#### Consciousness

For millennia we have misunderstood the nature of our consciousness. The reason is that we have failed to recognize our existence in two distinct information fields. The confusions can be put to rest once we understand the manner in which each information field supports its own type of conscious awareness and self-awareness.

Living things are aware in the information terms of the fields in which they exist. Like all of life's other creatures, we are aware of physical phenomena. That awareness comes in the information terms of our sensory devices – the sights, sounds, smells, touches, and tastes that our sensory and representational capabilities allow – the feel of pain, the sight of the color red, the smell of a rose.<sup>1</sup>

But having minds, we are also aware in the information terms of the descriptive field. Ours is the only species to have developed and exploited symbolic representation and to have benefitted from the adaptations through which our nervous system is able to process both physical and descriptive information. When processing sensory information as well as coordinating and directing our physical performances, our brains are processing information of the physical field. But when we are thinking descriptively, our nervous system is processing symbols, definitions, and meanings. Having access to both fields, we are able to seamlessly generate both kinds of awareness. For example, when we prick to our finger, we are not only aware of the sensory feeling of pain but also its description as painful.

In any aware experience, there is a self who has the experience. Existing in the information terms of two fields, we humans are comprised of two distinct selves, each of which has its aware experiences in the information terms of the field in which it exists.

Given the distinct nature of each information field, the nature of each self's conscious awareness and self-awareness is completely different. The bodily self of the physical field is conscious of its environment and itself in the information terms that its sensory devices and follow on physical representational capabilities allow – the felt experiences of life. Mind is conscious in the information terms of descriptive meanings, including those that allow it to be aware of itself as the descriptively aware entity. Unlike awareness of physical phenomena, descriptive awareness has no feels whatsoever. Descriptive information is independent of the information of the particular means of its physical representation and processing.

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<sup>&</sup>lt;sup>1</sup>A creature can be affected by physical objects and events but will not be aware of these unless they are detectable by its sensory devices. Awareness of physical phenomena is dependent on the capabilities and thresholds of the creature's particular sensory capabilities. And, of course, a creature is not generally aware of all the information produced by its sensory devices but only that elevated cognitively through selective processing.

Given our existence in two information fields, we must be on guard not to confuse or conflate the two types of information. Once we understand the two types of awareness, we will be able to resolve numerous consciousness confusions while making clear the information foundations of omniphysical mind. Like us, omniphysical individuals will be consciously aware and self-aware in the information terms of both fields, only more capably. In addition, we will see that we tend to attribute more semantic content to physical field awareness than is actually the case. The semantic richness of our lives is primarily a product of our descriptive powers.

#### Mind's Conscious Awareness and Self-Awareness

Each of the descriptive and physical information fields gives rise to its own distinct kind of awareness and self-awareness. Experiencing both types without understanding their distinct information nature has let us go badly astray, conflating two completely different kinds of information experiences. To set things straight, we start with mind's conscious awareness and self-awareness. Then, we'll address the very different nature of body's conscious experiences.

Mind's descriptive awareness arises from its ability to establish the meanings of symbols within the defined terms of the symbol system constituting it. Mind gains awareness and experiences descriptive content by understanding what it means in its information terms. Specifically, mind gains awareness of a symbol by calling it and computing its meaning – where the meaning is determined by the definitions of other symbols to which the symbol's definition is linked.<sup>2</sup> For example, consider the symbol token 'Icthyocentaur.' First, we must not to conflate sensory and descriptive information. Our sensory capabilities perceive a particular array of marks, but our mind computes the meaning of a symbol. Our descriptive awareness of 'Ichthyocentaur' does not arise because our bodily sensors see marks but because our mind determines its meaning within its defined terms. Mind's descriptive awareness arises only by dint of its ability to generate the meanings of its symbols in its defined terms.

