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The Impersonal Knowledge of Conscious Experience

A philosophical investigation

Griffith University

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Foreword

John Thornton was awarded a PhD from Griffith University, Brisbane in 2000 and is currently an Associate Professor at Griffith University's School of Information and Communication Technology. He has published extensively in the area of artificial intelligence, including articles in *Artificial Intelligence, the Journal of Logic and Computation, the Journal of Automated Reasoning* and numerous papers in the worlds major artificial intelligence conferences, including the 2007 *International Joint Conference on Artificial Intelligence* where he received a distinguished paper award. In the same year he also published a Prentice Hall textbook entitled *the Foundations of Computing and the Information Technology Age.*

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Preface

My motivation in writing this manuscript is to fundamentally challenge the prevailing wisdom of the philosophy of mind and artificial intelligence communities that conscious experience is created or caused by the operation of physical neurons in a physical brain. Because this idea remains unchallenged, it is now widely treated as an obvious truth, a fact beyond dispute. And so it is disseminated into the larger human community, through the media, and through scientific education, without further reflection.

As I shall demonstrate, this naturalistic scientific conception of consciousness is little more than an assertion of faith or belief, which remains unsupported by factual evidence. To see how this has come about, and how the reality of consciousness remains beyond the grasp of contemporary scientific and philosophical thought, requires that we each, individually, investigate this issue in our own conscious experience.

My aim is therefore not to give a detailed criticism of the particular arguments and positions of contemporary thinkers but to present a methodology for the investigation of the mind. The basic thrust of this methodology is the attainment of an impersonal first-person observational standpoint, and to show how such a standpoint can act as the foundation for an authentic philosophy of mind. The idea is to proceed by practical *demonstration* and not by conceptual *argumentation*. As such, this work flies in the face of current practice, and there is much in it that will appear provocative and even nonsensical to someone schooled in the existing literature.

Therefore I have to ask my prospective readers to suspend their judgement, as far as is possible, until they have absorbed what has been described in the following pages. For this is a practical work, and asks you to test what is proposed by actual observation and not according to the thoughts and opinions of others.

I should make it clear that this approach to the investigation of consciousness has not been plucked out of thin air. It owes much to the phenomenology of Edmund Husserl, although it goes somewhat further in identifying thought as the agency of the personal viewpoint. Behind that lies the philosophy of

Arthur Schopenhauer and my quite separate experience of the work of various twentieth century spiritual teachers. Of these the most profound inspiration has been the life and work of Barry Long (1926-2003). In particular, it is Barry Long's recognition of the fundamental distinction between thought and observation that lies at the core of the current work. Not that you will find a spiritual teaching in these pages. This is a work of philosophy and does not assume the existence of any spiritual realm. Quite the reverse. What is asked for here is only that we remain within the empirical realm of our direct, first-person experience.

Finally, I should like to acknowledge that the writing of this manuscript became a practical possibility only because of the support of Griffith Universitys Academic Study Program, for which I am most grateful.

Gold Coast, Australia, February 2007

These our actors,
As I foretold you, were all spirits and
Are all melted into air, into thin air:
And, like the baseless fabric of this vision,
The cloud-capp'd towers, the gorgeous palaces,
The solemn temples, the great globe itself,
Yea, all which it inherit, shall disolve
And, like this insubstantial pageant faded,
Leave not a rack behind. We are such stuff
As dreams are made on, and our little life
Is rounded with a sleep.

William Shakespeare, from *The Tempest* Act IV, Scene 1: 148-158.

Chapter 1
There is Nothing Else

In the BBC Reith Lectures of 2003, the eminent neuroscientist, Professor Vilayanur Ramachandran, attempted to summarize, for a general audience, our current understanding of the human brain. In his opening address, he described the brain as an enormously complex structure of neurons whose main function is to exchange information via synaptic connections. He went on to say: "Even though it is common knowledge these days, it never ceases to amaze me that all the richness of our mental life - all our feelings, our emotions, our thoughts, our ambitions, our love life, our religious sentiments and even what each of us regards us his own intimate private self - is simply the activity of these little specks of jelly in your head, in your brain. *There is nothing else*" [my emphasis].[1]

This statement captures an underlying view of the human mind that goes virtually unchallenged, both in the community of scientists that work with the physical brain, and in the community of cognitive scientists and philosophers who investigate the mind.[2] This consensus, or common knowledge, is that the human mind is caused by, or is determined by, or emerges from the activity of the neurons in the physical human brain. Perhaps there is something called consciousness, but it is certainly secondary, something that emerged from the process of evolution and hence from physical matter itself. The tone, the implication, behind this view of the mind, is that to go against it, is to go against science, and hence against reason itself. Behind that lies the belief, perhaps the great belief of modern science, that all phenomena, including the human mind, can be explained *naturalistically*, i.e. without invoking a supernatural or non-physical agency.

In the evolution of science, this directedness towards naturalistic explanations has proved extremely fruitful. Witness the incredible advances in our power to control physical processes with mechanical, chemical, electronic, nuclear and biological technologies. Time and again, faith and religion have challenged the findings and theories of science, and each time, it appears, religion is defeated. As biological science turns its attention to the brain, it does so in the knowledge of having vindicated Darwin against all those

who needed God or a metaphysical life-force to explain the evolution of the species. The understanding of the genetic structure and operation of the living cell has encouraged us to think we can uncover all life's mysteries, a belief which grows stronger with each new discovery. Hence, it appears natural that the human mind can also be understood by applying the techniques of naturalistic science to the human brain. The cognitive scientist and neuroscientist still stand in awe of the brain's complexity, but both are confident that, with time, the mystery of its operation will be uncovered. Furthermore, both are confident that such a complete physical understanding will also have explained the human mind. To protest that there is something beyond the reach of naturalistic explanation, is to be classed with those who said that evolution required divine intervention. As Ramachandran so blithely states, this is all "common knowledge."

Given such confidence, it is heartening to remember that nearly all the common knowledge of the past is now commonly considered to be false. We look back on Aristotle's view of falling bodies becoming more joyous on their return to earth with a superior smile. The unshakeable certainty of Newtonian mechanics is now the curiosity of another age. In our current scientific view, the existence of mind and consciousness is seen as something yet to be satisfactorily explained. Given the immense strides we have made in understanding the evolution of the universe itself, the problem of explaining the evolution of mind seems achievable. But perhaps we are forgetting that the universe of science is itself a construction of the human mind, something that exists conceptually. The real universe certainly differs from this construct in one important way, it *actually* contains the mind that built the scientific, conceptual universe. But more on this later.

To put it simply, the central insight I intend to convey is that our common knowledge of the physical basis of the human mind is mistaken. For me, as for many before me, this insight is self-evident. However, the idea of discovering anything through self-evident insight has fallen into disrepute. The methods of naturalistic science require *objective* evidence. Theories are proposed, logical consequences are elaborated, and tests are made against the physical fact. In this way, the vagaries of subjective opinion are eliminated, and science can progress on the basis of mutually agreed objective evidence. And we must agree that the methodology of science has been spectacularly successful in understanding the operation of the universe at a physical level. To suggest knowledge can be acquired through self-evident insight, is tantamount to suggesting a return to the Middle Ages. For surely many of the insights contained in the religions of the world were self-evident to those who propounded them. Yet we need only consider the conflicts, arguments, wars and persecutions that have resulted from the belief in such insights, to see why science so prizes its hard won objectivity. We must therefore look very carefully at the possibility of self-evident insight. For without such insight, what evidence do we have to investigate the mind, but the findings of neuroscience and the externally observable behaviour of the human subject? If

all else is ruled out of court, then the question of the physical basis of the mind is already answered in the affirmative. But what kind of science is it that fits a question to its methodology, rather than fitting its methodology to the question?

At the risk of appearing emotive, I ask you to reconsider Ramachandran's opening statement and really apply it to your life. Is there not something terrible in it? To consider that every perception of beauty, every moment of love or compassion, every insight, every glimpse of meaning or purpose, any sense of the sacred, that all these experiences are basically illusory. Perhaps you do not have experiences that indicate there is something more than naturalistic science suggests. Certainly the common knowledge of science is arrayed against such perceptions. You may say: "Yes, it is terrible, but it is the truth! One has to dispense with comforting illusions and face it with courage!" But equally, what if the common knowledge of science is false. What if something essential, something fundamental is missing from the scientific conception of the universe? A conception that is daily transmitted to the people of the world with all the authority that once attached to the pronouncements of religion. How terrible is that?

Notes

[1]The complete transcript of Professor Ramachandran's 2003 Reith Lectures is available from http://www.bbc.co.uk/radio4/reith2003/. There is also a book based on the lectures (Ramachandran, 2003).

[2]To underline this point consider the following excerpt from Jeff Hawkins' recent book *On Intelligence*, which expresses Ramachandran's same conviction in almost the same language. Referring to the human neocortex he says: "These thirty billion cells are you. They contain almost all your memories, knowledge skills and accumulated life experience. After twenty-five years of thinking about brains, I still find this fact astounding. That a thin sheet of cells sees, feels, and creates our worldview is just short of incredible. The warmth of a summer day and the dreams we have for a better world are somehow the creation of these cells. Many years after he wrote his article in the *Scientific American,* Francis Crick wrote a book about brains called *The Astonishing Hypothesis*. The astonishing hypothesis was simply that the mind is the creation of the cells in the brain. *There is nothing else* [my emphasis], no magic, no special sauce, only neurons and a dance of information. I hope you can get a sense of how incredible this realization is. There appears to be a large philosophical gulf between a collection of cells and our conscious experience, yet mind and brain are one and the same. In calling this a hypothesis, Crick was being politically correct. *That the cells in our brains create the mind is a fact, not a hypothesis*" [my emphasis] (Hawkins & Blakeslee, 2004, p. 43).
Although Hawkins acknowledges there does *appear* to be a "large philosophical gulf between between a collection of cells and our conscious experience," he assumes, with Ramachandran, that this has all been settled. However, it is not a fact that mind and brain are "one and the same." The question is simply being ignored and papered over by assertions of certainty without further argument. This is not to say that the authors concerned are involved in some deliberate deception. It is more that they fail to even conceive of the issues involved. And who can blame them? For if we turn to the literature of the philoso-

phy of mind we find the same underlying assumption of the certainty of physical existence discussed as if the matter had already been exhaustively argued and settled. But if we look for such exhaustive argument, we search in vain. For example, in John Searle's recent introduction to the philosophy of mind, he dealt with the possibility of the mind not having a physical basis as follows: "Idealism had a prodigious influence in philosophy, literally for centuries, but as far as I can tell it has been dead as a doornail among nearly all the philosophers whose opinions I respect, for many decades, so I will not say much about it. Some of the most famous idealists were Berkeley, Hegel, Bradley and Royce" (Searle, 2004, p. 48).

In effect, the argument of the contemporary philosophy of mind community against any fundamental criticism of its basic assumptions, is based on a vote popularity. It runs like this: "because we all, as a group, assume that the mind is created by the physical operation of neurons, and we are the experts in the area, it must be true." And so there has been no fundamental engagement with the issues raised by the idealist philosophers. For what interest could there be in arguing against something that everyone has already rejected?

Chapter 2
The Chasm

Before entering fully into a criticism of the idea that the mind has a physical basis, we must first appreciate what it is we are about to pull apart. It is an idea so deeply engrained in the human mind that most of us, for most of the time, remain unaware of its operation and influence. It literally defines the stance we take in relation to the outside world, a stance that assumes all the objects of external perception actually exist as they are perceived, while also assuming that they exist independently of perception. So we normally, unquestioningly, believe that the sky is blue on a cloudless, sunny day. Whereas a little reflection on the operation of the human nervous system indicates that blue, as a colour, is a quality that resides in our perception, and not in any physical sky. If we strip away all these so-called secondary qualities, like our experience of sound, of smell, of taste, of hot and cold, etc., we arrive at a more scientific conception of the universe, i.e. of matter or energy distributed in a field of physical spacetime. This "cut-down" conception still acknowledges the independent existence of physical entities, of forces, of masses, of volumes, etc. These entities simply lack the "surface layer" of quality and perspective that we know in our human, brain-mediated perception.

It is this scientific model that lies behind our contemporary understanding that the physical brain must somehow cause or create our experience of the world. So, it is here that we must begin our investigation. Science starts with the physical. So it starts with a physical human body interacting with a physical world. Electro-magnetic radiation in the form of light, impinges on the retina of the eye, causing the firing rates of certain frequency sensitive neurons to change. Sound waves propagating in the molecular structure of the air impinge in the ear, and are similarly transformed, lawfully and predicably, into neural signals which are transmitted across the brain. It appears that all our perceivable transactions with the environment, including those within our own body, must be propagated as information, via the agency of the brain's neurons. Although the brain is awash in a sea of chemicals, the significant effect of these chemicals is only to condition the firing of individual neurons and hence the transmission of neural information. This is the first principle: if

the information does not get into the human nervous system and from there into the physical human brain, then the mind can know nothing about it. Experiments with the brain are very clear on this. Seeing is an achievement of an entire system of neurons widely distributed across the brain. We do not "see" the back of our retina, we experience the activity of a wonderfully complex process involving separate areas of the brain performing recognizable tasks, combining to produce a unified field of vision. Brain damage, drug effects and surgery give apparently incontrovertible evidence of the physical causes of our perception. In brain surgery, for example, doctors routinely stimulate known areas of the brain and obtain direct reports of the effects from their conscious patients. Not only perception, but the motor control of the body, is all explicable in terms of the operation of this giant neural information processing system.

When one is shown all this, it does not require expert knowledge to get the point. The brain is like any other physical organ. It is made of living cells joined in certain cause-effect relationships. When something happens in the brain, it is happening according to well understood chemical and electrical processes. Neurons fire and transmit information because of chemical changes in their environment that produce changes in electrical conductivity. All this is explained by laws that apply indifferently to inorganic and organic systems. What is missing from the picture is how it all fits together. At the molecular-level, the operation of individual neurons is fairly well understood, and, at the global level, certain parts of the brain are known to be involved in particular cognitive and motor skills. However, the connection between the operation of individual neurons and the appearance of the higher cognitive faculties, like thinking and language use, is still a matter for investigation. Nevertheless, we can share the optimism of the neuroscientist: the brain is a challenge, but we have no reason to expect that we will not find physical explanations for human cognition. All science to date has confirmed this. Once we believed the body to be animated by a mystical life-force, but science has shown the body to be a collection of self-replicating, fuel-burning cell mechanisms, obeying the same laws as all matter. The view of the brain follows the same analogy. Once we thought an immaterial mind was necessary to direct our thoughts and actions, to see, to hear, but now we see it is an accomplishment of matter alone. Not only that, there is no room for any extra-physical agency to interfere with the material world. No such phenomena have been reliably observed in any scientific laboratory. All science finds are its physical laws confirmed, over and over again. Why, asks the scientist, invent some supernatural causal agency, where none is called for?

So far, so good. Perhaps the first warning bell from this account of the brain, is that on the basis of physical processes alone, we have no reason to expect the brain to produce anything like a mind, i.e. there is nothing in the physical account that predicts the phenomenon of a mind, even an epiphenomenal mind that has no causal influence on the brain whatsoever. What we have

is a physical system, the brain, obeying physical laws, drawing in physical information from the environment and producing physical behaviour, all as a result of some extremely sophisticated neural information processing. We can already build information processing systems that mimic the action of simple brains, but we have no expectation that they should exhibit any kind of mind-like experience. Furthermore, if any such system started exclaiming that it was having a conscious, internal experience, we would be at a loss to explain why. Such objections do not deter the progress of neuroscience. While no clear, obvious cause of conscious, mental experience has been identified, we can certainly observe that the brain does produce a mind by simple introspection. With more investigation, it is expected that some precise physical cause of mental experience will be identified. Or at least a reason why some brain processes are part of our conscious awareness (such as the visual field in front of you now), while others are not (such as the operation of your kidneys). In the literature, this is known as the search for the neural correlate of consciousness (or NCC). However, we can still question whether the identification of such physical causes of experience would qualify as an adequate explanation of the mind. To see why such an explanation could fail, we first need a clearer understanding of what is meant by the mind and experience.

Mind and Experience

Until now, I have been using the term mind fairly loosely, to stand for the possession of mental experience. This means, for example, the actual qualitative experience of seeing colours, the greenness of green, not just the information that green is in the visual field. To grasp this distinction requires an act of self-evident introspection. As such acts provide our only direct access to the mind, I will labour the point further. Consider a video camera, attached to a computer, pointing to a patch of green material. It would be fairly easy to write a program that processes the information from the camera, identifies the colour of the material, and produces an audio output of the form "I am seeing green." However, this system would not have produced any experience of the *quality* of the colour green, it simply *identifies* the colour green. It requires the presence of a mind to experience the quality of a colour (some have argued that a computer program does possess a primitive mind, but we will pass this by for now). Similarly, we experience our whole lives qualitatively, everything has a quality that cannot be captured in a word, or definition, or concept, or computer program. Consider not just visual perception, but the quality of feeling hungry or thirsty, of the perfume of a rose or the smell of a wet dog. The only way to understand what is meant by the quality of experience, is to actually experience it. The experience provides the self-evident confirmation of what quality is. A great deal has been written and argued about exactly what this means, and what conclusions we can draw from it.

But for now, I ask you to accept that this is what I mean by mind, and I ask you to confirm, directly, in your own experience, that you understand what is meant by the quality of experience, as opposed to the concept of experience.

The crucial point is that the quality of experience cannot be fully specified by a physical process in a brain. This is not something that can be demonstrated purely by a conceptual argument, it still rests on the self-evidence of experience. Ignoring quantum effects for now, if we consider the world at the micro-biological level of atoms, molecules and neurons, then the physical interactions occurring are finally assumed to act as physical causes of our mental experience. But no actual experience of greenness can be found in the brain, only the physical actions of the neurons, stimulated by the presence of light of a certain frequency (much like the computer program in our earlier example). Hence our experience of greenness, or any other quality, remains a mystery, except in so far as we could say that the pattern of excitation of the neurons that fire when we experience green is *the same as* the experience of green. Now many philosophers do maintain this position. For now, my response is to invite you again to examine your own experience. Try looking at a green object. Look at all the various shades of colour appearing on the object, at the quality of colour that distinguishes one colour from another. Can you now grasp that your experience of the quality of colour is of an entirely different *order* to the actions of the neurons in a brain? Action is action. In the whole history of science, action has only produced more action. In what sense can we say that the experience of colour is an action? Only conceptually; we can think it, but we cannot make such an idea consistent with experience. There is no imaginable way that we could construct an experiment to prove that the experience of quality is the same as a certain physical action in the brain. (Note, we are not saying that the experience could not be *caused by* the physical action of the brain, at least not yet). The point is, that to maintain mental experience *is* an action of the brain, that there is an identity between them, that they are one and the same thing, is to deny experience any content, any quality. The refutation of this argument, is simply to examine one's own experience.

