

***Knowing and Being:
Polanyi, Pirsig, and McGilchrist***

C.P. Goodman

To my beloved Father and Mother

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Introduction

'Homo non proprie humanus sed superhumanus est'

[To be properly human is to go beyond the human]

Mediaeval Scholastic Aphorism

In my opinion the replacement of the humanities by the sciences has been a disaster. Not that this is the fault of the sciences. A balanced education should include the humanities and the sciences. In the Middle Ages the subjects which made up an elementary education were divided up into a Trivium (grammar, logic, and rhetoric) and a Quadrivium (arithmetic, geometry, music, and astronomy) with advanced students going on to study philosophy and theology. After the Renaissance and Reformation an educated person was expected to be familiar with Classical and Biblical texts. The focus of education now is knowledge of science and technology. The problem is not science and technology, it is viewing them as a substitute for religion. In the Middle Ages the religion was Christianity. Jesus Christ forgave our sins and declared "My Kingdom is not of this World". The new religion is utopianism. The assumption is that science and technology will create societies in which everybody will be happy. Knowledge in these societies consists of following the correct rules. A consequence of this understanding is the conviction that it would be better if we were ruled by computers. This vision not only corrupts the humanities, which cease to be viewed as sources of knowledge, it also corrupts the sciences, by expecting them to save us.

Being able to make choices contains within it the possibility of us deciding not to do as we ought. But it also gives us an opportunity to live moral lives. To live a life that is in accordance with moral ideals. The conversion to Christianity generated an enormous amount of moral energy. When there was a revival of materialism this moral energy did not dissipate, it was redirected into the claim that we ought to transform

our societies into arrangements where everybody can live as they please. All the moral passion which Christianity devoted towards love of God was directed against those who were thought to be constraining our ability to live as we wish. Any attempt to assert the sovereignty of the spiritual was exposed by critical philosophers as nothing more than a disguised will to power. We are deemed to be self-legislating. Societies were envisaged in which everybody was equal. Why everybody counted as no more than one was left undefended. It is a Christian assumption deriving from the notion that everybody is equal under God. But Christianity was a vision of how we ought to live that materialists sought to dispense with, on the grounds that there is no such thing as higher and lower; there are only laws of nature which apply equally to everybody and which it is the task of the sciences to identify and describe. In this vision science and technology gives us the power to live as if we are God. Alternatively, it claims that since everything is determined by laws of nature, we are not anything special. People would hold both views at the same time, switching between them depending on the context.

That these positions are mutually contradictory is not a source of alarm to those who advocate them. What is important to them is the message. The liberation from any moral constraints other than the ones we chose to impose upon ourselves. What I say today may differ from what I say tomorrow, or what I said yesterday, what is important is that I said it. The creation of societies dedicated to equality is a moral commitment, but this commitment is sometimes explained in terms of laws of nature, or as a consequence of the principle of consistency. If people refuse to act with reason they are evil. Again this is derived from Christianity. How can there be evil in the world if all that exists are forces of nature? Such are the confusions generated by a materialist account which tacitly relies upon assumptions derived from Christianity. But instead of suggesting they be more consistent, and reject morality, I suggest that it would be better if we supplied a better account. One that recognises that we have minds which make commitments to ideals which transcend our existence as material beings. To the extent that I am defending a vision which endorses the reality of humans reflecting upon and creating our lives I am advocating a humanism, but to the extent that I am recognising levels of reality above the material it is a

spiritual vision. This book attempts to elucidate some of what this commitment implies.

Seeking to ignore science, or dictating to it the conclusions you wish it to reach, is not going to be a successful strategy. But if you make science and technology into your religion you are expecting more from them than they can deliver. Such a claim relies upon the false assumption that it is only science which delivers knowledge, and that insofar as it is our emotions which supply our lives with meaning they are deemed to be wholly subjective. This approach is the origin of the contradictory attitudes towards what it is to be a human being that I mentioned earlier. Humans are upgraded to be sole creators of the order which gives meaning to their lives, and downgraded to nothing more than the product of natural processes. A better balance between the humanities and sciences ought to be our aim. One which understands that it is humans who create science, and that science is not our only source of knowledge. I claim that reducing all knowledge to science is an expression of a more fundamental mistake. In the attempt to know what is the case, the boundaries of what we can describe are confused with the boundaries of what is real. Our humanity is not captured by the properties of matter, and our technology does not elevate us into God. I suggest a more adequate account of what it is to be a human being is required. The answers I give are connected, and amount to a philosophy.

Philosophy continually returns to three topics; what exists, how do we know it, and how should we live? To prevent an infinite regress in our attempts to find a justification for the answers we give to such questions we have at some point to stop and say, this is what I believe. But what justifies your stopping point? If somebody supplies you with a different stopping point to what can appeal if you start from a different place? At this point a reasonable person might conclude that philosophy is an absurd subject, indeed worse than absurd, because it not only fails to deliver answers we can agree upon, it also makes us uncertain about the practices and beliefs that we had previously accepted as what we ought to do and believe. But our assumptions do not go away simply because we refuse to discuss them. Philosophy tries to make sense of everything as a whole, and on the grounds that we are capable of

reflection, it is an attempt to connect our reflections and supply a general account. If your civilization is in a state of crisis you might come to the conclusion that this crisis is a consequence of its reliance on false assumptions. If you believe this to be the case is it not desirable to come up with better ones? This is the challenge. Providing a philosophy which seeks to understand what exists, how we know it, and how ought we to live.

In this book I suggest that the Western attempt to secure a foundation for knowledge ended up as the claim that only that which can be described is real. The claim that it is only the sciences which gives us knowledge is a product of this assumption. It is a product of the attempt to reduce everything into that which can be described. The three authors I discuss in this book not only do not oppose science, they endorse the Western tradition of humanism which gave birth to it. But they seek to modify the assumption that knowing can wholly describe the ground upon which we secure our beliefs. A myth about knowing was created in the West, and on the basis of some began to claim that it is only science which delivers knowledge. As a consequence what science cannot describe is deemed to have no reality. Pursuing certainty is in essence a fantasy about control. An assumption which the three thinkers I discuss in this book share is the conviction that life is sacred because it is exploratory. It is not possible to wholly escape the context of our understanding. But our unending pursuit of truth and goodness and beauty is what gives our life meaning. It carries with it the implication that we ought to defend traditions which give us the freedom to pursue this journey of exploration. It is a humanistic vision, but not a vision in which right and wrong are whatever we say they are, because such an analysis confuses the boundaries of what we can say with the boundaries of the real.

1) Securing Truth

'With most people disbelief in a thing is founded on a blind belief in something else'

G.C.Lichtenberg *Waste Books* L 81

The most important fact about ourselves is that we are conscious. If we were not conscious nothing would have any meaning for us. We would not even know that we exist. It is not the case that our awareness occurs everywhere, it occurs somewhere in particular, at a specific time. It is taking place now as you read this sentence. Nor is it the case that we can do whatever we want. We are constrained. To exist as a human being is to require oxygen, water and food. It is to be born and to die. As we live among others of our kind we acquire their practices. Although we are dependent on a body, we can enhance the capacities of our body by using tools, which help you achieve our purposes. The greatest single tool at our disposal is our capacity to use a language. It evokes and describes general features of our experience. Our ancestors were able to distinguish between a lion and a rock long before anybody made use of any language. But not only do we use language to evoke these distinctions, we also use it to extend and deepen them. As well as languages it is also the case that we create and apply numbers, which we use to describe experiences which can be quantified. Our linguistic and quantitative descriptions cannot replace our experience, but they facilitate our ability to become self-conscious about concepts. They enable us to formulate abstract ideals. One of our most important abstract concepts is the concept of truth. We can ask ourselves if the concepts we are relying upon are supplying us with a true description of reality.

Knowing is what takes place when a correspondence exists between our understanding and the object of our understanding. There are three well worn paths from this starting point. We can seek to transcend the particularity of our experience and make claims about what is true independently of our individual experience, on the assumption that there is a truth about what is the case independently of whatever we happen to believe. Another possible path is to deny that we can transcend the

context which supplies our experience. In this understanding of knowledge it is not possible to know general truths, all we can know is our immediate experience. Any attempt to secure knowledge about what exists independently of us is a delusion. There is a third path. It declares that we can make claims which are true because we are part of the reality we seek to describe. But for exactly the same reason our knowledge claims are fallible. What it is to know cannot be reduced to the object of our understanding, nor is it reducible to our beliefs about that object. It exists in a state of tension between the two. Our situatedness does not cut us off from what is true, it supplies us with a beginning. Every journey starts with a first step. Our knowledge claims are fallible, but we are able to build on the understanding supplied by our tacit knowing.

You might think that most philosophers in the Western tradition favour this third path. But you would be wrong. The claim that we can know truths, but only in a fallible way is a position which most philosophers in the Western tradition view with contempt. Let us call the first philosophical path Rationalism or Idealism, and the second Scepticism or Materialism, and the third path Personal Knowledge. For those who take the first path, anything less than absolute truth is unworthy of the name knowledge. It assumes that reflection secures knowledge. Any attempt to emphasise the personal is too subjective. The second path rejects Personal Knowledge on the opposite grounds. It asserts that any attempt to discover the truth of what exists independently of any perspective, the word which they use to describe this approach is metaphysics, is a delusion. It asserts that it is unjustified to claim that we can discover what is true. The Personal Knowledge approach endorses the claim that we can transcend the conditions of our subjective awareness and know what is real, but because we are situated our knowledge claims are fallible. At first sight these three different paths go in different directions. But the first two paths both rely on the assumption that we can secure what is true. The Sceptic simply reduces what we can know to our immediate experience, and on those grounds it makes the claim that any attempt to describe anything beyond that experience is a delusion.

Rationalism and Scepticism are united in their hostility to the Personal Knowledge account of knowing. For Rationalists any

recognition of the fact that knowing is situated condemns this approach as subjective. The Sceptics claim that Personal Knowledge relies upon the unjustified assumption that we can know what is true. Scepticism views this assumption as a relic of a theological vision in which it is possible for us to know the world as God knows his creation, which is to say from a position of absolute knowledge. Rationalists believe that to a lesser degree than God it is possible for us to obtain absolute understanding. Not in the sense of knowing everything, but in the sense of participating in an understanding that enables us to secure truths about what is the case. Although God knows more than us, we can to a lesser degree participate in divine certainty. Both Rationalism and Scepticism are extreme positions. If you read a book of Western philosophy you will generally find an elaboration of one of these two paths. They aspire on critical grounds to secure a foundation for knowledge. Both are two different expressions of the same critical approach. They assume that via a sustained process of criticism, a process that is facilitated by our use of words and numbers, it is possible for us to identify and define a ground of secure truths about what is the case.

The critical tradition is contrary to common sense. It claims that we can know absolutely. Scepticism is simply a version of absolutism. There are two possible explanations for this extremism. These explanations do not exclude each other, because they can both be operating at the same time. In the C18th Enlightenment philosophers turned to science to secure what is true and reject religion. In other words they sought to give and take away. In an attempt to secure a ground for morality other than Christianity some set about justifying moral claims by appealing to the principle of self-contradiction. That we ought to behave as we would want others to behave. But this fails to explain why we should concern ourselves with others. It also ignores our emotions. When we make moral judgements we appeal to what feels right in accordance with our conscience. In a particular context does a rule settle what is the right action? All rules have to be interpreted. Nor does an appeal to consistency get us very far. It is empty. To be given some content moral judgements need to be situated. Some Enlightenment thinkers sought to ground morality in utility. We should maximise the total amount of happiness for everybody. But why should everybody count as no more

than one. It also brings with it the problem of calculating what maximises happiness.