Like awareness, self-awareness is a capability of mind. Mind's self-awareness relies on the system's underlying capability of awareness applied to itself. By becoming aware (establishing the meaning) of the symbol representing its capability of awareness, mind becomes aware of

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<sup>&</sup>lt;sup>2</sup> Analytically, the meaning of a symbol is determined by first calling a symbol and its definition which definition is comprised of other symbols. For each symbol in the original definition, its definition is substituted, and on and on until no further substitutions are possible, arriving at primitive symbols. Primitives are of two types: symbols defined as primitives, and symbols which are denotational mappings to physical field objects and events. In practice, we humans truncate the process when a meaning serving the intended purpose is generated.

itself as the entity that is aware.<sup>3</sup> Mind is able to be self-aware because it can describe itself as the entity who is aware of its descriptions.<sup>4</sup>

In sum, mind gains conscious awareness by being able to generate meanings in the information terms of the descriptive content constituting it. Mind's self-awareness arises because its meanings include the description of itself as the aware entity. Thus, the system is able to generate both the content being experienced as well as the self-identified entity having aware experiences, all in descriptive terms. It is mind that enables the subjective "I" that is aware of itself as having its experiences. Put another way, the definitional flexibility of symbolic representation supports both the descriptions being generated and the subject experiencing those descriptions, all as part of the same self-contained descriptive system. We arrive at the answer to the age-old question, "Who or what is consciously aware and self-aware?" It is mind itself, the descriptive self who is able to understand meanings – including of itself as the aware and self-aware self.

Mind is able to map its descriptions to sensory information, using error-correction processes to maintain the accuracy of its descriptions. Thus, mind is able to be *descriptively* aware of the environments in which it lives, its own body, and its sensory feels. But as a descriptive entity whose information is independent of that of its physical supports, mind itself has no physical feels – it can only describe them. Not understanding this fact has led to numerous confusions about the nature of mind, as we will see. It has even led some to doubt the reality of mind. Of course, mind is completely real, a system of meanings physically represented by physical tokens which are manipulated by a very real processor.

# Body's Conscious Awareness and Self-Awareness

Despite the wondrous diversity of non-human animals' capabilities, all of their aware experiences exist only in the information terms of the physical field. It's not just that the sensory

<sup>3</sup>To be precise, the meaning of the symbol representing the system's awareness capability is the computational means through which a symbol's meaning is established. By establishing the meaning of this symbol, the system gains awareness of its own capability of awareness; the system is aware that it is the entity with the capability of awareness. Similarly, a symbol can be introduced whose meaning is the descriptive content of the system, including the content as well as the processing rules underlying its capabilities. When mind becomes aware of this symbol it gains awareness of its own content and capabilities.

Given the convoluted and unrecoverable nature of mind's evolutionary development, human mind is not fully transparent to itself. While it can be aware of vast amounts of its stored content, mind is not fully aware of all of its content and capabilities. To be fully self-aware, mind must be aware of itself as the aware entity, as well as all of its content and capabilities. Omniphysical mind is able to achieve full self-awareness.

<sup>&</sup>lt;sup>4</sup> Although not understanding its own nature and its information separateness from brain and body, human mind was easily able to represent its awareness and self-awareness even as it misattributed those capabilities to the person generally rather than to itself as mind.

and other representational devices of all living things, including humans, are products of the physical field. It's that all of non-human animals' information, including aware experiences, exist only in the information terms of the physical field in which the information contents of aware experience are identical to their physical correlates.

A creature's awareness of physical phenomena occurs in the information terms of its sensory capabilities. Like other animals, our body feels pain and sees color because we have sensory devices and representational capabilities for producing and processing this type of semantic content. The experience of color is the product of photon-sensing devices and ensuing physical capabilities that produce that particular color representation and make it available for cognitive selection and processing. The semantics flows from the bottom up, becoming eligible to be the content of aware experience.<sup>5</sup>

To help guard against conflating the two fields, I am going to examine physical field awareness using the example of a real live critter that exists only in the information terms of the physical field, our yellow lab Guy de Guy.<sup>6</sup> This is a good approach because we humans share the same kinds of sensory capabilities as Guy and, like him, benefit from a central nervous network which not only helps coordinate bodily activities but enhances aware experiences of physical field information.

Lacking access to the descriptive field, Guy is incapable of describing anything. His attentiveness to particular English language requests is stimulus and response pure and simple. If properly trained, he would respond to verbal stimuli that are pure gibberish; he does not have access to nor does he comprehend meanings in the terms of a descriptive network's symbols and definitions.

Without a description capability, Guy's world of information is fully captured in physical structure and capability. But even in the physical field, there are many things that go on inside and around Guy of which he is not aware (the same is true for us and any creature). Despite this,

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<sup>&</sup>lt;sup>5</sup> From an information viewpoint, physical cause and effect is information processing. When a stimulus has its effects on a sensory device, all along the ensuing chain of physical cause and effect, information is appropriately transformed, conserved, and conveyed, ultimately having its impacts as evolution and learning allow. Throughout all of this, information is embodied; physical field information is the information of its physical correlates. Put another way, the information of the stimulus is physically transformed and processed with the physical instantiations of those transformations being the representational vehicles for the information. There is no information assignment; the information is that of its physical correlates.

