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THE ETHICAL DIMENSION OF PERSONAL KNOWLEDGE

by

David O. Jenkins, Jr.

A Dissertation Submitted to the Faculty of the Graduate School  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

July 1981

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To Dr. Richard Westley, who went far beyond the call of duty in helping me prepare this manuscript under difficult conditions while never failing to elicit my best efforts.

## VITA

The author, David O. Jenkins, Jr., is the son of David O. Jenkins, Sr., and Alberta Jeannette Jenkins. He was born August 22, 1946, in Washington, D.C.

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## INTRODUCTION

Few philosophers have achieved as much in so many areas of human endeavor as has Michael Polanyi. My study of Polanyi's philosophical works introduced me to an outstanding and penetrating thinker in the areas of epistemology and the philosophy of science, which emphasizes a wide-sweeping view of the ontology of evolutionary change. But these works were themselves grounded in the insights he achieved as a thinker in the fields of chemistry, economics, and sociology. And I found that an understanding of these works was helpful in understanding his philosophical insights.

My study of Polanyi was not a mere perusal of a point of view. I encountered his thought in an attempt to discover insights which mediate between the epistemological methodologies of existential phenomenology and analytic philosophy. A teacher had recommended reading Polanyi's Tacit Dimension and Personal Knowledge; and, upon reading them, I became convinced that the notion of tacit knowledge held much promise for satisfying my search.

But my motive for investigating Polanyi's notion of tacit knowledge was not strictly a desire to find a mediating epistemological methodology. I, like most students of philosophy, wanted more deeply to find some philosophical position which did more than suggest some point of view or fact of

knowledge, as valuable as such a discovery might be. Perhaps I am only dimly reflecting a more wide-sweeping interest in the practical import of philosophical thought; but I understood my own search to be an attempt to find some rational guide for ethical life.

I have always believed that some actions and even beliefs and intents were somehow fundamentally right whereas others were wrong. And I am convinced that most rational and sane persons believe this. But I have found it difficult to compartmentalize ethical issues apart from what I actually think and do, as so many reflective people are capable of doing. My acts seem always to be fraught with the reflective self-criticism: is this act right? Should it be done? Is there a better way? What is wrong with what I'm doing? And in so far as my thoughts themselves were considered to be forms of action, I asked whether in some sense it was ethically correct--and not merely factually correct--to adopt certain points of view. In short, I have considered the ethical search for "rightness" and for "good" to have pre-eminence over the search for facts or for wide-sweeping points of view which form a context for the facts.

I cannot justify this preference. I'm not sure it can be justified. But I have not chosen to attempt such a justification; I have chosen only to be led by this preference into the search for those answers that are most

meaningful to me. It forms what Karl Jaspers the Fragestellen, the context in which all answers appear--the ethical question is my fundamental question.

This question (What is right and Good?) was the true inspiration of my investigation of Polanyi's thought. Existential thought seemed to be a dead-end: I found Gabriel Marcel and Jean-Paul Sartre at an impasse which could not be resolved merely by accepting blindly the presuppositions of The Mystery of Being or of Being and Nothingness. Nor did I find resolution in the works of Heidegger or other existential thinkers. I was searching for a rational ground of human interaction and decision; and I found the existential refrain of groundlessness to be inimical to this search. Only Marcel was helpful, since he asserts the reality of human relations; but still I could find no rational grounds not to "refuse the invitation" which he extends to "being-with" others in fidelity and love. I thought Marcel was right; but I needed more rational grounds on which to justify his (and my own) convictions.

Again, the analysts offered me nothing more than clarifications of the use of words such as "right" and "good". I wanted to know what I ought to do in particular, concrete situations; but from Wittgenstein and Ryle I seemed to learn only what I ought to say about such situations. I cannot deny that such reflections are helpful and even necessary for ethical decision-making; but clarifying how one ought to speak of

"right" and "good" is simply not sufficient for establishing firm principles of right action in concrete situations. More is needed; and I felt impelled to search for what was lacking in an analytic approach.

I cannot justify this prejudice I have developed against existentialism and analytic philosophy. I feel my critique is generally just in so far as it goes. But I do not wish to devote much space to a critique of these broad philosophical methodologies. I only wish to state the prejudicial grounds that formed my motive for pushing beyond existentialism and analytic philosophy to new insights, such as those of Polanyi.

Thus, when I encountered Polanyi's detailed description of the nature and role of tacit knowing as the key to the epistemological dynamic of scientific knowledge I immediately raised to myself the question whether there might be a tacit knowledge of values and of the principles of right action. That is, I questioned whether tacit knowing were reducible to being the dynamic only of scientific knowing. I saw the potential of expanding such a notion into other areas of knowledge as well; for to say that an explicit, focal knowledge of facts always relies upon assumptions of knowledge to which we are committed and of which we are not necessarily aware seems to outline a dynamic that could pertain not only to science in its strictest sense but also to

the kind of knowing we might claim for non-scientific fields such as art and history.

A close reading of Personal Knowledge and the Tacit Dimension suggested such an interpretation. But Polanyi was far ahead of me. He too saw the ramifications of his notion of tacit knowledge and worked on an expansion of it into other domains of knowledge. He acknowledged in these works that knowledge in general develops according to the dynamic of tacit knowing. And in later articles and books such as Meaning he argued for the reality of domains of knowledge other than science which also are supported by the dynamic of tacit knowing. Thus, art, history, religion, and political science were all given full status as true domains of knowledge.

But what about ethics? Polanyi's epistemological insights as well as the ontology which he develops on the basis of it lead naturally to knowledge-claims in other domains. Thus, should not one expect or hope that ethics would be a domain of knowledge in its own right? If there are domains of knowledge other than science--domains which are limited and justified in terms of the standards and norms pertaining to their own subject matter--then why not expect an appropriate domain for knowledge of the right and of the good?

I began to search the works of Polanyi for an answer to my question: is there a domain of knowledge appropriately called "ethics" which is constituted by some grasp of "right" and "good"? Polanyi himself does not specifically address the problem of the existence of such a domain. But that does not mean that such a domain cannot be pieced together out of what Polanyi does say about values, ethics, morality, social dynamics, and the dynamic of tacit knowing. Polanyi is far from inimical to such a task. Indeed, he is very concerned in his works in social and political theory to respond to the question of moral right and good. But he develops explicitly only the areas of epistemology (philosophy of science), art (in the various forms of literature, painting, sculpting, etc.), history, religion, and political science. I am convinced, however, from the large number of statements responding to moral concerns that he did not omit an explicit development of ethical theory as the result of holding some theory which would preclude the possibility of ethical knowledge.

In the first place, I not only found no evidence of such a theory in his major works but rather found many intimations of the possibility of developing such theory. Second, his works are full of references to what appears to be a tacit moral theory which Polanyi had integrated loosely into his texts but never made explicit mainly because his focus,



though often shifting, was trained on other important issues. And this theory is most evident in his social and political works, though its basic structure surfaces even in a close study of his specifically ethical statements.

Thinking myself to be only one of a large number of people who had raised the question of ethical knowledge in Polanyi's works, I thoroughly reviewed the secondary literature on Polanyi in order to benefit from those who had cleared this ground before me. But to my surprise my study turned up only two such articles: one by Frank Knight written in 1949 (Virtue and Knowledge) and a recent one by Harry Prosch dealing directly with Polanyi's ethics. Knight's article was more suggestive than helpful. He did not actually try to develop a Polanyian ethical theory but pointed out that one might be able to construct such a thing. I was already that far along in my research, so I turned to Prosch's article in hopes of finding some concrete guidance.

Prosch's article was indeed stimulating; but it stimulated me by arousing my disagreement. His article centered around the most recent work which Prosch edited and published for Polanyi: Meaning. And that book presents a theory of symbolism (in just a few chapters) which Prosch lifts out and makes the key and essential notion of a "polanyian" ethic. This bothered me because I was already convinced of the possibility of a Polanyian ethic on the basis of all of Polanyi's

other works prior to the publishing of Meaning. So I could not believe that a Polanyian ethic would be impossible without his notion of symbols--or, at least I did not want to believe this. For then I would have to be wrong in my insight.

I read Meaning and realized its value for a Polanyian ethical theory. But I was convinced that there was a great deal more to developing a Polanyian ethical theory than concocting one out of a few of Polanyi's last lectures. The entire notion of tacit knowing and Polanyi's theory of ontological change were presupposed in Meaning and were essential for an understanding of Polanyian symbols. Hence, the ethical domain, in so far as it involved tacit as well as symbolic knowledge, also involved the kinds of norms and standards developed by Polanyi for other domains of knowledge. And this meant that a close study of all of Polanyi's important works in the philosophy of science and his social and political writings might indeed uncover--by way of making explicit--the tacit Polanyian ethic. Indeed, I take this insight to be my prime contribution to Polanyi studies.

I decided to examine Polanyi's philosophy of science first, since this constitutes the emphasis of his philosophical work and is also the prime source of his notion of tacit knowledge. I believed that an analysis of a well-structured presentation could give me the basic structure of

a dynamic of tacit ethical knowledge. The first half of this work is dedicated to this task. My strategy was to develop from Polanyi's philosophy of science (his epistemology and ontology) the basic dynamic and structure of moral knowledge; and then this structure could be confirmed in a study of his social and political writings. The structure of moral knowledge as made explicit in Part I can then act to organize Polanyi's scattered references to moral realities and their relation to social change (Part II). Using the basic structure of moral knowledge as an organizing factor, I can develop a coherent picture of a concrete Polanyian ethic from his social and political writings. And these together should tell me what, in Polanyian terms, constitutes a right action or a proper pursuit of the good, at least in a general sense which can be applied to specific situations. Further, such a picture allows us to see the ideal societal structure produced by such an ethic; it allows us to see the sorts of decisions called for in a moral society.

More specifically, the strategy of my argument is aimed at finding and confirming a tacit structure of personal knowledge in the ethical domain through a detailed analysis of the important ideas of Polanyi's philosophical development. I have already explained the nature, function, and relation of the two major parts; but it is helpful to examine the movement of the argument in a more detailed overview.

In Chapter One I present what I take to be Polanyi's fundamental idea: the notion of tacit knowledge. Relying on Polanyi's own technique of making explicit what lies tacit in an idea, I do not employ what many may consider to be "logical" arguments or point to "facts" in order to draw out a concept of value-knowledge which I believe would correspond more or less closely to Polanyi's own concept had he developed it more explicitly. Instead, I simply apply the principles of tacit knowing to a presupposition which I believe Polanyi shares with me (a view for which there is ample documentation): that we ordinarily have a fairly well formed sense of right and wrong and of good and some kind of hierarchical value structure. Given this presupposition, I do not believe it is difficult to establish a case for at least the possibility of a tacit knowledge of values. And that is what I attempt to do in the first chapter.

In this chapter I also integrate Polanyi's concept of the role of the body in the knowing act into knowledge of values. One cannot leave Polanyi's notion of "embodiment" in knowledge untouched in a theory of values. I attempt to show how fundamental life-values are rooted in biological existence and how less "body-connected" values can be seen to be integrated with them in a profound way. In the context of embodiment in knowledge I argue that, if knowledge is intuitive (rather than "rational" or "empirical") in

character, then value knowledge must also be intuitive. Thus, value-knowledge, like all tacit knowledge, is intuitive in the sense that it is an embodiment of the person within value experience. And this experience is the ground for reflection and insight into value and the nature of the Good. At this point, I tie Polanyi's unique notion of truth and reality into his notion of intuition and insight in order to precise in what sense value-knowledge can be true. In short, I argue that there can be a personal knowledge of values.

In Chapter Two I apply Polanyi's notion of how knowledge passes from the tacit dimension to explicit concepts to tacit value knowledge. That is, I extend the notion of personal, tacit knowing to the explicitation of tacit knowledge in the form of personal commitments to concepts. And I argue that value-knowledge may be brought to explicitness so that we have access to concepts of value and of the Good which may be said to be true or false.

Chapter Three extends Polanyi's notion of conceptual knowledge to the social, interpersonal ground of all knowledge. Demonstrating that Polanyi's concept of embodiment (now called "indwelling") involves a notion of interpersonal relations (which he calls "conviviality") I attempt in this chapter to show how value concepts are not just individual insights but refer essentially to the communal bond that makes individual life possible. Thus, I attempt to show that a Polanyian ethic

is grounded in values which reflect our communal bond with others. We are right, in Polanyi's view, to believe that others are persons just as we are; and this belief is the basis for a "convival" ethic, an ethic which is essentially social in that it bequeaths to each generation in the form of "tradition" insights into value that must be learned from "connoisseurs".

I do not wish, however, to give the impression that ethical knowledge is simply the learning of a social code to which we are bound. I do not believe Polanyi would wish to see a "Polanyian" ethic identified with casuistry. Applying his concept of the dynamic of discovery to ethical knowledge, I argue that new insights into value and into the nature of the Good are possible. We can "break out" of older traditional modes, not by ignorantly rejecting them, but by utilizing them as connoisseurs of the tradition to go beyond them to new ethical realities. These realities, like all new insights, participate in (and reveal more profoundly) a "whole" which makes sense of more fragmented insights. I argue simply that, if all forms of tacit knowledge give access to discoveries, then value-knowledge must admit of them.

The third chapter ends the discussion of Polanyi's epistemology and the way it can be extended to knowledge of

values. The argument thus far has consisted of a gradual extension of tacit knowing to personal and interpersonal dimensions of conceptuality, an extension which was applied immediately to our conviction that we know right from wrong. Chapters Four and Five deal with an extension of Polanyi's ontology into the ethical realm of knowledge. These chapters involve two important shifts of focus. First, I shift from talking about the knowledge of values to talking about knowledge of the ontological structure of man. That is, I shift from speaking about how we gain knowledge of values to speaking about how we exist as human beings. Second, I shift from speaking primarily about values to speaking about right action (mainly because the first shift commits me to speaking about man as actor rather than as knower). Thus, these chapters involve an application of Polanyi's theory of man (and being in general) to an ethical notion of right action.

An importantly relevant argument in forming this bridge from an action-oriented ontology to a concept of right action in the ethical realm is my argument that knowing itself is an action and can be described in ontological terms. Furthermore, the reverse is true: Polanyi's ontology can be viewed as having the same structure as the dynamic of tacit knowing. In Chapter Four I argue for the parallel of Polanyi's epistemology and ontology in order to show that knowledge of a value is also at the same time a commitment

to act in certain ways. Indeed, knowing itself is an act to which ethical norms are applicable; thus, knowledge of the Good is a move toward the good, a move that must obey standards of right action just as knowledge must obey standards of truth.

Having established this parallel of knowing and being, and having applied this parallel to ethical modes of knowing and being, I proceed in Chapter Four to consider Polanyi's concept of emergent evolution and freedom. Polanyi's commitment to a kind of universal freedom (in the sense that no event is entirely explicable in terms of the events that "cause" it) is obviously relevant for an extension of his thought to the moral domain. Man is free in the sense that he is morally responsible for his decisions, even if this freedom cannot be conceived in terms of a rational philosophy. Again the parallel of knowing and being is relevant here in that the irreducibility of "higher" reactions to the "lower" elements that make it possible is due both to the epistemological principle that we always know more than we can tell and to Polanyi's notion of a "boundary condition". This latter notion is relevant to his concept of emergence; and emergence is a more complex and wide-sweeping concept of "breaking out", which I discussed in previous chapters. Boundary conditions are taken up more specifically in Chapter Five. In Chapter Four, emergence and freedom are extended



into a concept of moral freedom exerting itself in more and more complex and highly developed ways in pursuit of the Good.

Chapter Five considers the moral development of man more profoundly as a movement toward higher levels of being. That is, the ontological structure Polanyi defines as a hierarchy of being in which higher levels rely on lower levels (which in turn support and participate in higher levels) is extended to the moral domain. Man freely pursues the Good through a process of maturing toward the achievement of wholly novel modes of human being, modes which represent new insights into value, right, and the Good. I apply Polanyi's notion of "rules of rightness" (which he applies to the structures of reliance and marginal controls in the functioning of organisms and machines) to the moral domain, contending that, just as there is a tendency toward the stabilization of reactions or repeated functions so that "rules" of normal or "right" behavior are established and cannot be broken without damage to the structure created by them, so moral action proceeds by "rules of rightness". These rules describe systems of behavior which make communal life possible, though they are rules to which we freely submit and change as we break through to new levels. I conclude the chapter with a discussion of Polanyi's concept of "ultra-biology", which is immediately relevant to ethics since it describes the ultimate end toward which man is moving as he develops higher

levels of being. Polanyi points toward Chardin's concept of the noogenesis as the apex of human development. And I take this to be a moral as well as ontological category, as I am sure Teilhard de Chardin did.

Chapter Five ends the major discussion of the relevance of Polanyi's epistemology and ontology to the ethical domain of personal knowledge. I consider that I have thus far made three contributions to Polanyi scholarship: first, I have drawn from a wide number of resources to present an integrated description of Polanyi's epistemology and ontology; second, I have located the parallel between his epistemology and his ontology and have lifted out from them a basic philosophical structure which can be applied to other fields of thought; third, I have extended this basic structure to ethical experience and have shown that ethical theory is possible in terms of personal knowledge.

A fourth and important contribution is made in Chapter Six. In this chapter I take Harry Prosch to task for too narrowly identifying the possibility of a Polanyian ethic with his very late concept of symbols. I agree with Prosch that symbols are important for understanding certain aspects of moral life, such as the role of moral heroes. But my previous arguments have already established that a personal and not merely a symbolic knowledge of values and of right action and the Good are possible; and, on the basis of this

contribution, I argue that a Polanyian ethic is primarily personal knowledge though it admits the role of symbolic knowledge. Thus, my fourth contribution consists in ensuring that the whole structure of personal knowledge is applied to the ethical domain. For this also guarantees that even those who do not have the imagination to appreciate the value of moral heroes can still legitimately speak of the sense of value, right, and wrong which all persons experience. I take this position to be unique among those which other scholars, few though they be, have suggested in regard to a Polanyian ethic.

Chapters Seven and Eight are transitional chapters. Chapter Seven is a closing summary of Part I, and Chapter Eight outlines what we might expect to find concerning scattered references to moral ideas which we find in Polanyi's social and political writings if I am right about the way in which I am extending his epistemology and ontology into the ethical domain. I consider the second part of the dissertation to be a confirmation of the contributions I have advanced, though it is a confirmation which "fleshes out" the essential structure of ethical theory I have proposed and thus extends an understanding of it into more concrete images.

Chapter Nine returns to Polanyi's notion of the nature of the scientific enterprise in order to lift out the social dynamic of the search for truth (rather than the epistemological dynamic, which was dealt with earlier). My purpose in doing this is to demonstrate that science, considered as a human activity, involves essentially a moral strategy for achieving its purposes. Thus, science, replete with its commitment to truth, is a moral activity and binds scientists together as a moral community. Commitment to truth, freedom of exploration, mutual control and polycentric interests, free competition for publication, etc., are all social and moral activities which make the achievement of truth possible. And, if truth is possible only under such conditions, then the development of moral truth itself can occur only under similar social structures. Hence, the republic of science is a model for the moral community. Its essential structure is the fundamental structure of all truth-finding, which is the root of all moral development (since without moral truth there can be no moral life).

But Polanyi, I argue, gives us more than science as a depository of truth. I have argued that there are other domains of knowledge besides science, and in this chapter I amass evidence of Polanyi's intended extension of personal

knowledge to other domains such as art and history. So what is true of the moral organization of science must be true about other domains of knowledge including ethics. This means that the ethical life is necessary in order to gain ethical knowledge. Thus, we can pursue the Good only by reference to moral truth and the ethical organization (both individually and communally that that implies. Hence, we find confirmation that ethics is not only possible as a form of personal knowledge, but that it is essential as part of the search for truth that personal knowledge participates in. From this point, the "confirmation" slides into a description of how moral organization functions in society. And the description matches what we might have expected to be the case judging from the ethical theory I developed from Polanyi's epistemology and ontology. The chapter ends with a description of the communal movement toward the Good as a moral achievement.

Chapter Ten deals with the various moral inversions of this movement toward the communal Good in an effort to throw further light on the nature of this movement by virtue of some well-developed contrasts. To this end, I discuss Polanyi's dissatisfactions with rampant scientific scepticism (which leads to nihilism), Marxism, and the liberalism of democratic institutions. These dissatisfactions are related to the failure of these social structures to

properly pursue truth and to the way in which they differ from the dynamic of the republic of science.

Finally, in Chapter Eleven, I analyze Polanyi's notion of the free society to find the elements of moral culture which were implied in the contributions of Part I, as well as the more concrete working out of our expectations in earlier portions of Part II. This description of the free society concludes the dissertation.

In addition to the research and argument portions of the dissertation, I have also added sections entitled "critical comments". These comments are intended to explore various important critical insights into certain notions which Polanyi advances. Their purpose is to clarify what Polanyi means rather than to be isolated critical statements with no relation to the body of the whole. Some of the criticisms were suggested by journal articles and some of them were developments of my own thought (a minor contribution to Polanyi studies). Since I have intended this work as a whole to be a development of only certain of Polanyi's works, I have not amassed references for the critical notes, though I do not wish to claim that some of their basic ideas are not to be found in critical journal articles. My intent to clarify rather than merely defend or refute Polanyi in these comments should enable me to escape from a charge of building "straw horses". My work is aimed at explicitating

what is tacit in Polanyi (right or wrong) and not at defending his ideas.

CHAPTER I  
THE STRUCTURE OF TACIT KNOWING AS EMBODIED TRUTH  
THE EPISTEMOLOGICAL ARGUMENT

Introduction

In what follows I take the "epistemological argument" to mean a Polanyian account of how we come to know that the values we hold are right (or, conversely, how they are known to be wrong). That is, I shall display the fundamental criteria by which we know whether what we value is what we ought to value.

I call this a "Polanyian account" because I believe it is similar to one which Michael Polanyi would have given if he had developed his philosophical work in the area of ethics. I cannot claim, of course, to speak for Polanyi. He was a man of deep and enterprising thought, and one cannot guess what rich and penetrating insights he would have brought to the field of ethical studies.

Polanyi's epistemological work is highly developed, and what he says about knowledge has import for many domains of human thought. Though he was a scientist and though he raises epistemological questions in the context of scientific work, Polanyi's expressed intent was to develop criteria of knowledge that could be extended beyond the sciences into the domains of art, religion, history, and politics. That



he never dealt explicitly with ethical issues, apart from piece-meal remarks that may be gathered from his various texts, does not preclude a development of his work into the ethical domain as well. Indeed, one can only assume from Polanyi's own intent, that he would be happy to see such an effort.

The development of Polanyi's expistemology into criteria by which we know standards of good, right, and value is in some instances a straightforward inference. The whole tenor of Polanyi's work makes it obvious that an epistemology of values is an appropriate development of his work into the ethical domain of human experience and knowledge.<sup>1</sup> We must, however, rely on Polanyi's own understanding of the process of knowing: we must draw out what remains tacit in his thought concerning ethics and bring it to explicit form. This process transcends simple inference (which is itself a means of explicitating tacit knowing) in that it displays entire gestalten of thought which seem to lie hidden and yet accessible within Polanyi's work.

Ethicists properly distinguish between value theory and normative ethics. The first field deals with the notion of value and questions of worth; the second deals with

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<sup>1</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 52.

questions of what we ought to do or be. To some extent questions in the first field may be resolved independently of those in the second. In the analysis of Polanyi's epistemology, I shall deal with questions of value. I shall take up the grounds of normative theory in the analysis of his ontology. Generally, I shall show that what Polanyi says about how we come to know and to justify knowledge claims may, in Polanyi's own terms, be legitimately extended to a description of how we come to discover values and justify universal notions of worth.

In this chapter I will analyze Polanyi's fundamental notion of tacit knowing and show that it is applicable to our presupposed knowledge of values, I will argue that we do in fact have a tacit knowledge of values. In this context, I will employ Polanyi's notion of "embodiment" to elucidate the manner in which value-knowledge, as tacit, is rooted in biological, bodily existence. This tacit "body-knowledge" will be identified with intuition, a notion which will be extended to the fundamental mode of personal knowledge as a whole. I will discuss Polanyi's concept of truth and reality in relation to intuition and will apply these epistemological concepts to what I take to be a legitimate expansion of them into an analysis of our knowledge of values. Thus, we begin immediately with Polanyi's fundamental idea and relate it to our presupposed value-knowledge.

# 1. The Structure of Tacit Knowing in Value-Knowledge

The question concerning how we come to know may be raised from within a variety of perspectives. Our perspective is governed by a particular epistemological question we are asking of Polanyi: How do we come to know values?

We can begin to answer this question by analyzing what Polanyi calls the tacit dimension of knowing; thus, we can begin by asking how tacit knowing can involve knowledge of values.

A few simple examples will suffice to introduce us to the notion of tacit knowing. How do we recognize a face in a crowd? Obviously no single face is so radically different from all others that it stands out because of these differences. Rather, when we look for someone in the crowd, we already have a sense of what we are looking for: a familiar face. But what is it about a face that makes its features familiar? No one feature can account for this familiarity, nor can the expression it bears do so--though we do talk at times as if this were the case, as when we say something like, "It must be John; I'd recognize that nose anywhere". But our knowledge that this is the person we are looking for cannot be justified by a close analysis of the person's features. We know we have found our friend but cannot specify in detail how we know this.<sup>2</sup>

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<sup>2</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 4-5.

Again, we may examine the simple example of reading. When we read, we attend to the meaning of sentences and to the thought (argument, description, etc.) they communicate. We could not do this if we did not know the words that constitute the sentence and the letters that constitute the words. Indeed, we would insist that we do know these even if we were unable to account immediately for just how we knew them when we weren't paying attention to them. Again, we are claiming to know something without being able to specify in detail how we know it. Nonetheless, we can point to our understanding of the meaning of a sentence as evidence that we do know what we claim to know even though we cannot tell how we know it.<sup>3</sup>

These examples serve to clarify one feature of tacit knowledge: its nature as a kind of "silent" knowledge. The word "tacit" means "silent", and Polanyi employs it to describe a fundamental feature of knowing: every knowledge claim relies upon knowledge we have but are not aware of until we focus our attention on it. It remains "silent" until we address it and force it to speak concerning its role in knowledge.

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<sup>3</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 22.

What is the structure of this silent or "tacit" dimension of knowing? The clue to this structure lies in the word "rely". We rely upon knowledge of which we are unaware in order to be aware of something else. That upon which we rely Polanyi calls the "proximal" term; and that on which we focus while relying on the proximal term is called the "distal" term. The word "proximal" suggests nearness, and the word "distal" suggests distance. Thus, we rely on what is "close at hand" in order to become aware of what is relatively more distant. In the examples above, our familiarity with the features of the person we were looking for was the proximal term of our explicit, distal focus of recognition in a crowd. And our proximal knowledge of the letters of a word is essential to understanding the "distal" meaning of the sentence. The proximal terms, when focused upon, are seen as isolated particulars with no functional relation to the distal term, which integrates these particulars into a coherent pattern.<sup>4</sup> But when relied upon in an act of tacit knowing, the proximal terms of knowledge form an essential functional relationship with the distal terms.

We should note immediately that the fundamental structure of tacit knowing as a reliance upon unspecified knowledge to attend to specifiable meanings is itself an "ontological

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<sup>4</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 140.

commitment".<sup>5</sup> Tacit knowing is not a critical stance which throws doubt upon knowledge claims. On the contrary, Polanyi asserts that this central theme of his epistemology is a description of an a-critical ontological commitment: a depth commitment to understand what we experience as being fundamentally real.<sup>6</sup>

Let us clarify a few terms which Polanyi employs in regard to the dynamic of tacit knowing. Polanyi identifies the proximal term in the act of knowing with subsidiary knowledge and the distal term with focal knowledge.<sup>7</sup>

These identifications make semantic sense in that the distal term appears as such only when we focus our attention on it; and the proximal term is subsidiary to such a form: i.e., it "subsists" in a tacit way, silently supporting such a focus. Thus, our knowledge of letters in a word

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<sup>5</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 13.

<sup>6</sup>I must remind the reader, however, that at this point I am referring only to the structure of tacit knowing in its barest and most essential features. I am not saying that Polanyi argues that we are committed to a particular view of reality as a whole, but rather that the assumption that experience bears on reality is an essential component of any knowledge claim. This is an important claim and will have a profound affect upon what we can say about value-knowledge.

<sup>7</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 128.

is subsidiary to the focal meaning of the word or to sentences comprised of words.

The appearance of things within the functional relation of subsidiary and focal types of knowledge is called the "phenomenal" structure of tacit knowing.<sup>8</sup> The word "phenomenon" means "appearance"; and Polanyi is claiming that distal, or focal, knowledge is the explicit conscious appearance of what lay hidden in the tacit dimension of knowledge. For example, focusing one's attention on a painting in an effort to determine style may enable one to notice aspects of the painting which were not noticed before. One may notice, e.g. that broad, sweeping strokes and bright opaque colors give the painting its ephemeral quality. We were not unaware of these stylistic techniques before such an analysis; we were tacitly aware of them. And because we were tacitly already aware of them, we were able to raise the question of style and seek out the stylistic techniques. Thus, when we focused on them, they rose up out of the

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<sup>8</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 11.

still hidden depths of the painting and revealed themselves for what they were: they appeared.

Concerning this aspect of tacit knowing, Polanyi says, "This is the dynamic of tacit knowing: the questing imagination vaguely anticipating experiences not yet grounded in subsidiary particulars evokes these subsidiaries and thus implements the experience the imagination has sought to achieve".<sup>9</sup>

The functional and phenomenal structure of tacit knowing are clearly intimately related. Our reliance upon tacit knowledge in order to focus upon explicit objects of knowledge is essentially the means whereby the tacit leaves its silent hiddenness and appears. So Polanyi says, "...We are aware of the proximal term of an act of tacit knowing in the appearance of its distal term. We are aware<sup>10</sup> of that from which we are attending to another thing

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<sup>9</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 199-200.

<sup>10</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 11.



in the appearance of that thing".<sup>11</sup>

We should not be surprised, then, when Polanyi claims that the appearance of something is essentially the meaning of the particulars we rely upon in order to focus upon it. The joint meaning of particulars, as integrated into a comprehensive whole through focal attention, is called the "physiognostic" meaning of the particulars known hitherto only tacitly.<sup>12</sup>

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<sup>11</sup>We must, however, avoid identifying tacit knowledge with the actual appearance. Such an identification would contradict the notion of tacit knowledge since "tacit" by definition is that aspect of knowledge that does not appear.