Philosophical descriptions or definitions can refer not only to mind as mental experience, but also to mind as a cause or explanation of behaviour. In this second sense, internal mental states are used as terms to explain objectively observed behaviour. As first-person subjects can produce comprehensible explanations of their behaviour using such concepts as beliefs, desires and intentions, psychologists and cognitive scientists have, in turn, used these concepts as causal terms in their models. From this third-party perspective, whether the subject has any experience of these states or not is irrelevant, what matters is their role in a chain of explanation. One of the key features of a mental state, such as the belief that I am a good citizen, is that the same state tends to persist over time, whether or not I am aware of it. So, if we take a mental state to be a part of what the mind is, we are immediately led to conclude that the mind is more than that particular sphere

of which we are currently aware. We must therefore be clear that we are not referring to, or thinking of, the mind in this broader sense. Our interest is not to give an explanation of behaviour, but to examine whether the mind as experience can be explained by the existence of a physical brain. In the remainder of the discussion, the existence of particular beliefs, desires, etc., will be treated in the same way as the rooms existing in a house, i.e. they are *potential* mental contents, but not until we are actually aware of them do they enter the mind. This means we are not drawing a distinction between mental phenomena on the basis of whether they refer to an external world of objects, or to an internal world of mental states, and only insofar as we are presently aware of something do we acknowledge its existence in the mind.

Cause and Effect

So, returning to the question of what constitutes an adequate explanation of the mind, let us consider a future neuroscience, where the brain has been fully mapped and understood and where all the neural correlates of consciousness have been identified. In this world, your brain can be scanned, producing a description (with pictures) of exactly what you were experiencing at the time of the scan. The question is, would this be evidence enough to show that naturalistic science had explained the existence of the human mind, i.e. to show that the brain causes the mind?

To answer this involves us in a further digression into the nature of cause and effect. I think we can all agree that mental experience is *correlated* with physical processes in the brain. The question is whether this correlation can be raised to the status of an effect issuing from a cause. Again, we are on well-travelled ground. Can we ever say with certainty that one thing is the cause of another? No, only that all our observations to date have confirmed the relationship, and that we have a "good" hypothesis to explain the behaviour, e.g. one that is testable, perhaps fits in with existing theories, does not invent more entities than are necessary, etc. So, following Popper, we can say that the idea of the brain causing the mind is a hypothesis that we could never prove, but one that we may be able to falsify.[3] Firstly, let's look at the idea that the brain directly produces the mind as an effect, employing the existing constructs of naturalistic science (i.e. without postulating of the existence of a separate realm of consciousness). In this case, if we have accepted the self-evident existence of our own experience, then we will be asking the effect to contain considerably more than was in the cause (in Chapter 5 we will examine further just how much we expect from the cause). To fulfill the aim of being a hypothesis, we have to explain how non-physical experience was produced by a physical system that contained or had exhibited nothing like experience previously. Identifying the exact circumstances where such experience arises is not enough. In saying that matter in a certain physical

organization, performing certain processes, produces an entirely new phenomenon, we are just pointing to the organization and the activity. If we are to elevate complexity to a principle that explains experience, then we require more than a simple assertion that the principle is true. Complexity is only complex in terms of the way matter is laid out in space and time. To say that experience is associated with certain complex configurations is a *description* not an explanation.

I trust it is clear, that in attempting to explain the mind, naturalistic science has embarked on a task of a different order to that of explaining evolution, reproduction, or the sub-atomic structure and behaviour of matter. In its traditional domain, science has adhered to the principle: from the physical, only the physical. The brain is understood to act physically: the action of the neurons explain the action of the body. At each level, from behaviour, to nervous system, to neuron, to the chemistry, there is a clear chain of physical cause and effect explanation. When we think of the brain causing the mind, we are putting the idea of a cause on an entirely different footing. To point to all the earlier success of science and naturalistic explanation is not relevant. For all naturalistic explanation has been just that: naturalistic - it has explained the physical in terms of the physical and has denied the need for any non-physical agency. But in relation to the brain, we are expecting a physical cause to produce the non-physical phenomenon of mind. And by non-physical, we mean absolutely non-physical. Even if we found consciousness particles, or we could physically measure a consciousness field, this would still not move us forward. For the consciousness field, if measurable by physical apparatus, would still be physical: we would still be facing the same problem - how can something physical also be a non-physical qualitative experience? Just as the naturalistic scientist legitimately asks how a non-physical mind can possibly influence a physical brain, the same point works in reverse: how can a physical system bring into effect something that is non-physical?

The issue here is also one of domain. The domain of enquiry of naturalistic science is the physical world. Within this domain it labours to produce physical explanations of physical phenomena. The mind lies outside the domain of the physical, hence outside the reach of physical cause and effect. To postulate the mind as caused by the brain, is to postulate a new idea of cause and effect, and to step outside the domain of naturalistic science. Allowing we are prepared to take such a step, it is still not clear how we can proceed. If we accept the existence of self-evident non-physical qualitative experience and also the existence of a physical brain, and we ask one to cause the other, we are left, like Leibniz,[4] asking what possible agency could effect such a cause. If we postulate some new substance, say consciousness, we are still left asking the same question. How can the chasm between a non-physical mind and a physical brain be crossed?

Notes

[3]See (Popper, 1935/2002).

[4]Nearly 300 years ago, Leibniz was covering the same ground and asking the same questions. He clearly saw the difficulty in using a physical system to act as an explanation or cause of experience. Consider *Monadology 17*, where he uncannily anticipates our modern investigation of the physical brain: "Moreover, it must be confessed that perception and that which depends upon it are inexplicable on mechanical grounds, that is to say, by means of figures and motions. And supposing there were a machine, so constructed as to think, feel, and have perception, it might be conceived as increased in size, while keeping the same proportions, so that one might go into it as into a mill. That being so, we should, on examining its interior, find only parts which work one upon another, and never anything by which to explain a perception." (Leibniz, 1714/1992). Leibniz's solution was to postulate a (divinely) pre-established harmony between experience (perception) and the operation of bodies (matter). Consider *Monadology 78*: "The soul follows its own laws, and the body likewise follows its own laws; and they agree with each other in virtue of the pre-established harmony between all substances, since they are all representations of one and the same universe" (Leibniz, 1714/1992). Then, in *Monadology 81*: "According to this system bodies act as if (to suppose the impossible) there were no souls, and souls act as if there were no bodies, and both act as if each influenced the other" (Leibniz, 1714/1992). Leibniz makes the key statement that souls and bodies are both harmonious "*representations* of one and the same universe" [my emphasis]. Hence, he does not ask one to cause the other, but makes them both aspects of one underlying reality.

Chapter 3
The Physical

Nevertheless, naturalistic science presses on, undeterred by any imaginary chasm between the physical and the mental and confident that such difficulties will be cleared up by further empirical investigation. We, however, are attempting to demonstrate that such empirical investigation *in principle* cannot arrive at an adequate understanding of the mind. To do this we must take a step backwards, and examine the premisses on which the naturalistic scientific view of the mind is based.

So far we have characterized naturalistic science as a science of the *physical*. And it is only by using the idea of the physical that we are able to distinguish between a brain and a mind in the first place, i.e. the brain is physical, and the mind is not. But what does it mean to be physical, in a scientific sense? Perhaps our first response is to point to something, like a table or a pen, and say, "this is the physical, it is something I can touch and see." But when we come to the mind, things become more complex. For instance, is a thought physical? The neuroscientist would say yes, in so far as your thought can be traced to some activity in the brain, it is physical. And certainly, if we removed the right parts of your brain, that would be the end of your ability to think. But this is a circular argument. We are using the notion of something being physical to define what the brain is in the first place, so we can't very well use the activity of the brain as a criteria to decide what is physical.

Perhaps you will say, yes, but aside from the issue of mind-like phenomena, we know that being physical means being material, being made of, or being a property of, matter (taking matter to be science's current understanding of the basic substance of the universe). But this is again circular. For science has decided what matter is on the basis of what it is to be physical in the first place. In actual practice, the scientific model of matter is built using a certain methodology that already defines what is admissible evidence. If we are to discover what science means by being physical, we first have to examine what this admissible evidence is. For it is only on the basis of admissible evidence that any scientific theory can gain credibility or acceptance.

Objective Observation

Taking this route, we come to a fairly simple answer. For something to be admissible as scientific evidence it has to be *objectively observable*, i.e. able, in principle, to be observed by some ideal third-party observer. Using this criterion, we can pragmatically define the physical domain of naturalistic science to be that class of entities that are *capable* of producing objectively observable effects. Whether these entities actually exist is not the central question, they are theoretic or hypothetical constructs, whose role is to explain the objective observations. Of course it is the intention of science to discover the real, physical, underlying causes for the events it observes. But ultimately, it can only be sure of the observations themselves; the theory, the unobserved constructs, always remain potentially in doubt. This explains how physical, naturalistic science has come to accept the possible existence of abstract, mathematical constructs, such as the four-dimensional spacetime of general relativity, or the equations of quantum mechanics, i.e. they are used to explain objectively observable, physical effects. Whether we consider the ability to produce objective observable effects to be the same as being physical is not essential. The main point is that the brain, as far as science is concerned, only exists in terms of its ability to produce objectively observable effects.

To be objectively observable obviously requires both observation and objectivity. Objectivity is obtained by stipulating that scientific observation must not depend on the subjective experience of any one individual. So, for something to count as an observation it must in principle be available for anyone to observe (given the ability to reproduce the necessary conditions). This means only external, or third-person observability is acceptable in terms of defining what is physical. Hence, anything subjectively, or internally observed, such as a feeling of hunger, is not a physical fact in itself. It is a physical fact only insofar as a third-person observer could observe some external, non-subjective manifestation of that experience, e.g. hearing your stomach rumble, observing that you had not eaten for several hours, and ideally performing some physiological tests on your body to check that a hunger response was in fact occurring.

A second aspect of scientific objectivity, is that only a certain class of information is granted validity. For instance, if I were to observe a green object, I could well claim that this was an objective observation, and call in several friends, who would concur on the greenness of the object. However, the issue with greenness again brings in the mind of the observer. For we can never be sure that we all mean the same thing when we say green. Your experience of the *quality* of green may be the same as mine, but we cannot find any objective way to confirm this. Hence, although qualities are objectively observed, (i.e. for us they are properties of external objects) we have no way to check between ourselves that we are in fact experiencing the same thing. The best we can do is take objective measurements - that means comparing what we have observed to some other objective standard, like a ruler, or a

clock, or a light meter. Once we take a measurement, we have escaped the dilemma of having different qualitative experiences. In doing this we have removed the qualitative element in our observation and replaced it with a pure quantity. Nevertheless, my experience of seeing a green object is still a fact, the greenness is a fact. By fact I mean it is an actual self-evident experience. But it is not a fact that is allowed into the domain of scientific enquiry. It is a fact that cannot be properly corroborated.

So, of all the possible facts of observation, science disallows *all* (qualitative and quantitative) facts pertaining to first-person, inward experience (unless corroborated by some third-party observer), and all *qualitative* facts pertaining to externally perceived objects. (Note, that these are just those facts that confirm the existence of a mind!) What remains is a quantitative world of measurable phenomena, a world that has had qualitative conscious experience removed from it by a deliberate act of exclusion. Having done this, it becomes possible to use a formal language (i.e. mathematics) to describe the phenomena that remain. This world is not even necessarily laid out in space or time, insofar as space and time inhere in consciousness. The pure mathematical relationships of the quantitative world simply relate varying quantities to each other. In such a model, it does not matter whether a term for distance actually refers to a dimension of space, what matters is how it varies with the other terms in the model. It is us, with our consciousness, that try and project pure mathematical expressions back into our qualitative world of experience.

But next, we have to consider the act of observation itself. Although our scientific observations have to be objective in principle, in practice someone has to actually make the observation. If we examine the act of observation, we are equally drawn to conclude that to observe requires the registration of some event in a particular human mind, i.e. each act of observation requires the first-person experience of some observer to define it as such an act. To say that an observation occurs when an event is registered in the physical brain is to take a third-party view of the matter. For, in the actual practice of science, we never check inside the observer's brain to confirm the observation. We accept the first-person report of the scientist, and if we doubt it, we reconstruct the experiment and obtain our own first-person observation of the results. Even if we did examine the physical brain of the scientist to check the first-person experience was really happening, we would still be observing that brain in our own first-person experience.

It is here the second warning bell should be ringing. Our first bell rang when we recognized that a physical account of the brain in no way predicts the existence of a mind. And now we have reasoned, according to science's practical notion of what qualifies as physical, that the whole structure of science depends upon something that science would categorize as non-physical, something (first-person experience) that has been ruled out as acceptable scientific evidence. Of course, we would say that, although individual first-person experience is unreliable, once we have the agreement of multiple ob-

servers, then we have objectivity, i.e. it is the *agreement* that produces the objectivity. But the fact remains that all science is built out of experiences that do not count as physical events. How, we might ask, if one non-physical experience cannot constitute an objective observation, can the aggregation of multiple non-physical experiences make any difference? (Much like adding zero to itself and expecting a non-zero result).

The practical answer is that we do not actually go around checking with other observers to see that they really agree with our observations. We know in advance what counts as objective observation, and we have already divided the world up into those observations which count as objective and those which do not. This is now a deeply ingrained habit in our culture. Scientific methodology, at its very outset, sought to remove the unreliability of subjective, first person experience, by insisting on a new standard of objective reporting. The situation we are faced with now, when confronting the issue of the mind, is that that early, practical step, has become solidified in methodological concrete. When, during the scientific revolution, the first-person experience of the scientist was ruled out as direct evidence, a certain domain of enquiry was defined from the outset that *excluded the human mind as a valid topic of investigation*, i.e. the mind can only be addressed or studied by investigating the physical brain. Four centuries later, science has turned its attention to the mind, but it has forgotten its methodological origins. Now we are surprised that our understanding of the brain remains unchanged whether or not we include the concept of mind. But the concept of mind was already eliminated by the very methodology that was employed. The methodology was *designed* to get rid of the mind and its unreliable first person bias. So how can it be surprising that no trace of it enters into our physical explanations?

However, scientific enquiry *as a whole* does include the mind. For, as we have argued, without a community of minds there can be no scientific observations. In this sense, we can see that in the overall factual endeavour of science, there is no *independent* physical world. Science's idea of this world, the propositions that there are such things as electrons, or electro-magnetic waves, or neurons, *depends* on the first-person registration of observations in the minds of individual scientists (not to mention the invention of the propositions in the first place). The division of the world into a physical domain containing brains, automatically creates the idea of a mind as the necessary receptacle for the observations of the physical world. If we can imagine a situation where no such science and no such division had been made, then we would no longer have the problem of explaining how a physical brain can produce a non-physical mind. In other words, far from being a problem like any other, in trying to explain the mind, neuroscience has uncovered a fundamental and unacknowledged aspect of its own methodology, i.e. a methodological *mind-blindness*.

The Fact

So far we have looked at what it means to be an observation, and how science has set out to define a class of *reliable* observations. As we have stressed, an observation requires an observer, and an observation, by definition, is a first-person subjective experience. What science attempts is to reduce the class of all possible observations down to those that are *objective*. Behind this, the aim is to produce observations that are *factual*, i.e. to remove personal bias, opinion, error, illusion, etc. We have discussed what it means to be objective, but not what it means to be factual. The *Oxford Companion to Philosophy* defines a fact to be "the worldly correlate of a true proposition" (Honderich, 1995, p. 267). However, such a definition ignores the problem of how we can know that the world does indeed correlate to a proposition. It assumes that the crucial requirement of a fact being *true*, i.e. certain, beyond doubt, can be trivially obtained. The point we are making is that *only* first-person subjective experience can provide us with such true facts, and that facts, in order to be beyond doubt, must refer to what is experienced *not* to any supposed state of the world.

Let us take an example. You are in a laboratory, and your job is to weigh a certain amount of a chemical compound. To do this you have some weighing equipment that prints out the weight of the chemical on a piece of paper. You then make a first-person observation, by reading the print-out, that this chemical weighs 1.3423221 grams. This is the fact: you actually have the experience of holding that piece of paper, and of seeing the figures written on it. It registers in a direct, first-person sense. It is self-evident and certain. All other things we may hold to be true about the world, as distinct from our direct experience, at least have the *possibility* of doubt. This was Descartes' terribly simple point.[5] For instance, there may be a fault in the weighing machine, or we may be dreaming, or we may be wearing special lenses, that, unknown to us, cause all figure eights to look like figure threes. Nonetheless, it is a fact of the first order, that we are seeing what we are seeing, that our experience is what it is. This is so simple that it is almost embarrassing to have to stress it. The only certainty that we can rely on is our own first-person experience. Therefore, the only facts that exist, in the sense of being certainly true, are the facts of first-person experience. This is the ultimate given, upon which naturalistic science is literally grounded. Perhaps the main reason for the unparalleled success and progress of science is that, however far off the mark a particular hypothesis may go, scientific theory is ultimately brought to account by the facts of experience, *not* the opinions or beliefs of individual scientists.

The fundamental misconception hidden behind our understanding of the brain, is the assumption that the ultimate ground of science is the physical world. But this is self-evidently not true. As we have shown, our idea of the physical world is built up out of a certain subset of our first-person subjective experiences. The reality is either this way round, or it is not. This point has

to be faced very clearly. If we think that it is a *fact* that the physical world causes our experience, then we are forced to think that the existence of the physical world comes first. But the actual situation is that our idea of the physical world has been built up from a subset of our factual experiences. Whether the physical world exists or not, as we conceive it, is not something we can answer factually, it is a hypothesis. It is a hypothesis, firstly that the physical world has any existence independently of our experience, and secondly that our experience of the physical world is caused by a physical brain. Neither of these hypotheses can be factually verified. Of course, this does not mean that they are not true. The point is, from where should our understanding of the mind start? Should we start from the hypothesis or the fact? The fact is our first-person subjective experience. If we start from there, then we have already accepted that the mind exists. The task becomes one of explaining our experience of the physical world. Perhaps we may conclude that the physical world causes our experience of it. But it is the explanation of the physical world on the basis of our factual experience that becomes the task. Currently, and almost without exception, the task of the philosophy of mind is taken to be to explain the existence of a mind, given the existence of a physical world. This is just, self-evidently, the wrong way round. It is to the great credit of Edmund Husserl that he struggled for years to get this idea across to the human race. Yet we see little evidence of his thinking in the work of contemporary philosophers of mind. And it is not that these ideas have been discredited or outdated. It is rather that they have been ignored.

So, where does this leave us? We have demonstrated that the mind/brain division has come about as the result of a certain methodology employed by naturalistic science. We have then shown that far from eliminating subjective, self-conscious experience from its world view, naturalistic science is absolutely grounded on the factual certainty that can only be provided by such experience. From there we have concluded that the logical place to start an enquiry into the mind/brain problem is from a position of having accepted that there is such a thing as first-person experience, and that our understanding of the mind and the brain can only proceed (like all science) on the basis of the evidence of this experience. Our next step is to demonstrate that in order to investigate the mind/brain problem we need to broaden our definition of what constitutes an allowable observation, i.e. because the existing class of scientifically acceptable observations excludes any direct experience of the mind. If we are to start with the mind, then we obviously must be able to observe it. This has the further effect of changing the very definition of what constitutes a mind and a brain, i.e. our normal distinction is based on the idea that the physical is the objectively observable. If we allow other classes of observation to count as fact, then we can also change our idea of the mind/brain distinction.

However, the perspective of naturalistic science is not given up so easily. The basic ideas I am sketching out were first proposed by Husserl nearly

a century ago.[6] Yet, it is still the case that the majority of professional philosophers working on the mind would endorse some form of the naturalistic scientific view, and would maintain that a third party view of the mind is not just adequate, but the only viable alternative.[7] To propose a first-person investigation of mind is still regarded with suspicion. How can any agreement be reached on such a basis? What would it mean to have an objective first-person observation of the mind? It is to these questions we turn next.