<sup>&</sup>lt;sup>6</sup> I could have chosen a much simpler animal not so near and dear to us to make stark the differences between the semantic content of the two fields but at the cost of being further removed from our own aware experiences in the physical field.

Guy can have aware experiences with lots of physical semantics. Not only do his sensory devices allow him to be aware of much of his surroundings but also many of his bodily performances.

Guy is such a marvelously capable physical creature because, among other reasons, evolution built a central nervous system supporting the integration and coordination of his capabilities – both eligible for aware experience and not.<sup>7</sup> Guy's multiple sensory and other capabilities as well as his brain's ability to select from among those representations enhance his physical experiences. His networked nervous system allows the coordination of Guy's bodily abilities in reaction to stimuli and in service to his own inner initiatives.

For example, let's assume that Mr. Fox enters Guy's visual field. That information is selected for awareness, immediately triggering other physical performances supporting a virtuoso pursuit if not the catch. In the chase he will be aware of multiple kinds of physical field information — the sights, sounds, smells, etc. selected to have their information impacts. His aware experiences are only in the physical information terms of his sensory devices. So, for example, he will be aware of his heightened adrenalin and other chemical levels only to the extent that their effects are registered in the detectable information terms of his sensory devices. <sup>8</sup>

What is it like for Guy or any creature existing solely in the information terms of the physical field to have aware experiences? In answering this we must never lose sight of the fact that Guy has no descriptive ability. He cannot describe himself or anything else. All that I have just described about Guy is simply beyond him. He has no mind (sorry, Guy), no selfdom in the descriptive field, and no descriptive notion of himself or anything else. His thinking and other actions are all highly organized physical cause and effect. He cannot think descriptively, abstractly, theoretically, etc. because he lacks access to the descriptive information field.

But he is a self of the physical field. He is an autonomous living creature, an astounding orderly creation whose embodied information of life was found, conserved, and enhanced over evolutionary time. He is marvelous physical form and function existing in the very real information terms of the physical field. And we love him for the amazingly wonderful creature that he is.

<sup>&</sup>lt;sup>7</sup>His experiences not eligible for awareness rely on his nervous system, respond to appropriate stimuli, and are coordinated with other of his physical activities. But he is not aware of these activities because their physical effects are not detectable by his sensory devices. We humans have been able to extend the reach of our sensory capabilities by external tools able, for instance, to peer into the body, or the cosmos. But, of course, that information must be in forms detectable by our bodily sensors.

<sup>&</sup>lt;sup>8</sup> And, of course, lacking descriptive ability he will know nothing of the chemistry underlying his sensory experiences. He may be aware of a heightened heart rate but will have no clue to its physiological cause, even when his sensory devices allowed detection of such underlying states.

It should be no surprise that what it is like for Guy to be aware is to experience information in the terms of his sensory representational abilities. In his dust-up with Mr. Fox, his aware experiences were in the terms of sights, smells, sounds, tastes, feels, etc. associated with his great adventure. In running after Mr. Fox his awareness was not directed to information about his own body as much as toward his environment and its most important feature, Mr. Fox. 9 But, of course, he could quickly become aware of his own body through his sensory devices – such if he were to step on a sharp object. No matter what the stimulus, the information of his sensory devices delimits the content of his aware experiences, including those of his own body. There is indeed something that it is like for Guy to be aware. It is to experience sensory-based information.

Even for advanced animals like Guy, aware experiences are in physical information terms only. These creatures lack access to the kind of information that would go beyond their physical representational capabilities. <sup>10</sup> As an aspect of this and as would be expected under evolutionary search operating in demanding environments, their representations available for selection are highly capable but semantically sparse, selected for the efficient conveyance of information honed for survival.

Now let's turn to the critically-important issue of self-awareness in the physical information field. Being confined to the physical information field, Guy's awareness, including of himself, is only in the information terms of the sensory devices. He can see parts of himself that his eyes can detect, touch himself, smell himself, etc. Of course, much of the information of which he is aware, including of himself, can be multi-dimensional, conserved in his nervous system, available for recall and processing, and deployable for survival. But all of that information is embodied in form and function.