In what way, then, are we aware of what we know tacitly? This question presupposes that tacit knowledge is either another kind of knowing which requires a different kind of awareness from that which we have of explicit phenomena; or else that it is the same kind of knowledge arbitrarily partitioned from explicit phenomena. Polanyi does not intend tacit knowledge to be understood either as a different kind of knowledge or as a different "intensity" of knowledge. We are aware of the tacit dimension of knowledge through our awareness that what we know explicitly is not the whole of what can be known but is known as such by a reliance on other elements of knowledge which do not appear. Tacit knowledge is what we rely on in bringing some particular aspect of knowledge to explicit focus. This "bringing to focus" is itself an explicitation of what was formally tacit. Our awareness of the tacit as tacit is, however, reduced to a general sense that what we see explicitly before us has undefined borders that point outward toward areas of life of which we are not aware but upon which we rely in order to be conscious of an explicit object at all. Tacit knowledge, then, is not identical with the appearance of an object, though we are aware of tacit knowledge in the appearance of a thing.

<sup>12</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 128-9.

This term has within it the notion of appearance, since the physiognomy of a thing is its surface appearance. And this aspect of meaning is also identified with the ontological aspect of tacit knowing since Polanyi says that this aspect is constituted by a reliance upon the particulars of an entity to attend to their joint meaning.<sup>13</sup>

An example of physiognostic meaning is the mere visual appearance of any object. Its shape, texture, color, etc., is presented as a coherent mass, a "physiognomy" of unique features. But ideas also have a physiognostic meaning, an appearance of structure and pattern of dynamic flow, a conceptual content which is kin to the appearance of objects. The concept of Good, eg., has a unique physiognomy composed of various experiences which we denote as "good": the sharing of friendship and love, achievement in one's profession, etc. Thus, the shape and structure of any meaning, whether perceptual or conceptual, is its physiognostic meaning.

Intellectual knowledge of values can be seen to share the same structure common to all other forms of knowledge. Polanyi indeed applies the structure of tacit knowing to all levels of knowledge from perception and motor skills to the

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<sup>13</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y., Doubleday & Co., Inc., 1966), p. 10, 13.

highest intellectual endeavors.<sup>14</sup> He says, "The shaping of our conceptions is impelled to move from obscurity to clarity and from incoherence to comprehension, by an intellectual discomfort similar to that by which our eyes are impelled to make clear and coherent the things we see".<sup>15</sup> I shall go into more detail about the various levels of tacit knowing shortly; but for now we can establish at least some fundamental ideas about value-knowledge if such knowledge is tacit.

To begin, values are meaningful as explicitations of knowledge that is tacit. This statement makes sense when we note that for Polanyi all knowledge is either tacit or relies on what is tacit. Now, a value can indeed be interpreted merely as an emotive preference or as an attitude. But, even if we interpret a value in this way, we do not escape the Polanyian dynamic of tacit knowing. For the assertion "values are only emotive preferences or attitudes" is itself a knowledge-claim about the nature of values (otherwise the "argument" for a preference theory could be seen merely as a statement of personal preference on the part of the speaker and would bear no persuasive force other than as an emotive appeal). And this knowledge-claim relies upon a tacit awareness of emotive preferences.

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<sup>14</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1966), p. 13.

<sup>15</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 100-01.

Thus, we must raise the question whether the distinction between emotions (or preferences) and conceptual knowledge is so clear-cut. If emotions can be said to be a kind of awareness (and indeed the notion of emotions of which we are unaware in any sense is an odd one, denying even a Freudian theory of the unconscious which states that we are "aware" of them though not consciously), then we must ask whether this awareness is knowledge in any sense. Obviously, such awareness is not conceptual knowledge. But to deny altogether that it is knowledge leaves us unable to explain how we become aware conceptually of our emotional preferences. Perhaps our only recourse is not to "proof" of such knowledge but to an acknowledgment that, unclear as our notion of such knowledge might be, our emotions must be understood in such a way as to include a knowing awareness of them.

The notion of tacit knowledge as defined by Polanyi best fits the description of this kind of knowing. Every knowledge-claim about the nature of values in general or about the importance (or unimportance) of particular values relies upon the knowing-awareness of these values, even if we represent them as mere emotional preferences. I.e., we rely upon a tacit knowledge of preferences and ascriptions of worth in order to assert anything explicitly about values. Values are meaningful as explicitations of tacit knowledge.

Polanyi, of course, does not speak of values in this way, since he never accomplishes a description of value theory in the context of a theory of tacit knowing. But if we adopt his theory as he states it, then tacit knowing is well exemplified in the manner in which we hold and are aware of values.

This does not mean that Polanyi is willing to explain how we come to know things by claiming that we already know what we are trying to explain. Taken to extremes, this is an absurd argument, since it would simply say that somehow we already know what we are trying to explain. But the notion of tacit knowledge is not so absurd. Tacit integrations are the joint meanings of the tacit particulars comprising them. Such meanings are tacitly more than any single tacit particular; as integrations, they are not just "sums" of tacitly known elements upon which we rely to focus on certain ideas. This "more" is a creative "more" in that the joint meaning of tacit particulars is not identifiable with any idea previously known tacitly and yet says in some sense what several tacit particulars say "together". Explicit values, then, are held as integrations of joint particulars which we rely on in attending to the vague and unorganized notions of valuing in order to ascribe a standard of worth to something. Statements

concerning value-knowledge are rooted in tacit appreciations of value or else tacit appreciations which are initially integrated explicitly as values.

Further, value knowledge is not mere subjective assertion. A more comprehensive understanding of tacit knowledge will help us understand why values are not merely subjective.

Tacit integrations themselves are not just subjective assertions proclaiming the meaning of more fundamental beliefs. We must remember that the tacit dimension of knowledge involves a commitment that our thoughts bear on reality. The visions evoked in an attentive focus on some particular problem are suggested by commitments that are already functioning tacitly. In the case of value-knowledge, the problem concerning how to ascribe worth to acts, thoughts, feeling, etc., evokes through attentive thought, visions of standards of worth. These visions are not just subjective assertions because they are creative integrations of the joint meanings of various experiences of worth: times when we have considered one idea superior to another, or a person's life as morally superior to another, or a way of life as better than some other way. We perceive certain things as better than others (eg., we value human life over that of an insect; or, we prefer our mothers over total strangers). We evaluate our situation and take preferred courses of action. All of these fundamentally human acts are acts of ascribing the

worth of one thing, act, or situation over another; and such worth-ascribing acts seem to be essential for human life. Without some kind of order of preference, some kind of capacity for evaluation, human actions essential for life (food gathering, social structure, etc.) would be impossible. Thus, we must conclude that we do have the capacity to evaluate and that this capacity is rooted in a drive to make evaluative sense out of life-experiences.

Insight into value, then, is rooted in concrete experiences, integrating their meanings into unified visions which cannot be separated in any way from the experiences they are rooted in. The word "subjective" means for Polanyi simply an assertion that is made outside of the tacit commitments one lives in.<sup>16</sup> Such assertions are generally shown to be subjective (and mistaken) in that they have little power to bear out the reality we live in, a power possessed by valid integrations of tacit beliefs.<sup>17</sup>

Values, then, are integrations of the experienced meanings lived through in concrete situations of ascribing worth. And such integrations are inextricably rooted in these

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<sup>16</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 304.

<sup>17</sup>Ibid., p. 37.

experiences and are not "subjective" in the sense of being unconnected with experience or arbitrary.<sup>18</sup>

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<sup>18</sup>To some extent we have already tried to clarify Polanyi's notion of tacit knowledge. Polanyi spent no little effort in clarifying this notion himself, though each effort leaves questions unanswered. Polanyi never seems to make explicit just what tacit knowing really is in itself. He defines tacit knowing essentially in relation to explicit knowledge, each time relying on a phenomenological description of the manner in which explicit knowledge relies on tacit knowing. Hence, we might observe that Polanyi relies fundamentally upon description and an appeal to intuition in his attempt to establish a case for tacit knowing. His work Personal Knowledge is a massive attempt to demonstrate that the enterprise of science relies upon a "tacit" theory of tacit knowing; but his argument leads only to the persuasive assertion that the tacit dimension of knowledge must be acknowledged without detailing how we experience it in itself.

Polanyi, of course, is in no position to describe tacit knowing in itself. Tacit knowing is known only in relation to explicit knowledge, only as its support. In itself (if it could be separated from explicit knowledge) it must remain silent. It can tell us nothing about itself. Thus, we cannot quite grasp this "awareness of awareness" in itself; we cannot fully explicitize the tacit dimension. And this "criticism" of the tacit dimension is precisely, according to Polanyi, part of the description of it. To argue that we are reduced to simply acknowledging that we know in a tacit manner is to assert precisely what Polanyi means by tacit knowing: that we always know more than we can tell, and this knowledge is not amenable to proof.

We can rail against this assertion of "unknowable knowledge", calling it nonsense and mere assumption. Polanyi's argument is only as convincing as the acknowledgment it foists upon us. But to be clear, this does not mean that Polanyi is wrong. Even if we maintain either a standard of empirical verification or rational demonstration as a criterion for the acceptability of a theory such as that of a dimension of "tacit" knowing, the unfounded assertion of such a theory does not thereby demonstrate its falsehood.

If we are willing to accept a theory of tacit knowledge, despite the difficulties that exist in distinguishing it from a Freudian unconscious or a Jamesian "fringe consciousness", then a claim that value knowledge relies on tacit knowledge is a proper claim. But still unclear is the manner in which we "rely" on tacit knowledge in order to focus our attention explicitly. We may consider the relation between tacit and explicit to be one of several types: associative, causal, logical, inductively inferential, or as a relation of meaning. Though Polanyi often speaks of the last as the proper relation between the tacit and the



Having described the notion of values as rooted in tacit knowledge of evaluation experiences, we may now turn to a deeper analysis of how these experiences arise as tacit forms of knowing. We turn now to Polanyi's concept of the body and its fundamental rule in perception and the unique kind of knowledge we call skills.

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explicit, he sometimes seems to include one or more of the other types I have named. And he never clarifies in detail how "reliance" can be a relation of "meaning" (in the sense that the explicit is the meaning of tacit knowledge) in so far as "meaning" is defined as the relation between tacit and explicit!

Whether we must consider these other possible relations between tacit and explicit as types of "meaning" or meaning as a relation separate from these others is an open question. But clearly we rely on tacit particulars to focus on a meaning we would have no access to without them, regardless of how we define "meaning".

Polanyi claims that we come to a knowledge of things already committed to their reality. One might accuse him of proposing a naive realism, of believing that the world simply imposes its structure upon a passive and intelligent mind which has the mere function of recording and manipulating the data as true comprehensions of reality. But this critique can be avoided by an understanding of what Polanyi means by "reality". Reality is not what realists take it to be: an objective structure passively acknowledged. Rather, "reality" is a personal commitment to continue pursuing truth in terms of what is presently believed. The word "reality" refers to a sense that we know something of what is there, though we can make no absolute statement concerning reality. Our "ontological commitment" is not a subjective assertion or a claim of absolute, "objective" knowledge. It is a claim that we are personally involved in the process of the continuing unfoldment of truth from perspectives which continue to be confirmed in their truth as we follow the intimations of higher truth inherent within them.

## 2. The Body's Role in Value-Knowledge

For Polanyi, the human body is the fundamental tool for gaining knowledge. He says "...all thought contains components of which we are subsidiarily aware in the focal content of our thinking, and all thought dwells in its subsidiaries, as if they were parts of our body".<sup>19</sup> This "extension" of meaning from the body outward is achieved by a kind of projection of sense to a point farther away from the body and back again to it. For example, imagine a man in a dark cave using a long stick to probe unseen territory. The end of the stick is pushed forward by the man's arm, sending various kinds of data (holes, rocks, soft spots, etc.) to his hand. And these in turn are assimilated or translated in terms of body knowledge: three steps in this direction will bring one to the edge of a cliff, two in another direction will encounter a wall. More generally, we interpret things in the world as "up", "down", spatially oriented, and as temporal in relation to the fundamental tool of all knowledge: the body. Polanyi calls the meanings revealed in such interpretive projections "telegnostic" meanings, which are essentially forms of knowledge gained by extension of the body in some medium.<sup>20</sup> Physiognostic and

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<sup>19</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Company, Inc., 1966), p. x.

<sup>20</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), pp. 128-9.

telegnostic meanings are just two ways of observing the same phenomenon and, therefore, occur together. Both are tacit forms of knowledge which may be explicitated through selective attention. The former, however, refers to the structure of a perception or conception, and the latter refers to the origin of it. Thus, they can be readily distinguished from one another.

The role of the body is fundamental in knowledge.<sup>21</sup> It is at the same time in the world while it reveals the world. The body itself is known focally only as an object in the world. We "know" the body tacitly, of course; but we have no explicit knowledge of its own spatial, temporal, corporal nature apart from an understanding of it in terms of the world which the body tacitly gives us. Polanyi sees this body-world movement as a mutual dialectic of co-determination, which means simply that one cannot be understood without the other since each reveals the other to the depth that each is understood.<sup>22</sup> This understanding of the role of the body in knowing obliterates the distinction between "internal" and "external" as determinative epistemological categories. Both

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<sup>21</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 29.

<sup>22</sup>Ibid., p. 12.

internal and external are mutually given and neither has the power to be the ultimate critical standard of the other. "Internal" data are not under the authority of "external" criteria, nor are "external" data to be arranged by internal patterns.<sup>23</sup> The world of knowledge, then, is a unified but "bi-polar" world in which revealed and revealer are mutually given in terms of tacit body-knowledge.

Skills are good examples of forms of tacit knowledge<sup>24</sup> that are still closely connected to the body. When one learns, eg., to ride a bicycle, one relies on tacit muscular coordinations that are never known in detail explicitly. One might be able to do it, but he cannot tell anyone else exactly how he does it. The body is more deeply aware of this "how" than his conscious grasp is able to convey. And one is said to "know how" to ride a bicycle only as he masters it as a skill.<sup>25</sup>

We should understand this knowledge, however, to be held by the person. At present we are considering the role of the body in knowledge, but this focus should not obscure the more comprehensive and unifying power of a personal hold

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<sup>23</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), pp. 183-4.

<sup>24</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 61.

<sup>25</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 126.

on knowledge in which the body performs its role. In tacit knowing we must say that the person knows: though the example of the bicycle rider makes it clear that the person relies upon the body's role in knowing more deeply than he can tell.

Perceptions of all kinds (the five senses, kinaesthetic senses, internal senses, etc.) are examples of tacit forms of knowledge that are also closely related to our bodily reality. Polanyi asserts that we have an innate craving to make out what lies before us,<sup>26</sup> to use our powers of perception to discover a coherent world.<sup>27</sup> That we seek to discover a coherent world is very important. Perceptions are not simply passive receptions of objectively determined data.<sup>28</sup> We try to make sense out of what we perceive in the process of perceiving it. Essentially involved in developing perceptual coherence (eg., knowing that square towers are not really round when one views them from a distance) are one's beliefs<sup>29</sup>

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<sup>26</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 120.

<sup>27</sup> Ibid., pp. 138-9.

<sup>28</sup> Ibid., p. 79.

<sup>29</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 67.

which act as a kind of reality screen<sup>30</sup> for perceptions. Our senses must meet certain standards of coherence before they can be relied upon, and these standards themselves develop toward greater sophistication as our perceptions in turn inform us about the world. Perception, then, cannot be separated from interpretation<sup>31</sup> and the standards that support it.<sup>32</sup>

The essential mutual support of perception and interpretation makes perception something of a bridge between the most body-oriented form of tacit knowledge (skills) and highly sophisticated mental forms (e.g., science). Polanyi says:

We know that perception selects, shapes, and assimilates clues by a process not explicitly controlled by the perceiver. Since the powers of scientific discerning are of the same kind as those of perception, they too operate by selecting, shaping and assimilating clues without focally attending to them.<sup>33</sup>

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<sup>30</sup>We don't believe, e.g., that sticks bend when dipped in water, despite what we perceive. We learn in this case to perceive that sticks only appear to bend in such situations. Our world remains coherent in such a case, despite the contradiction of our senses.

<sup>31</sup>Michael Polanyi, Notes on Prejudice (Chicago: University of Chicago, Special Collections Library, unpublished manuscript 11/28/39) box 26, folder 1.

<sup>32</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press 1962), pp. 96-7.

<sup>33</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 11.

I quote Polanyi here because I want to indicate that, with perception, we have added an important facet to our understanding of tacit knowledge. Skills are developed by a kind of immediate feedback: we succeed or fail in what we are trying to do. But perception combines a drive toward success (or coherence) with a development of standards to ensure this.<sup>34</sup> One can extend these elements of tacit knowing to value knowledge. One could argue that the capacity to experience insights into worth in respect to some things lies in a fundamental drive, a power to make evaluative sense of things which is grounded in the aim of the body toward a fundamental biological success.

This drive is aimed at discovering values that are already there in a sense similar to the way one strives to perceive what is before one. The embodied evaluator tries to clarify preferences, or senses of worth, that are tacit and which are in part responsible for his successful survival. His tacit world of preferences emerges as he engages in concrete situations requiring evaluative effort. He "makes out" the level of preference of an act, situation, or thing, not as a passive reception of data but as an interpretive effort in which the preference is revealed as a value essentially related to human life. Values do not exist in some Platonic

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<sup>34</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 99-100.

realm of purity; yet they are discovered in so far as they relate to fundamental human projects!<sup>35</sup>

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<sup>35</sup> One might question whether Polanyi is unintentionally vague concerning whether knowledge of the world or knowledge of the body is epistemologically primary. Thus, it appears that he attempts to justify his theory about the "primary" role of the body by reference to a position that seems--mysteriously--to be neither in the world nor located in the body, a position from which both are viewed synoptically. But what is the justification for claiming such a synoptic view?

We can clarify Polanyi's intent in this regard by noting that the criticism misses the mark in accusing him of vagueness and of importing an unjustified, unclear, and ill-defined vantage point from which to view both body and world. Polanyi is not residing in a "vague" position but rather an ambiguous one. And I believe he does this intentionally and justifiably.

Knowledge of the world is not, for Polanyi, reducible to a description of how sensory mechanisms join with reflective capacity to create an "intelligible world". We have already spoken of knowledge as inherently possessed of an "ontological commitment" with which the independent force of the world announces itself. Nor is the body reducible to those descriptive categories employed by scientists to clarify the natural world, such that it would be only an object among others in a natural world viewed and known through some means other than the body. The body and the world mutually disclose one another, and neither is reducible to a function of the other. Polanyi appears to remain in a position of ambiguity, gaining his "synoptic" vantage point through reflection on the historical origin of both knowledge of the world and knowledge of the body: the alternating focus on each in terms of the other as preserved in memory and as projected in each bodily move.

If our description of Polanyi's intent is correct, as I believe it is, the question of primacy is resolved. Neither the body nor the world perceived through its medium constitutes the primary element of knowledge. This ambiguity is at the root of any epistemological claim, since all knowledge is rooted fundamentally in the world as mediated



### 3. Truth and Reality in Value-Knowledge

For Polanyi, embodied tacit knowledge is intuitive. That is, it consists in a spontaneous integration of particulars into a coherent object which relates directly or indirectly to the world as perceived through the body.<sup>36</sup> This intuitive aspect of tacit knowing is a part of all forms of knowing from perception to the highest discoveries.<sup>37</sup> Polanyi views the development of knowledge as a process of moving from

through the body. And this is true no matter whether the more obviously body-oriented forms of knowledge such as perception and skill-performances are involved or higher intellectual feats of "embodiment" are involved. Hence, values, rooted in a fundamental drive toward biological success, are inherently body-mediated even though they are developed and expressed in higher intellectual achievements.

The body, then, is a kind of "primordial" tool in the discovery of values (though not all values are directly related to a need or preference of the body). The survival and maintenance of bodily existence depends upon certain orders of preference (foods to eat, types of shelter, etc.). The world appears as a hodge-podge of routes to the satisfaction of the person's needs, each value answering to a personal need (some answering to "transomatic" needs). The world is not an "independent" object in the sense of being radically different from a subject. Like all forms of knowledge, values, understood as primitive, biological ones or highly developed social ones, are tacitly known and mediate a subject-object dichotomy. And, because they do this, they appear in the "united" world as realities that correspond to our embodied existence.

<sup>36</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 60.

<sup>37</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 201.

one intuitive integration to another by the interplay of imagination as supported and guided by former integrations.<sup>38</sup> Thus, whether considering the grounds of discoveries or the discoveries themselves, tacit knowledge is not the product of deduction or induction per se but is an intuitive grasp of the meaning of hitherto unrelated particulars of knowledge. All deduction and induction occur as relations between explicit, formalized terms, which are themselves dependent upon tacit forms of knowledge.<sup>39</sup> Even a contradiction, which puts a dead-end to deductive or inductive knowledge, can be resolved by an intuitive integration<sup>40</sup> which resolves the tension between the two terms.<sup>41</sup>

As intuitive knowledge, tacit knowing is said to be "irreversible".<sup>42</sup> This means that, once one has performed a certain tacit integration, one cannot erase the knowledge

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<sup>38</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 204.

<sup>39</sup>Ibid., pp. 170, 212.

<sup>40</sup>Ibid., p. 168.

<sup>41</sup>The contradiction between the geocentric and heliocentric theories in astronomy, eg., was resolved by an insight which accounted both for the apparent truth of the geocentric theory and for the phenomena which could be explained best by a heliocentric theory.

<sup>42</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 106.

gained by it. One can add elements of knowledge to a concept achieved by such an integration by deduction or inference, but the basic notion to which one adds (or perhaps subtracts) ideas is irreversible. From within the world is permanently transformed, comprehended in deeper and richer ways.

Tacit knowing, then, is an intuitive, heuristic movement toward the meaning of particulars. The meaning, once achieved, becomes the ground for all future tacit integrations. Tacit knowing exists in an inextricable relationship with explicit knowledge, which expresses the focal meaning of what is tacitly known.<sup>43</sup> When made focally explicit, knowledge can be put to critical tests.<sup>44</sup> We can establish rules that are also explicit and which guide us in the way we employ explicit statements, such as in mathematics or in rules of evidence in a law court. Such critical employment may enable us to correct critically one statement in the light of another, and this corrective device may even serve to confirm or invalidate a knowledge claim based on tacit integration.<sup>45</sup> Thus, our

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<sup>43</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 11-12.

<sup>44</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), pp. 14-15.

<sup>45</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 133.

claim on reality through tacit knowledge cannot be arbitrary. Though tacit knowledge is "a-critical"<sup>46</sup> in that it cannot be judged as right or wrong by the critical standards or deduction and induction, it can be confirmed or invalidated by critical rules.<sup>47</sup> There is, then, rational access to tacit meaning since "tacit knowing" in another way of referring to the deepest context for meaning of any explicit statement. Thus, what we rely on in order to focus explicitly on something else is the tacit meaning of what we focus on. Tacit knowing and tacit meaning are fairly interchangeable terms, and rational critique may penetrate into both.<sup>48</sup>

Explicit, critical knowledge, then, is essential in confirming or invalidating tacit integrations. And such intuitions are not true merely by virtue of being intuitions. Their truth must be confirmed explicitly even though we are

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<sup>46</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 264.

<sup>47</sup>Ibid., pp. 285-291.

<sup>48</sup>Copernicus, eg., might well have simply intuited as a spontaneous, tacit integration the theory that the earth revolves around the sun as the most adequate understanding of the meaning of the data he had before him. But the explicit statement of his theory still required a complete critique by logical rules, contrary data, etc. Such a critique served to confirm the theory. But it also served to invalidate the former geocentric theory.

convinced of the truth of what we intuit.<sup>49</sup>

Being convinced of the truth of our intuitions, then, is not an adequate criterion for their acceptance as true. Such a criterion would be a mere subjective feeling of psychological certainty. Our intuitions can be false, and this falsehood must be admitted in the face of a failure of rational confirmation.

Returning to our development of a Polanyian notion of values, we can establish that Polanyi is both a cognitivist and an intuitionist in value theory. Worth-ascribing acts aim at fulfilling a knowledge that one thing or act is better than another: they project a value and not just an emotional preference. Values involve knowledge that x is better than y. And this knowledge is of a tacit, intuitive kind in that it is a spontaneous integration of particulars into a meaningful pattern. But this pattern must, in turn, pass muster before a rational critique which applies explicit criteria (eg., of universality and appropriateness) to it. The result, if the challenge of the critique is met, is a rational affirmation of a value, the knowledge of which is rooted in a tacit integration of hitherto unmeaningful particulars of human experience.

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<sup>49</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 9.

One might be faced, eg., with several alternative preferences, each of which seems to cancel out the other (eg., attend to one's work, go to a movie, etc.). Though one cannot do all of these at once, a higher knowledge, which remained tacit until focused upon under the tension of this decision, can possibly unite them. Out of the effort of trying to see clearly how to achieve some kind of unity from this mass of contradictory preferences, there emerges a plan of action, an ascription of the worth of one act over another based upon a knowledge of "betterness", that places all proposed acts in perspective. One might, eg., determine that certain goals can be delayed and still be meaningful while others are more immediate. Thus, the temporal dimension of values becomes important. Some values may be delayed in their realization, while others must be immediately pursued. Functioning with this new insight, one might order his preferences beginning with the most immediate one and ending with the one that can be delayed the longest. A new insight, then, unifies this activity of worth-ascription: an insight into value.

Of course, we are here already presupposing a sense of "betterness" to which we are applying our temporal preferences. The sense of "betterness" is deeply and tacitly rooted in our sense of what tends to promote the projects of our lives; and these projects include the fundamental attempts

at pure, biotic achievement (food, shelter, etc.) as well as the highest acts of self-sacrifice for the benefit of others with whom we share life. Thus, an insight into value (or the "betterness" of one over alternative options of action) is an insight into what promotes our most highly developed sense of good, considered as the achievement of our projects. Our projects come given at birth in the cry for life, but even this fundamental project may be abandoned as we develop higher insights into value which lead us beyond the biological need for survival. Thus, though values are rooted in biological experience, this experience can be reformulated and developed into radically different senses of worth than those primordially given at birth. The sense of betterness may be a priori in this sense; but it is not a priori in the sense that man has a comprehension of value which is fixed and only needs to be applied to particular instances. Values must be discovered as routes to new levels of human existence.

We can distinguish worth-ascription from value in clear terms. I speak of insights into value because I consider Polanyi a cognitivist in that he implies that values are grasped intellectually. When we grasp a value, we grasp that one thing, act, or state of affairs is better than another and may argue for the validity of our position on the basis of any number of reasons. The ascription of the worth of something is based upon such insights. But sometimes we

feel that something is better than another thing without knowing the reason why or even knowing the value we are aiming at. We merely act in accordance with a preference that remains blind. This is worth-ascription in its purest sense. And as such, worth-ascription is grounded in a tacit knowledge of the value it is based on. We may analyze preferences to discern the values they are based on and offer these as the ground of our preference. But usually ascriptions of worth and insight into value go hand in hand, so that it is not necessary to distinguish clearly between them.

One's tacit integration of an order of preference, of course, may be discovered not to be the "right" one. The consequences of one's order of preference may indicate that one's ascription of worth is, eg., self-defeating in that it dissolves the possibility of achieving later goals. Going to a movie now, eg., may mean that one does not complete one's work on time. A critical analysis of one's order of preference may reveal this and correct it--or else confirm that one's original tacit integration has placed one's preferences in a proper order. Our ascriptions of worth, then, are not arbitrary. They are grounded in tacit integrations that yield insight into a right order, a value that can act as a standard for ordering our lives and achieving ultimately an insight into the Good. In this sense, a self-defeating act reveals the falsehood of one's value and, thus, reveals a



negative criterion for right choice.

Our original tacit integration is a-critical. But this insight may be corrected, modified, confirmed, or invalidated by explicit developments of it. One important feature of this corrective or validating procedure is that it reveals tacit knowing as a kind of "foreknowledge"<sup>50</sup> We make explicit what we already know tacitly, and we shape the form of our explicit knowledge through the guidance of the clues offered us in our tacit knowing: we "feel" our way toward new insights.<sup>51</sup>

As we move into the area of man's higher functions of concept-formation, this foreknowledge becomes more important. For here we discover that the search for understanding, to achieve intellectual integrations that make deep and penetrating sense of the world, is itself an inherent desire in man.<sup>52</sup> And it is a desire which aims at its own satisfaction. We achieve this satisfaction by "sensing" our way to the resolution of intellectual paradoxes, often guided by conceptions we never previously thought had any bearing upon the

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<sup>50</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 23.

<sup>51</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 128.

<sup>52</sup>Ibid., p. 127.

the reality in question. In this sense, such concepts are heuristic in nature, forming an interpretive guide to new insights which integrate wide ranges of previously unrelated concepts.<sup>53</sup> Thus, intellectual desire, thrusting forth as an energy of probing, reflecting, researching, integrating imagination,<sup>54</sup> is a passion that finds its resolution only in an understanding to which one is fully committed as bearing on reality.<sup>55</sup> Indeed, Polanyi claims that a feeling of satisfaction, of resolution, is one of the marks of truth.<sup>56</sup>

This does not mean, however, that such a feeling of resolution or satisfaction is the criterion of truth. Polanyi's concept of truth does not permit any single, simple criterion which can distinguish truth from falsehood in definite, clarion tones. Our beliefs, whether true or false, involve commitments to act as though they bore directly on reality: belief involves a passionate commitment to the reality revealed to us in believing. That is, believing is reality-orientated, as I have already pointed out in my discussion of the ontological aspect of tacit knowing.

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<sup>53</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 143.

<sup>54</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 57.

<sup>55</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 106.

<sup>56</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 26.

Polanyi's definitions of reality and of truth bear a striking similarity. Reality attracts our attention by clues which create the tension that only a passionate intellectual research can satisfy. And it has this power of attraction because it is independent of the knower and can manifest itself in unexpected ways.<sup>57</sup> Similarly, an idea is true when it is capable of revealing its own truth by continuing confirmations in yet unknown and unthinkable consequences.<sup>58</sup> We have an "intimation" of reality in a true idea,<sup>59</sup> an intimation which confirms itself in new and unexpected ways as we follow its limitless implications,<sup>60</sup> an intimation which leads us to patterns of ideas that are truly aspects of reality.<sup>61</sup>

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<sup>57</sup>Knowing and Being: Essays by Michael Polanyi, edited by M. Grene, (Chicago, The University of Chicago Press, 1969) pp. 119-120.

<sup>58</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. vii-viii; Michael Polanyi.

<sup>59</sup>Michael Polanyi, Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y.: International Universities Press, Inc., 1974), p. 126.

<sup>60</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 252.

<sup>61</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 10.

Polanyi's notion of truth should enable us to see that, though no truth comes to us without our passionate commitment to it as truth, truth itself is not reducible to a mere passion. One must still ask whether our passions - our commitments, are right.<sup>62</sup>

The rightness of a passion or commitment cannot, however, be determined by traditional epistemological tests. Polanyi finds fault, e.g., with the correspondence theory of truth.<sup>63</sup> The necessity of conceiving assertions as belief commitments alone makes a correspondence theory of truth unacceptable, together with all of the criteria which might

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<sup>62</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 134.