Notes

[5]Descartes' famous doubting of all that could be doubted led him to assert at the beginning of the Third Meditation: "I am a thinking thing, that is, something which is doubting, affirming, denying, understanding a few things, not knowing many, willing, not willing, even imagining and sensing. As I already mentioned, even if the things that I sense or imagine happened not to exist, I am still certain that the modes of thinking that I call sensations and imaginings, insofar as they are simply modes of thinking, are in me. And in these few things I have listed everything that I know, or at least, what I have so far noticed that I know" (Descartes, 1641/2003, pp. 30-31). And later in the same meditation: "It seems, therefore, that I could establish as a general rule that everything that I perceive very clearly and distinctly is true." (Descartes, 1641/2003, p. 31). It is here, before Descartes continues with his proof of the existence of God, that we can see the parallel with our own recognition of the self-evident certainty of first-person experience.

[6]While Husserl's terminology differs significantly from that used here, the underlying aim of his transcendental phenomenology was also to ground knowledge in the certainty of experience. For example, consider the following: "The path leading to a knowledge absolutely grounded in the highest sense, or (this being the same thing) a philosophical knowledge, is necessarily the path of universal self-knowledge" (Husserl, 1929/1999, p. 156).

[7]For a clear and critical overview of contemporary philosophy of mind, see John Searle's *Mind: A Brief Introduction* (2004).

Chapter 4
Conscious Experience

The difficulty with first-person observation is that it is *personal*. Our observations are coloured by personal opinions and beliefs, our personal histories, things we have come to approve of, ideas we dislike, the prevailing opinions of others, and the likelihood that our observations will be met with approval by those who have power over what is published and commended, etc. More generally, the very nature of our experience of the world is fundamentally influenced by our linguistic and cultural background. The views of naturalistic scientists are coloured in the same way. But objective science is ruled by the fact. However strong the vested interest, the bias, the commitment to an existing view, the facts still have to be accounted for. And these facts *are* the facts of first-person observation, limited in such a way that they can be publicly measured and verified. Behind the methodology of science is the basic admission that the undisciplined first-person observation of the individual *cannot be trusted*. As we have shown, this methodology of naturalistic science, in eliminating the bias of a personal viewpoint, has also eliminated the qualitative experience of the mind from the domain of its enquiry. What we are aiming for here is to reinstate that qualitative domain of experience as a valid topic for scientific, impersonal investigation, i.e. to find a mode of first-person observation that eliminates the bias of the person, but retains the essential first-person quality of experience.

This question has already been addressed at length in the philosophy of Edmund Husserl. His phenomenology was an attempt to unify all science on the certain ground of our direct first-person observation of the phenomenon, of the "thing itself." Husserl clearly recognized the problem of the person and the personal perspective. His proposal to eliminate this perspective was that each "beginning philosopher" should develop an ability to bracket off their belief or disbelief in the existence of an independent external world. The idea of this "transcendental reduction", or epoché, was to reveal the objects of our experience as sheer phenomena, i.e. to put out of play any idea of these objects having an actual physical existence in an independent objective world, to just see the experience of the object, the quality of the experience, exactly

as it is presented in consciousness, to stop experiencing objects as existing "out there" in relation to our physical body and to examine experience for what it actually *is*.[8]

But this is not easily done. Husserl's transcendental reduction, his idea of the transcendental ego, and phenomenology itself, were all attempts to introduce his readers to an absolute ground of knowledge. But these ideas are without content until you have entered into the actual experience to which they refer. And how is this achieved? It is not enough to have a conceptual understanding. To simply understand the idea of suspending one's belief or disbelief in the independent existence of the world does not achieve the aim. Something needs to be *done*, a kind of negative action, or withdrawal. If successful, one should enter into a new realm of experience.

But what is this new realm of experience? What is the "ordinary" realm we are supposed to be leaving? And how is the action of suspending one's belief in the world practically achieved? Does one just think it? Or continually watch for thoughts that refer to the world and dismiss them? How does one dismiss a thought? Surely once a thought has arisen it has already done its work. Or does one positively think: "I no longer believe or disbelieve in the independent existence of the world", and repeat it continuously? Is it not the case that one arrives at a belief for good reasons, that having a belief is a fact that you can do little about, unless you come to see that the reasons or foundations of that belief are unsound? Doesn't suspending a belief that you actually hold, really mean you are pretending to suspend belief, that underneath you know you really believe it, but you have decided to play make-believe for a while? That your investigation is a kind of game and that no fundamental alteration in your experience has occurred? And how can we even discover the full range of our belief and presupposition? Surely the very aims and intentions in our observation distort the things we actually notice? How can we ever be sure that our experience of the phenomenon is not coloured by mental content to which we have no conscious access? And even if we could identify all these background beliefs, intentions and assumptions, how can we put them out of play as an actual reality, not just as an intellectual exercise? So that we actually know a shift in our experience? This is the question. Husserl's answer was not simply the description of the transcendental reduction. It was contained in the complete expression of his later writing. And this work certainly needs to be read. Yet many today would argue that a complete suspension of our personal perspective is impossible, that our experience is fundamentally determined by our personal past and by the particular culture in which we live, that, in short, all is relative, and that the aim of reaching an impersonal view of the mind is unattainable. From this place, Husserl is seen as an anachronism, someone from a past age who dreamed of unifying all philosophy, someone who did not understand the pervasive effect of personal history, language and culture in shaping experience at a very basic level.

Our response to this, to Husserl's phenomenology, and to his modern critics, is to examine the issue from a another perspective. Instead of addressing

each individual belief and presupposition, instead of trying to eliminate the effects of culture and language on our experience, we can look in the opposite direction and ask: who is it that believes all these beliefs, that holds all these personal opinions, that carries this particular cultural and linguistic perspective? The answer is that this person is our *self*. For all our belief, our opinion, our personal existence, has its inner correlate: our personal self. This self is the supporter of all we are considering as personal. Clearly, if we can put the self out of play, we can, at one fell swoop, put out of play the personal viewpoint, and perhaps discover what it means to be impersonal. But have we made any progress? How can putting one's self out of play be any easier than negating all our individual beliefs and opinions? How can it be achieved? The answer to this is so simple that you will probably not believe it. But belief or non-belief is beside the point. If the answer is correct, it must be able to go to the very basis of belief and eliminate it. So what are we proposing? It is this: in order to eliminate yourself from the observation of the mind, you have to stop thinking.

Stopping Thought

To stop thinking means to stop all inner movement of the attention, now. It means to become inwardly absolutely still and attentive. It means simply allowing whatever is happening now to happen, without engaging in any inner interpretation, or passing any judgement, or connecting what is happening to anything else. It means staying with experience, *as it is*. This is not something to grasp conceptually or intellectually. You actually have to do it (or, more accurately, *not* do it).

Unless you can see immediately what stopping thinking means, and actually stop thinking, it is likely that you will start thinking about not thinking. Perhaps you already have an opinion about not thinking, that there is something irrational and untrustworthy about such an idea. Or perhaps you are thinking that the idea of not thinking is an illusion, and that this has all been thought out already. But whatever you think about not thinking, you are still thinking. The question is, is it possible to stop thinking? Or, more precisely, is it possible to observe without thinking, and is such observation truly impersonal? Clearly these questions can only be answered by an actual investigation, not by an exercise of thought. Therefore, we shall begin by examining exactly what we mean by thought.

As we have been emphasizing, all experience is self-evidently what it is. And clearly, when we think, we are having some kind of experience. However, if we try and make distinct exactly what the experience of thought is, we find a difficulty. For the crucial feature of thought is that we sustain it with our attention. As soon as our attention moves away, the thought evaporates. When we look for it again, it has gone. The thought depends on us, it is an

actual movement of our attention. If we attempt to observe thought, in the way we would observe a sensory object, the thought as a movement cannot persist, it cannot sustain itself. The attention it needs has been diverted to the act of observation. And observation is *not* thought. As we aim to demonstrate, to observe, means to stop thinking. Hence we cannot observe thought directly, in the moment of thinking. We can only catch it afterwards, as a memory, or as a linguistic expression.

So what do we experience when we think? Clearly it is important to answer this question, if we are to understand what it means to stop thinking. As we have already indicated, the first and fundamental aspect of thinking is that it is a *movement* of attention. However, it is not enough to just read about thought. Unless what is said can be demonstrated in experience, it has no factual ground. Therefore we will try an experiment to illustrate what thought is. The idea is to see if you can catch yourself not thinking. After reading this paragraph in full, the experiment first involves shutting your eyes. Now simply watch to see if you can find any thought going on. I predict you will not actually catch yourself in the act of thinking, *while* you are thinking. For the resource that you use to look for the presence of thought, is the very resource you use to think, i.e. your attention. So, in order to even know you are thinking, there has to be a tiny gap of no thought from which you can contrast the thinking experience. It is likely that when you first notice you are thinking, you will immediately think "I am thinking." Obviously this is a thought too, and you will have to be quick to have registered any experience of no thought. But the very thought that "I am thinking" will have stopped your previous line of thought. What then? You can't keep thinking "I am thinking." There is likely to be another gap. Then you will have another thought. Maybe this thought will be "Look! I wasn't thinking just then!" That's it. You've just caught yourself not thinking. Even if it was only for a second or two, this is the demonstration of what not thinking is. It is a kind of nothing. And yet you know it has occurred, otherwise you could not have recognized it. Something was aware during that period of no thought. *That* is the something we are identifying as being impersonal. If you have not tried the experiment yet, as an actual experience, then try it now, before reading further.

Conscious Experience

The last experiment was designed to illustrate that thinking is quite distinct from any other first-person experience we can consider. This is because we cannot bring it directly to our attention. We can only observe it *after* it has happened. Then it is no longer actual or direct experience, but a memory, or something we have said or written down. Thought may invoke images and phrases as it moves, but if we stop to observe these experiences, then the

thought stops too. We cannot consciously observe thought in action. This is strange is it not? It means we have a definite test for whether an experience is a thought, or not. If we can observe the experience, in the sense of being aware of it as an experience, of knowing that it is an experience while it is happening, then it is not thought. Thought is exactly that experience of which we cannot become self-aware, or conscious. To put it another way, we only have the one resource of *conscious* attention. If that resource becomes engaged in thinking, then it can no longer observe, in the sense of being self-aware of the observation. This self-awareness, this knowing that we know something, is the essence of reflective consciousness. It is only by using this self-awareness that we can come to know the qualities of experience. And experience *consists* of these qualities.

This idea of conscious attention is fundamental to what follows, and is quite distinct from the normal usage of the term. For you would probably say that you were conscious of your environment whether you are thinking or not, that you know where you are, that there is such and such an object in front of you, etc. But this kind of awareness is *not* what we mean by conscious experience. Conscious experience has the additional dimension that it knows itself, *the experience knows itself.* It is only within such conscious experience that you can come to know the quality of experience for what it is. There is no way that this can be fully defined or explained in words. You have to stop reading, stop thinking, and look at something, and actually become aware of the experience itself (we will try an exercise to illustrate this below).[9]

To be a conscious experience, there is a knowledge that the experience is what it is. This is quite distinct from any thought that says "I am seeing this." It is an actual knowledge that we can all make self-evident. It is not like the experience we have while we are thinking. That experience does not know itself, it is an *awareness.* As we have shown, when we think, our actual attention is *in* the thought. We still feel we are conscious of the objects around us, but we are just *aware* of them, we do not know them in their actual qualities, because our conscious resource is engaged in thinking. We can know *what* something is in this awareness, we can say "There is such and such in front of me," but we do not consciously know the particular qualities of that object. Even if we say "it is blue" we still haven't looked, we haven't grasped exactly the quality of that blue. While we are caught up in thought, we cannot distinguish between the experience of something and the naming or categorizing of it. In order to make the idea of conscious experience clear, you have to pause in your thought, and make it evident that you know what it is you are experiencing, *without* the thought process informing you. How can you possibly know the colour of something by thinking about it? There has to be an experience of the colour that preceded the thought. It is that experience, raised to the level of full consciousness, that we are indicating.

To make this clear, even though it may appear obvious, you have to *do* it, in your own experience. So try looking at something, an object in the immediate vicinity. Look at it carefully. As you know, you have to get beyond the naming

and the categorizing of the object. You have to look at its colour, the quality of the colour, how it changes, how the shading on the object is coloured, how these gradual variations of colour cannot be named or thought, how they are part of the pure experience. Now look at the shape of the object, the actual experience of the shape, of any corner, or curve, or any edge. Look at how the colour and the shape are experienced as one thing, how they are unified in experience. As you observe like this, you will probably notice that things occur to you as thoughts. But if you are observing with your full attention, you will not be distracted by these isolated thoughts, you will be pulled back to the experience of the object, you will not start up the thinking process. If the thinking process does start, if instead of an isolated thought, you start travelling down a chain of thought, then you will necessarily have stopped observing the object *as it is*, you will be thinking about aspects that you have already observed, that you have already named. Or you will be judging, or thinking of something else. While you observe, if you are finding that thoughts have crossed your mind, commenting on your observation, note that you will have to actually observe something *before* the thought can comment. The thought thinks *it* has made the observation. But this is not the case. The thought is commenting. This is a significant distinction. The observation, the knowledge of a particular quality in the object is a fact, it is given. In order to think it, the experience is translated into something else. To the extent that you can withdraw from thought and actually look at the object, you will find that you can experience the object consciously, actually know it, without any associated thought. You can *see* the colour without naming it. And even when thought names a colour, the name is obviously *not* the colour.

Perceptual Experience

In the previous example, we were looking at relatively easily observed aspects of visual sensory experience. However, we do not just experience colour and shape when we look at an object. We also have the *perception* of it being an object, i.e. of it having an ongoing existence in time and a three-dimensional shape in space. And the object itself is perceived to exist in relation to our own body and in a background world of which we are only partly aware. If we are to examine conscious experience fully, we also have to look at what perception is, as opposed to the simple registration of sensation. Once more this means performing an observation. To begin with, select an object in front of you. This time, just observe the actual quality of its being an object. This definitely requires you to stop thinking. We need to make a finer distinction than just seeing an object's colour. We are trying to bring to consciousness the experience of the object's space, the experience that is left when you stop imagining or thinking you know what the object is. The most important thing to verify is that, whether you think or not, the object does not dissolve into

a mass of sensations. It still retains its objecthood., i.e. the object's integrity is not a product of you *thinking* it is an object. There is an actual experience going on, an experience of perceiving an object. Although this experience cannot be translated into language, language can indicate it. For instance, you could say you have a "knowledge" of the existence of the object. Of its three-dimensional shape and that it is a certain distance away. If you examine your perception of the emptiness of space, without thinking, you still know the emptiness is there, as a knowledge, even though you cannot positively "see" it in the way you can see the colours of an object. This knowledge is a definite experience. The physical demonstration of space is to actually move through it. But we can still perceive it, without having to pass through it.

A practical demonstration that we directly perceive a third spatial dimension is provided by the various artificial devices that exploit our binocular vision, e.g. seeing through a stereoscope, or watching a 3D movie with 3D movie spectacles. Here, we literally feel what was once a flat image, "jump out" towards us, and in that moment of contrast, we can directly experience a perception of depth and space emerge. This shows that we "know" depth as a particular quality of experience, *not* as an intangible understanding. With a little practice, we can directly produce this experience using the two images in the figure on the next page, taken from Wheatstone's original paper (1838, p. 372, plate XI, fig. 15). Here the task is to *fuse* the images into a single perception. Firstly, place the figure to within about 20 cm of your nose, and then start crossing your eyes (you may need to vary this distance if the experiment fails initially). You should experience a double image of the original figure. You will need to play with moving these images closer and further apart by controlling the degree to which your eyes have crossed. The aim is to get two images to overlap. Then you need to focus your attention on these overlapped images so that they fuse into a single picture. Once this is achieved you should be able to experience a third dimension of depth with the image appearing as a pyramid with a square top. The experience is quite subtle but can be accentuated by moving your head slightly. In that perception, if you can register it consciously, you literally experience your knowledge of the space between the top and the bottom of the pyramid.

The idea of this example is to make clear that our depth perception is an actual perception, something that makes a difference to our experience, and that has nothing to do with thought or any intellectual understanding. We *think* we see depth, but our example is designed to show that we *know* depth as an experience, and that the experience of knowing the space of depth is a sheer quality. The distinction here is between the experience of colour sensation in the two dimensions of the visual field, and our additional, almost intangible experience of depth that seems to pull the colour into our perception of a third spatial dimension. We know this in a way that defies thought or description. Our example serves to highlight this perception by creating an

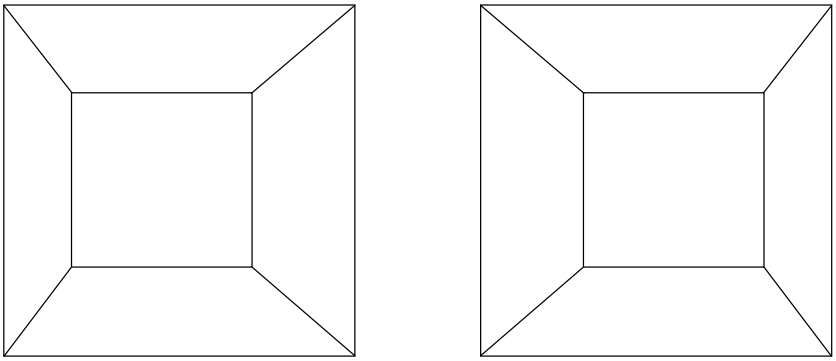

Fig. 4.1 Stereo fusion example: Place the image within about 20cm of your face and then try crossing your eyes. You may need to place a finger or a pencil between you and the image and focus on that while still remaining aware of the double images in the background to get started. Keep moving the images by controlling the degree to which your eyes are crossed. The aim is to get two images to overlap and then to focus your attention on fusing the lines into one image. If you succeed you will experience a sense of depth between the top and the bottom of a pyramid object. If you move your head slightly when the images are fused this can help accentuate the effect.

artificial contrast. However, it is important to see that this knowledge of the depth of space is present in all our normal perception of external objects.

Even without the effort involved in manipulating the eyes, we can experience our perception change when we view the well-known example of the Necker cube (see next page). Here our perception can flip between two possible interpretations of the drawing as a three dimensional cube, where either point A or point B is perceived as the bottom left corner of the upright face closest to the observer. This simple exercise gives a clear example of how perception determines our experience, of how we "see" the cube differently, and yet the sensations of the black lines on the white paper remain unchanged. The experience of this shift is exactly what illudes thought, and is exactly what is *not* expressed in these words. Thought will say "Yes, yes, I've seen all this before," but the aim is to stop thinking, and actually do it, as a conscious experience.

The Necker cube highlights a crucial, and generally unconsidered, aspect of perception. You could say that we have two possible interpretations of the drawing, and that each is equally likely. Hence, with a little nudge we can cause our interpretation to flip. But the point is that we actually *experience* the interpretation. It is not an interpretation of thought. We are not thinking the drawing is a cube in a certain orientation, we are *seeing* it as an experience.[10] You can check this. Just look at the drawing again and see that the experience of a particular orientation continues regardless of any thought you are having. We only employ our thought and personal will in the act of causing the flip. Once the flip has occurred, we remain in a settled

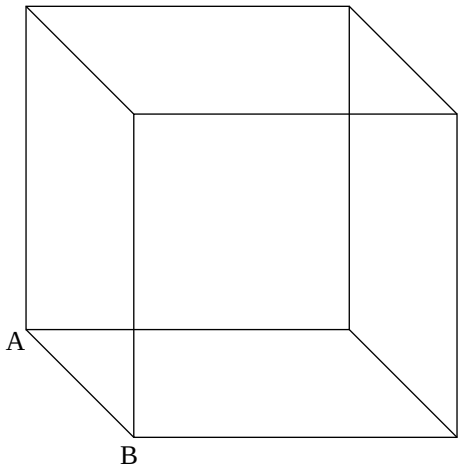

Fig. 4.2 The Necker cube: the diagram can be perceived as a cube with either point A or point B as the bottom left corner of the upright cube face closest to the observer.

perception. We are provided with a direct experience of the *meaning* of what we are seeing. We mean the drawing to be a cube with point A closest to us, we then mean it to be a cube with point B closest to us. With a little effort we can even mean and perceive the drawing to be a collection of lines on a piece of paper, and eliminate our perception of a cube altogether.