Body's self-awareness is completely different from mind's descriptive self-awareness. Mind enables the subjective 'I' who can describe to itself that it is having its descriptive experiences, including its descriptions of its bodily and other experiences. Not so for Guy. Lacking mind, Guy has no way to describe himself as the physical self that he is; he cannot descriptively represent himself as the creature who is having his experiences, although he is. The information of the physical field cannot be detached from its embodiments. Symbolic representation frees

<sup>&</sup>lt;sup>9</sup>We know that in growing up, Guy directed his awareness to help learn much about his body and the performances of which it is capable, conserving that information as routines and allowing him to now navigate masterfully while focusing his awareness on the environment and the chase.

<sup>&</sup>lt;sup>10</sup>Existing only in the information terms of the physical field, all of Guy's concepts are embodied physical form and function. Of course, these are complex and nuanced, reflecting the enormous amounts of information synthesized in Guy's nervous and other bodily systems. He can recognize objects, register and learn correlations in reality, and act to causes with appropriate effect. But all of these concepts are embodied physical semantics reflecting genetic instructions or as learned and embodied in form and function.

information from its physical correlates, giving rise to descriptions about all manner of things, including the key description that I am the one living my life and having my experiences in both information fields. Lacking mind, Guy lives his life but lacks the information capabilities to represent to himself the nature of the life he is having.

Of course, we humans with our descriptive abilities can describe that Guy is the bodily self that he is. But Guy cannot. When we attribute such capabilities to Guy or any other creature, we are confusing the information of the two fields. Our animal brethren lack the representational means to truly comprehend the nature of themselves or reality. In our own thinking about these animals, we can mistakenly endow them with description-based understanding that they simply lack.

# Resolving Consciousness Confusions

We now briefly address numerous confusions arising from the failure to recognize the nature of mind, and the very different nature of mind and body's conscious capabilities. I first consider some generic confusions, followed by what are taken to be the deeper problems of consciousness.

The Guy in Our Head. It is natural to think that if there are conscious experiences, there must be someone who is having those experiences. Conflating the two information fields, early attempts to identify the basis of our conscious experiences conjectured that it might be an organ like the pineal gland, or a homunculus in our head. There is indeed a guy 'in our head' that has our descriptive experiences. But that guy is our mind, a descriptive entity. Mind's aware experiences are of descriptive content, including that it is the descriptive entity experiencing its descriptions, including its descriptions of body's feels. To posit a physical entity having mind's conscious experiences is to violate the separation of the two information fields. And, of course, body has conscious experiences, but only in the sensory information terms of the physical information field.

<u>Idealism.</u> Another wrong turn was to take the description of physically aware experience as the experience itself. Having made this error, it is a small but profoundly mistaken step to infer from the non-felt nature of descriptive information that physical phenomena are either not real or at least not open to physical explanation. Once again, awareness in the information terms of the physical field is completely real, the product of sensory and nervous system capabilities built over evolutionary time. And, of course, the descriptions of those physical field experiences are made by and experienced by self-aware mind.

<u>Information Independence versus Physical Dependence</u>. Errors arise by the failure to make the fundamental distinction between mind's informational independence and its physical dependence. The information of the descriptive field cannot be reduced to physical field

information terms. But descriptive content must be physically supported, represented by tokens able to be processed by appropriate physical means. Not recognizing the omniphysical basis of mind's support, some have posited that mind depends on strange and inexplicable physical sources, even appealing to quantum phenomena, or pseudo-phenomena like 'perceptronium.' All such musings are profoundly wrong. In fact, mind can be supported by any number of appropriate universal computing devices.

One Processor, Two Kinds of Information. Although our nervous system supports both descriptive and physical field thinking, it processes two distinct types of information. The notion that mind is what the brain does mistakenly puts the emphasis on the operations of the physical processor rather than the more fundamental information facts. Like other animals, our cognitive processing of physical field information is essential to our physical performances. But it is descriptive content that is the province of mind.

<u>Focus on Physical Correlates</u>. Further confusions are evident in the focus on physical correlates as the key to mind. Once we grasp the nature of mind, we see that the physical processor is not at all the main show. It is descriptive content, capabilities, and structures that are the keys to mind. Indeed, with omniphysical mind properly constructed on the basis of algorithmic processing rules, any number of universal computational devices will do. Despite all sorts of good reasons for understanding brains and their capabilities, assuming that these are the keys to mind has masked its nature as a descriptive information entity.

