition of what we "see" is a "feel" of that color, we feel qualia in our brain/nervous system. The Bing itself is also a feeling – that feeling is a quale of the feeling itself. One can rightly proclaim that everything is qualia!

He concludes: Any account given in purely physical terms will suffer from the same problem. It will ultimately be given in terms of the structural and dynamical properties of physical processes, and no matter how sophisticated such an account is, it will yield only more structure and dynamics. While this is enough to handle most natural phenomena, the problem of consciousness goes beyond any problem about the explanation of structure and function, so a new sort of explanation is needed.

Therefore, something not of a physical explanation must come about. That is what I have proposed, something that is outside of the material or space-time dimensions.

For an explanation of consciousness, then, we must look elsewhere. We certainly need not give up on explanation; we need only give up on reductive explanation. The possibility of explaining consciousness non-reductively remains open. This would be a very different sort of explanation, requiring some radical changes in the way we think about the structure of the world. But if we make these changes, the beginnings of a theory of consciousness may become visible in the distance. *And this is precisely what I have proposed and defined.*

At this point in my narration it is a good time to step back, renew and remind ourselves of how very amazing this all is. We do not want to reach a situation where, because consciousness gets somewhat explained, it loses its aspect of amazement. That can always be a concern. Evidence atomic theory. Although when we reflect upon what it is we are still amazed and in awe, in general we just take it for granted. This is the risk of discovery – that which gets discovered loses the awe from its mystery.

In the case of consciousness, it's easy to overlook the amazingness of it all. What must be kept in perspective is that given the explanation that everything is qualia, and qualia is universal and outer to us – then all that we fundamentally are is universal, outside us and shared in common with us all. It is the amazement of the concept of the soul, and it quite possibly realizes the most precious desire of all living things – that of continuation after death. Maybe it still is not the individual continuation, but if indeed everything is of the universal, if no consciousness is individual to us in the sense of basic experience of qualia and consciousness – then the “I continue after death” simply, but passionately becomes, “We continue after death”. It might not be fully what we wanted (the individual-ness continuation) but it's a damn good consolation prize!

So – be amazed! When you go about your day, your life, your existence – you are in reality, underneath it all; partaking of the universal – you are not alone!!

In his next chapter he presents his theory of Natural Dualism; An argument against materialism was made in the last chapter, I was concerned with the explanatory question, “Can consciousness be explained by physical theories?” rather than the ontological question, “Is consciousness itself physical?” But the two questions are closely related, and in this chapter, I will draw out the ontological consequences of the arguments in the last chapter. In particular, the failure of logical supervenience directly implies that materialism is false: there are features of the world over and above the physical features. This is what I claimed; that energy subsumes the physical (and the phenomenal).

We can use Kripke's image here. When God created the world, after ensuring that the physical facts held, he had more work to do. He had to ensure that the facts about consciousness held.

This failure of materialism leads to a kind of dualism: there are both physical and nonphysical features of the world. The falsity of logical supervenience implies that experience is fundamentally different in kind

from any physical feature. But there are many varieties of dualism, and it is important to see just where the argument leads us.

The dualism implied here is instead a kind of **property dualism**: conscious experience involves properties of an individual that are not entailed by the physical properties of that individual, although they may depend lawfully on those properties. Consciousness is a feature of the world over and above the physical features of the world. This is not to say it is a separate “substance”; the issue of what it would take to constitute a dualism of substances seems quite unclear to me. All we know is that there are properties of individuals in this world—the phenomenal properties—that are ontologically independent of physical properties.

This points to the question of whether energy transforms into three separate entities with their own completely separate identity, or do the three entities just have different facets of one, monadic entity? I maintain that energy has been transformed into separate entities, but that those separate entities remain connected to one another and cannot exist without one another, and ultimately, after many eons, re-form into the monadic entity of energy (ultimately into potential energy). This is important that they are separate yet connected because it accounts for why we feel separate from everything (and alone). This is because our conscious experience is only connected, through our bridge of Will, to the conscious portion of energy and not to the other two facets (space-time and materiality). This separateness connection results in a separateness of experience also – it reflects it.

Because these properties are not even logically supervenient on microphysical properties, they are nonphysical in a much stronger sense. When I speak of property dualism and nonphysical properties, it is this stronger view and the stronger sense of non-physicality that I have in mind.

This remains plausible, however, that consciousness arises from a physical basis, even though it is not entailed by that basis (*that is only partially true – the physical basis is its functional process that must be present, however, that may be considered the least part of what constitutes conscious experience*). The position we are left with is that consciousness arises from a physical substrate in virtue of certain contingent laws of nature, which are not themselves implied by physical laws. *I agree with this concept.*

Although it is a variety of dualism, there is nothing antiscientific or supernatural about this view. The best way to think about it is as follows. Physics postulates a number of fundamental features of the world: space-time, mass-energy, charge, spin, and so on. It also posits a number of fundamental laws in virtue of which these fundamental features are related. Fundamental features cannot be explained in terms of more basic features, and fundamental laws cannot be explained in terms of more basic laws; they must simply be taken as primitive. Once the fundamental laws and the distribution of the fundamental features are set in place, however, almost everything about the world follows. That is why a fundamental theory in physics is sometimes known as a “theory of everything.” But the fact that consciousness does not supervene on the physical features shows us that this physical theory is not quite a theory of everything. To bring consciousness within the scope of a fundamental theory, we need to introduce new fundamental properties and laws.

And this is what I have done in my theory. He could have also because it is my contention that the fundamental feature of consciousness is qualia. The concept of qualia was there for him to utilize as a fundamental feature, he just didn't do that, leaving a void for this. As far as fundamental laws goes, this we do not presently know (except possibly the law of cause and effect). I suspect that they are subsumed by the fundamental laws of energy. In my theory those laws are born of geometry. The other

dimensions (space-time and materiality) correlate their laws to that of energy. Space-time with geometry and materiality with fields. I suspect that consciousness too will reflect their similarity to energy's basic laws and fundamentals. If I had to make a guess as to what they would constitute, I would guess quantum-ness.

There are two ways this might go (according to Chalmers). Perhaps we might take experience itself as a fundamental feature of the world, alongside space-time, spin, charge, and the like. That is, certain phenomenal properties will have to be taken as basic properties. Alternatively, perhaps there is some other class of novel fundamental properties from which phenomenal properties are derived. Previous arguments have shown that these cannot be physical properties, but perhaps they are nonphysical properties of a new variety, on which phenomenal properties are logically supervenient. Such properties would be related to experience in the same way that basic physical properties are related to non-basic properties such as temperature. We could call these properties proto-phenomenal properties, as they are not themselves phenomenal but together, they can yield the phenomenal. Of course, it is very hard to imagine what a proto-phenomenal property could be like, but we cannot rule out the possibility that they exist. They are qualia.

Here he sums up the crux of my beliefs about phenomenal properties and fundamental laws as I expounded above. I don't think though that they would be one to one related to experience. I think that experience would be a secondary characteristic of phenomenal fundamentals. Instead, it would be qualia that was directly caused by those fundamentals.

The "laws" of qualia is something that would need further investigation of. Laws, in general, specify how a fundamental object or property acts in relation to other objects or properties – whether those be phenomenological or physical. They are relational laws and have an intimate, perhaps one on one, connection with cause and effect (the fundamental aspect being cause). Therefore, the study of what effects occur due to an interaction with qualia, will likely beget what laws that are responsible for causing qualia to exist in connection with qualia (or energy in general).

Two primary observations occur here; 1) There seems to be a "logical" ordering of qualia with each other. The appearance or occurrence of qualia happens in conjunction with other qualia that has, in psychological retrospect, a certain cognitive logic to them, and 2) Qualia causes experience within a psychological, functional cognitive structure.

As regards the first issue; referral to the section in my book "Mirrors" concerning how cause and effect interrelates with the logical ordering of qualia within universal consciousness, is an exact rendition of this first law.

As regards the second observation; that qualia results in experience, a referral to the dynamics of how qualia interact with the physical cognitive process, points to how the law manifests as qualia interacts with materiality. This requires delving into the nature of the how and why of energy's three-entity manifestation, transformation and interaction. These aspects of energy's "distribution" have been touched upon in "Mirrors" and basically demonstrates how geometric spatial differentiation causes energy's relationship with space and its forming of space, it demonstrates how the function of "persistence" causes time and how the effect of motion (creating mass) results in materiality.

So, in these senses, the laws of qualia are effects begotten from the advent, the onset, of kinetic energy. The remaining laws deal with how these three facets interact with one another (again, a cause and

effect study and relationship). In general, interactions are of the nature of both transformation (depending upon what vantage point it is viewed from, that is; from which dimension) and reflection (how they co-exist with one another). For example; time co-exists with materiality (and with consciousness) in that it endows these two related facets with persistence. Space endows them with location. Materiality endows them with the ability to effect things and consciousness endows those two with identity, definition and existence itself.

These are the primary laws of energy and its three dimensions. Within those three dimensions are secondary laws that will determine how these facets operate in the universe, both materially and phenomenally.

So, a clue to the why qualia interact with materiality and causes experience, according to its endowing characteristics (identity, definition and existence) lies within the cause and effect nature of qualia. Cause and effect always portray and depict the secondary properties resulting from fundamental entities. Identity, definition and existence are the effects, phenomenally, of energy manifesting, energy's causational property.

Those secondary properties consequently cause qualia (which causes experience). So, qualia, stemming directly from energy, are the fundamentals of the phenomenal realm. They cause attributes (or qualities) as an effect which goes on to cause experience, then recognition, then cognitive definition.

It is interesting to note that the material (cognitive) result of the chain of causation set off by qualia, which has as its properties definition, identity and existence, are exactly those characteristics that the material and cognitive final effect results in. This dramatically supports my concept that each of the dimensions have each other as a part of them in some form upon interacting with one another. In this case; the phenomenal attributes of definition, identity and existence is reflected in the physical effect from interacting with the phenomenal. I think this quite distinctively goes to the heart of explaining the "hard problem".

Chalmers continues in this vein extensively; Where we have new fundamental properties, we also have new fundamental laws. Here the fundamental laws will be psychophysical laws, specifying how phenomenal (or proto-phenomenal) properties depend on physical properties. These laws will not interfere with physical laws; physical laws already form a closed system. Instead, they will be supervenience laws, telling us how experience arises from physical processes (*actually experience arises from phenomenal processes, from their causation and effect*). We have seen that the dependence of experience on the physical cannot be derived from physical laws, so any final theory must include laws of this variety. In that last sentence it is apparent that he sees experience being dependent on phenomenal laws as I have contended.

Of course, at this stage we have very little idea what the relevant fundamental theory will look like, or what the fundamental psychophysical laws will be. But we have reason to believe that such a theory exists. There is good reason to believe that there is a lawful relationship between physical processes and conscious experience, and any lawful relationship must be supported by fundamental laws. The case of physics tells us that fundamental laws are typically simple and elegant; we should expect the same of the fundamental laws in a theory of consciousness (*which they do*). Once we have a fundamental theory of consciousness to accompany a fundamental theory in physics, we may truly have a theory of everything (*as long as we here include the laws of space-time which we have been partially given from Einstein, but not fully*). Given the basic physical and psychophysical laws, and given the distribution of the

fundamental properties, we can expect that all the facts about the world will follow. Developing such a theory will not be straightforward, but it ought to be possible in principle.

This view is entirely compatible with a contemporary scientific worldview, and is entirely naturalistic. On this view, the world still consists in a network of fundamental properties related by basic laws, and everything is to be ultimately explained in these terms (*and in fact they do and they reveal symmetry and elegance, stemming from one monadic entity – that of energy*). All that has happened is that the inventory of properties and laws has been expanded, as happened with Maxwell. Further, nothing about this view contradicts anything in physical theory; rather, it supplements that theory. A physical theory gives a theory of physical processes, and a psychophysical theory tells us how those processes give rise to experience

Actually, it is also vice versa, phenomenal theory tells us how processes give rise to experience). It is this “vice versa” aspect that gives my theory its elegance and simplicity as well as symmetry – because physicality begets experience and likewise, experience begets physicality (plus the additional interaction of space and time), this theory exhibits elegance and demonstrates a likeliness that it describes reality.

To capture the spirit of the view he advocates, Chalmers calls it **naturalistic dualism**. It is naturalistic because it posits that everything is a consequence of a network of basic properties and laws, and because it is compatible with all the results of contemporary science. And as with naturalistic theories in other domains, this view allows that we can explain consciousness in terms of basic natural laws. There need be nothing especially transcendental about consciousness; it is just another natural phenomenon. All that has happened is that our picture of nature has expanded.

I should also note that although I call the view a variety of dualism, it is possible that it could turn out to be a kind of monism (*I absolutely label it – monadic, energy being the monad*). Perhaps the physical and the phenomenal will turn out to be two different aspects of a single encompassing kind, in something like the way that matter and energy turn out to be two aspects of a single kind. (*Emphasis added!*). Nothing that I have said rules this out, and in fact I have some sympathy with the idea. But it remains the case that if a variety of monism is true, it cannot be a materialist monism. It must be something broader (*which it is*).

Perhaps it may turn out that the duality of the physical and the phenomenal can be subsumed under a grander monism (*which I contend is energy*), but this will not be a monism of the physical alone. *Energy is not purely physical, nor is it purely phenomenal.*

Though it could be looked upon as constituting both of these, a more correct definition is that it is in some other realm which encompasses and subsumes the physical and phenomenal realm. It would be all but impossible for us to really ever know what that realm is since we are “sentenced” to viewing everything from the physical and phenomenal realms only. We can however determine its properties and further, its dimensions.

Nevertheless, the very nature of causation itself is quite mysterious, and it is possible that when causation is better understood we will be in a position to understand a subtle way in which conscious experience may be causally relevant.

As I have spoken about previously (and in “Mirrors”) it is cause and effect that bestows the universal consciousness with an operational framework which our functional framework can operate with logically, and ultimately can experience conscious experience – a grand, closed and elegant loop.

A third strategy rests with the very nature of causation itself. We saw in Chapter 2 that there are two classes of facts that do not supervene logically on particular physical facts: facts about consciousness and facts about causation. It is natural to speculate that these two failures might be intimately related, and that consciousness and causation have some deep metaphysical tie (*as I demonstrated*). Both are quite mysterious, after all, and two mysteries might be more neatly wrapped into one.

A proposal like this has been developed by Rosenberg (1996), who argues that many of the problems of consciousness are precisely paralleled by problems about causation. He argues that because of these parallels, it may be that experience realizes causation or some aspects of causation, in the actual world. On this view, causation needs to be realized by something in order to support its many properties, and experience is a natural candidate. If this is so, it may be that it is the very existence of experience that allows for causal relations to. So that there is a subtle sort of relevance for experience in causation.

The intrinsic nature of the physical. The strategy to which I am most drawn stems from the observation that physical theory only characterizes its basic entities relationally, in terms of their causal and other relations to other entities. Basic particles, for instance, are largely characterized in terms of their propensity to interact with other particles. Their mass and charge are specified, to be sure, but all that a specification of mass ultimately comes to is a propensity to be accelerated in certain ways by forces, and so on.

Each entity is characterized by its relation to other entities, and these entities are characterized by their relations to other entities, and so on forever (except, perhaps, for some entities that are characterized by their relation to an observer. The picture of the physical world that this yields is that of a giant causal flux, (*I would phrase it as a “flux of effects”*). But the picture tells us nothing about what all this causation relates. Reference to the proton is fixed as the thing that causes interactions of a certain kind, that combines in certain Russell (1927) notes, this is a matter about which physical theory is silent.

One might be attracted to the view of the world as pure causal flux, with no further properties for the causation to relate, but this would lead to a strangely insubstantial view of the physical world. It would contain only causal and nomic relations between empty placeholders with no properties of their own. Intuitively, it is more reasonable to suppose that the basic entities that all this causation relates have some internal nature of their own, some intrinsic properties, so that the world has some substance to it. But physics can at best fix reference to those properties by virtue of their extrinsic relations; it tells us nothing directly about what those properties might be. *But I contend that it can and that it does, we just need to follow the trail of causation beginning with the monad of energy.*

There is only one class of intrinsic, nonrelational property with which we have any direct familiarity, and that is the class of phenomenal properties. It is natural to speculate that there may be some relation or even overlap between the uncharacterized intrinsic properties of physical entities, and the familiar intrinsic properties of experience. Perhaps, as Russell suggested, at least some of the intrinsic properties of the physical are themselves a variety of phenomenal property? (*I have shown that they are and that they stem from the interaction of the physical with the phenomenal*) The idea sounds wild at first, but on reflection it becomes less so. After all, we really have no idea about the intrinsic properties of the physical.

Either way, this sort of intimate link suggests a kind of causal role for the phenomenal. If there are intrinsic properties of the physical, it is instantiations of these properties that physical causation ultimately relates. If these are phenomenal properties, then there is phenomenal causation; and if these are proto-phenomenal properties, then phenomenal properties inherit causal relevance by their supervenient status, just as billiard balls inherit causal relevance from molecules. In either case, the phenomenology of experience in human agents may inherit causal relevance from the causal role of the intrinsic properties of the physical (*actually it is from the role of the phenomenal*).

Almost all of what Chalmers has brought out in this section agrees fully with my theory and supports much of what I have presented herein. I feel that this ratifies my theories and further solidifies those theories and renders them more likely and believable.

He goes on to further support my theories; There is a sense in which this view can be seen as a monism rather than a dualism, but it is not a materialist monism. Unlike physicalism, this view takes certain phenomenal or proto-phenomenal properties as fundamental. What it finally delivers is a network of intrinsic properties, at least some of which are phenomenal or proto-phenomenal, and which are related according to certain causal/dynamic laws. (these are exactly the characteristics that underlie my theory) These properties “realize” the extrinsic physical properties and the laws connecting them realize the physical laws. In the extreme case in which all the intrinsic properties are phenomenal, the view might be best seen as a version of idealism. It is an idealism very unlike Berkeley’s, however. The world is not supervenient on the mind of an observer, but rather consists in a vast causal network of phenomenal properties underlying the physical laws that science postulates. A less extreme case in which intrinsic properties are proto-phenomenal, or in which some are neither phenomenal nor proto-phenomenal, is perhaps best regarded as a version of Russell’s neutral monism. The basic properties of the world are neither physical nor phenomenal, but the physical and the phenomenal are constructed out of them (*this is exactly what I proposed above – that there is some other kind of realm that these realms are caused by – the realm of energy*). From their intrinsic natures in combination, the phenomenal is constructed; and from their extrinsic relations, the physical is constructed.

To underline this once again, that is what we contend; that physical (material) and phenomenal (consciousness) are constructed out of a more basic fundamental – energy, which quite possibly may be considered as having been formed from potential energy and geometrics (see “Mirrors” for a complete exposition of how geometry contributes fundamentally to the creation of kinetic energy from potential energy) Therefore, geometrics have inherent within them the three derivatives of energy. Being derivatives allows for causation between those entities.

On this view, the most basic laws will be those that connect the basic intrinsic properties (*as I brought out previously, that is that it is interaction, causation that connects those intrinsic properties*). The familiar physical laws capture the relational shape of these laws, while abstracting away from the intrinsic properties. Psychophysical laws can be reinterpreted as laws that connect intrinsic properties (or properties constructed out of these) to their relational profiles (or to complex relational structures).

Thus, these laws do not “dangle” ontologically from physical laws. Rather, both are consequences of the truly basic laws (*the laws of energy as demonstrated previously and the interactive laws of causation*). But the epistemological order differs from the ontological order: we are led first to the relational structure of the causal network, and only slowly to the underlying intrinsic properties (*actually, we cannot “know” directly the underlying intrinsic, fundamental properties, but we can experience them*

and know secondarily, once removed about them). For everyday explanatory purposes, it is therefore most useful to continue to think of this view in terms of a network of physical laws, with further principles connecting the physical to the phenomenal. *I disagree, I think that the more we attempt to explain from a phenomenological point of view then the more we will learn about it – practice makes perfect.*

Option (iv) requires that the shape of physics will be transformed so radically that it could entail facts about conscious experience; but nobody has an idea of how any physics could do this. Indeed, given that physics ultimately deals in structural and dynamical properties, it seems that all physics will ever entail is more structure and dynamics, which (unless one of the other reductive options is embraced) will never entail the existence of experience.

That is ascribing a primacy of physicality to physics. In spite of the name physics, at this point in the deep and extensive amount of information we have accumulated in our studies of physics, I think the subject could at this point accommodate novel concepts outside the boundaries of just the physical. We should expand the study, not differentiate and thus isolate it. Once upon a time, philosophy was considered a part of the study of physics – it's time to resurrect that and concede that we were too quick to do away with their complimentary natures.

Just because physics deals with structural and dynamical properties does not preclude the ability for a structural or dynamical type that is hereto undiscovered to account for phenomenalism or ultimately consciousness. In fact, if energy is the progeniture of it all (phenomenal and material) then being structural and dynamic, it will fit this definition.

One occasionally hears a fifth objection to dualism, which is that it cannot explain how the physical and the nonphysical interact. But the answer to this is simple on the natural supervenience framework: they interact by virtue of psychophysical laws. There is a system of laws that ensures that a given physical configuration will be accompanied by a given experience, just as there are laws that dictate that a given physical object will gravitationally affect others in a certain way. It might be objected that this does not tell us what the connection is, or how a physical configuration gives rise to experience. But the search for such a connection is misguided. Even with fundamental physical laws, we cannot find a “connection” that does the work. Things simply happen in accordance with the law; beyond a certain point, there is no asking “how.” As Hume showed, the quest for such ultimate connections is fruitless. If there are indeed such connections, they are entirely mysterious in both the physical and psychophysical cases, so the latter poses no special problem here.

Throughout the history of scientific discovery, that which was unknown was always considered mysterious and unknowable. That is until someone came along and upset the apple cart. Hume is wrong to once again submit to such a defeatist stance, and Chalmers should obviously know better given how much he has understood about the nature of the hard problem and the nature of the phenomenal.