Utility justifies cutting up a healthy young person so their organs can be distributed to those in need. It is justified on the grounds that the needs of the many override the needs of the few. But the slaughter of innocents is immoral. Rationalist thinkers set out to liberate ourselves from traditional practices by dedicating ourselves to reason. They were sensitive to the fact that to be a human being is to be born in a particular body, at a particular time, and into particular practices. They seek to liberate ourselves from these constraints via the joy of knowing absolute truths. It is akin to, and you could reasonably argue, precisely corresponding to, a spiritual experience; albeit one grounded in an appeal to reason. That which cannot be justified by reason is repudiated as being not worthy of knowledge. The ground upon which a Sceptic builds their claims is that all we have is ourselves. All we have is what we decide to do. We should therefore do whatever we wish, or whatever nature determines are our desires. It was on the grounds that there is no basis for what is right and wrong other than our own desires that some Enlightenment reformers sought to replace all existing societies with a society organised around the principle that everybody is equal. That via the notion of a social contract we ought to go about creating a new society.

The State in this vision should be given whatever powers are necessary in order to bring about the rights agreed within the social contract. Why everybody should be given equal consideration is left undefended. It is assumed as a moral postulate. In a Rationalist metaphysics we can know and understand the order of the universe and our place within it. All that is needed are philosophers to supply us with the correct metaphysics. This metaphysics will explain and justify how we ought to behave. In the absence of any metaphysical ground we should follow rules derived from our reason. In a Sceptical vision there is no ground for morality other than our own wishes. It was argued that because it is we who create values we ought to repudiate any attempt to ground morality in anything other than our own desires. Revolutionary philosophers argued that we ought to reject all existing practices and replace them with new practices. Because we are capable of thought we ought to render our society more rational. While the Rationalists may not

have secured as many truths as they claim, the belief in our capacity to understand led to important discoveries. The Sceptics by seeking to situate all knowledge claims within a local context provide a corrective to those who claim that they have reached a state of equality with the divine.

The approach which I am seeking to defend is an appeal neither to Rationalism nor Scepticism, but to a return back to our commonsense experience of being human. It incorporates the quest for precision which our use of descriptions gives us, with an acceptance that all knowing relies upon our tacit knowledge. This tacit knowledge arises as a consequence of the fact that we are conscious and situated. We are part of the reality we seek to describe. But this does not prevent us from understanding it. Our tacit awareness supplies us with the starting point of our attempt to extend and deepen our understanding. The best attempt to describe this path has been provided by the Hungarian philosopher Michael Polanyi (1891-1976). In his advocacy of Personal Knowledge he does not reject the aspiration to evoke and describe what is the case, but he does so by recognising that we know more than we can say, and we say more than we can know. He also points out that our descriptions not only mirror our experience, they also re-present it, in ways which serve to bring into being higher level realities as objects of discovery. One way of understanding the Personal Knowledge which Polanyi advocates is to view it as drawing attention to the power and limitations of language, while denying that we can demarcate in advance what is true.

What Polanyi is advocating is a Post-Critical philosophy, which by returning us back to the context of our understanding moderates the aspiration of philosophy to know, without abandoning the quest to make discoveries about that which is true, and good, and beautiful. In my efforts to elucidate the non-arbitrary character of such aspirations I make use of the writings of the American philosopher Robert Pirsig (1928-2017), who seeks to ground our judgements in a metaphysics built on the concept of Quality. Although both assert the power and limitations of language, there is a tension between them, insofar as Polanyi emphasises the agency of the person whereas Pirsig emphasises the reality being discovered. This tension not only exists between them, it also exists within their writings. I believe that the writings of the

contemporary philosopher Iain McGilchrist supply us with the grounds of a possible reconciliation. According to McGilchrist we experience the world in two different ways, corresponding to the two different hemispheres of our brain. The left hemisphere supplies us with a focal awareness, whereas the right hemisphere is responsible for generating a general awareness. The optimum relationship between them is when the left hemisphere is subservient to the right hemisphere. This is consistent with the approach taken by Polanyi and Pirsig. They all engaged in an attempt to understand the power and limitations of our capacity to describe.

A contemporary example of what happens when the two hemispheres of the brain are not in an optimum state of balance is the declaration that it would be best if humans were directed and replaced by computers. This view is called Transhumanism. Such a view is a consequence of a failure to appreciate the role which our consciousness plays in bringing meaning into the world, with language a tool in the service of our tacit knowledge. Not only in the sense of evoking and describing our already existing tacit knowledge, but also in the sense of enriching this knowledge by rendering possible higher levels of understanding. It is our capacity to participate in a higher level of reality than that which is supplied by our biology that distinguishes us from other animals. Taken together, Polanyi, Pirsig, and McGilchrist make sense of a Post-Critical approach to knowing. A philosophical account which is not opposed to religion, or philosophy, or science, but seeks to restrain the ambition that it is possible for us to reach a state of absolute knowledge. It claims that a false assumption about knowing has been responsible for generating a false philosophy. Religion (at least in its Western form) and philosophy and science have all sought to secure absolute claims. An approach which mistakes us for God. But that does not mean that we should oppose the human attempt to discover meaning by extending and deepening our understanding. It can be argued, and I do argue, that a Post-Critical approach is an affirmation of our humanity.

2) Critical Philosophy

Ἐγγύα πάρα δ, engýa pára d'atē'

[Surety, brings ruin]

Inscription on the temple of Apollo at Delphi

I mentioned that we are aware of our existence because we are conscious, but I now want to draw attention to the fact that we have two different levels of awareness. A focus of attention and a background awareness. We sustain a focus of attention by relying upon a background context. We cannot generate a focus of attention without relying upon this background awareness. The focus of our attention is not fixed, but our ability to sustain a focus always relies on our background awareness. The Western critical tradition in philosophy seeks to render that background awareness wholly explicit. Rendering it explicit enables us to reflect upon it and assess its validity. Our awareness is deemed to count as knowledge only if it can be explicitly justified. By the West I mean the cultural tradition derived, via the Romans, from the writings of the Ancient Greeks and Jews. Greek philosophical texts seek to identify and justify true assumptions, with the end in mind of supplying an intellectual foundation for a good life. The Jewish understanding of our existence was passed down in the texts we know as biblical texts. All these texts are interpreted. It can plausibly be argued that Western civilization is a legacy of the invention of the phonetic alphabet. Because the West passed on a tradition of texts there is a prejudice in Western culture in favour of that which it is possible to describe.

In the Western critical tradition that which is deemed worthy to be called knowledge is that which can be described. If it remains tacit, it is ignored, or at least not deemed to count as knowledge. Our awareness starts as tacit, we are born without the ability to use a language, but the aim is to put our awareness into a form capable of being subject to criticism. The ancient Greeks claimed that reality has a comprehensible order. A good life is a correct understanding of this order. We may either view that order as a moral order, which rewards good behaviour, or we may claim that what exists is amoral, indifferent to our actions, and

conclude from this that we should seek to maximise our individual pleasure. For the Jews a good life is a life lived in accordance with divine instructions. A righteous life is not a life lived in accordance with what we want but in accordance with the will of God. Christianity replaced the claim that the Jews are a people chosen by God with the claim that everybody ought to live in accordance with the example and instructions supplied by Jesus Christ, who lived among us as the son of God, and whose sacrifice on a cross redeems our sins. We are sinners but by the grace of God we have been shown a path where we transcend our selfishness.

Western intellectuals sought to integrate Christianity with Greek philosophy. In the Greek philosophical tradition reality is something we can have a true theory about which philosophers can justify. We can make a distinction between those ancient Greek philosophers who defend the claim that the universe has a moral order and those who claim that the only reality is matter moved around by forces, but both accounts require us to recognise and accept the natural order of the universe. Christianity however makes room for personal agency. We have a soul and therefore decide how we shall live. God has given us this freedom because if our choices are wholly determined they are no longer our choices. We can choose how we live and are responsible for our actions. Christianity endorses the tradition that what happens to us after we die depends on how we lived our life. Those who live a life in accordance with God's commands will be rewarded. Ancient Greek philosophers subjected existing practices to criticism on the grounds of an appeal to laws of nature. For Christians however a morally good life is the product of an emotional commitment to a way of life that is not determined by any natural order, but has a supernatural origin in the will of God. What is good is not derived from nature, it derives from the creator of those laws of nature, but is not reducible to those laws of nature.

We can choose to defy God and follow our own desires, or we can live in accordance with his commandments, which Jesus reduced to love God with all your heart, and love your neighbour as yourself. In the Jewish version of Scepticism what motivates God will always elude our understanding. We should fear God. Righteousness is submission. In comparison with God we are nothing. Our lives are full of sin, but by

exercising our agency to do good it is possible, because God loves us and forgives our sins, to redeem ourselves and save our souls. For Christians we are not passive agents of natural forces but agents with the freedom to choose that which is morally right. We are loved by God because we are made in his image. In the Christian account God so loved mankind that he sent his son to live among us and suffer, so that we might know from his example how we ought to live. Christianity set itself against the brutality and callousness of the ancient world, and offered the possibility of a different sort of life. As for the relationship between philosophy and religion, the Western critical tradition gives us three possible paths. The advocates of each path sought to impose their path as the correct path to happiness. Each path was codified in texts which set out an orthodoxy. This orthodoxy set out the rules of how we ought to live.

In the first path everything can be rationally justified. Greek philosophy and Christianity exist in a state of harmony. Once you accept the truths of Christianity reason can explain and clarify your beliefs. In the second path Jerusalem has nothing to do with Athens. We should trust the revelation which is given to us by God. This revelation is contained in the texts of the Bible. The truths contained in these texts are not the product of any reasoning process, they are a revelation of how we ought to live that exceeds our ability to understand. We should simply accept them on the grounds of an appeal to faith. The third path claims that it is possible to secure a line of demarcation between the truths of reason and the truths of revelation. It relies for our understanding of the world on those Greek philosophers who claimed that the universe has an order which justifies moral claims, an order that derives from the fact that God created the universe. But in addition to this knowledge, revelation tells us truths which transcend what our reason can secure. They go beyond what reason can justify. In the absence of a commitment to God these three paths re-emerge in the first path as the claim that how we ought to live in accordance with reason. A good life is a rational life. In the second path decisions about how we live are determined by forces beyond our control. We should simply accept these forces. In the third path, we are material beings who can impose meanings on the material properties which render our existence possible.