<sup>63</sup>Polanyi has been accused of leaving no room for the traditional notion of belief as "deciding to believe in" something. ("Michael Polanyi The Responsible Person," Walter E. Conn, The Heythrop Journal, 17, 1976, pp. 45-7). To some extent this accusation is based on Polanyi's identification of the statement "P if true" with the statement "I believe P is true" (Personal Knowledge, p. 305). Thus, tacit belief is identified, in the eyes of his accusers, with explicit belief. And this identification precludes faith as a decision to pick up a point of view among other possible points of view. But in reality Polanyi does not intend this identification to be carried so far. Decisions to believe are different from tacit belief; but they are not excluded by it. When faced with several different interpretations of a text, e.g., one might decide in favor of one without any evidence that excludes the others.

determine whether our ideas correspond with reality.<sup>64</sup> Briefly, if we are committed to the beliefs we hold, it makes no sense to "stand outside" of them in order to determine whether they are true by virtue of corresponding to what reality "really" is. Polanyi holds that such a theory amounts to making truth an unasserted assertion, which is a contradiction in terms. We must acknowledge the "fiduciary" element of truth and formulate a theory of truth that does not force us to deny our commitments.

Polanyi has trouble also with other theories of truth. He denies, eg., that the fruitfulness of a theory is in itself a criterion of truth,<sup>65</sup> though it is an element of the truth-criterion.<sup>66</sup> The fruitfulness of a theory is its capacity to lead to new ideas and adventurous paths of research. But some ideas can be fruitful and not true. One might generate all sorts of interesting evidence to support a geocentric theory of the universe and still be wrong, despite the massive amount of evidence and supporting ideas that can be found. The problem is here that no continuous confirming evidence is

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<sup>64</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 305; but cf. an earlier appreciation for correspondence-theory language; Michael Polanyi, Notes on Prejudice (Unpublished manuscript, The University of Chicago Special Collections Library, 11/28/39), p. 1.

<sup>65</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 147

<sup>66</sup>Ibid., p. 148.

found--only more ideas: Fruitfulness per se, then, cannot be the final criterion of truth, although one must admit that an idea which does not lead to new and more penetrating insights into reality cannot be true.

The same thing can be said for coherence. Certainly incoherent ideas cannot be true. But coherence itself is only an expression of the stability of our ideas, not of their truth.<sup>67</sup> Of course, we can expect an idea that is true in one field of thought to be consistent at least with a true idea in another field and to show signs of leading to a more comprehensive truth.<sup>68</sup> But this consistency still does not enable us to assert that consistency alone makes both ideas true.

Polanyi is not left, however, without any guides of truth. We have already said that an idea must be fruitful and coherent in order to be true, even though these are not final categories of truth. But, more than this, an idea is usually considered worth following up for its fruitfulness if it is accurately determined and well defined, if it is systematically relevant to its own field, and if it is

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<sup>67</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 294.

<sup>68</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: The Contempt of Freedom (New York: Arno Press, 1975), p. 42.

intrinsically interesting as well as plausible.<sup>69</sup> Simplicity is excluded as a guiding principle, since some true ideas are more complex than false ones.<sup>70</sup>

None of these "guides", however, are final determinants of truth. Rejecting traditional theories of truth while outlining certain marks of truth, Polanyi claims that truth is knowable but not demonstrable as such.<sup>71</sup> He means to separate the knowledge of truth from a theory concerning how we justify truth claims. Indeed, we can know true ideas without being able to justify them as true by reference to epistemological theories. This is precisely the claim of a theory of tacit knowing: to grasp a truth is always to grasp a reality that is deeper than our own understanding.<sup>72</sup> We always know more than we can tell. We can know that what we tell bears the marks of truth and that it bears on reality in such a way as to enliven us to new worlds which confirm the partial truths of our old world and go far beyond them.

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<sup>69</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 135-6.

<sup>70</sup>Ibid., p. 166.

<sup>71</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 82.

<sup>72</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 43.

But there are no "final" determinants of truth. There are no unchanging truths. Polanyi says,

...man has the power to establish real patterns in nature, the reality of which is manifested by the fact that their future implications extend indefinitely beyond the experiences which they were to control. The appraisal of such order is made with universal intent and conveys indeed a claim to an unlimited range of as yet unspecifiable true intimations.<sup>73</sup>

In the end, we must credit our own personal judgment with ultimate powers to discern truth and falsehood.<sup>74</sup>

For this reason, Polanyi stresses what I have described as the fiduciary element of knowledge: its character as grounded in belief-commitment. He points to our capacity to doubt whether what we believe is true as itself implying a belief of some kind to which we are committed.<sup>75</sup> He says,

We must recognize belief once more as the source of all knowledge...No intelligence, however critical or original can operate outside such a fiduciary framework.<sup>76</sup>

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<sup>73</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 37.

<sup>74</sup>Ibid., p. 265.

<sup>75</sup>Ibid., pp. 273-4.

<sup>76</sup>Ibid., p. 266.



And, concerning the impossibility of final criteria of truth, we find him saying, "...Any inquiry into our ultimate beliefs can be consistent only if it presupposes its own conclusions. It must be intentionally circular".<sup>77</sup>

Polanyi does not mean, as do critical rationalists, that he is committed to a stance of self-criticism.<sup>78</sup> Rather, he is committed to an "a-critical" stance in that he believes that no critique is possible without reference to some particular frame of commitment. A stance of commitment must always precede criticism, though all commitments can be criticized from within a larger context of knowledge to which one is committed.

Such a position is tantamount to restating Polanyi's fundamental tenet of tacit knowledge: that we know more than we can tell. Doubt can imply a commitment or a possibility of commitment to another frame of reference which itself may be doubted. Such doubt is tacit knowledge of other frames of reference. and no frame is indubitable. Yet, doubt implies a commitment to other possibilities, a knowledge of other possibilities. Hence, critique, though infinite, is always rooted

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<sup>77</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 299.

<sup>78</sup>"Michael Polanyi The Responsible Person", Walter E. Conn, Heythrop Journal, 17, 1976, pp. 31-49.

in a knowledge-commitment which holds itself as true. Contravening evidence alone can discredit this commitment; but, at the same time, such evidence opens new possibilities of truth which form the ground of new commitments.

This means that knowledge is not just a passive entertainment of mental pictures which may or may not be true. It always involves a commitment to a truth that is larger than our grasp of it, a commitment that is an investment of our personal selves. A change in beliefs is not just a change of mind; it is a personal re-orientation within a new context of meaning, a new personal investment.<sup>79</sup>

#### 4. Personal Knowledge of Values

The tenor of Polanyi's argument concerning tacit knowledge has been to establish the whole involvement of our personhood in the act of knowing. From the most fundamental bodily perceptions to the highest acts of intellectual problem-solving, the bodily and intellectual commitment of ourselves is a personal investment.<sup>80</sup> Knowledge, in this sense,

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<sup>79</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 105.

<sup>80</sup>Ibid., pp. 300-301.

is essentially personal.<sup>81</sup>

To say that knowledge is personal is not, however, to say that it is arbitrary or subjective. Polanyi asserts that any knowledge-claim must be a responsible claim; it must respond adequately to standards of truth that are already present and relative to the field of knowledge in which the claim is made.<sup>82</sup>

This means that a personal claim to truth is at the same time a claim that meets standards that are proposed as universal, at least within the field (truth in art might, eg., satisfy other standards than those of scientific truth). Polanyi says "...The personal comes into existence by asserting universal intent, and the universal is constituted by being accepted as the impersonal term of this personal commitment".<sup>83</sup> Concerning the "personal term", Polanyi says, "Every factual statement embodies some measure of responsible judgment as the personal pole of the commitment in

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<sup>81</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. vii-viii.

<sup>82</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 41.

<sup>83</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 308.

in which it is affirmed".<sup>84</sup> This responsible judgment constitutes the personal pole of the commitment because we identify our commitments with ourselves, the most intimate recesses of our personhood.<sup>85</sup>

Thus, our personal commitment to our beliefs is at the same time a submission to the universal intent of these beliefs, for we submit ourselves to the universal standards of truth implied in our assertions.<sup>86</sup> Clearly, claims of personal knowledge cannot be subjective in the sense of being arbitrary. For each claim can be faulted by its failure to meet the standards of truth it claims to obey even in the process of establishing them.<sup>87</sup>

We participate in the act of knowing, then, by projecting our conviction as true by virtue of the universal standards of truth they imply and to which we ourselves submit, expecting that all other persons shall also submit to the. Thus, we say: "I hold this as true and expect everyone else to take

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<sup>84</sup>Michael Polanyi, Personal Knowledge: Towards a Post Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 312.

<sup>85</sup>Ibid., p. 59.

<sup>86</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 77-8.

<sup>87</sup>The term "personal subjectivity" really means "personal responsibility"; Michael Polanyi, Remarks sent to M. Roupise, Unpublished Manuscript, University of Chicago, 2/2/39. Box 26, Folder 1.

account of its truth when they make knowledge-claims. No one, including myself, should contradict this truth." Or, "This kind of idea is a good way of understanding such events. Everyone, including myself, should understand such events this way". Or again, "All such things are instances of x and should be understood as such". And, as various claims yield their universal standards, the domains of knowledge (art, science, politics, history--ethics) distinguish themselves, and the standards of truth within them become more definite.<sup>88</sup> Our personal commitment to universal standards is a commitment to believe that they bear on reality.<sup>89</sup> And only when we retreat from our commitment does reality seem to fall into irretrievable doubt.<sup>90</sup>

We may wish to formalize personal knowledge in terms of highly defined statements, mathematical calculi, statistical probability, etc. In doing this we must remember that all such formalizations rely on what is unformalized, tacit,

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<sup>88</sup>This does not mean that, just because the imagination is active in projecting the pathways to truth, the truth discovered is imaginary.

<sup>89</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 132.

<sup>90</sup>Ibid., p. 379.

in personal knowledge. For example, defining always relies on undefined (tacit) terms and on an undefined understanding of how the definition functions.<sup>91</sup> Mathematics even relies on tacit knowledge of what its abstractions refer to and of how to apply it to the real world.<sup>92</sup> Thus, we must understand personal knowledge as represented in but not as identical to the narrower scope of its formalizations. "Personal knowledge" is a broad concept referring to the tacit and explicit terms of knowledge.

To sum up Polanyi's notion of personal knowledge in his own words,

It is the act of commitment in its full structure that saves personal knowledge from being merely subjective. Intellectual commitment is a responsible decision, in submission to the compelling claims of what in good conscience I conceive to be true. It is an act of hope, striving to fulfill an obligation within a personal situation for which I am not responsible and which therefore determines my calling. This hope and this obligation are expressed in the universal intent of personal knowledge.<sup>93</sup>

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<sup>91</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 250.

<sup>92</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 21.

<sup>93</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 65.

To summarize this discussion of personal knowledge as a whole, we can return briefly to Polanyi's idea that conceptual knowledge is powered by a kind of intellectual need for understanding, a need which "feels" its way to its own satisfaction as it moves through tacit clues toward an insight which in some sense it foreknows. This dynamic, in Polanyi's opinion, is the answer to Meno's paradox.<sup>94</sup> We recognize the answer to a problem because we know its answer tacitly through the clues that can be integrated into an explicit statement. Thus, as we develop and in turn rely on our conceptions to approach new insights, we indeed create new, sweeping intellectual visions in which we hope to catch something of reality. We follow and confirm our intimations of reality, a reality which attracts us as the object of our intellectual passion.

The visions we achieve, therefore, are satisfactory only as visions of reality. They cannot be mere imaginative adventures which expend themselves as subjective passions for mental pleasures. We must be committed to what we believe in as bearing on an aspect of reality while being willing to relinquish beliefs that show themselves as wrong in the context of living through a commitment to them. Like Luther, we must say, "Here I stand and cannot do otherwise".

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<sup>94</sup>Meno, line 80d, ff.

If insight into the nature of reality relies upon not simply a "sensory registration" of the world but rather a total personal engagement with it in terms of our commitments, then insight into value as a proper ordering of preferences must be seen as a personal knowledge of value-realities. I.E., personal knowledge, if it can be extended into other domains of knowledge besides that of science (as we have seen that it can) can be extended to the domain of knowledge which is constituted by the claim to know what we should do. We have a personal knowledge of values.

We might not be able to make this argument if Polanyi had restricted his notion of personal knowledge to scientific knowing. But obviously the general statement of this concept implies a breadth of application which cannot be restricted to the sciences. We claim to know what is art and what isn't, to know events in history, to know the objects of our religious devotion, etc. Polanyi indicates that knowledge in any of these domains of experience is valid in so far as it obeys the universal standards that are relevant to each domain. He does not impose a scientific model on the whole of our knowledge claims, excluding those which are not "scientific". Rather, he describes in a phenomenological manner the essential structure of any act of knowing, comprehends it as "personal", and understands this essential



to apply to knowing acts in any domain of knowledge.

A personal knowledge of values cannot be excluded as a possibility any more than can the claims of personal knowledge in other domains of knowledge. Polanyi seems to allow knowledge claims whenever the unique standards within a domain are met. Certainly we can view our claim to know what we ought to value and to do as a claim of personal knowledge which is valid in so far as we meet the unique standards of the moral domain.

## CHAPTER TWO

### EXPLICITATION OF TACIT KNOWING

This chapter is devoted to one main issue: the development of explicit concepts from tacit knowledge. Thus, I am extending the argument of Chapter One to cover the assertion that both tacit and explicit forms of knowledge are personal. And I apply the dynamic of explicitation to value-knowledge in order to argue that our value concepts are instances of personal knowledge. As a corollary, I wish to assert that value assertions can be true or false.

Our visions of reality cannot be tested for truth by criteria that stand outside of them or by criteria that are a part of any sensible statement (eg., consistency, coherency). They themselves set the standards by which they are judged. We project our visions as universal truths and submit our thinking to them, confident that they deepen our insight into reality. The "correspondence" of our ideas with a detached "reality", the fruitfulness of our ideas as their consistency, though "marks" of truth, cannot finally determine our confidence that our personal investment is right or wrong. This is left to our own judgment ultimately guided by hope and a responsible submission to the standards we set for ourselves as personal knowers. Knowledge, then, is not to be identified with the subjective passions that often empower

it to develop nor with the cold formalizations that pronounce memorial over passions long since spent. Knowledge is responsibly personal, full of visions that are both real and intimately human.

Polanyi's notion of personal knowledge can be extended to the domain of ethical knowledge, knowledge of the Good.<sup>95</sup> I have already spoken of our everyday experience of having to order our preferences by evaluating them, ascribing relative levels of worth to them. Our innate capacity to desire, to need and to reach out to satisfy our needs, intimately related to our bodily existence in a world of living beings, is a fundamental foreknowledge of values. Our desires and the more sophisticated evaluations that we make all serve in turn as tacit evaluations which guide our efforts to new insights into higher, more comprehensive and workable value-structures, including insights into the essential nature of values themselves. Thus, the structure of tacit foreknowledge is applicable in the domain of value knowledge just as it is in other domains such as science, art, religion, etc. Indeed, our highest conceptions of the Good are explicitations of what we already know about it tacitly in terms of values we live by.

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<sup>95</sup> I capitalize this term not because of any pretense to Platonism, but because it represents the ultimate category of the ethical domain.

The need to evaluate, to order ascriptions of worth, is itself a desire to know a proper hierarchy of value. We seek not only to discover and order experiences of worth, but we also seek an intellectual clarification of values in themselves. We seek not only to live through our values but also to know them. And this impetus to know values can be satisfied only by a commitment to achieve a deeper intellectual insight into them, an insight which, in turn, serves as the tacit guide to even more comprehensive understandings. Thus, the development of a value structure through reflective evaluation is intimately connected with the intellectual grasp of values. Evaluation leads to knowledge of values, and this knowledge becomes the new platform from which we ascribe worth and order our preferences. Intellect and desire coalesce here into a kind of intellectual desire for the Good.

We grope our way to higher conceptions of the Good by relying on past comprehensions and present experiences. We seek an understanding of the Good that we can live in and through which we can experience life as inherently valuable. This means that we must be concerned about the rightness of our values. Values cannot be mere explicit statements of what we want; we must learn to order our sense of worth, to value rightly. We must seek to evaluate according to our knowledge of value, a knowledge we confidently assert as right and which bears on reality. We look for an

understanding of the Good that is true and which therefore leads us into a real sharing in the Good--in so far as we understand it.

Of course, just as traditional tests of truth are not applicable to Polanyi's epistemology, so neither are such criteria applicable to our knowledge of the Good. Theories of the Good that are fruitful only in the sense that they beget more complex theories cannot lead us to experience the reality of a growing understanding of the Good. On the other hand, theories that are attractive merely because they are simple may overlook the highly complex tacit background of explicit value ascriptions or statements of value. Again, theories which try to build "models" of the Good as a whole, models which are supposed to "correspond" to the reality of the Good while asserting their function only as models, merely attempt to construct another universe of discourse for the real thing. Such attempts overlook the bridge between subject and object formed by Polanyi's epistemology. Values are lived in through a commitment we cannot escape by fleeing into the detachment of a model which somehow we "hope" corresponds to reality. Nor can a coherent theory of value in itself enable us to discover right values. We can always justify what we want to do by coherent arguments and even a coherent theory of values. But such coherent theories do not necessarily give us right values, values that manifest the

nature of the Good. We seek to know values that bear on the reality of the Good, which continue to bear fruit as intimations of ultimate Good.

We see the Good which satisfies our search for right values as an independent reality which attracts us to itself. Like any object of knowledge, the Good is discovered piece-meal through individual and concrete experiences of valuing, experiences that are an inherent element of human life. Piece-meal experiences reveal an attractive object in a piece-meal way. Nevertheless, they demand our attention and the elevation of our whole person, especially the intellect, to understand that object and appropriate the quality of reality it yields. Our understanding of the Good is a temporal process that unfolds a reality which alone is the fundamental base of a comprehensive knowledge of values: the Good itself.

Fruitfulness, coherency, consistency, etc., are all marks of true intimations of the Good. But they are not final determinants of a true knowledge of it for the same reasons they can determine no reality as finally known. Thus, knowledge of the Good bears the same fiduciary element that undergirds all other forms of knowledge. We rely on tacit knowledge of values--a reliance that is the full weight of commitment--in order to attend to more comprehensive theories of the Good. The Good always appears from within the context of our commitment. We acknowledge particular goods, some of

which may be circumstances; and the Good comes to clarity from within these commitments through a gradual explicitation of their tacit components.

This explicitation of the Good is an act of personal knowledge. It is not arbitrary but obeys the standards of truth that are maintained tacitly in commitments more lived in that thought ought. We "think out" our notions of value and of the Good by trying to achieve comprehensive visions that are grounded in and unify our various tacit comprehensions. So, these explicitations must share the confidence we have in our tacit knowledge that the reality of the Good shines through our value-commitments. Further, if we were to consider them in isolation from the concept that unifies them, we would find them consistent and coherent with the whole as represented by the integration. And we would find continued and unexpected confirmation of our explicitations in the new aspects of the Good which reveal themselves when in turn we rely on these explicitations as tacit components of a new vision.

Our intellectual achievements of new visions of the Good obey standards of knowledge we ourselves have projected as universal. And with each new concept, we build standards

by which we judge as true the knowledge of values that shine forth from the Good. Thus, in the act of asserting confidently the new visions we achieve, we also submit ourselves to the standards they represent. These standards must be viewed as standards set by a personal knowledge of values. Thus, we have a personal knowledge of values and, ultimately, of the Good. We are called to this knowledge by the reality of the Good that partially reveals itself to us in our experience of valuation and urges us to find satisfactory resolutions of the tensions generated by contradictory acts of valuation. We seek a wholeness of life, and this wholeness depends upon a true knowledge of the Good.<sup>96</sup>

But how do these insights into value develop into theories of value or explicit concepts? I have already indicated something of the movement of thought by which this occurs. But we may return to Polanyi's epistemology for a

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<sup>96</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 318.



more comprehensive view of the development of truth in general.<sup>97</sup>

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<sup>97</sup>The difficulty in clearly distinguishing the personal character of knowledge from both the subjective and the objective senses of knowledge cannot be lightly passed over. One might argue that Polanyi does not escape subjectivism merely by showing that the claims of personal knowledge are not arbitrary. A claim can be subjective in a sense other than that of being arbitrary; and, indeed, being arbitrary may not be the most dangerous sense of subjectivity. More dangerous, in the sense of more subtly illusory and misleading, is the concept which seems to follow from a sense of reality, rational reflection, a system of right beliefs, etc., but is simply wrong. We believe something to be true, even with the usual justifications, but our belief is ultimately ungrounded and wrong: it is subjective.

Polanyi may easily avoid the charge of naive realism because of his insistence upon subjecting knowledge claims to universal standards. But he does not thereby avoid the charge that such standards are just as subjective as the knowledge claim would be without its benefit. Hence, the knowledge claim itself, grounded in what is itself ungrounded in anything other than our decision to project our own notions as universal truths to be obeyed by everyone, is subjective.

One might enjoin the critic to recall Polanyi's notion that knowledge always involves an ontological commitment. Thus, we never believe that we are only engaged in an act of belief; we believe that our concepts touch reality and thus escape subjectivism. But this argument against the charge of subjectivism cannot succeed because it never qualifies precisely what is known objectively. To claim that we have some grasp of reality without specifying at least part of what constitutes that grasp is no more to escape subjectivity than did Kant in his distinction between phenomena and noumena. Polanyi's ontological commitment appears to have no more substance than Kant's noumena. Hence, if Kant's phenomena can be said to be subjective in the sense that knowledge claims based on them have no right to reality, so Polanyi's ontological claim remains ontologically empty and does not save him from the charge of subjectivism.

However, Polanyi might be saved from this charge if we note that the subjective-objective distinction is itself grounded in the Cartesian model of an ontology bifurcated by

The explicitation of the tacit is a process of two mutually supportive directions: from a recognition of a whole toward identification of the tacit particulars that are integrated to comprise it; and the recognition of particulars

two fundamental substances, mind and matter. The Cartesian and Kantian dilemmas of the mind-body dichotomy cannot be overcome as long as this model is maintained. But it is precisely this model that is assumed in criticising Polanyi for not being "objective".

Polanyi does not accept the Cartesian model; hence, criticisms which are grounded in it miss the point. For Polanyi, the world as known and the knower mutually disclose each other, with neither being primary. The alternation from world to embodied knower and back again is responsible for the distinction between inner and outer, internal and external, subjective and objective. But this distinction more adequately represents the subjective as that which proves mistaken rather than that which is truly "inner" as opposed to a truly "outer". Polanyi's ontological commitment is not restricted to assertions about an "external" reality. It is a commitment to acknowledge that our assertions are true in so far as they grasp reality, considered as a continuously confirming series of concepts in which our deepest tacit sense of what is real comes to make sense while new vistas of research are opened to us. Our ontological commitment is not empty, as is Kant's noumena. It is as full as the assertion concerning reality itself, while it also leaves room for change and development--even eventual contradiction. Such changes, even when implying that we were wrong in our assertions, still leaves room for being right in so far as we have experience to organize into concepts. To be "wrong" means merely to ascribe to a model of exploration or understanding which does not adequately account for what we come to know even if it accounts for what we presently know.

Personal knowledge, whether of the moral domain or of other domains of knowledge, is, then, neither subjective or objective. But it avoids the scylla and charybdis of this dilemma not by residing within the terms of the distinction and attempting to mediate between them but by passing beyond the distinction to the fundamental ambiguity of knower and world, an ambiguity in which commitment and certainty also mutually determine each other.

toward grasping their integrated whole.<sup>98</sup> When we attend from particulars to their meaning, we "interiorize" them; and when we look away from the meaning toward the particulars, we "alienate" them: we single them out by standing aside and looking at them.<sup>99</sup> We may see interiorization as the act of tacit or subsidiary reliance on particulars,<sup>100</sup> whereas singling out particulars is a way of seeing them uncomprehendingly rather than understandingly in the context of their participation in the whole.

Polanyi calls this focusing on and singling out of particulars "destructive analysis".<sup>101</sup> Despite the negative overtones of the word "destructive", Polanyi does not mean that such analysis is inappropriate to the development of knowledge. On the contrary, it is the means by which the tacit becomes objectified in explicit statements. We perform destructive analysis whenever we single out an object in perception,<sup>102</sup> trace out conceptual possibilities of the cause

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<sup>98</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 125.

<sup>99</sup>Ibid., p. 146.

<sup>100</sup>Ibid., p. 128.

<sup>101</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 50-52.

<sup>102</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 115.

of an event<sup>103</sup> or stop the bad performance of a skill in order to focus on what we are doing wrong. Thus, the ultimate purpose of destructive analysis is to enable us, once we have singled out and corrected a faulty element in perception, skill, skill, or conceptual knowledge, to reintegrate it into a tacit whole upon which we can rely with renewed confidence.<sup>104</sup> We cannot replace tacit knowledge by a continued growth of explicit statements developed under destructive analysis; we can only correct and develop tacit knowledge by using such analysis as a tool.<sup>105</sup> Tacit knowledge can be corrected in the sense that mistaken assumptions which are often woven into the fabric of basically true commitments can be isolated and modified or eradicated from the functioning tacit integration. Being tacit is no guarantee of being true, though tacit truths are lived as well as "known". Some truths, indeed, are functional only as tacit. Imagine, eg., replacing knowing how to ride a bicycle or tie a knot with a detailed description of how to perform such skills.

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<sup>103</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 57..

<sup>104</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 125.; Michael Polanyi, Tacit Dimension (Chicago: The University of Chicago Press, 1966), p. 19.

<sup>105</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 20.

The process of becoming explicit, then, is a process of destructive analysis. The rules of procedure we adopt to perform such analysis may vary with the object of knowledge which we seek; they must only be adequate for isolating the data we wish to make explicit: a mathematical analysis yields abstract, formalized data; a religious inquiry yields knowledge different from that in art, history, etc. Fact and method determine each other in that only facts which respond to the question posed by the method can appear as true explicitations of the domain of tacit knowledge in which one seeks truth; and these facts in turn may guide our questions toward a more penetrating gaze which uncovers and brings to light entire domains of tacit knowledge.<sup>106</sup>

The word "explicitation" suggests making known what is implied. But the common understanding of implication cannot be applied to Polanyi's concept of explicitation. Apart from the obvious sense of this word in mathematics and logic, it is also used to describe how "objective" forms of knowledge are contained in tacit forms. But here we can see that deduction does not itself define the whole process of

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Michael Polanyi, History, Philosophy, and the Sociology of Science: The Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), pp. 1, 161.

elucidating the tacit, though it may be one part of the process. The explicit appears as such more through a free play of the imagination guided by certain questions than by a process of chain-logic (though such logical thinking does not preclude the discovery of new ideas which are more "traditionally" implied in tacit thoughts).

The existence of explicit concepts does, however, imply that there is a tacit dimension of knowledge.<sup>107</sup> I have already shown why and how this is so. We need only note here that, since knowledge develops by an alternation of destructive analysis and re-integration of particulars, Polanyi's creative sense of implication functions on both sides. We "see" the tacit particulars we wish to single out because they respond to a question we are asking of the whole, such as "Why doesn't it behave as I expect if I understand it properly?" We see elements of knowledge as "contained in" the whole; but we may arrive at the knowledge of them through means other than deduction. Nonetheless, because there truly is a "containment" of the explicit in

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<sup>107</sup> Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 12.

the tacit and of tacit notions within explicit statements, we may reasonably say that they are related by implication.

Further, since knowledge develops by an alternation of analysis and integration, we may see the dangers of stressing as worthwhile, only the "objective" side of knowledge. The benefit of formalization is that when we rely on it to attend to new problems, it opens new vistas of insight.<sup>108</sup>

Partial formalization is essential in knowledge. But one cannot objectify everything; and one ought not to try. The possibility of systematic errors,<sup>109</sup> misapplication of facts or procedure, etc., are only mechanical difficulties which nevertheless form permanent barriers to total formalization of knowledge. So when Polanyi says "I start by rejecting the ideal of scientific detachment"<sup>110</sup> he means that the attempt to define the scope and limits of knowledge by the borders of explicit statements is inherently a misguided ideal. Such an ideal does not properly represent the way

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<sup>108</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: The Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), pp. 5-6; Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 29.

<sup>109</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 19.

<sup>110</sup>Ibid., p. vii.

in which we actually gain knowledge,<sup>111</sup> as I have already demonstrated; and it ends in the absurdity of defining ad infinitum every speck of cosmic dust while losing the crucial perspective of knowledge as a human reality born in and supported by personal commitment!<sup>112</sup>

The loss of the human perspective leads us to an absurd, Laplacean mechanical interpretation of the universe.<sup>113</sup> And this is a universe in which even the highest concepts of justice, morality, custom, law, Good, and evil are reduced to

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<sup>111</sup>Michael Polanyi, Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 60.

<sup>112</sup>This loss of perspective is Polanyi's major criticism of the drive to perfect formalization. Most positivists will admit, of course, that perfect formalization of knowledge is an unattainable ideal. But, they might insist, this is no reason to stop seeking the ideal. After all, small victories are better than no victories at all--or fleeing the battleground altogether! But Polanyi is saying that even these "small victories" must be put into a perspective whose knowledge-content exceeds the "field" of formalization if they are to yield any sense at all. And this perspective is gained only by recognizing that it represents a personal though intentionally universal commitment to view reality in a certain way--a way not justified by the terms of formalization alone.

<sup>113</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 153



statistical descriptions of what people believe.<sup>114</sup> Human experience becomes something to manipulate through prediction and control rather than valuable in itself as the prime revealer of things.<sup>115</sup>

The ideal of total formalization, then, is a rampant, uncontrolled orgy of destructive analysis uncorrected by a human effort to understand from committed perspectives. Reality presents itself with its richness of experience and knowledge to those who engage the whole of their persons in it and who develop their knowledge out of an engagement that seeks a universal perspective for all formalizations.

How, then, does an explicit understanding of values develop in the light of this analysis? We have already shown how the knowledge of values develops tacitly from human experience and the need to order ascriptions of worth. We may now apply the process of destructive analysis to the development of value-knowledge. For if knowledge of values is, as we have shown thus far, a matter of tacit knowing, then it must become explicit in the same way in which the

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<sup>114</sup>Michael Polanyi, Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 50; Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), p. 54.

<sup>115</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 197.

tacit dimension becomes explicit in other domains of knowledge. The burden of unfolding the unique explicitation of value-knowledge lies upon us, since Polanyi does not develop his theory of tacit knowing in this area.

In the process of finding our value-structures inadequate to meet the new situations to which they inevitably bring us, we single out our particular values, making them "objective" and "theoretical". From experiencing friendship, eg., one might conclude that the good in friendship lies in the fact that friends are available to help us. This may lead to our ignoring friends except in times of trouble. And, when we discover that they are no longer available to us because of our long neglect, we may suspect that something is wrong with our understanding of the value of friendship. Thus, we focus on this value, objectifying it for the purpose of gazing at the structure we have been living in. We raise this value out of tacit waters like the hull of a boat in order to inspect its structure for seaworthiness. Clearly, this value is part of our whole value structure just as the hull, hidden below the waters, is an essential part of the boat. And once structural repairs or even rebuilding has been done to this section, the boat will be renewed and fit again for travel. The hull is resubmerged, where it tacitly supports a renewed voyage. In the case of our value of friendship, we may observe that our error lay in failing to

to see that the good of friendship lies in a two-way sharing of help and understanding. We may then place renewed confidence in our re-structured understanding and come again to rely on our value of friendship in life.