It may be that in the early stages of the universe there was nothing that satisfied the physical antecedents of the laws, and so no consciousness, although this depends on the nature of the laws. In any case, as the universe developed, it came about that certain physical systems evolved that satisfied the relevant conditions. When these systems came into existence, conscious experience automatically accompanied them by virtue of the laws in question (*Not so, consciousness always existed – it just went cognitively unrecognized – when the physical systems originally evolved, or manifested, so too did*

consciousness, as did space-time). Given that psychophysical laws exist and are timeless, as naturalistic dualism holds, the evolution of consciousness poses no special problem.

At this point in his book, Chalmers comes to explore the subject of the relationship between consciousness and cognition. As far as I am concerned, this is where the rubber meets the road. This is where the hard problem exists and where an explanation that we can grasp comes into existence.

A thorough investigation of the links between consciousness and cognition can provide the purchase we need to constrain a theory of consciousness in a significant way, perhaps ultimately leading to an account of consciousness that neither mystifies nor trivializes the phenomenon (*so much for Hume!*).

The mind-body problem is not that of explaining our judgments about consciousness. If it were, it would be a relatively trivial problem. Rather, the mind-body problem is that of explaining consciousness itself. If the judgments can be explained without explaining consciousness, then that is interesting and perhaps surprising, but it does not remove the mind-body problem. *In other words, reporting the “what” of it is inferior to knowing the “how” of it.*

There is a certain intellectual appeal to the position that explaining phenomenal judgments is enough. It has the feel of a bold stroke that cleanly dissolves all the problems, leaving our confusion lying on the ground in front of us exposed for all to see. Yet it is the kind of “solution” that is satisfying only for about half a minute. When we stop to reflect, we realize that all we have done is to explain certain aspects of “do I experience it like this?” And we realize that this explanation has nothing to say about the matter.

But this does not explain the contents of introspection; it explains only the processes involved. Extrospection is not introspection, although it is easy to see how a philosopher inclined to speculate on his own internal mechanisms could take one for the other. Conscious experience remains untouched by this explanatory method. *In other words; introspection is just a different form of cognitive functionality and does not touch upon the phenomenal aspect of experience. It is part of the closed loop of functionality.*

The basic problem with the accounts above is that they make our access to consciousness mediated, in the way that our access to objects in the environment is mediated, by some sort of causal chain or reliable mechanism. This sort of mediation is appropriate when there is a gap between our core epistemic situation and the phenomena in question, as in the case of the external world: we are connected to objects in the environment from a distance. But intuitively, our access to consciousness is not mediated at all. Conscious experience lies at the center of our epistemic universe; we have access to it directly.

I disagree. Because consciousness is an effect from qualia, and qualia is a primary cause with self-experience being secondary and non-direct, then consciousness is secondary also. An effect is always a secondary property, with causation being primary. In order to know an effect, we must mediate with our cognitive apparatus. Consciousness can be thought of as an outgrowth of qualia and as an outgrowth, it is not direct. Although we directly do have experience, that experience is not of the absolute nature of qualia – it is the attribute of qualia processed through our Will, recognition and cognitive identification.

Chalmers, at this point in Part III, takes us on a journey of his considerations of a working model of consciousness, the cornerstone of which is his contention that based on all the above conceptual arguments, then only a non-reductionist version of consciousness is feasible. It is non-reductionist

precisely because once you admit that there are fundamental, non-divisible, monadic properties, you by definition have become non-reductionist – they are not reducible.

Even if consciousness cannot be reductively explained, there can still be a theory of consciousness. We simply need to move to a nonreductive theory instead. We can give up on the project of trying to explain the existence of consciousness wholly in terms of something more basic, and instead admit it as fundamental, giving an account of how it relates to everything else in the world. Such a theory will be similar in kind to the theories that physics gives us of matter, of motion, or of space and time. Physical theories do not derive the existence of these features from anything more basic but they still give substantial, detailed accounts of these features and of how they interrelate, with the result that we have satisfying explanations of many specific phenomena involving mass, space, and time. They do this by giving a simple, powerful set of laws involving the various features, from which all sorts of specific phenomena follow as a consequence.

But consciousness does also. In fact, in physics the formula $E=MC$ squared is the mathematical explanation of the transformation and interaction of the material with energy. Most likely there is a not unsimilar formula for the transformation of energy into consciousness, and one into space-time.

the cornerstone of a theory of consciousness will be a set of psychophysical laws governing the relationship between consciousness and physical systems. Consciousness supervenes naturally (although not logically) on the physical. This supervenience must be underwritten by psychophysical laws; an account of these laws will tell us just how consciousness depends on physical *processes* (and *vice versa*). Given the physical facts about a system, such laws will enable us to infer what sort of conscious experience will be associated with the system, if any (*though it's doubtful that it could give a detailed specific rendition of a specific qualia*). These laws will be on a par with the laws of physics as part of the basic furniture of the universe.

There need be nothing especially supernatural about these laws. They are part of the basic furniture of nature, just as the laws of physics are. There will be something “brute” about them, it is true. At some level, the laws will have to be taken as true and not further *explained* (*because they are fundamental or at least, stem from a fundamental entity*). But the same holds in physics: the ultimate laws of nature will always at some point seem arbitrary. It is this that makes them laws of nature rather than laws of logic.

But they are not, at the very base – arbitrary. The only reason they might seem arbitrary is that we have not reduced them down to the basic fundamental state. There is nothing arbitrary about energy and how it operates or how its laws work.

If it turns out that in the study of consciousness one needs to take some aspect of the relationship between physical processes and consciousness for granted, then so be it. That is the price of constructing a theory.

There's no reason to take it for “granted”, not if it bears explanation, which it does. That would just be giving up. An explanation akin to the theory of energy and its tri-level dimensions that include consciousness does the job.

Physics does not content itself with being a mere mass of observations about the positions, velocities, and charges of various objects at various times; it systematizes these observations and shows how they are consequences of underlying laws, where the underlying laws are as simple and as powerful as

possible. The same should hold of a theory of consciousness. We should seek to explain the supervenience of consciousness upon the physical in terms of the simplest possible set of laws.

Of course, it may be that in the quest for such theories, there will be developments that change our conception of an ultimate theory. It may be, for example, that we will find overarching laws that subsume the phenomena of both physics and consciousness into a grander theory (*the theory of energy*), just as we found a theory that subsumed electricity and magnetism, and as physicists are now searching for a theory that unifies all the basic physical forces. Perhaps there will be developments that are more surprising still.

All this metaphysical grandeur is well and good, one might reply, but how does it cash out in practice? In particular, how can we discover the psychophysical laws that will constitute a theory of consciousness? After all, there is an enormous problem for a theory of consciousness that does not confront a theory of physics: the lack of data. Because consciousness is not directly observable in experimental contexts, we cannot simply run experiments measuring the experiences that are associated with various physical processes, thereby confirming and disconfirming various psychophysical hypotheses. Perhaps these laws, even if they exist, might remain in an unknowable limbo? Indeed, it might seem that the un-testability of any theory of consciousness that we might put forward would relegate such theories to the status of pseudoscience.

This doesn't necessarily have to be the case though. Thought experiments and the like, pure logic, can substitute for experimental discovery. Witness Einstein. It is true that those "discoveries of thought and logic" will be hard, if not impossible, to test physically – but that does not make them not true, or even unprovable necessarily. It is possible, conceivable, that in order to understand an unknowable phenomenon like consciousness, one must give up confirmation, but not give up trust in probable belief.

It seems to me to be ironic that in that the same way religious beliefs must be based on faith, due to their unprovability, which is due to its unknowable essence, its phenomenal essence – so it is the case with consciousness, which shares this aspect of unknowability with religion. In the final analysis, only material aspects are materially provable, phenomenal aspects must, by definition, be proved with phenomenal logic – phenomenal logic being of an order that we do not relate to – we relate only to the physical.

Yet we can believe and have faith, and a certain belief, a belief that has certainty, if believed by enough scientists and philosophers and ordinary people, can substitute for mathematical and physical proof. Though we do not reject that there may possibly still be a mathematical proof (as $E=MC^2$ was). Remember, if you reflect deeply about energy – you find that it has a phenomenal aspect, and therefore $E=MC^2$ is a case where the phenomenal is represented by a mathematical term!

Some other plausibility assumptions might include the following: that fundamental laws are homogeneous in space and time; that conscious experience depends only on the internal physical state of an organism.

This points to and agrees with our contention that consciousness is interrelated and interactive with space and time (as well as with the physical) and that the space-time aspect is indeed homogeneous, is ubiquitous. The above contention that consciousness may depend only upon an internal physical state may or may not be a truism as qualia's impingement upon consciousness may be an outside agent only, or is more likely a combination of inner physical make-up and outside phenomenal agency.

Of course, this reliance on first-person data and on plausibility constraints means that a theory of consciousness will have a speculative character not shared by theories in most scientific domains. Because rigorous intersubjective testing is impossible, we will never be quite as certain that our theories are on the right track. *But we may be sure enough – especially if it is simple and elegant and doesn't upset any physical apple carts – that it fits in with everything quite neatly and has the same characteristics of known theories – like symmetry, simplicity, elegance, unification, etc.*

The most promising way to get started in developing a theory of consciousness is to focus on the remarkable coherence between conscious experience and cognitive structure. The phenomenology and the psychology of the mind do not float free of each other; they are systematically related. The many lawful relations between consciousness and cognition can provide much of what we need to get a theory of consciousness off the ground. The best way to get a handle on this relationship is to focus on phenomenal judgments (*we call this “phenomenal recognition”*). These judgments are part of psychology, but they are closely bound up with phenomenology, and as such they provide a bridge between the domains. By thinking about these judgments and the way they function in our own case; we can come up with a number of principles connecting the phenomenal to the psychological. *I too call for the need for a “bridge”, which I supply as the Will.*

The most basic obvious principle of this sort is the one I mentioned in section 1: our second-order judgments about consciousness are by and large correct. We can call this the reliability principle. When I judge that I am having an auditory sensation, I am usually having an auditory sensation. When I think I have just experienced a pain, I have usually just experienced a pain.

The most fundamental coherence principle between consciousness and cognition does not involve second-order phenomenal judgments. Rather, it concerns the relationship between consciousness and first-order judgments. The principles with which we will deal here concern the coherence between consciousness and awareness (*we say it is attention, awareness being receptive while attention being interactive and targeted; but his general point is correct – that they are first order judgements*). Recall that awareness is the psychological correlate of consciousness, roughly explicable as a state wherein some information is directly accessible and available for the deliberate control of behavior and for verbal report.

Where there is consciousness, there is awareness (*attention*). My visual experience of a red book upon my table is accompanied by a functional perception of the book. Optical stimulation is processed and transformed, and my perceptual systems register (*recognize*) that there is an object of such-and-such shape and color on the table.

To a certain extent I do not agree – I think that all the time we are experiencing consciousness but we are not all the time experiencing awareness. Consciousness is over-arching.

In the same sort of way, we can handle hallucinations and other cases of sensations without a real object being sensed. Although there is no real object for the contents of perception to concern, there is still representation in our perceptual system. (*which is why we can conjure up the color and perception and experience of green without the object being there*).

Note that the principle is not that whenever we have a conscious experience, we are aware of the experience. It is first-order judgments that are central here, not second-order judgments. The principle is

that when we have an experience, we are aware of the contents of the experience. When we experience a book, we are aware of the book; when we experience a pain, we are aware of something hurtful; when we experience a thought, we are aware of whatever it is that the thought is about. It is not a matter of an experience followed by a separate judgment, as might be the case for second-order judgments; these first-order judgments are concomitants of experiences, existing alongside them. *They are thus the closest we can come to the direct experience of qualia, and it is attention to it that results in recognition, not awareness – again, awareness being passive and thus not causing recognition.*

The tie between experiences and second-order judgments is much more indirect: although we have the ability to notice our experiences, most of the time we notice only the contents of the experience, not the experience itself. *(that is closer to the concept of awareness – in that sense, awareness is a secondary judgement)* Only occasionally do we sit back and take notice of our experience of the red book; usually we just think about the book. Where second-order judgments are infrequent, first-order judgments are ubiquitous. The most direct link is therefore the link between consciousness and first-order judgments. *Or at least the most direct we can come close to a truly direct experience – there still, even in consciousness, is a subject to object relationship. This lasts throughout our lifetime, but becomes fully direct after death. In a sense, death removes “the mask” of separation!*

So far, I have argued that where there is consciousness there is awareness (*attention*). But the arrow goes both ways. Where there is awareness (*attention*), there is generally consciousness. *However, consciousness is ubiquitous. Attention is not necessarily. Therefore, consciousness is more basic.*

We can therefore build this directness of access into a revised notion of awareness. According to the revised notion, non-occurrent thoughts do not qualify as part of the contents of awareness, but occurrent thoughts do. Correspondingly, we should expect that occurrent thoughts will be associated with experiences (*if attended to*), even if non-occurrent thoughts are not. This is just what we find. My non-occurrent thought that Clinton is president has no impact on my phenomenology, but an occurrent thought to that effect will be associated with an experience. To see this, note that there is something it is like to think to oneself that Clinton is president; if I had not been thinking that thought just now, it would have been like something subtly different to be me. *This is so only as long as the “thought” is coincident with attention to it, if I am only “aware” that Clinton is President (I have received a thought that this is the case) then I do not have an experience of it – it just passes within a cognitive functional process with no “Bing”). Awareness is simply receptive.*

If this is true then everything would not be considered qualia; qualia would be restricted, subservient, and not absolute – depending somewhat on a cognitive awareness state – but qualia is unrestricted and absolute. Thus, without the bridge there would be no qualia or consciousness recognized. But that is not the case. The bridge only serves to “realize” the qualia (be aware that it is qualia – recognize it) – but qualia impinges upon our psyche no matter what – we are just not aware of it as consciousness, we do not attend to it, and in fact simply stop at awareness. We call it awareness when in actuality it is conscious experience that is qualia, not simple receptive awareness.

It is ironic – awareness is considered to always exist and consciousness not so, but in reality, qualia always exists and the awareness is more contingent upon some type of cognitive reception, an attention. This irony is due to our overwhelmingly strong grounding in physicality; that something which is phenomenal at base is mistaken as physical due to our bias toward the physical.

This is the principle of structural coherence. So far, we have a hypothesis: where there is consciousness, there is awareness, and where there is (the right kind of) awareness (*attention*), there is consciousness. The correlation between these can be made more detailed than this. In particular, various structural features of consciousness correspond directly to structural features that are represented in awareness. An individual's conscious experience is not in general a homogeneous blob; it has a detailed internal structure. My visual field, for example, has a definite geometry to it. There is a large red patch here, with a small yellow patch in close proximity, with some white in between; there are patterns of stripes, squares, and triangles; and so on. In three dimensions, I have experiences of shapes such as cubes, experiences of one thing as being behind another thing, and other manifestations of the geometry of depth. My visual field consists in a vast mass of details, which fit together into an encompassing structure. Crucially, all of these details are cognitively represented, within what we can think of as the structure of awareness

I don't see this as a structure of awareness – I see it simply as a structure of functionality without any consciousness or experience. It is not until a certain phenomenal type of recognition, brought on by attention (the Will) occurs, that experience accompanies awareness and cognition. We see an entire scene but may only be aware of a few components of that scene (and maybe attend to even fewer).

The size and shape of various patches is represented in my visual system, for example: perhaps in a fairly direct topographic map, but even if not, we know that it is represented somehow. It must be, as witnessed by the fact that the relevant information is available to guide the control of behavior.

Behavioral guidance may be a defining or important feature of the receiving or awareness of sensory input, however it may not necessarily take a visual form in order to initiate behavior and more importantly, may not be accompanied by consciousness. One may experience a tornado coming, through attention to sensory input, but may react to something other than the visual stimulation. Perhaps fear might over-ride a full "viewing" of the scene and it is fear, not visuality, that instigates behavior. The point is that we do not know what guides behavior for sure – it is not the be all and end all defining consciousness or experience as Chalmers contends.

This therefore seems to suppose that consciousness does not determine behavior (?) I reject that if this is what he is saying. Consciousness, qualia – through causation, has a specific logical order to it and thus, that logic, could very well drive behavior.

In principle, someone with complete knowledge of my cognitive processes would be able to recover all of these structural details. The geometry of the visual field can be recovered by an analysis of the information that the visual system makes available for later control processes (*not necessarily as demonstrated in the above example of a tornado*) The very fact that each of these details can be reflected in the behavioral capacities of the subject (*which is not necessarily so*)—a subject might trace the various structural details with arm movements, for example, or comment on them in verbal reports—implies that the information must be present somewhere

Qualia is always present – but qualia are not purely information, though it may have information as a secondary part of it. Being always present it exists as our experience – that is the somewhere, not a physical location, but rather a space-time phenomenal one.

Of course, the details of the analysis would be very tricky, and far beyond present-day methods, but we know that the information is there. In this way we can see that the structure of consciousness is mirrored in the structure of awareness

Again – not so, awareness may miss a lot of detail, it is attention that results in behavior that stems from consciousness and the “mirroring” is recognition oriented. Other than that, behavior can stem simply from functional neuronal circuit-like programming. The point is that behavior is not an indicator of consciousness.

But it is interesting to see that the structure is currently being worked out in detail in studies of the visual system (see Hardin 1988 for discussion). We might say that in this case there is a difference structure in our conscious experience (a space of differences between possible experiences) that is mirrored by a difference structure in awareness: to the manifold of color experiences and relations among them, there corresponds a manifold of color representations and corresponding relations among them

This steers us away from the salient point about conscious experience, about qualia – and that is that qualia are of itself and that the only correlation to inner functionality (like a visual cortex) is one of projection, like a projector, not one of experience. Our brain and its apparatuses only record, those apparatuses do not experience. The apparatuses are not conscious.

I do somewhat agree though, and that is why we cannot experience colors that do not exist in our cortex's abilities (we see the rainbow colors only) – why we do not see x-rays as a color, etc. Therefore, it seems true that consciousness is limited to our inner ability or functionality. However, it may be conceivable that we do “see” x-rays – we just don't recognize the form it takes. Maybe it's a sound, or a feeling or something we can't recognize but is nonetheless there, maybe non-visually in other words. Maybe something under our recognition radar. Since the qualia exists, which we know from the fact that other animals have the ability to recognize boundary sensations like ultra-violet light, then very possibly something exists as a qualia from outside us, we simply do not process it in a known, recognizable way due to limited functionality – but it's there.

It therefore would be considered “unconscious”. Unconscious could mean a form of consciousness that lacks attention (as dreaming is) as opposed to having nothing to do with consciousness. Perhaps it is consciousness without attention. For example; when we dream, all sorts of sensory images appear to us (we may even be “aware” of them), however we are not conscious of them, we do not experience them, because the Will is not engaged, we do not employ attention in a dreaming state (though we do somewhat when we are waking from a dream, in a semi awake state. That is when and why we remember a specific dream, because attention is starting to operate.

We therefore do not generally experience our dreams. The ones we do are those that we are waking from, and in fact we call this that we are near consciousness. Other occurrences demonstrate unconsciousness or the absence of consciousness also. For instance, if we come upon a scene where we do not have the ability to recognize it within our cognitive processing, often “new” scenes never encountered before. Perhaps a first time look at a tornado, or a robbery – we react with what we call Awe – we are stupefied and we have no conscious relation to it, we actually have suspended experience (or the recognition thereof). The qualia are there, we just are not attentive to it (no Will) because we do not cognitively know how to apply attention to that which we have not learned previously.

In general, this sort of reasoning leads us to the conclusion that any detailed structure that one might find in a phenomenal field will be mirrored in the structures represented in awareness. *As I discussed previously, I find this not to be so.*

I will call this the principle of structural coherence. *Maybe it is structurally coherent, however it is not conscious – it must be non-structurally coherent, phenomenologically coherent to be conscious.* This is a central and systematic relation between phenomenology and psychology, and ultimately can be cashed out into a relation between phenomenology and underlying physical processes. As we will see, it is useful in a number of ways. *In my view, calling it structural coherence mis-represents the nature of the mind-body issue, which I contend is one of non-structural or phenomenal coherence (to qualia).*

A tricky problem case is provided by experiences during sleep. It is plausible that we have experiences when we dream (although see 1978b), but reportability and any role in the control of action are missing, as action is missing entirely.

He has a different slant on what is happening during dreaming as you can see by reviewing my discussion of dreaming previous to this. While I connect the missing of sleep experiences to the non-usage of the Will or attention, he connects it more to the lack of action or behavioral control. In his explanation though he wouldn't be able to account for near waking states where in spite of the fact that you do experience your waking dreams, you still lack behavioral control over them. Is this however an indication by him that he believes that Will is connected with the ability for action? Will certainly seems to have a lot to do with behavioral control.

It is not required that a content actually play a global control role to be conscious, but it must be available to do so. This seems to square better with the properties of experience. For example, we experience the fringes of our visual field, but most of the time these do not play much of a role in global control; they are merely available to do so if required. Many of the noises we experience may pass without leaving significant effects on memory, behavior, and the like, but the information could have done so.

This goes to the question; Is qualia present if we are not aware of it? Or is there consciousness only when there is access and attention to it, and if so, where is the qualia then. Do inner qualia only exist upon coherence with attention (the Will) or is it always there and just not accessed? What I believe is that it is always there, we do not however always tap into it.

Another functionalist account is Rosenthal's (1996) proposal that for a state to be conscious is for it to be the object of a higher-order thought. In the language I have been using, this means that a first-order state has content of consciousness precisely when there is a second-order judgment about it. This is considerably stronger than my proposal, in the same sort of way that Dennett's proposal is stronger. On the face of it, there is little reason to believe that we form second-order judgments about all of our experiences, including experiences of every detail of the visual field, of background noises, and so on.

If there is a mediating function (like Will) then when it is not operating there is no coherence and thus no consciousness (though an over-riding feeling of being conscious is always in the background it seems to me -a sort of "buzzing attention" or recognition of simply being).

He submits that the availability for global control (action) is a prerequisite of consciousness. This may then point again to the Will, but in this case, use of the Will (global control) is akin to consciousness on

automatic pilot. Does the using of the Will beget a constant stream of qualia? I don't think so, it seems to be the opposite, it seems as if when using the Will, we are on an automatic shut off of diversionary thoughts, we are focused, and that focus assures that we are connected to the action we have sought (the attention to it), and thereby connected to qualia. So, action does seem to be connected to consciousness, but only in the sense that it is open to conscious experience but not assured of it. It is only assured of being available. The bridge has been formed, is on auto pilot and is open to accept qualia experience. Possibly the "experience" of the Will is a quale itself – in its own right – a feeling of Will, an experience of "Will". This goes along with the concept, which I endorse, that everything about us is borne and caused by qualia.