All these approaches assume that only that which can be rendered explicit counts as knowledge. They disagree only over which accounts of reality warrant our belief in their validity. Within the approach taken by critical philosophy, if you are to avoid an infinite regress in your assumptions you will at some point have to stop and say this is what I believe. On the basis of these beliefs you will reject other beliefs. But this raises the question: why accept one set of beliefs rather than another set of beliefs? Why does justification stop at this assumption rather than another assumption? In the ancient world philosophy therefore reached an impasse. You might go to one particular teacher or their school of thought or a different teacher and their school of thought. But all such accounts rely upon assumptions which others may dispute. If what you believe depends on your assumptions, and people start from different assumptions, then all philosophical claims are circular. In other words all justification relies upon what you already believe to be true. The critical tradition thus undermines itself. Any attempt to wholly describe the ground upon which we secure our knowledge claims ends up with claims which are grounded in nothing more than the fact that we take some explicit claims to be foundational. If only that which can be rendered wholly explicit counts as knowledge, disputes between those who rely upon different explicit assumptions are irresolvable. Disputes are settled by force.

The critical philosophical tradition, in both its Rationalist and Sceptical versions, ignores that which cannot be wholly articulated. It seeks to wholly articulate that upon which we rely so that we can subject it to a critical analysis to assess its validity. But all such criticism relies upon what we take for granted. Polanyi returns us back to the context of discovery. He claims that our tacit awareness is grounded in our contact with reality. Our tacit awareness is our experience of reality. It is true that we are agents who make decisions about how we will interpret our experience. But our personal agency does not mean that we impose upon our experience whatever we want. We are guided by our tacit knowledge. Our tacit knowledge of reality is not uninterpreted. Knowing occurs within a process of mutual arising in which, guided by our tacit awareness, we rely (Polanyi uses the word *indwell*) upon language and make use of it to make sense of our experience. In the beginning of the human was the word. We can neither wholly transcend the context of our

understanding nor are we wholly determined by it. We are neither passive agents, nor is it the case that we decide what is real and live however we wish. In this view knowing is not description all the way down, we understand each other by appealing to our shared tacit knowledge.

There is a political dimension to the claim that all assumptions if they are to count as knowledge must be explicitly justified. If you believe that via a process of reflection you can identify and secure what is true, you will believe in a society where those who can identify and secure what is true ought to rule. The source of these truths may be some combination of reason and revelation. You may on the other hand claim that there is no justification for reason and revelation, because it is not the case that we can agree on which claims to accept. In this view right and wrong is determined by nothing more than force. By an imposition of will. All societies rely on somebody instructing you what to believe, and if the only assumptions you deem to be acceptable are those derived from explicit claims, and these explicit claims cannot, without an infinite regress be explicitly justified, the inevitable endpoint of a critical approach is Scepticism. All Rationalism in my view therefore degrades into Scepticism. It can only halt this by relying on assumptions imposed as dogmas. In this way the critical philosophical tradition ends up as dogmatism. Any attempt to escape the tacit context of our knowing ends up as either dogmatism or relativism. In this way Western philosophy self-destructs. Polanyi is attempting to supply us with an alternative approach.

You may rely upon force because you believe that you are in possession of the truth, and on the basis of this insight seek to define and enforce this truth. Or you may rely upon force because you believe that nobody knows the truth. But in either case what is true ceases to be an object of inquiry. You do as you are told. There is therefore no justification for having one political arrangement rather than another arrangement, except that which happens to be imposed by force. In either political scenario there is no place for debate. There is no justification for a free society. In a free society people will have different opinions, and as a consequence there will be endless conflict. Why endorse a society based on endless conflict? On the basis that there is no ground other than what we happen to do, a traditionalist might assert

that we should carry on what we are already doing, on the grounds that it is familiar. The customs we have been brought up in ought to be the ground upon which we rely when interpreting our experience. It seems to turn on what is your personal preference, chaos or order. Why opt for chaos when you can have order? Advocates of a critical approach did so on the grounds of an appeal to the concept of truth. It is not enough to do what a tradition tells us to do and say, because we are reflective beings we ought to find out what is actually true and good. We are able to know.

Within Western philosophy what marks us out is our ability to formulate and reflect upon abstract ideals, to which the Bible adds that we are beloved of God. But a humanistic approach is grounded in the assumption that we are not God. Any attempt to view ourselves as divine is an overclaim. Our task as human beings is to pursue truth and goodness and beauty within the context which is supplied by our situatedness. I suggest that what is needed is an alternative approach to the critical tradition. One that rejects the search for absolute knowledge while endorsing the attempt to pursue abstract ideals. All knowledge is personal. We never arrive at a state of absolute knowledge, and it is an overclaim to imagine that we can. But this does not imply that we cannot know, all it implies is that we cannot be certain. It is not the case that our awareness is wholly explicit. All knowing is grounded in our tacit knowledge. But this is not a reason for opposing any attempt to render what we know explicit. Rendering it explicit facilitates the passing down and accumulation and critical analysis of knowledge claims. All such inquiry however is grounded in our background and not wholly explicable tacit knowledge. This tacit knowledge is not arbitrary. It derives from accumulated experience of reality. This refutes scepticism. We know too little to justify setting ourselves up as dogmatists, but we know too much to be sceptics. This is a humanistic approach to the problem of knowledge.

3) Personal Knowledge

‘Man is an intellectual animal and therefore an everlasting contradiction to himself. His senses centre in himself, his ideas reach to the end of the universe’

William Hazlitt *Characteristics CLVIII*

To illustrate the difference between a Rationalist, a Sceptical, and a Personal Knowledge approach let us look at three ways of understanding the orbit of our planets. Rationalist philosophers in ancient Greece saw the regularity of the movement of the planets in the night sky as a demonstration of the rationality of the cosmos. Each planet moved in a perfect circle around the Earth. It was then pointed out that the motion of the planets in the night sky is not consistently in one direction. At certain times of the year the planets seem to move backwards relative to the stars. Sceptics concluded that although we can anticipate the motions of the planets, any model of the behaviour of the planets is nothing more than a calculating device. A way of organising our experience that enables us to predict what will happen without committing ourselves to any claim about what is real. Both ways of looking at the motion of the planets are present in the discovery by the Polish astronomer Copernicus (anticipated by some ancient Greeks) that the planets orbit the Sun not the Earth. For the German astronomer Kepler, heliocentrism supplies us with a confirmation of the rationality of the universe. The German theologian Osiander however wrote in his preface to the book in which Copernicus set out his theory that the heliocentric theory was not a claim about what exists, it was nothing more than a way for astronomers to calculate the behaviour of planets in the night sky.

Polanyi begins his magnum opus *“Personal Knowledge; Towards a Post-Critical Philosophy”* (1958) by discussing the Copernican Revolution. He notes that some view the discovery that the Earth is not the centre of the universe as a humiliating demotion. We are a planet in orbit around one of billions of stars in our galaxy, which is one of billions of other galaxies. In a materialist account we are nothing more than a chance arrangement of atoms formed in accordance with laws of physics. In a sceptical account the laws of physics are simply convenient

ways of organising our experience. There is no metaphysical ground for this order other than the convenience of organising our experience in ways which further our purposes. These purposes are entirely subjective. Polanyi counters by pointing out that the Copernican Revolution is actually a demonstration of the power of thought to transcend that which is supplied by our senses. By reflecting on our experience we replace a sensory anthropocentrism with a more ambitious anthropocentrism of our reason. It is the conviction that the universe has an order we can comprehend which motivates scientists to discover patterns. The heliocentric account of the motion of the planets is not simply a convenient way of interpreting our experience, it is a discovery of what is true.

Those who claimed that we cannot transcend our experience were wrong, just as those who claimed that the planets have perfectly circular orbits were wrong. The bold speculation, contrary to our experience, that the Earth is in motion is true. Reason was right to challenge our common sense. Empiricism, the claim that knowledge is experience, denies that we can transcend our experience, and on those grounds it claims that if an observation conflicts with a theory then we should abandon the theory. But heliocentrism was believed to be true against the evidence of our senses because those who relied upon the power of thought saw the Earth in orbit around the Sun as a more intellectually satisfying explanation of the movements of the planets. By the power of thought they transcended their experience and arrived at a correct explanation. If our planet is in motion as it orbits the Sun, then why do we not fly off into space? Instead of abandoning the theory it was seen as a problem which a true account has to solve. The result was a new physics. The claim that the planets are in orbit around the Earth, an explanation accepted as true for thousands of years, is false. It is not the case therefore that our claims are always correct. Our understanding relies upon commitments. These commitments are not arbitrary, they are guided by our tacit knowledge. But it is not the case that tacit knowledge is a royal road to truth. It can be mistaken. It arises from contact with reality, an encounter we may not be able to wholly describe, but it is not infallible.

Polanyi rejects the assumption that knowing can be secured by following a set of rules. Our knowledge claims are fallible judgements

guided by our tacit knowledge. He notes that somebody noticed that a relationship seems to exist between π and the length of mammalian pregnancies. It was rightly ignored. Science is not about listing correlations, it is about finding patterns which reveal realities. Guided by our tacit knowledge we inquire into the results which suggest fruitful lines of inquiry. This tacit knowledge is not wholly explicable but it serves as the foundation of all knowing. This is why a computer is a good servant but a bad master. The questions we ask, our commitment to finding a solution, and our sense of where to look for a solution, are all guided by our tacit knowledge. We bring this knowledge with us when we make use of a computer to help us solve a problem. We relied upon mathematics, and later upon telescopes, to understand the motion of the planets in the night sky not only for practical purposes, but also to understand what is true. But contrary to Rationalism and Scepticism Polanyi does not view the task of philosophy as wholly describing and securing a ground for knowing. He understands knowing as a fallible practice that enables us to discover truths, and find meaning in our experience.

We are motivated by our commitment to make sense of our experience. This desire to know is driven by instincts which existed prior to the existence of any language, but language enables us to pursue truth as an abstract ideal. The Rationalist quest to secure knowledge by leaving our participation in knowing behind is delusional. It assumes that we can reach a point that transcends all perspectives. It is the philosophical equivalent of a text which contains the claim that Moses descended from a mountain with tablets engraved with all God wants us to know. The flip side of this belief is the claim that it is absolutely the case that we cannot know. That scepticism is the only position worthy of our support. These are two different sides of the same overclaim. As a philosophical approach Scepticism inverts the overclaim that we can arrive at absolute knowledge into the overclaim that it is absolutely the case that we cannot know. In order to rescue the pursuit of certain knowledge some philosophers claim that we can know with certainty that which we create, because we have made it. But instead of flipping between declaring that we can secure certain knowledge, which we then seek to impose on others, and declaring that we know nothing, a claim we also seek to impose on others, or combining them by claiming to

have secured a line between them, Polanyi understands knowing as a tacitly guided exploration which transcends the objective-subjective distinction.

Polanyi begins his undermining of the objective-subjective distinction by noting that probability statements cannot be contradicted by experience. Not because they are merely subjective declarations. If our judgements keep failing us we will doubt their validity. To claim that an event occurs randomly is to deny that it is the result of an ordering principle. When we observe pebbles at a train station saying "Welcome to Wales" we recognize the improbability of this pattern occurring by chance. But if the pebbles are scattered, the resulting arrangement is also improbable, and yet we are happy to accept that this arrangement occurred by chance. This is because we tacitly assume that pebbles forming words have been ordered. To make a probability or order assessment is an act of personal judgement. But not because it is nothing more than a subjective judgement. It can be wholly subjective judgement, but only when it is mistaken. Nor does it follow that discovering an objective order carries with it the implication that we wholly understand it. It may lead to insights which change how we interpret our experience, which in turn lead to further insights into what is real. The quest for knowledge is a process of continuous discovery sustained by intellectual passions. Our discoveries may have the consequence of profoundly changing our understanding of our experience.