Mystery in an Enigma. A mainstream misconception is that the nature of our awareness and self-awareness presents a mystery that, given the current state of science, cannot be solved. This throwing up of hands is accompanied by the assumption that the resolution awaits some breakthrough in neuroscience or companion fields – a profoundly mistaken conjecture given that the correct resolution is an understanding of the information facts. We already have a scientifically grounded explanation for our aware feels. It is the same one that applies to all creatures existing in the information terms of the physical field. Our dog Guy is able to smell, see, and feel his environment and parts of his body because evolution has built sensory and supporting representational devices that generate that physical field sensory information. As for mind, there is no mystery. Mind is a powerfully-capable aware and self-aware descriptive self.

#### The Mind-Body Problem

For millennia, we have been perplexed and confused about mind. A key question for resolution has been formulated as the mind-body problem. "The mind-body problem is the problem of whether mental phenomena are physical and, if not, how they are related to physical

phenomena."<sup>11</sup> Like many problems resisting solution, it turns out that the quest for resolution has been misdirected. The key issue is not the physical relation between mind and body but the information nature of mind and of body, and the relation between what turn out to be two entirely different kinds of information entities.

Briefly stated, here's the issue. We know that everything that exists must have a material basis. We also accept that physical entities can be reduced to or explained in the terms of their underlying material constituents – for example, the material basis of a living creature can be reduced from its biological to its chemical to its more elemental physical constituents. The question posed by the mind-body problem is whether mind can be reduced to material terms. More generally, the issue is the nature of mind.

We know that our nervous system provides the needed physical basis supporting mind. But we also intuit that our mind is an entity which seems distinctly nonphysical; our mental experiences are very different from our physical ones. For example, the pain of a pin prick is very different from its description as being painful. And at a fundamental level, mind seems to be irreducible to an underlying material basis, appearing to violate our physical-based view of reality. Lacking an understanding of mind, conjectures outside the bounds of experience have bubbled up, depicting mind as other-worldly, disembodied, driven by strange quantum phenomena, and more. These and similar explanations are completely off-base. Once the information facts are clear, there is nothing mysterious about mind.

There are two main elements to the solution of the mind-body problem. First, the nervous system *mechanisms* supporting mind are most definitely physical and can be reduced to their underlying material basis. The deeper element of the solution is the recognition that mind is a descriptive information entity. All of its content and capabilities are enabled by and are part of a symbol-based system of meanings existing within the descriptive information field; mind is per se descriptive. Given the separateness of the two fields, mind and body cannot be reduced to each other's information terms. <sup>12</sup> Thus, while mind is *physically dependent* on products of the physical field (tokens and processors), it is *informationally independent* of the physical means by which its meanings are represented and computed. As a purely descriptive information entity, and given the separateness of the two information fields, mind cannot be reduced to the

<sup>&</sup>lt;sup>11</sup> The Cambridge Dictionary of Philosophy, Second Edition, p. 684.

<sup>&</sup>lt;sup>12</sup> Reduction was one of the great discoveries of human mind, setting the empirical framework for the advance of science and civilization. Mankind's several scientific revolutions have been anchored in reductionism, the belief that reality's varied phenomena share a physical dependence running from the simple to the complex that is orderly, coherent, and capable of empirical explanation and validation. But the insight of reduction is so powerful that it was misapplied in the quest to understand mind. The misapplication was not due to a flaw in the reductive principle itself but to our failure to recognize the existence of information fields and the fact that reduction is possible within each information field but not across fields.

information terms of the physical field which is embodied in physical form and function. More generally, reduction is possible within information fields, not across.

#### Mind and Matter

A central and recurring question has been how matter can give rise to mind with all of its intelligent content and capabilities. How can a bunch of molecules give rise to our wonderful mental life and intelligence? As it turns out, we could search forever and never answer this question as posed. That's because matter doesn't give rise to mind. Mind is per se descriptive, existing in an information field that is not reducible to the information terms of the physical information field. Matter supplies the tokens representing mind's content as well as processors able to appropriately manipulate tokens representing meanings. But mind is a purely descriptive information entity existing in its linked sets of defined meanings and not in the information of its material supports.