Thus, our theoretical and explicit gaze on this value led us to a renewed understanding of the value which was able to function tacitly and resolve the tension of the question. Our gaze contemplated the inadequate structure, tracing out possible lines of re-structure toward the sense of adequacy, still tacit within us, which we required. Thus, even this tacit sense of adequacy is contained within our sense of the failure of our value, the object of our gaze. We cannot escape the tacit ground of our values by objectifying them; but we can deepen and improve this ground by correcting our tacit misunderstandings explicitly--and then returning them to our tacit confidence.

We should be warned, however, that an understanding of values and of the Good cannot be identified with a theoretical structure. Personal knowledge of these ethical realities includes the tacit understanding that grounds all of our explicit theories, including the standards to which we submit them. Polanyi would not accept as valid any approach to values or the Good which attempts to capture their reality in a theoretical structure. This is evident in his assertion that concepts of justice, morality, custom,

law, Good, and evil cannot be reduced to descriptions of what people believe. And such would be the case if we turned our understanding of values into a description of them.

Here Polanyi explicitly admits the reality of these experiences and indicates that they have an independent importance in determining how we should understand the knowing process. His point seems to be not only that these ethical notions cannot be comprehended by mere description but also that the realities they denote should be acknowledged in every knowledge-claim and that such acknowledgment is part of the reason why we should not attempt to objectify all knowledge. Our tacit commitments, it seems, being acts of the whole of our person, are confidences which include moral realities within their scope as well as conceptual commitments. What we believe is importantly connected to our moral commitments. That is, there are some beliefs we feel we ought to have (eg., belief in friendship) and others we feel we ought to deny. We are influenced deeply in the selection of the beliefs to which we commit ourselves by our moral beliefs. Polanyi even asserts<sup>116</sup> that we ought never to

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<sup>116</sup> I am touching here on ideas which are developed later concerning Polanyi's explicit moral assertions. We shall find that Polanyi believes there are perversions of our moral entanglement with knowledge and that its true function is a moral commitment to truth. But in this section I merely want to establish the basic structure of value-explicitation and how it functions to deepen our understanding of moral realities. We can also acknowledge here that

accept beliefs that deny the reality of moral values.<sup>117</sup>

we are involved in a domain of knowledge that is an element of all knowing since it strikes at the heart of commitment, which is at the root of tacit knowing. But we must wait for later chapters for a careful description of how knowing itself is in part a moral act.

<sup>117</sup>One might question whether Polanyi's concept of explicitation can be classed as a methodology. Methodologies, one might argue, establish knowledge claims by means of rules which are explicit and well known. Hence, logical truths obey rules of logic, scientific truths obey rules of induction, and other truths obey rules appropos and commonly know to pertain to the mode of knowledge in question. But although Polanyi includes deduction and induction as modes of explicitation, he seems to view explicitation as a much broader activity than one that can be regulated entirely by rules. Indeed, rules seem to be more a crystallization of certain modes of explicitation than an a priori guide of the process.

Does this mean that processes of explicitation which do not obey already established rules--as in deduction and induction--are still valid? I believe Polanyi would answer "yes" to this question on the grounds that insights are not justified by the rules by which we are guided to them but by the intimations into reality to which they provide access. Further, the rules which these insights establish in our act of universalizing our understanding in terms of new insights to which we ourselves submit become the guideposts to them. We do not arrive at new discoveries via paths already well-trod.

Explicitation, fundamentally, becomes a process determined only by a free play of imagination when we are in pursuit of new truths. The experience of insight itself, as a novel and powerfully renewed access to reality, establishes the route only after the fact. This means that imaginative freedom is the fundamental methodology of discovery, even when that freedom makes use of rules which it embodies and transcends.

If this extended meaning of "methodology" be accepted, especially in the light of the rules which insight establishes, then explicitation in any sense and in any domain of knowledge is a methodology.

### CHAPTER THREE

#### THE SOCIAL DIMENSION OF KNOWLEDGE

In this chapter, I wish to extend Polanyi's notion of conceptual knowledge to a social, interpersonal ground of all knowledge. We shall see that we do not understand the dynamic of the achievement of knowledge unless we take into account the essential communal nature of our deepest experiences and the communal bond in which they are grounded. This bond is immediately relevant for drawing out the ethical implications of Polanyi's thought, since it is essential for an ethic that some notion of the nature of interpersonal realities be established. Polanyi's concept of "conviviality" meets this need and lends itself handily to the development of a notion of a social code of ethics.

I shall apply the concept of "tradition" and of "connoisseurs" which Polanyi develops in the context of a socially grounded epistemology to value-knowledge and push his concept of discovery to a notion of value-discovery. Thus, I will argue that we learn ethical truths from within the communal bond, indwell them in the process of coming to maturity, and move toward the Good (which is the "whole" in which individual insights into value participate) as an end. The process of maturing can "break out" of the traditional mores of society and lead to individual and communal grasps of moral truth

which are entirely novel. In establishing that the dynamic of tacit and personal knowing can be applied to the domain of moral knowledge, I will have completed the epistemological argument for moral knowledge.

# 1. Indwelling and Conviviality in Value-Knowledge

We must now procede to an understanding of how our individual insight into worth, our personal comprehensions of value, enliven our lives and extend themselves to the human community as a whole. To accomplish this, we must return to Polanyi's notion of knowing, particularly his concepts of indwelling and conviviality.

Indwelling is the deepest form of commitment. We begin the process of discovery by pouring ourselves into the subsidiary elements of a problem and continue to spill ourselves further and further into tacit clues until we arrive at the discovery fully committed to it as an aspect of reality. For Polanyi, this is the sense in which the existential dictum "existence precedes essence" has its appropriate meaning. The "thrusting forward" of our existence into a position of com-

mitment in relation to a discovery that follows it is the way we make the truth our own. Imagination strains to find a path to a superior life of the mind. Existential choices are made in response to a tacit insight into potential discovery and follow a "gradient" of understanding toward this expansion.

Although whole worlds are rarely ever chosen; there is a personal center of control capable of responsible choice according to already established criteria.<sup>118</sup> Considered as fundamental in man's being, existential <sup>119</sup> changes, considered as depth "world-new" changes, do not impair the rationality of our personal judgment; they merely affect our calling.<sup>120</sup>

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<sup>118</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 81.

<sup>119</sup>Polanyi's sympathy with existnetialism in so far as it affirms commitment as fundamental in knowing should not be construed as an alignment with existentialism. Polanyi agrees that existentialism has affinities to his notion of indwelling. But existentialism, in his view, has not faced the fact that science itself is the product of commitment/decision. Existentialism forces a dichotomy here, setting itself up as a revel in relation to scientific thought. Thus, existentialism fails to take up Polanyi's task: to find a concept of knowing that applies to both science and existential thought. (Points from a conversation with Paul Tillich, Feb. 21, 1963, Box 25, folder 4, pp. 3-4 of University of Chicago collection).

<sup>120</sup>Knowing and Being: Essays By Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 134.



Polanyi then extends the use of the term "indwelling", unlike existential thought to both science and the humanities. Indwelling, as tacit knowledge, is characteristic of all knowledge.<sup>121</sup> It is a kind of "interiorization" of knowledge in that we inwardly identify ourselves with an object of knowledge.

I have already shown how the dialectic of destructive analysis brings forth explicit, focal knowledge. Another way of saying this in regard to indwelling is that there is a dialectical production of meaning through the alternation of indwelling and alienation from a context for knowledge.<sup>122</sup> In this sense, indwelling is a term which also opposes the meaning Polanyi expresses in the terms "looking at".<sup>123</sup>

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<sup>121</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 17.

<sup>122</sup>Knowing and Being: Essays By Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 148.

<sup>123</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 18; Interesting examples of this are reading and playing the piano. One is aware only of the meaning of sentences in reading as he indwells the words and letters. But a confusion in meaning may send one back to a close, explicit scrutiny of the words where one may discover that a misspelled word changed the entire meaning of the sentence. Beginning from a different point of view, corrected by an explicit (alienated in relation to indwelt) grasp of the words of the sentence, one goes on to grasp the point of the entire work. Similarly in playing the piano, one indwells the musical scores from which one plays. But a difficult finger movement may require that the pianist explicitly scrutinize a certain part of the score for a better sense of how to procede. The music stops, and the indwelling has become an alienation from the music. But immediately the music begins

Thus, Polanyi says we use theories (as well as systems of signs, notations, etc.) by dwelling in them; and this dwelling can be gusied by a shaft of focus. Indwelling requires a surrender of oneself to a context of meaning and consists in a living in rather than a controlling of experience. Through indwelling we control neither ourselves nor our environment. Our attitude is that of contemplating the content of experience.<sup>124</sup>

Music, poetry, painting, and all arts lie on a continuum of indwelling somewhere between science and worship.<sup>125</sup> I contend that knowledge of ethical realities--values, orders of worth-ascription, intimations of the Good--also belong on this continuum. Our tacit knowledge of values, eg., is a form of indwelling a reality to which we are committed. As indwelt, ethical realities are not merely ideas we constitute by reflection upon past experience. An indwelt perspective does not

again, this time with better execution and much improvement. In both cases (the reading and the music) the alternation of indwelling and alienation deepened the comprehension, the meaning, of the performance.

<sup>124</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 196; Contemplation, then, is impersonal only in the sense of being a complete participation in the object rather than a detachment from it. Contemplation is self-abandonment (p. 197) an abandonment to all levels of intellectual life. Polanyi, reverses the usual sense of "contemplation" here. He rejects the notion that contemplation is the same as "theory" or "sight" from an objective distance.

<sup>125</sup>Micahel Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 199.

seek the ideological essence of any reality, including ethical realities. We find ourselves confronted with an aspect of reality we can only acknowledge as intimately ours and yet as something we have discovered, something we can contemplate and to whose reality we can abandon ourselves. The personal knowledge of values and of the Good, then, should be seen not merely as a product of "existential commitment" (in the sense of "making" our values). We find ourselves already indwelling them; and we develop this indwelling with increasing capacity to appreciate ethical realities and to order our lives in accordance with them rather than to make them subservient to our lives.

We must turn, then, to a more comprehensive view of the nature of the ethical realities we indwell. Polanyi says that all knowledge, as committed indwelling is convival:

Since both individual and interpersonal commitments are related socially and established institutionally, the perspective of commitment widens here to the whole of humanity pursuing its course towards an unknown destination.<sup>126</sup>

The pursuit of knowledge, according to Polanyi, is not simply an individual affair. It is communal--or convivial--not only in the sense of being a necessary achievement for each person in community but more specifically, in being the necessary

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<sup>126</sup> Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 328.

basis of any individual, personal engagement in truth-seeking.

Polanyi argues for the interpersonal character of knowledge in a number of ways. One of these is to tackle the question of knowledge of other minds in a direct manner. In reference to knowledge of others, Polanyi states "mind is not the aggregate of its focally known manifestations, but is that on which we focus our attention while being subsidiarily aware of its manifestations".<sup>127</sup> The parallel here between tacit knowing in general and this knowledge in particular is intentional.<sup>128</sup> We never, e.g., merely observe the external workings of another body. We see the body as a clue to the presence of something else: the mind.<sup>129</sup> Thus, "A man's mind can be known only comprehensively, by dwelling within the unspecifiable particulars of its external manifestations."<sup>130</sup> Such an approach side-steps questions of solipsism

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<sup>127</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 263.

<sup>128</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 32.

<sup>129</sup>Ibid., p. 31-32.

<sup>130</sup>Michael Polanui, The Study of Man (Chicago, The University of Chicago Press, 1958), p. 33.

or of how the other is "inferred". The same dynamic that fundamentally governs all acts of knowing permits real access to the personal quality of the other.

Further, a belief in truth as a communal achievement, a belief essential to science, requires that one open up to others in an attitude of fairness and tolerance, that one believe that he shares with others a disposition to the truth.<sup>131</sup> This participation of the knower in the shared attitude of the other increases steadily as we proceed to higher levels of existence until, in the case of knowing others, indwelling is so full that there are no longer two logical levels. We apply the same standards in knowing the other as we do in knowing ourselves and, thus, transcend mere scientific "observation".<sup>132</sup> We come to know that we do not know others by observing their bodies or see what they see by observing their neurological processes. <sup>133</sup>

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<sup>131</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 70.

<sup>132</sup>Michael Polanyi, The Study of Man, (Chicago, The University of Chicago Press, 1958), pp. 94-5.

<sup>133</sup>Meaning, Michael Polanui and Harry Prosch, The University of Chicago Press: Chicago, 1975, p. 49.

An immediate result of this realization is that we can no longer ask merely for the cause of an act since the cause becomes logically distinct from the reasons for an act. And when we ask for the reasons of an act, we encounter the person instead of an object of positivistic, mechanistic science.<sup>134</sup> Our appreciation of others, manifested in our respectful attention, is a fellowship in which we acknowledge that we share with him the same firmament of obligations. We understand each other as capable of responsible choices.<sup>135</sup> Polanyi refers to this understanding as a "communal art of confidence."<sup>136</sup> And he asserts that we must commit ourselves to this art as an act of trust, of faith. Only by adhering to a choice to trust others even when this trust is most unfounded can we discover friendship or a true human bond. And this

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<sup>134</sup>Scientific Thought and Social Reality, ed. by Fred Schwarz, International Universities Press, Inc.: N.Y., N.Y., 1974; Polanyi identifies this encounter with Martin Buber's "I-Thou" encounter of persons, an encounter in which love becomes possible. But, more than love, Polanyi says that the I-Thou encounter necessitates that we move from the assertion of facts (as in science) to a continuous encroachment on the area of moral and civic commands; Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy, (Chicago: The University of Chicago Press, 1962), p. 346.

<sup>135</sup>Michael Polanyi, The Study of Man (Chicago, The University of Chicago Press, 1958), p. 66.

<sup>136</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 71.

principle is valid not only for dyads and small groups but also for the whole range of social interplay. Faith, considered as "indwelling" is a method of discovery in all human relations and a condition for human disclosure and truth. And it makes possible the good works that are based on the recognition of trust.<sup>137</sup> A belief that others are motivated only by ambition, greed, lust, and violence is responsible for producing and forwarding these motives in any society.<sup>138</sup>

But aside from these ways of approaching the problem of how we know other persons, there is abundant evidence of an interpersonal coincidence of tacit judgments continuous from language to the pre-linguistic interaction of powerful emotions (e.g., sympathy with another's pain).<sup>139</sup> Sentiments of fellowship, e.g., exist prior to articulation and form the ground of our capacity to trust in any formalized community.<sup>140</sup> So Polanyi can say, "The tacit sharing of knowing

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<sup>137</sup>Notes on Prejudice, 11/28/39, box 26, folder 1.

<sup>138</sup>Ibid.

<sup>139</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 205.

<sup>140</sup>Ibid., p. 209.

underlies every single act of articulate communication." <sup>141</sup>  
 Communication occurs only when both speaker and listener rely mutually on one another's correct understanding and use of words. Both must trust the authority for correctness and one another's proper obedience to it. Trust and authority must be combined.<sup>142</sup>  
 And, when it is, any linguistic move between persons contributes to this conviviality in so far as it is a reaching out and a sharing.<sup>143</sup> This may not in itself form an organized society, but it is the sine qua non of such.<sup>144</sup> And it sets the stage for impersonal obligations to the community.

This sharing of experience is one kind of conviviality. A second kind is participation in joint activities. Such participation affirms communal existence and, by identifying the life of the group with antecedent groups, established historical continuity and reconciliation within the group. It confirms the

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<sup>141</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 203.

<sup>142</sup>Ibid., p. 206

<sup>143</sup>Ibid, p. 210.

<sup>144</sup>Ibid., p. 212



convivial existence of the group as transcending the individual.<sup>145</sup>

The conviviality of knowledge does not mean that man is incapable of pure thought undermined by social influences. But such thought must be done within the limiting structures of society to which one must submit since they are beyond the scope of one's own personal responsibility and are the framework on which one relies.<sup>146</sup> Evidently, Polanyi does not consider our tacit, convivial sharing to be an "influence" in the negative sense of blocking our original or even radically opposing ideas. It is clear, however, that tacit sharing is an influence in so far as it grounds the dynamic of all thought in any culture.

Polanyi refers to this positive sense of "influence" as the "authority" for thought. Clearly, we must rely on the authority of others in the community who are accredited with knowledge of things we do not know.<sup>147</sup> This does not mean, of

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<sup>145</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 211. Polanyi, offered this about ritual, but I think this point of view can be extended to all shared activities, since they all require evidently the same mutual indwelling.

<sup>146</sup>Michael Polanyi, The Study of Man (Chicago, The University of Chicago Press, 1958), pp. 68-9.

<sup>147</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 163.

course, that we should submit ourselves naively to the viewpoints of others. Thoughtful submission to authority includes some opposition to it. We accept authority as competent but not as supreme.<sup>148</sup> Thus, reasonable submission includes conflicts in views and changes in belief and values on both sides.<sup>149</sup> The authoritative traditions of the past are not just "handed down" but are our interpretation of the past as we view it from the context of particular problems in the present.<sup>150</sup> We remold authority to meet the problems with which we struggle and yet rely on it as a universal measure of what is right for the community as a whole.

This is possible, of course, because we are capable of learning the rules of a skill, art, or science through the tacit dynamic of knowledge. And, more than that, we are capable of teaching these rules to others and of using them to improve our performances by re-integrating into our performance the understanding represented in the rule.<sup>151</sup> In teaching these rules to others--or to ourselves--we must never impress

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<sup>148</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 164.

<sup>149</sup>Ibid.

<sup>150</sup>Ibid., p. 160.

<sup>151</sup>Ibid., p. 162.

our particular slant which we give them on others. They must be free to respond in their own creative way to the authority that binds the community.<sup>152</sup> We are not the perfect embodiment of our own rules.

Tradition, then, is the convivial embodiment of knowledge and requires an active, creative response as it is transmitted. It is composed of both explicit and tacit elements. Where no explicit prescription exists, the tradition must be learned by example from the master as an "art". The apprentice submits uncritically to his authority (but not naively!) and thus learns rules of which even the master is unaware. He learns the tradition of the art and often surpasses the master.<sup>153</sup> His skill is then called "connoisseurship".<sup>154</sup>

In this sense, the learner must believe before he can know. He must rely on others; he must submit to the

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<sup>152</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 46.

<sup>153</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 52-4.

<sup>154</sup>*Ibid.*, pp. 54-5.

tradition by pouring himself into it.<sup>155</sup> At the same time, he must bring his own modifications to that to which he submits, even though radical dissent still implies a partial submission. For he cannot dissent from something in which he has absolutely no involvement.

Traditions are always in a state of creative renewal. They invite their own opposition. Thus, the personal element must appeal to a tradition not merely as it is but as it ought to be. The person aims at a reality which is both embodied in the tradition and transcends it. His view of this transcendent reality from within the tradition is the ground of the modification of the tradition. This dynamic is universal for science, law, religion, and other domains.<sup>156</sup> All creative activities are based on traditions of a structure similar to those found in science.

The discussion of knowledge of the Other, conviviality, submission to tradition, and connoisseurship leads naturally to ethical implications. Indeed, the description of

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<sup>155</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 208.

<sup>156</sup>Michael Polanyi, Science, Faith and Society (Chicago: The University of Chicago Press, 1966), pp. 56-7.

the ontological and epistemological link which Polanyi unfolds in relation to the other leads us to see quite easily how one might, in Polanyian terms, argue for a communal or convivial knowledge of values and of the Good.

The importance of indwelling in value knowledge shows itself on two levels. First, since all integrations of meaning involve a tacit indwelling of clues, then any assertion that X is valuable (i.e., tends toward the Good) or that X manifests an insight into the Good must rely on a tacit indwelling which allows us to perceive the value or insight. Such assertions represent meaningful integrations, if we take Polanyi's epistemology seriously. And the fact that we do make such insights leaves our insight into value to be explained in the same manner in which Polanyi explains how we come to know in general.

The parallel seems obvious. Polanyi does not attempt to justify all knowledge claims by some fundamental, unquestionable datum. Indeed, the tenor of his epistemology would rule against such an attempt. Instead, he begins with a description of how we come to have the knowledge we claim to possess and developed from this perspective. Thus, a legitimate extension of knowledge into the ethical domain need only begin with the same starting point: with a description of how we come to meaningful integrations of insight into value. It is consistent, indeed necessary, for a Polanyian

thinker to investigate the standing of knowledge claims in the form in which they are made by an analysis of the tacit-explicit dynamic that underlies the experience to which they refer. Thus, we can assert with confidence that claims of value-knowledge are appropriately analyzed and justified in the light of such a dynamic; and value-assertions are, therefore, integrations of meaning which we perform as an act of personal knowing through an indwelling of a tacit awareness of various partial insights and feelings into value.

Value-knowledge comes to explicit focus through a personal indwelling, more specifically, of the value-laden communal experience. Even if we cannot agree with Polanyi's argument for an intersubjective reality, we cannot deny the importance of such a reality for the ethical domain. If we indwell an intersubjective reality, and if value-knowledge is made explicit from an indwelling of tacit value-awareness, then we indwell an intersubjective, value-laden reality from which we integrate our personal values. An intersubjective reality means a communal field of values.

This intersubjective sharing of values can occur on an explicit level, of course, as when people discuss points of view and persuade others to their own viewpoint. But the argument for an intersubjective sharing of values finds its focus in the tacit realm of communal life in which a fundamental ontological congruency between persons makes common

values, tacit or explicit, possible. Without an intersubjective sharing of values, we are reduced to a solipsistic inference that others feel and believe as we do. But an acknowledgment of this sharing enables us to understand that, when we acknowledge the personal reality of another, we also acknowledge a fundament of values that binds us together as human being.

The intersubjective sharing of values, then, makes ethical life fundamentally a communal affair. Our insights into value are grounded most deeply in a tacit sharing within a community of shared values upon which we rely in coming to our own insights.

The other elements of the model of the epistemological community of tacitly shared insight must be extended, if we are to be consistent, to value-knowledge: i.e., authority, tradition, connoisseurship.

The community which we indwell forms the tradition which we take over for ourselves in ascribing worth (and standards of worth) to things, events, persons, acts, etc. We indwell a tradition of values which we project as we face present issues and orient ourselves to the future. These values are to some extent reconfirmed in each of our acts, forming, by "repetition", a continuous tradition of value.

We cannot, of course, "look at" our standards in the process of using them. We attribute absoluteness to them because we rely on them absolutely. Yet this reliance is itself temporal and constitutes the continuity of tradition. Even if the capacity to rely absolutely is potentially eternal, however, there is no necessary reason why such absoluteness should itself be employed as a value. We must remember that we are responsible for the continuance of the value-tradition through our indwelt commitments. Otherwise, we lose sight of the perspectival character of all knowledge, including value-knowledge.<sup>157</sup> Such a loss would condemn the free growth of cultural life and destroy society's capacity for original thought.<sup>158</sup>

Thus, having a tradition of values does not mean that we cannot meaningful oppose the value-standards of our community. True, we learn what values are and how they aim at achieving the Good from within our community. But each person is free to discover new realms of human value that may surpass those of his community to the extent that assertion

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<sup>157</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 184.

<sup>158</sup> Ibid., p. 220.



of the latter is morally offensive to the discoverer!<sup>159</sup>

We can, thus, change the standards of worth by which our community lives. We can, as the "master" of a new understanding of values, teach others a new aspect of ethical reality. And when they become connoisseurs, firmly entrenching the master's teachings in the community, they themselves, relying absolutely on what they have learned, can come upon new discoveries which again demand dissent. They are, indeed, the authorities of the ethical domain until a new

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<sup>159</sup> For example, one man's ethical insight might perceive that there is no real relation between the sacrifice of children and the productivity of crops. The value of child sacrifice plummets in his view; he sees such activity now as futile, self-defeating (since it robs the fields of potential workers), and generally abhorrent. This departure from the normal understanding is not due in this case to ignorance or a lack of "connoisseurship" of values; he is skilled in the art of ordering his ascriptions of worth within his community and has placed his confidence in the standards of his society. But, let us say he is a farmer whose crops failed after the sacrifice of his first-born son. His confidence in his community's value of sacrifice is shaken; he has lived by them, and they have failed him. He now sees the abhorrent act for what it is, released from the blindness invoked by a belief that only such an act could protect the crop that helps feed the community. He takes up a position of dissent, not wishing to overthrow the tradition but to re-make it in a more humane way. Perhaps he finds the freedom to do this and perhaps he does not. But, in Polanyi's view, he should be allowed the freedom of dissent since this is the way in which the tradition is both re-vitalized and re-molded. We should all recognize that we are not the perfect embodiment of our value-standards and that our standards may not represent the ultimate Good.

ethical reality begins to assert itself in the form of dissent.<sup>160</sup>

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<sup>160</sup>We might question Polanyi's notion of "indwelling" in respect to its vagueness. The clearest notion available for understanding what Polanyi means is that of a sharing of ideas: two or more people with the same idea. But obviously, even if the model is relevant it is not adequate for understanding the importance of the term "indwelling". Even Polanyi would reject it as an adequate model.

More specifically, Polanyi is referring to a tacit sharing not only of ideas but of habits and patterns of life. Such sharing occurs on two levels. First, Polanyi seems to assume an "ontological congruence" of persons within a culture in which the sameness of influential factors produces human beings who share a fundamental "sameness". Second, the culture itself tends to reproduce itself in the shape of individuals who learn to share common assumptions and patterns of life. The second kind of sharing can be understood to some extent as an explicit sharing of ideas. But obviously Polanyi intends even this kind of sharing to have its tacit dimension.

The tacit dimension of this sharing and that of the "ontological congruence" which constitutes the first level of sharing is supposed to constitute "indwelling". Polanyi wishes to distinguish between indwelling as an intellectual act and indwelling as an existential act. He means by this distinction only to divide a partial act (intellectual) from a whole (personal) one. Indwelling includes intellectual forms of indwelling as part of a total, personal involvement in culture.

But these distinctions, though they help explicate Polanyi's concept of indwelling to some extent, cannot serve to eliminate the vagueness of the term. Ultimately, "indwelling", in its most significant sense as "ontological congruence", seems to rely upon an assumption of a sameness of being throughout a "field" which includes persons and the cultural or "civic" environment. Polanyi seems to want to retain a strict epistemological meaning for indwelling; but his epistemology is constituted by a description of the tacit-explicit dynamic, the ontological assumption remains an ungrounded ground. One must accept it or else find an alternative way to explain indwelling strictly as an epistemological act, unless the ontological assumption can be grounded within the purview of Polanyi's philosophy. Polanyi himself does not resolve this issue.

— This does not mean that Polanyi gives us no guides to its resolution. His notion of ontological commitment, eg., allows us to understand how all of our beliefs carry with them a commitment to consider them as aspects of reality. One might argue that indwelling, considered as a self-interpretive concept, itself reveals the aspect of reality to which it refers: the "sameness" of the person and the cultural environment which makes the "ontological congruence" possible. This insight may not itself resolve the problem of how to understand dwelling, but it points in the direction of an answer that would be impossible to unfold in the context of the present work.

The problem of indwelling extends specifically to the problem of the Other. Polanyi claims that we know the Other by indwelling the tacit clues to the presence of mind so that mind reveals itself naturally as the meaning of these clues. Hence, we do not infer the presence of mind but perceive it as the meaning of the clues we indwell.

Polanyi seems to adhere too closely to the language in which the traditional problem of other minds is stated. He appears to be interested in establishing a means by which we know the presence of mind in others and, thus, appears to be bound by the Cartesian metaphysical difficulties which are responsible for the problem in the first place.. He ends up asserting the existence of mind as though it were a metaphysical entity in itself.

But before we are misled by appearances, we should recognize that Polanyi's main objective in discussing the problem is to illustrate how the notion of indwelling overcomes the problem even in its traditional statement. The point is that knowledge of others is not an inference but part of the perceived world; Polanyi is not attempting to justify the metaphysical separateness of mind in accordance with a Cartesian mentality.

Again, however, we might question the assumption that indwelling represents some sort of "ontological congruency" in which the Other is, in some sense, "part" of ourselves and our perceived world. Polanyi does not offer any specific justification for this assumption in regard to knowing others. Indeed, he appears to acquiesce to Cartesian dichotomies. But again, his notion of ontological commitment may release him from the fangs of this critique. Indwelling, in the perspective on ontological commitment, lets us see the Other as an aspect of reality in the sense that, under ordinary conditions, we are not deceived in our belief that we are dealing with real others who are real in the same sense and manner in which we are. This

New values, then, are discovered as part of a process of "breaking out" of old ones. To understand this more clearly, we must return to Polanyi's epistemological understanding of "breaking out".

## 2. Discovery in Value-Knowledge: Breaking Out

We may recall some of the things we have already established. Personal knowledge claims to establish contact with a reality beyond the clues on which it relies. It commits us passionately and beyond comprehension to a vision of reality which we can neither verify or falsify in its own terms. We live in it as we live in our own skins. Yet this passion answers to a demand for universalizability, which is true objectivity.<sup>161</sup> The relations of tool to purpose, meaning to meant, and part to whole are sustained through the belief that they are discovered and not created by the knower.<sup>162</sup> We may have appetities, including intellectual ones, which we aim at satisfying, but the discoverer seeks a solution to a problem that is satisfying not only for himself but for everyone.<sup>163</sup>

ascription of a value of reality to the Other need not involve an acceptance of the reality of a Cartesian "mind". Its intent is to leave the ultimate mystery of personal reality in tact while asserting that others also participate in such a reality in a manner that is accessible to us.

<sup>161</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 64.

<sup>162</sup>

Ibid., p. 63.

<sup>163</sup>

Ibid., p. 301.

Discovery is a response to our convivial obligations as it draws us beyond ourselves.

Discoveries are made by pursuing possibilities suggested by existing knowledge.<sup>164</sup> But when it occurs by leaping beyond a hitherto accepted structure toward a new heruistic vision, it is called "breaking out". The old structure is thereby demolished, and a new one leaps into sight.

At the root of such "breaking out" is the constantly questing, restless nature of the human mind.<sup>165</sup> The questing mind has the power to break out into new visions because higher levels of meaning are essentially accessible through the framework of tacit reliance, a framework that has the power to evoke within the searcher the process and means of discovering them. Such creative releases, then, are controlled by their own potentialities.<sup>166</sup>

The language of discovery should not be confused with the language that describes a natural event. A discovery is a uniquely human achievement, not an event that can be described like other events in the world. Discoveries differ from inanimate events in that 1) the field evoking and guiding them is

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<sup>164</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p.67.

<sup>165</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 196.