In his tribute to the power of language to extend and deepen our understanding Polanyi claims that our intellectual superiority over other animals derives almost entirely from our use of language. Or more broadly, from our ability to understand, contrive, and extend the meaning of symbols. The meaning we give to our symbols relies upon tacit powers of discrimination that preceded our use of symbols, but our ability to use symbols enhances and extends these powers. Just as making use of a hammer enhances the power of a hand, symbols enhance the power of our mind, But it is not the case that descriptions wholly capture the reality they describe. All representations are reliant upon indeterminacies, although to different degrees. We can define what is meant by a symbol in mathematics more precisely than we can define the meaning of a word. But in order to serve as a description words will

always mean more than we can say if they are to mean anything at all. It is the price that we pay for them having a bearing upon reality. Polanyi halts any potential infinite regress in our attempt to define the meaning of a word by noting that a word means nothing by itself, it is we who use a word to mean something.

This does not imply that the meanings we give to words only have a subjective significance. No more than it does in the case of assessments of probability or order. Relying upon our imagination we make claims about a reality which goes beyond our subjective awareness. These claims are not arbitrary. We are guided by our tacit knowledge. We select from possible descriptions. We create new descriptions. In both we are guided by our tacit knowledge. Copernicus assumed that the universe has an order that we are capable of comprehending. He did so because he assumed that God has created a universe that we can understand. This assumption is grounded in faith. But this faith is not arbitrary, it relies upon our tacit experience of order. The movements of the planets in the night sky make sense. The planets move in a way that can be rendered comprehensible once we understand that they are in orbit around the Sun. We comprehend the motions of the planets not because we have imposed an order upon them, but because they act in accordance with laws which via our reflective abilities we succeeded in comprehending. We could understand those orbits because the universe is ordered, and because we have a mind which is capable of understanding that order. But all attempts to understand are subject to revision.

When we make a claim about what is the case we are making a claim we believe to be true. Defining truth as that which is true is an empty declaration. But Polanyi reminds us that to affirm something is true is to believe that it is true. We are only able to eliminate the infinite regress which takes place when we accompany the claim 'p is true' with the claim 'This sentence is also true' and so on indefinitely if we recognise that the claim that p is true as an affirmation of what we believe is the case. All claims that something is true rely upon our acritical (not uncritical) reliance upon what we already believe to be true. It is not the case that our beliefs about reality are arbitrary, they are guided by our tacit knowledge. This tacit knowledge arises as a consequence of the fact that we are an embodied consciousness attempting to make sense

of our experience of reality. Our understanding is fallible, we may be mistaken, but it is not arbitrary. Our Personal Knowledge is grounded in contact with reality. This experience is not uninterpreted. We rely upon what we believe to be true. This understanding is grounded in our tacit knowledge of reality. Of that which exists independently of whatever we would like to be true, and which serves for us as a continual object of inquiry.

4) Transcendent Ideals

'The first law to be inferred from philosophical experience is philosophy always buries its undertakers...Our second law...man is a metaphysical animal...our third law, that metaphysics is the knowledge gathered by a naturally transcendent reason in its search for first principles, or first causes, of what is given in sensible experience...Our fourth...as metaphysics aims at transcending all particular knowledge, no particular science is competent either to solve metaphysical problems, or to judge their metaphysical solutions.'

Étienne Gilson *The Unity Of Philosophical Experience* (1937) pp.246-9.

When we make a claim about what we believe to be true we are aspiring to transcend the subjective in anticipation of an indeterminate number of future discoveries. We are not being uncritical, because we accept the possibility of revision. Our beliefs may be mistaken. This is the reason why we subject our beliefs to criticism. To be dogmatic is to deny the possibility of error, on the grounds that you believe that you have secured absolute truths. It is assuming that you have secured absolute truths which is dogmatic, because it assumes that you have eliminated the possibility of being mistaken. It is an overclaim. The same also applies to Sceptics who claim that we cannot know. This is a negative version of the same overclaim. The critical philosophy method assumes that our knowledge claims can be secured. Polanyi accepts that our knowledge claims are situated, and therefore fallible, but does not extend this into the overclaim that because all knowing is situated we cannot know. Elevating our ability to think into a capacity which secures absolute knowledge goes beyond what is reasonable. Polanyi returns us back to the place where knowing takes place; an embodied consciousness seeking to enhance its understanding of its experience by reflecting on its awareness. Any claim that our reflections have secured knowledge claims beyond the possibility of revision, or that our reflections can never transcend the boundaries of our immediate experience, are overclaims that appeal to and are sustained by the

dogmatic delusion that it is possible for us to reach a state of absolute knowledge.

Once we formulate the concept of truth we try to satisfy the intellectual demands which a pursuit of truth makes upon us. It is a moral commitment which imposes obligations upon us, and it is sustained by intellectual passions. But accrediting our ability to identify what is true does not imply infallibility. Indeed Polanyi claims that committing ourselves to one way of understanding our experience may have the consequence of separating us from those who are committed to interpreting the same experience differently. Formal rule based operations which rely on one interpretive framework will not demonstrate the validity of that way of understanding to somebody who relies upon a different interpretive framework. The attempt to supply rules which can identify and secure our explanations as true is no better than Clever Hans; the horse who solved mathematical problems. It turned out that Clever Hans was unable to answer questions whose answers were not already known to his interrogators. Without realising it his interrogators were signalling the answers to him. Every method for determining what is a correct solution to a problem relies upon what is already believed to be the case. Nor is it the case that when people come up with objections to what we believe we simply concede defeat. We passionately defend our claims, and try to fend off objections by finding reasons why the objections of our opponents should be rejected, and our claims accepted.

Every factual claim has the structure of a commitment. But while appetites are guided by a private satisfaction, an intellectual passion strives to satisfy universal obligations. The claim that something is true implies universality. The freedom to do what you want is overruled by the freedom to do as you must. In other words, the implication of claiming that we believe something to be true is the claim that it is true for everybody. If we claim something as being true, but then act as if it is not the case, our opponents will rightly point out the contradiction. That we are saying one thing, and doing another. The fact that our claims may be mistaken does not imply that our claims are wholly subjective. But because our convictions are sustained by our emotions nor are they wholly objective either. Objectivism assumes that if we eliminate all possible doubt we will be left with what is true. But eliminating everything

that it is possible to doubt leaves us with nothing. It would be better if critical philosophers faced up to the truth that we are responsible for our beliefs rather than claiming that they have discovered a path to absolute knowledge, bringing any debate to an end. Nor are our emotions wholly subjective. When there is a lion waiting to eat us at the bottom of the tree our emotion of fear is connecting us to the fact that we may become lunch.

In our attempts to make sense of our experience we are guided by our emotions. Our emotions interpret our experience. But it is not the case that our emotions are wholly subjective. What we passionately believe to be true may in fact be true. Of course our feelings can mislead us, but an account which makes science a dispassionate exercise in rule following is a false account. Science is an emotional commitment to discovering what is true. What distinguishes us from other animals is our pursuit of standards of excellence we have set ourselves. Excellences exist relative to purposes. We supplement our biological purposes with spiritual ideals. The pursuit of these ideals, the pursuit of truth and morality and beauty, enrich the meaning of our lives in ways that are not reducible to our biology. We may for example as the result of our conversion to Christianity live a celibate life in a monastery. What is good in this example is not determined by an appeal to the operation of biological instincts. Our behaviour is a consequence of our desire to live in accordance with demands made upon us by our commitment to higher ideals. These spiritual commitments do not ignore our emotions, they constrain and direct them in the service of a higher purpose. An animal has a moment to moment existence responding to what gives them pleasure or pain. To be a human being is to be able to make spiritual commitments.

We seek to know what is true not simply because truth helps us achieve our purposes, but because truth is an end in itself as an object of intellectual inquiry. Nor is it the case that what we claim to be true is whatever we want to be true. What we want to be true is constrained by our commitment to truth as an ideal that transcends what it is that we would like to be true. Truth as an object of endless inquiry. The fact that our efforts are fallible does not imply that we cannot know what is true. It was not obvious to previous generations that the Earth is a planet in orbit around the Sun. If appearances are to be believed it is the Sun which

moves around the Earth. As we look up at the night sky the planets appear to be in orbit around us. On the grounds of an appeal to our experience it was assumed that our planet is situated at the centre of the universe. Modern science corrected this claim. Polanyi recognises that sometimes it is only specialists working in the same or closely related fields that have the competence to judge each other's work. But the reverence shown to those who claimed that the planets orbit the Earth shows us that a consensus can impede progress. But the fact that what is believed to be true is false does not imply that all knowledge claims are equally trustworthy, but nor does it legitimate those claiming to be in possession of absolute knowledge. The acceptance of truth as a transcendent ideal carries with it the implication that all authority should be challenged.

On the assumption that knowing occurs if you follow the right rules it is asserted that if a machine, or more specifically a computer, is programmed with the right rules it can know. But it is not the case that because a machine is a rule following (syntactic) device that this in itself carries the implication that it can be a meaning generating (semantic) machine. In the account Polanyi sets out creating a meaning (intensionality) requires a consciousness. A consciousness has the property of aboutness (intentionality), which serves as an obstacle for those who want to reduce everything into physical properties. In their (I am tempted to say religious) devotion to materialism some solve this problem by declaring that consciousness is an illusion. It may be accepted that getting a computer, which is to say a universal machine, to follow rules does not render that machine conscious, but they do so on the grounds that nothing is conscious, because all that exists are physical properties. Because consciousness does not fit into this account it is eliminated as a causal agency. This relies on the overclaim that physics can provide us with a complete explanation of everything in existence. Polanyi accepts that if we did not have a body we could not have a consciousness. But this is not the same as claiming that what it is to have a consciousness is reducible to the physical properties that render a body possible.

To deny the reality of consciousness is absurd. It is a good example of the lengths which philosophers will go to defend their assumptions. In this case the assumption that science can supply us with a complete

explanation of everything. If science is unable to explain the phenomenon of consciousness, instead of accepting the limitations of science, some would rather deny the reality of consciousness. They are more devoted to descriptions than the reality we use these descriptions to evoke. A critical philosophy approach leads to a dogmatic imposition of a description. Anything not contained in that description is rejected as having no reality. These descriptions are justified on the grounds of an appeal to a method which delivers truths. The assumption that it is possible to secure knowledge, accounts for the hostility shown towards any appeal to tacit knowledge. Our tacit knowledge arises in the context of our fallible explorations of reality and cannot be converted into a dogmatic account. It derives from our fallible attempts to make sense of our experience, and it undermines the notion that it is possible to convert the utterances of those philosophers you want to be correct into absolute truths. But to claim that we are unable to discover any truths about the realities we encounter also goes beyond what it is reasonable for us to accept.

Our ancestors gathered and hunted. If they could not distinguish between different varieties of plants and animals they would not have survived. In a linguistic form these categories exist as universals. When attempting to make sense of our experience we rely upon discriminative capacities that existed before the development of language. We notice similarities and differences. That water is wet and that fire is hot and so forth. But so keen are philosophers within the critical tradition to secure an absolute foundation for their knowledge claims that they would rather create a new reality composed entirely of universals, or conversely claim that universals are nothing more than arbitrary divisions we impose on our experience, than admit that our explicit claims become meaningful as a consequence of a Personal Knowledge that is grounded in our fallible tacit knowledge. This knowledge is characterised by imprecision rather than exactitude, although to varying degrees, on the grounds that every object, even the abstract objects of formal systems, cannot be wholly captured by our descriptions. This imprecision does not imply that there is no reality justifying calling our descriptions better or worse. It is an unreasonable overclaim to assert that everything in our experience exists in such a state of flux that it is not possible for us to identify general features.