The Necker cube is generally understood on the basis that we are dealing with a drawing, or representation of a cube, so we know the drawing really exists and the cube is an illusion. Hence, we do not recognize the *same* power of perception producing our experience of the cube *and* our experience of the drawing, and of the world in which it appears. The deeper significance of the Necker cube is that it brings to our attention the basic activity of our perception in creating the meaning of the world around us. We need an artificial example because we are unable to see it in our normal perception, because we take our normal perception to define what is real. We do not see the world as a work of perception, as an infusion of meaning into sensory quality, we take it that the objects we see are really out there, that the meaning is *in* the object. But the Necker cube demonstrates, as a direct experience, that the meaning is *in* the perception. This is at the crux of Husserl's transcendental reduction. In his terminology we *intend* the objects of our experience. We do not create our perception by thinking that this is an object, that this is a table, that this is a chair. Our perception arrives ready made, with the meaning inherent in it. We do not see it at work, we experience it. The Necker cube, and examples like it, give us a glimpse of how perception *makes* what we experience, how, without the inherent meaning that perception gives us as a direct experience, we would not know of any external world whatsoever.

Even in everyday experience, we can sometimes see the same shift in perception that we have highlighted. For instance, we can *mean* a shape in the tree to be a bird, and we perceive it to be a bird. Then a breeze passes and the experience is transformed into that of a twig and a few leaves. We *interpret* the bird experience to be an illusion and we conclude there really are leaves and twigs. But the experience, the perception of the bird was actual. Our meaning it to be a bird, meant it was an experience of a bird, just like our experience of the orientation of the Necker cube. It's no use saying that we weren't looking hard enough. At the time of the experience, we were experiencing a bird. If we look harder the experience changes. That doesn't mean we didn't experience a bird. The point is, our experience of the leaves and twigs is informed in just the same way. We know there are leaves and twigs, because that meaning is in our perception. And the meaning literally changes what we see. Hence it was said that the indigenous people that first saw Columbus' ship in the Caribbean were at first unable to perceive more than a certain movement in the water.[11] There was no meaning in them that corresponded to an object like a giant ship with sails, hence no such perception was possible.

You may now be bristling with explanations about the connection between meaning in perception and the neurological operation of the physical brain. Obviously, you will say, perception is the work of the brain. We are not directly seeing things "out there," we are seeing the result of certain unconscious brain processes that are involved in synthesizing the information arriving from the retina, with information about our previous experience already stored in the brain. But we are not trying to *explain* experience in physical terms (we will address this question later). And we would not expect our observations, if true, to contradict the observations of neuroscience. For now we are simply characterizing experience *as it is*. We are noting that our perception is literally saturated with the experience of meaning. It is this very *quality* that we are indicating, how the very form of our experience is defined by the meaning we put on it. How it is not intellectual, we literally know it as a quality of experience. The aim is to actually get the idea, to register how *remarkable* this experience of meaning as perception is. And we cannot say that that this experience is an interpretation. For that would be to assume something else, another object, another something that our experience is an interpretation of. And *that* is one of the very assumptions we are suspending in deciding to look at experience for what it is, in itself.

Meaning and Truth

At the very root of our discussion, is the assertion that conscious experience is what it is, that it is *true*, that it is the *fact*. More generally, we would say that our knowledge of anything being true, *depends* on the verification of

conscious experience. In all our demonstrations, all our appeals to conscious experience, lies this idea that there is something in consciousness that is self-validating, that possesses a certainty that cannot be questioned. Not that you are certain that there is something out there *causing* your experience. But that you are certain of the experience itself. *That* certainty *is* the ground of truth, and the very essence of consciousness, its ability to *know* that it knows. This is so obvious that thought just jumps over it. There is almost nothing to register. Yet this nothing is the basis of any possible demonstration of truth. Even if we are to demonstrate an abstract truth of logic, we still have to resort to this same first-person experience of certainty.[12]

Consider the principle of contradiction, that something cannot simultaneously have a property p and not have property p, or that proposition p cannot be simultaneously true and not true. This principle is basic to the idea of logical proof. And yet quantum mechanics shows electro-magnetic radiation to have contradictory wave-like and particle-like properties, and posits quantum-level systems that behave as if there were multiple superposed states existing at the same time in the same space. At this level we do not reason that light does not exist by proving it has contradictory properties. We remain certain of our first-person experience of light. Instead we try and change our idea of what it means to exist. But this does not invalidate the logical and mathematical demonstrations that rely on the principle of contradiction. We know the principle with certainty, because it is inherent in our conscious experience. To make it clear, the principle of contradiction is directly demonstrated in experience by the knowledge that every conscious experience that we register is what it is, *and not something else*. So, for example, every perception we have of something being an object, is accompanied by the certainty that we are perceiving that object, that it is just that perception and no other. Returning to the Necker cube, when we perceive it in one orientation, then we have the certainty of it being in exactly that orientation, and then when we perceive it in the second orientation, we are certain it is in that orientation, and no other. We can *think* of the cube having two *potential* orientations, but we can only *experience* one orientation at any one time. And all perceptual experience shares this property: if we perceive something as something, we cannot simultaneously perceive it as something contradictory. This is a principle of our actual experience, a *form* of it, something that we cannot experience otherwise. So, *for us*, it is a necessary truth of our experience.

In order to see a necessary truth of experience, we have to do more than just experience the certainty of a particular experience. We have to generalize experience and we have to experience the certainty of that generalization. This ability to generalize from experience may first be seen as something achieved by thought, that we need to think about our experience in order to make a generalization. However, the fact is that perception already contains generalization. For what does it mean to perceive something as an object? It means that the various views, the various sensory modalities of the object

have *already* been generalized into the single perception of an object. Our ability to see the truth of the principle of contradiction rests on the same ability to generalize without thought. If thought is involved, there is no direct knowledge of certainty. We have joined together something that may or may not be true, and we are particularly vulnerable to having introduced a false step, or an unfounded belief.

The conscious experience of perception also demonstrates that generalization, i.e. the ability to categorize experience and come to an underlying understanding that unifies multiple, particular examples, is another *form* of our perception. We can theorize about the origin of this capacity to generalize. For example, it may be that we are learning, through experience, to perceive certain ideal forms that already lie behind experience. Or we could simply be learning to recognize underlying invariant patterns within experience. In either case, the fact is that we can *know* these underlying forms as direct perceptions that actually organize our experience. The Necker cube again provides a clear example. For, in our normal understanding of objects in the world, the drawing is *not* a cube. We bring the perception of the cube to the drawing, it is already *in* us. And we have no trouble recognizing that the cube is a cube in *both* orientations. We experience this with certainty, we do not perform a calculation to check that both orientations are in fact cubes, and then make the generalization. The spatiality of the cube is already there in our perception. We know it, it lies behind our ability to perceive the cubes in the first place. More generally, spatiality lies behind our ability to perceive a single object in different orientations, and our ability to perceive that two different experiences are both experiences of objects.

Once we see that two different experiences can fall in the same category, we have the basis of the abstract ideas of sets and numbers. Similarly, our direct perception of an object's spatiality gives us the general ideas of geometry. It is through these connections that the certainty of mathematical and logical demonstration is grounded in the certainty of conscious experience. We *know* what it means for something to be a member of a set: we experience this whenever we perceive the same object from different perspectives. We *know* that something is what it is, and not something else. We know this with certainty because our experience would not be what it is, if it were not there. We may come to know another form of experience, e.g. one where we can directly perceive the superposed states of an object having contradictory properties. But that would be a different perceptual world. And it is *this* world that we experience with certainty, not another world that we imagine. Even the form of our imagination is predicated on the basic forms of our experience. So we cannot imagine the actual *experience* of a superposed object. Perhaps we could picture a series of wispy semi-transparent images. But these would still be a reworking of our existing world of possible experience. To get the idea, try and imagine a completely new colour (i.e. *not* one mixed out of existing colours).

In demonstrating the perception of truth, we have jumped to the idea that we can experience meaning directly, without a sensuous perception to support it. This is more subtle than distinguishing thought from sensuous perception, because sensuous perception has a distinct quality of existence, i.e. it *persists* in a sensory dimension. But pure meaning, like the perception that a logical proposition is true, is much harder to distinguish from a thought, because a perception of pure meaning occurs in the same inner (i.e. non-sensuous) realm as thought. However, the distinction is there. To know any truth is a conscious experience, it is a perception, it is there "all of a piece." Whereas thought takes time. It puts one thing after another, it moves, it cannot be stopped and contemplated. The essential quality of the experience of truth as pure inner meaning, is firstly that it is known as a direct and complete perception, and secondly that this perception is known with direct certainty unconnected with any thought or justification. As Robert Allinson has already seen is his brilliant treatment of Descartes' Legacy, "... truths are perceived as certain because their very intelligibility derives from the truth of their content ... *But, it is not their certainty that makes them true; it is their truth that makes them certain*" (Allinson, 2001, p. 133). If you have followed the demonstrations in this chapter, you will already have perceived the truth in this way. For example, the truth that perception contains its own meaning. Although the meaning of a perception is experienced in an individual perception, the knowledge that this is true for all perception, can only be grasped non-sensuously, as a direct perception of truth.

Impersonal Experience

Before continuing further, we must first issue a warning: even if you have successfully grasped the ideas presented in the previous demonstrations, when you refer back to check and clarify these ideas in thought and memory, you are likely to draw a blank. This is because each idea can only be known and demonstrated as a conscious experience, *now*. It is no use referring to a memory of conscious experience in thought. That thought is exactly what conscious experience is *not*. As we have shown, thought and conscious experience are mutually exclusive states. So, unless you can directly confirm what is being said as an experience, your thought will tend to dismiss it, or think that what has been said is not clear. It will say there is nothing to get hold of, i.e. nothing to think about. And this is true. Instead of stating a series of propositions and giving the arguments for and against them, we have engaged in a series of demonstrations. The idea is that you come to know the self-certainty conscious experience, not to think about it.

Nevertheless, we have to examine what has been achieved. Our aim is to gain impersonal first-person access to the mind, so that we can study the mind *in itself* as qualitative experience. If we are to succeed in this, we have

to show that conscious experience, freed from thought, is fully impersonal. But, as everyone can confirm, perceptual abilities are *learnt*. This implies that our ability to perceive particular objects, as those objects, is based on our previous experience. For example, our experience of perceiving something as a chair is based on our previous experience of sitting, of having coordinated our bodies, of having learnt how to distinguish objects in the first place, etc. We can conceive that someone who has never been able to sit, and who has never observed anyone else sitting, would be unable to perceive a chair as a chair. They would have another perception of that object. So, the argument would go, perception is *personal*, it depends on our personal past, on our personal and cultural background. And what is true of perception, is true of conscious experience itself. We may know it with certainty, but all we know is our personal experience. In this view, what is truly impersonal is the world behind perception, that which is causing the perception. And via this route we arrive back at the third-person viewpoint of naturalistic science.

So what is wrong with this argument? It commits the basic error of all naturalistic science. It assumes the existence of an objective world is demonstrated by our perception. That because we experience the perception of objects, this means there really are objects "out there" causing our perception. Even if this is not assumed as a certain truth, it is assumed as the only plausible explanation. In this way the certainty of conscious experience is transformed into the certainty that the objects of our perception "really exist" as entities that are distinct from our perception of them. However, we can attach no certainty to the separate existence of a real world of objects, because we can only know of such a world through the medium of conscious experience. As we have shown, there is no bridge of certain knowledge that can lead from the certainty of experience to the certainty of a separate objective world. The only bridge is a bridge of belief. And, as should be clear, a belief is *personal*. Hence, you believe there is a separate objective world, and I believe it is "all in the mind." Neither of us know, we are personal, we are believers, we have left the certainty of experience behind.

But how do we answer the argument that conscious experience, with its dependence on a personal past, is also personal? Are we to conclude that we cannot transcend our personal viewpoint? To answer this we have to again recognize that conscious experience is self-certain, that it contains its own warrant of validity. So we *know* that any conscious experience happening now, is that experience and no other. The question is, is there anything personal in that pure act of knowing? And the answer is no. Whether or not the particular perception you are having now has been determined by your past experience, you are still not personally involved in the act of pure conscious perception. If you perceive an object as a chair, it is in exactly that way that you perceive it, with arms, with a place to sit, and in no other. It is already present to you as the chair. You did not personally think or decide it was a chair. You did not make the colours, the shape, the orientation of the

chair. This was done for you. *You were not personally involved.* That is what it means for something to be impersonal: no involvement of the person.

One immediate objection is to say that we *are* involved in the perception of the chair, but we are not *conscious* of this involvement. That the creation and categorization of the experience happens in a series of unconscious brain processes, and hence that our perception is completely coloured and determined by these processes. Firstly, I trust it is clear that if a brain process is unconscious, then it is beyond our power to influence. Hence, it is impersonal, by definition. Secondly, to say that these unconscious processes influence or colour our perception is to assume that our perception is really of some external chair. Whereas, according to neuroscience, our perception *is* our brain process ("there is nothing else"). So clearly the brain process associated with our perception of an object cannot colour that perception, if it *is* that perception. We therefore have no argument with the neuroscientific picture, i.e. that impersonal perception is our consciousness of the activity of certain brain processes over which we have no volitional control. But we should be clear that this is simply a translation into third-person terms of the first-person experience of perception. And we should also be clear that this does not assume that these brain processes cause our perception. For the activity of a system of physical neurons, however complex, gives no hint that any conscious, qualitative experience should result. And it is this conscious experience, the quality of it, the shades of colour of each object, the knowing of the object as an experience of spatiality, the very knowing of the knowing, that we are indicating as impersonal. Not the putative existence of a physical brain.

Notes

[8]Husserl's most abbreviated introduction to phenomenology was given in the Encyclopedia Britannica article, where he defines the transcendental reduction as follows: "... the objectives of a transcendental philosophy require a broadened and fully universal phenomenological reduction (the transcendental reduction) that does justice to the universality of the problem and practices an "epoché" regarding the whole world of experience and regarding all the positive cognition and sciences that rest on it, transforming them all into phenomena – transcendental phenomena. [...] Instead of a reduction merely to purely psychic subjectivity (the pure minds of human beings in the world), we get a reduction to transcendental subjectivity by means of a methodical epoché regarding the real world as such and even regarding all ideal objectivities as well (the "world" of number and such like). What remains in validity is exclusively the *universum* of "transcendentally pure" subjectivity and, enclosed within it, all the actual and possible "phenomena" of objectivities, all modes of appearance and modes of consciousness that pertain to such objectivities, and so forth. [...] The transcendental reduction opens up, in fact, a completely new kind of experience that can be systematically pursued: transcendental experience. Through the transcendental reduction, *absolute* subjectivity, which functions everywhere in hiddenness, is brought to light along with its whole transcendental life, in whose intentional syntheses

all real and ideal objects, with their positive existential validity, are constituted" (Husserl, 1927/1997, pp. 16-18).

[9]Schopenhauer was acutely aware of the distinction between personal and impersonal observation that we are introducing in this work. In an anticipation of the phenomenological reduction and our own exploration of observing without thinking, Schopenhauer was already aware that pure perception holds the key to impersonal observation. Consider the following passage: "Thus we no longer consider the where, the when, the why, the whither in things, but simply and solely the *what*. Further, we do not let abstract thought, the concepts of reason, take possession of our consciousness, but, instead of all this, devote the whole power of our mind to perception, sink ourselves completely therein, and let our whole consciousness be filled by the calm contemplation of the natural object actually present, whether it be a landscape, a tree, a rock, a crag, a building, or anything else. We *lose* ourselves entirely in this object, to use a pregnant expression; in other words we forget our individuality, our will, and continue to exist only as pure subject, as clear mirror of the object, so that it is as though the object alone existed without anyone to perceive it, and thus we are no longer able to separate the perceiver from the perception, but the two have become one, since the entire consciousness is filled and occupied by a single image of perception" (Schopenhauer, 1859/1966, Vol. 1, pp. 178-179).

[10]Wittgenstein also used a Necker cube example in section 5.5423 of the Tractatus. In the accompanying text he says: "To perceive a complex means to perceive that its constituents are related to one another in such and such a way. This no doubt explains why there are two possible ways of seeing the figure as a cube; and all similar phenomena. For we really see two different facts" (Wittgenstein, 1921/2001, p. 65). Here Wittgenstein is making the point that we *perceive* relationships as facts, not just lines and shapes

[11]This story was related in the movie *What the Bleep Do We Know!?* directed by William Arntz from Lord of the Wind Films.

[12]Robert Allinson gives an alternative exposition of the self-certainty of the experience of truth using a simple arithmetic example in his book *Space, Time and the Ethical Foundations* (2002, Chap. 1).

Chapter 5
The Missing Explanation

Having accepted conscious experience as our ground, we now have to admit the self-evident experience of this ground *existing*. When we grant an independent physical existence to the objects of experience, we miss the primary existence of experience, *as experience*. That, for us, the things of the world do not exist as electro-magnetic radiation, atoms and molecules, but as colours, as touch-feeling, as sound, etc. That the primary and certain existence is literally the existence of *sense*, not matter. But, as we have shown, we do not experience sensation, as sensation. We experience it as *perception*. And while perception can be analyzed into components of sense and of perceptual meaning, we cannot experience the sensory component independently. We at least need sensation to be expressed in some form of spatio-temporal field. In fact, experience is inconceivable without temporal duration. This needs to be made clear. Despite the universal acknowledgement of Immanuel Kant's contribution to philosophy, his fundamental insight into the *a priori* forms of experience has still not been generally understood or accepted.[13] For while we can reason that we learn our understanding of external time from experience, experience *itself*, and hence all possibility of learning anything from experience, is only made possible by the fact that our experience *endures*. This enduring of experience is the essence of time and consciousness, i.e. it is only because something endures as an experience that we can become conscious of it.