<sup>166</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 90

not that of a stable configuration but of a problem; 2) their occurrence is not spontaneous but due to an effort toward the actualization of certain hidden potentialities; and 3) the uncaused action which evokes them is usually an imaginative thrust toward discovering these potentialities.<sup>167</sup>

One can locate the premisses of science in the means by which we get out hidden and potential discoveries. It is in the process of discovery and verification that the premisses of science exercise their guidance over the judgment of scientists.<sup>168</sup> Thus, recognizing a problem and seeing it as worth solving is a discovery in itself.<sup>169</sup> This means that science neither proceeds by a prescribed operation from clues to discovery, nor does it yield an established manner of verifying (or falsifying) a theory. The history of science and its controversies demonstrates that discovery is always separated

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<sup>167</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 89.

<sup>168</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 165.

<sup>169</sup>*Ibid.*, p. 120.

from its clues by a logical gap.<sup>170</sup> The surmises of scientists are born of imagination seeking discovery. And imagination is not so much a logical as a creative thrust; it risks defeat for this reason, though it never seeks defeat.<sup>171</sup> And when we break through to discovery, we do so with the conviction of trust because discovery itself is the satisfaction of the intellectual desire that points to the solution comprising it.<sup>172</sup>

A discovery is original when it allows persons to see more deeply into the nature of things.<sup>173</sup> When a strenuous search beyond the tradition of knowledge loosens bits of a solution, the discovery may be achieved in an original way by an effortless integration of these bits.<sup>174</sup> Polanyi does, however, distinguish between intuitions that indicate the potential for discovery ("anticipatory" intuitions) and those that are claims of discovery ("final" intuitions).<sup>175</sup> This

<sup>170</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 167.

<sup>171</sup> Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 69.

<sup>172</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 130.

<sup>173</sup> Ibid., p. 178.

<sup>174</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 201.

<sup>175</sup> Ibid., p. 202.

distinction shows that intuitions themselves may be integrated into "higher" intuitions. Thus, an idea given in intuition is pondered by the imagination, which is let loose to ferret out a path of possible clues, guided by intuitive feeling. Then it offers itself intuitively as a possible conclusion.<sup>176</sup>

We may recall here Polanyi's notion of irreversibility. No discovery is irreversible if it is achieved by a procedure following definite rules. Thus, true discovery is not a strictly logical performance. Only the gift of originality, which leaps across a logical gap, can yield a true discovery.<sup>177</sup> True discovery, then, is irreversible in the sense that, once it has occurred, we cannot see things again in the same way.

We must observe, however, that, though true discoveries leap across logical categories, they are not entirely without guidelines for acceptance. Polanyi says they must show a sufficient degree of plausibility; they must be accurate, systematically important, and intrinsically interesting; and they must be original.<sup>178</sup> The criterion of plausibility, of course, does not yield demonstrability and is itself based on intuition.<sup>179</sup> But let us remember that such intuition is tacit

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<sup>176</sup> Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), pp. 96-7.

<sup>177</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 123.

<sup>178</sup> *Ibid.*, pp. 53-4.

<sup>179</sup> *Ibid.*, p. 76.



and convivial. We cannot even let strong confirmation of some important predictions make an implausible theory acceptable, since even false theories can predict true consequences. This may mean that we risk rejecting a theory that is true; but this risk is less than the consequences of setting predictability up as the final criterion.<sup>180</sup> Finally, we must remember that the criterion of interest means for Polanyi not a "subjective interest" but an objective interest: an idea that is "of interest" or shows promise in advancing the truth of a domain of knowledge.<sup>181</sup>

In addition, Polanyi reserves a central place for the notion of beauty as a criterion of true intellectual achievement. Even scientific theory, in so far as it calls attention to its own beauty as a partial criterion for its validity as representing empirical reality, is akin to a work of art and to the mystical contemplation of nature, both of which claim to do the same thing.<sup>182</sup> Thus, intellectual beauty is a guide to the participative flow of passion in knowledge and is a

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<sup>180</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 79.

<sup>181</sup> Ibid., p. 82.

<sup>182</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 133.

mark of truth.<sup>183</sup>

How important is intellectual beauty? Polanyi says that the vision that accompanies discovery is less than knowledge in being still a guess and more than knowledge in being a foreknowledge of the yet unknown. This vision acts as an indispensable guide to knowledge. It protects us against pursuing trivialities. It suggests what is reasonable and interesting to explore and what is plausible. Only a grasp of scientific beauty can evoke this vision.<sup>184</sup>

Nonetheless, the intellectual beauty of a theory is not the same as artistic beauty. It is too harmonious and does not combine incompatible elements by imaginative integration.<sup>185</sup> Its beauty is the beauty of harmony and synthetic compatibility, not of juxtaposed elements. Even so, it has the power to reveal the truth about nature, though this power should be distinguished from that of mere formal attractiveness.<sup>186</sup> Polanyi is correct to distinguish between a new

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<sup>183</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 300.

<sup>184</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 135.

<sup>185</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 106.

<sup>186</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 149.

insight into the nature of things and a mere formal advance.<sup>187</sup>

The inherent rational excellence of intellectual beauty often overrides both counter-evidences or verifications of a theory. A theory may be more acceptable because of its intellectual beauty despite certain counter-evidences to it and despite verifications of it on other levels.<sup>188</sup> Such considerations should militate against any doctrine that discoveries should be "purely objective".<sup>189</sup>

This discussion of discovery confirms much of what seemed obvious in the flow of Polanyi's epistemological thought. And it has a bearing on how we describe the discovery of new values.

We find ourselves passionately committed to the values we share in our community. We live in them as a passive acceptance of our communal life. But we are constantly moving beyond the borders defined by the values we live by. They themselves suggest new possibilities of truth within the ethical domain, possibilities we must develop because of our need for an adequate system of values and knowledge of the Good. If such a

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<sup>187</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 150.

<sup>188</sup> Ibid., p. 14.

<sup>189</sup> Ibid., p. 15.

knowledge is clearly necessary for individual survival, then it is even more so for the development and maintenance of a community. For association of persons can function without shared values, if we understand "community" to mean a sharing of vital interests.

Following new possibilities of ethical truth, developing new insights into what is valuable and what is not is an inevitable process of communal life. Developments in other fields of knowledge (science, technology, etc.), eg., may force entire communities into a re-evaluation of their ethical standards of value. But in every community at all times there will be adventurous souls who are born to discovery. And some of them will be discoverers of knowledge in the ethical domain. Guided by problems unnoticed by the masses, they will seek out the hidden potentialities of their communal value system. Thus, they exercise their imaginative skills or integrations of thought, striving to bring new forms into being. Such adventurers, masters of the tradition, are those who break out of tradition and discover new values, new intuitions of value, which will serve eventually to enhance the life of the community--or disrupt it irreversibly.

The discovery of new insights into value is not a deductive or inductive enterprise, though these may be employed in the process of the discovery. As in all fields of thought,

a true discovery in the ethical domain is an irreversible tacit integration, a leap across logical borders to more profound meanings.

There may be many guides to this leap. We may be motivated by a number of subjective reasons and interests. But the idea that promises to satisfy these reasons and interests is not a valid insight into value and the Good unless it is of "objective" interest. An idea is worth pursuing if it presents a plausible solution to the difficulties of the present value system, reflects an accurate and adequate comprehension of the tradition, relates in important ways to a new system of values which is in the making, and is intrinsically interesting in the sense of promising deeper access to ethical realities. Insights into ideas which confirm themselves in the community as guided properly by these concerns generally lead to new life to the community. Finally, the harmony or "beauty" of an insight is a mark of its integrative power and may be at times our sole reason for pursuing it over other possibilities.

Discoveries in the ethical domain of knowledge, then, are rational in nature. They make sense of things yet uncomprehended by the inquiring mind and follow rational guides in doing so. Discoveries of values of new comprehensions of the Good may not be found at the end of an unbroken chain of deductive logic; but they are rational.

Discoveries of values aim at being universal. We have already noted how they project universal standards that they submit themselves to. But they also aim at the highest intellectual concepts possible: universals. Again we return to Polanyi's epistemological thought for a view of what he means by a universal.

The movement of discovery, as tacit knowledge, may penetrate its object in stages. That is, each aspect may be itself a cue to a more comprehensive entity. Indeed, we pass from more tangible entities to less tangible entities as we progress in knowledge. But, just for this reason, the less tangible entity is the more real since it has a wider range of indefinite confirming future manifestations.<sup>190</sup> Polanyi calls these "less tangible entities" wholes.<sup>191</sup>

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<sup>190</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 168.

<sup>191</sup> We shall deal more extensively with his doctrine of wholes or universals in the section dealing with his ontology; but for now it is important to note only that we make sense of things by considering them in a variety of levels. Elementary entities combine to compose complex ones. But these complex entities are not simply aggregates of elementary ones. They are wholes which make sense on levels of understanding which are higher than those which comprehend their composing elements. (cf. Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), p. 2.

Polanyi says that when we focus on wholes we are subsidiarily aware of their parts, though, as already noted, not necessarily with a difference in the intensity of the two kinds of awareness.<sup>192</sup> Something that is subsidiary to the whole participates in sustaining the whole, and this sustenance constitutes its meaning within the framework of the framework of the whole.<sup>193</sup> We rely on these particulars without naming them as we focus on general meanings.<sup>194</sup>

Universals, then, are developed from a tacit reliance on knowledge of individuals: a universal is their joint meaning as a comprehensive entity. This entity is real in that it has the power to disclose itself in still hidden and yet confirming ways.<sup>195</sup> Thus, universal concepts may anticipate future instances of particular things or events, even though

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<sup>192</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 58.

<sup>193</sup> Ibid.

<sup>194</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 166.

<sup>195</sup> Ibid., p. 149.

there will be some individual differences between each particular.<sup>196</sup>

Polanyi considers the universal or "whole" to function at times as a heuristic "empty" center of our groping concepts. We are capable, as we seek a discovery, of focussing on a center that still is empty and yet "brings out" the joint meaning of particulars which is yet unknown.<sup>197</sup> Thus, Polanyi says, "...The understanding of a whole appreciates the coherence of its subject matter and acknowledges the existence of a value that is absent from the constituent particulars".<sup>198</sup> This is why Polanyi says that the less tangible a thing (or focus) is, the more mental and conceptual is its meaning.<sup>199</sup>

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<sup>196</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 170-1.

<sup>197</sup> Ibid., p. 171.

<sup>198</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 327

<sup>199</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 189-190; Nonetheless, he does not want to be identified as a "conceptualist". He affirms, as I have shown in some detail already, the reality of minds, classes of things, justice, etc. And he is adamant about his criticism that if our theories regarding the impossibility of the reality of such things is not to block our knowledge of such coherences, we must develop an epistemology that will explain how their meanings are no less real than those of science and perception (cf., Michael Polanyi and Harry Prosch, Meaning [Chicago: The University of Chicago Press, 1975], p. 68.).



To procede with our argument, the knowledge of values and of the Good aims at universals that are no less real than those discovered in other domains of knowledge. This does not mean, of course, that Polanyi thinks of the Good as a Platonic reality which is either perceived or unknown in its entirety. Ethical universals are discovered gradually as our knowledge of the Good extends over more comprehensive areas of human life and becomes less and less tied to concrete aspects of human experience. This loss of tangibility is the mark of the development of a universal. Particular values, tied strongly to concrete experiences, are integrated into more comprehensive values. These bear more directly on the reality of the Good as universals that impinge upon all areas of our lives. In this sense, particular values become the tacit clues upon which we rely for this higher integration.

Universal values are the deeper and more comprehensive meanings of particular values. They are the hidden realities which our commitments to particular values are trying to discover and live by. Our particular values seem incomplete because they do not yet encompass a whole toward which we are called by the intangible reality of the Good. We dwell in them and yet seek beyond them until at last we are ready to break out of them toward a higher vision, a vision that so deepens the meaning of each that all are united in it.

This higher vision then becomes a universal in two senses: it becomes the universal standard by which we determine what a value is and to which we submit all of our value-claims. And it is universal in the sense of bearing universally (in regard to all values) on the reality of the Good.<sup>200</sup>

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<sup>200</sup>One might complain that Polanyi's notion of discovery is nothing other than a stock intuitionism in which the only appeal for justifying an idea is a demand that others promote the same intuition in themselves. Such intuitionism smacks of an arrogant subjectivity which is attempting to pass as justified objectivity.

I have already dealt at length with the question of whether personal knowledge is subjective or objective and will not repeat that argument here. We can take note, however, that Polanyi's intuitionism is not an attempt to establish a traditional objectivism and is certainly not a subjectivism in default of such an attempt. Polanyi's intuitionism is an intuitionism of personal knowledge in which the justifications are numerous enough to guide minds to a proper access to intuition. Polanyi is not demanding that everyone put forth some mysterious effort in order to see things as he does. He abides by intuitionism in so far as he insists that original discoveries, novel integrations of meaning, are leaps beyond rule-guided thinking which is beset by built-in justifications. But he does not leave us with no guides to an insight into new discoveries; even if a justification comes "after the fact" of a discovery, like a trail blazed by an explorer, the discovery is still justified in so far as it opens new vistas of reality for all who follow behind to see.

Polanyi, then, intends to frustrate our expectation that discoveries are made by following a pre-established methodology. There might be common procedures and justifications in the various domains of knowledge; but these constitute descriptions of methods by which discoveries have been made rather than rules by which they must be made.

Polanyi is quite willing to accept the common criticism that a discovery which leaps beyond the usual rules of thought might well be wrong. Of course one can always be wrong, even when rules are followed. But wrong ideas have certain earmarks which give us early warnings of their untruth; and they show their falseness in time if we remain

## Conclusion

In this section on Polanyi's epistemology, I have tried to show how his epistemology represents a way of knowing that may be extended into the ethical domain. In so far as Polanyi's epistemology is concerned, I have tried only to show how we develop and justify our knowledge of values and of the Good. I have reserved the question of knowledge of the right for the next section on Polanyi's ontology. I believe I have shown how the ascription of worth becomes involved inextricably with a knowledge which grows into the highest visions of the Good.

committed to discerning the truth. Falsehood is a risk we cannot avoid even if we attempt to explain discoveries without recourse to intuitionism.

Polanyi intends to resurrect a form of medieval realism in his notion that the less tangible reality is the more real one. But we should not absurdly accuse him of claiming that something is more real just because it is less tangible. Air, eg., is not more real than lead just for being less tangible. The lack of tangibility must occur in a specific way: the higher reality is less tangible in the sense of being more general (and not more "ethereal").

Polanyi's notion of the universal differs from the medieval (and Aristotelian one), however, in that his universals are not statements of absolute realities. His universals, although our most general understanding of things, are themselves guides to a fuller experience of reality. Universals are constituted by our most penetrating and original discoveries; they are the most real because they give us the most intense and wide-ranging access to reality in so far as we follow its leadership to its own self-confirmation. Thus, for Polanyi, universals are not the end-points of thought but are developed as growing parts of the process of coming to know reality.

Value knowledge, like all knowledge, develops out of our incarnate indwelling in a communal world in which we satisfy our personal and communal needs for survival, companionship, and knowledge according to standards we ourselves project. We can draw a line of continuity within the structure of tacit knowledge from the most fundamental perceptions and skills to the most sophisticated visions of various domains of human experience: science, art, history, religion--and ethics.

Value knowledge, then, is tacit knowledge or else relies on tacit knowledge for the validity of its explicit assertions. That is, we rely on tacit experiences of worth of our needs to make and order our ascriptions of worth in order to objectify notions of particular values. The motive of such objectifications may generally be our need to understand what we are doing and what we mean by ascribing worth to something; and the notion toward which we move in satisfying this need is that of value.

No single level of knowledge, however, is ever fully satisfactory. As we develop our notions of value, we become familiar enough with them to indwell them as tacit forms of our thought. They become fundamental in the way we view the world. But, as masters of the tradition, we begin to trace

out by imaginative thrusts new possibilities of thought which answer the inevitable questions that arise out of such indwelling. We dissent from tradition and project new standards of thought for what counts as a value and as a vision of the Good. And we submit ourselves to these standards, indwell them, and move intellectually toward a tacit integration of our total knowledge of values, toward an intellectual vision of the Good.

Our knowledge of the Good is knowledge of a universal which draws us toward itself as we commit ourselves, step by step, to its reality. Our knowledge is personal; thus, we commit ourselves to the reality of what we believe and submit ourselves to the standards of truth our beliefs imply. We are personally engaged in the reality of the Good and discover values--and an ultimate vision of the Good--as we come to understand this personal engagement. We move from a tacit comprehension that guides us by subtle feeling toward itself as an explicit and universal vision forms, a vision we contemplate as an intrinsic element of our communal life.

Briefly, this is the vision of values and of the Good which I think Polanyi would agree to as a legitimate extension of the structure of personal, tacit knowing into the ethical domain of human experience. We turn now to Polanyi's ontology, which we will extend into a knowledge of the right.

## CHAPTER FOUR

### THE PARALLEL OF KNOWING AND BEING IN THE DEVELOPMENT OF A NOTION OF FREE AND RIGHT ACTION THE ONTOLOGICAL ARGUMENT

This chapter introduces the argument for moral knowledge and action based upon Polanyi's ontology. Rather than leave epistemological and ontological issues separated, only later to be joined loosely by some third consideration, I discovered that Polanyi's epistemology and his ontology can be viewed as intimately connected. Knowing itself is an action and can be described in ontological terms; and Polanyi's ontology can be viewed as an ontologizing of his epistemology. Thus, there is a parallel between the knowing act viewed epistemologically and the same act viewed ontologically.

Given this parallel, it becomes possible to view the knowing act as an act to which moral categories are applicable. That is, knowledge of a value is at the same time a commitment to act in certain ways. Thus, knowledge of the Good is a move toward the Good, a move that obeys standards of right action just as knowledge must obey standards of truth. In essence, I find a parallel between knowledge of value-truth and commitment to right action. In the argument from ontology, I emphasize the concept of right action rather

than the knowledge of values. For I believe Polanyi's ontology has more to say about the being of man (particularly his advancement of himself as a bio-psychic organism) than about his knowledge.

Man's advancement toward the Good and the consequent development of higher insights into the Good follows the ontological dynamic described by Polanyi in his interrelationship of higher and lower principles. Just as higher principles rely on lower ones (which support them), so higher moral insights depend upon less penetrating visions of the Good and are not possible without them. Our moral knowledge "emerges" into novel shapes, and, vis a vis the parallel between epistemology and ontology, our actual, biotic lives function under new principles. I argue in this chapter that Polanyi's notion of freedom can be directly applied to moral responsibility for decisions and actions. Thus, in this chapter, I present the fundamental ideas of Polanyi's ontology and draw out the tacit dynamic of moral development that may be inferred from it (if we begin with the presupposition that we do know something about moral life and that we commit right and wrong acts).

### 1. The Origin of a Notion of Right Action

We may now turn to the notion of right as an extension of personal knowledge in the ethical domain. To do this, we may return to Polanyi's epistemological language.

We have established that persons come to know values and gain insights into the nature of the Good as they attempt to grow and live successfully within the community of human beings. The solution of life-problems is essential for any living organism, and man's intellect seeks for a way of ordering life which solves the increasingly complex problems he finds confronting him in communal life. Values are ascriptions of worth to an object, act, or event. They are ordered into a functional, organic hierarchy which meets the needs of the individual, needs that are informed by communal life.

From an epistemological point of view, the scope of a value is determined by our intellectual grasp of the object it refers to as desirable, whether inherently so or as a means to something that is. But Polanyi's view of the intellect does not allow us to reduce the notion of a value to an intellectual grasp of the worth of something. We have observed that tacit knowledge requires the reliance of the person as a whole upon ideas which form the ground of new discoveries. This reliance is never classed, however, as mere intellectual reliance in the sense of remaining strictly within the realm of ideas. Indwelling is an act of the whole person; even within the realm of ideas alone, it represents a commitment to pursue a line of thought. But such pursuance itself is a form of activity and not merely a passive



idea. And it necessitates all kinds of action, whether physical, mental, and social in its own support. The indwelling of tacit knowledge necessarily involves human action as well as human thought.

The ordering of goals to be pursued according to a hierarchy of ascriptions of worth is in itself an ordering of human activity. Knowledge of values can be true or false in the sense that it may or may not be an ascription of worth that responds adequately to the problem of successfully ordering one's life. A "true" value opens up a route to further value-discoveries and continues, despite changes or even reversals in our commitment to them, to confirm our knowledge of the aspect of reality they reveal. A false value manifests itself as such by its systematic contradiction of our committed hierarchy of values or by its incapacity to resolve value-dilemmas.

Since value-knowledge can be true or false in so far as it is part of our grasp of reality, we can view the actions they involve or imply as being right or wrong. Actions which support and sustain or are directly involved in pursuing the values held to be true are right actions. Those which fail to do so, whether by omission or commission,

may be wrong actions.<sup>201</sup> Thus, valuing is a human activity which, in so far as it involves actions in pursuit of the truth of a value, may be right or wrong.

Let us remember that the personal knowledge of values is informed deeply by our necessary involvement in the community of persons. Thus, a personal knowledge of values is also a projection of those values as universal standards to which each person submits. We judge the truth of our values by the universal standards of value-knowledge to which the community of which we are a part submits. And, thus, we also submit ourselves to the standards of action or behavior which support the values of the community. Communal value-standards imply communal actions which pursue these values; and these actions cannot be random but are ordered toward realization of these values. This ordering is a standard of behavior to which we submit ourselves as we order our lives in pursuit of our communal values. Thus, committing ourselves to

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<sup>201</sup>I make this assertion conditional because one might assert a value or advise an action which appears relevant to the situation but may actually be irrelevant. In addition, the value or action advised may be universally acclaimed as a true value and a right action; but under certain circumstances, it may not be helpful or harmful. One might conceive of a man who is young and swift of foot being approached by a mad man with an ax. He might drop to his knees and begin to pray for his safety--certainly no one would condemn prayer as a valued action. But, after all, one can run and pray at the same time! Praying--if immediately ineffectual and the only action taken--seems to be a wrong action in such circumstances, particularly if the safety of the man's family is involved.

a value is a commitment to certain standards of behavior. We find ourselves obligated to certain standards of behavior and, thus, pursue values by doing what we ought to do. Our actions are right in so far as we do what we ought to do.

A hierarchy of values constitutes the indwelt tacit realm upon which we rely in order to attend to an ultimate vision of what we aim for: the Good. We gain a personal knowledge of the Good in so far as our knowledge of values is adequate to reveal it.

Thus, our knowledge of what we ought to do, of what is right, is part of this hierarchy and opens the way to a knowledge of the right. A right is a universal standard of behavior which not only indicates what actions ought to be taken in pursuit of the Good but also what actions may be taken by all persons who submit to the standards of right. Thus, an obligation to pursue the Good according to the standards represented in the hierarchy of values found in one's community is also a right to pursue the Good in this way. An obligation to right action implies a right to pursue the Good rightly. Thus, we can see that the concept of a personal knowledge of values may be extended to that of a tacit

commitment to standards of action which pursue these values and to at least a minimal concept of a right<sup>202</sup> as defined by the values we seek to realize.

Doing right is a demand of our value system, a demand authorized by our total personal commitment to it. The insight toward which our standards of right action aim and out of which they flow is that of justice. Just as values are grounded in and aim at the Good, so do right actions aim at justice.<sup>203</sup> That is, standards of right are developed and corrected in the light of what they reveal about the rightness of actions within the context of the community; and these standards become standards of justice in so far as they judge in general what constitutes the communal rightness of an action.

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<sup>202</sup>I will forego an indepth discussion of human rights since I wish only to make the formal point here that standards of the Good also tacitly imply standards of right and wrong and that these standards are known in the contexts of personal knowledge. One might imagine that a grasp of fundamental human rights might be achieved by a comparison of relative value standards among a large number of cultures. But I wish only to establish the formal point that knowledge of values and insight into the Good implies knowledge of right action and, therefore, also a concept of a right.

<sup>203</sup>I am not going to enter into a detailed distinction between retributive and distributive justice. But I shall define justice fundamentally as a rightness of action within the community of persons. And this definition, though minimal, applies to both retributive and distributive forms of justice since each of these aims at the Good through right action within the society.

Standards of right--and rights--are judged by the insight into justice which they afford; and this insight, universalized as are all personal commitments, establishes the goal toward which right actions aim and judges what constitutes wrong or unjust actions.

We do, then, have a personal knowledge of right and wrong as a part of our knowledge of values and of the Good. This knowledge, of course, depends upon the particular values we pursue and the insight into the Good that these afford us. But no insight into values or the Good is unattended by at least some vague notions of the direction action must take to meet the standards implied in such insight. Thus, the intellectual grasp of a value is itself a move toward a higher life in which the whole person is committed, involved, and participating.

## 2. The Parallel Between Epistemology and Ontology

In attempting to understand the transition which one can easily make in Polanyi's works from epistemology to ontology, we may be helped by observing the parallel between tacit reliance in knowing and the development of levels of being as we find it in Polanyi's ontology. We may then see more clearly how a knowledge of values involves an activity

of pursuing the Good through right action.

I am not simply surmising that there is a parallel between the order of knowledge and the order of reality in Polanyi's thought. He asserts this explicitly:

Viewed in themselves, the parts of a machine are meaningless; the machine is comprehended by attending from its parts to their joint function, which operates the machine. To this structure of knowing there correspond two levels controlled by different principles. The particulars viewed in themselves are controlled by the laws of inanimate nature; while viewed jointly, they are controlled by the operational principles of the machine. This dual control may seem puzzling. But the physical sciences expressly leave open certain variabilities of a system, described as its boundary conditions. The operational principles of a machine control these boundaries, and so they do not infringe the laws of physics and chemistry, which operate within these boundaries.

The same dualism holds for biology. Biologists will tell you that they are explaining living beings by the laws of inanimate nature, but what they actually do, and do triumphantly well, is to explain certain aspects of life by machine-like principles. This postulates a level of reality that operates on the boundaries left open by the laws of physics and chemistry.

This opens up a perspective to a whole sequence of levels, all the way up to that of a responsible humanity.<sup>204</sup>

We can see that the dual activities of "looking at" and "attending from" have their foundation in the existence of distinct levels of functioning within the organism. Such levels

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<sup>204</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 153-4

manifest themselves in the way the principles determining the stability and power of an organism exercise a multi-leveled control over its parts.

This kind of multi-levelled control extends to nature as a whole. While particulars viewed in themselves may be controlled by inanimate nature, viewed jointly they are controlled by operational principles known only by a joint comprehension of the particulars. Polanyi's epistemological dualism of reliance and attention, then, parallels the ontological dualism of control and function in organized systems. Just as one relies on elements tacitly known to attend to a focal, comprehensive object, so ontological principles also show a hierarchy of reliance; thus, all entities develop and function by the principles or laws that apply to single elements themselves as well as the laws that control the comprehensive entity formed by them.<sup>205</sup>

Polanyi extends his parallelism of epistemological and ontological realms especially to living organisms and to man. He claims that the operations of living organisms resemble an integration of particulars by means of tacit knowing. Living organisms survive by solving life-problems, and their survival is contingent upon such solutions. Thus, living organisms may succeed or fail in solving their

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<sup>205</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 153-4.

problems.<sup>206</sup> And, to fail or succeed is living. Their solutions may be as primitive as the extension of a pseudopod toward a fixed object or as sophisticated as a scientific theory!

We have already noted how we use the body as a tool for our subsidiary awareness of the world. Our body is not an object to us, but the means through which the world appears. Further, the tools (machines, ideas, etc.) we use in exploring the world become an extension of our body. Thus, we are subsidiarily aware of them in attending to the world through them. We "pour ourselves out into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them".<sup>207</sup> Knowing, then, involves an intentional change of being. Knowing is a way of intending or grasping an object of knowledge as well as a way of being: a pouring of oneself into a subsidiary awareness of particulars in order to skilfully achieve the comprehensive whole.<sup>208</sup> Polanyi, then, acknowledges that knowing is an act of being, And, as such, knowing is a shaping of the knower's being.

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<sup>206</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 153-4.

<sup>207</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 58-9.

<sup>208</sup>Ibid., p. 64.



Knowing is an intimate ontological participation in the whole of reality. Thus, Polanyi's epistemology is itself an entrance into ontological knowledge.

We see, then, that knowing itself is an activity which in turn must be described ontologically. This ontological description relies upon tacit knowledge; and tacit knowing may be described by the same dynamic principles that pertain to the ordered activities of all things. Man's knowing activity is itself an emergent reality in the universe of events. We have already anticipated this conclusion from an analysis of Polanyi's epistemology. Now we may enter into his ontology, particularly his ontology of man the knower, with confidence that such concrete analysis will lead us to the ordered activities that obey standards of right. We proceed then with an analysis of the fundamental notion of change and development, which Polanyi understands as a form of emergent evolution.<sup>209</sup>

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<sup>209</sup> We can raise the question of starting points in relation to Polanyi's parallel of epistemological (tacit) reliance and ontological reliance. Do we begin with his ontology and base upon it the doctrine of tacit knowledge? Or do we instead begin with an epistemological doctrine and reflect "tacit reliance" in an ontological doctrine?

Clearly, Polanyi begins as an epistemologist. But his own starting point does not throw light on this question, since he adduces no reasons why one must begin with the epistemological question. The fact that he does raise the issue of tacit knowledge first in his works may be only accidental to the question at hand.

Fundamentally, we are asking whether we ought to make a beginning with the insight into the nature of reality that Polanyi reflects in his ontology or with a statement of "truth" about the process of coming to know. Do we begin with methodology or content?

### 3. Knowing and Being in Emergent Evolution

Polanyi approaches fundamental ontological questions from the point of view of a scientist. More specifically, he pays close attention to the biological sciences as an entrance into a wide-ranging understanding of man and the nature of reality.

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Polanyi does not answer this question for us. He begins with epistemological methodology, but he does not make methodology "primary" merely by beginning with it; and he does not derive, in a logical progression, an ontology which reflects this methodology because it is derived from it. Nor does he make his ontology the "tacit" ground of his methodology. In short, he does not give primacy to methodology or ontology any more than he gives primacy to the body or the world in the knowing act.

But I do not think that we can accuse Polanyi of arbitrarily and naively opting for one beginning over another, despite appearances to the contrary. The point is that Polanyi could begin with either methodology or content and still maintain his position in both. If he were, eg., to begin with a description of the ontological dynamic of hierarchical reliance, the ontology itself would necessitate a concept of tacit knowledge. For the description of ontological reliance would have to be extended to the bio-psychic act of knowing and would consider knowing as an ontological aspect of the human being. The ontological reliance of one act of knowing upon another translates, in epistemological terms, into the reliance of explicit ideas upon tacit knowledge. Similarly, the explication of tacit knowing necessitates the ontological dynamic which Polanyi expounds and extends beyond acts of human knowing to the fundamental dynamic of reality. If methodology and content mutually imply one another, then one can begin with either and comprehend the other. It makes no difference where one begins; the implications of one's beginning will make explicit the other term. Polanyi's position, then, is that methodology and content are so intertwined that it does not matter where one begins as long as one begins with a commitment to truth, a commitment generally taken for granted whether one begins with an epistemology or an ontology.