But our ability to abstract general features does not imply that we can secure perfect descriptions of our experience. Symbols are tools for evoking our tacit knowledge. In the absence of our tacit knowledge symbols are meaningless. By returning us back to our Personal Knowledge, Polanyi transcends the debate between those who view universals as an order that we read off reality, and those who view them as fictions which we impose upon our experience. A Personal Knowledge account returns us back to our fallible acquaintance with reality. Fallible because what we believe to be true may be false, but it is not on those grounds wholly subjective. Only a Rationalist wholly captivated by formal systems would claim that our experience can be wholly captured by descriptions. Only a Sceptic who seeks to reduce everything into the flux of our immediate experience would deny that we can identify realities which transcend that experience. Only somebody who is carried away by the fact that it is possible for our imagination to create an endless number of different interpretations of the same experience would assert that reality is whatever we want it to be. These are all overclaims. Polanyi returns us back to the way we actually live instead of claiming that we are able to discover a ladder to absolute knowledge.

Those who claim to have secured absolute foundation are keen to dismiss those who do not share their conviction. Alternatively, Sceptics assert that those who claim to have secured truths are motivated by something other than the pursuit of truth. Both these approaches claim to be in possession of the absolute truth. Schools are established where correct views are dispensed to those who dutifully repeat their views back to them. In a political context the knowledge claims which are used to justify power are endorsed by critical philosophy. Those who supply alternative opinions are ignored or persecuted. The critical tradition in Western philosophy therefore far from being open to new discoveries is inherently intolerant. Either because alternative opinions are not required because they are already in possession of the truth, or because it is asserted that all claims to knowledge are unwarranted, and all knowledge claims are nothing more than the dictates of those in possession of power. The task of the critical philosopher (on the grounds of their superior knowledge) is either to justify those in power or to justify why they should be replaced. A Sceptic seeks to do this on the grounds

that nobody possesses the truth, and any claim to truth is nothing more than an expression of power. They exclude their own claims to truth needless to add, which reveals its true character as dogmatism in disguise.

5) The Tacit Context

‘Abstraction is not our enemy unless it is thought to be our only friend.’

G.D.Martin *Shadows in the Cave; Mapping the Conscious Universe*
(1990) p.17.

A Rationalist or Sceptical philosophy cannot account for the phenomena of discovery. For a Rationalist because knowledge is simply deducing claims from what we already know. For a Sceptic because we cannot know what we are claiming is true. Polanyi takes a middle position between these two extremes. But just as there is a horizontal scale going from Rationalism to Scepticism there is also a vertical scale. At the top of the scale there is Realism, and at the bottom there is Subjectivism. To be at either extreme again undermines the discovery process. Realism eliminates the importance of the knower in creating what is real, there is simply what exists, whereas in subjectivism the only reality we can know is our subjectivity. Materialists claim to know that everything that exists is matter, and Objective Idealists claim to know the process by which a consciousness reaches a state of absolute knowledge but neither takes the reality of what it is to be a human being seriously, we are the determined product of processes beyond our control. Subjectivists are solipsists who ask us to believe them when they claim that only they exist, even though they are not living their life as if it is true. Again Polanyi takes a moderate position. It is we who bring mathematics and history into existence, but it is not the case that claims in mathematics and history are wholly subjective. Because history describes other human beings, it is more personal. It relies upon our ability to empathise with what it is to be human, but it is not the case that mathematics, unlike history, is wholly impersonal. Even mathematics is personal.

According to Polanyi, all perception, all tool use, and every sort of meaning, relies upon two forms of awareness. A subsidiary awareness is integrated into a focal awareness. This integration takes place when we perceive, and the integration it supplies generates meanings. It is not the case that our awareness consists of “sense data”, a mythical construction created by Empiricist philosophers, we make sense of our

awareness by integrating it into wholes. We interpret our experience of the world. All experience is interpreted. Our integrations identify wholes that have a reality which transcends our awareness. A lion is a fictional entity. It is a man eating reality which can be distinguished from other realities such as zebras. Tacit knowing therefore has a perceptual, a semantic, and an ontological dimension. In order to explain how tacit knowing operates, Polanyi seeks to draw our attention to its instrumental aspect. To the fact that tacit knowledge becomes tacit knowledge within the context which is provided by our relying upon an object that serves as the focus of our attention. We rely upon our tacit knowledge in the pursuit of ends. It is also the case that these ends cannot be wholly defined. The attempt within critical philosophy to wholly define our ends is as misguided as the attempt to wholly define what we rely upon when pursuing these ends.

Polanyi illustrates how tacit knowing operates in tool use by using the example of a hammer. When we are trying to hit a nail with a hammer we attend to the nail and the hammer; but not in the same way. Our awareness of the hammer is subsidiary, and our awareness of the nail is focal. These two forms of awareness exclude each other. If you shift your attention from the nail to the hammer this will impair your ability to hit the nail. These two different types of awareness exist in a functional relationship. As we hammer a nail our awareness of the hammer in our hand becomes a subsidiary as the hammer becomes an extension of our body. To change the example, when practising playing a musical instrument a musician may reflect upon their technique, and try to improve it, but the knowledge they gain from this practice is deployed tacitly during a musical performance. The focus of a musician in a concert is evoking an emotional response from the audience. We not only use hammers, and play musical instruments, we also engage in using a language. We use language to evoke, preserve, and elaborate meanings. These meanings are not tacitly hardwired into our nervous system. Polanyi claims that a meaning occurs when an embodied consciousness integrates their subsidiary awareness into a focal awareness. A conscious agent integrates their awareness into a purpose.

It is not the case that these meanings are simply a product of following rules. Computers are machines that we invented to process

symbols. We can use the symbols it processes to stand for anything we want. In this sense a computer is a universal machine. If a computer is programmed to follow grammatical rules it can be used as a word processor. But when we use a computer to process words it is not the computer which gives meaning to those words. It is no more aware of the meanings of the symbols it processes than an abacus knows that it is doing arithmetic. The claim that computers know the meaning of the words that it is processing derives from the false assumption that knowing can be rendered wholly explicit. We make use of computers as a tool to help us to achieve our purposes. A computer is a machine which acts in accordance with the rules which have been supplied to it by the person who has programmed it. A computer does not know the difference between a grammatically correct sequence of words and a literary masterpiece. The claim that a computer thinks is not simply wishful thinking, it has deep roots in the assumption that what is it to be a reality can be captured by a description. That knowing can be reduced to a process of supplying a correct description. But a description can only serve as a description if it is being used as such by an agent that is conscious.

According to Polanyi nothing that is said or written can mean anything by itself. Without any consciousness there are no meanings. It is a consciousness which recognizes and applies a symbol who can mean something by it. We use symbols to evoke and extend the meanings that are created by a consciousness. Symbols are tools for deploying our tacit knowledge. We make use of symbols as tools in the service of purposes. The ability to distinguish between a rock and a lion is a capacity which helped our ancestors to survive. Our use of symbols enhances our existing powers of discrimination. If a symbol is to be useful to us we have to be able to recognize, store, and rearrange them so they can be used to evoke and facilitate reflection upon what it is they denote. Polanyi calls this the Law of Poverty. But if it is our tacit knowledge which is primary, why is language so important? Polanyi claims that creating descriptions is transformative because it enables us to exist at a higher level of consciousness. Language enables us to formulate purposes that only become possible via our ability to describe them. This can be reconciled with the priority of the tacit if we accept that description is always incomplete. The attempt to render our tacit

knowledge facilitates our ability to reflect upon it, but all articulation is incomplete.

Our descriptions have varying degrees of precision. Mathematicians derive claims from axioms in accordance with rules of inference, and this enhances rigour. It inspired Rationalism. But Polanyi rejects the Rationalist claim that knowing can be reduced to deduction. Knowing is a process which includes leaps of understanding. It is not simply a deduction from what we already know. If you know exactly what you are looking for, then you already know it, and if you have no idea of what you are looking for, then you will not find it. The process of discovery demonstrates that we know more than we can say. It is also the case that we say more than we know. We make knowledge claims which turn out to be false. But Polanyi denies that we can secure truths simply by following rules. A procedure of validation, and what we already believe to be true, cannot be separated. This does not imply that our participation in knowing means that everything we say is wholly subjective. It merely undermines the requirement that for anything to count as knowledge it must be certain. But why accept such a demand? It is a demand which ends up as the claim that we cannot know anything. It collapses into Scepticism. It would be better if we accepted that relying upon our tacit knowledge we say what we believe to be true. That it is possible to make discoveries about what is the case, but sometimes our claims are mistaken.

Nor is it the case that by emphasising the importance of our tacit knowledge that Polanyi is attacking the importance of language. He goes so far as to claim that it is our ability to use language that makes us human. What he is claiming is that description is not a process that can be rendered wholly explicit. It relies upon our tacit knowledge. It is not possible for our descriptions to capture all we know. All knowing relies on our tacit knowledge. Some Sceptics claim that mathematics is nothing more than a collection of tautologies. But is it the case that a mathematical claim is necessarily true? We cannot even be sure if the axioms of arithmetic are consistent. Some define mathematics as the totality of theorems which can be derived from a consistent set of axioms. But this implies that our axioms are arbitrary, but this is not correct. Very few of the propositions that can be derived from an arbitrary set of axioms are of any interest. What Polanyi is claiming is that all

formal systems rely upon that which is tacitly supplied by those who make use of them. Some descriptions capture more of what we are using them to describe, but it is a matter of degree. Even our most formal systems cannot be wholly defined. All rules are interpreted. Every interpreter of rules relies upon that which has not been captured by those rules.

A map enhances our ability to make sense of a territory, and a map of all human knowledge would be a very valuable tool. Polanyi reminds us however that even if it were possible to create such a map, our capacity to interpret and enhance that map would be an even greater achievement. These abilities are reliant upon our tacit knowledge. By drawing attention to tacit knowledge Polanyi is not simply claiming that knowing and skills have elements which have not been described. What is important is not the existence of the unspecified, but the role which the unspecified plays in knowing. In the absence of any tacit knowledge there is no knowledge. We are conscious embodied agents who use symbol systems to make descriptions which rely for their meaning upon our tacit knowledge. Materialism is a metaphysics in which all of our cognitive and moral achievements, all that humans have achieved, and are achieving, and hope to achieve in the future, are reducible to a metaphysics in which our commitments and intellectual passions are irrelevant. But Polanyi reminds us that without a knower there is no knowledge, without any freedom of choice there is no morality, and in the absence of any consciousness, it is not possible for there to be beauty either.