Again, to see this, we actually have to stop and examine experience. A clear example is the experience of sound. If you consider any sound in the environment, you will notice that the immediate past of the sound endures in the present, *as an experience*. You literally hear the past of the sound. It is only through this enduring of the immediate past that we can distinguish the sound as a single perception. If we heard only the present instant of the sound, we would not register any enduring sound at all, for an instant has no duration. Note also that our experience of the persistence of sound in the present is quite distinct from any memory of sound. We literally hear it, the

perception emerges from the temporal field of sound as a distinct knowledge, much as an object emerges from a field of space.[14]

However, our experience of the endurance of the objects in the visual field is different. We do not need the colour to be extended in a field of past colour, because colour is already extended in two-dimensions of space. Like sound appearing in the form of its immediate past extended in the present, so colour appears in the form of a two-dimensional extension in space. We know the endurance of the objects in space by our perception of change or movement. These perceptions are further examples of pure knowledge appearing directly as experience. For, if you attend, you will observe that we do not actually *see* movement by extending the past experience of colour into the present. We only see the present position of a moving object, yet we *know* it is moving. Not only that, we know how fast it is moving. The perception of this is so strong we think we do see the past trajectory of the moving object. But check again. Try moving your hand across the visual field. As you focus on your hand, you will see something like the still shot of a camera. The sense of movement comes from the hand's traversal across the background. In turn this is based on the appearance and disappearance of visual information in the background scene, i.e. taking the hand to be a perceived object, rather than a sensation of colour, we would say the movement of the hand is causing some parts of the background to disappear and other parts to appear.[15] The knowledge that something has appeared or disappeared implies we do retain information about the immediate past of our visual experience. But we do not *see* this information. It is retained and transformed into a direct perception or sense of movement that is quite distinct from an experience of the appearance and disappearance of the background scene. As with our perception of depth, our seeing of movement is a perception of the *knowledge* of movement, and not something known directly as a sensation. So, the form of our visual perception contains multiple elements: we have the two dimensional sensation of a field of colour, in which we perceive movement and depth that unite to form the perception of persisting objects.

It is of the utmost importance to see that there are pre-given *forms* of our experience. We do not learn to extend sound from the past into the present. Likewise, we do not learn to extend colour in two dimensions of space. These are examples of the given forms of our various sensory modalities. And then, when we do develop our perceptual abilities, such as knowing depth and movement in the visual field, this knowledge is already present in the underlying spatio-temporal form of *all* experience. For the very possibility of experience is predicated on our ability to distinguish one thing from another (space) and to know that something endures (time). Our perception of depth and movement in the visual field uses our fundamental knowledge of space and duration and projects it into the sensation of colour. If we look at any sense like this, we can see it is a combination of a basic sensory quality (e.g. colour) *and* a basic form (e.g. the two-dimensional field of colour). Perception then *animates* the sense with an experiential knowledge of what is perceived.

The usual discussions of consciousness and qualia entirely miss these forms of sensory modality. Yet the senses are the basic building blocks out of which our perceptions of an independent world are synthesized. They are the *palette* of experience.

And while each sense has its own form, we have the additional unified experience of consciousness itself. Here, the distinct modalities of all the senses, our entire perception of having a body in a world, are all experienced *as one thing*. A colour is a colour. It is completely distinct from a sound. But we connect these modalities into the unified experience of a single reality. When we are intent on understanding the world, as the world, we do not recognize this continuous synthesis of experience. But if we look more closely, we are confronted with a unified field of consciousness. It is in this field that the basic sense of our own existence and the existence of the world is known. We could say it is a field of space and time. But we should not confuse this with the space and time of the world. That is an *objective* space and time measured by rulers and clocks. We mean the actual experience of space and time, as a sheer knowledge of the present moment.[16]

Within the present moment, space is the extraordinary glue that allows the disparate elements of our experience to co-exist. It is the means by which anything can be a thing, i.e. separate from some other thing, or from a background. Space, in this sense, is the absence of the things it separates. The best way to experience this is to shut your eyes. This eliminates the generally overpowering experience of the space of the visual field. Now look at your experience of having a body, of the tingling sensation in your hands and feet, of any aches or discomfort, anything at all that you can distinguish. Do you see how these sensations are laid out in a space of bodily sensation? Now widen your perception to include any sounds that may be occurring. Each sound will have a direction. It will appear in the same space as the sensation of your body. And within that space, the sound will have its own sound space, where it is extended from its own past.

The point to grasp is that it is the *same* space in which all the sensory modalities exist, even though they have their own individual spaces. All is united and connected in space. And yet space itself is nothing. It is a sheer absence or separation of sense. We can call it a field or structure. But it is not simply a field of space. For all experience is enduring in this field. The old is elapsing and the new is entering. And not in a stop and start fashion. There is a sense of flow, the sense of a *rate* of flow. How can we describe this? That there is a rate of passage of experience? There is nothing in the world to refer to, because all experience of change refers to this flow. And although the physical structure of our nervous system can explain *what* we can experience, how can we explain this feeling of experience elapsing at a certain rate? Why does a second *feel* this long? Couldn't a minute feel as long and still contain exactly the same content of experience? This knowledge of the flow of time is a pure quality. It is the foundation of the sense of our own existence. If experience did not flow in this way, decaying away into the past,

it would be unknowable. We need the immediate past to remain present to us long enough for us to *know* it. And this knowing of experience, as we have stressed, is the essence of what it means to be conscious.

So we can see that this field of space and duration, in which all experience flows and is known, that contains all our sensory modalities, actually *is* our consciousness of experience. We cannot pull it apart, except in thought. Space is always known temporally. If it didn't endure, we couldn't know it. And this pure endurance, this pure temporality has to have something *in* it, that is distinct from something else, in order that we can know anything. So there has to be space as the basic form of distinction for there to be conscious experience in the first place. To think that we learn what space and time are from our experience of interacting with the world, is to have failed to observe experience. Without these basic forms of separation and duration, there is no experience, and hence no world can be known.

Looking more closely at the duration and flowing of experience,[17] we can see that the whole process is produced and defined by the idea of the present moment. There can be no rate of flow unless the flowing is defined by something that is *not* flowing, i.e. if all flowed at the same rate, it would be indistinguishable from being stationary, and if all flowed at different rates, we would not know what it is to be stationary. Even though we can stretch out experience, and prolong the past into the present, this all occurs *in* the present. And it is this present that *does not move*. So we could not say that the present is actually a part of any linear movement of time. We only see the present this way when we think about the past. The fact is that we never leave the present. Our whole experience occurs in this moment. And as far as experience is concerned, to be present is to exist. Even the idea of a linear flow of time assumes a past and future that can exist outside the present. But as all experience is in the present, we can never demonstrate the certain existence of the past and future. Like the world outside experience, we can only ever *think* about them.

The best way to describe the present is to say it is the *presence* of consciousness. It is the presence of *that which knows*. It is this presence that self-evidently defines what *is* present, and hence what, for us, has certain existence. And what certainly exists is our conscious experience of the present. This experience contains a perceptual synthesis of sensory modalities, unified in one spatio-temporal field. We generally think of this perceptual synthesis under two headings: myself and the world. But the crucial point is that myself and the world *exist* as perceptions. These are the actual facts, that anyone can derive from an impersonal observation of their experience. It is from here that we have to examine the idea that all we have outlined as experience has been caused by the activity of physical neurons in a physical brain existing in an independent physical world.

The World

One of the points that Husserl was trying to get across with the transcendental reduction is that the existence of the physical world, as an entity independent of our experience of it, is not a *fact* in the sense that we are defining a fact here, i.e. something that is self-evidently certain in conscious experience. What is the fact is our conscious experience of objects in space and time, including the inner and outer aspects of our own body. Long before the advent of modern science, the human race was making the distinction between the private inner world of thoughts and feelings and the outer public world of objects. This distinction is clearly made on the basis of whether something is observable to another. Hence, we can hide our true feelings, we can have thoughts that no one else can understand, whereas we all know that the table in front of us is available for others to experience much as we do. From this we easily get the concept of an independently existing, objective table, and then, by considering all possible objects, we get the concept of an independently existing objective world. Otherwise, how could it be the case that we all appear to be experiencing the same external objects?

Now this is an old argument. Virtually all modern philosophers of mind accept the independent existence of the external world as something given. While they are aware of idealism and sceptical arguments, they consider this all to be "old hat," something maybe to be covered in an undergraduate course, but no longer relevant to the real business of philosophy, e.g. showing how the brain causes the mind. However, the point we are now making, is that in this one move of accepting, without question, the independent existence of the external world, modern philosophy of mind has cut itself off from the fact. The fact, that is, of conscious experience. Science, physical, naturalistic science has not done this. Despite the scientist's belief in the existence of the physical world, the *final* adjudicator of a scientific theory is the experiential fact, i.e. first-person observation. In the case of contemporary philosophy of mind, the final adjudicator is the unquestioned belief in the real, independent, existence of the physical world. This belief is mistakenly connected to the idea of being scientific. But philosophy of mind is not scientific. There is no fact of the matter in it. There is no experiential observation that could ever finally unseat the materialist, or the dualist. Each position is endlessly revisable, because it is ultimately founded on a belief in a concept.

The *fact* of the external world is just our conscious experience of it. There is no test or experiment we can ever perform that would *factually* confirm the existence of that world, independently of our experience. This is quite simply true, because we can only ever be absolutely, factually, certain about our conscious experience of the world. We have no other access to it. We try and obtain certainty by imagining an ideal third party observer. But there is no ideal third party observer, the only observation possible is in first-person subjective experience.

So in what *factual* sense does the physical world *exist*? It exists *conceptually*. This is just a necessary truth that follows from our definition of a fact. Our belief that the world must exist independently and outside of our experience, is a belief in a concept, a concept of something that, in principle, we can never consciously experience. It is, therefore, an ungrounded concept. Let us go back to our conscious experience of an object. The *fact* of that experience is that it is what it is. Your experience of the colour of the object, is your experience of the colour of the object. In this case, the words do not refer to a concept, they refer to an experience. Therefore the statement is grounded in conscious experience. To what experience can the statement, "there exists a physical world independent of experience" be grounded? This is not to say that the physical world does not exist independently of experience. It is just to say that the question of its existence cannot be answered factually. Whereas there are many other questions that *can* be answered factually.

Nevertheless, the scientific and mainstream philosophical investigation remains rooted in a "common sense" belief in the existence of a physical world. Consequently, the evidence of conscious experience, as we have demonstrated it, remains outside the domain of allowable scientific enquiry. Only once it has been turned into third-party, objective, measurable observation can it be admitted. In this form, the original experiential reality has become a concept.

The Mind and the Brain

Hence, when we consider the mind in our scientific and philosophical reasoning, what we actually have is the concept of mind, the concept of conscious experience, the concept of perception, the concept of meaning, etc. Everything has been reduced to a conceptual form, suitable for inclusion into logical propositions, and ready to enter the arena of logical argumentation. In short, the whole domain has been transformed into something that can now be *thought* without further reference to the ground of conscious experience. So when we assert that the physical brain causes the experience of mind, we are really expressing the *thought* that our concept of the brain and our concept of the mind have the right properties to qualify as terms in our concept of cause and effect. This is the fact of the thought, even though the thinker may believe the thought refers to a real brain and a real mind. And this is not to say that such thinking is invalid. All science proceeds in this way, putting forward theoretical propositions, seeking out confirming or contradictory evidence, etc. And this procedure makes sense for naturalistic science, for a scientist cannot continually refer to direct experience, i.e. by endlessly reproducing the same experiments. It would take too much time. But in the case of the brain causing the mind we are in a different situation. For us it is more than just a concept. We can directly and immediately experience the meaning of one side of the relationship. So, while the proposition appears to

have the usual form of a cause and effect relationship, this is not the case. For when we speak of something causing the mind, we generally forget that it is the mind itself that has formed the concepts in the proposition. In all other cause and effect relationships, we are proposing that one object or event of experience causes another object or event of experience. But in the present case, we are asking an *object* of experience to be the cause of *experience itself.* While this observation does not decide any position, it should make us wary of using analogies to other examples of cause and effect. For instance, many philosophers have tried to argue that the brain producing conscious experience is analogous to a physical system exhibiting a particular property, e.g. a body of water supporting a wave. But, as we discussed in Chapter 2, all such examples remain in the domain of effects that can be scientifically observed and measured, i.e. they remain in the physical. And a physical analogy cannot capture conscious experience. We do not need such an analogy. We have the experience already at hand.

Materialism and Dualism

There are two main schools of thought amongst those who maintain the physical brain is the cause of mental experience. Firstly, there are the materialists. On this view, all conscious experience can be reduced to, or shown to be identical to the physical processes that are observed in the physical brain. The most popular view is that of functionalism. Functionalism maintains it is the actual function of the brain process that is identical to the experience, not any particular state of the neurons in the brain. Hence, a computer program performing the same functions as a human brain, would also possess the same experience. It is then maintained that there is nothing more to explain. That a full and complete understanding of the functional operation of the human brain, would automatically provide us with a full and complete understanding of experience.

In effect, materialism denies that there is anything like conscious experience as we have demonstrated it. So the experience of the quality of colour just *is* the particular process going on in your brain while you are having the experience. I trust it is clear that you cannot refute such a view without referring someone to their actual conscious experience. And if a person is denying there is such a thing as conscious experience, then, of course, you cannot refer them to that very experience. So really, there is no retort, there is no demonstration that would ever be acceptable. One can only withdraw and ponder how someone could arrive at a position that denies conscious experience. And the obvious answer is that the idea of materialism has been arrived at on the basis of thought alone. That the materialist has failed to connect or ground his or her thought in conscious experience. As we have shown, a person who is thinking is not conscious of their experience. Hence

it is quite understandable that thought can reach a view that does not include the fact of conscious experience. One actually has to stop thinking to know experience consciously. It is significant to see that a full *experiential* understanding of the distinction between thought and conscious experience both explains how a belief in materialism is possible, and demonstrates the absurdity of such a belief.

The second group of philosophers that see the physical brain as the cause of experience are the dualists.[18] Dualism allows that there is *something more* to our mental experience than can be explained by physical processes alone. Hence the existence of a physical world *and* a world of consciousness is proposed. The world of consciousness is then used to explain the existence of our qualitative, conscious experience. Looking at the evolution of the species, a contemporary dualist would maintain that there was something in the physical world that was capable of producing consciousness. Perhaps it was something potential, but latent in matter. Then, with the evolution of complex brains, the phenomenon of conscious experience naturally emerged in parallel. On this view, conscious experience is entirely dependent on the existence of physical systems to support and provide the content of the experience. Opinions differ as to whether consciousness itself can have any causative effect on matter, but most would agree that the activity of the brain does cause experience, although consciousness adds the qualitative content to that experience.

The main problem for dualism is to explain how physical matter can have any effect on consciousness. We have two entirely separate domains, and the seemingly obvious fact that a physical cause can only produce a physical effect. If a physical cause could effect consciousness, then the two domains must overlap in some way. But how can two discontinuous ideas like mind and matter actually overlap? It is hard to see what this could mean. And if consciousness enters the physical, then it looks like we must return to some form of materialism.

Nevertheless, whereas materialism can be dismissed for failing to have understood or addressed the issue of conscious experience, dualism is still viable, despite the problem of causation. For we can simply maintain that although we cannot explain this causation and how it operates, we can simply state that *it is the case*. And we have the precedent that all scientific explanation finally grounds out in some principle that is accepted as being a cause from which we can go no further. Perhaps this correspondence between the physical brain and our experience is just such an ultimate relationship. Something from which we can ask no further questions.

Lost in Translation

Although the preceding section has summarized an extraordinary volume of argument and literature, our conclusion is the same, whether we look in detail or not. Firstly, materialism has failed to understand the issue. Instead of explaining the existence of conscious experience, it is intent on explaining it away. Secondly, although dualism has understood the issue, instead of providing an explanation, it has created a concept of consciousness that allows the scientific idea of the existence of a physical world to survive unaltered. Our aim now is to show that this kind of dualism, far from answering the question of the cause of conscious experience, simply moves it out of sight.

The situation can be stated quite simply. Firstly we have a physical system: the human brain. The idea of the brain causing the mind, is that the physical processes occurring in this physical system act as causes for our experience. We must be careful not to imagine the physical brain as somehow "knowing" that it exists in a physical space. This brings in *our* experience. Once again, the proposed causes of experience are the *processes* occurring in the brain. This must mean that the spatial layout of these processes is irrelevant. For example, if we were to rearrange the cells of the retina, but still organize it in such a way that the same information was received by the same cells, then we would expect to experience the same visual scene. Similarly, if we were able to move the physical locations of neurons in the brain, while maintaining the same connections, we would expect our experience to remain unchanged. The crucial point in proposing that brain processes are the cause of experience, is that it places the whole causative responsibility on the way the neurons are connected, not on their actual spatial position. This is important to grasp, because the plausibility of the proposal that the brain causes the mind, at least in part, rests on a naive picture of the activity of the brain being projected into another medium that somehow hovers around or inside the brain. So we think there is no problem associated with our being able to see the two dimensions of the visual field on the retina. But clearly, the activity of the cells in the retina is to communicate information via the optic nerve to the visual cortex of the brain. All that matters here are the *logical* connections. That A is connected to B, and B is connected to C, and so on, until finally some X is connected to a Y that contributes to a motor behaviour in the body. It is the logical arrangement of these connections that allows the system to function. So long as the right sensory inputs are connected to the right motor system outputs, then our brain is *functioning*. It has no possible access to a knowledge of its own spatial arrangement in any objective space, i.e. the brain does not see itself, and does not need to.

So how can a process of information transmission, passing through a series of logical connections, produce our experience of a mind? We must remember that the brain as a physical process *does* explain our physical behaviour. There is no problem there. But we are asking how a particular process of neural excitation in one part of the brain can act as the cause of a visual

experience, and how another can act as the cause of hearing something. The point here is to actually see and understand the magnitude of the problem. In fact, just seeing the problem is enough. For this is where dualism takes its mighty leap. By proposing the existence of consciousness, it thinks it has answered the question of the brain causing the mind. But the question is, *how* is it achieved. What sort of consciousness is it that can "read off" a brain state directly into experience. What capabilities would it need?

Clearly it would need to know everything happening in the brain that is connected to conscious experience, down to the finest details of each physical process. But that is no problem. That is the nature of consciousness, i.e. to be conscious *of* something. If we imagine such a consciousness, hovering in the brain, with its own spatio-temporal field of experience, we can picture something like the sensation of billions of pulses moving in patterns. It would be totally unlike our experience of the senses. And to experience these neural pulses would only require *one* sensory modality, for a pulse is just a pulse. Its only role in the physical economy of the brain is the transmission of information.

However, experience shows consciousness has access to many different sensory modalities. Even before considering the connection of these modalities to the activity of the brain, we have to ask about their origin. Are we to say they reside in consciousness? For I trust it is clear that our knowledge of the quality of colour is an actual knowledge, and that it cannot reside in the physical brain. For all that resides in the brain are physical processes. It is to explain such experiences as the quality of colour that we have postulated consciousness in the first place. And colour is a knowledge. We cannot encode as information any colour quality. Although we can describe it as something else, as a wavelength of light, a certain process in the brain, we can only know it through conscious experience. And colour qualities are not arbitrary. We do not make them up. They are part of the pre-given palette of experience. As we mentioned in the last chapter, for us the colours are fixed, we can only mix the existing colours, we cannot experience a completely new one. So where does the knowledge of the quality of colour reside? From where does the newborn child obtain its ability to experience colour and all the other modalities? As the physical brain cannot encode this as information, we must conclude that knowledge of colour resides in some "other place", and that consciousness not only has access to the physical brain, but also access to, or contains, this other place of knowledge of the sensory qualities.