# The Hard Problem of Consciousness

As Wikipedia says, "the hard problem of consciousness is the problem of explaining how and why we have qualia or phenomenal experiences." Qualia or phenomenal experiences are the consciously aware experiences of body's sensory productions of sight, sound, smell, taste, and touch. These sensory productions have been referred to as feels, and the hard problem is to explain our consciously aware experiences of these feels.

The resolution of the hard problem is only possible through an understanding of information fields. We humans exist in two distinct information fields, the physical and the descriptive. Each field enables a self in its information terms: body is the self of the physical field and mind is the self of the descriptive field. Each self is conscious in its distinct information terms: mind is conscious in the information terms of its descriptive meanings and body is conscious in the information terms of its sensory capabilities. We humans benefit mightily from being conscious in two independent but linked information fields.

Once we understand our two-field consciousness, we will see that the issue posed by the hard problem rests on a fundamental misunderstanding of the information facts of our reality and the nature of our conscious experiences.

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Not realizing that each of us is two distinct selves, our linguistic usages merge the two and 'I' speak of 'myself' without realizing that such a self-identification is a convenient fiction. The confusion is a natural one since mind emerged on the foundation of body, concealing the separate and distinct information nature of our two selves. For most purposes, the fiction does no harm. But it leads us far astray when dealing with the deep issues of human existence, including the nature of our consciousness.

By asking "How do I have my conscious felt experiences?" we are off on the wrong foot, conflating two kinds of information. It is only mind that enables the descriptive I who is able to formulate the question. But being a descriptive information entity, mind can't have feels. Only body can. But the body that has the feels lacks the descriptive information capabilities to ask the question. More fundamentally, it is only mind's descriptive capabilities that allow the person to describe herself and her life, including that it is her body that is conscious of its feels. The person's body lacks the representational capabilities to describe itself as the entity that consciously experiences its feels. Only mind can do that. But mind can't have feels; only body can. The question posed by the hard problem rests on a mistaken assumption, namely, that there is a self-identifying descriptive I that has conscious feels.

The correct question is, "How do each of mind and body have their distinct conscious experiences and how are those conscious experiences linked and related to each other?" In previous sections, I have addressed the conscious experiences of each of mind and body. I now want to build on those to address the confusions that lead us to think there is a hard problem when, in fact, the formulation is ill-conceived, resting on a misunderstanding of our own nature.

We are the only living beings existing in both the physical and descriptive information fields. All other creatures exist only in the information terms of the physical field in which all information is embodied in form and function. Their conscious experiences exist only in the information terms of their sensory representational capabilities. Not having mind's descriptive abilities, they lack the descriptive information means to represent that they are the living entity whose body is having its conscious feels. We humans are different. Our bodies have their conscious feels and we have a mind that can describe that our body is having its feels.

Confusion about the role of mind in our conscious experiences is partially rooted in the nature of mind's evolutionary emergence. As we have seen, the path to mind progressed from information assignment, symbolic representation, linked meanings, symbol systems, and then to mind. The first assigned meanings were tied to important objects and events represented and detected in sensory information terms – rock, food, predator. The assigned meaning became part of the neuronal complex representing the relevant sensory information. So represented, both kinds of information can be triggered simultaneously. We humans have our sensory and descriptive conscious experiences together even though the two experiences are in completely different

information terms. Of course, there's a great deal of evolutionary advantage in having access to the two kinds of information simultaneously – thanks to a brain processor able to support two informationally distinct kinds of thinking.

The conscious descriptive experience that is triggered along with the conscious sensory experience only has meaning within the system of mind's meanings. Thus, mind's descriptions always occur within the context of a mind who is conscious of itself and its body in its descriptive information terms. The subjective 'I' enabled by mind is able to describe that its body is having its feels. But when these information facts are not understood, and with both kinds of information arising simultaneously, we seek an explanation in which the conflated 'me' has 'my' conscious experiences. We are at a loss to explain as one what are actually two informationally distinct but linked conscious experiences. Our conscious experiences are, as they must be given our two-field nature, two distinct kinds of information that are linked to each other.

But some hard problem folks may not be satisfied with this solution, casting the hard problem as how we and other creatures consciously experience our bodily feels independently of the descriptive abilities of mind. This formulation seeks that extra physical something that causes the physical feel to become the creature's conscious experience of the feel. The desire to add something extra to explain physical reality has a long history and has given rise to kindred speculations in the form of phlogiston, elan vital, and the ether. Fortunately, once science explains physical phenomena accurately, these extra somethings fall by the wayside.