A good example of the Will leading and accepting consciousness and qualia is that of peripheral vision. Usually we are unaware of it and not conscious of it. A direct experience, attention to consciousness is missing. However, in circumstances when it is needed (like let's say in basketball, etc.) then the action of focusing attention on your peripheral vision (the Will) results in conscious experience of that viscosity. The circumstance, born of a need, determines the usage of attention. Consciousness in this sense might be considered as an evolutionary response to survival in that it is need that triggers the "necessary" attention on what reality is out there at the moment. But that contention is just a possible function of consciousness, not necessarily the only use of it. Nonetheless, awareness of our surroundings is certainly of paramount importance to an organism. When a fly rushes away as your about to hit it; it undoubtedly is doing so reflexively, but it seems entirely possible that it is doing so consciously, and even that it was consciousness of the experience that was happening (that of a hand coming toward it) that caused the action, the behavioral control.

*One might wonder how any story about physical processes could be used to shed light on features of experience, given what I have said about the impossibility of reductive explanation. The principle of structural coherence allows us to understand what is going on. In essence, this principle is being used as a background assumption, to provide a bridge from features of physical processes to features of experience. If we take for granted the coherence between the structure of consciousness and the structure of awareness (*attention*), then in order to explain some specific aspect of the former, we need only explain the corresponding aspect of the latter. The bridging principle does the rest of the work. We agree except that it is not "the explaining" or understanding of what is going on. Experience, consciousness, qualia is more direct and brute than that, and it is what it is.*

So, if the coherence principle is taken for granted, a functional account of visual processing serves as an indirect account of the structure of phenomenal color space. The same method can be exploited to explain many other features of experience. It may mimic the qualia in structure, but it isn't experience – no experience comes just from functional structure – that's the whole point!

He is trying to explain a "structure of consciousness", however, there need not be a structure because consciousness may simply be brute, direct experience all to itself with no structure per say, and attention and recognition derives the structure from "out" of the experience. So, one might say that consciousness has potential structure or that it causes structure, but is not structural otherwise.

If what I have said before is correct, these claims are a little too strong. First, this method does not explain the intrinsic nature of a color experience (which is brute and direct). Second and more important, no account of the structure of awareness explains why there is any accompanying experience at all, precisely because it cannot explain why the principle of structural coherence holds in the first

place. By taking the principle as a background assumption we have already moved beyond reductive explanation: the principle simply assumes the existence of consciousness, and does nothing to explain it.

Within these limits, the principle of structural coherence provides an enormously useful explanatory relation between the physical and the phenomenal. If we want to explain some apparent structure in a phenomenal domain—say, the relations we find between our experiences of musical chords—then we can investigate the functional organization of the corresponding psychological domain, taking advantage of insights from cognitive science and neuroscience to reductively explain the structure of awareness in that domain. *But it still does not explain the experience, just the content of it. I can explain the content of red to you – the electromagnetic waves, the retina, the visual cortex – but I cannot make you understand the quality that is red, only experience can do that.*

I believe that conscious experience has no deeper functionality other than “it is what it is” with no secondary logical extension of itself a priori. I believe that it is the psychological reaction to consciousness that places upon it all the logic, inference and secondary aspects. Conscious experience just is. The only reductionist path one can take from psychological to phenomenal is to derive the “what it is” of the phenomenal from the “way it is” of the psychological. Phenomenon itself cannot be reduced into anything other than its qualia. It is non-reductionist.

The answer must be that whenever conclusions about experience are drawn from empirical results, a bridging principle linking physical processes to experience is doing the work. A bridging principle will give a criterion for the presence of consciousness in a system, a criterion that applies at the physical level. Such a principle will act as an epistemic lever leading from knowledge about physical processes to knowledge about experience. *This is the Will and phenomenal recognition. Phenomenal recognition being the physical effect of phenomenal causation.*

Bridging principles are so crucial here that it makes sense to be explicit about them. There is a sense in which anyone who appeals to a bridging principle—which means anyone who draws conclusions about experience from external observations—is doing “philosophy,” as bridging principles are not themselves experimental conclusions. *Nevertheless, philosophy or pure thought can lead to accepted conclusions even if not physically, through experiment, proven.*

The bridging principle that I have recommended is that of the coherence between consciousness and awareness (*attention*): when a system is aware of some information (*attends to it through the Will*), in the sense that the information is directly available for global control, then the information is conscious. *Here again he uses “global control” as the salient factor – a position we do not adhere to.*

What are the neural and information-processing correlates of consciousness? This is one of the central questions about consciousness that empirical research is often taken to address. Various empirical hypotheses have been put forward. For example, Crick and Koch (1990) put forward the hypothesis that certain 40-hertz oscillations in the cortex are the neural correlates of experience. Baars (1988) can be interpreted as suggesting that a global workspace is the information-processing basis for experience, with the contents of experience corresponding directly to the contents of the workspace. Farah (1994) argues that consciousness is associated with “high-quality” representations in the brain. Libet (1993) puts forward a neural “time-on” theory, in which consciousness is associated with neuronal activities that persist for a long enough time, with a minimal duration of around 500 milliseconds. There have been numerous other proposals in a similar vein.

Because we lack an “experience meter,” we must always rely on such indirect criteria, and the criteria of reportability and awareness seem to be the best we can do. *Again, he stresses “reportability” which we do not necessarily subscribe to. We believe that experience just is onto itself whether reportable or not. We believe that an experience can occur but no reportability is associated or happens with it – like peripheral vision.* It follows that we can only have empirical evidence for a link between a process N and consciousness if we already have evidence for a link between N and awareness

Not so – this goes one level too far as attention, in his case awareness, needs no further linkage. As regards the physical theories about what consciousness is – they all fall short of accounting for the qualitative experience itself. There certainly is a “how”, the challenge is more to discover the “why” and to find out how a physical “how” can result in a phenomenal experience. Physical theories cannot do this without an explanation of a bridge.

It seems natural to say that the central correlation between physical processing and experience is the coherence between consciousness and awareness (*attention*). What gives rise directly to experience is not oscillations or temporally extended activity or high-quality representations, but the process of direct availability for global control. *Again, he cites the global control principle – it is the indirect linkage with the direct availability that results in experience, not “global control”.*

Schacter (1989) suggests that there may be a single mechanism, such as a module, but this is only one way things might go. It might turn out that a role in global control is always facilitated by some central mechanism (such as Baars’s global workspace), but on the face of it, it is equally likely that processes of many different kinds are responsible at different times for securing the appropriate availability, even within a single species or a single subject.

I believe that physical theories alone, without accounting for a bridge or a linkage, cannot give full explanation of consciousness. However, I do believe that physical theories can account for global behavioral control, unlike what Chalmers believes.

We should therefore not expect the search for a neural correlate of consciousness to lead to the holy grail of a universal theory. We might expect it to be valuable in helping us to understand consciousness in specific cases, such as the human case: learning more about the processes underlying awareness will certainly help us understand the structure and dynamics of consciousness, for example. But in holding up the bridge from physical processes to conscious experience, pre-experimental coherence principles will always play a central role.

So far, I have mostly considered coherence within a range of relatively familiar cases, involving humans and other biological systems. But it is natural to suppose that these principles of coherence may have the status of universal laws. If consciousness is always accompanied by awareness, and vice versa, in my own case and in the case of all humans, one is led to suspect that something systematic is going on. There is certainly a lawlike correlation in the familiar cases. We can therefore put forward the hypothesis that this coherence is a law of nature: in any system, consciousness will be accompanied by awareness, and vice versa. *Except that the system must have a specific capability to bridge.*

It is natural to infer an underlying law: for any system, anywhere in space-time, the structure of consciousness will mirror and be mirrored by the structure of awareness. *That indicates a direct, one to one relationship between awareness or attention and consciousness or qualia. I do not subscribe to that and believe instead that there is no direct relationship, only a secondary, once removed, process and*

experience. The exact nature of what qualia is will remain a mystery for the most part, but its effect (experience and self-consciousness) can be discovered.

A proposed theory of consciousness psychophysical law is simple, well-motivated, and has the coherence principles as a consequence (*not a consequence, which is an effect, but rather as a cause*), then that may provide good reason to accept it.

What, then, are the grounds for accepting the coherence principles as laws? The basic evidence comes from the correlations in familiar cases: ultimately, for me, from my own case. The apparent correlations between awareness and consciousness in my own case are so detailed and remarkable that there must be something more than a mere chance regularity. There must be some underlying law. The only question is what law? This law must entail that in my own case, awareness will always be accompanied by consciousness, and vice versa, and further that the structures of the two will correspond. *Here, once again, this misses the point about consciousness and qualia being "brute" and not subtle or mediated functionally.*

It is very plausible that some kind of awareness is necessary for consciousness. Certainly, all the instances of consciousness that I know about are accompanied by awareness. There seems to be little reason to believe in any instances of consciousness without the accompanying functional processes. If there are any, we have no evidence for them, not even indirect evidence, and we could not in principle. It therefore is reasonable to suppose on the grounds of parsimony that wherever there is consciousness, there is awareness.

This may account for individual awareness but does not allow for the concept, so important to all of this, of universal awareness/consciousness. Without the universal reality of qualia there would be no individual awareness/consciousness. So, there is consciousness universally but not necessarily awareness that accompanies it. Awareness or self-consciousness exists as a special individual case of coherence with the universal and reliance on phenomenal recognition born of attention.

Don't forget that universal awareness, as brought out in "Mirrors", is a direct consequence of cause and effect which orders qualia into a logicalness (see Mirrors for a more detailed discussion of this). Because, other than cause and effect, the qualia are non-directional and have no inherent or a priori logic to them – the logic is brought about through the ordering brought on by cause and effect. In a sense; the universe's logic is not the same as our logic.

The problem was the assumption of materialism in the first place. Once we accept that materialism is false, it becomes clear that the search for a physical X-factor is irrelevant; instead, we have to look for a "Y-factor," something additional to the physical facts that will help explain consciousness. We find such a Y-factor in the postulation of irreducible psychophysical laws. Once we have imported these into our framework, the intuition that consciousness is a further fact is preserved, and the problem is removed.

Chalmers now goes deeper into the subject of qualia, a subject that is the whole crux of all of this. Qualia is the gateway into the phenomenal. Without qualia there is no experience and without experience we are just zombies. It is thus the study of qualia that can give to us the fullest understanding of what consciousness is.

Nonetheless, even though Chalmers has correctly identified the importance of qualia, his theories about it are frustratingly disappointing. It seems to me that he has turned his back on his earlier correct

insights and betrayed them. Those insights, which he repeatedly expressed, said that there is a phenomenal quality to consciousness which material or physical systems cannot begin to reach or experience. Over and over he gave examples of other reductive, physical theories and refuted them on that basis. He insisted on a non-reductionist philosophy. He called this "natural dualism". Now he is propounding just the opposite – that a physical, functional system can realize and experience consciousness. He has turned his back on the whole point and has defaulted (I guess due to the pressure to explain and come up with a workable theory) to a reductionist, physical only theory. Like I said, I read the rest of this in a state of frustration and even of anger.

To quote Chalmers himself:

Almost everything in the world can be explained in physical terms; it is natural to hope that consciousness might be explained this way, too. In this chapter, however, I will argue that consciousness escapes the net of reductive explanation. No explanation given wholly in physical terms can ever account for the emergence of conscious experience. This may seem to be a negative conclusion, but it leads to some strong positive consequences that I will bring out in later chapters.

But he now turns his back on this and proclaims that consciousness can be brought about through purely physical systems. He now states that; "One can believe that consciousness arises from functional organization but is not a functional state". I obviously, whole-heartedly disagree.

Chalmers; I claim that conscious experience arises from fine-grained functional organization. More specifically, I will argue for a principle of organizational invariance, holding that given any system that has conscious experiences, then any system that has the same fine-grained functional organization will have qualitatively identical experiences. According to this principle, consciousness is an organizational invariant:

The invariance principle is far from universally accepted. Many people of both dualist and materialist persuasions have argued against it. Many have held that for a system to be conscious, it must have the right sort of biochemical makeup; if so, a metallic robot or a silicon-based computer could never have experiences, no matter what their causal organization. Others have conceded that a robot or a computer might be conscious if it were organized appropriately, but have held that it might nevertheless have experiences quite different from ours. *Neither of these is the case – a physical, functional system must bridge coherently between the phenomenal and the psychological.*

Corresponding to these two views, there have generally been two kinds of argument against the invariance principle. The first kind comprises arguments from absent qualia. In these arguments, a particularly bizarre realization of a given functional organization is described, in a system so outlandish that it is natural to suppose that the qualities (qualia) of conscious experience must be absent. A popular example from Block (1978) is a case in which our organization is realized in the population of a country (as in Chapter 3). Surely, it is argued, that could not give rise to conscious experience. If not, then consciousness cannot arise from functional organization. *We agree with him here.*

The invariance principle holds that functional organization determines conscious experience by some lawful link in the actual world. *Actually, in the phenomenal world – which is part of the actual world.*

Maintaining the natural possibility of absent and inverted qualia in the face of these thought experiments requires accepting some implausible theses about the nature of conscious experience, and in particular about the relationship between consciousness and cognition.

Many have pointed out that while it may be intuitively implausible that such a system should give rise to experience, it is equally intuitively implausible that a brain should give rise to experience! *This is not so and very myopic, the whole point of this treatise is to show how a brain achieves this and to demonstrate that there needs to be a wider concept that transcends mere physicality.*

Whoever would have thought that this hunk of gray matter would be the sort of thing that could produce vivid subjective experiences? And yet it does. Of course, this does not show that a nation's population could produce a mind, but it is a strong counter to the intuitive argument that it would not.

A nation of homunculi is nowhere near the dynamics of a brain which has a phenomenal ability to recognize – that is; to recognize the phenomenal. That ability has to do with the coherence of the make-up of a brain with the make-up of qualia – both must be born from energy – a nation of robots is not so born.

Of course, as Block points out, we know that neurons can do the job, whereas we do not know about homunculi. *I disagree that neurons can do the job. That is putting the cart before the horse. Neurons are the cart; qualia are the horse- the horse comes first.*

Given this situation, we can construct a series of cases intermediate between me and Robot such that there is only a very small change at each step and such that functional organization is preserved throughout. We can imagine, for instance, replacing a certain number of my neurons by silicon chips. In the first such case, only a single neuron is replaced. Its replacement is a silicon chip that performs precisely the same local function as the neuron.

This is called “fading qualia”. However, there can be no “replacement” of the Will. The Will is not a purely “physical” construct – it borders upon both the functional and the phenomenal (which is why it can be a bridge). No amount or configuration of silicon can take the place of the Will nor can a complexity of programmed silicon ever induce willfulness and attention. These are of consciousness itself, and being so, defy silicon programming.

The fact is that if you replaced every one of your neurons exactly the same with a silicon chip thereby having all of the same functionality, you will at some level or quantity of replacement, lose the phenomenally connected ability to use the Will or attention. This is because the Will's functionality, on a conscious level, is caused by qualia interacting with a phenomenal process (the Will) that can only be born organically, not through a computer-like program. Attention or the Will transcends physicality and is triggered by processes that are not inherent in a program – it is triggered from outside influences that require a psychophysical linkage to a phenomenally based quale. Attention needs an object to attend to. The “psycho” part of that linkage is a phenomenal reactivity to outside influences. Being phenomenal and thereby coherent, silicon programs cannot cohere and interact and are thus rendered impotent. Remember, it is not the physical reality of billions of neurons that supervenes control of our attention; attention is supervened by a phenomenally based coherence. Once the silicon chips have fired, their physicality is gone, as is their influence. This concept is obviously controversial and maybe to some counterintuitive. Nonetheless, to believe in artificial intelligence is ultimately to reject selfhood – it is intuitively doubtful, and I maintain that one should not discount the value of intuition.

Between me and Robot, there will be many intermediate cases. Question: What is it like to be them? What, if anything, are they experiencing? As we move along the spectrum, how does conscious experience vary? Presumably the very early cases have experiences much like mine, and the very late cases have little or no experience, but what of the intermediate cases?

There are no cases however. Yes, one can replace a single neuron or a small grouping of neurons and not affect conscious experiencing, but that is only because those replaced neurons had nothing to do with the linking and recognition of conscious experience in the first place. Consciousness is not "within a neuron": or group of neurons – that is simply a form of Pan psychism. Neurons are not conscious. Consciousness does not reside in a functional location. Once it is triggered (recognized, experienced) it does so everywhere phenomenally, not physically. Consciousness is not a physical thing.

Given that the system at the other end of the spectrum (Robot) is not conscious, it seems that one of two things must happen along the way. Either (1) consciousness gradually fades over the series of cases, before eventually disappearing, or (2) somewhere along the way consciousness suddenly blinks out, although the preceding case had rich conscious experiences. Call the first possibility fading qualia and the second suddenly disappearing qualia.

It might be then (if these fading qualia have consciousness, especially at the beginning of silicon replacement) that as long as the bridge is "intact" then the rest of the functionality can be silicon. But what is the bridge "made of". Why not a silicon Will? If Will itself has an outside phenomenal component, a universal component, then that would be all that is needed and the inside components theoretically could be silicon. However, if all was just silicon, no Will could be induced (due to non-coherence) and no consciousness could be experienced. At the point that the silicon make-up takes over the "program" to control attention, the ability to cohere is lost. Attention at that point will just be more recorded thoughts and will not have the ability to phenomenally link to qualia – the attentive recognition process will not operate.

He doesn't address that the silicon will have to have had all the previous experiences in order to build a functional system that is capable of consciousness. If this is true then consciousness arises gradually as we catalogue our experiences (starting as a baby). Consciousness then evolves into fullness. So, a sudden replacement negates all the organic programming that has occurred in the past and which adds to the subject's ability for conscious coherence.

In the China example we get people to step in one at a time for the chips, making sure that they set off outputs appropriately in response to inputs. Eventually, we will be left with a case where the entire population is organized as my neurons were, perhaps even controlling a body by radio links. At every stage, the system will be functionally isomorphic to me, and precisely the same arguments apply. Either conscious experience will be preserved, or it will fade, or it will suddenly disappear. The latter two possibilities are just as implausible as before. We can conclude that the population system will support conscious experiences, just as a brain does.

Again, this misses the point of selfhood. The self is not made from an amalgamation of neurons (or Chinese people). The self is a result of phenomenally linked experiences that define a holistic organism. The "hum" of consciousness is an a priori ability of a brain linking to the externally phenomenal qualia. That "ability" does not come from physicality alone, it comes from the causation of qualia interacting with a psychophysical construct. The "Bing" of Penrose is in the psycho-phenomenal recognition that

occurs between qualia and a physically suspended Will. The Will cannot become phenomenal (link) through a purely physical cause.

The fading qualia argument suggests that my functional isomorphs will have conscious experience, but it does not establish that isomorphs will have the same sort of conscious experience. That is, functional organization determines the existence or absence of conscious experience, but it might not determine the nature of that experience.

This he calls Inverted Qualia; however, I think that inverted qualia are possible and is dependent upon the outside of the bridge. Synesthesia patients experience this all the time. And what of them? They point to an internal functioning that coheres with an external one and is rich for exploration. Inverted qualia is a function of a diverted or a changed recognition path, the recognized consciousness still “bings”. It is the Bing that is the crux of this argument and of consciousness overall. It all becomes fully comprehensible if the Bing happens in the external world of universal consciousness! Then, no amount of inner anything would do anything conscious.

The major concept to understand as regards artificial consciousness is that it takes all three dimensions (space-time, materiality and consciousness or qualia) to enable experience and thus selfhood. In all artificially constructed paradigms, consciousness must be there a priori. Our organic make-up is formed from all three dimensions. We process through the physical dimension. However, we cannot proceed with that process unless we have the other two dimensions inherent within us. We effectually tap into consciousness a priori and into space-time a priori. When we “invent” a brain, we leave out those two dimensions in our construction and leave them impotent as to experiencing consciousness or location and duration. Silicon is only physical and lacks consciousness coherence and space-time coherence.

This completes my analysis and at times, critique of Chalmers writings. I now move on to an analysis of some other noteworthy author’s renditions of this subject. The first of which are some brief thoughts on consciousness extracted and commented from: The Hard-Terminological Problem of Consciousness by Alexander Boldachev.

Boldachev starts off by stating; there are only two certitudes with regard to consciousness: (1) it is tied to the subject, it is always the consciousness of some subject, and (2) the existence of consciousness is fixed only by the givenness of objects within it; it is characterized by a multitude of objects that exist within it.

This then rejects that consciousness can be without a subject or object, i.e.: out there in the universe to be grasped or attended to which is what I propound. He effectively is saying that consciousness is dependent upon something else, while I believe it is fully independent of our physical make-up (although it is interactive), but dependent upon the external qualia (universal consciousness).

Consciousness is a form of the relation between the subject and objects. Such an understanding of the ontological status of consciousness automatically leads us to the following conclusion: consciousness as a non-object cannot possess properties, attributes, or states; it also cannot be a property or state of any object. I reject this view categorically – this would mean that consciousness isn’t even a phenomenological occurrence, that it is just a property (of what he doesn’t say).

The claim that any extended object is given to us in consciousness should be understood exclusively and only as an indication of that object’s distinction in space. Such objects include feelings, emotions, and

thoughts – we perceive them as being extended in time, that is, they are distinguished in consciousness not simultaneously, like spatial things, but purely sequentially. *This doesn't make sense since one can be having thoughts, or a thought, while simultaneously having an emotion about it.*

Is consciousness physical? Consciousness is neither physical, nor chemical, nor physiological, nor psychological, nor cognitive, nor spiritual – we cannot say that it “is” at all. That is, it is not a phenomenon and does not exist at all. Everything that exists, from the physical to the spiritual, exists in consciousness. That means that whatever object we select, whatever property we examine, whatever event we record – it will be neither consciousness itself, nor a property of it. We only run across physical, chemical, physiological, cognitive, and spiritual phenomena, properties, and events. And where is consciousness? Consciousness is where we are given those objects, properties, and events. Such is the ontological status of consciousness – it is a form of the relation between the subject and objects. *This has all sorts of contradictions in it. The “where” he talks about, are precisely the “objects” he mentioned above. Since these “objects”, according to him, include inner states (non-material) then the where it is given, again, presupposes a given from – that from being universal and not personal. Personal could not be given from the outside unless the outside object has properties (which he rejects).*

Does consciousness affect behavior? The conception of “influence” implies the presence of two objects and reflects the fact that the state of one object depends on changes in the state of the other. *This is what I call “super-position” as taken from quantum theory.*

It is clear, after all, that everything listed above – physiology, the psyche, the cognitive system, will – *do not relate to consciousness itself*; all of these systems are given in consciousness and, undoubtedly, exert influence on each other and have a causal relationship.