The job is then to connect this knowledge of the sensory modalities to the activity of the brain to produce our experience in the pre-existing field of consciousness of the present. It is this connection that poses the greatest problem. For how is consciousness to know that this particular pattern of neural excitation is to cause this particular experience? Are we to assume that particular neurons cause a particular quality of experience? That the quality is "built-in" to the neuron as some yet to be discovered physical property? This already goes against our current understanding of the brain,

where we see, e.g. in cases of brain damage, that different parts of the brain can take on new roles. Do these neurons take on new physical characteristics that flag them as vision neurons, etc.? This seems unlikely. Especially when we consider perception, rather than an isolated experience of sensation. For the perception of an object involves billions of neurons, neurons that will be reused in other perceptions. This draws us to conclude that our experience is defined by the abstract pattern of the excitation, not by any physical characteristics of the neurons involved. Therefore we are forced to say that consciousness can "read" these patterns, that it not only knows the sensory modalities themselves, but it understands the language of the brain and can translate neural patterns into a perception. If you consider your perception of an object, this is a simply staggering feat. Firstly we are considering that consciousness knows all about the functioning of the visual cortex, i.e. it knows information in the visual cortex refers to the perception of shape and colour; it knows how each micro-system refers to edge detection, movement detection, etc.; it knows how all this information is synthesized in a visual field existing in consciousness (not in the brain, remember the brain knows nothing of space). How each colour is correctly identified. How this process continues on up, how the excitation of the visual cortex leads to a cascade of associated neural activity that is translated as our knowledge of the perception, that this is an object, that it is a person, that it is my grandmother. At every level, consciousness has to take an entirely syntactic, physical system and translate each piece of information into another dimension of sense and perceptual experience.

Are we to assume this entire process of translation happens automatically? That it is somehow built-in to the structure of the universe that a brain-reading consciousness is always present, waiting for physical processes of the required complexity to appear? And what of the existence of the sensory modalities. Did consciousness always have the idea of vision and colour within itself? Or did it create the colours as the species evolved? If the colours were created, then how? Out of what? Was there a natural selection of sensory modalities, with creatures who could only smell through their eyes being eaten by their sighted cousins? Surely not, for we would expect creatures with the same physical structures in their brains to exhibit the same behaviours, regardless of the sensory qualities experienced. So how could the sensory modalities have evolved? If we fully consider the extraordinary achievement we are ascribing to consciousness, in turning neural pulses into experience, we wonder why consciousness has limited itself to such an obscure and difficult task. For surely something that can take a physical object, like the brain, and "from the inside" so to speak, without any direct knowledge of an external world, produce an experience of the world, surely such a phenomenon does not need a brain? If it can read a brain like this, why not read the world directly? Why remain attached or fixated on a brain?

Overall, we can see the dualist is finally performing the same leap as the materialist. For we cannot explain it further. We have to say that the physical

excitation of the brain just becomes experience. There is no real difference between saying this and saying that experience *is* the physical excitation of the brain. The dualist simply adds the ingredient of consciousness to explain how the leap is achieved. But it is the same gap. What have we gained by adding consciousness to the picture? Does consciousness have a book where it looks up each neural state and then "turns on" the correct experience? We cannot say. We have not provided any better explanation than the materialist, we have just covered our ignorance with the *word* consciousness.

At the end of the day, dualism has not demonstrated how the brain causes the mind. So we are left facing the same question. How can a physical process, something entirely based on the idea of physical cause and effect, of one physical interaction causing another physical interaction, become the cause of something that is self-evidently not physical, i.e. conscious experience? The two basic answers of contemporary philosophy of mind are either 1) Physical brain processes do not cause conscious experience, because conscious experience does not exist, or 2) Physical brain processes do cause conscious experience because they just do. Behind all the literature, these are the basic positions. The materialist may argue that conscious experience is not denied, it is just identical to, or the same as, the corresponding brain process. But if we consider conscious experience as we have demonstrated it, then such a statement becomes incoherent.[19]

Notes

[13]The basic insight of Kant's philosophy was that space and time are not entities that we learn on the basis of our experience, but pre-existent *forms* of our experience. That this insight is still not generally understood or accepted is perhaps one of the great tragedies of modern philosophy. For to accept Kant does not mean that one rejects the idea that we learn to perceive objects in space and time, or that we learn depth perception, or the spatial layout of our own bodies. To think in this way misses the point. We need the pre-existent forms of space and time, in order to learn to organize our experience *within* these forms. This cannot be demonstrated by concepts alone. It can only be fully verified by reference to one's own experience. It requires us to step outside the realm of thought and actually grasp as an experiential knowledge the nature of space and time *independently* of our experience of objects existing outside our bodies in an external space and time. Although Kant is famous for his obscurity in other areas, he was extremely clear on this. For example, consider the following excerpt from the Transcendental Aesthetic: "Space is not an empirical concept that has been drawn from outer experiences. For in order for certain sensations to be related to something outside me (i.e., to something in another place in space from that in which I find myself), thus in order for me to represent them as outside one another, thus not merely as different but as in different places, the representation of space must already be their ground. Thus the representation of space cannot be obtained from the relations of outer appearance through experience, but this outer experience is itself first possible only through this representation" (Kant, 1781/1998, pp. 157-158).

[14]For a more detailed discussion of the perception of sound in time see (Husserl, 1964).

[15]The connection between the perception of movement and the occlusion and disocclusion of surfaces in the visual field is based on the pioneering work of the psychologist J.J. Gibson (Gibson, 1986).

[16]The idea of knowing the present moment as one unified experience raises an issue that cuts to the heart of our enquiry. That is the problem of the attention. Until now, in the main text, you have been asked to follow particular instructions, and to direct your attention from one aspect of experience to another. The idea has been to get a glimpse of the pure quality of experience, of colour, of shape, of the knowledge of perception, and to get the idea of thought as an activity, and as a distraction from conscious observation. But you have still been following the author's *personal* instructions. I have decided what aspects of experience to look at. I have decided what to emphasize. Even given that the actual experiences we have been investigating are self-evident and verifiable, you are only obtaining a partial, and fragmentary knowledge. And the problem does not go away if you begin your own investigation. For your investigation will also be personal. You will notice what *personally* interests you. The question still remains, how are we to grasp experience *in its entirety?*

To achieve this, as an actual reality, requires the *giving up* of the direction of the attention. This is a fundamental surrender of the self that *thinks* it directs your life. Even when there is no obvious experience of thought, the self can be present as this experience of intention, or will. To completely detach from thinking, also means to detach from this intention. The direction of the attention involves a basic contraction, that focusses conscious awareness on a particular aspect of experience. The idea, in knowing experience as a whole, is to relax this centre of focus, and to pull back and detach from the intention to look at anything. This produces a widening of the attention, which dissolves the distinction between the foreground of conscious attention and the background of awareness. The connection to a personal memory also recedes, as does the motivation towards any particular action, and the experience of a single, unified field of consciousness begins to emerge. In this way it becomes possible to know experience *as a whole*, without thought, and without concentrating the attention in one particular area.

Unfortunately, a relaxation of attention often results in the observer drifting off into thought, or even sleep. You will find that there are forces within you that do not want to stop thinking, that are not relaxed, that would rather do something else. If you are disturbed about something, the urge to think about it will be hard to resist, and if you resist you are employing force, and so not relaxing the attention. You can enter into a strange world of trying to give up thought, failing, thinking again, and getting more and more tense as a result. It is beyond the scope of our discussion to explain how these problems can be resolved. It requires serious dedication and practice. But it is nevertheless extremely relevant to the impersonal investigation of the mind that you are able to reliably enter into a conscious, but unfocussed, thought-free state. This means you will probably have to take some action and start improving your observational apparatus. The "New Age" has produced a plethora of techniques designed to still the mind, and reveal inner realities. However, I suggest you treat any mind-stilling technique with extreme care. It is important to avoid methods that involve accepting a belief in something that cannot be directly demonstrated, or that depend on imagery, music, or any external device. The idea is simply to withdraw from the activity of thinking. The most profound and direct route I have found is through the teaching of Barry Long. His book *Meditation, A Foundation Course* (1995) provides clear and explicit guidance on how to master the thinking process, and I commend it to anyone wishing to take this philosophy seriously.

[17]The recognition that time is experienced as a duration that flows comes from the work of Henri Bergson. This is expressed with extreme clarity in the following extract from *Duration and Simultaneity*: "There is no doubt but that for us time is at first identical with the continuity of our inner life. What is this continuity? That of a flow or passage, but a self-sufficient flow or passage, the flow not implying a thing that flows, and the passing not presupposing states through which we pass; the *thing* and the *state* are only artificially

taken snapshots of the transition; and this transition, all that is naturally experienced, is duration itself. It is memory, but not personal memory, external to what it retains, distinct from a past whose preservation it assures; it is a memory within change itself, a memory that prolongs the before into the after, keeping them from being mere snapshots and appearing and disappearing in a present ceaselessly reborn. A melody to which we listen with our eyes closed, heeding it alone, comes close to coinciding with this time which is the very fluidity of our inner life; but it still has too many qualities, too much definition, and we must first efface the difference among the sounds, then do away with the distinctive features of sound itself, retaining of it only the continuation of what precedes into what follows and the uninterrupted transition, multiplicity without divisibility and succession without separation, in order finally to rediscover basic time. Such is immediately perceived duration, without which we would have no idea of time" (Bergson, 1922/1999, p. 30).

[18]Probably the most well-known of contemporary dualists is David Chalmers. His book, *The Conscious Mind* (1996), did much to bring dualism back to the forefront of attention in the philosophy of mind community. The book also provides an informed overview of the area from the perspective of someone committed to "taking consciousness seriously" (1996, p. xii). However, Chalmers also constrains himself to "taking science seriously," and to "taking consciousness as a natural phenomenon" (1996, p. xiii). This means the independent existence of a physical world is assumed at the outset, although he does go on to examine the various interpretations of quantum mechanics, finally favouring Everett's "many-worlds" view (1996, Chap. 10). This honest confrontation with the paradoxes of quantum-level observations brings Chalmers somewhat closer to the views expressed here. For, while we cannot examine these issues in detail, quantum mechanics does indicate that the reality behind our perception may not be capable of representation using the forms of our perception. This is a point we will be making quite separately in Chapter 6.

[19]As John Searle famously says "philosophy of mind is unique among contemporary philosophical subjects, in that all the most famous and influential theories are false" (2004, p. 2). Searle goes on to argue his case, and rather than report it in detail here, I refer the interested reader to his accessible introduction to the area (Searle, 2004). Of course, if Searle rejects all contemporary philosophy of mind as false, one wonders what he has to put in its place. He firstly dismisses materialism, as we do, on the grounds that it does not account for conscious experience, and then dualism, on the grounds that no coherent explanation can be given of the interaction between the mental and physical domains. At this point Searle gives a pithy statement of his approach: "My method in philosophy is to try and forget about the history of a problem and the traditional ways of thinking about it and just try and state the facts as we know them" (2004, p. 111). Unfortunately, Searle goes on to list things that he *believes* to be facts. He provides no clear idea of what it means to be a fact, beyond those things that appear obvious to John Searle. For example, it is a fact that "my feelings of thirst are entirely caused by the neurobiological processes in the brain" (Searle, 2004, p. 111). This is stated without further comment. Searle goes on to conclude that because dualism is incoherent and materialism denies consciousness, it simply must be the case that our brain processes are examples of conscious, physical processes. We just need to expand our idea of what it means to be physical to allow the idea that some physical processes include the property of being conscious. Genuinely conscious, that is, in a way that cannot be reduced to being the same as a physical process. We are then exalted to change the way we think about the categories of physical and mental, because, of course, as it stands, Searle's solution is incoherent. And I think that it is true, *if* we accept that physical processes are the cause of our experience, we are forced into a paradox. Searle does not escape this paradox, he simply asks us to think the unthinkable, i.e. that something can be both a physical process and a non-physical conscious experience. His argument is that this must be so, because this is the factual state of affairs that we are presented with. But, of course, this is not the factual state of affairs. As we have demonstrated, it is not a fact that our experience is caused by physical, neurobiological processes. This is

a hypothesis that Searle *believes* is a fact. Eliminate this, and you eliminate the basis of Searle's philosophical position.

Chapter 6
The Unified Medium of Existence

Having faced the inadequacy of contemporary materialism and dualism, we are now in a position to offer a more positive answer to the question of the origin of experience. In doing this we shall necessarily have to reject the idea of an independent physical existence, at least as something that can be known or that could act as a cause of experience. Such rejection is not simply an intellectual exercise. It is action that fundamentally changes one's existential orientation. It must be done carefully and sincerely, and it must be done individually. For in genuinely relinquishing this belief, one steps out of the collective security of the accepted opinion of the world. And this is not just an outward phenomenon. The collective opinion of the world resides in our very thought process. That is why we cannot "think this through." It must be seen directly, as a conscious experience. Our only guide is the truth itself.

The World as Representation

So, our task is to put the reality of the physical world into question. To do this it is only logical that we start from the ground of what we know to be certain. And we have shown that we are certain of our conscious experience. So, clearly, we must start our investigation into the reality of the physical world by examining how it is given to us in conscious experience.

If we enter into a direct experience of the present moment of consciousness, we find that experience *is* exactly what it *is.* To see this requires the complete surrender of all thought, all reflection, all interpretation. It means simply being present as the pure consciousness of experience. Even to say it is a consciousness *of* is incorrect. For the field of consciousness is conscious. All that appears in it appears as a conscious experience. We cannot experience a person or a subject of experience. Experience simply is. It is only in reflection that we can say that there was "something" of which "I" was conscious. In the moment of being conscious of something, that something *is* our consciousness

of it. We cannot pull these aspects apart.[20] We can only treat an object as something distinct from our consciousness of it in reflection, and in such reflection we are conscious of *another* object (i.e. a concept) that then refers, or points to, our original conscious experience.

However, to examine how the physical world is given in conscious experience we must necessarily reflect on that experience. For we do not find that the physical world is given to us directly. What is given is an immediate perception of a *phenomenal* world. Our perception does not think there is some other object behind an object of experience. It takes each object of experience to be exactly what it is perceived to be, to be *this* colour, *this* shape, separated by *this* space. Perception does not reason that because colour perception is dependent on certain photo-receptors in the human eye, that the object it perceives is not "really" coloured. The idea that there is an independently existing physical world behind the world of phenomenal perception is something that we introduce as a result of our reflection. And, as we have stressed, such an idea is a hypothesis, it is not something that is directly revealed in the primary data of perceptual experience.

So, as far as our immediate conscious experience is concerned, we are *presented* with a world of sense perception. If we can accept that that is all there is to it, that there is nothing further behind our experience, no cause, no greater reality, then we can stop and conclude that we are already in possession of all there is to know. However, in upholding such a position, we are faced with various well-known difficulties. Perhaps the most obvious is the existence of other conscious experiences. That you and I appear to be experiencing the *same* underlying world. If this is the case, then we can no longer treat the presentation of the objects of our perceptual experience as ultimately real. For if you and I are perceiving one and the same object, then we have *two* differing perceptions but only *one* underlying object. Hence our perceptions cannot be the reality of the object (that is not to say that perception is not real *in itself*). If we accept this, then we must also accept that our sensory perception is ultimately a *representation* of something else.[21] It is a representation because we are using something that is not the world as it actually exists (i.e. sense perception) to represent the underlying *structure* of the world. Even a direct realist would have to accept that we only have a direct perception of the structure of the world, and that we use sense as a medium to represent this structure.

The Unfolding of Experience

However, at this point in our discussion, we are not justified in assuming the reality of other conscious experiences. As we are questioning something that most people accept as a certain truth, i.e. the independent existence of the physical world, it would be inconsistent to assume the equally, seemingly

obvious, existence of other conscious experiences. Due to the profound issues involved, we are postponing our discussion of solipsism until the next chapter. In the interim, we can still show that our experience of the world is a representation without reference to the experience of another. To do this, we have to look at the structure of experience as it *unfolds*. For we do not experience the existence of something complete or finished. Experience is in a continual state of change, and we experience this change not just as a memory (which could be delusory) but as an actual perception in the present.

So how are we to account for the experience of change? By this we mean that our experience has a certain horizon, that it progresses in a certain style, that there is a continuity. It lies before us ringed with the potential of more experience, more unfolding. An unfolding connected to and continuous with our present experience. Even as we experience a field of consciousness in the present, that field appears situated in a global structure of potential experience, of which we illuminate a certain portion. And we appear able to influence this global structure by our actions - we see it not as fixed, but as a field of many possible experiences.

But in what sense can we say that this global field *exists*? It clearly does not possess the certain existence of our direct conscious experience. Can we say it exists with logical necessity? To answer this it may help to get up and walk into another room, and look at the experience of the room appearing. We are enquiring into that old issue: what existence does the room have when there is no one in it? Can we conceive that the room totally disappears from all existence when it is not observed? That our experience of it is created out of nothing? No. At the minimum, if all experience is being created moment by moment, out of itself, it is necessary that there is *something* that determines what happens next, whether this be the action of some supra-intelligence, the application of a set of laws, or something else we cannot imagine. Looked at from our side, we are simply not conscious, as an experience, of how it is that our experience unfolds.[22] But, as we directly know our experience is unfolding, it follows that *something* is determining that unfolding. This is still true even if we take the non-determinism of quantum mechanics into account, for there is still *something* that determines this non-determinism. [23]

The Medium of Representation

Now the dualist will be saying, of course, that "something" is the physical world! Haven't we just shown that we need something exactly like the physical world to explain our representation? Because the idea of the physical provides just what we need: an ultimate substratum that endures and embodies the laws of its own unfolding. But we forget that the physical world is what appears *in* the representation of experience. The representation itself is demonstrably not *made* of physical matter, rather it *appears* in the non-

physical medium of a mind. It is the unfolding of experience in the mind that we have to account for. The idea of matter only accounts for the behaviour of the physical world as it unfolds *within* physical spacetime. We are still left with the paradox of how something appearing in a representation can at the same time be the cause of that representation.

A representation can be understood on two levels: firstly, at the *content* level, where we see the forms or entities that are represented, and secondly, at the *medium* level, where we see the materials and means used effect the representation. Although we know both levels must be present, they form mutually exclusive categories. This is illustrated by the fact that a representation cannot represent its own medium *as content.* If it attempts to do so it ceases to be a representation. For example, an abstract painting can become so devoid of recognizable content that we cease to see it as anything more than various colours rendered in paint on a canvas. Such a painting confounds our expectation that it should represent something, or be more than it actually is. By attempting to represent itself, it ceases to be a representation, and *becomes* itself. In doing so, it illustrates the essential nature of a representation, i.e. it always represents something that it, itself, is not. So, when we look at Leonardo's Last Supper, we immediately see the representation of various human figures gathered round a table in the context of a certain world. But such a world cannot give an account of the paint and canvas used in its creation, i.e. in understanding the world in the painting *as* that world, we have to put aside our understanding of the medium in which it is represented. Yet we can easily switch perspectives and consider how the painting was made, we can admire the brushwork, the way the shadows are rendered, and comment on how brilliantly it was executed.

We take a directly analogous stance when we consider the content of our conscious experience to be rendered in the medium of sense perception. In doing this we can ignore the actual figures in the world, their interaction, etc, and examine experience as if it too were a kind of representational painting. The reasoning of neuroscience has taken an object within the representation, i.e. the physical brain, and made it into the cause of our experience. Hence we say the activity of neurons causes our experience, because when the activity changes our experience changes accordingly. But the fact is that our experience of the world is being represented in the medium of sense perception. In making the brain the cause of our experience, we are expecting something that exists as a representation to be the cause of its own representation. Now this is an obvious absurdity. So we posit the independent material existence of the physical brain. We say that we experience this representation, but behind it is the *real* physical brain. The problem here is to discover what the real physical brain is. To do that we would have to step back from our representation of the brain, as we do when we consider a painting, and look at the materials used to produce the effect, the brushes, the painter, the painter's studio, etc. But in relation to our conscious experience, this is exactly what we cannot do. There is no place to step back to. Instead we have to construct

our idea of the physical brain from the forms of our conscious experience. We trust that these forms (space, time, persistence) are the real forms of the real world. But the representation of the brain leaves out the existence of first-person experience (i.e. the knower of the representation). Such experience provides our only direct access to, or knowledge of, the medium of representation (i.e sense perception). And so it appears we cannot get behind the medium of representation, i.e. we have reached the limits of what can be represented and hence of what we can make known.