Everything which has been described is the sum total of our use of symbols to convey what we have felt, understood, and done. Indwelling within these descriptions not only enables us to recover and admire past achievements and pass them on to others, it also enables us to make new achievements. Owing to its sensuous character, Polanyi claims that we are more deeply affected by a great work of art than we are by a scientific discovery. The arts and the sciences both rely upon our ability to understand their symbols, both require creativity, and both explore realities which are not wholly subjective. But Polanyi claims that we have a higher degree of participation in a work of art than we do in a scientific theory. We seek to verify a claim in the sciences, but we validate the experience that is evoked by a work of art. The sciences are an attempt

to describe the natural world, or at least those aspects of it that are amenable to precise description, but a work of art is a trans-natural integration whose purpose is to evoke and enrich what it feels like to be alive. A “Theory of Everything” in physics is an attempt to unify the physical sciences. But it is only about everything if everything can be described by physics. It is a vision in which everything can be reduced to physics. But it is false to say that everything in our experience can be reduced to physics.

Physics is a human creation. Not in a trivial sense but in a profound sense. In the absence of physicists there would be no physics. In the absence of conscious agents there would be no knowledge. It makes no sense to talk about knowledge except within the context of the conscious agents. The same goes for meaning and purpose. Indeed they are interconnected. A physicist gives meaning to the symbols he uses in accordance with the purpose of understanding the workings of the natural world. Discovery in science requires skill and imagination, just as the humanities require skill and imagination. It is an attempt to make sense of our experience in accordance with our purposes. But Polanyi does not view the purposes that create the humanities and the purposes which create the sciences as reducible to one another. What we are seeking to achieve in the humanities, and what we are seeking to achieve in the sciences are not the same. Nor is it the case that the sciences are superior to the humanities. The sciences, which is to say the physical and biological sciences, describe physical and biological systems. To this you can add the social sciences, which seek to describe the functioning of social systems. They do this with varying degrees of success. Technology creates something new. The humanities also describe and create, but they also explore the experience of being human.

5) A Free Society

*'1) Wealth is knowledge 2) Growth is learning 3) Information is surprise
4) Money is time...The great disabling error of the dominant schools of
economic thought...is the belief that scarce material things are what
constitute wealth. Under this materialist superstition, economics
becomes chiefly the allocation of scarce material resources. If
economics is the allocation of scarcity, politics becomes the enforcement
of...allocations; and war...the pursuit of politics by other means.'*

George Gilder *Life After Capitalism* (2023) pp.xi-1.

The claim that in Christianity we are equal under God is not the claim that we are all equally good. It is the claim that we are given equal consideration. Declaring that in the eyes of God there is no moral difference between Saint Francis of Assisi and the Marquis De Sade is not a Christian claim. It derives from a materialist philosophy which denies the existence of moral standards. In 1935 while Polanyi was on a visit to the USSR he had a conversation with the Bolshevik theoretician Nikolai Bukharin, who declared that science is not and never has been about pursuing truth, it is about attempting to solve problems set by those with power. In a Communist society scientists are directed to solve problems arising from implementing the latest Five Year Plan. Instead of a Civil Society, which is an arrangement which serves the purposes of the bourgeoisie, a Communist State has as its purpose satisfying the needs of everybody. In order to satisfy these needs free markets are replaced by central direction. Polanyi asserts that science is a practice orientated by the pursuit of truth. Nor is he persuaded that it would be better if scientific research was directed by the State. The claim that science is only ever concerned with practical issues, and seeking on the grounds of an appeal to sociology to undermine the claim that scientists are pursuing truth, are contradictory. If pure science is not real, then why denounce it?

In the USSR those who were put in charge of planning science sought on ideological grounds to deny that plants and animals can be improved by selective breeding. They relied on the ideas of Trofim Lysenko, who claimed that nature is determined by nurture. Anybody who disagreed with this was dismissed from their job, and some were executed. As a direct consequence of Bolshevik reforms millions of people died from starvation. The rejection of truth, justice, and beauty resulted in a society that was pervaded by lies, oppression, and ugliness. For the 19th German philosopher Karl Marx human history is nothing more than class conflict. This conflict will come to an end when everybody is equal. Technology will create a society that produces all we need, and in this utopia you will be free to do whatever you want. There will be no private property, all that exists will be owned by the State, and everybody will spontaneously agree to submit to the requirements of the collective. On the basis of his materialist philosophy Marx reduced morality to nothing more than a pursuit of self-interest. All your convictions are determined by your class. In a classless society everybody will be in harmony with everybody else. Liberated from any submission to moral demands, Bolshevik revolutionaries relished being ruthless.

They set out to be ruthless not because they aspired to live in a society where humans are treated like cattle, but because they saw humans as blank slates. Human history is a process where we make ourselves. Inspired by their class war view of human history Marxist revolutionaries viewed their actions as in accordance with the sociological laws of history which Marx described. Human history is simply class struggle, and it inevitably ends up as a society in which everybody is equal. The hell which the Bolsheviks created in the Soviet Union was held up as something to be admired. Not because the classless society they claimed to be bringing about ever arrived, but because reducing morality to nothing more than disguised class interest was taken to be authentic. Enthusiasts for the Nazi Party in Germany had a similar approach. The moral passions which had driven the Jewish prophets, rendered homeless by a materialist metaphysics, returned as a devotion to nihilism. Polanyi calls the process whereby morality is viewed with contempt and immoral behaviour admired, a moral inversion. It assumes a Darwinian vision of human history as a process

of continual conflict. With the difference that Marx took from Christianity the assumption that at the end of history a new Jerusalem will be created in which swords will be converted into ploughshares and we shall lie in harmony.

According to Marx (although he left the details somewhat vague) planners in a Socialist society will possess the knowledge needed to maximise happiness. Because free markets generate inequalities they will be replaced by a system in which the State allocates resources more efficiently. When the Communists seized power in Russia the promised greater efficiency of central planning did not arrive. Nor was the society they created more equal. Some were more equal than others. Elite members of the Party even had their own shops. The focus was not on wealth creation but wealth redistribution. The Bolsheviks thought they knew better how wealth should be distributed. It was a rejection of free markets and an attempt to return back to something resembling feudalism, except that power was not distributed throughout the aristocracy, on the grounds of their service to the king, but concentrated in the Communist equivalent of the king, whose authority was unrestrained by any appeal to the law. The law was whatever the king decided. It was not an object of discovery. This privilege was extended to the head of the secret police, who drove around selecting who he was going to rape. In order for somebody to be executed it was enough for Lenin to desire it. In a materialist conception of the universe justice was a concept with no reality other than the reality of power. Lenin or Stalin or Mao or Pol Pot decided who was an enemy of the people and acted accordingly.

The fusion in Marxism of moral passion and materialism, is described by Polanyi as a dynamo-objective coupling. Moral passion is not eliminated, it is inverted into a defence of immorality. The very existence of something being deemed to be good becomes a reason for it to be rejected, because any claim that something is better than something else offends against the principle of equality. On materialist grounds it was asserted that everybody should be free to do as they wish as long as this is consistent with the freedom of everybody else to do as they wish. The aim was to return humanity back to a state of nature, in which everything is held in common. Private property was abolished and what is right and wrong is determined by the State. The only standard of

judgement is making sure that everybody is equal. Quite why this ought to be the only standard is left undefended. Supporters of the Nazi Party in Germany rejected this standard and made a distinction between the chosen people, chosen by themselves, and everybody else. Everybody else was deemed to be inferior, fit only to be slaves. But they agreed with the Bolsheviks that opponents of whatever happened to be the Party line ought to be re-educated or executed, as everybody should live in accordance with the collective needs determined by the rulers of the Party.

In his defence of a free society Polanyi denies that a free society is morally neutral. A free society arises as a consequence of a belief in the reality of transcendent ideals, which serves as objects of continual discovery. The pursuit of truth and justice implies a society which attempts to sustain and protect our freedom to discover what is true and just. It rejects both the claim that what is true and just has already been discovered, and the claim there is no such thing as truth and justice only power. Polanyi claims that these extreme positions are a consequence of advocating a critical philosophy which seeks either to secure claims about how we ought to live, or deny that there is anything to morality other than subjective preference. Alternatively a critical philosophy claims to have identified the precise boundary between these two positions. By following the correct method we can identify what is objective and what is subjective, and can secure the rules which should be imposed upon everybody. The practices in this society are imposed and defined by the law, which in an egalitarian society operates on the principle that everybody is entitled to their own views on how to live, so long as everybody lives in accordance with the principles of an egalitarian society. These principles are enforced by the rulers of the State.

According to Polanyi it is not possible to wholly describe the practices which sustain a free society. Nor does he seek to elaborate fixed principles. The practices which sustain a free society are in a continual state of evolution as we adapt to new problems, new knowledge, and new circumstances. Intellectuals in the French Revolution assumed that once they obtained power all that is needed to create a free society is the right set of rules. But rules have to be interpreted. The American constitution was accepted because the population of the United States

was already familiar with the English traditions from which its principles were derived. It does not follow that once the practices of a free society are reduced into a set of rules a free society results. What happened in France after the French Revolution was exactly the opposite of a free society. The government, on the grounds of an appeal to various abstract rights, became tyrannical. Those who had a different interpretation of these rights were identified as being enemies of the people. Even if you all agree upon freedom as your goal, when does it become right to restrain your freedom on the grounds of an appeal to the freedom of others to live as they want? It all depends on your definition of liberty. You may seek to include in your definition the need for more equality.

The free society which Polanyi defends is a society which protects the freedom of institutions to pursue their goals without direction from the State. He is not opposed to individual liberty, or an economic system based on free markets. Given the number of adjustable relations which a complex society requires, he claims that a centrally directed modern economy is impossible. But he does not defend a free market on the grounds that every choice is equally good. Liberalism as a political creed has its origins in opposition to intolerance. The source of this intolerance was religion. But Liberalism contains a logical contradiction. The English philosopher John Locke argued for tolerance on the basis of doubt. We should not impose beliefs which we cannot prove to be true. But Polanyi denies that moral claims can be secured. In the account supplied by Locke if we cannot prove that our views are correct we should not impose them. The English avoided addressing the nihilistic implications of this by what Polanyi describes as a veritable suspension of logic. The French writer the Marquis De Sade however concluded that if it is not possible to rationally justify morality then there is no obligation to be moral. Why be constrained by appeals to morality, if all such claims are nothing more than an expression of power. We should seek power and do as we wish.

Instead of viewing history as a struggle between classes, some replaced classes with nations. Polanyi cites the example of historians in Germany advocating Realpolitik. It is might which determines what is right. If Germans wish to rule other nations, and they have the power to enforce their will, they should do so, if necessary making the inhabitants

of other nations slaves. Both the Bolsheviks and the Nazi Party endorsed the notion that the best way of dealing with opponents is by cancelling them. Either by executing them or finding other ways of deleting their contribution. Both authoritarianism and nihilism are opponents of a free society. The first because it takes away your freedom to question those in power, and the second because it declares that morality has no ground other than power. Instead of defending the concept of a Specific Authority, which seeks to direct everything, Polanyi advocates the concept of a General Authority, which justifies freedom of inquiry on the grounds that an ideal such as truth or justice transcends that which we are able to wholly capture in our descriptions. Their reality is not defined by those descriptions. They form ideals towards which we are continually striving. Although the English sought to protect themselves against nihilism via an appeal to common sense, others embraced the 'transvaluation of values' that an appeal to materialism justified.