It is only pre-supposed that they do not relate to consciousness itself. This is only true when one claims that material things have consciousness, but does not entertain the concept that consciousness is a separate “state” from material or psyche.

Once again, this is only true if one considers whether consciousness is an object (thereby forming the certainty that it is not; i.e.; is not non-material). But this is a myopic view of things as simply material or (space) or time oriented, and does not consider that it can be a third, unknown entity (emanating from energy) – the three derivatives of energy – time, space and consciousness itself. All of his arguments are refuted as soon as you consider consciousness as part of an object, but one of a different nature than that of space or time or the material.

Does the brain generate consciousness? He asserts that “Consciousness, in its ontological status as a non-object, cannot exert influence on anything”. However, *if consciousness is an object (of a different nature as brought out above) then it certainly could be generated, and is, but we contend this is the bridging of universal consciousness to individual consciousness. Without the universal (the non-material) then individual consciousness could not exist. It is generated in the brain through its bridge, through the Will, with the universal.*

Why does the functioning of the brain involve consciousness? It turns out that of all the seven questions, only this one relates directly to the problem of consciousness. Essentially, it expresses the hard problem of consciousness as formulated by Chalmers: why don't we live in the dark? Of course, we can obtain a formal answer to this question as well: simply because the subject is a subject only in its own world of objects, and the givenness of these objects implies the presence of a space/forms/means for their

givenness – consciousness *This is only a different way of admitting the fact that consciousness is an object (just of a different, and external nature than materiality, or thoughts psyche, etc.).*

Conscious and Unconscious Actions. Now we will expand our subject area and examine psychological behavior and human activity from the standpoint of the narrow interpretation. Some manifestations of the human psyche indicate that it can make appropriate actions in an unconscious state, without their representation in the “picture” of consciousness.

He goes on to give the example of a sleep walker avoiding walking into walls (or a hypnotized person). We contend however that ordered and logical actions do continue to occur in their relatively proper order (evidence dreaming logical sequences), but they are still unconscious due to the lack of Will applied to them (again, Will being the bridge or connection to the universal consciousness, to qualia).

The Role of Consciousness in Activity. What predetermines human behavior – data that comes from outside (light, sound, tactile, and other data), or elements of the “picture” of consciousness?

It is the cause and effect ordering of qualia from universal consciousness that determines (but does not predetermine) human behavior. It is not pre-determined because the Will, mixed with probability (the probability curve of possible choices) is what will determine choices, behavior – and ultimately karma (in the form of decoherent waves, or coherent ones, the non-efficient use of energy – or the efficient use).

Active Paradigm. To carry out activity, we use the internally coherent “picture” of consciousness built by our psyche. And it is built, even in usual, everyday life, on the basis of some principles which are not very understandable to us ourselves.

It is not understandable simply because it is not being defined as universal and universally attainable.

Essentially, a sleepwalker is analogous to the philosophical zombie of thought experiments. Physically, the zombie sometimes acts far more precisely than the person in consciousness. Yet his actions are, on the one hand, primitive, and, on the other hand – and this is what is most important – cannot be used for the execution of the next action: not an individual and certainly not a collective one. *This is the role of the Will and the effect of operating without one. The Will determines action.*

The next author is Gary Hatfield and his manuscript, “The Reality of Qualia”.

He begins by perfectly stating; I am a qualia realist. I believe that specifically phenomenal qualia are present in perception. Thus, when we see a yellow lemon in good light, we typically see that it is yellow by experiencing a yellow quale. We can experience (an instance of) the same yellow quale in the absence of the lemon, or of any yellow object. In my view, not only is the experience of the lemon’s quality real something many will grant but the experienced quale is real, in the sense that it exists as perceiver-dependent phenomenal content.

Aristotle thought that color is a real quality, and that, during perception, the ‘form’ of that color is transmitted from the object to the soul. Democritus is said to have held that the atoms that compose things aren’t really colored, but that color arises as a merely subjective effect of atoms on perceivers. Philosophical reflections on color properties and color experience intensified during the early modern period, when Descartes and Locke (among others) developed a distinction between primary and secondary qualities. Discussion has again intensified in recent years, raising issues in metaphysics,

epistemology, and philosophy of mind. *I find it interesting that earlier conceptions about perception agree fully with my theory.*

He then defines the various types of beliefs about perception.

Objectivists argue that color is a mind-independent property of objects. They say that, when we perceive a colored object veridically, we perceive a physical property that the object possesses independently of all perception or experience of it (ours or any other). They identify this physical property with the object's color. Currently, the most popular form of objectivism is called 'representationalism', according to which the phenomenal content of color experience is nothing but the representation of a physical property (Dretske, 1995; Tye, 1995, 2000, 2003); visually representing a physical color property just is a phenomenal experience, which contains no subjectively supplied content. *This fits my belief system.*

Subjectivists argue that color is not a property of objects, but an internal state of the perceiver: color reduces to the subjective content of a perceiver's experience. By contrast with objectivists, they think that the notion of color has legitimate reference only to visual experience, and they deny that objects are really colored. In their view, color experience is a kind of standing illusion, although a useful one. *Of course, this begs the question of where does the quality of color come from, why is it the same in everyone – and a host of other consequential questions.*

Dispositionalists also define color in relation to color experience, but that definition allows a notion of 'object color' 134 that ascribes a color property to the surfaces of objects in virtue of the relation between objects and the color experiences they produce. They argue that color, considered as a property of objects, consists in a relational disposition, or its causal basis; it is a property that surfaces (and light sources) have of causing perceivers to have experiences that exhibit various phenomenal characters (Johnston, 1992; Peacocke, 1984). For dispositionalists, color as a phenomenal feature of experience is conceptually primary; they then use experienced color to define the related notion of color as a property attributed to objects. *Here again, this brings up many challenging questions as it moves the hard problem to the realm of objects that have phenomenal properties – how can a physical object have phenomenal properties (the hard problem moved to objects).*

Consequently, to understand what color is as a property of an object The Reality of Qualia (or of an object's surface) requires that we understand object surfaces, illuminants, eyes, brains, and color experiences. One doesn't need to reflect on or understand any of these things in order to have color perceptions or to classify things by their colors. But in order to understand what color is in objects, and how it is involved in color perception, we must consider these factors. *What of color we call up in our minds without an actual object being there?*

The standard view had been that color is a 'real property' in the Aristotelian sense. This meant that in the surfaces of things there is a property, color, which is transmitted to the mind 'without its matter' during perception (Simmons, 1994). On this view, the mind receives a copy or instance of the color property that inheres in the surfaces of things. Once transmitted into the brain (according to medieval Aristotelian accounts), this instance expresses itself as a color experience (Hatfield). *I submit though that color is experienced way before the brain records it, unless that is if you consider the recognition that of brain recording. We need to explain how qualia interacts with the objects that reflect color. Is this in a material or ethereal way? And if ethereal – then how? This goes to the nature of interaction between the three dimensions of energy.*

Locke construed them as not 'in the mind'; rather, they are physical properties of objects (properties consisting in configurations of the primary qualities such as size, shape, and motion) that have the 'power' to cause specific types of color sensations in perceivers (Locke, 1690, II.viii.1013). For an object to possess color as a secondary quality is for it to possess a power to cause the sensation or experience of color in perceivers. *What is this power constituted of and where does the quality come from?*

Although dispositionalists may speak of phenomenal color as representing the surface properties of an object, they (unlike representationalist objectivists) do not think that the phenomenal content of color experience is reducible to the bare representation of a physical property. *And it is not in the sense that it is once removed from direct interaction.*

Objectivists often put this point by saying that color experience is 'transparent' (Tye, 2000, pp. 4551). To them, this means that there is no mediating subjective element of experience that constitutes phenomenal color. Rather, the physical property, present to the mind representationally, constitutes the phenomenal color (Dretske, 1995, pp. 8893. *They are both right and wrong here. Wrong in the sense that there is a mediating element (the bridge and the Will). Right though that the representation (for lack of a better word) constitutes phenomenal color – but not of a physical nature or cause (the quality of color is not a physical thing and thus could not be born (caused) of a physical thing).*

Dispositionalists are committed to there being a relation between two distinct things: a phenomenal color and a surface property. They think that the phenomenal color is causally correlated with physical surface properties, and that it represents or signifies the surface properties of things, without transparently making those properties present in consciousness so as to constitute phenomenal color. *Partially right in that they are a relation between phenomenal color and the surface of objects, partially wrong in that they do make (or cause) those properties to be present in consciousness, just in a different form or quality.*

I maintain that color properties should be classed relative to color perception or color experience. This means that theories of color as an object property must begin (conceptually) with color experience. *I also agree with this.*

Both the existence and character of the object quality must depend on the experience itself. By saying that the object quality depends on experience, I mean that the phenomenal characters of color qualia are features of how colored objects appear to us, of the experience, that is, by which we see colored objects. I also mean that we should construe the qualitative character of color experience as developing out of the subject's capacities for phenomenally presenting objects. *I think that the subject's capacities do play a part, which is why we can't see x-rays. I also agree that color qualia are a feature of how color appears to us and are not the entire nature of qualia. Qualia presents color to us but has more properties than that phenomenally that we do not link to or interact with.*

Evolutionarily, color experiences are a kind of phenomenal infusion into pre-existing perceptual presentations of surfaces. The phenomenal character of this infusion is not generated by its representational content (as in objectivist representationalism). Rather, we may imagine that mutation generates it, and that its etiology lies in the capacities of neural structures to generate phenomenal characters. *This misses the key point about qualia when he says that the neurons generate phenomenal characters. If that were the case then we wouldn't need qualia to generate the color experience and zombies and computers could experience colors – which I reject. He is avoiding addressing the hard problem.*

From the present theoretical point of view, color experiences are blank signs for the color properties of objects. They contain the content that a thing has a color property of a specific kind (yellow, red, etc.), but they do not provide any further details. We, as theorists, can correlate the signs with their causal conditions under a physical description and we can determine that the color property in objects is a disposition to produce color experience. However, evolution established those correlations in the visual system through the trial and error of natural selection. It did not build into color experiences the content that they result from dispositional properties.

This indicates that "color" evolved in no necessarily specific inter-relationship (like a rainbow allegedly has). That is: red evolved, as did green, as did blue – and their relationship, in the phenomenal sense, had no correlation of continuum with each other. Green could have evolved as another type of quality, but green is what happened. But this would then bespeak that green qualia do not exist – rather a certain quale does exist, but our phenomenal perception of its green quality is tied to an interaction with the qualia "trigger" and the interpretation, phenomenally – with that trigger. So therefore, there would be a distinct and separate phenomenal agent, other than the triggering qualia, that accounts for our seeing that qualia as "greenness". Two qualia's so to speak – one from the phenomenal aspect of the object (the material's consciousness aspect – qualia) and one from the phenomenal aspect of our interpretive (recognition) trigger – a related but separate other qualia particular to ourselves. Not necessarily purely physical, but proto-physical from the interaction of our Will (attention) and recognition of this "other" qualia. This may seem circular; however, it would be one account for the difference between object qualia and perceptive qualia. I do not necessarily subscribe to this though.

Phenomenal colors are aspects of our experience under which we experience surfaces, and they are arbitrary signs by which we distinguish surfaces. Such signs represent things that in fact have causally relevant physical properties (SRDs or disjunctions of SRDs), but they are not representations of physical properties as such: they do not carry in their representational content a specification of the SRDs that cause them. They present the surfaces of objects in accordance with the distinctive dispositional bases objects have for producing color experiences, but we need not construe them as representing the specific physical properties that constitute a particular dispositional basis. Color qualia, as signs, simply present the object as having a color property of a kind that differs from other color properties. Accordingly, phenomenal colors are arbitrary signs for the properties of surfaces *I disagree that they are arbitrary. I consider the color aspect of qualia as an absolute character of that qualia.*

Of course, there would need to be boundaries: if a yellow object is seen under aberrant lighting conditions (say, under monochromatic blue light), then it appears dark bluish grey and not yellow, and so it doesn't appear to have the object color it does. Or if a red object is seen by a nonstandard observer (say, someone who is red-green colorblind), then it may not generate a red-experience. These are violations of standard conditions and normal observers. *This doesn't bear on the absolute nature of the qualia, just on the apparatus used to filter that color. The apparatus itself (like a blue filter) has its own quale.*

The dispositionalist says that the property of color in an object is a dispositional basis of its surface for causing experiences of phenomenal color of a certain kind. It also takes for granted that color experiences fall into phenomenally distinguishable groupings. Thus, observers can readily distinguish phenomenal yellows from phenomenal reds. To this extent, color properties are partially revealed in experience. From our color experience (in standard conditions) we can tell that two objects have different colors (yellow vs. red). We know how yellow and red look. We can't tell, just by looking, what

yellow and red are as properties of an object surface. That is the whole functionality though of qualia in a sense. Qualia allows us to differentiate automatically. In this sense, qualia are a direct mediator between experience and object.

The following is a good analogy of what is happening:

THE DARK ROOM

A man wakes up in a room with no light. We say that he “sees” blackness. Though we say that blackness is the absence of color, black nonetheless has a quality that is black. Therefore, the quality that is black has the same “type” of quality as that which is red or green, it’s just not red or green – it is black. But we can say with confidence that blackness has the same type of color-ness quality as does red, green, etc. Therefore, the absence of color has a quale associated with it.

Light now suddenly floods the room. The man now sees whiteness instead of black. White can also be considered a color by the same token as black was. This man now has the varied experience of two colors, both of which share a certain similarity of color-ness even though the color quality is starkly different.

Now the light that has flooded the room is physically cut in half. By physically what is meant is that the actual wave lengths of the light have been reduced to shorter wavelengths by one half. Thus, there now is a certain absence of part of the previous white wavelength. Absence of a wavelength, as was demonstrated in the black room (which had no wavelengths at all) produces a certain quality of color (the missing wavelength) and a certain level of “diminished” light. There is thus a new quality that is starkly different than white or black (by one half physically). This will have a color quality also, but it must have one that is different than white and is different than black.

What that color quality is, is a function of the inherent emanation of what a one-half wavelength gives off – the quale. It is determined not by a set of physical relational laws, rather it just is a certain color quality. That quality is an indivisible, fundamental quality (let’s name it red) and exists a priori as red. It is not born from a mixture of white and black. It is not some other random color or physical mixture of colors. Each gradation of color along a continuum has its own quale. It manifests as a fundamental quality (qualia). There is no more reason to the “choice” of red than there was reason for black appearing as blackness or white as appearing as whiteness. The nature of the existence of separate color qualities is that they differ in their material (physical) make-up. But their inherent causative make-up is absolute, fundamental and inherent.

Given the three constituents of energy, that of materiality, space-time and qualia (or consciousness), the qualia aspect being seemingly arbitrary is no more mysterious than the arbitrariness of the physical make-up or the spatial make-up. They all are reflective (not in the color sense) of the nature of energy in different states. One might “call” that arbitrary but that is only because one doesn’t inherently understand them. Subjectively arbitrary but phenomenally absolute.

In this case, the state of half wavelength differs in all three realms; materially as one half, spatially as taking up a specific shape and time and consciously as having the qualia we call red. They are all tied together. Were energy a different physical (or material) constitute and a different shape-time (shape-motion) then the qualia would be of a different color quality. Color characteristics are formed as a combinational interaction of all three dimensions.

So, yes, an object has a specific color to it and we see it as red or green or blue, through our interaction with the inherent qualia that exists when we recognize it through our interaction with the phenomenal aspect that is consciousness (or qualia). I would call this phenomenalistic objectivism.

A key concept in the above explanation of the primacy and brute specificity of a particular perceived color is that there is no mechanical relationship to the phenomenality of the colors associated with various wavelengths. The quality of the specific color red exists irrespective of the physical object. There may be a correlation to that object, but the redness quality is of the qualia alone.

A good example of this concept is that of the rainbow. A rainbow, physically, is a continuum produced by successive changes in wavelength such that there is a logical physical relationship to the continuum. So, a neighboring diminished or increased wavelength does appear next to each other in the rainbow. These result, physically, in the nomenclature that a rainbow is constituted by ROY G BIV (In order: Red, Orange, Yellow, Green, Blue, Indigo, Violet). However, and this is the main point, the phenomenological qualia of the colors have no such inherent relationship continuum. It just as well could have been that the wavelengths spelled out BIG V YRO (Blue, Indigo, Green, Violet, Yellow, Red, Orange) as the continuum's phenomenological aspect and quality of colors. We relate to ROY G BIV simply due to the inherent quality of those colors with those physical wavelengths and the order of those qualities are arbitrary in the sense that there was no a priori connection based on that continuum.

So, red is red, not because of some physiological relationship to a varying wavelength aspect, but simply because it is brute red at that particular wavelength. Witness synesthesia, it shows that the wavelength is not inherently a certain quality, but rather a certain quality of its own making.

Hatfield continues and underlines the above; One of the chief sources of this problem comes from thinking that, if phenomenal red is real, then we must ascribe the property of being red to something, according to a normal substance/property ontology. So, if phenomenal color is real, something must really be colored, or have the color property, in just the way that the surfaces of things have the property of being red according to a kind of naive realism or updated Aristotelianism. If a sense-datum does not bear the property, then a brain state or some other entity must have it, or so the reasoning goes. Again though, this does not account for synesthesia.

I find a home for qualia in experience: I construe them as intentional contents, in Brentano's original sense. Brentano originally posited the relation of intentionality to obtain between an act of perceiving and an entity that is present to consciousness (I call that recognition). According to Brentano, this entity exists 'in' the perception, whether it exists externally to the mind or not. (I do not agree with that though – it exists in the quale. Our recognition is more of a phenomenal connection to that quale, not a physical connection to our cognitive pre-programmed perceptive process).

Thus, the fact that we can be aware of phenomenal red as a qualitative content of our experience entails that phenomenal red exists intentionally: it is 'presented' to us in consciousness. Brentano held that our being aware of the phenomenal red in this way is neutral with respect to the further question of the relation between mental contents and "external" physical objects (Brentano, 1874/1973, pp. 92100).

Objectivist representationalists (e.g., Dretske, 1995; Tye, 1995, 2000), these latter theorists, use the term 'intentional' simply to describe a representational relation between a state of mind and an object or object property, and they equate phenomenal content with representational content in order to do away

with the dispositionalists' phenomenal qualia and with the Brentano intentionality of such qualia. *In other words, they do not ascribe it to attention or to linkage with the phenomenal aspect of qualia.*

As Hatfield develops the theory further, both shape and color present external properties under a subjective aspect: both show subjective characteristics. In the 158 GARY HATFIELD case of shape, we can observe the subjective aspect in the compression of Euclidean space with distance from the standpoint of the perceiver, as we see in the case of a road with parallel sides, whose sides nonetheless converge phenomenally within the visual field (Hatfield, 2003b). These 'phenomenal aspects' are characteristics of our experience, but neither our brains nor external objects possess the properties exactly as presented. That is the wonder of Brentano intentionality. *The roads converging is a function of the interaction of geometry with our physical apparatus and is a priori such. Furthermore, they are a function of a quale also.*

As regards ontology, I propose that we simply include phenomenal red among the phenomena of nature. That is, I propose that we accept that the phenomenal is itself real.

From there, we might ask how we should explain its existence and characteristics. If we don't accept substance dualism (a position that is of no help at all in explaining phenomenal qualities), we should assume as a working hypothesis that phenomenal red depends on brain activity. However, we should not treat that hypothesis as a necessary condition on the acceptability of phenomenal red into the domain of natural phenomena. At present, no one has any idea of how to explain phenomenal red in terms of brain activity. There is some knowledge of the brain correlates of sensations, but there is no direct explanatory relation or intelligible connection between brain activity and phenomenal content. *This is the crux of the hard problem. My theory does assert an explanatory connection however.*

Next is an analysis of "Hidden Qualia" by Derik Schiller.

Schiller writes; I will argue that we should be open to the possibility that there is more to our current conscious experiences than we are aware of. Beliefs about our experiences are cognitive in a fashion that the experiences themselves are not. There may still be necessary connections between our qualia and our beliefs about our experiences, but such connections are not inherent in the nature of qualia itself. I agree, they are of our cognitive judgements. However, the causation is directly from qualia.

While the existence of unattended qualia is controversial (Prinz, 2000; Papineau, 2002; Schwitzgebel, 2007), it is intuitively plausible that we have some qualia that we do not attend to. *I believe that without attention, no qualia are presented to us because it is attention that enables us to connect to qualia. However, the question of whether qualia still exists in us is an open one. It bears on the possible relationship between qualia and unconsciousness. And even more so on how exactly unconsciousness exists functionally.*

It is plausible that although it might be especially difficult to direct our attention to a given quale, that quale still constitutes part of what it feels like to be us. *This is conceivable, and in my schemata might contribute to what I call the "overall hum of consciousness" that we always have – whether conscious of it (attending to it) or not.*

Upon introspecting a rose-red quale, we might come to believe that we are experiencing a rose-red quale, a red quale, a colored quale, or some visual quale or other. Introspection might also lead us to different levels of confidence about our higher-order judgments:

I don't believe that qualia and judgements go hand in hand. We experience qualia, we judge things only cognitively and without resort to qualia – it is intellectual. Our experience is brute and isolated from our cognitive thinking. We may evaluate a certain experience, but that doesn't suppose that the experience needs evaluation to be an experience. In fact, evaluation is removed from experience and exists in an isolated realm of intellectuality, although it certainly can be caused by experience nonetheless.