The assumption of all thought that imagines the physical brain could cause our experience, is that everything that exists can be grasped within the basic forms of our experience. Our more detailed picture of the brain's activity still uses these forms, we see neurons, molecules, electrical charges as all instantiated within a basic spatio-temporal model of physical existence. If questioned further we are likely to say that it is inconceivable for us to see things any other way. But that is the point. Our ability to represent is exactly limited by the forms of our possible experience. We are necessarily unable to represent how the medium of our representation came to have existence, because we use that very medium to form our representations in the first place. If we were able to form such a representation, we would have to represent that in *another* medium, and we would be left asking the same question: what is the origin of that medium of representation? If we look at this abstractly enough, we can see there must be some ultimate form to our experience, otherwise we would fall into an endless regress.

This explains the physical brain. It is simply the best possible representation of the structure of our experience that can be rendered in the forms of our experience. It is like a self-portrait of the artist. No one would think that the self-portrait had painted itself. We would think that the "real" artist, as distinct from the image in the picture, had painted the picture. And we could actually visit the studio and observe the artist that the picture represents. The difference with the physical brain is that we cannot obtain a more real representation. There is no studio to visit.

You may object that in the example of the self portrait we can understand that the image in the painting, and the artist we visit in the studio, are both representations of the real artist existing in the real physical world, i.e. a world that is distinct from both representations. Then we could say that neither representation actually painted the painting. But the point of the analogy is to show that if we only knew of the world through the forms of paint on canvas, then we would have no practical idea how such an image could have created a painting. It is only because we can step back into another medium of representation that we can grasp time, movement, the third dimension of space, the fluidity of paint, the action of the brush, the existence of the painter, in short, the process whereby a painting is created.

The Unified Medium of Existence

However, showing that we cannot directly represent the origin of experience, does not conclusively demonstrate that that origin could not be an independently existing physical world. To finally dissolve this idea of the physical we have to look more carefully at what it is to be a medium.

The essential property of a medium is that it allows *communication*. Our one certain example of a medium is our first-person knowledge of consciousness. For it is through the medium of consciousness that experience is communicated in the first place. Without this *primary* communication of that which is known, to that which knows, we would have no experience whatsoever, or any idea of what a medium is. All other ideas of communication arise from this basic experience of knowing our own experience. However, to appear in consciousness is to be immediately known or received. There is no time or distance involved, where something is sent from one place to another. Consciousness is the sheer immediacy and essence of communication. This is not something hypothetical, we are describing the reality of what it is to know anything, a reality that can be demonstrated as conscious experience at any moment.

Typically, when we think of a medium of communication, we think of messages passing in physical spacetime. Such messages have a sender and a receiver, and traverse a certain spatial distance in a certain amount of time. In our practical understanding of the world we take this form of communication to be primary, and we imagine experience is communicated to us in this way (i.e. as photons impinging on the retina, etc.). Logically, however, the medium of physical spacetime is not primary. It is something only known through the more basic medium of consciousness. If we are to maintain the independent existence of the physical world as a cause or basis of our experience, it must be possible that information from the medium of physical spacetime can be communicated to the medium of consciousness. And, if we can show that such an idea is incoherent, we will also show that an independently existing physical world cannot explain our conscious experience.

In embarking on this task, we should be clear we are engaging in a *hypothetical* argument. We can no longer rely on the certain evidence of conscious experience, because conscious experience cannot provide us with knowledge of the *independent* existence of the physical. If there is any independent, or ultimate, physical existence, we can only point to the necessity, or otherwise, of such existence, through the procedure of argumentation. This is far from ideal, as argumentation that cannot be finally and clearly grounded in experience is open to the endless criticism and reformulation of thought.

Nevertheless, if we are first clear in our acknowledgement of the certainty of conscious experience, we can show that the idea of an independent physical existence is inconsistent. Otherwise, if we remain entrenched in a belief in the independence of the physical, then no argument can penetrate. One's fixed feeling of certainty will always triumph; that is the nature of belief.

An argument can only help to make a perception of truth clearer. If the matter is already prejudged, then no such perception can arise. That the overwhelming weight of educated and public opinion automatically assumes the independence of the physical only adds to the difficulty of our task. For a belief in the primacy of matter, of physical law and explanation, is perhaps the defining feature of our modern world.

Let us therefore start by accepting the world's opinion and assuming that there is an independent physical existence. We must first concede that no physical object, *as* a physical entity, can appear directly in consciousness. We only know physical objects as collections of (non-physical) sensory qualities appearing within the medium of consciousness. But we assume our *perceptions* of the sensory qualities represent the true spatio-temporal arrangement of physical objects in physical spacetime (after allowances for perspective, etc.). Although we *represent* physical spacetime using the forms of spatial extension and temporal duration in conscious perception, we assume that physical spacetime is exactly what we are perceiving, that our knowledge is a knowledge of a true state of affairs obtaining in the physical world - real shapes, real movements, real distances. But we have no way to finally verify this assumption, as our whole experience of the world is a representation contained within the forms of conscious experience.

For our perception of the spacetime of the universe to be a true representation of a real, independently existing, physical spacetime, and not something existing entirely within and for a mind, it must be the case that information is communicated from the medium of physical spacetime to the medium of consciousness. This either requires that these two media are directly connected, i.e. that information in physical spacetime is directly known in consciousness, or that there is another medium that can translate and communicate information from the physical to consciousness. If there were direct communication, then we would be conscious of matter itself, as matter, something we have already dismissed as impossible. So, if the idea of the physical is to survive, there must be an intervening medium that takes physical configurations (e.g. brain states) and *translates* them (e.g. via a collection of psycho-physical laws) into the qualitative experience of consciousness (as we pictured in Chapter 5).

The issue is to decide how this intervening medium can operate. If it is to connect physical existence with consciousness, it must "know" the physical directly, i.e. it must contain information about the physical configurations of the relevant parts of the brain during each moment of conscious experience. If we look closely at what this means, it requires that the physical configuration of the brain must exist *in* this second medium as well as in the physical. For if the second medium simply held a model or representation of the physical, then a further medium is needed in which *that* information is translated, and so on. In saying that the physical brain must exist in this second medium, we are really saying there is an additional dimension to physical spacetime, i.e. if physical matter has existence in both media, then there is no meaningful

sense in which we can consider the media to be separate. For to be a medium is to allow the communication of information. We are now allowing that physical spacetime can isolate and communicate specific information about brain states in certain circumstances.

This gives us the idea of a field of information existing in the physical brain, as an additional property of physical spacetime. This field, like any physical field, is subject to certain laws, i.e. laws that translate brain states into conscious experience. However, unlike other physical fields, this is a *global* field, i.e. it unites countless billions of individual energy fields within the brain. And in order to translate the information embodied in this distributed collection of physical matter into one unified conscious experience, this global field must have *simultaneous* access to all the relevant information. It is important to see the necessity of this. If simultaneous access is not assumed then we cannot explain the simultaneous parallelism of our conscious experience. We already assume the existence of such simultaneous access in our concept of a physical energy field. For what else is an energy field but the ultimate carrier of information at the physical level? As with our hypothesized brain field, an energy field is equally permeated with the information of its current state and the necessary laws of its own transformation. When one energy field comes into contact with another in physical spacetime, there is a mutual transmission of each field's information. This transmission is final - there are no further "particles" or energy-waves involved. In that interaction, the true communication occurs and the behaviour of the system changes according to the laws of the fields themselves.

The idea of a brain field is therefore a straightforward extension of the idea of a physical energy field. The difference is that a brain field is a "meta-field" that embodies, as one unified entity, all relevant information about the physical brain needed to produce conscious experience. And we must additionally characterize this field as being "mind-like," for it ultimately has to have direct access to the medium of consciousness, a medium, as we know, that is absolutely non-physical. In opening the brain field like this, we necessarily transmit a mind-like quality to the physical. For, as we have already shown in relation to physical spacetime, if the brain field communicates directly with consciousness, then the medium of conscious experience must also exist *in* the brain field. A medium simply cannot communicate with another medium and remain separate. The very communication means that one medium shares *existence* with the other, i.e. whatever exists in one medium must also exist in the other. Otherwise a further intervening medium is required.

Our picture now is that the physical structure of the brain processes relevant to conscious experience exist in a unified brain field. This structure is then lawfully translated into a field of qualitative experience. The idea that there is communication from physical spacetime to conscious experience necessarily unifies these three media - physical spacetime, the brain field and the field of conscious experience - into one *unified medium of existence.* This position could be described as a form of *property* dualism. We are not say-

ing that consciousness is another substance or medium, we are saying that it is a property exhibited in physical spacetime under certain favourable circumstances, i.e. when there is a brain structure of sufficient complexity. To maintain the idea of the primacy and independence of physical spacetime, we have to consider that the brain field and the consciousness it embodies are *potential* in physical matter, but do not exhibit until matter organizes itself into structures of sufficient complexity. In this way we can support the idea that the universe can and has existed without the presence of any realized consciousness, and would continue to exist if consciousness disappeared. However, in travelling this far, we have created a basic and unavoidable problem: if we remain with our "classical" scientific knowledge of matter, then all we observe are the interactions of localized physical systems. It is at the basis of our understanding of spacetime, in the absence of any brain field, that the speed of physical communication is limited by the speed of light. So, for any physical entity (field or particle) to "know" about another, there must be some communication in spacetime via the physical movement and interaction of physical entities.[24]

The problem is, if we rely only on the known properties of physical matter communicating in physical spacetime, we have no means to explain how matter can recognize that a brain of sufficient complexity has developed in the first place. For some form of communication is necessary, some message must pass that triggers the activation of the brain field. But how are the individual energy fields in a particular brain going to generate a global awareness that a complex structure is in fact present? There is no meta-wave or meta-particle at a physical level that could possibly register more than its state in relation to those particle/waves in its immediate vicinity. Yet the activation of a brain field requires that billions of individual particles spontaneously recognize that they are in a certain favourable brain-like configuration.

If we say it is a fundamental "law of nature" that certain structures exhibit conscious experience, and we go on to discover the precise conditions of this law, that still does not explain the medium of the law's operation. For every basic physical law has a physical field of operation. And this "law of conscious experience" is certainly basic, i.e. it cannot be broken down to the operation of lower level physical laws, because such laws are localized in spacetime and limited to light speed communication. Although we may picture the detection of a brain structure "arising" from the interactions of the particles in the brain, this already implies a global field in which this global interaction is known or recognized. But matter that is *isolated* in localized fields and constrained to communicate within the limits of light speed has no means to "get outside of itself" and detect a global structure. To achieve this feat we must propose that our law of conscious experience operates in a pre-existent global field that encompasses any region of potential brain material.

If we try and limit the extent of this field, say to the surface of a planet, then we run into the same problem. To recognize the conditions of a planetary surface would require another global field containing all planetary material,

and so on. By a simple process of regression, we must conclude that this global brain-detecting field is completely co-extensive with spacetime itself. And this means it *is* spacetime, i.e. that spacetime has this property of recognizing brain structures built into it. I trust it is becoming clear just what kind of trouble we are falling into. We have reasoned that the idea of the structure of a physical brain must be encoded as a basic law in the fabric of spacetime, and that the operation of this law requires spacetime to have the capacity to spontaneously "recognize" such structure, i.e. without the means of any physical light speed medium of communication. We then require that spacetime exhibit the further property of transforming the activity of brain structures into qualitative experience. Finally, we require that spacetime includes in itself fields of conscious experience.

To put it more directly, if we allow that physical spacetime is permeated or pervaded with a pre-existing ability to detect brains and produce conscious experience, then we attribute powers to it that would more naturally be associated with a *mind*. In particular, we are requiring an instantaneous access to the entire domain of spacetime, just as we have instantaneous access to our own field of conscious experience. In neither case can this access be explained by processes involving physical (i.e. light speed) communication. If we seriously attempt such an explanation (rather than pushing it aside as too fantastic) we have to completely revise our concept of what it is to be physical.

The Unreality of Physical Spacetime

Again it must be stressed that we are engaged in a hypothetical argument. We are asking, *if* there were an independent physical reality, what properties would it require to support the existence of conscious experience? Starting from this premiss, we have shown there must be a unified medium of existence that encompasses both the physical medium of spacetime and the experiential medium of consciousness. We have then shown that in producing conscious experience, this medium must encompass and unify the physically separate processes occurring in each physical brain. As we shall now make clear, this unification *transcends* the boundaries of light speed communication and so dissolves the possibility that physical spacetime could be ultimately real.

To see this, we must first stress that the idea of physical spacetime *is* the idea that physical entities are spatio-temporally separated while themselves filling out a certain spatio-temporal volume. If we put aside our sensory notions, the reality of spacetime hinges on the reality of this filling and separation. Matter either exists in this form, or it does not.

If we accept our experience is an experience of the activity of a physical brain, it follows that this experience must be based on immediate non-spatial, non-temporal access to brain processes that, at the same time, we consider to

be spatio-temporally separated. This is a straightforward contradiction. We should not be confused by the fact that our experience is *of* a spatio-temporal world. We can only construct such a world on the basis of an instantaneous access to our brain states. This access is continuously reflected in the synthesis of information that underlies each sensory field. So, for instance, we experience the innumerable ongoing processes occurring in the visual cortex as one unified visual field. We have a mental/perceptual understanding of these processes as being spatio-temporally separated and yet we know them as *one* thing, i.e. the firing of *this* particular neuron *here* and *this* spatio-temporally separate, but experientially related, neuron firing *here* are simultaneously registered in experience, even though no physical (light speed) signal could have formed this connection. And we already know that a field of experience must share a common medium of existence with its associated physical brain, otherwise communication would be impossible.

This gives us the picture of an instantaneous connection between physically separate processes occurring in the same medium. The existential reality of this medium is either that these processes are spatio-temporally separated, or they are not. If we allow instantaneous connection, then we also allow that there is no spatio-temporal separation. This is simply what spatio-temporal separation means: if there is no time separation, then equally there is no space separation. If physical spacetime is a real medium of existence, then it is contradictory to allow that spatio-temporally continuous areas of spacetime could at the same time be immediately connected.[25] But our conscious experience demonstrates in the clearest possible way that such immediate connection is occurring. Therefore, spacetime cannot be an ultimately real medium of existence.

Instead we must conclude that matter has an immediate unified reality that is not spatially or temporally extended. If we try and limit this immediate unification of matter to only encompass brain processes, we create another unbridgeable gap between brain matter and the rest of the universe and we fall back into our original dualism. In this case the same arguments apply, i.e. there must be communication between brain matter and universal matter, hence they must exist in a common medium, and so on.

Now this result is literally staring us in the face, and yet our conviction as to the independent reality of physical spacetime is so strong that we are likely to dismiss it. That is the nature of belief: it is because we *believe* in the first place, that we experience disbelief. To make it clear, we are not disputing that the universe exists, or claiming that human experience is a delusion or a fiction. We are simply demonstrating that our idea of an independent, physical spacetime cannot be ultimately real. This does not deny that we have a real perception of spacial extension and temporal duration within experience. What it does demonstrate is that spatial extension and temporal duration are properties that we bring, as the forms of our representing consciousness, to a universe that otherwise exists as an immediately connected, unified whole.

Something that could not *be* an experience unless it were "pulled apart" and distinguished.

Notes

[20]I am indebted to Robert Allinson's book *A Metaphysics for the Future* (2001) for curing me of thinking in terms of subjects and objects. Of all the contemporary philosophers I have read, it is Allinson's work that comes closest to what is being proposed here.

[21]This term is, of course, borrowed from the *The World as Will and Representation* (Schopenhauer, 1859/1966), perhaps the single most neglected masterpiece of modern Western philosophy. This neglect is seen both in the quantity of Schopenhauer-related publications and in the quality of those writings. With the main exception of Bryan Magee (1997), the bulk of contemporary Schopenhauer scholars have either failed to understand what he is saying, or have concentrated on side-issues (particularly in relation to aesthetics). To criticize the critics of Schopenhauer would be a thankless task, and I recommend the interested reader to go straight to the source. For no one else better expresses the philosophy of Schopenhauer than Schopenhauer himself.

[22]We are ignoring for now the issue of experience unfolding in a person's imagination. For that would introduce the question of free will, i.e. whether we truly direct the course of our imagination, or whether it is automatically determined within the structure of the overall representation.

[23]In so far as we consider quantum mechanics to be a physical theory, then we would say that there is something inherent in electro-magnetic radiation that determines the non-deterministic appearance of physical particles. That such radiation respects the predictions of the Schrödinger wave equations shows there is a lawful unfolding. The non-determinism is only non-deterministic *for us*, i.e. as observers we cannot determine how a wave system will collapse, however *something* determines this collapse, it's just that this something is inscrutable from our perspective.

[24]Even if we consider the issue of quantum level non-locality, as demonstrated in Alain Aspect's famous experiments, we can still see that entangled particles are part of a single energy field that has become unusually extended in spacetime before collapsing.

[25]This argument equally applies to the hypothesized existence of non-local quantum level entanglement. If we accept that such entangled systems exist, we must also accept the underlying reality of an instantaneously connected, non-spatial, non-temporal reality.

Chapter 7
Through the Looking Glass

To summarize our progress in the last chapter, we have shown that if we assume the independent existence of physical spacetime, we must finally accept that the universe exists as a non-spatial, non-temporal, totally connected unity. This result means we can no longer ascribe ultimate or independent reality to physical spacetime.[26] Instead, we must view it as something that *appears* in the representation of experience. However, it may not yet be clear that we have also uncovered the ultimate non-temporal, non-spatial character of universal existence. For we argued by first assuming that physical spacetime and physical brain processes do possess an independent existence. Whereas our result shows they do not. Strictly, therefore, having shown the necessity of a unified medium of existence, our central argument only demonstrates that the existence of physical spacetime is *inconsistent* with the existence of conscious experience. And, as we have certain knowledge of conscious experience, it follows that independent spatio-temporal physical existence is a fallacy.

To fully demonstrate the non-spatial, non-temporal character of the unified medium of existence, we must go beyond hypothetical argumentation and return to the ground of conscious experience. For the medium of universal existence is not some mental abstraction. We *are* this medium. In it resides our experience, our knowing of experience, and anything that could lie behind that experience. If we can demonstrate that our knowing of experience is not spatio-temporal, then, through the necessary unity of the medium of existence, we will also have demonstrated that the medium itself is not spatio-temporal.

The Present Moment

Let us start by considering the experience of space. Our basic observation is that consciousness always encompasses itself. It is in this way that the

infinite regress we meet in the structure of experience is halted. The regress of perceptual space is demonstrated by the fact that a particular area of space cannot be distinguished, except in relation to another area of space. So, when we indicate the space inside a box, we use the surface of the box to delineate the space. But how do we delineate the extent of the box? We have to see it as contained in another space, such as the space of a room. And then the room is delineated by the space of a house, and so on. Finally, we imagine the space of the entire universe, perhaps as the distance light has travelled since the big bang. But even that idea implies there is an "outside." For without an outside, our idea of the universe occupying a bounded volume loses any meaning. We can *imagine* an expansion into nothing, but, in practical terms, we do not imagine nothing, we imagine another space, and call it nothing. Whatever we finally conceive as the container of space, is necessarily infinite, or unbounded. And, as such, it presents us with a paradox, because a space is only conceivable when bounded by another space. If we can put this paradox aside by imagining that it is possible to put something spatial in an infinity of nothingness, and then consider the relative size of that space, we can see it becomes infinitely small, i.e. it has no relative size, and so is no longer a definite, measurable volume. In effect, it becomes a point whose size in comparison to infinity can never change, however any space viewed from within that point may appear to expand. Substituting the idea of four dimensional spacetime, does not alter the basic situation. If we are to measure physical spacetime at all, and make of it something definite, then we can only do this by making comparisons with other spacetimes. When we seek something final or ultimate upon which to ground these measurements, we again find an infinity against which no comparison can be made.