On the grounds that God is dead it was claimed that we ought to seek to create societies where we can do whatever we want. According to Polanyi if the liberties of a free society are going to survive they can only withstand attacks upon it by nihilists on the grounds of a philosophy that can justify moral values. Polanyi agrees with Aristotle that living organisms have to be understood in terms of purposes. In accordance with Aristotle he denied that what is good and bad can be wholly captured by rules. He instead views moral judgement as a skill which we acquire via an apprenticeship to a practice. We ought to act as a good person would behave in the specific circumstances that require a moral judgement. Aristotle however assumes that we will arrive at a point where knowers are able to discover all that can be known. He sees the science of his time as having reached this point. Polanyi however views knowing as a process of continual discovery. Via an appeal to the concept of transcendent ideals we can and should reflect upon existing practices with a view to improving them. The content of our transcendent ideals is revealed in a continuous process of inquiry. In the English Common Law for example verdicts by juries and judges serve as precedents. What is just is an ideal that motivates continual inquiry, it is not a deduction from abstract principles. But if justice is not wholly

subjective, but is something which is discovered, how is such a reality possible?

6) Emergence

'To say that life is nothing but a property of certain peculiar combinations of atoms is like saying that Shakespeare's Hamlet is nothing but a property of a peculiar combination of letters. The truth is that the peculiar combination of letters is nothing but a property of Shakespeare's Hamlet. The French or German versions of the play "own" different combinations of letters'

E.F.Schumacher *A Guide For The Perplexed* (1977) pp.28-9.

One of the texts which somebody educated in the Western tradition was expected to be familiar with was the *Phaedo* by the ancient Greek philosopher Plato. It recounts the last hours of Socrates. Socrates was charged with corrupting the young men of Athens by questioning traditional beliefs. When he was asked by the court what his punishment should be he suggested free meals for life at public expense. He was condemned to death. Western civilization you could argue has two founders, Socrates and Jesus. Their sayings and life story were written down by others, and both were executed. Socrates explains to his followers why he did not try to escape. He explains that he did not do so on the grounds of respect for the law, intellectual consistency, setting an example, and submitting to his fate. What he denies is that his actions are determined by material causes. Polanyi notes that the politicians Charmides and Kritias, who were prominent in the Thirty Tyrants group who took over and ruled Athens after its defeat by Sparta in the Peloponnesian War, were pupils of Socrates. On the grounds that moral beliefs cannot be rationally justified, they came to the conclusion that morality is simply an imposition of will. This is the background to the trial and execution of Socrates. Charmides was Plato's uncle and Kritias was his first cousin. Plato is seeking to defend Socrates by claiming that he was not rejecting morality, he was making use of reason to define and secure it.

A diamond does not have values, but a living being does. A cow values grass. It values it as food. There is better and worse quality grass. But if a cow comes across a philosophy book advocating materialism it would simply be a coloured shape. If we came across that

same book and after reading it were convinced by it to declare that it is only physical properties which are real, and therefore the only reality the book possesses are its physical properties, this creates a problem. We have been persuaded by a book to change our mind. How does a book change our minds? A philosopher who dedicates their life to the purpose of demonstrating that purposes are unreal is an interesting object of study. Polanyi denies that we can understand what it is to be a mind in terms of physical properties. He supplies an account of reality which claims that there is more than one level of causality. Not all causality can be comprehended in terms of physical causes. He claims that understanding the structure of tacit knowing helps us to understand how this is possible. We identify particulars within the context that is supplied by a whole. A whole is a higher level of reality than its particulars. For example we perceive the particulars of a face within the context of our recognition that we are looking at a face. We may recognize it as somebody we know.

When a consciousness integrates the particulars of their subsidiary awareness into a focal awareness this creates a meaning. When we identify something as a cow we integrate our awareness of its particulars into a whole. It is not identical to every other cow, it can be distinguished from other cows, but has features that enable us to identify it as a cow as opposed to an elephant or a camel. Charles Darwin in his book "The Origin of Species" (1859) denied that it is possible to identify an order in nature which enables us to securely distinguish between different species. Life exists as a continuum, the diversity of which arises as a consequence of a differential selection of mutations. Life is differentiated into ever more specialist forms of life. Adam Smith in his book "The Wealth of Nations" (1776) claims that wealth is a product of labour differentiated into ever more specialist tasks. Thomas Malthus claimed population increase is greater than food supply, and this gave Darwin a selection mechanism. Not every living being survives long enough to reproduce. Life is a struggle for existence. How does mind fit into this account? Darwin's chief advocate Thomas Huxley described mind as an epiphenomenon of the body. He would reply to Socrates that yes your decision to stay in Athens and accept your sentence was determined by the properties of matter. In his view consciousness is like a steam

whistle on a train. It accompanies physical events but has no causal role in them.

Polanyi claims that the structure of tacit knowing gives us an insight into the structure of reality. The integration of two levels of awareness enables us to understand how it is that a higher level emerges from a lower level. Reality is not uniform, it is stratified. Material properties are only one level of reality. Each level has boundary conditions which leave open the possibility of direction by a higher level. A level that is constrained but not determined by the lower level. Polanyi describes this as a system of dual control. The boundary conditions are determined by the principles which are directing the next highest level of reality. This occurs in accordance with the principle of marginal control. Although every higher level depends for its existence upon the properties of a lower level, its higher level properties are not reducible to lower level properties. In accordance with this account there cannot be any such thing as a mind without a body, but a mind is not reducible to physical properties. Although a mind can only operate within that which is rendered possible by a body, it directs a body. It is a higher level of causality that emerges from physical properties. Higher levels exert a downward causality over lower levels. But this downward causality is constrained by that which is rendered possible by the properties of the lower levels of reality. We cannot live in whatever way we would like to live, but we can decide which of several possible paths is the one we want to follow.

The French scientist Pierre-Simon Laplace claimed that if a physicist was present at the beginning of the universe, and they knew the position of every atom, and all the forces acting upon them, they could accurately predict the entire future of the universe. Using the example of how a machine works, Polanyi rejects this claim. A machine is made of parts which jointly serve the purpose for which they were created. These purposes cannot be reduced to physical properties, because it is not these properties which determine its properties as a machine. What it is to be a machine is a consequence of its operational principles. So even if the physicist knew all about the initial conditions at the beginning of the universe, and even if they knew every law of physics, and were able to do every calculation, their knowledge would not enable them to know the principles of a machine. Machines are created by us with the end in mind

of facilitating our purposes. The more effective the machine, the better it is at achieving our purposes. An understanding of the laws of physics may help us to understand why it is that a specific machine has stopped working, but a complete description of its physical properties will not explain why it is a good machine, because that which determines why it is a good machine exists at a higher level of reality than its physical properties.

If a biologist claims that biological principles are explicable in terms of the laws of physics they are mistaken. The laws of physics exclude sentience, and so anything which can be wholly explained in terms of physical laws cannot be sentient. It is true that a living organism operates in accordance with laws of physics, but a living organism has additional properties which cannot be described in terms of physical properties. They exist at a higher level. To explain what he means by levels Polanyi uses the example of giving a speech. We make noises which are constrained to produce words, which we organise into sentences, and are arranged in accordance with a literary style, that submits to literary standards. The principles of each level are studied by phonetics, lexicography, grammar, stylistics, and literary criticism respectively. In a speech we impose standards on ourselves which cannot be reduced to physical properties. We extend these standards to other humans. When we ask if a claim is true we are imposing an obligation upon ourselves that transcends what we want to believe. Nor are our answers wholly determined by material properties. Our pursuit of what is morally right and wrong arises from our self-set commitment to a transcendent ideal, an end we impose upon material properties, namely what is morally good.

Polanyi denies that our dedication to transcendent ideals can be reduced to principles identified by the physical, biological, or social sciences. We are a physical, living, and social being, and in the absence of the realities which these disciplines seek to describe there cannot be any pursuit of transcendent ideals. But via our capacity to create descriptions we also submit to self-set ideals. The most important feature that the evolution of life demonstrates is the emergence of the higher from the lower. Reducing evolution into the selective advantages of random mutations ignores what emerges. It is that which emerges which is of greatest interest. The higher the level of your existence the

richer your meanings. Plants as they grow absorb and create what sustains them. Carnivores pursue prey to devour, and strive to avoid becoming prey themselves. Humans ask themselves how they ought to live. Polanyi rejects a philosophy in which truth is deemed to be nothing more than which is useful, justice is nothing more than what a law demands, and art is nothing more than a source of amusement. That is a vision that excludes the level of the spirit. It advocates a single level of reality, a single level of causality; an account in which we become meaningless to ourselves.

In accordance with his claim that particulars are recognised as such within the context supplied by a whole, Polanyi denies that a mind is an inference from observed bits of behaviour. We understand behaviour in terms of the mind that creates that behaviour. Our minds are the meaning of our body. In accordance with his assumption that the belief that something is real implies that it will manifest itself in as yet unthought ways in the future, Polanyi claims that what it is to be a person is more real than a diamond. Although a diamond is more tangible and enduring than a person, a person reveals themselves in more unexpected ways in the future. Using this definition of reality a mind is more real than a body, and the meaning of an object is more important to us than its physical properties. A meaning is generated by an embodied consciousness. It brings new levels of reality into existence. Realities organised by values. A cow values grass as a source of food. Our pursuit of truth creates the possibility of science. A trans-natural integration however is not a natural order, it is an order we impose upon the natural world in accordance with a pursuit of self-set standards. It brings into existence a level of reality with its own distinctive properties.

Mathematics for example imposes standards upon us which determine when an answer is correct. It is we who bring these standards into existence, but it is not the case that they are wholly subjective. What it is to be a cow can be less precisely defined than a diamond, and its behaviour is less predictable. The lack of meaning in physics is compensated for by the precision of its descriptions and predictions. The properties of being human are harder to define and predict than the behaviour of a cow. We exist at a much richer level of meaning than a cow. We reflect on how we ought to live, and our ability to supply

descriptions enables us to formulate self-set ideals which impose obligations. We can ask ourselves if something is true. In the attempt to describe what is true, advocates of materialism seek to reduce the higher meaning generating levels of reality into the meaningless properties described by the physical sciences. In 1953 the chemical structure of DNA was revealed. It was discovered how it is possible for the chemical structure of chromosomes to encode the instructions that create different sorts of organisms. But that discovery does not imply that our existence can be reduced to a sequence of chemicals. It would be as absurd as claiming that thinking about how we ought to live is reducible to the properties of atoms. Moral valuations cannot be described in terms of physics because valuations are not physical properties.

Instead of abandoning a commitment to materialism some would rather deny any reality to values, even though it is the pursuit of truth which creates science. When biologists set out to describe and understand how living organisms work they are attempting to discover what is true. To assert that what the biologists claim is determined by laws of physics undermines the practice of science. Polanyi calls the pursuit of values ultra-biology. Although being human relies on lower level physical, biological, and social realities, it is not reducible to them. If it was reducible to them science would not be possible. Claiming that everything is determined by material necessity denies the reality of freedom. It is a version of the theological paradox that we choose to do either good or evil, but what we choose is predetermined by God. So which is it? Either we are rewarded/punished in heaven/hell for our choices, or our choices have already been determined. We may decide or not decide but doing both at once is contradictory. The British theologian Pelasgius claimed that God gives us the ability to make choices, and we can decide to do good. Saint Augustine responds that it is God who decides. To the extent that we can exercise our freedom we choose evil. We chose to defy God. Augustine claims that it is only divine grace which guides us to the possibility of living a life in accordance with what is moral; which is to say in accordance with the will of God.