Schiller believes that qualia is produced inwardly – that is not so and thereby refutes most of his arguments concerning hidden qualia existing; though it is true that there is hidden qualia, but it is hidden from the outside interaction, it is not “bridge-able” by our Will apparatus – our Will is thus limited.

Chalmers (Chalmers, 1997, 10) speaks of one possible variety of such qualia when he describes a qualitative sense of self as a “background hum” that is fundamental to consciousness. *This is what I believe – but does that mean we are tapping into a constant quale of universal consciousness? Maybe so!!*

Each of the other three accounts suggests that justification requires some sort of intellectual focus on the relevant aspects of one's experience. Feldman took this to be attention, and Fumerton and Sosa to be direct acquaintance. Though direct acquaintance is a bit mysterious, it is plausibly very closely related to attention; we are not directly acquainted with qualia (or any correspondence between them and our beliefs) to which we cannot attend.

Cognitive theories of attention suggest that attention involves shifting our neural resources so that some cognitive processes have better access to important cognitive channels. By gaining access to those channels, they can exert a greater influence over our higher-order intellectual faculties (*and to the external qualia*). They can come to play a greater role in our deliberations or enter into our memories. We attend to visual experiences by strengthening the effect that visual processing regions have on our higher-order faculties and we attend to what we hear by strengthening the effect that the auditory processing regions have.

Maybe that is so but it has little to do with how attention relates to qualia. Those supposed “channels” that we would have greater access to while in a state of attention, would still not cause qualia to be experienced – this would again be supposing that qualia come from within. Those channels might possibly have some intimate connection with the recognition that is all important for interacting with the outer qualia though.

I move on now to a very thorough discussion about qualia by Michael Tye.

He starts off stating; If you are told to focus your attention upon the phenomenal character of your experience, you will find that in doing so you are aware of certain qualities. These qualities — ones that are accessible to you introspectively and that together make up the phenomenal character of the experience are standardly called ‘qualia’.

Other philosophers (e.g. Dennett 1987, 1991) use the term ‘qualia’ in a more restricted way so that qualia are intrinsic properties of experiences that are also ineffable, nonphysical, and ‘given’ to their subjects incorrigibly (without the possibility of error). *To my thinking both of these views are correct.*

He asks; Which mental states possess qualia? The following would certainly be included on my own list. (1) Perceptual experiences, for example, experiences of the sort involved in seeing green, hearing loud trumpets, tasting liquorice, smelling the sea air, handling a piece of fur. (2) Bodily sensations, for example, feeling a twinge of pain, feeling an itch, feeling hungry, having a stomach ache, feeling hot, feeling dizzy. Think here also of experiences such as those present during orgasm or while running flat-out. (3) Felt reactions or passions or emotions, for example, feeling delight, lust, fear, love, feeling grief, jealousy, regret. (4) Felt moods, for example, feeling elated, depressed, calm, bored, tense, miserable. (For more here, see Haugeland 1985, pp. 230-235).

Galen Strawson has claimed (1994) that there are such things as the *experience* of understanding a sentence, the *experience* of suddenly thinking of something, of suddenly remembering something, and so on. Moreover, in his view, experiences of these sorts are not reducible to associated sensory experiences and/or images. Strawson's position here seems to be that thought-experience is a distinctive experience in its own right. He says, for example: "Each sensory modality is an experiential modality, and thought experience (in which understanding-experience may be included) is an experiential modality to be reckoned alongside the other experiential modalities" (p. 196). On Strawson's view, then, some thoughts have qualia. (This is also the position of Horgan and Tienson (2002).)

Should we include such propositional attitudes as feeling angry *that the house has been burgled* or seeing *that the computer is missing* on the list? These seem best treated as hybrid or complex states, one component of which is essentially a phenomenal state and the other (a judgment or belief) is not. Thus, in both cases, there is a constituent experience that is the real bearer of the relevant quale or qualia.

These views capture one of my most comprehensive beliefs. I strongly suspect that qualia are part of everything we do. That we experience the entire external and the internal through the recognition of qualia that is "behind" all of it. Qualia, in my theory, is in everything that we are and perceive. This is how I come to the conclusion that we are a part of the universal, that our soul is part of the universal soul.

One possible explanation is that that there is a realm of subjective, phenomenal qualities associated with color, qualities the intrinsic nature of which Mary (Mary is a character who had never seen anything but black and white, but theoretically knows everything about color, just hasn't experienced it) comes to discover upon her release, as she herself undergoes the various new color experiences.

Some physicalists respond that knowing what it is like is know-how and nothing more. Mary acquires certain abilities, specifically in the case of red, the ability to recognize red things by sight alone, the ability to imagine a red expanse, the ability to remember the experience of red. She does *not* come to know any new information, any new facts about color, any new qualities. *This however might just be semantics and depends on the definition of what "to know" means.*

An alternative physicalist proposal is that Mary in her room lacks certain *phenomenal concepts*, certain ways of thinking about or mentally representing color experiences and colors. Once she leaves the room, she acquires these new modes of thought as she experiences the various colors. *I do not agree with physicalist viewpoints. In this case I submit that she doesn't acquire new thoughts, rather she acquires new experience.*

It appears then that there is no difficulty in holding both that Mary comes to know some new things upon her release, while already knowing all the pertinent real-world physical facts, even though the new experiences she undergoes and their introspectible qualities are wholly physical (*they are not*). In an ordinary, everyday sense, Mary's knowledge increases. *But they are not wholly physical – this is where the physicalist is mistaken.*

Of course, this response does not apply to those philosophers who take the view that qualia are irreducible, non-physical entities. However, these philosophers have other severe problems of their own. In particular, they face the problem of phenomenal causation. Given the causal closure of the physical, how can qualia make any difference? *That is because casual closure does not exist – casual (i.e. cognitive processes) remain open to any input including input from phenomenological causes through the potential recognition which depends on outside input (and thus is not closed).*

We are each so much smaller than the China-body system that we fail to see the forest for the trees. Just as a creature the size of a neuron trapped inside a human head might well be wrongly convinced that there could not be consciousness there, so we too draw the wrong conclusion as we contemplate the China-body system. *This statement fails miserably since we have many trillions of neurons, China has only a couple of billion!*

This is interesting because if you agree with the China body hypothesis then it is an easy step to contemplate that the universe as a whole may be conscious and its functional aspects are some specific organization of cosmic objects (planets, stars, galaxies, black holes, etc.) – we just are to myopic (or small) to see the big picture and to have the knowledge of how those components inter-relate – but components aside – the physical make-up of the universe could in that scenario have phenomenal consciousness, qualia, etc. (and maybe we evn tap into it).

What it shows is that the property of having some phenomenal character or other has a functional essence. But it does not show that individual qualia are functional in nature. Our grasp of what it is like to undergo phenomenal states is supplied to us by introspection.

But is that true? Is introspection, a cognitive process, needed in order to undergo a phenomenal state? We do claim in our theory that recognition occurs – but is recognition the same as introspection. I believe not. I believe recognition is a quale itself – it is a feeling, a “Bing” and enlists no introspection in order to experience it. Experience does not require knowledge – the concept of experience is direct.

No matter how much objective information we come to acquire, we still seem to be left with something that we cannot explain, namely, why and how such-and-such objective, physical changes, whatever they might be, generate so-and-so subjective feeling, or any subjective feeling at all. *The hard problem.*

I don't like the use of the concept of “subjective” when describing qualia experience. To me, subjective entails a personal mode of thinking that though it has no objective grounding, is nonetheless of a cognitive nature – cognitive processes being not a part of the experiencing of qualia – it is the part only that thinks about it, cogitates about it, but does not experience it.

This is the famous "explanatory gap" for qualia. Experiences and feelings are as much a part of the physical, natural world as life, digestion, DNA, or lightning. It is just that with the concepts we have and the concepts we are capable of forming, we are cognitively closed to a full, bridging explanation by the

very structure of our minds (McGinn 1991). *I like the gist of this thought; however, I believe though that we can understand the gap and can define the bridge.*

There is no general agreement on how the gap is generated and what it shows.

The "Gap" is a result of energy distributing itself between the physical and the phenomenal – between materiality and consciousness. That separation of energy into parts (actually three parts when you include space-time) automatically reveals a gap from either one of the dimension's vantage points. No real gap exists though – it is just a mistaken vantage point observation. The alleged gap is "filled" through the reality of interaction.

Two billiard balls may exist separately on a physical level, but when they meet through a cause and effect collision (interaction), they share each other's time and motion aspects, transferring and interacting with each other's time or motion quotients. In the phenomenal and the space-time sense, there really aren't two separate balls (that is just a material vantage point definition of the "scene") – there are in a different sense of view, a different reality; a continuum of motion and time, at different intervals, that as a whole make up the total of cause and effect of time and motion (100%).

Likewise, phenomenological aspects and material aspects together make up one full measure of energy, with no gap. Energy distributes, but overall (between the two states of phenomenon and materiality) has not diminished one bit. Energy cannot be created or destroyed, and when it distributes itself, or transforms into two states, it cannot be diminished or increased, it remains 100%, space-time, materiality and consciousness. If I look purely from the vantage point of consciousness, I detect nothing else. If I look purely from a physical point of view then I detect no phenomenological-ness. The "Gap" is simply one of a subjective view point.

In the past, philosophers have often appealed directly to introspection on behalf of the view that qualia are intrinsic, non-intentional features of experiences. Recently, a number of philosophers have claimed that introspection reveals no such qualities (Harman 1990, Dretske 1995, Tye 1995, 2000). Suppose you are facing a white wall, on which you see a bright red, round patch of paint. Suppose you are attending closely to the color and shape of the patch as well as the background. Now turn your attention from what you see out there in the world before you to your visual experience. Focus upon *your awareness* of the patch as opposed to *the patch* of which you are aware. Do you find yourself suddenly acquainted with new qualities, qualities that are intrinsic to your visual experience in the way that redness and roundness are qualities intrinsic to the patch of paint? According to some philosophers, the answer to this question is a resounding 'No'. As you look at the patch, you are aware of certain features out there in the world. When you turn your attention inwards to your experience of those features, you are aware *that* you are having an experience of a certain sort but you are aware *of* the very same features; no new features of your experience are revealed. In this way, your visual experience is transparent or diaphanous. When you try to examine it, you see right through it, as it were, to the qualities you were experiencing all along in being a subject of the experience, qualities your experience is *of*.

This is correct to my view. It also touches closely upon a similar question; Is there an object, a quale derived from that object and then experience of that quale which would thereby be the experience exactly of the object? Or are qualia different than the object itself. It seems that some aspect of the object is duplicated in the qualia and then the experience. However, this is the constant mistaken notion of what qualia is.

It is true that an object triggers quale (better put, it is the cause of qualia in the sense of cause and effect – which itself is really just interactive transformation from the physical to the phenomenal) but the object is not inherently the same as the qualia. The qualia are something separate and different than the object and have a translation of the object but no qualities of the object – one is materiality only while the other is ethereal only – they are different.

Our experience also is removed from both the object and the inherent nature of the qualia. Our experience is just triggered by the qualia. It has all been cause and effect, all been interaction and transformation (of energy). The three aspects (object, qualia, experience) are all separate views of an underlying reality (holistic energy).

Therefore, our “bridged” (effected) interaction that is experience is just a different view of reality filtered through our Will through the application of attention (attention being a part of both the qualia and the Will) – attention is the interactive agent in this “transaction” (transformation) with recognition being the effect part of the cause and effect process – the transformation itself. Each dimension (material, space-time, consciousness) has a cause and effect upon the other dimension(s). Each effect is different in its inherent quality or reality. There is object (one reality) triggering qualia (another separate reality) triggering recognition or experience (yet another reality). These realities, that each have their separate inherent nature, are all distributions of energy.

But as to whether the transformation is true to its cause, as the question Tye analyzes above, the answer is that it absolutely is. No inherent change takes place in the transformation, in the interaction, just the form changes. They might not appear the same but they retain a one to one correlation that would be exactly the same if an interpreter could be enlisted and applied to it. The words “Oui” and “Yes” are inherently the same even though they are spelled differently and hail from a different substrate.

This point holds good even if you are hallucinating and there is no real patch of paint on the wall before you. Still you have an experience of there being a patch of paint out there with a certain color and shape. It's just that this time your experience is a misrepresentation.

It is not simply a mis-representation. After all – it duplicates the qualia effect (green looks green whether it's from the qualia or from a hallucination – it still has greenness). What is happening is that the same trigger that caused the qualia transformation from a material object, is interacting with our neuronal circuit/cognitive process (in this case a hallucination). Since the trigger is the same, the qualia are the same and therefore the experience is the same. In the case of a hallucination, or even a self-derived thought about the patch of color, the trigger is our memory of the object.

This means that we have, inwardly, the physical ability to duplicate the inherent nature of an object's trigger in our neuronal process, in our memory (Mary can't do this). This is because our cognitive process is of the physical, the material, as is that of the object. Therefore, it can be isomorphic to the object. We do not inwardly “experience” the object – that is done through the qualia – we do however, duplicate the neuronal firings that the object would give off naturally, only in this case it was only an inward cause or trigger that fired those neurons.

The visual cortex in this case takes the place of the object and the attention matches coherently with the qualia that is associated with that process (but associated only in the sense that it mimics the nature of an object). In effect, the conscious dimension has interacted with the same cause and effect of the physical dimension, the only difference being that the physical representation was not of a material

object but of a representation of that material object. Do not mistake this though to mean that the qualia are representational – the qualia are still a separate phenomenal entity and so is the consequent experience. In other words, even though it was inwardly triggered (as an object), the external qualia was still tapped into.

These observations suggest that qualia, conceived of as the immediately 'felt' qualities of experiences of which we are cognizant when we attend to them introspectively, do not really exist. The qualities of which we are aware are not qualities of experiences at all, but rather qualities that, if they are qualities of anything, are qualities of things in the world (as in the case of perceptual experiences) or of regions of our bodies (as in the case of bodily sensations). *I fully reject this view.*

If I feel a pain in a leg, I need not even have a leg. My pain might be a pain in a phantom limb. Facts such as these have been taken to provide further support for the contention that some sort of representational account is appropriate for qualia. *But this is refuted in the above discussion about hallucinations. The phantom leg is a memory/object leg. If a person never had a leg then this could not happen.*

What of the three-way concept (discussed above) concerning cause and effect transformations between object, qualia and experience? How does this work in the case of an emotion, depression let's say? In that case – sadness is the experience, the qualia produce the feeling of sadness, the experience of sadness or sadness-ness. But what transformation is the qualia from? Where is the object that triggered the qualia?

In the case of emotions – the qualia are triggered by a cognitive evaluation of a circumstance. That "evaluation" and that "circumstance" together form, in terms of triggered qualia, the object. The cognitive evaluation process is therefore the same as the cognitive process that remembered an objects properties. This is possible simply because all facets of this interactive process are of the material. A circumstance is a physical reality, an action must be involved. Introspection of that circumstance (or action) is the evaluative part and introspection is a physically cognitive process of physical/chemical neurons. Since these two physical aspects inter-relate subjectively yet physically in the brain, they are consistent with the process of calling up an object cognitively in the sense we are considering objects and qualia and experience. So, emotions are the qualia of physically constituted events processed in the brain.

Do frogs have qualia? Or fish? What about honey bees? Somewhere down the phylogenetic scale phenomenal consciousness ceases. But where? It is sometimes supposed that once we begin to reflect upon much simpler beings than ourselves — snails, for example — we are left with nothing physical or structural that we could plausibly take to help us determine whether they are phenomenally conscious (Papineau 1994). There is really no way of our knowing if spiders are subject to states with qualia, as they spin their webs, or if fish undergo any phenomenal experiences, as they swim about in the sea.

I contend however that as long as there is Will and attention, then a creature (or even a computer) will experience qualia. So, yes, fish and snails are conscious and have experiences. Plants however, in my view, would not be – they lack the facility for attention and Will. Will is not simply action – it is action with targeted attention (or Will). Plants do not have that facility. Remember that animal brains, or even snail brains, have billions and billions of neurons.

In the rest of this paper I examine what I find to be the most interesting aspects of these subjects as well as the most challenging; that is the views of Kant. The first section on Kant's philosophy is from Idan Shimony's discussions of Leibniz, Kant and Boscovich on the Relationality of Space – the Make-Up of Space.

All three thinkers (Leibniz, Kant and Boscovich) regarded matter as logically prior to space and advanced relational and derivative views of space. Leibniz argued for relational and ideal space in order to resolve the problem of the constitution of matter. Kant had the same motivation for suggesting a relational account of space. Yet he suggested that to resolve this problem it is sufficient to postulate a relational and real space and monads which are physical rather than mental. For Boscovich, the view that real space is derivative and discrete was the outcome of a theory of matter designed to preserve Leibniz's principle of continuity. Thus, Leibniz's notion of relational space proved to be a fruitful philosophical idea. It yielded bold and intriguing attempts to decipher the nature of space. For all three thinkers, the relational account of space was combined with a dynamical view of matter. Thus, it was integrated in theories of nature that introduced novel scientific ideas: Leibniz's theory of nature suggested, for example, a rudimentary formulation of the principle of conservation of energy, while the Kant-Boscovich model of matter is of historical 31 See *ibid.*, § 198. 32 *Ibid.*, § 142. Leibniz, the Young Kant, and Boscovich on the Relationality of Space 85 importance as the forerunner of 19th century field theories and certain dynamical conceptions of matter in modern physics.

The issue that consumed 18th century philosophers was whether space took up space! That is; does space have a physical make-up that is "container like" or is it something phenomenal that only reflects the relational aspects of physically indivisible monads (relational physical monads seem like a contradiction to me).

The argument was from Leibniz who philosophized that space is divisible and could forever be divided into smaller and smaller parts. Since monadic physical structures were, at their monadist extreme, non-divisible, then how could a monad exist "in" a space if no divisibility could take place in spite of the concept that since space was divisible, then monads should be likewise if they caused space by their relational aspect – you can't have division of that relational aspect yet be indivisible in its physical aspect. This was the crux of Leibniz's argument.

Kant however thought space was an entity and separate from monads, therefore a monad could exist, non-divisibly, within a divisible space. Space, in that view, was not a relational phenomenon between objects.

This all predated Plank's discovery of the smallest possible spatial and object-oriented dimension (dimension in the measurement sense). Given this concept, space becomes not an object relational entity as Leibniz thought. What is it then – why does it exist and how does it exist?

Space, in our theory, is begotten from energy distributing into materiality, consciousness and space-time.

That being the case, it would be given that the breaking up of energy is such that each of those dimensions (not measurement dimensions but rather cosmic dimensions) are of a different basic nature; Materiality's nature is that of physical existence, consciousness's nature is that of phenomenal attributes, qualities or qualia. And what of space? Space's nature, we contend is neither of these. One might consider it phenomenal, but that is just because it is not physical. It is in actuality also different than the phenomenal definition we carry as applying to consciousness and qualia.

It gives to materiality a location, a place to exist. It does this concurrently when the physical aspect of energy materializes (consciousness is also formed at that instant). This is comprehensible. After all, if you accept that energy is the progeniture of these three dimensions, then the different aspects come into being with each other, each having a different nature. So, space is a location, and Plank space is the indivisible extent of that location. What then, and why then, and how then – do the spaces between objects (as opposed to inherently within objects) come about? It seems as though this must be space that has been formed by itself, alone - not in conjunction and concurrently with an object and with consciousness.

Our answer to this is that the spatial existence that exists in locations other than that which an object takes up (in other words all other locations – the container-like spatial content) is part and parcel to energy before it became kinetic. In other words, that space is an aspect of potential energy (as delineated from kinetic energy, kinetic energy being the distributive energy into the three dimensions of space-time, materiality and consciousness). In a sense it is potential space (the potential to “house” objects which is different than actually locating an object).

That space has the property that Leibniz concluded – that of a continuum of divisibility. There is no Plank limit to it. It reflects infinity at both ends – at the furthest reaches it is infinite, and at the smallest reaches it is infinite. Therefore, both Kant and Leibniz were correct. Leibniz upon materialization of objects was correct, Kant a priori to the material objects was correct (or actually, with them). Also, in that sense both Kant and Leibniz were also incorrect. Kant, in this schematic was wrong because space is not relational in its potential form - because it is only relational when it is object dependent. Conversely, Leibniz was wrong because prior to objectiveness space is not relational.

This brings up a new and interesting concept. This points to the fact that within potential energy (before existence happened) there were “properties” of the three dimensions that energy is made up of. These three properties, before the advent of kinetic energy, before geometric causation of kinetic energy, each had a potential aspect to them that was different than they would come to have upon the advent of existence.

Therefore, not only is energy always existent in one form or another (remember energy cannot be created or destroyed so neither can its dimensions), those forms being in one realm; that of potential energy, and in the other realm; that of kinetic energy, but the three dimensions of energy also are and were always existent too. It also points to the fact that the aspects of potential energy (potential materiality, potential consciousness and potential space) continued to exist where and when kinetic energy did not, and still continue today within the potential spatial extant. The “space” between kinetic objects today that exists is potential space (with its non-relational property) as does potential consciousness and potential materiality.

What does potential consciousness consist of? It would consist of non-relational, undifferentiated qualia. And because it would exist concurrently with potential space and time, then it would exist, undifferentiated, everywhere at once. It is when kinetic energy manifests that qualia break up into its individuated qualities, prior to that it was everything, and even today – within the “nothingness” of inter-object space – it exists as all qualities at once and everywhere (in the everywhere of potential space).

This is interesting in its own right because it means that the individuated, differentiated qualia we experience is a portion of all experience. This is similar to experiencing a portion of “God”. In that sense,

God (in our case) energy, broke itself up into billions of parts and that is what makes up the universe; physically, consciously and in space-time.

As an interesting side note; it is my contention that when you focus your Will/attention on no object at all, not an inward or an external object, then what you tap into and cohere with is the everything of consciousness – all qualia, undifferentiated. This equates to becoming one with god, nirvana, energy (take your pick of descriptions). This comes about in the state of pure and perfect meditation.

Therefore, materiality must also exist in some potential state concurrent with those potential dimensions. What is that state though? It must be one of two aspects; either it is infinitely material or in other words; the undifferentiated unification of all forces everywhere within the infinite potential space, or the other aspect would be that it is, at root, made up of the phenomenal aspects of those forces – that is: the forces, at their most indivisible base, must be phenomenal.