The reason why Polanyi considers biological science so important is that value-free observation is impossible within it. Even at the vegetative level we accept the interests of the living organism as the standard of our evaluation of it. We say that an organism succeeds or fails. Thus, the biological sciences are convivial in a way in which the inanimate sciences cannot be.<sup>210</sup> Further, biological knowledge cannot be just a matter of statistics and prediction. In order to bring order into biological knowledge, one must look at its multiplicities and pay attention to characteristic shapes, markings, etc. This is done, of course, within a prior system of morphology and has the appearance of scientific sophistication. But this morphology is grounded in a kind of phenomenological approach to the content of biological study.<sup>211</sup>

Such an approach, combined with the acknowledgment of value (in the sense of the success or failure of the biological organism) as a legitimate category of understanding

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<sup>210</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 51.

<sup>211</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 353.

in the biological sciences, enables Polanyi to extend the knowledge and manner of knowing in biology indefinitely toward more wide-ranging theory.

Biology is an extension of the theory of knowledge toward a theory of all kinds of biotic achievements, of which knowledge is only one. Biology is an analysis of the biologist's commitment in understanding the realities upon which a living organism relies in the strategem of living.<sup>212</sup> Thus, for Polanyi, it forms the basic theoretical ground upon which an understanding of reality can be based.

In view of this, Polanyi envisages a knowledge of "knowers" proceeding from biology to a sort of "ultra-biology". One moves from knowledge concerning primordial, vegetative commitments to that concerning primitive active-perceptive commitments. And from this point one moves on to intelligent commitments with universal intent and ultimately to a study of the convivial intellectual and emotional life of human peers where observation is replaced by pure indwelling where we may recognize another as superior to us. At this point we may even a-critically accept the other's standards as our own, forming ideals which constitute the universal pole of our personal commitment.<sup>213</sup>

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<sup>212</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 347.

<sup>213</sup>Ibid., pp. 378-9.

Thus, Polanyi envisions levels of knowing life from the most primitive biotic knowing to a human knowing beyond our own capacities.

Again, we must keep in mind that this development in knowledge cannot be separated from our claim of a parallel development in the order of being. A science that moves from biology to ultra-biology is also essentially both an evolving science and a science of evolution. Polanyi is firmly committed to a theory of evolution as fundamental to his understanding of reality.

Polanyi says "The evolutionary process forms a continuous transition from the inanimate stage to that of living and knowing persons....".<sup>214</sup> And he asserts in the Tacit Dimension that evolution is a continuous process.<sup>215</sup> Thus far, we cannot find anything that contradicts or adds to traditional scientific understanding. But Polanyi's understanding of evolution is not really so traditional. Let us note that two basic theories concerning evolution separate Polanyi from traditional scientific evolutionism. First, Polanyi rejects the idea that accidental mutation and natural selection is responsible for all evolutionary development or that all

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<sup>214</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 345.

<sup>215</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 50.

evolutionary change can be explained solely in terms of these. He asserts that a sort of gradient of meaning is operative in addition to these forces.<sup>216</sup>

A key idea in describing this gradient is to be found in Polanyi's notion of emergence. He says, "Evolution can be understood only as a feat of emergent".<sup>217</sup> The notion of emergence involves novelty in evolutionary change. An emergent reality cannot be explained by a deterministic theory concerning the dynamics of its composite elements. A creative development is released, evoked, even controlled, but not determined by its accessible meaning potentialities or by the releasing agent of the change. In this sense, the creative development is emergent.<sup>218</sup> Thus, the development of a new and higher species of animal, eg., would be explained not merely as accidentally successful mutation but as a move of the organism toward a more successful mode of life. The potential mode of life "releases" or "evokes" the organism to seek a more successful mode of life, a mode discovered through a "feeling out" into various possible responses to complex stimuli.

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<sup>216</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 173.

<sup>217</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 390.

<sup>218</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 177.

This does not mean that emergence is inherently a mystery or a movement motivated by "magical" forces. All emergent realities can be understood as produced from prior elements. But just how the production occurs may remain unspecifiable from the point of view of the knower.<sup>219</sup> Thus, while one may conceive emergence as an explanatory notion in itself, one may remain unable to specify exactly how any particular emergent reality comes into being. Polanyi says, eg., that the emergence of new life forms are inexplicable in terms of physics and chemistry.<sup>220</sup>

One can say with certainty, however, that nothing that ought to be can be determined by knowing what is. The boundary conditions between the lower and the higher levels of development are left open and the higher emerges by principles not contained in the lower levels.<sup>221</sup>

A corollary to this principle is Polanyi's assertion that solutions to problems and higher visions of reality "emerge" in the same way and are part of all evolutionary

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<sup>219</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962, p. 394.

<sup>220</sup>Ibid., p. 383

<sup>221</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 44-5; we shall analyze in some detail Polanyi's notion of "higher" and "lower" levels in later sections.

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<sup>219</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962, p. 394.

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innovations.<sup>222</sup> As Marjorie Grene has pointed out,<sup>223</sup> Polanyi is anxious to avoid the paradoxes that attend the extension of Cartesianism into science, such as a biology without reference to the categories of life. The process of evolution, in Polanyi's view, has led to our capacity to seek and discover truth, to articulate and preserve it. This points to a trust placed in one by all creation. Polanyi views it as a sacrilege to contemplate any actions which may lead to the extinction of humanity.<sup>224</sup> We must recall that, for Polanyi, to live by truth is man's calling,<sup>225</sup> a calling noted in the movement of evolution toward a higher humanity.

What then, are the key elements that account for or describe the feat of emergence? We have mentioned the evocative power of potentials. Another factor is that of randomness. Randomness cannot be handed over to the consequences of accidental motions. We must try hard to avoid even accidental order; yet randomness is most easily achieved when we do not

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<sup>222</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) pp. 87-8.

<sup>223</sup>Marjorie Grene, The Knower and the Known (London: Faber and Faber, 1966), p. 185.

<sup>224</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 69.

<sup>225</sup>*Ibid.*, p. 70.

know how exactly to produce it, such as when we shuffle a deck of cards. In such a case, we can observe the randomness as such, but we can never specify in the detailed and exact terms of the system below the emerging one how the lower one produced the randomness.<sup>226</sup> Polanyi says, "Random impacts can release the functions of an ordering principle and suitable physical-chemical conditions (eg.) can sustain its continued operation; but the action which generates the embodiment or a novel ordering principle always lies in this principle itself."<sup>227</sup>

Randomness, then, cannot be precisely defined, though it can be clearly recognized as such. The background of any focussed figure, for example, is relatively random. Randomicity can be overcome by stability; but too much randomness can overcome stability, a principle necessary to the growth and functioning of living beings.<sup>228</sup> Emergence, then, is an achievement of a unique tension between an ordered being and a new order discovered through random exploration. And this tension, necessary to emergence, can be dissolved if there is either too much randomness or too much order.

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<sup>226</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 390-92.

<sup>227</sup> Ibid., 401.

<sup>228</sup> Ibid., pp. 37-40.

The emergence of a new order is more a process of "maturing" into it than that of a sudden leap: "Novel forms of existence take control of a system by a process of maturation".<sup>229</sup> Furthermore, these "maturing orders" are established generally through changes in type rather than through individual mutations. Polanyi calls the emergence of type "phylogenesis".<sup>230</sup> And he classes phylogenesis as a development of fundamental potentials of being: "...phylogenetic emergence - is a process of maturation which differs in the most curious manner from that of ontogenesis; for it is a maturation of the potentialities of ontogenesis."<sup>231</sup>

This dynamic of emergence is the key to understanding how Polanyi can assert human freedom to act as one chooses. Polanyi extends the notion of creative emergence to individual

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<sup>229</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962, p. 395.

<sup>230</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co, Inc., 1966), p. 48.

<sup>231</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 400.

creative acts.<sup>232</sup>

#### 4. Freedom

Let us examine two related images that apply to this notion. First imagine a graph on which a sloping line indicates a gradient from a higher chemical concentration of

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<sup>232</sup> Obviously Polanyi is reintroducing into contemporary philosophy--and science--the notion of finalism. Besides Alfred North Whitehead (Process and Reality) and Teilhard de Chardin (The Phenomenon of Man) he is one of the few contemporary philosophers to do so.

I could rehearse here the various arguments against finalism and ask whether Polanyi escapes what might be considered fatal charges against it. But rather than defend Polanyi here, I think it is better to clarify in what sense he is a finalist.

Polanyi's finalism lies in his assertion that the movement of an organism from a less successful mode of life to a more successful one is not accidental but is guided by a tacit "feeling toward" a higher level, which "exists" as a potential mode with "powers" to guide the movement as a whole. This finalism rests at first upon a purely descriptive notion of how higher, more complex levels of functioning rely upon simpler and more primitive ones. From a purely descriptive point of view, such a finalism might make sense. When the reliance of the higher upon the lower as well as the supposedly obvious "goal" of the lower in the higher can be spelled out in the presence of both terms (the lower and the higher). Such a description might be an alternative way of describing reality as a fait accompli.

But Polanyi wishes to extend his notion of evolution to present biotic achievements in such a way as to make the higher term of an evolutionary movement still a potential term. For this reason, Polanyi's finalism must face up to enquiries concerning the status of being for such "potential" realities. For they cannot be said to exist in any tangible manner, yet they appear to have tangible causal relations. Clearly, Polanyi does not develop his ontology deeply enough to explain how the tangible relates to the intangible in terms of actual causality. And he does not develop the distinction between actual being and potential being in any clear way other than to define such a distinction in terms of the finalism or teleology inherent in things.

something to a lower concentration of it. The line indicates the temporal interval that lapses as the solution passes into a state of chemical change (a state of perfect distribution of the soluble substance, eg., as a salt). The gradient slopes in the direction of a minimization of potential energy; i.e., the chemical bonding that will occur in the solution actually takes place: it is transformed into kinetic energy.

A related image is that of the energy generated in a chemical reaction as the reaction moves from less stable to more stable configurations. Again, potential energy is collected into meaningful patterns that tend toward stability. Polanyi is indicating in these examples<sup>233</sup> that the heuristic tension in a mind seems to be generated much as kinetic energy in physics is generated by the accessibility of more stable configurations. He does, however, note one difference between mental heuristic tension and chemical reactions: the former are often deliberate, whereas the latter never are. In Polanyi's view this excludes the possibility that the dynamic of personal knowing--and being--is causally determined. Certainly the efforts of the person are not random or free in the sense of being absolutely non-contingent.<sup>234</sup> But this does not mean that human acts are

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<sup>233</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 176.

<sup>234</sup>Polanyi does not adhere to a Sartrean sense of radical freedom, since he asserts that the mind guides its efforts by its intentions.

are determined.<sup>235</sup> We must look for a more common-sense meaning of freedom in Polanyi's works'.

Mental acts are temporal. As such, their assertion is a matter of making decisions which cut into situations fraught with the risk of hesitating too long or acting too hastily.<sup>236</sup> These decisions may appear to be determined only if we accept "scientific" standards of explanation as valid for decisions and attempt to fulfill them in action. But they are really indeterminate in so far as they are achieved by an intensification of uniquely personal intimations. One can decide, eg., whether he will strive to fulfill self-set standards of behavior or not. Decision is not to be understood in terms of causal methods. Indeed, every act is engendered by a commitment that has two poles: the universal standard (the determinant) and the personal commitment (the indeterminate).<sup>237</sup> Concerning this latter, Polanyi says, "...the personal pole of commitment retains its autonomy everywhere, exercising its calling within a material milieu which conditions but never fully determines its actions".<sup>238</sup>

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<sup>235</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 176.

<sup>236</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 314.

<sup>237</sup> Ibid., p. 396.

<sup>238</sup> Ibid., p. 397.

In Polanyi's view, then, indeterminacy and creativity are logical implications of tacit knowing. The unspecifiability of tacit clues makes a deterministic model impossible. Since the knowledge that would make determinism possible--that of the entire mental state of the person--is ruled out by the dynamics of tacit knowledge. Thus experience itself is indeterminate, constantly novel.<sup>239</sup> And, as a result, one cannot consider reality or human action to be anything less than creative and novel. Polanyi's parallel between the dynamic of knowing and the structure of being and its dynamic of emergence means that novelty in experience is novel--undetermined--development in human activity.

Human reality, then, is a free, creative, emergent reality. Like all living organisms, man's life is defined in terms of its movement toward success in surviving and developing toward its calling. In the case of lower animals, this calling may extend only to the ordered activities that enable them to feed themselves, find adequate shelter, and form a primitive community. But in man this calling extends to responsibility for his free decisions. Man is called toward achievements which require that he take in hand his own freedom and move with responsibility to fulfill and continue to develop the standards of action which fulfil the highest

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<sup>239</sup>"A Bridge from Science to Religion Based on Polanyi's Theory of Knowledge". William Scot, Zygon, 5, 50-57, 1970.

goals his intellect can grasp.

Man's freedom and his responsibility are given together. We are free to act as we wish only in relation to ordered activities or standards of action which have supported our existence and which demand that we responsibly support them or find better ways of ordering life. Our freedom allows us to act to our disadvantage, to act against accepted standards, even to overthrow them. We can move toward ultimate anarchy if we wish, destroying communal standards of behavior and refusing even the most primitive biological needs. Our calling is just that: a guiding vision that requires responsible and creative development; it is not a mechanically determining impetus toward unthinking, blind response. But this freedom must acknowledge its relation to the organization of life in which it is grounded and accept responsibility for how it shapes--or destroys--this organization.

This freedom is moral since it involves making decisions, making a difference in things. And this difference has no determinative reasons other than the act of choosing. But this does not mean that we must buy Sartre's notion of radical freedom in which values do not exist until we have chosen them. Polanyi considers this view unnecessarily anti-intellectual. Freedom is most essentially freedom when thought is free to raise questions about its own freedom.<sup>240</sup>

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<sup>240</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 4.



And such a question points not to a radical, ungrounded freedom but to a freedom with definite grounds in conscience.<sup>241</sup>

This does not mean that moral freedom can never be arbitrary. Arbitrary choice is justifiable as a heuristic process since it is only by narrowing our focus (arbitrarily) in some respect that we are able to perceive certain patterns hitherto unknown. Arbitrary choice is a "guide" or "fruitful belief" which leads us to new insight.<sup>242</sup>

Polanyi, then, accepts the existential tenet that morality demands moral commitment in the form of decisions. Indeed, he extends this concept through to an assertion that no animal can be certain that its purpose will be successful and that every movement is a commitment which takes the risk of failure.<sup>243</sup> But he condemns existentialism as a hybrid of scepticism and moral perfectionism. It employs moral scepticism to blast existing society as artificial, ideological, and hypocritical. And this only means that moral passions themselves become filled with contempt for their own

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<sup>241</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 65.

<sup>242</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), p. 2.

<sup>243</sup>Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 59.

ideals!<sup>244</sup> The distinction between good and evil is then eliminated, and appeal to moral ideals is seen as futile and dishonest.<sup>245</sup>

Polanyi does not reject the moral tradition of his culture by means of a radical scepticism. Nor does he hold delusions of moral perfectionism. Instead, he holds that freedom must be rooted in tradition and that no generation can be radically self-determinative. But this acceptance of tradition must be integrated into a system cultivating radical progress. Not all labor for a common purpose can be determined by the will of the people, since public will is known only fragmentarily and requires for its fulfilment individual initiatives aiming at fragmentary problems. This freedom which allows a certain amount of directionlessness in a society is nonetheless indispensable to the pursuit of social self-improvement.<sup>246</sup>

In the realm of ethics, then, Polanyi is a firm believer in the sort of human freedom that makes us morally responsible for our actions. Ascribing creativity and novelty to the most fundamental dynamic of reality, especially of

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<sup>244</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 58.

<sup>245</sup>Ibid., p. 59.

<sup>246</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 71.

life, he must naturally regard man as responsible not only for his total evolutionary emergence to higher levels of being but also for his individual decision to participate responsibly in the life-standards of the community.

But how does this free power to organize life toward the emergence of higher forms actually create "levels" of reality? We must investigate further the nature of Polanyi's concept of a hierarchy of reality.<sup>247</sup>

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<sup>247</sup> Clearly, Polanyi identifies that human freedom over which so much philosophical ink has been spilled as the power of choice. More specifically (since even determinists believe in "choice", if only as the last consideration of a series of deliberations), Polanyi believes in the power of human beings to inject novelty into the world through both arbitrary and reasoned choices.

Again, Polanyi's argument for freedom is not so much an argument as a description of change. If he has an argument at all, it rests on the principle that, since we cannot ever totally describe an event, we cannot prove a determined chain of events. Here Polanyi injects the unspecifiability of tacit knowledge into an age-old issue with the intention of resolving it on epistemological grounds. But clearly his argument commits the fallacy of an ad ignorantium. Merely because we cannot specify the reasons why an event occurs does not mean that there are no unknown reasons.

In so far as Polanyi argues the issue of freedom, he commits the ad ignorantium. In so far as he considers the ontological dynamic of freedom, he merely describes the event of change without a functioning presupposition of determinism. Such a way of proceeding is not a resolution of the philosophical issue of freedom. It is hardly anything more than an assumption of freedom decorated by elaborate description. And one might observe that this lacuna in Polanyi's philosophy is an important one since he emphasizes political and social freedom (which can only be seen as rooted in this deeper, ontological sense of human freedom) as the key to man's emergence into higher realities.

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The only classification possible here is simply to note that, if Polanyi has no conclusive argument for human freedom, neither has anyone produced a successful argument for determinism. Thus, since both freedom and determinism are unproved, one might as well accept one rather than the other and include his assumption within a consistent world-view. Polanyi is at least consistent with his option for freedom throughout the whole of his thought. The point here is that I am attempting only to accept and clarify Polanyi's own somewhat uncritical acceptance of moral freedom with the aim of showing that his notion of freedom is an important element of his tacit ethic. I believe Polanyi accepts moral freedom as a radical choice of world-views. We may disagree with his choice; but we can hardly deny the important ethical consequences of it. And this latter point is the one I wish to advance.

## CHAPTER FIVE

### "RULES OF RIGHTNESS" AS LEVELS OF HUMAN ACTIVITY

This chapter carries forth the momentum of the previous chapter. We may now see that Polanyi's ontology is very much oriented around a hierarchy of being in which higher levels rely on lower levels (which in turn support and participate in higher levels). This notion is extended to the moral realm in which man is viewed as freely pursuing the Good through a process of maturing toward the achievement of wholly novel modes of human being, modes which represent new insights into value, right, and the Good.

In this chapter I apply Polanyi's notion of "rules of rightness" (which he applies to the structures of reliance and marginal controls in the functioning of organisms and machines) to the moral domain. Just as the stabilization of processes tend to create rules of correct functioning (rules of rightness), so moral structures which work and which keep access to moral truth open tend to stabilize into rules of rightness. These rules are moral rules or codes by which we judge behavior. Our moral concepts, grounded in individual and communal experience, tend to be expressed in the form of rules by which actions are judged to be right or wrong. These rules do not, however, preclude emergence through insight into new forms of moral life; and it is at

this point that Polanyi's ontology seems to coalesce with the moral domain: his concept of "ultra-biology" describes not only a "scientifically" conceived destiny of man but, by reference to Teilhard de Chardin's noosphere, touches definitely upon a concept of a moral end of man. This chapter ends the discussion of Polanyi's ontology, having moved this discussion from the key elements of his ontology to a conception of man's ultimate organismic destiny which coincides with a moral end of man.

### 1. Levels of Being

To trace Polanyi's thinking on this subject in more detail, we can develop more deeply his thesis that each level of being (including life, human reality, etc.) relies for its operations on all of the levels below it. Thus, each higher level imposes on the one immediately lower to it a boundary that harnesses it to the service of the higher, a control that is transmitted stage by stage to lower levels.<sup>248</sup> This structure does not, however, make the higher levels reducible to the terms of the lower (we cannot, eg., explain life in terms of chemical structures);<sup>249</sup> nor can one account for the principles of the higher level in terms

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<sup>248</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 234.

<sup>249</sup> Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 85.

of the lower (we cannot reason from chemical knowledge to the necessity of the properties of life).<sup>250</sup>

Again, this ontology parallels the dynamic of tacit knowledge:

...the two-levelled logic of tacit knowing performs exactly what is needed for understanding this mechanism.

Tacit knowing integrates the particulars of a comprehensive entity and makes us see them forming the entity. This integration recognizes the higher principle at work on the boundary conditions left open by the lower principle, by mentally performing the workings of the higher principle. It thus materializes the functional structure of tacit knowing. It also makes clear to us how the comprehensive entity works by revealing the meaning of its parts. We have here the semantic aspect of tacit knowing. And since a comprehensive entity is controlled as a whole by a higher principle than the one which controls its isolated parts, the entity will look different than an aggregate of its parts. Its higher principle will endow it with a stability and power appearing in its shape and motions and usually produce also additional novel features. We have here the phenomenal aspect of tacit knowing.<sup>251</sup>

Lower levels, then, are highly illuminating to the higher levels of reality when viewed as part of the operational principles of the higher. The higher level defines the conditions under which the lower may operate,<sup>252</sup> whereas

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<sup>250</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 155.

<sup>251</sup> Ibid., p. 218.

<sup>252</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 133.

lower levels define the conditions for the success or failure of systems in so far as the higher relies on them.<sup>253</sup> Thus, Polanyi says, "Everywhere the potential operations of a higher level are actualized by their embodiment in lower levels which makes them liable to failure".<sup>254</sup>

Polanyi uses the terms "marginal conditions" and "boundary conditions"<sup>255</sup> to describe the relation between higher and lower levels. Higher levels exercise control over lower ones by shaping them, when they fulfill the conditions higher levels lay down, into new entities functioning under principles different from those formerly governing them. Eg., consider the difference between hydrogen and oxygen as separate elements and these two in chemical combination as water. The gaseous state of these two elements functions by principles appropriate to gases until they are mixed together under the proper circumstances. When they combine to form water (which is the only element they can form under certain conditions, since they are bounded on all sides by the higher principle

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<sup>254</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 67.

<sup>255</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 55, 40-41, resp.)

<sup>253</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 382.



of their combination), they fulfill the conditions of the principles governing water. The principles governing the structure of water in this case are the boundary conditions which, when "crossed over" by the combination of hydrogen and oxygen, create the unique properties of water.

Levels of reality, then, seem to "slope upwards" toward more and more complex entities governed by principles which exercise control over the lower principles upon which they rely. Polanyi intends to describe the hierarchical development of reality as a teleology toward higher levels of reality. He argues that even mechanisms of various kinds acquire their organization by reference to some aim, goal, or purpose that is to be achieved by it. This purpose cannot be deduced from the physical and chemical laws that make machines possible,<sup>256</sup> but it manifests itself in its organization toward a function relying on but not defined by the elements making up the machine. Thus, Polanyi is a "finalist" in that he believes all things organize themselves to ends not defined by the elements of combination themselves.

This finalism is explicitly applied to the development of human activity. The achievements of human life act as heuristic guides to a yet hidden reality and, because they form a base on which to stand as well as elements of a higher

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<sup>256</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 169.

achievement, every achievement has the power to promote the realization of a new level of insight or activity.<sup>257</sup> Polanyi orders the grades of commitment, eg., as primordial (biological commitment to life and centralized functioning), primitive (active-perceptive centering), and responsible (requiring conscious deliberation).<sup>258</sup> Human life, then, moves from primordial biological commitments to responsible moral ones as a multi-levelled, finalistic movement toward higher centers of organization and operation.

Polanyi's notion of levels of reality may be extended to the ethical domain. We have already seen how values may be developed in a hierarchical order. Now we may see more concretely how we may order our action in society to preserve these values and promote stability in standards of behavior.

The human organism controls its behavior in increasingly complex ways as it pursues its goals. But, as we have seen, its goals are not merely biological. The person lives in a community in which he finds his support and to which, to some extent, he is responsible. His responsibility is defined by his inescapable participation in the community.

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<sup>257</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 399.

<sup>258</sup> Ibid., 363.

He has an obligation to sustain and forward his community's values because his own life is to a larger extent than he can explicitly ever know, identified with the community. This much has already been established.

Moral acts are acts motivated by the concern to submit to the moral standards of the community in order to share in its life. They constitute an "organismic" participation in the community which attempts to dwell successfully in the community. As such, they are guided by an insight into right action in specific situations (or what seems to be right). This insight orders action, guiding a person's choices concerning what he does. This ordering is done in the light of a principle: what is deemed right. And this principle becomes a "higher level" control of behavior, shaping individual acts into complex and related acts which aim at the right.

The higher principle, the right, relies upon individual acts which, considered separately, have no bearing on the right. For example, fulfilling one's obligation to pay taxes relies upon acts like filling out the tax forms properly, figuring the required mathematics, and sending the check for the required amount. Right action relies on the complex of ordered actions that fulfill one's tax obligation. A failure in any of these destroys the possibility of meeting one's obligations (despite the fact that a mathematical

error would not be viewed with the gravity that would pertain to a refusal to send the required sum).

The higher principle, however, is not reducible to any one of the separate acts which achieve the right, nor are they reducible to the series of acts as a whole. The goal of such acts is the sense of acting rightly, and this goal shapes behavior by defining the conditions of a right action. In each specific ethical action, the right embodies itself in particular acts upon which it relies in order to exist. And these particular acts are no longer to be viewed in their isolation but rather as elements of one movement toward right in the ethical domain!<sup>259</sup> Thus, an attempt at right action, informed by the values and standards of the community and by one's own ethical insight, transforms the elements of human behaviour into entirely different and novel types of acts. There is, if you please, a "phylogenetic maturation" in human ethical behavior toward higher and higher guiding principles which aim at transforming the whole of human activity into new and still hidden shapes.

Of course, this maturation is all a matter of freedom. We are free to choose to act rightly or to act with disregard

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<sup>259</sup> An attempt to save a drowning man, eg., is not simply "swimming" but rather a complex of acts whose character is irremediably changed by the relations established between them in fulfilling, as a whole, the end toward which they aim.

for what is right. The development of the person within the community depends upon a commitment to seek higher truths and right action. One can choose to act against the community and against one's own interests; and one can even oppose the community in the interest of a higher insight into right than that possessed by his community.

We can see, then, that, if we extend Polanyi's notion of a hierarchy of reality into the ethical domain, human actions themselves become levels of human reality--indeed, the highest levels of biological existence. Human actions can be graded from sporadic, blind attempts at survival to committed, cooperative and participative sharing within a community of persons. Each level introduces a new depth of insight into right action in general and manifests itself as the boundary conditions for all of the right actions which participate in it. Clearly, then, ethical action is an instance of the development of human reality toward higher levels of a hierarchical arrangement.

## 2. Rules of Action

Insight into right, based upon a responsible commitment to communal values, then, is an ordering principle of behavior. We can understand what this means by investigating the ontological meaning of an ordering principle.

Polanyi defines an operational principle as any "collection" of parts which function according to a principle which orders activity in a way not defined by the parts so ordered. He distinguishes, however, between the actions of an ordering (or operational) principle from the conditions which release and sustain its actions.<sup>261</sup> Thus, the principle is not identical to the parts that functionally constitute it and upon which it relies. It is in fact the originator of the potential within an open system, a group of elements which can be harnessed and developed into new functions--and even new elements--by a principle that stands outside of them until released to function by the presence of these elements.<sup>262</sup>

Once harnessed by an ordering operational principle, the composing elements tend to endure within the order that is produced. For example, life, once produced from non-living matter, tends to remain life and resist breakdown. Thus, the ordering principle is an initiator of an order which, by a momentum of its own, tends to stabilize a new order.<sup>263</sup>

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<sup>261</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 382.

<sup>262</sup>Ibid., 384.

<sup>263</sup>Ibid.

This is why the ordering principle is often innovative. Once having stabilized a system, it can effect random motions which discover even higher levels of order.<sup>264</sup>

Polanyi credits living organisms with improvising alternative ways of achieving the end of an ordering principle as well as the capacity to achieve higher levels of life. These "equipotential" modes of alternative orders within a single ordering principle are part of the originaive power of the principle.<sup>265</sup> Living organisms centralize their efforts and split this center into relatively self-regulating sub-centers of organization.<sup>266</sup> And the result of this splitting or distribution of regulative functions enables the organism to explore randomly alternative ways of integrating its life toward ultimate purposes--or discovering new purposes.

In relation to the development of persons, Polanyi says that the unconscious, spurred by conscious effort is capable of changing consciousness by reference to an original insight. He calls this power to originate a change in

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<sup>264</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 386.

<sup>265</sup>Ibid., p. 337.

<sup>266</sup>Ibid., p. 356.

consciousness morphogenetic originality.<sup>267</sup> Thus, the morphogenetic principle is the top operative principle through which equipotential processes have their being as a comprehensive rightness under the principle. They all disappear if the morphogenetic principle disappears.<sup>268</sup> Thus, thought itself, together with the general consciousness of the person, develops by the same processes applicable to all other aspects of reality.

Polanyi himself sums up this discussion of the power of originality in ordering principles. He distinguishes three types (or stages) of originality. First, we are resourceful enough to find alternate ways to achieve our goals even when normal means are cut off. Second, we are capable, of course, of normal maturation toward our goals. And third, we can discover altogether unprecedented operational principles.<sup>269</sup> All of these ways ensure a continued, creative movement both of a personal knowledge of the right and of our power to order our lives rightly.

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<sup>267</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 339.

<sup>268</sup>Ibid., p. 340.

<sup>269</sup>Ibid., p. 399.



An insight into right is, then, an ordering principle which collects previously unrelated acts into a unified movement toward right action. This insight is something different from the action of pursuing the right in the sense that it is the condition which releases and sustains the actions which aim at establishing the right. It is the originator of our potential to order our actions rightly.

Decisions to act rightly establish eventually an order which has a power of its own to stabilize and resist destruction. Such decisions are grounded in an insight into right action and are the effective, originative agents of order. They establish systems of behavior, not merely isolated acts; for they are informed by insights that yield principles covering wide-ranging areas of action. Thus, once a general principle of behavior is decided upon and grounded in commitment, a certain "stabilizing" force tends to establish this commitment as a general order of behavior. And from the base of such an ordered system, the person may direct his surplus energies toward an imaginative exploration of alternative ways of fulfilling his obligation to right action or even discover higher obligations.

Thus, moral action may seek out "equipotential" alternatives which bring change and development to the moral order. A system of moral behavior need not be a total, comprehensive control of behavior. Instead, the moral principle (eg., refraining from doing injury to others) may,

need a special response in times of war or personal attack. The general principle may require modification through the allowance of extenuating circumstances for protective action which may necessitate harming others. And such exceptions may open a community to new principles, eg., those governing the conduct of war or the treatment of prisoners. Thus, new insights into what is right--as well as new rights--are discovered and put into practice.

The growth and development of moral principles is partially the growth and development of the person as a whole. Moral principles are sustained by the continued commitment, indeed the life, of the whole person. And the behavior that is collected, shaped, and which constitutes the moral principle in action is in turn sustained by the principle itself. If the principle ceases to exist as a prime motivator of the person, the behavior cannot continue its ordered behavior. The moral act ends as a moral power.