But is what is good defined by what God wills? The Gnostics claimed that the universe was created by an evil spirit. Those who are in

possession of this knowledge should repudiate this world and replace it with something better. The Austrian philosopher Eric Voegelin claims that Marxism is a materialist version of Gnosticism. Both seek to destroy the world and replace it with something better. The implication of their vision is that we become God. Liberated by their materialism from any submission to moral constraints, Marxists seek to remove the restraints imposed by morality. They claim that human history inevitably creates egalitarian societies. Societies in which we do as we wish, accepting that nobody is better than anybody else. Opponents of Marx (and the philosopher Rousseau) respond that every level of existence is rendered possible by constraints. Humanity is no exception. We are born in a world that we did not make, and acquire a cultural inheritance created by those who lived before us. Our traditions are a response to the realities of our existence. We cannot do as we please, and to imagine we can is a pernicious fantasy. Polanyi seeks to justify a free society on the grounds of an appeal to the reality of transcendent ideals. This creates something unprecedented in the history of our planet. Communities dedicated to the pursuit of truth, and beauty, and justice; together with the practices which facilitate the realisation of these ends. But as Saint Augustine declares, human beings reside in a City of Man not a City of God.

7) Moral Passion

*“Mért legyek én tisztességes? Kiterítenek úgyi
Mért ne legyek tisztességes! Kiterítenek úgyis.”*

[Why be good? They will lay me out anyway.
Why not be good? They will lay me out anyway.]

József Attila *Two Hexameters* November/December 1936

Polanyi emphasises the importance of apprenticeship, community, and authority, but in his life what strikes you is his determination to make his own path. At the age of 18 his friend George Polya, who went on to become a renowned mathematician, told Polanyi's mother that Mishi [his nickname in Hungarian] 'walks alone'.¹ In his youth Polanyi attended meetings of various radical student groups but failed to be persuaded by either their materialist philosophy or their utopianism. To satisfy his mother, who was worried about how he was going to financially support himself, he trained and qualified as a physician. But while recovering from diphtheria he wrote a paper on thermodynamics that was sent to Einstein, who was so impressed that the paper was accepted as a doctorate. In 1920 Polanyi moved to Germany and talent spotted by Fritz Haber, who gave him a job as a physical chemist at what is now the Max Planck Institute in Berlin. By 1926 he was appointed a professor. His colleagues were some of the most famous scientists of his day. Einstein described him in a letter to Max Born as a creative talent. In accordance with Max Planck he viewed science as an innovative practice sustained by faith in the comprehensibility of the universe. With the coming to power of the Nazi Party in 1933, he moved to England, accepting a chair in chemistry at Manchester University. Recognising his interest in economics its Vice-Chancellor set up a new chair for him in Social Science.

The economist Paul Craig Roberts (who served as Assistant Secretary to the Treasury under President Reagan and was one of the leading advocates of Supply Side economic reforms) claims that his analysis of the role which the circulation of money plays within an

economy was a generation ahead of other economists. These shifts in career from different specialities are unlikely to happen today, and they were unusual in his own time. He was driven by the desire to solve problems; first in physical chemistry, then in economics, and last but not least in philosophy. When appointed a Fellow of Merton College at Oxford University this elicited some negative comments; such as 'who invited that charlatan' (his fellow Hungarian Lord Kaldor), 'he is a philosophe not a philosopher' (Geoffery Warnock), and 'he should have stuck to chemistry' (Isaiah Berlin). As Max Planck noted, specialists are prone to inertia. In the absence of any competitive pressure the desire to conform overwhelms the desire to innovate. The desire to uphold standards serves as an excuse to exclude competitors. So where does this leave his claim that communities of specialists are best left alone to pursue their own purposes, without direction from the outside? Well Polanyi never claimed that specialists are infallible. On the contrary he defends the desirability of being subject to continual competitive pressure.

Polanyi claims that there are no rules to which we can appeal to secure our judgements. Major innovations require leaps of understanding that change the assumptions of the debate. Orthodoxies should be questioned. What drives this process is the conviction that we can expand and deepen our knowing. It is not the claim that change is desirable as an end in itself. A state of anarcho tyranny is the worst of all worlds. Direction by those aspiring to power combined with a denial that there are any standards other than imposing your will. This is a vision familiar to Polanyi from his experience of Bolshevism in Russia and the Nazi Party in Germany. His favourite sister died in a Nazi concentration camp, and his niece was arrested and persecuted in the USSR on the grounds that she was an enemy of the people. She only survived because of a campaign by among others her former lover Arthur Koestler. Her experience became one of the sources of his book 1940 *Darkness at Noon*. Europe during the lifetime of Polanyi could be described as a descent into nihilism, justified and enhanced by an appeal to science and technology. The creed of do as you will was combined with utopianism. The resulting totalitarianism added nihilism to authoritarianism, together with opposition to the institutions and practices

of a free society on the grounds that true freedom is submission to the State.

Polanyi denies that the practice of science is nothing more than a specialised pursuit of truth. Reality is stratified. Higher levels are rendered possible by lower levels. The pursuit of power and profit is not absent in scientific research. But what renders it science is a dedication to the higher level ideal of truth. Pursuing truth is a moral commitment which restrains lower level purposes. Researchers in the sciences pursue power and profit, but to qualify as a science they also pursue truth. Utopians are excited about the possibility of destroying every existing tradition and social arrangement, on the grounds of their imperfection. They seek to replace them with a new rational order directed by themselves. Rationalists in opposition to Sceptics claim that knowledge can be secured abstractly. There is a connection between Rationalism and utopianism, and Scepticism and relativism. In a political context the former claims to know more than they do, and the latter claims to know less. Both assume that if knowing is to count as such it has to be explicit. In the account of knowing which Polanyi supplies it is not only the case that we say more than we can know, it is also the case that we know more than we can say. Absolutism and Scepticism are replaced with an account which asserts that we can know, but only fallibly, and that all knowing is situated, but this does not invalidate the pursuit of truth. We rely upon descriptions (via symbols) which serve as vehicles of meaning that facilitate our ability to understand our experience.

In an interdisciplinary conference held at Manchester University on the 27th October 1949 on the theme 'The Mind and the Computing Machine' Polanyi disputed the claim by his friend Alan Turing that a computer can replicate what it is to be a mind. Polanyi claims that the person using a computer supplements its rules with their tacit knowledge. It is not the case that knowing is simply about following rules. We interpret rules by appealing to our tacit knowledge. Kant in his proselytising in favour of critical philosophy conceded that you cannot have rules to apply rules ad infinitum. At some point there has to be an informal judgement. Polanyi claims that the ultimate ground of appeal in disputes about the truth or falsity is to our shared tacit knowledge. By this he not only means shared practices, he means our shared

experience of reality. It is not the case that we (or some absolute mind on our behalf) determines what is real, but nor is it the case that we passively describe an already existing reality. We rely upon more than one level of reality, with the highest level left open. We are moral not because it is determined by a natural order, but because we bring a new level of being into existence via the discovery and pursuit of transcendent ideals.

If the only source of knowledge to which we can appeal in a debate is explicit assumptions, this inevitably leads to relativism. It becomes a dialogue of the deaf between people appealing to different ideologies. If there is no shared experience to which interlocutors can appeal when selecting between theories there is no common ground upon which agreement can become possible. It is our shared tacit knowledge of reality that encourages the belief that agreement is possible. One of the implications of the claim that all knowing is personal is that knowledge claims are choices. We make these choices in the knowledge that our choices may be wrong. But the absence of any method for securing truth does not carry with it the implication that all the answers which are given are equally good. They are not of equal value. Nor is a free society a society in which everybody is free to decide for themselves what is good and bad. A free society is rendered possible by a submission to traditions. What renders it a free society is that orthodoxies are subject to continual revision. What is right and wrong is the product of continuous debate. We do not simply do as we are told. In these debates the opinions of specialists have more weight, but this does not amount to awarding specialists the status of an absolute authority. Knowing is a process of continual inquiry. A free society is not a utopian vision in which everybody does whatever they want, it is a society constrained by practices which rely upon the assumption that there is such a thing as right and wrong, but our pursuit of them is a continuous process of discovery.

If there is nothing except power to which we can appeal when justifying our choices, on what grounds can we defend the practices of a free society against its opponents? If it is a question of choosing between a society which gives us choices, and a society which relieves us of the burden of making choices, you may prefer to be told what to do. This is especially the case if you are promised by those in charge

that they will look after you. It is on those grounds (in addition to hatred of the bourgeoisie) that the Bolsheviks justified their seizure of power in Russia. There has never been a shortage in human history of people keen to tell others what to do. A society which gives absolute authority to central planners appeals to such people, as long as they are the ones in charge. But in a society which reduces or eradicates the incentives which lead to discoveries, as opposed to incentivising repetition of the Party line, innovation ceases. The Soviet Union not only failed to deliver the high standard of living they promised would be an inevitable product of a centrally directed economy, they also decreased the production of cultural achievements. Why? Because those in charge of directing the arts judged excellence entirely on political grounds. In a free society a State ought to be strong enough to achieve its purposes, but those purposes ought to be limited. The primary purpose of the State in a free society is facilitating the discovery process going on independently of itself.

The position taken by Polanyi is partially captured by the phrase attributed to Pierre Bayle "I know too much to be a sceptic and too little to be a dogmatist". I say partially because the target Polanyi has in mind is the fact-value distinction. The word value is a replacement for the word good. To talk about values carries with it the implication that your values are a personal preference, or something you have acquired as a result of being brought up in a specific culture. Of course they are a personal preference, and that preference may be something you have acquired. But this should not imply that such judgements are nothing more than subjective or local preferences. Nor are facts something (unlike values) which scientists prove to be true. A fact is what is believed to be the case. What we believe to be true may actually be false. It is therefore misguided to make a sharp distinction between facts and values. Judging something to be a fact is a valuation. To claim that facts and values are unconnected is a delusion. Some assert that we should not seek to make judgments about what are good and bad when talking about the choices made by others. On the same grounds some assert that defending liberty is a value claim, and since values are subjective, making everybody act in accordance with my wishes is also legitimate.

A culture, in the metaphorical sense used by Cicero, means the cultivation of our potential to become a better human being. To become something other than we are without ignoring the conditions that render what it is to be a human possible. This change is brought into being by loving truth, goodness, and beauty. In an anthropological change of definition some define culture as meaning nothing more than a set of beliefs and practices. In this change of definition the sense of a cultivated person being a better person is eliminated. All that exists are different practices, all of them equally valid. In accordance with his opposition to relativism Polanyi describes science as a practice which relies on a moral commitment to the pursuit of truth. He rejects the claim that there is a method which can secure knowledge, either in the sense of proving or refuting. All knowledge claims are judgements. But he also rejects the notion that there is no such thing as truth. That truth is nothing more than a claim added onto a personal preference. He asserts that truth, goodness, and beauty have a reality which transcends our subjective preferences. You are not a human being, which is to say you fall short of what it is to be a human being, if you are unable to distinguish between good and evil. You may discuss if an action is good or evil, or fail to achieve your aim of doing good, but this is not the same as having no moral awareness. This includes the possibility of choosing evil.