Objects as forces would then be originally ethereal and non-physical. That would fit with the ultimate ethereality of consciousness at that stage. I contend that it is both, depending upon which vantage point it is being viewed from. From the viewpoint of materiality (our only way to view things because we are physical) – it is the unification of all forces everywhere. From the phenomenal viewpoint (that of consciousness) it is ephemeral at its base. It also seems to suggest that the unification of all forces, cancel each other out – a very interesting concept. If that were the case, then the sub atomic missing force of gravity (or at least in any effective sense) would account for materiality. But this is getting way upstream from our topic!

Either way, the vast expanse of the universe is made up of these three potential dimensions and has the characteristics of unlimited and undifferentiated, non-relational and indivisible existence. This has many varied consequences on the true make-up of our universe – on reality itself.

One last point – just as space is not relational and divisible in its potential form – so is time. Time would be infinite and all at once everywhere that potential space exists (the vast extents of the universe). It is only relational as it relates to objects – time on that scale is indivisible at the Plank scale, along with objects and consciousness – they are absolute and ubiquitous otherwise in the stretches of space between objects.

More follows now on Kant's philosophy of space and time.

One view is that space and time exist independently of all possible objects and object relations, or perhaps that space-time points exist; and relationalism, the view that space and time depend for their existence on possible objects and relations, or perhaps that space-time points do not exist

According to our description, both are true depending upon whether it is space as regards its connection to an object, or its connection to potential space (potential energy).

Leaving aside questions about ontology, there is a distinct—or at least potentially distinct—issue regarding space and time: what is the origin of our representation of space and of time? This third issue arises from the sense in the early modern period that our idea or representation of space and time must somehow be importantly distinct from our idea or representation of ordinary physical objects. Many believed that space and time are causally inert and therefore imperceptible—how then are we able to represent space and time at all? Few are willing to deny that we have a representation, not merely of

spatial and of temporal objects, but also of space and time themselves, so there is a genuine puzzle lurking here. Are space and time somehow dependent upon the mind for their existence?

Yes – they are through their dependence upon qualia, which interacts with the mind, to have a conception of space & time through the process of recognition (space and time have a qualia to them). However, the above puzzle, as he puts it, is no different than the puzzle of the mind-body hard problem, just that space and time take the place of consciousness in the problem.

The view that space and time are actual entities is meant to represent the Newtonian position, and the view that they are determinations or relations of things, the Leibnizian position (but cf. Hatfield 2006, 77-8). Later in the Transcendental Aesthetic, Kant refers to the Newtonians as the “mathematical investigators” of nature, who contend that space and time “subsist” on their own, and to the Leibnizians as the “metaphysicians of nature,” who think that space and time “inhere” in objects and their relations (see A39-40/B56-57). *Actually, to inhere in an object and to exist only relationally are diametrically opposite things – one is real (inhering) and the other is representational.*

While Kant does clearly allude to this theoretical background, it is noteworthy that views of the sort he articulates in the Aesthetic—that space and time are transcendently ideal, that they are mere “forms” of intuition, that they depend upon the “subjective constitution of the mind,”

This can only be considered as true if one extends qualia to the subjective judgement of the mind, but the inherent reality of space and time is not ideal, they are absolutes and fundamentals.

Newton construes the true motion of an object, as opposed to its merely “apparent” motion, not in terms of its change in relations to other objects, as Descartes had done in his *Principles*, but in terms of its change of absolute place (Janiak 2008, chapter five). So, the very idea of absolute or mathematical space helps to express what true motion is. Discovering the true, as opposed to the merely apparent, motions of objects, so that one can then determine the forces that cause these true motions, represents one of the principal goals of Newton’s *Principia*.

The “true” motion of an object is its motion in relation to its other properties (space-time and consciousness) not to its relation to the “container-like” aspect of potential space. Therefore – motion is inherent within an object, as is time and space. Motion, being a function of time and space (they are interchangeable – see Mirrors for discussion), and time and space being an integral part of an object through energy transformation/distribution – therefore, motion is an inherent part of an object. When an object moves, it is moving through (or more accurately – with) space and time. Space & time move along with the object and it is that “along with” aspect that is the nature of motion. Yes, it changes place locations within a certain duration – but each “place” and “time” is within the object itself.

Motion cannot occur in relation to potential space-time because potential space-time is nowhere and everywhere, and thus could not be an absolute with which to make reference to. However, if space-time is the location and time where an object exists, then as it moves, it does so in relation to where it was a moment (or location) before (this is cause and effect). So, motion is relative to the object itself. This means that motion is a fundamental property of relational space-time and of an object.

Think of it this way; remove the conception of a physical object moving and conceive instead of a location appearing at different intervals over specific but varied durations – that is time & space changing and is the essence of motion. The motion itself does not exist – only the relations of time &

space to themselves exist. Once you impose an object onto the varied times & spaces you get the appearance of motion within our senses (from qualia).

Therefore, Newton is wrong about space being absolute. It is so only in its potential state – but that is not what Newton was referring to. And Descartes is essentially correct (though he considered it as relations to objects while we consider it as relations to itself). It is also possible to define “true” motion as motion in relation to space-time.

Kant does discuss the important notion of the “motion of the subject” in a famous footnote in §26 of the Transcendental Deduction. Is that kind of motion under discussion, perhaps implicitly, in the context of the Aesthetic? Kant does not think that the “motion of the subject,” for instance in drawing a circle, is empirical, but he does think that it requires—indeed, it apparently exemplifies—the unity of the manifold of intuition imposed by the unity of consciousness. *This is simply the qualia from consciousness bridged to from the Will. So, Kant here considers motion as a quality that gets enjoined to the senses when recognized.*

In a famous passage in the first Critique, Kant indicates what he takes a representation to be as the following diagram depicts:

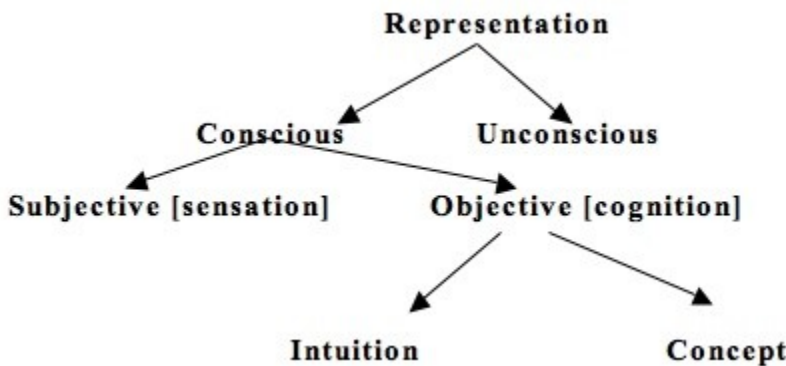


FIGURE 1.

Kant regards an intuition as a conscious, objective representation—this is strictly distinct from sensation, which he regards not as a representation of an object, property, event, etc., but merely as a state of the subject. Whereas sensations do not represent anything distinct from the sensing subject (including perhaps the state of the subject’s body), intuitions are objective representations. *He is mistaken however in his contention that sensations are not distinct. Distinct, is the nature of qualia and qualia is the nature of sensations. And intuition is of cognition which is subjective and not objective – his whole schemata is backwards!*

But roughly speaking, intuition represents some X—where X might be an object, a property, or perhaps even an event—as one represents X in perception. Thus it represents X as, for instance, *that there*.^[4] In contrast, a concept represents X—where, again, X might be a property, an object, or perhaps even an event—by placing X within one or more classes.

Here again he’s incorrect as he talks of a representation, while X is in actuality “that, that it is” in and of itself – qualia. The recognition that occurs and is responsible for us experiencing X is not a representation – It is a direct correlation – a coherence.

There remains a question, however, of how we are to understand the very idea that we can have pure—or a priori, i.e., non-empirical—intuition at all. *That is the nature of qualia interaction.*

For he famously contends that space and time are nothing but forms of intuition, a view connected to the claim in the Transcendental Aesthetic that we have pure intuitions of space and of time. This means, as we have seen, that we have non-empirical, singular, immediate representations of space and of time.

We do have what Kant calls intuitions (and we call recognitions), in terms of the quale of space and the quale of time – but that does not mean that space and time do not exist, as Kant here contends. In fact, it means it is objective and therefore empirically does exist – as we have described above.

One goal of this entry is to clarify this idea. It is not a stretch to contend that this idea represents one of Kant's most distinctive contributions to modern philosophy, although characteristically, it is profoundly difficult to grasp. *And wrong!*

"By an exposition (*expositio*) I understand the clear (if it is not explicit) representation of what belongs to a concept; it is metaphysical if it contains what the concept presents as *a priori* given" (A23/B38). By a concept (*Begriff*) in this context I take Kant simply to mean a representation. *It might be that because he says that it is a priori then it saves this sentence in that I take a priori to mean of itself.*

One might wonder what type of view is at issue here. One potential target is a classic empiricist account of our idea of space, such as that found in Locke. Acknowledging in the *Essay* that the idea of space seems to be "remote" from our perception of objects, Locke contends nonetheless that its origin lies in experience (*Essay*, 2.13.2-4): perceivers observe objects in close proximity to one another, including the distance between objects, and then repeatedly add the ideas of these distances together, thereby obtaining an idea of as large a single space as they please. (*there is on "adding of ideas", there are just various quales of various sized spaces*). According to Locke's view, a version of which was also defended by Hume (*Treatise*, 1.2.3), we obtain a representation of space—not of places, but of the one all-encompassing space, which *may* be akin to geometric space—from the perception of spatial relations. (*I agree, however, it is not just one quale of one all encompassing space, but rather various quale's at various relational sized intervals*).

I contend that our cognition of it as an all-encompassing space, or our experience of it that way – comes from a quale that is responsible for our sensation of an all-encompassing space, no different than our sensation of the quality of green-ness. It is the quality of spatial extent and stems from consciousness's relation with potential space.

Kant states: Space is a necessary *a priori* representation that underlies all outer intuitions. One can never forge a representation of the absence of space, though one can quite well think that no things are to be met within it. (*that is contradictory in my opinion*). It must therefore be regarded as the condition of the possibility of appearances, and not as a determination dependent upon them, and it is an *a priori* representation that necessarily underlies outer appearances. (A24/B38-9)

But here again, he speaks of it as a representation, while it is not. Unlike what he contends – an object that has space as an integral part of it is definitely a determination that is dependent upon things (objects). The space between, which is likely what he is thinking of, is of a different nature and in its case; is dependent upon the nature of potential space. We can experience this through qualia.

In the third and fourth arguments, Kant contends that the representation of space has a specifiable content that is incompatible with it being a conceptual representation. That is, he argues that our representation of space is not a concept, but is in fact an intuition—it is a singular, immediate representation. As we have seen, the distinction between sensation and intuition indicates that this claim does not amount to the idea that we have a sensation of space (an odd idea, it seems). Instead, it

amounts to the claim that we have an objective representation of space, but one that is singular and immediate, rather than conceptual.

This sounds like he is saying that we have an “experience” of space that we process and thereby represent. In this I would agree – our experience of space is the quale associated with spatial experience and recognition processing gives it the form of a representation.

However, it certainly seems like a stretch to say that space itself might be one of those things. That is not merely because space is not an object in any clear sense; it is also because space itself, in this historical and philosophical context, is not something that has a causal impact on me. So, it remains doubly difficult to see how I might conclude, with Kant, that I have something akin to a perception of space.

I don't agree – I believe we “animate” many ephemeral things to be akin to an object (like space) through our recognition of the quale associated with that ephemeral thing. So, for example, we “objectify” many non-objective things; like space, sadness, pain – through the process of consciousness recognition and processing. Also, space absolutely has a casual influence upon the physical through motion and time.

Space represents no property at all of any things in themselves, nor any relation of them to one another (yes it does – motion and time through cause and effect), i.e., no determination of them that attaches to objects themselves and that would remain even if one were to abstract from all subjective conditions of intuition. For neither absolute nor relative determinations can—prior to the existence of the things to which they pertain, thus *a priori*—be intuited.

This impresses me as saying simply that there is a lack of knowledge about space within objects, cognitively a priori. However, consciously, through quale, I believe that the spatial aspect of an object existing in a “place” is a priori an aspect of that qualia and therefore Kant would be wrong.

Kant reaches the famous conclusions that we can speak of space “only from the human standpoint” (A26/B42) and that space has “transcendental ideality” (A28/B44). This is the heart of one of Kant's main positions in the *Critique of Pure Reason*. *By speak, I substitute; think. Yes, we can only “think” from a human perspective – but we can feel or experience from a universal recognition (perspective).*

Leibniz asserts in his last letter that relations are “ideal” because they are neither substances nor accidents, and are therefore not elements of reality (L5: 47). As he writes in the *New Essays*, in reality there are only substances and properties of substances; the mind “adds” relations (*New Essays*, 2.12; cf. also 2.30.4 and 2.25.1). Since space is the order of the possible relations of objects, it is presumably ideal in the sense of being mind-dependent. But Leibniz's point here seems to be that just as people reify relations, thinking they exist independently of objects, they reify space, thinking it too exists independently of objects. So even when Leibniz discusses the ideality of space, he does so to indicate that we need not think of relations and of space as absolute in order to account for the tendency toward reification.

He would only be correct if it was true that space has no distinct, separate existence from objects. It does so though on two fronts; 1) As a separated dimension that goes into making up and accommodating an object of three dimensions, and 2) Potential space (all non-object spatiality) that is of itself only. Because of these two cases, space is thus not ideal but is objective and absolute. It is also noteworthy that substance or objects are made up of atomic elements but are primarily made up almost totally of space between atomic elements – protons, neutrons and electrons. Without space having an identity, objects could not exist, without the space between atomic elements, atoms could not exist. In fact, that is how the dimension of space interacts with that of materiality.

Kant: But I understand under the *transcendental idealism* of all appearances the doctrine according to which they are all together to be regarded as mere representations, and not as things in themselves, and accordingly that space and time are only sensible forms of our intuition, but not determinations given for themselves, or conditions of objects as things in themselves. This idealism is opposed by *transcendental realism*, which considers space and time as something given in themselves (independent of our sensibility). The transcendental realist therefore represents outer appearances (when one grants their reality) as things in themselves, which would exist independently of us and our sensibility, and therefore also would be outside us according to pure concepts of the understanding. (A369) (*I think that transcendental realism is anthropically true*).

Although transcendental idealism is correct in that I agree that objects are once removed from the absolute nature of qualia through our recognition process, it nonetheless doesn't take into account the special nature of space and time, and how that "special nature" remains when it is transformed through our cognitive apparatus.

The underlying properties of space and time as they effect objects is what I am calling a "special nature". Think of space and time as having a certain "role" to fill as they regard objects. That role is a function of the relationship between an object and its dimensions (in the case of space) and its persistence (in the case of time). This relationship persists as a property, irrespective of any transformation of the object when we become conscious of it. Therefore, the essential nature of space and time retains itself upon any object transformation. Think of it this way; if there was no property of length, height and width - material things would have nowhere to be. And if there was no persistence or duration, then they would have no when to be. The phenomenal, no pun intended - has no ability to put your finger on it!

Because the nature of space and time is something other than physical or phenomenal, because its primary nature is that of an effect (as it relates to an object), then that proto-phenomenal nature does not change from a transformation. In effect, space and time does not transform, objects do, and with an object's transformation, space and time's nature stays the same. Mathematically this might look like the following: If X (an object) = $S-T$ (space-time) where $S-T$ is unchangeable; then $X^{\wedge} = S-T$. So, due to this "special nature" of space and time, they are not representations but rather they retain their essential nature. Our experience of space and time has a one to one correlation and is not once removed and transcendental idealism does not hold.

We dispute all claim of time to absolute reality [absolute Realität], namely where it would attach to things absolutely as a condition or property even without regard to the form of our sensible intuition. Such properties, which pertain to things in themselves, can also never be given to us through the senses. Therefore, herein lies the *transcendental ideality* of time, according to which, if one abstracts from the subjective condition of our sensible intuition, it is nothing at all, and can be considered neither as subsisting nor as inhering in the objects in themselves (without their relation to our intuition). (A36/B52)

Here Kant rejects my argument that space and time have a special inherent nature that retains itself through to our conscious recognition. But even if his logic within his assumptions are correct - that is; that space and time are only sensible intuitions - his following argument that if you removed those sensible intuitions then you would have nothing, does not hold. The "nothing" that would be left would only be nothing regarding our perception of space and time, but space and time themselves would still have their own a priori existence.

Also, keep in mind that he insists that it is "not through the senses". This is somewhat true, but he uses this phrase as a catch-all for everything we experience. There are things we experience (qualia) that are

not experienced through sensation (senses). For example; you cannot touch, smell hear, taste or see "sadness".

Those, however, who assert the absolute reality [absolute Realität] of space and time, whether they take it to be subsisting or only inhering, must themselves come into conflict with the principles [Principien] of experience. For if they decide in favor of the first (which generally is the position of the mathematical investigators of nature), then they must assume two eternal and infinite self-subsisting non-entities (space and time), which are there (yet without there being anything actual) only in order to comprehend everything actual within themselves. *(this is circular logic based on an assumption he makes in it that space and time are not self subsisting).*

He is making a leap of assumption that they are "non-entities". I insist that they are entities of another kind that we are not familiar with (not physical and not phenomenal). Taking that to be the case would make his argument fall apart because in that case space and time would have an identity, an existence – just not physical or phenomenal (we might call it "physio-phenomenal"), and therefore would actually be there, unlike what he concludes.

To once again underline this point; He's speaking of Newton's views, which I agree with Newton. Kant is saying that you cannot believe in an absolute reality of space and time while at the same time consider them as "non-entities". The reason Kant is wrong is that he doesn't consider that space and time are of a nature that is both not physical and not consciousness related – it is its own third type of thing that we do not comprehend because we only have relations with the physical or the qualia aspects of things. So, because he does not "know" of anything that could be non-physical and non-phenomenal, he considers them non-entities.

Thus, for Kant, the Newtonians regard space as an infinite substance-like entity that is imperceptible and causally inert, a view that Kant regards as absurd on general metaphysical grounds.

I show on the contrary, first, that space (and time too, to which Berkeley gave no attention), along with all its determinations, can be cognized by us *a priori*, for space, as well as time, inheres in us before all perception or experience as a pure form of our sensibility and makes possible all intuition from sensibility, and therefore all appearances (Ak 4: 374-5).

Kant is saying, again, that we know space or time only because of our senses and not through our experience – an argument I disagree with.

So from Kant's point of view, Berkeley rejects transcendental realism—he rejects the notion that space is a thing in itself, or a property of things in themselves.^[24] He presumably also rejects the idea that space and time are independent of intuition. In the Transcendental Aesthetic, Kant admits that one cannot "blame" Berkeley for falling into a radical version of idealism in an attempt to avoid the "absurdities" of transcendental realism, absurdities into which Kant takes the Newtonians to have fallen.

We come now to Kant's views on Causation. Cause (and effect) are all important to my way of thinking. It is only through the nature of cause and effect that not only does the universe unfold, but it is through them that our consciousness can recognize experience when it occurs. Without cause and effect, our experiences would have no correlation within our cognitive structure – there would be no reasonableness or sensibleness to the data we receive when we have an experience. Without that logical recognition – no "Bing" could occur. An experience would be impersonal and impotent. The experience of green would

not register as coming from an object. It would simply appear with no relationship that we would discern. Without the relationship (which is what cause and effect begets), we very well might see green, but we would have no specificity that it was a color. It would have an equal effect as all other experiences and so all experiences would be the same with no differentiation. Without differentiation, without contrast, we would not be connecting the quale to the object in any way. Without object specification, everything would be the same. Therefore, the subject of what is causation is an all important one as regards experience and consciousness.

In addition, it is cause and effect that is responsible for the unification and interaction of the three separated dimensions of energy. Without those interactions and interrelations among the different separated dimensions, nothing could exist. Think of it this way; if energy, upon breaking into three components did not retain connections among them, then energy would fall apart – a direct violation of the conservation of energy. And without energy, the fundamental monad of existence, nothing would exist.

Here are some other initial thoughts of mine regarding causation:

Cause and effect are one continuum of the inherent properties of time and motion within objects. A cause-effect action is an exchanging of a certain quantity of motion for time (or vice versa). In the phenomenal and physical world, we consider certain effects to stem from certain causes (in that order), whether those comprehensions are of the nature of motion and time or are otherwise. Thus, we may consider that a car was demolished as a result of a train colliding into it, and we call the “demolishment” an effect. But here we are extending, through logic, the condition we call demolished. All that happened in from the vantage point of cause and effect was a transferring of a certain quantity of time and motion (adding up to 100%) into another form of such (in this case the car received all motion and no time (time being “at rest” in this case). The extension of our cognitive logic that this “rest case” is better termed “demolition” is borne of relational identification. Our relational, logical, identification from our cognitive make-up is not the reality itself, but rather encompasses judgement. We have translated the cause and effect of motion into what we have labeled “a demolition” in our mind. In reality what happened is a transferring of causal effects – time and motion.

This contra-oriented explanation between reality (time & motion) and judgement is true of all physical cause and effect actions. Non-physical cause and effect are something of an entirely different nature. Take for example; “he yells at her and she reacts with fear”. This non-physical chain of events is borne purely from judgement and observation cognitively and therefore has nothing to do with the reality borne nature of cause and effect. To reality (if reality had a mind) all that happened was that sound increased in her direction.

The other aspect of physical cause and effect is that of ordering things. This too is a “vantage point” judgement borne of our cognitive logic. In reality all that has happened was a transferring of an inherent amount of time and motion between objects. We ascribe an “order” to those things (effect coming after cause) simply due to an entropic characteristic of the cause and effect transfer.

We order things as before and after in terms of the change in motion only (we do not order in relation to the change in time). This is so because motion constitutes part of our physical world and, being physical, we define everything within a physical construct (not a time oriented one). Time, is not of the physical world, it has its own nature, and that nature is not something we can call upon from our physically based cognitive (or even sensory) nature. It is noteworthy to point out here that even though space and time is

neither physical or phenomenal – upon change (motion or duration) it accrues physical aspects, which is what Einstein discovered (that velocity, the speed, accrues mass).