We are morally free, of course, to devolve morally. We can refuse our commitment to moral values and cease acting morally. The reasons--or causes--for this are myriad. But we can also choose to fulfill our moral objectives, find alternative routes to them, or discover new ones. Moral life, like all aspects of life (such as knowing), is creative and not determined by external circumstances.

We may not extend this inquiry into the dynamic of moral action toward the establishment of a general sense of moral rules. We have spoken thus far about moral principles but not as they are codified through the tradition of the community. To understand how such codification occurs, we must turn to Polanyi's notion of "rules of rightness",

Operational principles, embodied in a system of action, are called "rules of rightness".<sup>270</sup> These rules codify the successful functioning of a system, whether the system is that of a machine or an organism. They account for why a system functions in a way which accomplishes its goals. Thus, the rules tell us how a thing or system is supposed to work; and they are determined by a careful observation of the standards of functioning directly bearing on the success of the system.<sup>271</sup> This pertains both to machines and biotic achievements with the difference that, in biotic achievements, rules of rightness are discovered not by analyzing fixed structures but by a skillful connoisseurship of their forms of achievement.<sup>272</sup> But in both machines and living organisms, rules of rightness constitute a rational strategem for success.<sup>273</sup>

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<sup>270</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 329.

<sup>271</sup>Ibid., 345.

<sup>272</sup>Ibid., pp. 342-3.

<sup>273</sup>Ibid., 332

Rules of rightness pertain not only to somatic, biotic achievements in general, but specifically also to the act of knowing. Thus, Polanyi speaks of intellectual rightness as a species of general rightness of response which involves the whole person.<sup>274</sup> It is in this context that Polanyi defines truth as the rightness of an action.<sup>275</sup> And, by extension, we can see that insight into right action is a truth upon which we base our action.

Rules of rightness pertain, then, both to right knowing (defined as truth) and right acting (based on truth). Thus, subjectivity and error in knowledge and perception break the rules of rightness that pertain to them just as abnormality, malformation, or disease interferes with the proper functioning of a living organism.<sup>276</sup>

We can easily understand how Polanyi's notion of rules of rightness can be extended to the ethical domain of knowledge and action. On a personal level, the truth of right guides us to right action. And our actions tend to systematize, to become "rules" of action based upon moral truths to which we are committed. Thus, because we participate in the community of persons, we also develop rules of rightness that

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<sup>274</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 368.

<sup>275</sup>Ibid., p. 320.

<sup>276</sup>Ibid., p. 361.

are shaped by this participation. We establish within our own commitments to act rightly an obligation to submit to the rules constituting right action within the community.

This submission is, of course, a free act. And it is, as we have seen, a creative one in that we can seek new means to achieve communal as well as personal goals and establish new, universal rules of rightness to which we ourselves submit. Such ethical rules may be taken up by the community, systematized, and developed into the custom, ethic, or law of the community. As rules, they may be explicitly developed and modified.

We have, then, established in Polanyi's notions of a hierarchy of reality and rules of rightness a continuum of human activity from perceptual rightness to moral rightness. He claims that beyond sentience in motive and knowledge in the person is the effort to do the right and know truly in the presence of an independent reality.<sup>277</sup> And, lest anyone doubt that my extension to the moral realm of his concept of doing "rightly" is an exaggerated employment of his biological ideas, we may note this statement:

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<sup>277</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 363.

Our inquiry into the logic of machines is, therefore, capable of generalization over a domain extending from mathematics to physiology. And we may add to this domain, as further rules of rightness, the principles of ethics and law.<sup>278</sup>

Further, we must note his explicit hierarchy of levels within man: 1) embryological life; 2) vegetative organic functioning; 3) perceptive-motor activity; 4) conscious behavior and intellectual action; 5) moral sense, guided by his own standards. Each level gives rise to the next by morphogenesis, Polanyi's general word to describe the dynamic of creative emergence as we have described it.<sup>279</sup>

### 3. The Ultimate Aim of Human Reality

We may now turn to a general view of the goal toward which individual cultures and the entire human race moves. Such a view will allow us to see how profoundly Polanyi considers the moral development of man.

Polanyi would admit that deep cultural forces create changes in culture. Indeed, the knowledge claimed by a culture extends to all that is believed to be right and excellent within it, including the utterances of prophets, poets,

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<sup>278</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 332-3.

<sup>279</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) pp. 36-7.

legislators, scientists, leaders in history, etc.<sup>280</sup> But Polanyi is not really a proponent of the idea that change comes only through cultural forces. He believes that the superior knowledge guiding a free society is formulated by great men and embodied in its tradition.<sup>281</sup> Thus, the ideals of a culture are proposed through individual insights and are learned only when an entire culture follows them. Polanyi advises us to study the influence of great men if we are to understand cultural growth, including growth of moral ideals. He calls this study an extension of biology: "ultra-biology".<sup>282</sup>

Human greatness is man's power to transcend the culture in which he participates toward higher ideals and values which will open new vistas for the entire culture. The possibility of human greatness includes, of course, the potential for devolution toward the demonic. But, considered as forward moving, human greatness can be recognized only by submission to it. Only by a commitment whose value reaches out toward what greatness discovers can the discovery be recognized for what it is. Human greatness stretches communal tacit knowing toward a knowledge and a

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<sup>281</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 397.

<sup>282</sup>Ibid., p. 377.

standard projected by one man: "...man stands rooted in his calling under a firmament of truth and greatness".<sup>283</sup> The power of a living, vital morality lies in this commitment, without which morality becomes a convention.<sup>284</sup>

Toward what end does moral development strive?

Polanyi has indicated that acts of knowing and of moral intent hope to capture aspects of reality: the Good, the right as serving the Good, etc. The search for truth moves forward in the hope that other findings will coincide with and supplement each other toward the development of one truth.<sup>285</sup> From the ontological point of view, this transcendence toward one truth is a transformation of man from a self-interested, survival-conscious organism to a person transcending the concerns of individuality and death. The body becomes no longer an instrument of self-indulgence but a condition of the calling of man. Polanyi calls this development "noogenesis".<sup>286</sup>

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<sup>283</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 380.

<sup>284</sup> Ibid.

<sup>285</sup> Ibid., p. 315.

<sup>286</sup> Obviously, Polanyi is inspired by Teilhard de Chardin's Phenomenon of Man.



the development of new heuristic passions which reveal worlds of human greatness and freedom.<sup>287</sup> This development reaches beyond even individual societies to the highest fundamental principles of humanity. Such principles are so wide-ranging as to create a "cosmic field" of hidden but infinitely great potential.<sup>288</sup>

Polanyi, inspired by Chardin's works (The Phenomenon of Man, p. 200), calls this "cosmic field" the "noosphere". The noosphere is composed of a holistic development of linguistic, mental, and social realms toward a completely novel creation. The change and development of a system, eg., scientific knowledge, is not specifiable in terms of strict rules. The guide of heuristic activity is an intimation of a hidden reality, and the change occurs as a self-modification of an entire interpretive framework. Each noospheric development is believed to be real and entitled to the claim of universal validity. Such change develops the noosphere<sup>289</sup> through ontogenetic innovation.<sup>290</sup>

At last we can understand Polanyi's integration of truth, right, and free emergence. He says, "...the emergent

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<sup>287</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 389.

<sup>288</sup> Ibid., p. 405.

<sup>289</sup> Ibid., pp. 395-6.

<sup>290</sup> Polanyi's term for a change in a level of being or the transformation from one level in the hierarchy of being to another.

noosphere is wholly determined as that which we believe to be true and right; it is the external pole of our commitments, the service of which is our freedom. It defines a free society as a fellowship fostering truth and respecting the right".<sup>291</sup> Moral development is part and parcel, then, of a complete development of man into a reality in which truth, right, and freedom are the highest motivating values.

Polanyi moves into religious language to describe the emergence of the noosphere toward its highest insight of truth and commitment to right and justice. He says

The stage on which we thus resume our full intellectual powers is borrowed from the Christ-scheme of Fall and Redemption. Fallen man is equated to the historically given and subjective condition of our mind, from which we may be saved by the grace of the spirit. The technique of our redemption is to lose ourselves in the performance of an obligation which we accept, in spite of its appearing on reflection impossible of achievement. We undertake the task of attaining the universal in spite of our admitted infirmity, which should render the task hopeless, because we hope to be visited by powers for which we cannot account in terms of our specifiable capabilities. This hope is a clue to God...<sup>292</sup>

This religious language sums up the absoluteness and totality with which we procede toward higher insights and higher life as human beings. It shows the ultimate ground of moral and

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<sup>291</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 404.

<sup>292</sup>Ibid., p. 324.

total human development as our highest comprehension of this life, a comprehension that can be manifested only in religious language. And Polanyi affirms that this cosmic panorama is intended to offer us a framework within which we can define responsible human action, of which moral decisions are a particular instance.<sup>293</sup>

We may conclude this section on the ontological thought of Polanyi with a brief summary of its relevance for an extension of his ontology to ethical standards of action and knowledge of the right. We began by pointing out the parallel between epistemological and ontological thought in Polanyi and how this parallel enabled us to speak of tacit reliance in knowledge in terms of a reliance of one level of reality upon another. Thus, I see knowledge of the Good as a reliance of behavior upon standards of behavior to achieve the Good. Tacit commitments in knowing the Good thus become tacit support for the standards of action which support the values of the community.

The notion of and commitment to right action in the community of persons is a matter of emergence into higher forms of moral life. What we termed "discoveries" in our discussion of Polanyi's epistemology is termed "emergence"

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<sup>293</sup> Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 52.

when viewed ontologically. Emergence is a free, creative act which occurs on all levels of reality, particularly in biological reality. Thus, one level of reality, higher than another, relies on it for its own existence and controls the basic scope and limits of lower, less complex realities. But these higher levels themselves may, by a free exploration of alternate modes of reaching their specific aims, discover higher realities which control their own and, thus, release this higher reality to an effective and active embodiment in lower realities.

Moral realities are controlling principles of behavior which rely upon individual acts and are embodied in them. Man emerges from individual self-assertion to an acknowledgment of his communal participation and then toward the "ultra-biological" transcendence toward concept of the Good and right which are contained only tacitly in culture.

The right is a responsible action in respect of communal standards to which one submits in pursuit of the communal Good even when one's understanding of these transcends what culture believes and is committed to. It emerges freely through responsible commitment and evolves toward more wide-ranging principles of control of human thought and action. It establishes rules of rightness which enable communities to function by virtue of custom and law. But these rules themselves develop as humanity emerges from ignorance

to the Good toward a free movement to higher moralities. We come at last to Polanyi's cosmic panorama in which the highest vision calls us constantly to give embodiment to ever new vistas of the Good, the right, and continued free emergence.

We may now turn to Polanyi's notion of symbols to clarify an important point concerning moral knowledge and action. And here we must grapple with an argument recently put forward by Harry Prosch.

## CHAPTER SIX

### THE INADEQUACY OF SYMBOLS FOR UNDERSTANDING THE ETHICAL DIMENSION OF PERSONAL KNOWLEDGE

In this chapter I wish to take up Polanyi's conception of metaphor and symbol. My aim is to show how these relate to the extension of personal knowledge into the ethical domain.

Opening with a brief statement concerning the consistency of certain chapters of Meaning, with prior works of Polanyi, I move into an explication of Harry Prosch's view of how these chapters relate to ethics. I take issue with his view that the Meaning material is the primary source for understanding how to extend personal knowledge to ethics. Prosch believes that only with this material can one finally construct the outline of a Polanyian ethic. I have already shown how value, right, and the Good can be understood in Polanyi's epistemological and ontological works; so, I disagree that Meaning is essential to understanding a Polanyian ethic, though the text is helpful in demonstrating how symbols function in the ethical domain. I argue that one can understand the development of ethical knowledge and action in Polanyi's works without reference to the power of symbolism, except for those particular incursions of symbols developed around important events or great persons. I do not think such symbolism is necessary for the development of a Polanyian ethic, but I do think it

plays a role in such development. And in this way I differ from Prosch, who thinks a Polanyian ethic cannot be conceived apart from the power of symbolism.

The text of Meaning has been attacked on the grounds that it does not represent the ideas of Polanyi, a criticism grounded in the credit of authorship: Michael Polanyi and Harry Prosch. Some Polanyi scholars (eg., James Wiser, Loyola University) have raised the question whether the hand of Prosch is heavier in this book than that of Polanyi. I do not think Prosch has in any way distorted Polanyi's later thought, however, and I think various evidences and testimonies concur with this opinion.

The texts most likely to be questioned in Meaning are Chapters five through ten. Prosch is responsible for the division of this book into chapters. But the texts themselves are essentially the ideas Polanyi set forth in a series of lectures at the Universities of Texas and Chicago in 1969. Polanyi specifically requested Prosch's aid in developing these lectures for publication and studied the text Prosch prepared for ten months before approving it. I think the main reason questions are raised about these chapters is that Polanyi is breaking new ground in them, extending personal knowledge to areas he had never considered before such as art, myth, religion, and poetry. In the context of such a study, he developed a concept of symbol which enables us to

understand how personal knowledge functions in these areas. Thus, because Polanyi breaks new ground so briefly and tentatively before the end of his academic career, some raise questions whether he ever broke it at all.

A close study of Polanyi's previous work, however, indicates clearly that what Polanyi says in his later work does not contradict or seriously modify his earlier work. His notion of symbol in fact relies on his concept of sense-reading and sense-giving, which is grounded in his concept of tacit knowing. One cannot understand what Polanyi means by a symbol without relying on his earlier work (though one can understand his earlier work without reference to his concept of symbol). Thus, his concept of a symbol is continuous with his earlier development of tacit knowledge in other areas. Prosch denies authorship of Meaning in any way except as a spokesman for Polanyi's own thought, even to the extent of making the word "I" self-referential for Polanyi.

On both external and internal evidences, then, I conclude that Meaning is a valuable text--indeed the only text--for understanding Polanyi's concept of symbol and how it applies to the domain of ethical knowledge and action. I am not alone in this conclusion, as it is shared by Don



Musser<sup>294</sup> and other Polanyi scholars.

The only serious problem with Meaning's application to ethics is the application Prosch himself makes of it in his article on Polanyi's ethics.<sup>295</sup> Here we are dealing with Prosch and not directly with Polanyi. And so his application of Meaning to this area is fair game for critique.

I agree with much of what Prosch says about the possibility of developing an ethic from Polanyi's works. He points out that the motivation for Polanyi's work in epistemology was an attempt to counteract the destruction of moral ideals by positivist scientism (p. 91) and that moral ideals are just as real as scientific discoveries for Polanyi. He even argues that Polanyi intended his epistemology to apply to the discovery of moral ideas just as readily as scientific ones, though he does not show in any detailed way how this can be done.

He indicates, as I have argued, that ethics involves a hierarchical and teleological movement toward the Good, which manifests itself as a reality (pp. 92-4). Moral principles are, then, higher operative principles which rely on

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<sup>294</sup> Review of Meaning, Don Musser, Zygon, 12, Sept., 1977, p. 259.

<sup>295</sup> "Polanyi's Ethics", Harry Prosch. Ethics, 82, 1972, 91-113.

but cannot be reduced to such levels as the neurological and the physiological and which project standards of behavior to which they themselves submit (p. 95). Prosch further argues a point I shall also stress: that ethics must take up freedom as a prime ideal if culture is to develop in all areas of science, art, religion, and morality (p. 95).

Clearly, Prosch outlines a direction of thought in his article with which I can in large part agree. Indeed, I have tried in my previous chapters to argue in some detail for the positions Prosch only indicates as a fruitful line of research. But he goes on to apply Meaning to ethics in ways of which I cannot approve.

We remember that Polanyi calls the integration of joint clues which produces the appearance of something of the "semantic" meaning of the thing.<sup>296</sup> Originally he extended semantic meanings to include all meanings achieved by man and not just linguistic ones. For example, perception and sounds are included as well as conceptual meanings. But in Meaning he wishes to be more specific about linguistic meanings and to distinguish them clearly from non-linguistic meanings such as those integrated in perception. Thus, in Meaning he

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<sup>296</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 145.

restricts semantic meanings to linguistic meanings.<sup>297</sup> This is the only explicit change from past positions that Polanyi makes in Meaning.

In the context of the restriction of semantic meanings to linguistic meanings, Polanyi considers integrations in which the subsidiaries bear on a focal meaning to be "self-centered". That is, they are made from the self as a center to the object of focal attention.<sup>298</sup> This is the pattern we have already seen in our discussion of Polanyi's epistemology. It is the fundamental "from-to" pattern. And we have seen how in moral knowledge we rely on present value-commitments to focus on new insights into value and the Good. Concerning reliance upon signs in order to focus on new meanings, Polanyi says "This reliance is a personal commitment which is involved in all acts of intelligence by which we integrate some things subsidiarily to the center of our focal attention."<sup>299</sup>

Polanyi distinguishes between linguistic meanings that are sense-giving and those that are sense-reading. Sense reading is the act of making sense out of clues that are present before us, such as is performed in scientific discoveries.

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<sup>297</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 74.

<sup>298</sup>Ibid., p. 71.

<sup>299</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 61.

Sense giving is the act of creating new meanings out of apparently unrelated meanings, eg., a technical invention. Our moral lives require both sense-giving and sense-reading: we must understand moral values and standards in order to submit to them; and we must responsibly create new visions of value and right. Thus, Polanyi says that the growth of intelligence in language is a combination of sense-reading and sense-giving.<sup>300</sup> Indeed, even the most fundamental linguistic achievement reveals this combination. The definition of words depends ultimately on some kind of ostensive gesture, a kind of sense-giving. And picking up the meaning of this gesture will depend on our tacit ability to "sense-read" what is meant.<sup>301</sup>

We must remember, of course, that sense-reading and sense-giving are both tacit acts and that both refer to reality. Polanyi does not distinguish between the linguistic mode and the "material" mode. Language is not a mere convention for expressing thought (this is nominalism in his view). The use of language requires a tacit indwelling in the meanings it conveys, whether by sense-reading or sense-giving. And our personal judgement stands at the root of all

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<sup>300</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 205-6.

<sup>301</sup> Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966) p. 6.

sense-reading<sup>302</sup> and sense giving.<sup>303</sup> Thus, we indwell language and are tacitly committed to the realities language reflects. When we disagree on the nature of things, we are not simply having a verbal dispute. We judge and indwell reality through language and develop a rational vocabulary through an acknowledgement of reality. I have already made this point in regard to tacit knowledge, but we should remember it in order to avoid thinking of language as somehow divorced from reality.<sup>304</sup> Thus, Polanyi says "To talk about things...is to apply the theory of the universe implied by our language to the particulars of which we speak".<sup>305</sup>

In Meaning Polanyi distinguishes two types of semantic meaning: indication and symbolization. Indication projects meaning away from the self as center (the person makes judgements, discovers, creates new objects or ideas), and symbolization is a reversal of this movement from self to object: symbols draw the person to themselves and, thus, give themselves to persons. Indication, then, is

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<sup>302</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 80.

<sup>303</sup>Ibid., pp. 113-14.

<sup>304</sup>Ibid.

<sup>305</sup>Ibid., p. 81.

self-centered; and symbols are self-giving.<sup>306</sup>

We must distinguish this self-giving, however, from sense-giving. As we have seen, indications can be sense-giving. Eg., the meaningful use of a word sometimes makes us look through the word toward inventing a new meaning, and this is "sense-giving" since we apply a meaning to experience.<sup>307</sup> Polanyi considers all verbalizations to be forms of sense-giving. Acts of interpretation are instances of sense-reading since they attempt to make sense jointly of a text and the experience described by the text.<sup>308</sup>

Sense-reading and sense-giving are cyclical activities. The person's integration of meaning is sense-reading, and his projection of meaning in words is sense-giving. But another person's interpretation of his projection of meaning is sense-reading.<sup>309</sup>

Symbols, however, are not projections or readings of sense. A symbol is an object of some kind which has a meaning that does not bear on reality in the same way in which

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<sup>306</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), pp. 74-5.

<sup>307</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), p. 184.

<sup>308</sup>Ibid., p. 188

<sup>309</sup>Ibid., pp. 185-6.

words denote objects. Instead of denoting objects, symbols "stand for" objects. An example is a flag or a medal. As a focal object, a flag is apparently meaningless. But subsidiary to the flag as a focal object are the meanings it is intended to give to us: a sense of patriotism, pride in country, etc. Thus, in symbolization the subsidiary clues are more important than the focal object since the focal object is of interest only because of its symbolic connection with the subsidiary clues through which it becomes a focal object. In this sense, symbolization reverses the self-centered movement of indication.<sup>310</sup> The symbol, as a focal object, draws us into its subsidiary meanings, thus carrying us away into what it stands for.

The subsidiaries that bear on a symbol become, through our surrender to it, embodied in it. Through this embodiment, the symbols reflect back on their subsidiaries, fusing our diffuse responses and memories so that we are carried away toward an experience of these subsidiaries which bear on the focal symbol. We are "picked up" into the meaning of the symbol.<sup>311</sup>

Obviously such symbols as flags, medals, logos, etc., do not have any intrinsic meaning as focal objects. In fact

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<sup>310</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 72.

<sup>311</sup>Ibid., p. 73

what they are as objects are generally incompatible with the meanings they give us when we surrender ourselves to them. A flag is painted or dyed cloth; but patriotism has nothing to do with paint or cloth. Yet these elements, though incompatible with feelings of patriotism, are joined in such a way as to yield these feelings.

We may infer that, since the subsidiaries of a symbol are embodied in it through our surrender to it, we ourselves indwell the symbol. This indwelling gives the symbol body; yet the symbol itself has the power to draw our lives, our committed responses, into it so that we give embodiment to it. Thus, symbols are self-giving not only in the sense that it gives us its meaning; but it is self-giving in that we invest ourselves in it and, thus, empower the symbol to yield what we have invested as a community in it: we find ourselves in the symbol, and are empowered by it to grow into new meanings.

Not all symbols, however, are composed of "incompatible elements". Some symbols are composed of elements which are themselves of intrinsic interest as well as the subsidiary meanings they yield.<sup>312</sup> Polanyi classes metaphor as a third type of semantic meaning which is composed of elements that are as important as their subsidiaries.

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<sup>312</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 74.



Metaphors are symbols which have meaning in themselves. Thus, a metaphor is itself a meaningful relation between the vehicle (the words, materials, acts, etc.) and their tenor (intention, meaning); and this relationship itself (the metaphor) draws us as a symbol into itself, integrating us to the meaning of its subsidiary clues as we surrender to it.<sup>313</sup> The "tenor" of a metaphor is the object of principle interest which we embody through another intrinsically interesting object (the vehicle), thus giving the first object a new emotionally charged meaning.<sup>314</sup>

The word "metaphor" brings immediately to mind literary or poetic metaphor; and, although Polanyi intends the word to have a much wider-ranging meaning, such metaphors are excellent examples of what Polanyi means. In poetry, eg., words which have meaning are vehicles to express a much different tenor of meaning than the words themselves have. Words in poetry have meanings which are essential for the tenor of meaning to "come off". Thus, we must pay attention to their meanings while surrendering ourselves to the higher meaning of the symbolism that they constitute. Polanyi says that this act necessitates an act of the imagination that is

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<sup>313</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), pp. 77-79.

<sup>314</sup>*Ibid.*, 151.

much richer than that required in indication.<sup>315</sup> And, like jokes, metaphors lose their point when explained in detail in terms of the literal meanings of their vehicles.<sup>316</sup> Their meaning is destroyed when we shift our focus from their meaning to their constituent parts,<sup>317</sup> as is the case with all destructive analysis.

To sum up, Polanyi distinguishes between self-centered and self-giving semantic meanings. Self-centered meanings are acts of indication and are patterned after the normal "from-to" dynamic of tacit knowing. Such meanings may be instances of sense-reading or of sense-giving and involve a commitment to reality-beliefs that are embodied in language. Symbolization, however, reverses the "from-to" pattern in that the subsidiary meanings are of intrinsic interest over the focal object constituting the symbol. Symbols stand for the feelings and memories and ideas which they have the power to invoke in us by drawing us into their subsidiaries. Metaphor, however, as a special case of symbol, utilizes as its vehicle elements which are of intrinsic and important interest in order to constitute higher

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<sup>315</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 82.

<sup>316</sup> Ibid., p. 79.

<sup>317</sup> Ibid., p. 82.

meanings that require imaginative effort to understand.

The importance for ethics of this explication of symbolism and its distinction from non-symbolic meanings lies in Polanyi's concept of metaphor. We have already seen in detail how meanings developed by sense-reading and sense-giving are operative in ethical knowledge and action. Now we can understand how symbols in the form of metaphor are operative in the ethical domain.

As we have seen, the development of knowledge and of standards of action in all areas of human endeavor often take leaps forward by the individual initiative of single persons. Such leaders, after mastering the tradition of their field, achieve insights that show promise of a continued self-confirmation and of truly developing knowledge in a particular field. The masters of particular traditions who achieve such insights become the leaders of their field. They have the power to break the mold of past understandings and of shown "apprentices" deeper truths within their field. In establishing new forms of thought, new inventions, new political structures, etc., they become "great men".

A great man can become a symbol which stands for an ideal, a political ideology, or a religious concept among many other things. We can readily think of how the jowly

visage of George Washington affects Americans, as well as the figure of Lincoln--or, negatively, Lenin. Such men are symbols which stand for deep cultural commitments in which we all participate. Washington stands, perhaps, for a national pride in integrity; Lincoln stands for sheer human greatness; Lenin, negatively, stands for a mistrust of communist ideology. The mention of these great men, the sight of their figures in painting or statuary, etc., draws our feelings and memories to the tales of their deeds and the values which they embody. We are carried away by their symbolic appearance to the values which they stand for.

Great men, then, are symbols of cultural values in which we participate. But they are not symbols in the sense that flags, medals, etc., are symbols. That is, they are not meaningless in themselves and dependent for their power as symbols on the investment of meaning the culture has committed to them. Great men are metaphors for the values they realize in changing cultural life for the better. They have meaning in themselves, since we can observe the dynamic of their lives and understand how they lived and what motivated them. But to understand the values they stand for, we must make a special effort of the imagination. Without such an imaginative act, the tenor of their meaning falls flat, just as we can fail to understand the point of a poem while understanding all of its words.

Great men in the ethical realm, then, are metaphors which continue to preserve the ideals they established and to inspire further ethical development. Meeting them, hearing of their deeds, seeing pictures of them, etc., draws our feelings, memories, ideas, and commitments into their subsidiaries: ethical values and acts. Thus, they have, as metaphors, the power to preserve cultural values and standards and to inspire creative acts representing higher values.

In sum, then, we can say that an extension of Polanyi's notion of symbol into the ethical domain of knowledge and action relies on his concept of metaphor. And the particular metaphor that is relevant to ethics is that of great men whose personalities and accomplishments have so impressed a culture that they act to draw us into an appreciation of the values their lives embodied.

But what is the dynamic by which this appreciation is developed through participation in the metaphor? For a closer look at how the metaphor of great men draws us into the life-stream of their value-insights, we may turn to the manner in which it affects us. Polanyi says that world views are to be judged not by the standards of science but by the criteria by which art is judged: as a work

of the imagination.<sup>318</sup> The metaphor of Great Men is indeed a work of the imagination, as we have noted, and must be approached as Polanyi would approach and judge a general world view (for this is actually what such metaphors represent!): by criteria pertaining to art.

This does not mean that Polanyi thinks root metaphors of reality (including what I term "ethical metaphors" of great men) are simply works of art, as though they bore no import for our commitment to seek reality. In the first place, we shall see that Polanyi believes that art itself does bear on reality in its own way. But, more importantly for our purposes, we need not identify ethical metaphors as mere art forms. Polanyi says we should judge them by the criteria of art, but he does not say that they are art in the same sense in which poetry, literature, painting, sculpting, etc., are art. If he did believe this, we could not distinguish the domain of art from that of ethics or philosophy.

By the "criteria" of art I think he means that, since ethical metaphors are products of the imagination, we must examine the manner in which imagination functions in art to

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<sup>318</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 104.

judge whether our imaginative insights in other domains are indeed integrations through imagination or are mere assumptions. And, since art gives the best illustration of how imaginative integrations, including art's power to integrate us into its symbolism, functions, we may turn to art for insight concerning how to understand a similar imaginative process in ethical metaphors.

We may, then, lay to rest any idea that art does not bear on reality. It does introduce us to imaginative realities which may or may not open doors to new insights into the world of perception and thought. An artistic problem is an imaginative anticipation not of unknown facts that already exist but of a fact of the imagination that could exist.<sup>319</sup> The artist is not necessarily interested, then, in "realistic representation". He is not after realism in this sense but rather he seeks an artistic reality.<sup>320</sup> This artistic reality requires an act of the imagination; and such an act may lead one into a world quite different from the one he lives in--yet still a world to be judged as such on the merits of its own power to draw us into it.

The difference between acts of imagination in metaphor and those in science or the other domains we have

already discussed is that others may reap the benefit of original work in science (and other fields of thought) without repeating the imaginative effort of the scientist. But a work of art is independent of its author and draws us into itself demanding that we re-create the vision of its author.<sup>321</sup>

Ethical metaphors, then, are realities despite the fact that they are imaginative productions. They draw us into a world of value that could not be seen until, by a unique combination of self-surrender and imaginative interplay we are shaped by their power to inform us. This act of imagination is different from that of the ethical thinker who, after a long period of study, achieves creative insights and discoveries concerning ethical realities. Such work is more like that of science than art. But this is not the full scope of ethics. Ethical metaphors are more like art than science in that they require us to perform the same act of imagination that the great man performed in order to achieve and benefit by his insight. As an ethical thinker, one may build upon another's thoughts and advance ethical thinking. But one cannot build upon the insights of a great man until one has surrendered to his metaphor: and this requires re-enacting the imaginative act that produced the metaphor.

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<sup>321</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), pp. 84-5.



Concerning the basic dynamic of artistic symbolism, Polanyi says,

First the artist produces from his own diffuse existence a shape circumscribed in a brief space and a short time--a shape wholly incommensurable with the substance of its origins. Then we respond to this shape by surrendering our own diffuse memories of moving events a gift of purely resonant feelings. The total experience is of a wholly novel entity, an imaginative integration of incompatibles on all sides.<sup>322</sup>

Important for understanding the relation of an ethical metaphor to society, however, is Polanyi's claim that symbolic integrations of art, poetry, myth, etc., do not enter our lives in a practical way. They do not "work" in the practical sphere. They have to be re-enacted through imagination with each encounter and are not made functional in society.<sup>323</sup> Thus, the metaphor of a great man does not itself lay down rules about how to achieve the Good. Such metaphors are ideals, outside the realm of practical ethical life. They may draw us into a world of inspiration and give us insights never before attained. But they themselves do not enter into our everyday world and demand reform. We must apply the inspiration of the metaphor to our practical efforts and insights before any change can occur. And this practical activity is clearly different from a pure indwelling within the

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<sup>322</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 88.