Yet this paradox of perceptual space does not unsettle us, because, in reality, we always experience perceptual space as ultimately bounded. It is bounded by and in our field of consciousness. In this way we only directly know "pieces" of perceptual space, delimited by our sensory fields, and always in relation to our primary object: the sensory awareness of having a body. If we attend to this, we can see that our knowing of space has two aspects. First, we have perceptual space, which we attribute to an independently existing external world. But our primary spatial experience is of the extension of our sensory fields. This extension is the means by which any one sensation can be distinguished from another. So, for example, we have an underlying two-dimensional space of colour sensation that constitutes our visual field. We have the space of the tingling sensation of the body. And we have a containing space where each sensory space is unified in conscious experience. All such spatially extended sensation is a simultaneous knowing of difference made possible by the essential quality of space, i.e. that it *separates* and so distinguishes whatever appears in it, while still remaining unified. But if we look for a boundary to our sensory spaces, we look in vain. Each field dissolves at the edge into an indistinctness that cannot be clarified. Nowhere do we find a sharp division. And yet the most disparate elements are being brought

together. When we look for the ultimate boundary whereby these sensory spaces are unified, we must conclude that it cannot be more space. If it were, then we would again face the problem that space cannot ultimately bound itself. It has to be contained by something that is not spatial, otherwise we fall into our previous infinite regress. Clearly, within experience, this "something" is our own knowing consciousness.

So, our consciousness of experiential space also bounds it and demonstrates that consciousness is something other than spatial. This is not something simply conceptual, like our idea of a spatial universe, it is something that can be known directly. To do (or more correctly *not* do) this requires the total cessation of all inner movement of thought or feeling. It requires an *allowing* of sensory experience to be what it is, without comparison, naming, liking and all the other activities that usually distract us. In remaining with this we are entering what Heidegger (probably) meant by the "clearing of Being" where the truth as "unconcealedness" is revealed.[27] Our aim is simply to contain the whole experience of the present moment, as one thing, in the one "clearing" of a unified experiential field of consciousness. It is this clearing that *is* the space of experience. But it is bounded. It is contained by our very knowing of it. The seeing of this is the direct confirmation that knowing is not spatial, that it is that in which space *appears*.

But what of time? Is it of the essence of consciousness that it is temporal? That it is divided into sequential episodes, in which successive events occur, that it wakes up, goes to sleep, and finally disappears in death? If we examine these temporal processions, we can see they are bounded very much like the space of the sensory fields. For example, the experiential boundary between waking and sleeping is analogous to the boundary at the edge of our visual field. We cannot make it clear. As we cast our gaze towards it, it immediately recedes. We may dream, but when we dream we again possess at least some degree of knowing awareness. The same goes for thinking and daydreaming. If we remain factual, we never know a time when we are *fully* unconscious. We only reason about periods of unconsciousness on the basis of an external time, something we already know to be ultimately unreal. And, like space, time divides into two aspects: firstly there is the perceptual time of the world, i.e. the time, as measured by a clock, that elapses independently of our first-person consciousness. It is this time that suffers the same paradox as our idea of space. For we can only conceive of the existence of time by making it bounded by another time. So a second is bounded by a minute, an hour, a day, a month, a year, a century, and so on. Again we reach an unbounded infinity, and the problem of not being able to form a coherent idea of time having a beginning or an end.

And then there is experiential time, or duration, i.e. the moment to moment experience of change, of the continuous dying away and renewal of experience. As we have already made clear, it is experiential time that is primary, and upon which we base our perception of an external time. If we

examine experiential time directly, we see it is always known as an *enduring* in the present. This enduring is inextricably connected to our experience of space. The enduring of a sound, of a sensation of touch, is a "stretching out" and "retaining" of sensation directly analogous to the stretching out and retaining we experience in the endurance of the visual field. The very idea that space and duration can be separated rests on the false idea that we could somehow "freeze" experiential time in the way we freeze images on a reel of film. But, as should be clear, every frozen image is only known through its endurance for some knowing consciousness. And the frozenness itself can only appear through a comparison with an enduring previous state. The reality is that unless something endures, it cannot be an experience and so cannot appear in any space. It would therefore be better to describe the space or clearing of experience as a spatial-duration, or as the *ongoingness* of spatial experience.

We have already shown in relation to space that knowing a field of experience also bounds it. As experiential space and duration are inextricably implied by each other, this bounding equally applies to our experience of time as duration. In this way the infinite regress of time is halted by our bounded retention of change as it flows and decays out of, and in, the present moment. And, as consciousness bounds time in this way, we can confirm that consciousness is not temporal.

However, the clearest demonstration of the non-temporal character of consciousness is the presence of the present moment, now. For the present moment actually *is* the non-spatial, non-temporal point from which experience is extended into something that can be known. If we can simply grasp that everything is happening in this one instant of the present, a point of being that has no duration, and yet that remains continuously, unchangingly present, then we have also grasped what consciousness *is* and the certainty of its non-temporality. For our knowing is always poised in the present. If it surveys the past, in reality it is bringing a representation of an earlier experience into the present. And our sensory experience is always flowing out of this point. All duration and change is known relative to its unchangingness. This is not something that can be argued. We have to look into the present, into what it is.

And if we are to put this into language, we must say that the present moment *is* the unified medium of existence. It self-evidently is the source of our experience. It self-evidently is the presence of our knowing. It self-evidently is not spatial or temporal. And it self-evidently bounds our experience.

Being and Experience

Alternatively, we can say that the present moment is the point of entry of sheer undifferentiated being into the differentiation of experience. Being is

the name we apply to a medium that exhibits the power of knowing. For we can no longer differentiate knowing into "my" knowing and "your" knowing. That would imply that knowing is something spatio-temporal, and we have just shown that it is not. From this perspective we can begin to understand why we must experience the reality of being as a representation. For being, considered as an instantaneous, totally connected, unified knowing of itself, cannot be an experience *of* anything. Experience always implies a separation, a pulling apart, where one thing is known as different from another. If being is a knowing of anything, it is a knowing of completeness, of an at-one-ness, of a nothing happening-ness, of an utter non-distinction. For us, who know experience, we must consider undifferentiated being as a complete absence of experience, as the very thing that lies beyond our power of direct representation, because it is the source of that representation. But it is not something abstract, or invented. Undifferentiated being is what our consciousness is, when we take away our experience. We are literally *in* it. It is *our* being.

To know anything as an experience, this unity of being must be broken up, while still remaining unified. And this is just what experience achieves. It represents a world to us, a world that appears as a unity in a projected, physical spacetime that in turn appears in a unified field of experience. On both levels we have the extraordinary presence of spatial-duration. Something that allows a self-evident unity to appear as separated. It is as if space and duration introduce a certain absence that allows one experience to be differentiated from another, while at the same time forming a unifying "glue" that holds everything together. If we did not experience it, if it were described to us, we simply would not believe it.

So, in reality, there is no space and no time. We know experience directly. There is no chain of cause and effect from a material world, to our brain and then to our consciousness. This is simply, logically, the wrong way round. We have, or know, our experience as the result of a completely instantaneous, non-physical *power.* This is the power of the unified medium of existence to produce experience "out of itself," i.e. out of the present moment. There can be no further place or process, no further medium or reality. We reached the end of such thinking when we allowed the ultimate, instantaneous connection of all that exists.

To see the overall picture, we must be clear that cause, effect, motion, one thing following another, can only appear in experience. These are all effects produced by the forms of spatial-duration. When we look into the perceived world, we see the real order of things reversed, as in a mirror. Instead of experience being primary and instantaneous, we see it as being secondarily produced by processes that took time and moved through space. This is the nature of the mirror of representation. We cannot express the existence of anything in time and space, except as the result of some prior activity.

In seeing this, we can just grasp what an extraordinary *idea* experience is. How it produces the appearance of a brain that exactly mirrors the structure of our possible experience, and how it produces the appearance of an external

world whose activity exactly mirrors what is necessary to produce the activity in the brain corresponding to our experience. And so it appears that experience is caused by what it represents. Until we realize that we are looking into a spatio-temporal mirror, and that we are the instantaneous presence of the unified medium of being itself. It is an amazing accomplishment. Something so perfect, so self-consistent, that the temptation to fall into the mirror is almost overwhelming...

The Question of Solipsism

In our discussion of unified being, we have yet to address the question of the separation of individual experiences. If we accept, as we must, that our perception of an independent, spatio-temporal existence is only a representation of an underlying unity, then we must also accept that we cannot infer the existence of something real on the basis of such perception alone. And yet it seems that we do exactly this when we believe another person is having a conscious experience. We take two spatio-temporal objects, my body and yours, we observe the similarities between their structure and behaviour, and we conclude that you too are experiencing a world as I am, except that you inhabit the perspective of that body, and I inhabit the perspective of this one. Or so it appears, if we stop to think about it.

It is in this way that the spectre of solipsism arises. The idea that, as only my experience is certain to me, it could be the case that every other person and creature that I meet in the world is simply an appearance, something with no more reality than an image on a film. And, if we remain within the domain of rational thought, it appears that this idea cannot be refuted. For we never know the first-person experience of another. Even if I were to enter directly into your experience, for me, it would still be *my* experience. This is the nature of experience. It is always unified. It is always *mine.* And so, in a sense, solipsism is true: given that existence is ultimately a single unified medium of being, there is, and can be, only one knower of experience. And yet here I stand, somehow ejected from the primal unity, seeing only one aspect of the world. Even though I appear surrounded by creatures just like me, I only know these creatures as representations, and never with the certainty that I know myself.

Is this really our situation? Can we never be certain of the existence of the consciousness of another? We have already shown that our certainty about the existence of the physical world is without ground. And we know we cannot think or reason our way beyond solipsism. Does this mean we are condemned to remain in doubt of something that appears so obvious? To answer this, we must confront the very root of our doubt. For the only way to demonstrate the certain existence of the experience of another is through the knowledge of conscious love.

Now this will be a very unsatisfying answer for thought. For conscious love, like conscious experience, is inaccessible to thought. And while we can pretend to know something about conscious experience by thinking about it, if we are sincere, the subject of love is harder to gloss over. Something stirs in us, it reaches a little closer to home, to something real. If we look for help in the academic philosophy, psychology and science of our times, we meet with love as an emotion implanted in us through the process of evolution to better ensure the survival of the species. In other words, we meet the usual naturalistic third-party perspective: something that tries to measure what love is in terms of behaviour because it has no way to approach reality directly.

The demonstration of the reality of the conscious experience or being of another is conscious love. It is the knowledge of the presence of another. This is a direct, unmediated knowledge. It is either this way, or it is not.

Say I look into your eyes, and I perceive your presence, your actual being there. The question is, do I imagine this presence? Is it something I transfer onto you, that I have worked out and built up on the basis of your behaviour? Have I read my representation of your face, your body, your behaviour and constructed a further representation of you as a person? We certainly do this. We imagine someone is kind, that they think or feel in a certain way. But we are not talking about this. Such projection is the work of past association and thought. We are talking about the actual conscious experience of knowing the presence of another, now. To know this presence requires the absence of thought or judgement, an openness, an unguardedness, a lack of fear, of concealment, of resentment. We are not indicating any *feeling* of love or any movement of attachment or possessive grasping.

Now, in this state of openness, in this clearing, we are to see if you can come to know the presence of the other. Perhaps there is a sweetness, a knowledge of beauty. But can you *perceive* the conscious presence of the other? Not that you are representing that presence to yourself as a thought, but that you *know* it directly. And not that that presence is a presence in a body. For that body is a representation, it is *your* representation. It is not the representation that feels your gaze upon it, it is not the representation that is present as the experience of the other. Our perception of the presence of another is *behind* the representation and it is the presence that is real. Our representation is only a mirror, a means, something to be seen *through.* But where is this place *behind* the representation? Clearly it is in *me.* Not in any sensation of me, or anywhere I can represent, but literally in me, in my knowing, in my consciousness, in *my* presence.

And, as we know, my presence is the present moment. The one unified presence of universal being. So my perception of your presence, is that you exist in this presence that is me. Is this not love? The knowledge that although we appear divided, it is the same knowing, the same being in your experience as in mine. That you are in me, and I in you. That we exist beyond space and time and separation and death. That love is our very connection with

reality, our guarantee in the extremity of this separated representation. Is this not what all lovers have protested throughout the ages? Are we to say that because science has nothing to say about this that it is all rubbish? Or are we to start questioning what kind of science it is that remains willfully ignorant of the reality of love and consciousness?

Love and Thought

Love is not love unless it is known consciously. And, as we have shown, this means without thought. So it is no good thinking that you love, or that you don't love. You have to look into the present moment.

Love comes with its own certainty. We know, in love, that we love a reality, whether it is the reality of another, or whether, perhaps, we love reality itself, the very presence of now. So, in love, we do not doubt the reality of that which we love. In loving it, we know it, not as we know an object, we know something directly, in its non-spatial, non-temporal reality.

But this knowing of a reality is somehow impossible. For, as we have shown, to know something is to pull away from it and represent it. Yet love is not a knowing in the sense of knowing a representation. It is something ineffable, something that cannot be grasped, or pictured, or thought about as a memory. Love is simply the word we give to this pure knowledge of a non-represented reality. It is there in every experience, it is presupposed, it is the link that allows us to form a representation in the first place. But it is not love for us, until we make it conscious.

So love is transcendent of experience. You either see this or you don't. Even if you have known such love, once back in the ordinary realm of experience and thought, you will find you do not know love consciously any more. You simply have a memory. The only way back is to re-enter the state of love. And you cannot do this by thinking. Thought and the self that thinks are therefore barred from any direct knowledge of love, because love cannot be reconstituted as an object for thought. Thought can only think thought.

This means that thought cannot help but doubt love. It will say I have no grounds to accept the certainty of the knowledge of love. It will tend to look at love as a delusional state, something unreal, a wish fulfilment. Thought thinks it stands on the firm ground of fact, of reason, that it is hard-headed, clear, impartial, etc.

But I trust we have made it clear that thought has no such ground. It is a degradation of conscious experience which turns away from the fact and starts to follow a trail of mental association. The thinker thinks it directs its own thought. But this is simply not the case. One thought follows another according to the total context of the mental life. It is guided by all our unacknowledged assumptions and beliefs, our likes and dislikes. We can never uncover this unacknowledged ground as it operates. For what is unacknowl-

edged necessarily lies outside our awareness. We can only become aware that a certain belief was clouding our view when we see through it. And a belief is not seen through by thought but by a direct, conscious perception of its falsity. Our mental life is personal - it is an amalgam of personal past, personal beliefs and personal inclination. We reject ideas on the basis of a "gut feeling" and then build rational structures to show we were right. And this is equally the case for philosophical thinking. That place where all assumption and belief should be thrown aside. Materialism, for instance, can be characterized as a gut feeling inclination against what is imprecise, what cannot be grasped in cool, clear concepts.

Like love. If thought thinks of love, it brings in the past, the disappointment, the confusion, the inability of thought to retain its calm equanimity. Love, the unconscious experience of human love, the pain of it, the extraordinary crescendos, the glimpses of perfection, of impossible happiness. Perhaps the betrayal, the one you thought perfect, who became so selfish, so heartless. Or perhaps the absence of love, the loneliness. This, or some other version, is the thought of love.

Whereas love is a state. You are either in it, or you are not. To think about love is to demonstrate you do not know it. Such thought is based on the memory of the effects of love on the self. And there is no self in the state of love, because there is no thought. We only *think* we love a person, another self. Love itself knows no person, it knows the presence of another, and that presence is only ever present now. It is the returning self that attaches the memory of love to that other self. And then, usually, it is disappointed. Selves can only see other selves. Selves are independent, personal, selfish. Selves do not love, but they crave love, they crave a release from the prison of their own separation.

Whereas love of another is the recognition, the knowledge of the reality of another. And that reality, as we know, is not "out there" in the representation of a body. That reality is behind all representation. It is one and the same in you and I. This is the extraordinary revelation of conscious love. You can either accept it or you can doubt it. For there is no argument that can demonstrate the reality of love. Love is its own demonstration. Like the knowledge of truth, it carries its own warrant of certainty. But it is not the common self-certainty of sensory perception. It is a certainty that most will deny and that few will have registered consciously. And even those who have loved are likely to doubt it as soon as they return to themselves, to thought.

For thought, if it has taken hold, if it controls the centre stage of an individual life, by its very nature, will always doubt what is real. To know any reality, we have to give up this restless, doubting thought, we have to give up what we think is our self. And the self, the thinker, does not want to lose its phantom-like existence. It wants to remain, to think, to wonder, to work things out, to doubt. So, for thought, it is a great arrogance to assert that something is the truth. Because, if there is truth, then thought must give way. And, instead of giving way to a direct investigation of conscious

experience, thought will judge any declaration that claims self-certainty to be misguided and dogmatic, something to be resisted as an affront to freedom, i.e. the freedom to think and doubt.

In the end, it all comes down to this: to what will you be true? To the present, to the presence of the one unified medium of existence, to consciousness, to the certainty of conscious experience, to love, to truth? Or will you be true to thought?

Notes

[26]We must still acknowledge that there could be an independently existing physical spacetime. However, our argument has shown that such a spacetime could have no influence on or connection with conscious experience. It would necessarily exist in an independent medium, literally in another universe, and so would be irrelevant to any explanation of experience in this universe.

[27]See (Heidegger, 1993).

Epilogue

And so, in our exploration of the philosophy of mind, we have arrived, perhaps, at the base-camp of philosophical enquiry. We have seen that if we are to speak of what is real, if we are to know it as an experience, then we must necessarily *represent* it as something other than it is. The world that appears before us in perception is just such a representation. It is a rendering into space and time of that which (metaphorically) lies behind space and time. At every level this representation attempts to give a self-consistent account of itself. But it cannot finally give an account of space or time or consciousness, because these constitute the very medium in which the representation has its existence. From this vantage point we can see that the idea of a physical brain causing conscious experience is incoherent. No matter how hard we search in the folds and wrinkles of the grey matter of the brain, we find no feeling, no experience, no colour, no sound. It is as simple as that. The basic error of our modern understanding of the mind is that we take the representation to be a reality.

If you look into the current literature, you will find that the direct investigation of conscious experience, the very source of our understanding, appears to have nothing to do with the real business of philosophy. You will find that philosophy, that which was once the *love* of wisdom, has become the *thought* of the human self. And human thought is a slippery fish. It will think about what is written here. It will come up with all kinds of answers and objections. So let us be clear. However reasonable the responses of thought, our only reliable guide is conscious experience itself. It does not finally matter if I have made false observations. If I have, I can be corrected. We can investigate the question directly, because we have a *methodology.* We have agreed to give up our personal position, our thought, and to actually look into the present moment.

This is the fundamental point. To see what it is to investigate without thinking. To see that we can actually make progress, that we do not face a wall of meaningless sensation or hold a purely personal, relative view, to see that reality itself lies timelessly before us and within us.

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