So, order, is from the change in motion or time – either increased or decreased. It matters not which change occurred (increase or decrease) – that is not the arbiter of ordering. It is the change itself that is responsible for what we call ordering. So, if a billiard ball, with motion, collides into one at rest, (with no motion), then there will be an increase of motion in the second at rest ball. We will ascribe to the second ball an effect – an ordering of “after” to its reaction. However, from the vantage point of the first ball that halts its movement upon hitting the at rest ball and thereby comes to a stop – from that vantage point, the first ball’s reaction is the effect, in spite of the fact that in that vantage point there was a decrease in motion. So, in the case of the demolished car, from the vantage point of the train – the train’s decrease in motion was the effect, but to the car – its increase in motion (or better termed; force), which resulted cognitively in demolition, the increase was the effect.

So, as Einstein so aptly showed – cause and effect are relative to the observer (or in this case; to the observed object). It is noteworthy in all this to observe however that if one utilizes time as the arbiter of order, then order will be ascribed in the reverse of what it is when motion is used as the arbiter. Since in reality, both of these aspects are exchanged (both time and motion), then there is no such thing as ordering in reality – they cancel each other out in a subjective cognitive sense. (time is the reverse of motion as Einstein showed that as motion increases, time slows down – and as time increases (speed or duration) then size dilates or decreases). What that means is that in the realm of “things happening”, there is no absolute consequential order to it – therefore, cause and effect – the way we understand them – do not exist in reality and so order does not exist either. Reality just is. We are the “receivers” of order through our association to the physical (motion oriented) realm. Order in reality is as follows:

Physically – effect after cause

Universal Consciousness (qualia) – no a priori order

Spatially or Time oriented – Relative (vantage point of) to the object being observed

Now for the manuscript at hand:

First, he describes Hume’s lacuna concerning causality, recognizing the contemporary debates over his “final position.” As he argues, there is no empirical warrant for the necessary connection between things or events that is assumed in any determination of causal relations, and, for him, asserting that one thing causes another involves a habit of thought, namely, a habitual conjoining of phenomena together, namely, those which we have previously experienced as accompanying one another. While Hume seeks to demonstrate that determinations of necessary causal connection are without empirical warrant, he indicates that the concept of causality is an important one for human beings in that it enables them to function successfully in their everyday lives. However, the joining or ordering of empirically conjoined phenomena (phenomena that occurs together in a correlated manner) is objectively together and so continues that property into our consciousness.

Kant attempts to overcome Hume’s skepticism by giving an account of how causality is an a priori concept of the understanding, namely, it is part of the necessary conceptual frame through which rational beings constitute their experience actively.

Accordingly, twentieth century evolutionary epistemologist, Konrad Lorenz, argues that, together, the a priori concepts of the understanding, including the notions of substance and of causality, provide an enduring, biologically hardwired, and inheritable framework by which human beings qua rational beings,

constitute their experience in our contemporary epoch. *He ascribes order and causality to biology and cognitive evolution, but rejects that it actually empirically exists, a view point I disagree with.*

Third, by outlining how Hegel responds to Hume's skepticism of causality by showing how the dialectic pervades the notions of substance, causality, as well as the process of thinking by which determinations of necessary causal connections are made and are articulated,

Quantum indeterminism seems incompatible with Kant's defense of causality in his Second Analogy. The Copenhagen interpretation also takes quantum theory as evidence for anti-realism. This article argues that the law of causality, as transcendental, applies only to the world as observable, not to hypothetical objects such as quarks, detectable only by high energy accelerators. Taking Planck's constant and the speed of light as the lower and upper bounds of observability provides a way of interpreting the observables of quantum mechanics as empirically real even though they are transcendently ideal.

I disagree that quantum mechanics are transcendently ideal, just because they do not become one specific reality until probability and the collapse of the wave function completes, does not mean that at that "completion" an objective and empirical reality does not exist – it does. The state before that can be considered "real" also, the wave function is real in and of itself. It's just that in that wave function state, specific object properties do not yet exist. This becomes an interesting argument for a phenomenally based underlying reality to materiality, thereby unifying, in a sense, existence to be phenomenal at base, in all three dimensions. That is an interesting concept that bears more investigating (or philosophizing) and enjoys a certain elegance and simplicity, as well as symmetry.

Of these four theories, it is only Kant's that I agree with. But what of the psychological ordering of cause & effect inwardly? Is there any correlation to the objective definition of how they work (stated above by me)? I believe, our ordering is an outgrowth of reality's ordering process. As said above; objects transfer time and motion, and in no a priori order. It is "vantage point" dependent as to what that order is.

It is my belief, that this transference is reflected within our psychological make-up through the following function(s); First of all, our sensory ordering comes about through our reception of qualia. As part of that reception (recognition through attention) we become more and more subject to how qualia are presented to us vis a vis ordering and phenomenal co-joining. To understand this, one must understand how cause and effect operates among qualia within universality.

Because qualia have an intimate connection with space-time (motion-time – motion will be shown later in this to be an aspect of the spatial, so that when we refer to motion, it is akin to referring to space). Because of qualia's connection there, the exchange principle of cause and effect, of time and motion - is represented (in an equal sense) as part of the interaction of the universal and of the physical within qualia. That is; since the universal is another aspect of the physical flowing from the distribution of energy to those dimensions – qualia will incorporate that process of ordering within the universal collection of qualia.

Recall we stated that in its primeval "potential" form – consciousness encompassed all qualia as one all-pervading phenomenon (since energy was homogenous within that potential state – so too was consciousness's qualia and so too was its connection with space-time and thus time and motion from physicality's aspect of it).

Upon manifestation into the universe (kinetic energy distributing the three dimensions of space-time, materiality (physical) and qualia (consciousness), upon the manifestation everywhere of energy, qualia ordered itself within the constitution of physicality – that is; with the same relationship of time and motion that physicality has.

Therefore, even though there were reams of separate qualia, which supposedly could not have a cause and effect aspect since they are each singular (cause and effect seemingly demanding two entities to occur), those separate qualia's (quale's) had the same capacity of time and motion within them as reflective of the dimension of physicality within their existence (each of the dimensions have their version of the characteristic nature reflected in each other – in this case, time and motion).

Therefore, upon an individual experiencing multiple co-joined quale's, those quale's will have their portion of time and motion, dependent upon the context that they appear in. So, if one were to experience the interaction of two qualia's that in their experience the person recognized together – then upon psychologically processing those sensations/experiences, as part of the processing, the cognitive make-up of the person will also experience the sensory and phenomenal transfer of their respective quotients of time and motion within the construct of how the qualia interacted within that person's experiential recognition. In this way, recognition, is the ordering agent of cause and effect.

In that way, all physical qualia will have the same functionality as do their physical counterparts in the material world, which then reflects into the consciousness of the person's experience and recognition. So, when we experience the "qualia that is collision" we also experience the time and motion interchange inherent within that qualia, i.e.; we recognize in the same way that the collision actually occurred and transferred time and motion in the physical realm.

(Also see #1 marked below for an explanation of how causation comes to be inherent in our thoughts and ideas).

*Kant's solution in the Third Antinomy to the question whether freedom of the will is compatible with the universal necessity of causal law is to argue that there is one action that can be interpreted as free or as causally necessitated, depending on the standpoint one takes on it. He instructs us at the outset as to how to think about these standpoints. He reminds us of the doctrine of transcendental idealism he has already tried to establish: that appearances are not things in themselves, but merely law-governed empirical representations which therefore must have Gründe. These Gründe, in turn, are not themselves law-governed empirical representations. (A 537/B 565) He now characterizes them as an intelligible cause of sensible action. So Gründe are intelligible rather than sensible, and themselves cause sensible action. *If one switches Grunde to be qualia then I would agree with this. However, Kant does not mean qualia, and thus I do not agree.**

*Grund , for Kant, comprises the conceptual presuppositions of objective empirical knowledge, i.e. the logically necessary functions of thought established in the Table of Judgment; and that, according to Kant, these functions of thought yield highest-order explanatory first principles. These principles are rational ideas of an unconditioned condition that subsumes its series of empirical conditions. *I do not agree – what he refers to here I say is purely cognitive. Also, it is somewhat contradictory in that he calls it a presupposition but also calls it empirically objective – it can't be both.**

Kant claims that a Grund is an intelligible cause of certain appearances, he means to say at the very least that these empirical conditions (again – that is contradictory) are determined by a rational idea that is

neither empirical, nor sensible, nor spatiotemporally external to the agent who conceives it. *But it is external. And besides – what he lists here that it is not – covers everything that something could be!!*

He argues elsewhere that there are at least two ways in which a rational idea might determine (bestimmen) an empirical representation. First, it might fix its form; i.e. it might structure and specify that representation as an instantiation of the idea. So, to take an empirical analogue, my idea of a vacation cottage might specify the form of anything I identify as a vacation cottage as small, ranch style, and low-slung.

Thus, that would be a subjective idea and have no empirically oriented representation, subjectivity trumping empiricism. It seems to me that Kant gets circularly stuck in his Transcendental Idealism, which is ubiquitous throughout his ideas. I say it is circular because it ignores completely the hard problem, and thus gets stuck, round and round, within its own assumptions.

It is backwards – he's saying that the idea of the form or qualia constructs any identification of similar forms to be of that qualia. It is just the opposite – the experience of qualia determines our idea of that noumenon. This is why various shades of green are lumped together for the most part as simply green.

But second, a rational idea in itself might bring an empirical representation into existence. Just as my empirical idea of a vacation cottage causes me to build a vacation cottage, and so is the efficient cause of the vacation cottage I actually build, similarly, a highest-order rational idea considered as an intelligible cause might actually bring that of which it is an idea into existence, as when my idea of honor causes me to act honorably. In this second sense the idea is the efficient, i.e. precipitating cause of those empirical representations.

Here, the author is ascribing cause to a higher order rational idea, in this case “honor”. But the concept of honor (or any concept) is born from early examples that combine with other examples to build a concept. Those “examples” are not of higher order thought. Those “examples” are from experience that we witness. We witness experiences with our will (attention) attending to an external stimulus, often qualia (but not always – it can be a willful observation which does not entail targeted attention but rather entails receptive awareness). Being of the external, even though we have translated it to an encompassing concept (of the examples), the external experiences are the causation and the conceptualization of it, which happens eventually, is the effect.

Therefore, an idea cannot be a cause – it is in actuality an effect. This also speaks of the concept that many quale's, exerting their influence over time on our learning process, can add up to an accumulated cause that is not from one cause by itself, but from an accumulation of inherent causes combined into a certain configuration (concept). This is possible from the standpoint that causation and effect retain their quantities within an object (and thus that object's quale) and the accumulated quantity respectively will result in an overall cause. Mathematically it would look like the following;

$$1/X + (1/(X + 1)) + (1/(X + 2)) + (1/(X + 3)) \dots = 100\% X, \text{ or}$$

Percent of Cause 1 Plus Percent of Cause 2 Plus Percent of Cause 3 = Combined 100% Cause

At least he goes on to say: But this does not explain how the intelligible world could be the efficient cause of the sensible world. Nor does it fully explain the sense in which the noumenal subject (the idea) could be the Grund of the empirical subject. In these cases there is more involved than solely the structuring and subsumption of an empirical conception under a highest-order rational one. All of which

contradicts what is previously contended and finally addresses the hard problem, which is the whole point of all this.

All three of Kant's highest-order rational ideas determine their instances in the formal sense: we each must regard our individual souls as immortal, irrespective of personality; our actions as free, irrespective of their particular goals; and every representation of God (*Energy*) as representing an omnipotent being (*Thing*). *This I can agree with.*

Kant asks: How can a mere idea – an abstract conceptual entity – precipitate physical behavior? (*i.e.*; *Be a Cause*)

In the sense that the idea was caused by an external source (see discussion above) then it can “carry with it” the causative quotient of the original cause that got transferred to the idea. Therefore, the phenomenal (in this case a rational idea) can take upon itself the physical aspect of time or motion, i.e.; causation or effect, in relational proportions to the original progeniture cause/effect. The idea is therefore an effect from previous empirical objects or qualia, and a cause of behavior. This is not strange to have something as an effect of one thing but a cause of another – that is the nature of continued motion.

This is a very key principle because it results in the theory that non-physical, internal psychological cognitions can accrue cause and effect and this therefore explains causation and effect in terms of the phenomenal, psychological, neuronal induced effects and judgements.

Kant thinks the sensory matter of appearances is the result of the effect of things in themselves on our sensibility; and these are neither empirical nor sensible, nor necessarily external to the agent, either. By contrast with rational ideas, it seems that these sorts of things in themselves causally affect our sensibility, not our reason. *They obviously effect our reason according to our above theory.*

So, things in themselves, it seems, can be of two sorts. Some can causally affect sensibility and thereby give rise to the sensory matter of appearance; let us call these metaphysical Gründe. But others, it seems, can causally affect reason, and both effect human actions and specify their form; let us call these conceptual Gründe. Whereas metaphysical Gründe are purely efficient causes, it seems that conceptual Gründe may be both efficient and formal causes.

I agree with the second point “Conceptual Grunde” but not the first “Metaphysical Grunde” – that is because the first ascribes effect only upon sensory appearance, but by using the term “appearance” it connotes something removed from reality by cognitive psychology.

He now defends three hypotheses conjointly: (A) denotation: the one-way relation of conceptual to metaphysical Gründe is one of denotation. According to (A), metaphysical Gründe would be what the concepts constitutive of conceptual Gründe refer to. So (A) presupposes that metaphysical Gründe exist. (B) causation: the one-way relation of metaphysical to conceptual Gründe is a causal one. (B) implies that the actual unconditioned conditions to which the ideas of reason refer – God, free agency, the immortal soul – are in themselves formal and efficient causes that affect our sensibility and ultimately generate our concepts of them. In a similar manner, those concepts themselves as formal and efficient causes affect our intellect and motivate action guided by them. (C) inference: the one-way relation of (A) to (B) is inferential. (C) says that if the one-way relation of conceptual to metaphysical Gründe is one of denotation, then the one-way relation of metaphysical to conceptual Gründe is one of causation. (C)

instantiates the more general rule that if a term or concept T succeeds in denoting an object or state of affairs O within a subject S's conceptual scheme (and I do think there are conceptual schemes), then O plays a causal role in S's grasp of T.

I agree with (B); it is metaphysical to conceptual one way and it is the actual unconditioned condition (that of cause before effect) as evidenced by the natural state of energy a priori (as posited previously by me).

Kant also might have argued that I must conceive myself as spatiotemporally transcendent in the following respects: first, in my ability to grasp the meaning of any particular spatiotemporal situation I am in, in general and universal terms that transcend it; second, in my ability to remove myself in thought from that particular spatiotemporal situation, and imagine myself in some other one; third, in my ability to enter a realm of abstract thought in which spatiotemporal constraints fall away entirely; and fourth, in my logical inability to conceive the world as persisting without me. I have argued elsewhere that each of these aspects of our rational self-conceptions as immortal souls is a consequence of the transcendental and synthetic status of the "I think" as the "vehicle of all concepts."

This is all very "nice", however, it once again (as it does throughout the ages) ascribe an individuality to the immortal soul. That is something that is patently false and is borne of our ego. My belief is that the concept of, "I will carry on after death" should be simply replaced with, "We will carry on after my death". The individual does not endure, but the universal, which ultimately makes up an individual, does endure.

Now suppose denotation to hold, i.e. that this necessary self-conception was a conceptual Grund that denoted a metaphysical Grund, namely my actual immortal soul. According to inference, causation would then also hold: my actual immortal soul would then causally affect my sensibility, just as ontologically independent objects do. First, my actual immortal soul would efficiently cause in me sensible representations of its properties, i.e. the transient mental events that in fact constitute my empirical consciousness:

Yes, if you call that empirical consciousness qualia. But he goes on to say that consciousness entails ... thoughts, emotions, memories, concepts, deliberations, etc. which I take myself to experience. Which are not of qualia and are not of an immortal soul's effects upon a person (as he contends). The soul's effect upon a person is the ability to experience. Since the soul is "all qualia", and qualia is the cause of experience, then the soul is the base cause of experience.

Therefore, my immortal soul would affect my sensibility as a formal cause, by synthesizing its representations into a unified whole (cf. B 153, B 156-157, fn.). So we might think of an immortal soul as a kind of magnetic field matrix function of some sort (whether strong, weak, electromagnetic, or gravitational is – you will pardon the pun – immaterial for our purposes) that systematically condenses and organizes the sensible data received by certain sentient material objects, namely human beings. I do not claim that this is what Kant actually meant at A 78/B 103, but I also would not deny that he might have.

Interesting theory in that it attempts to give a quantum physical constituency to what qualia is and where it comes from (some type of field of force). He also posits that: My immortal soul is what in fact leads me (causes) to the rational Idea of my immortal soul. He bases this on the concept that the immortal soul causes higher order thought and that that thought is the thought that I am an immortal

soul – a circular unity. The problem is that the immortal soul is in actuality the universal soul and the universal soul does not cause that thought, except in the sense that we spoke of above about causation being carried forward into thought.

Causation may very well be existent in thought, but the actual, logical, neuron induced thought itself is not an outcome (effect) of the universal qualia. Qualia does not engender thought concepts itself – our attended recognition does, and as such, is a judgement caused by that recognition. But do not mistake the recognition of qualia to be a judgmental aspect of qualia. Qualia does not carry with it any information – only direct, brute experience. It is our once removed recognition that causes information to be produced cognitively, and as such, the causation might be traced back to the qualia, but the effect has been removed. All cause and effect must co-exist and be 100%. So, the effect within qualia is not that of information – it rather is that of brute experience.

It is our interpretation of the recognition of that experience that might possibly result in the idea that I am an immortal soul – but the cause was recognition and the effect was to produce information cognitively. The cause of that particular concept or thought was not inherent in the universal soul (the immortal soul).

The causation hypothesis, when applied to the immortal soul as an efficient and formal cause of this synthetic unity, would explain Kant's 11op. cit. Note 5. Kant's Intelligible Standpoint on Action 8 © Adrian Piper Research Archive Foundation Berlin cryptic description of synthetic unity as the effect of a blind but indispensable function of the soul. Causation thereby would explain the possibility of empirical knowledge. But by definition this hypothesis could not itself be the object of it.

Which is what we are saying above that universal consciousness does not cause our cognitive concept of us as an immortal soul – not directly.

Next consider a different kind of case. Suppose, by analogy, that, contrary to fact, the rational idea of a unified force field was for Kant an unconditioned condition that explained the lower-order principles, hypotheses, and observed physical phenomena of objects and events. This idea would be a formal cause of our identification of that phenomena, in that our idea of it would structure our perception of them: nothing inexplicable in terms of it would be among them. And the formulation of the theory of a unified force field as a highest-order rational concept would assume the truth of denotation, i.e. that it referred to what really existed; that it was a true explanation of all of those phenomena, including our empirical selves. If in fact a unified force field really did exist, this would ensure that the rational idea of a unified force field actually had application, that it succeeded in denoting what it purported to denote.

Not so – by the same exact argument I presented above about the immortal soul causing the thought of an immortal soul. This is the same logic. It also credits cognition only with that effect and ascribes nothing to qualia.

The concept of the unified force field itself implies the truth of inference, and so of causation: the actual unified force field would be, by hypothesis, the efficient cause of the physical phenomena of objects and events we observe. That force field would also formally structure that phenomena. But since we ourselves, as empirical human beings, are among the physical phenomena it structured, it would also indirectly formally structure our cognitive ability to investigate and grasp it as an explanatory hypothesis. In this case, this rational idea would be a conceptual Grund that denoted a metaphysical Grund – and,

moreover, explained why the metaphysical Grund, i.e. the actual unified force field – efficiently caused discrete physical phenomena to appear to us as they did.

This goes to the concept that “what we conceive of creates that which we conceive”. This is simply the above logic reversed and is thus false as a concept or truth.

The actual unified force field would be what in fact led me to the idea of a unified force field.

Only to the idea of one – but not to a direct experience of one and not to an explanation of one. This goes to the concept that we can never directly know reality (a very quantum concept) – which I actually agree with as far as that goes. He goes on to admit (and thus agree with me) that: But by definition it could not itself be the object of it.

In particular, the unconditioned rational Idea of a free agent as a conceptual Grund has the following empirically ascertainable effects on empirical action. Consider first its role as a formal cause. The Idea of free agency formally causes me to conceive my own behavior in a way that is consistent with this Idea: as self-caused, self-ascribed, intentional, and uncompelled by immediate external sensible causes. Maxims, i.e. action descriptions¹⁴ satisfy these conditions. And rational human agents must conceive themselves and others in accordance with this Idea of Reason, because so doing is necessary for having unified experience (A 651/B 679).¹⁵ So any behavior conceived as an action must conform to this Idea of rational free agency, on pain of conceptual incoherence.

This is so untrue. Even if we take this argument at face value to be so, it ascribes to us a pure, never wrong, never incoherent ability to our thoughts and ideas – which is patently untrue – at base, we are an unsure, confused at times and contradictory lot. Pure, never incorrect logic is quite rare and in the majority of cases is ascribed as coming from without us, as revelation.

Free Will, though existing in the sense that we can control our choices by using it, nonetheless is very connected and influenced by external stimulus. Our Will is often “captured” by what seems to be either a fleeting fancy or diversion, or in other cases by a demanding and important one. In either case, the Will is being “summoned” seemingly from an external agent or stimulus. In that sense, though you wouldn’t call the Will a slave to the external and not in control, but you also wouldn’t necessarily call that process one of self-contained freedom. The Will is interactive with the phenomenal and the external, and as such, does not inure freedom to our psyche.

Kant contends: “[T]o every rational being possessed of a will we must also lend the idea of freedom as the only one under which he acts. ... But we cannot possibly think a reason, which consciously in regard to its judgments receives guidance from elsewhere. For in that case the subject would ascribe the determination of his power of judgment not to his reason, but rather to an impulsion. Reason must view itself as author of its principles, independently of alien influences.” (Ak. 448)

But Will, alone, without bridging to reality (or qualia) is impotent and subject to falseness. Will is simply targeted attention. That target can be a false thing, and certainly can be an externally triggered thing (unlike what Kant contends above). Kant says Will must presuppose its freedom, but ... many a will has gone astray. Witness the Will of Hitler. Was his Will free? Only in the sense that it could seek evil and decoherence to reality and reality’s physical wavelike make-up, that itself can be considered as always “efficient” and itself “free”. But by not cohering to this efficient wave of energy, by definition, Hitler’s Will did not cohere to freedom, rather to decoherent evil and could even be considered as enslaved.