The problem in seeking something extra to explain our felt conscious experiences is that it asks for something that can't exist, namely, the conscious experience of the feel as something different from its physical correlates, that is, different from the physical means by which the feel is generated and consciously represented in body's information terms. Body's conscious feels are the result of information-laden forms and functions found through evolutionary search exploiting the possibilities for order inherent in the physical information field. Any explanation of the experience of feels must be anchored in physical form and function – the physical correlates. Of course, our descriptively-based scientific explanations of body's forms and functions are constantly improving. But those explanations will always be about physical forms and functions and not something apart from or different from those.

Even though the search for something extra seeks to situate itself in the physical field alone, behind the curtain there is the unwitting conflation of two kinds of information. Not recognizing

<sup>&</sup>lt;sup>13</sup> Before the distinct information natures of mind and body were understood, people misidentified the self-aware entity as 'themselves' or brain or something else rather than mind, the actual self-aware entity. Even so, all that mattered was that something about them allowed them to describe that it was their body having its conscious feels.

that it is mind which allows the individual 'I' to be conscious that its body is having its conscious felt experiences, an explanation is sought in 'something else' that gives rise to our phenomenal experiences – a quest that is doomed to failure. Our conscious feels are the products of evolution building information-laden forms and functions – the physical correlates of our feels. And we can describe that they are our phenomenal experiences because we have a mind.

One particularly misguided attempt to explain our conscious feels is to invoke quantum phenomena. Quantum phenomena have nothing to do with either body's or mind's conscious experiences. In fact, quantum phenomena exist in their own separate and distinct information field. The information of the quantum information field exists in the information possibilities for orderly physical entities of the physical field. The quantum field is one of information possibilities; the physical field is one of information actualizations. The informational independence of the quantum and physical fields is brought by the extinguishment of information possibilities in moving from quantum reality to physical reality. That is, it is impossible to reduce the embodied information of physical realizations to the information of possibilities that were never actualized, and which no longer exist. Symmetrically, the information of quantum possibilities cannot be expressed in the information terms of a particular realization. And even though the quantum and physical information fields are informationally independent, physical reality is materially dependent on quantum reality since the realizations of quantum possibilities are, in fact, part of our physical reality. And, of course, as with everything in our physical reality, there must be an underlying material basis supporting any information field – just as the descriptive field is informationally independent but materially dependent on products of the physical field.

Now back to consciousness and the attempt to cross information fields through the invocation of the quantum. All bodies of all living things exist in the information terms of the physical field. All are replete with information inherent in and essential to the existence and functioning of these orderly physical structures, including conscious sensory experiences. All of this is in terms of actual physical entities with their information embodied in form and function, and not existing in the quantum field's realm of information possibilities. Put plainly, the physical constituents of bodies and their conscious experiences have already been actualized in physical reality.

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In sum, our conscious feels are the product of body and are experienced in body's sensory information terms – the feel of pain, the color of a rose. Body experiences its feels, but not being an aware and self-aware descriptive self is incapable of representing that it is the entity who is experiencing its feels. Mind is an aware and self-aware self but only in its descriptive information terms. It cannot feel anything, it can only describe. But mind can accurately map its descriptions to objects and events of the physical field and as part of this can describe that its

body is having its feels. Thus, our conscious awareness of our body's feels has two informationally distinct elements: the feel in body's physical information terms and mind's description of the feel as being our body's.

Thus, when we ask how 'I' have my conscious feels, the question assumes the impossible. The body which has the feels can't consciously describe itself as the one having them, and the mind who is descriptively self-aware can't have feels. In the same manner, when we try to explain why there is something that it is like to be conscious of our sensory experiences, we are again assuming the impossible, an aware and self-aware self that has feels. There is no such thing: we humans are two distinct entities: mind and body existing in separate and distinct information fields. Body has its feels, and mind inferentially maps its descriptions of them.

Once we recognize our true nature, there is no mystery to our conscious experiences. Body's conscious feels are explainable in reducible scientific empirical terms. Mind's conscious experiences arise in a descriptive system capable of describing itself as the one doing the describing and having its descriptive experiences. It is our great fortune that we are conscious in the information terms of two distinct but linked information fields, making our conscious experiences rich, robust, and far more powerful than all other creatures.