Hitler wasn't free, he was a slave to thoughts born of fear of the external world, and as such he was a slave to that world. He was able to impose the use of his Will, but not control its allegiance. True freedom entails coherence with the efficient path of energy. All other decoherent "paths" keep us tied to a series of mistaken, karma inducing actions that we are not able to get out of, and thus are not free in that sense.

Free action – transcendently free action – just is action efficiently caused by the agent's own unconditioned rational ideas, rather than by external empirical conditions. An agent is transcendently free if and only if her actions are caused by rationally unconditioned Ideas.

No - it is the efficient coherence to external conditions that defines free action – all decoherent actions are not free by contra-distinction to the free coherent reality and thus actions. To give an example of how Kant is wrong here; take someone whose "rational" idea is to hurt herself (bulimia, cutting, etc., born of a rational logic as reacting to an emotional state), is she then performing a free action, or is she a slave to her incorrect and hurtful rational thinking?

The Idea of free action is an unconditioned rational idea. If I have this Idea, and this Idea efficiently causes me to act rationally and treat others rationally, then I must be, in myself, actually free; and the Idea of free action that governs my behavior also denotes it. Hence denotation is confirmed by the efficacy of the Idea of free action in causing me to act freely

This statement is a little better in that it fully agrees with my theory that it is the coherence with the most efficient path of energy that denotes freedom, morality, the good, etc. However, this statement does not follow well with the previous one and it still has the problem of rationally intact but irrational effects.

Again, it is actual free action that leads me to the rational idea of free action that denotes it. This is no more metaphysically suspect than the rational idea of a unified force field denoting an actual unified force field

Again – refuted by the argument(s) against immortal soul and force field self-consciousness that we set out above. They are circular arguments.

We ordinarily refer to such intentional behavioral regularities as dispositions, and I shall follow that convention. I shall say that a free agent has a metaphysical predisposition to construct a vacation cottage, or, respectively, to virtue, if the idea of a vacation cottage, or virtue, causes her to realize these ideas in action.¹⁷

He is stating why a certain idea causes a certain action and says that it does so because that precipitated action (effect) realizes the cause. This indicates that effects are representative of causes. Interesting theory because, as I state, cause and effect, time and motion – are the same thing from different vantage points. He is thus saying this in another way (which I like), however, when he defines the effect in terms of behavioral action, he in actuality is separating the equality of cause and effect. This is true because causation is not a behavioral thing. Causation is a phenomenal, brute and foundational thing born of energy (time and motion's aspect of energy), while behavior is an effect of an impulse born of cognition or ideas and is thus removed from being equal to a metaphysical cause.

Kant on the Intellectual Standpoint:

He equates the distinction between phenomena and noumena (a thing in itself), first, with that between the world of the senses and that of the understanding (Verstandeswelt), and second, with that between the sensible and the intelligible world.

Kant has already explained that abstracting the categories of the understanding from sensibility yields the logical forms of judgment; and he later explains that extending them beyond the purview of sensibility yields ideas and inferences of reason. So, the world of pure understanding.

For if the senses represent to us something merely as it appears, this something must also be in itself a thing, and an object of a non-sensible intuition, i.e. of the understanding.

First, he says it is a "sense oriented thing" but then says it's an object of understanding because the senses represent that thing. Good for as far as that seems, however, if the sense recognition is more than simple "appearance", if it is qualia and brute, bridged from the Will interacting with reality, then is it really just an "appearance"?

That is, a cognition must be possible in which no sensibility is to be found, and which alone has absolutely objective reality, through which, namely, objects are represented to us as they are ...

And here he underlines what I have just said – that a cognition (recognition) could have absolute objective reality. He seems to contradict himself.

This passage, which Kant struck from the B Edition, makes a number of important points. First of all, he thinks that if it were possible to intuit objects through the intellect alone, i.e. through reason, this mode of access would yield knowledge of things as they are in themselves which was absolutely objective. In this Kant follows Plato's account of knowledge in the Republic, where the world of forms is a higher and truer reality, accessible only through trained intellectual discrimination.

I won't even go into how wrong Plato was. I note here however that Kant eliminated this opinion from his 2nd edition, thus sticking to the original incorrect stand from above. Intellectualness does not create reality, just the opposite.

Correspondingly, particularly in the Anticipations of Perception, he valorized the senses as the touchstone of the real. In deleted passage (2) from the discussion of Phenomena and Noumena, by contrast, the senses deceive us as to the true nature of reality, just as they do for Descartes. Only through the operations of the intellect do we discern the nature of things as they are in themselves.

It's just the opposite though. Our intellect always has the ability to deceive us and has throughout the ages.

Intellectual intuition through which to apprehend the nature of things in themselves, this faculty would not provide us with the open window onto the world that naive realism requires. Although it would represent things as they are, it would still represent them mediately. In this way intellectual intuition would be different from sensible intuition, which brings us into unmediated relation with objects. The reason for the difference is that intellectual intuition would be a kind of knowledge (Wissen), and therefore inherently representational, whereas sensible intuition is merely a kind of acquaintance (Kennen), which is not.

This is not so if you subscribe to the concept that "sense" is still removed one step from reality. It is only the direct interaction between Will and Qualia that eliminates any mediation. In analyzing that statement which I just made, one must not fall into the trap of considering the Will as a vehicle for intellectual understanding – the Will, in the case of bridging to reality through targeted attention, is not intellectual or sensible, it is an unmediated connection (coherence) with reality. This is because qualia have the trait of causation – that is; it causes the brute reality of itself to be recognized by the attention (the Will). It is unmediated because, as Rilke said; "The Will stands stupefied". That is: the "bridge" is the Will, naked of any of its intellectual powers – it is power without prejudice. Qualia's invocation is direct.

The reality behind qualia (electromagnetic waves, noumenon, etc.) may be once removed and mediated between itself and the physical reality of the object that causes qualia, but the quality itself is a direct one to one correlation and coherence. The coherence makes it exactly equal. So, when the Will (attention) coheres to the rendition of qualia – they are duplicates. In this sense, qualia can be thought of the way we think of DNA or RNA – providing an exact duplicate of itself. Another way of saying this is that the quality that we see as greenness is the same greenness that is the qualia, there is no difference or mediating agent.

A third important point in passage (2) is Kant's characterization of the intelligible world as an object of thought in the mind, and so one that employs pure understanding far more nobly than does the sensible world. This distances him somewhat from a Platonic metaphysical realm of abstract objects.

Here, he puts the mind ahead and more directly experiencing true reality over and above that of the senses and ultimately qualia. I don't know how he could think that. In this case, Plato, is way in front of Kant. Also, the use of the word "nobly" is way too subjective.

Kant's intelligible world is a mental world of conceptual objects fashioned by the intellect in accordance with the demands of reason; conceptual objects that represent actual states of affairs as they really are.

Ugh!

Now in the B Edition Kant finds doctrinal reason to repudiate the possibility of intellectual intuition (B 313-314; also see B 68, 71-73, 159), and with it the positive concept of noumena here described

I guess in that sense he saves himself!

Certainly, we must observe Kant's stated restrictions on his technical use of the term "knowledge" as more or less interchangeable with "experience," and as therefore requiring the synthesis of sensible intuition under the categories. This implies the rejection of the first claim above, that the intellection (or intuition) of objects as they are in themselves could yield absolutely objective knowledge

In other words – he believes in the final rendition of his ideas here, that experience is removed from reality and still needs some sort of translational objectiveness (synthesis of sensible intuition as he puts it) in order to yield absolute objective reality – with which I agree with that sentiment. However, in no way do I agree with the interchangeableness of knowledge with experience.

But the intelligible world of rational ideas in the mind may nevertheless provide a noble use of the pure understanding. And even though these rational concepts (Begriffe) cannot, by definition, yield empirical knowledge, they can still yield us representations that give us theoretical and explanatory Kant's Intelligible Standpoint on Action 16 © Adrian Piper Research Archive Foundation Berlin insight into things as they are. These conceptual representations can make empirical knowledge comprehensive and coherent, and in so doing, enable us to grasp (begreifen) the deeper reality that lies behind the sensible appearances. That is, we begreifen this deeper reality through Begriffe. This is not full-fledged empirical knowledge (Erfahrung, Erkenntnis); but it is not nothing, either. It is in fact no more mysterious or different than what any explanatory hypothesis tries to achieve.

That's good as far as it goes – but it seems like an apology for his previous ideas that contradict that.

So only the concepts and ideas we generate through understanding and reason situate us in this world. On this conceptual interpretation of the intelligible standpoint, that we cannot know (erfahren) the contents of the intelligible world follows by definition of what the intelligible world is. It is a realm of purely conceptual activity, distinct from sensibility. We can grasp (begreifen) its contents by thinking, conceiving, and identifying them. But since 18"[I]n regard to what may be in [us] of pure activity (which reaches consciousness not through affection of the senses, but rather without mediation) [we] must class [ourselves] in the intellectual world, with which [we have] no further familiarity (kennen)." (Ak. 451) Kant's Intelligible Standpoint on Action 17 © Adrian Piper Research Archive Foundation Berlin knowledge in Kant's technical sense requires the contribution of sensibility, it follows that we cannot know them.

Here he considers knowledge as lacking "really knowing" because it lacks sensory recognition of reality. But we maintain that when you combine cognition (understanding) with direct experience, we indeed can "know" a thing, or at least at a minimum we can know the quality of a thing, and the quality of a thing is its nature. Thus, we know green intimately and directly. This combination of understanding (cognized recognition) and brute experience is what allows us to comprehend and navigate the world, and may very well be the evolutionary and otherwise "purpose" of consciousness.

The last sentence of passage (3) further develops the claims Kant has already made in Paragraphs 24 and 25 of the B Deduction: that synthetic understanding is spontaneous and active, and that it not only formally specifies the passive subject's form of sensibility but also causally determines it.

I believe that here he is actually in effect describing qualia recognition (assuming that his use of the word "synthetic" means direct understanding – knowing it for what it is). But to claim that understanding determines experience is backwards.

In case you haven't noticed, most of my criticisms of Kant's views are that they are backwards. This makes sense (that we would be in opposite camps) simply because on one hand, Kant, comes from a base belief that the intellect is the omnipotent force behind the reality within us, while I believe that the phenomenal external universalness is such a force, with intellect a secondary effect. These stances would lead each of us to opposite conclusions.

Here Kant adds that it is reason that shapes the understanding in this manner. In the Groundwork he adds, further, that reason is even more purely spontaneous than understanding. Understanding, although active and spontaneous to some degree, is limited to the production of those concepts that

subsume sensible representations under rules and so unify consciousness. Reason, by contrast, produces ideas that transcend sensibility and thereby demarcate the limits of understanding itself

This is an amazing statement, for he is in effect saying that "reason" is superior to direct experience in that it can expand our relationship to objective reality over and beyond "mere" direct experience by adding to that experience judgements, reason, wisdom, etc. However, here again, Kant supposes "perfect" understanding without error or cloudiness – this is something we do not have the full ability to produce. Again, when we do produce that level of understanding, wisdom or cognition – we consider it "revelation" and coming from an outside agency. So, what Kant says is theoretically possible, but pragmatically does not exist (except in cases of revelation).

I believe that "revelation" itself is nothing more than the awe experienced upon a direct bridged recognition of something entirely new. I further believe that revelation from understanding or cognition is not true revelation but is rather awe of an intellectually new idea that produces the reaction of truth (the reaction of truth ironically is a qualia effect).

It is then because we exercise our rational faculties in spontaneous intellectual activity that, on Kant's view, we must regard ourselves as free, by definition (Ak. 448). That is, if it is reason we are exercising, then by definition we must regard that activity as spontaneous, original, and uncoerced by external influences. We express our intelligible character and situate ourselves in the intelligible world, by engaging our minds and intellects in the activity of rational thought.

Once again, he assumes a priori an ability to have perfect understanding (quite a Platonic like view ironically).

But the propositional content of unconditioned rational ideas – the ideas in themselves, so to speak – are not the kind of entity that can be the result of empirical causes, any more than the law of noncontradiction itself could be. They are universally valid, Kant's Intelligible Standpoint on Action 18 © Adrian Piper Research Archive Foundation Berlin abstract, spatiotemporally transcendent conceptual objects that exist independently of us; and that we therefore have temporal occasion to discover, rather than to invent.

Interesting concept that I do not agree with. The author contends that "ideas" have object-like properties in that they exist already waiting to be discovered. He also is saying that they do not flow from sensory experience (qualia). Again, a Platonic slant to it in that he points to "pure" ideas that represent truth, etc. waiting "out there" to be discovered by us. I believe that all ideas are built up cognitively, and although they certainly can reflect representative wisdom and understanding of experience, they are not experience itself – "truth" being a direct experience, not an intellectual one. Yes, reality is out there to be discovered – but discovered through direct experience of qualia not through conception of ideas. When we do conceive of something that is a truth, we ascribe the credit for it to our intellect and cognition, however, that is simply because we do not have access (intellectually) to the entire path of causes and effects that lead to that cognition.

Kant on Spatiotemporal Transcendence:

Kant states: Pure reason, as Kant points out, is not subject to the form of time (or place).

Note that he is specifically alluding pure reason to the "higher concepts" such as God, freedom, immortality, etc.

I still have problems with the concept of "pure reason" for it pre-supposes intellectual truth, and I believe "truth" to be an effect of reality and cannot be fully recognized and experienced intellectually.

And then we "lose ourselves" in abstract thought, and cease to experience the passage of time. At that temporal location and for that temporal duration in which we are engaged in reasoning with abstract concepts, the awareness of spatiotemporal location, duration, and individuation – and so the awareness of the sense of empirical selfhood, and of personal identity – fall away. With them disappear the necessary conditions for empirical knowledge (*I would say that this state is the exact conditions for empirical knowledge*). What remains is conscious, active, impersonal intellection, moving purposefully through a conceptual terrain without concrete signposts and mapped only by the laws of reason. Thus, our intelligible character consists in the metaphysical predisposition to regard empirical events as instantiations of abstract universal concepts and principles, and so to transcend in abstract thought the personalizing and limiting constraints of time and place.

This, from the author, is purely speculative. There are a number of problems with this reasoning; he claims that a sense of selfhood and other spatiotemporal characteristics are necessary for empirical knowledge (I say that simple, brute experience, recognized, is what is necessary); and he contends in the last sentence that time and place are limiting factors. I say they are defining factors (time and motion being causation) and that they are direct dimensions of reality. The fact that we "lose" ourselves in thought does not eliminate the constant barrage of effects (unconscious sense experience) born of time and place.

For example, thinking about what to cook for dinner tonight may remove me in thought from my actual spatiotemporal location. But only by transporting me to a different one which I plan to effect. So, I conceive both locations from the empirical or sensible standpoint; planning the future does not transport me to the intelligible world.

This goes to the concept of future as it relates to time and place (space-time). The future, in my view, is ephemeral and non-existent. What he is really talking about is planning for the future. Planning has no spatiotemporal characteristic, it is purely cognitive or reflexive.

Kant's view that the moral worth of an action has nothing to do with its results follows naturally from his conception of the sensible standpoint. All such results, and all such hypothetical reasoning about empirical action and its results, concern merely empirical events and their spatiotemporal interactions. Since reasoning with hypothetical imperatives involves reasoning about events at one spatiotemporal location with regard to results they are intended to cause at a future one, it fails to disentangle the agent from the sensible web of spatiotemporal interactions in which she is embedded. Kant's Intelligible Standpoint on Action 20 © Adrian Piper Research Archive Foundation Berlin The imprisoning character of the empirical world thus cannot be explained merely by its thoroughgoing causal determination. For we have seen that as noumenally free agents we are also causally determined – intellectually, by reason, to deliberate in accordance with its laws and initiate empirical actions that carry them out. Rather, the sensible empirical world constricts us because it individuates, locates, and plants us in a spatiotemporal order which, because it need bear no relationship whatsoever to "the rule and order of rationality" (A 550/B 578) – i.e. the order of abstract objects of thought we denote through concepts, and the systematic logical and conceptual relationships we discover among them – offends against our deepest

metaphysical disposition: the disposition to rationality. Moral worth requires the intellectual transcendence of spatiotemporality – i.e. transcendental freedom – because only then can we exercise without arbitrary constraints the capacities of rationality and intellection that distinguish us from other sentient creatures.

This is diametrically the opposite of what I believe. I believe it is exactly our “moral” coherence (beliefs and actions) with the external world of energy that determines morality. Energy is manifestly the ultimate form of efficiency and I correlate efficiency with the absolute value of the good and of morality. If the path taken is the most efficient one, then it avoids unnecessary, diversionary and mistaken routes to be taken – this defines what is good (relationally) and what is moral (effectually). Such is the same with the most efficient path of energy, coherence to which equates to goodness and morality. The most efficient path of energy are those wave probabilities that do not cause further discordant waves – they are the most efficient path.

I have a very different take on this subject of morality being limited by reality. Kant thinks that morality is of a “higher level” than reality is – from an intellectual or rational level, self-created (we’ve all seen what that has gotten us!). But I see reality as the highest moral existence. I define this to be true due to the “most efficient path of energy”. If that is so then it is the coherence to reality that produces the most moral effect, not an intellectually produced concept. Plato comes close to this in arguing that there is a pure rational morality which we strive for and approximate through reason. My theory places the definition of morality as an exact rendering of reality, while Kant’s places the definition of morality as an exact rendering of higher reasoning which, in my view, can’t help but be subjective and not pure. For more on morality see “Mirrors”.

Thinking about whether to share my dinner with the indigent gets me underway. For it requires me to subsume the events of an envisioned spatiotemporal location under the abstract, spatiotemporally transcendent principle of helping the needy – itself an expression of the good will. By subsuming the action’s maxim under the spatiotemporally transcendent idea of the good will, I lift myself in thought beyond the spatiotemporal web in which I am embedded, and thereby secure my transcendental freedom. Only from this spatiotemporally transcendent perspective can intellectual causality function.

Nicely, though subjectively and judgmentally said. But where is the absolute morality that exists from helping the indigent? It leaves us in a subjective, judgmentally defining situation that may or may not be an absolute. Who is to judge? And if one says “God is to judge” then one decides what he or she determines that God thinks!

My concept of morality removes the subjective aspect of it and places its authority squarely in the lap of how the universe most efficiently operates. Why is that necessarily an absolute morality? Simply because it matches (coherently) the most efficient flow of energy (wave shape). Inefficient energy flow (decoherence) causes the universal effects to be chaotic, disorganized and in many cases destructive.

For example; in the indigent and needy example that he gives above – it just so happens that the efficient flow of energy goes along (is coherent with) helping the needy. The “why” though is different than his subjective opinion of what is moral. While his “why” had to do with a subjective, emotionally felt cause begotten from best intentions, the efficient use of energy works simply because the non-efficient case will perpetuate the needy, which in turn will perpetuate the more inefficient need and use of energy to deal with the consequences of neediness, and so on and so on – a very inefficient process. The help of the indigent will not perpetuate and hopefully eventually will do away with the indigent condition and

allow energy to flow onward, not trapped in a closed loop of inefficient indigency and the consequential problems and further use of energy that indigency brings. Notice that the most efficient use of energy is the one that produces the least consequences or removes them.

So, in this case (indigency) both approaches result in the same action, but efficiency is objective and an absolute. Many other moral choices, if subjectively chosen, can lead to the inefficient flow of energy despite the person's best intentions. Why rely on intellect when one can be assured through reality? Remember, evil people do not think of themselves as immoral – that tells you a lot!

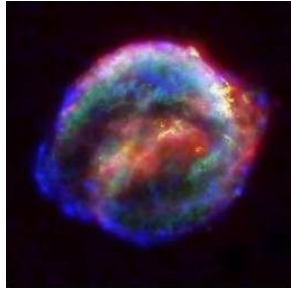
By defining morality as a non-subjective efficient characteristic (even if that definition is random) places the measure of morality on firm and consistent ground. Therefore, if morality is defined to be objective, this allows it to have a grounding and a measurement base that can be judged non-subjectively and does not conflict with anything that is of reality. We need not know exactly what reality demands of us (morally), we need only know how to be in conjunction (coherence) with reality and then we can be assured that we are acting in accord with objective principles and characteristics of the good and the moral. Otherwise – it is all up for grabs with mistakes and chaos and evil, etc.

By contrast, by inferring that meeting next month's payment is the right thing to do, I take the intelligible standpoint on that same action. For I subsume its maxim under the spatiotemporally transcendent concept of rightness, and so identify it as universalizable.

But it is his subjective opinion of what is universalizable. In my schemata, universality is automatically and non-subjectively defined. Remember that in the subjective world; one person's morality is another's evil (thus war!).

Now recall from the conclusion to Section II Kant's definition of the character of an efficient cause as that rule-governed causal relationship between the content of the idea one has and the action one performs in its service, such that the mental occurrence of the idea precipitates the corresponding appropriate action. I note this passage simply because I find it telling that Kant uses the concept of "efficiency" to judge the rightness of an action.

This ends my analysis of selected ideas of Kant. In many cases I agree with Kant, but on the whole; Kant's reliance on the intellect as the true reality is misled in my opinion. It's my belief that if Kant knew of and subscribed to the concept of qualia, he would change many of his theories and constructs.



THE FLOW OF ENERGY

POTENTIAL ENERGY

KINETIC ENERGY

SPACE-TIME

MATERIALITY

UNIVERSAL CONSCIOUSNESS (QUALIA)

MOTION & TIME

BODY & COGNITIVE

CAUSE & EFFECT

PSYCHOLOGICAL

THE BRIDGE

THE WILL

THE WILL

ATTENTIVE RECOGNITION (SELF-CONSCIOUSNESS)



PHYSIO-PHENOMENAL
REALM



PHYSICAL
REALM



PHENOMENAL
REALM

THE MIRROR OF CONSCIOUSNESS

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