<sup>323</sup>Ibid., p. 125.

metaphor. Only when the meanings yielded within the metaphor have become, with much human effort, eventually integrated into the communal vision of value and the Good and have been employed to inspire change do they effect cultural development. And, at this stage, they are no longer metaphors but are communal, indwelt forces of change. They no longer require an imaginative effort to be comprehended, but require only a commitment to submissive and creative participation.

Art, then, affects life by crying out against the meaninglessness of culture and thereby proving its own capacity to transcend culture by imaginatively projecting new visions of meaning.<sup>324</sup> Art affects the lived quality of our existence,<sup>325</sup> and we effect new standards of life in order to integrate these qualities into our lives. As art, these visions of meaning are separate from our lives. And, as integrated into life, these meanings are no longer art. This "de-artization" of a symbol is comparable to its destructive analysis which, as we remember, has the benefit of breaking down the elements of an insight, a technique, etc., into "palatable" particles capable of reintegration in new forms. And so ethical metaphors may be broken down by destructive analysis (whereby they cease to be metaphors) to

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<sup>324</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 116.

<sup>325</sup>Ibid., p. 109.

yield insights and standards which the community may employ for development.

We have already seen in previous sections how in epistemology, ontology, and ethics insights are projected as universal standards to which all must submit. Polanyi claims the same universality for art. He claims art is both intensely personal and detached in that the finished product bears inseparably the personality of the author and yet has a life of its own. Thus, art constitutes a personal claim to a universal standard of truth and reality in the same sense in which science and other intellectual endeavors claim universal standards.<sup>326</sup> And that is why Polanyi says that art has no tests external to art.<sup>327</sup> Art may interact with tradition and the public's present inclinations as well as the author's judgments. But an artist submits these to being universal standards which may be contested by other artists--for they are not infallible for being art!

The ethical metaphor, as an imaginative work similar to the symbols of art, must be judged by the universal standards of meaning in the ethical domain which they give

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<sup>326</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 102.

<sup>327</sup>Ibid., p. 103.

to the culture. Only those who can be drawn, by an act of the imagination, into such a metaphor can judge whether it truly introduces one to a world of ethical possibility. Such a judgment must be distinguished from that concerning whether communal insights into value or the Good are fruitful for bringing the Good into concrete reality through standards of ethical action. The first judgment is more like an artistic judgment; the second judgment is more like a scientific discovery. Both judgments function in the ethical domain of knowledge and action.

Returning to Prosch's claim that morality derives its power to carry us away through the same sort of trans-natural symbolic integration that operates in art and religion, we clearly can agree with him to a certain extent. Further, he is correct in pointing out that a refusal to participate in the ethical symbol reduces it to merely an observation with no power of commitment.<sup>328</sup> But the mistake Prosch is making here is that he identifies Polanyi's entire notion of value with the ethical symbol. And I have tried to show how the ethical domain, though it supports and is, to some extent, supported by ethical symbols, is not circumscribed by the borders of these symbols. The ethical

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<sup>328</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 105.

domain also includes commitment to values and standards that are easily comprehended with no real effort of the imagination but with a simple intent to submit to the standards one has learned within his culture. Prosch's identification of ethics with ethical symbolism is not only textually incorrect, but it implies ideas, inconsistent with Polanyi's explicit statements.<sup>329</sup>

One important implied inconsistency is Prosch's assertion that values are persuasive only because they "carry us away".<sup>330</sup> Here he uses the language of symbolism to describe the source of authority for ethical values. He implies that commitments are possible only when we are carried away by an ethical symbol. But this assertion places too much emphasis upon art as the model for knowledge and action. It overlooks all Polanyi has said about the role of commitment in such non-symbolic endeavors as science, technology, history, politics, etc. If commitment is powerless without symbol, then it ought to be powerless in science. But Polanyi says it plays an important role in science. Therefore, commitment

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<sup>329</sup>Cf., Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 30; 45; Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 65; Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: University of Chicago Press, 1969), pp. 18, 31, 44.

<sup>330</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 105.

cannot be dependent upon symbol for its power, although its ideal can be manifested by committed application of the symbol.

Another inconsistency lies in Polanyi's explicit denial that ethics is grounded in symbol. He says, "Moral rules are therefore an instrument of civic power in the hands of those who administer moral culture, and morality is allied to custom and law. Men form a society to the extent to which their lives are ordered by the same morality, custom and law, which jointly constitute the mores of their society".

Clearly, if Polanyi's work in Meaning is consistent with his earlier thought (and I have argued that it is), then Prosch is wrong to narrow the power of ethics down to ethical symbols. They have an important role to play; but, as we can see from the quote above, the ethical domain includes much more than ethical symbol.

We may conclude with some brief remarks about religion. Polanyi classifies religion as an imaginative endeavor which generates symbol. But the solemnities of religion differ from works of art in that they are deliberately unoriginal. They employ conventional and traditional forms, and they intend to call our existence to a comprehensive and lasting framework.<sup>332</sup> Participation in worship is a way of

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<sup>332</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 118.

thanking and trusting God, and ritual is a way of realizing a sense of eternity over temporal existence. For Polanyi, God is the focal point that fuses by imaginative effort all the incompatibles of the practice of religion. Only through participation in acts of worship can we see God.<sup>333</sup>

Now Prosch has evidently picked up Polanyi's assertion that only by participation in religious symbol can we know God as a clue that the same pertains to ethics: only by participation in the ethical symbol can we know the Good. But we must observe that the analogy does not hold. In Polanyi's view of religion, God is the symbol which gives meaning to the subsidiaries of ritual and worship. Thus, Polanyi is consistent in saying that we know this symbol only by participation in it. He says of all symbols that they are known in this way. But ethical symbols, which are also known only by participation, are not the whole of ethics. This much is plain from the passages referred to above. Thus, we do not come to know ethical realities merely by participation in ethical symbols.

Finally, we must note that the basic attitude of man, whether concerned as moral or religions, is one of holding together the incompatible elements of life (fears, pains, anguish, etc.) in a permanent tension with the hope that he

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<sup>333</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), pp. 155-6.

can do what he must by a power that is beyond him and yet which enables him to live within the limits of his capacities, his "calling".<sup>334</sup> This hope is an attitude that can be symbolized; but it is not a symbol itself. Attitudes such as hope, fear, hatred, love, etc., are not in themselves symbols as Polanyi understands them. But they are effective in defining the kind of response we take up toward the symbols our culture provides us or that we discover. Thus, we must not understand attitudes like hope as ethical or religious symbols, even though they join incompatible elements together under a tension. For there is no imaginative effort involved in taking up hope, except in response to symbols that demand such effort.

I conclude, then, that Polanyi's notion of metaphor is an instance of symbol that bears on ethical realities. This bearing has to do, however, with giving us visions of particular values or the Good which we cannot attain without surrendering and submitting to the symbol. It does not have to do with the whole of ethics, such as the development and learning of moral standards, moral commitment, submission to custom and law, and knowledge of moral values, that is possible apart from symbol. We may now turn to Polanyi's

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<sup>334</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 156.



explicit statements on the nature of ethical realities in society in an effort to understand how the whole of the ethical domain actually functions in society.

## CHAPTER SEVEN

### CONCLUSION AND TRANSITION

We have established that all value knowledge bears the same structure as knowledge in any domain. We organize our vague notions of value into the explicit integrations that form our concepts of value. And these concepts are not mere mental constructions but are arrived at with the commitment that they touch upon an aspect of reality. We are committed to our concepts as revealing aspects of reality; hence our conceptions of value, Good, and right represent commitments in these areas which we have already made at the moment we "discover" these conceptions. We indwell our value commitments, bringing them to explicit focus when the challenges of life require reflection and value-reorientation. And we discard those value commitments which prove themselves out of touch with the reality we face; i.e., we prove such values to be "false".

We have shown that the body, as the prime medium of all knowledge, cannot be disregarded in value-knowledge. The body mediates between the subject-object dichotomy, allowing for the appearance of a world already shot through with values, preferences, and a sense of what is right and Good. The body is the prime medium of experience; and our conceptions in all domains of thought are explicitations of the tacit

knowledge mediated through experience, the contact of the body with the world. Hence, explicit value-concepts are grounded in a perception of a world in which values are always already operating; and the skills and habits of right action and of consistently responding appropriately to our chosen values indeed essentially involve the body.

Value-knowledge, then, is an intuitive integration of particular value-preferences into a systematic whole which bears the marks of a grasp of reality, of the kinds of values which we ought to prefer to realize in the world. Mediated by the body, value-knowledge grows as we gain insight into the nature of the world in which we live and into the nature of the Good itself. Each insight integrates tacit elements of knowledge that heretofore were non-functional, bringing a new mode of life to the person. And each insight acts as the tacit ground for new discoveries.

Knowledge of values is neither inductive nor deductive, though it may include such inferences. Rather, it is constituted by testable intuitions which can be criticized by means of the results we obtain in following them. If the results lead to a sense of reality, we are justified in following their lead; if not, we are not so justified. We must see Polanyi as an intuitionist-cognitivist in value theory. Further, we must see his position as mediating between a rationalist and empiricist position; for we do

have an a priori sense of "betterness", but this sense is not concrete nor does it give us an insight into particular values. The sense of "betterness", of one thing or course of action being better than another, is rooted fundamentally in our biological existence; but the explicitation of concrete, particular values is a process of intellectual discovery. And such discovery can be "right-headed" or misdirected, right or wrong. Standing out beyond our comprehensions is reality itself, luring us to ever more comprehensive integrations of truth in the domain of value-knowledge.

Value-knowledge, then, can be said to be "true" or "false". Like all other forms of knowledge, a tacit knowledge of values is a kind of "foreknowledge", a desire to make explicit our vague sense of what is better. This movement, lured and conditioned by the reality it seeks, is a passion for understanding, a passion for breaking through the paradoxes and irresolved difficulties of present conceptualities into new vistas of truth. Thus even in value-knowledge we follow our intimations of reality, seeking the marks of truth in our conceptions: fruitfulness, intrinsic interest, coherence, accuracy and close definition, and systematic relevance within the domain of value-knowledge.

All of these marks of truth, of the knowledge that the values we hold are true in the sense that they reveal something of a world of value that remains tacit in our

understanding, a tacit world that calls us to the responsible explicitation of the concepts it promises us.

Commitment and movement toward the realization of such promise within the domain of value-knowledge is the essence of a personal knowledge of values. We find ourselves already committed as persons to the explicit concept of a value which we have been indwelling personally in the tacit dimension of knowledge.

This does not mean that the values we hold and explicitly own as our commitments are subjectively chosen in the sense that they are arbitrary and unjustified. Personal knowledge of values is responsible knowledge. Like all other domains of knowledge, it both proposes and obeys the standards of correctness that are suggested within the domain itself and which are properly relevant to it. Our assertions of value-knowledge are essentially the obedience of personal commitment to universal standards that grow out of prior, tacit commitments. Our explicit values are, thus, always concepts which integrate personal commitment with impersonal standards; and in this sense they are said to be responsible commitments. Explicit commitment to a value is at the same time submission to the universal value standards implied and proposed as part of the commitment. And this submission involves an expectation that others should also submit to the authority of such values; for we submit to what we believe

are universal value standards. A responsible judgment on what is a proper value is personal knowledge in that it involves both the tacit and explicit poles of knowledge.

We begin, then, by ordering our preferences in the attempt to satisfy our most fundamental biological needs; and this effort represents a tacit foreknowledge of values that we will come to acknowledge as such in the process of value-explicitation. Thus, the need to evaluate and order values is a need to know them, to achieve intellectual insight into them. And each attempt at re-evaluation and reordering is satisfied only when new levels of understanding are reached--levels which themselves, firmly indwelt, become the tacit ground for higher integrations of more profound values. The ultimate reality of which our process of value-explicitation allows us an ever more comprehensive grasp, as judged by the marks of truth that attend any knowledge-claim, is the Good. Thus, we attend to the Good and engage in the process of bringing it to clarity through our personal commitment to its explicitation in knowledge and its integration in action.

We achieve our notions of the Good and of value, then, by arriving at comprehensive visions that are grounded in and bring integrated unity to our various tacit comprehensions of it. The Good finds continued and unexpected

confirmations as we proceed to explicate it rightly according to the calling to responsible judgment by which the reality of the Good itself attracts us.

Our explicitation of the Good proceeds both from a recognition of the Good as a whole toward an identification of the tacit particulars or values which compose it and from a knowledge of such particular values toward a comprehension of the whole they compose. We "interiorize" particulars in order to integrate them into a comprehensive whole; and we employ a "destructive analysis" of the whole which we comprehend and indwell in order to grasp new values which have integrated themselves within our grasp of the whole.

The explicitation of the Good depends upon the alternate use of both of these methods. However, the explicitation of a particular value is generally the result of destructive analysis, while the explicitation of a comprehensive whole that reflects the Good is achieved through the integrative interiorization of particular values. In either case, explicitation is not a matter of logical deduction or empirical "addition". It is fundamentally a matter of intellectual insight.

Helpful in explicating the Good is a formalization of this insight. Polanyi does not believe that any domain

of knowledge can be fully formalized. The key tenet of tacit knowledge is that we always know more than we can tell. Thus, knowledge as such, in any domain, cannot be identified with the system which formalizes it. And this must be true also of the ethical sphere of knowledge. If we attempted such a formalization in this domain, the same problems that attend such attempts in other fields would attend it: systematic errors, misapplication of facts and procedures, the inherent impossibility of fully formalized knowledge. Our perspective of the Good must, rather, be guided by our personal commitments which are no less unjustified for being unformalizable.

The dual procedure of explicating the Good and discovering higher values is also a procedure of correcting false values. We can isolate them through destructive analysis, correct what is wrong in them, commit ourselves to the restructured values, and re-integrate them into a renewed, comprehensive grasp of the Good as a whole. Values themselves are an integration of both tacit and explicit components of the value commitment; this is what Polanyi means by a personal knowledge of values. Thus, no theoretical, explicit structure or system can be identified with the process of discovering and holding values. Such an identification mistakes a sociology of values with a comprehension of the dynamic of value-knowledge.



personal knowledge of values involves, then, what Polanyi calls "indwelling". Indwelling is that deep form of commitment in which we spill ourselves into subsidiary elements and arrive at discoveries in the value realm completely committed to them. We indwell ethical realities, discovering explicitly those to which we have already become committed. Such indwelling represents the truth of the existential dictum that "existence precedes essence." For the "spilling over" of indwelling, indeed the very act of indwelling itself, is the "thrusting forward" of our existence in the sense in which most existentialists understand it. Further, such indwelling is quite different from a distanced contemplation and rational control of a concept; that music, art, poetry, etc., emphasize such indwelling is adequate evidence of this. But this does not mean that we cannot indwell intellectual concepts so as to rely on them tacitly in order to focus on new discoveries; for the enterprise of science attests to this capacity.

The point is that we do indeed indwell ethical realities; but we neither make our values subservient to explicit choices (as do the existentialists) nor do we first discover values and then commit ourselves to them. We indwell them, discover explicitly what is tacit in our indwelling, and find ourselves committed explicitly to what

previously was only tacitly valued.

Value-knowledge is not discovered in isolation from others. Like all knowledge, value-knowledge is convivial. Polanyi is not a solipsist; tacit knowledge functions to give us an awareness of the person through our indwelling the meaning of his acts. All communication depends upon the communal sharing of social meanings that arise out of such indwelling; thus, all values arise out of such sharing and are essentially interpersonal. Our values and standards of the Good are not simply ours, but are discovered in the context of tacitly indwelt social meanings that are an inherent part of our personal reality. And this involves specific acts of trust and obedience to authority, all of which constitute particular social structures. We are all interpersonally reliant upon such structures in that we indwell them as a community of persons and develop our values in the communal context of human meaning. Our values transcend our own particular ability to integrate and comprehend them; we rely on communal meanings. This does not mean, however, that we cannot oppose particular social values; we have the power to isolate them by destructive analysis and to consider them critically, restructuring and re-integrating them into social life through the common forms of social change. We are then both committed to the tradition of communal meaning and capable of opposing it without destroying it

through radical action. We must submit to the tradition in order to learn the social meanings essential to moral development; but we oppose its falsehoods as we discover them. We learn through indwelling the tradition not only what it is but what it ought to be. Nonetheless, we are not justified in claiming that our notion of the Good is the only correct one; even in our conviction of being right in opposition to social concepts, we must acknowledge room for growth and correction. We must learn the tradition from persons who indwell it and are connoisseurs of it; and we must intend to become connoisseurs ourselves, connoisseurs who can be opposed and corrected.

Value-discovery, then, is a response to our convivial obligations and draws us beyond ourselves into a reality of Good to which we find ourselves already committed and which we hold as universal truth. We "break out" of old thought and behavior patterns by transcending old knowledge-structures in our movement toward new vision of the Good. The questing power of the mind wedded to imagination taps into the potential of discovery inherent within the reality of the Good, releasing and controlling the path of discovery through heuristic visions. Knowledge of value and of the Good is not a mechanical process of discovery but is a uniquely human event. Discovery requires a human grasp of a problem, a paradox in value-theory, and involves effort

and free exploration. Only when we go beyond mechanical rules of procedure do we "break out", risking defeat and hoping for accomplishment.

The marks of a true value-discovery are the same as for any truth; they show a sufficient degree of plausibility in resolving present difficulties, are accurate comprehensions of the tradition in terms of our present conceptualities, are systematically important and intrinsically interesting. Further, we follow "hunches" en route to their discovery, we have "anticipatory intuitions" of them. We know in advance what would "count" as a proper ascription of value, and we find an intrinsic promise of a deeper access to ethical realities through an indwelling of our discovery as a "final" resolution.

The process of value-discovery is a passage from more tangible realities to less tangible ones. But being less tangible does not mean that a higher insight into the nature of the Good is less real. For Polanyi, a concept is "real" to the extent that it gives us access to a deeper comprehension of reality. The less tangible a concept is, the more comprehensive it is and the wider a range of indefinite future confirming manifestations it presents us. Thus, the less tangible a value-discovery is, the more "real" it is; such discoveries approach the reality of "wholes" or "universals".

Universal values are not simply aggregates of particular, elementary values. They are integrations of these into novel, complex, wide-ranging insights into the Good. We rely on knowledge of particular values in order to achieve such integrations and are subsidiarily aware of them in the more comprehensive insight. We acknowledge them as parts which ontologically sustain and contribute to the reality of the Good as the highest universal. It is the universal itself which attracts our focus in the search for meaning and knowledge of the Good, which releases and controls our process of achieving higher insight. Thus, universals are not mere mental constructs but have in themselves a power to draw our focus and crystallize our insight into higher value and the Good. Our highest vision of the Good is that standard to which we ourselves submit and which we choose to indwell as our highest access to the Good.

The concept of values and of the Good does not constitute the whole of the ethical domain. The ordering of goals constituted by our insight into values implies an ordering of the human activity which is committed to realizing them. For knowing a value is itself a commitment to it; a commitment to realize it. If our values are true, then the effort to realize them involves actions which are in accord with the nature of the Good in so far as we understand it. Such actions are right actions; and those actions

which fail to be guided by such insights are wrong actions.

Communal value standards imply communal norms of action to which we submit as we participate in developing these standards. Our behavior is always guided and disciplined by the authority of communal norms of action, which are ordered toward their own stable preservation. These norms of action are the origin of communal obligations, of our sense of "ought". We find ourselves obligated to act rightly, to act in accordance with communal norms. When we act rightly, we act justly; and we have a right to pursue the Good according to communal norms.

A personal knowledge of the Good, then, implies a personal knowledge of right and wrong. For we have a personal knowledge of the communal standards of action that are implied in our system of values.

Our development of ethical norms requires and is more than a change of behavior. Just as all knowledge is constituted by a dynamic of tacit reliance and explicit focus, so all changes rely upon simple, particular states of being in order to develop more complex and highly integrated ones. Since all knowing is a form of change, discovery of values and new insights into the Good are changes of human modes of being. They are ontological developments which share the dynamic of tacit knowing in the structure of reliance and focus.

Ontological change is not mechanical and determined. The movement from a lower system of values to a higher, more complex and integrated one which issues in new standards of action is a free movement. This does not mean that the movement from a lower level of moral functioning to a higher is not deliberate. But it does mean that such achievements are motivated by uniquely personal intimations of the Good and follow an indeterminant course. We are able to decide whether to fulfill self-set standards; we are not determined by them. Thus, in the process of free decision, we act out and continually resolve a tension between universal standards (the determinate pole of choice) and personal commitment (the indeterminate pole of choice). We are ontologically free to choose our actions; and this indeterminacy and creativity are logical implications of tacit knowing (since the unspecifiability of tacit clues make determinism permanently unjustified). The moral life, then, is free, creative, and emergent. We are responsible for our decision and are called to take responsibility for our freedom within the context of communal life. Freedom and responsibility are given together, we must deal with an ordered society within which we order our own actions in pursuit of the Good.

The dynamic of moral growth follows the same pattern of integration and development as applied to all forms of ontological change from lower levels to higher ones. Higher insights into value are epistemologically dependent upon lower ones; and higher standards and norms in pursuing the Good are ontologically dependent upon lower ones. The higher levels impose on those below it the "boundaries" of their functioning, such that they serve the higher in sustaining its potentials. Higher standards of action are not, however, reducible to the aggregate norms and values of lower standards. Rather, we indwell or "embody" these lower standards giving them what justification they have in view of a higher indwelling of these higher standards and forms of action which harness the dynamic of the lower. And we may seek constantly to achieve higher levels of moral functioning, if we follow the ontological impetus toward the higher that is inherent within the structure defined by "reliance" toward "focus". We move ever upward in our ability to make responsible, effective choices in pursuit of the Good.

This development toward higher levels of moral functioning is not merely a personal achievement. It is carried on within the communal context and is ultimately a communal achievement. Indeed, we have an obligation to sustain and forward society's values. Moral acts are themselves forms of our total aorganismic participation in the moral life



of the community. They are guided by insights into right action, insights which allow submission to the communal moral Good.

Right action, then, embodies both the moral and the non-moral forms of human action according to the ordering principle of the pursuit of the Good which is inherent within it. The establishment of a standard of right relies upon our commitment to right action and justice as ordering principles within the community. The Right embodies itself in such acts. Human action itself forms a hierarchy of levels of human reality, each level realizing a higher form of moral and communal life.

Since moral life develops through submission to standards which we learn within the community and project universally, we must view it as obeying and being guided by rules of action. Moral standards are the operational principles of moral life as it moves toward the potential of realizing the Good. These standards comprise the rules of action within the community and tend to establish a stable pattern of ethical life which we are obliged to respect. But respecting these standards does not mean obeying them unquestioningly. We are free not only to explore alternative ways of pursuing the Good which may enhance the moral life of the entire community, but we may also abrogate our responsibility and follow our own self-oriented desires in a manner destructive of

communal-and-personal-development.

We develop moral life by finding alternate ways to achieve this Good when our normal ways are closed off, by discovering novel rules of rightness, and by a normal maturation of our present moral life. Also, we may be "carried away" by moral symbols into new dimensions of moral life far beyond our grasp without the aid of the symbol.

For the most part, however, moral life develops in a natural way. A continually developing insight into right is the ordering principle of moral life. It releases and sustains the potential for right action and establishes workable systems of morality. Our highest, most well integrated standards become the centralized principles of our ethical life, regulating our behavior in a general way. But they leave room for an exploration of "equipotential" methods of responding to specific situations, just as biological organisms are successful in life by adjusting to specific situations while meeting the life requirements of the organism as a whole. Our moral principles develop toward stability and permanence as long as they are effective in meeting the requirements of moral, human life as a whole; but, toward the end of adaptation for the better, they remain flexible, changeable, and open to new discoveries, new insights into right.

Moral life is the life of the person as a whole.

And moral freedom involves the ability to either grow or devolve. Moral evolution occurs only under obedience to or proper restructuring of moral standards consistently pursued; moral devolution occurs when one deliberately performs wrong actions. We learn rules of rightness from the tradition, from connoisseurs of the moral tradition. And we change it for the better by achieving connoisseur status ourselves and establishing new rules of rightness which benefit the common Good. We can commit errors or refuse to benefit the common Good. But our moral health depends upon positive development of the moral life. And this development establishes a hierarchy of values and standards of action in which each level supports and sustains the one above it and is controlled by the higher level.

We, then, have the power to change communal life for the better. We can even achieve a status of greatness whereby we can function with high effectiveness--perhaps even as a symbol--to effect social change. Thus, we can transcend our moral culture toward higher ideals, toward the "ultra-biology" of moral change.

Moral life, then, moves ultimately toward a communal realization of the Good through a self-regulating movement

toward the consolidation of a unified and unifying moral development of persons. Such change depends, however, upon human decision. And even entire societies may follow a communal intimation of hidden moral realities. Borrowing from Teilhard de Chardin, Polanyi calls such communal realizations the development of the "noosphere", the sphere of life most uniquely human, moral, and spiritual.

We may, then, summarize my contributions to Polanyi studies thus far by pointing to four specific contributions:

- 1) I have drawn from a wide number of resources to present an integrated description of Polanyi's epistemology and ontology;
- 2) I have located the parallel between his epistemology and his ontology and have lifted out from them a basic structure to ethical experience and have shown that ethical theory is possible in terms of personal knowledge;
- 4) I have extended the ethical domain of knowledge (and action) beyond the purely symbolic knowledge with which Harry Prosch wishes to identify it and have shown that ethical knowledge is fundamentally personal knowledge, sharing all of the elements and the dynamic of personal knowledge.

We may now proceed to the confirmation and "fleshing out" of these contributions in Part II.

CHAPTER EIGHT  
AN OUTLINE OF WHAT WE MUST EXPECT TO FIND  
IN POLANYI'S SOCIAL THOUGHT, BASED UPON  
WHAT HAS BEEN ESTABLISHED THUS FAR

We have established that the structure of tacit knowing pertains to a knowledge of values and of the Good. And we have further established that the ontological parallel to tacit knowing, the ontological structure of evolution through a reliance upon particular elements to integrate novel wholes, pertains to the moral development of the person according to "rules of rightness". And the general structure of the process of valuation and right action should now be clear.

But, despite the clarity of ethical import which Polanyi's epistemology and ontology evidences, we can still go much further in developing his notion of the ethical domain. Having explicitated the structure of an ethical domain from his epistemology and ontology, we can now search his social and political writings for confirmation of this structure. If we find this structure confirmed in these writings, we can be much more certain that the ethical structure we have explicitated was indeed tacitly implied in Polanyi's epistemology and ontology and was not a mere isogesis of the texts. For, although it is possible to

slant the evidence in order to make these texts appear to be at least favorable to the development of ethical theory, such self-deception becomes virtually impossible when the ethical interpretation can be tested.

Polanyi has not left us without an adequate test of such an interpretation. First, although he never attempts to develop ethical theory as such, he does often refer to concepts which are valid only under the supposition of an ethical domain of knowledge and action: eg., the common Good, freedom, moral culture, moral ideals, "right" and "wrong" types of societies. Such references, though not comprising a systematic ethics, are useful in testing the fundamental structure already explicitated. If what Polanyi says in such references either is a direct implication of our explicitation or at least is consistent with it in a confirming sense, then the explicitation is probably correct. Thus, a good test of the reliability of our explicitation is to draw the most reasonable expectations concerning what Polanyi might explicitly say about moral life on the basis of his tacit understanding of the ethical domain. We can then compare our expectations with an account of what he actually does say, as clearly and systematically as this can be elucidated. If the two match, then Polanyi's explicit moral concepts are consistent with his tacit understanding as comprehended in our explicitation. And this

"consistency" will also bear the marks of deep rootedness in the more systematic tacit structure of the moral dynamic implied in his epistemology and ontology.

We should be surprised if, after demonstrating how knowing and doing are inextricably linked, we did not find the enterprise of science determined not only by the epistemological dynamic of tacit knowledge but also by rules of research and investigation which transcend mere epistemological requirements. Science is a social procedure for establishing facts about the natural world. It is in the unique position as a cultural institution of organizing the social responsibilities of scientists to pursue the truth for its own sake.

We should expect, then, that science will function under rules which ensure the proper and effective pursuit of this goal. And these rules are actually a "mini-model" of an ethic, since they involve social rules aimed at achieving a specifically defined communal Good. Thus, the institution of science itself should evidence an "ethic of discovery" which organizes the enterprise as a whole.

We should find truth itself as an ultimate value in this ethic of discovery, a value realized as a moral value. For inherent in the enterprise of science is the conviction that we ought to discover truth; and, since the failure to do so can come through deliberate (self)-deception, fraud,

and generally inappropriate methodology as well as by honest error, the ensurance of right procedure demands rules which structure behavior in many ways other than those which specifically govern research. The pursuance of truth, then, demands an ethic of discovery. And we should expect Polanyi to insist on all the social elements which ensure the discovery of truth: free exploration, autonomy, conviction and conscience.

We should, then, be able to find within the communal enterprise of science an ethic which cannot be denied essentially as pertaining to communal concerns in general. That is, we should find it strange that the scientific enterprise would stress free thought and exploration, the pursuit of truth, and responsible research while finding these denied in other communal concerns. Since we have established that the ethical dimension involves knowledge of ethical realities, then there are moral truths. And we should expect Polanyi to suggest at least the possibility of such knowledge in the moral domain. Indeed, the same dynamic of knowledge and action which establish intellectual standards of truth in general should be recognized as effective in the moral domain.

If our argument that knowledge should be expanded to include moral knowledge leads us to expect to find evidences of such assertions in Polanyi's political and social writings, then the argument that the ontological dynamic of biological



development should be expanded to a higher development of man into moral and spiritual dimensions should lead us to expect that Polanyi would refer to moral rules within the social context. Just as intellectual visions in other domains establish the "rules of rightness" for pursuing truth and accomplishing purposes within them, so we should expect to find moral ideas functioning in society as rules of rightness. And we should expect to find conscience playing a prominent role in the communal moral consciousness, given the intuitionism of Polanyi's ethical epistemology.

The epistemological concept of "indwelling", and its ontological counterpart in the concept of "boundary conditions", should show up as playing an important role in the proper functioning of a communal ethic. We should find Polanyi referring to an indwelling of moral teachings and ideals; and, because of his insight into the nature of symbols, we should expect to find the assertion that "moral heroes" act as symbols that "carry us away" into new dimensions of the personal knowledge of moral realities quite consistent with his theory of personal knowledge as a whole. We should discover that morality, like any domain of human knowledge and action, is motivated by passions similar to those for truth; and these passions drive us to an ever deeper indwelling of moral realities.

We should be very surprised to find any statements in Polanyi's social or political writings which support a deterministic position. For he specifically repudiates determinism in his philosophy of science. Freedom is at the root of his thought, as already evidenced in his epistemology and ontology. Hence, freedom should be the cornerstone of his social-political theories and, consequently, of his moral theory. For it would seem even more absurd to find arguments for political and social freedom while discovering assertions of determinism in the moral realm. We should expect Polanyi to emphasize both the power to choose and the liberty to choose.

This freedom, evident in the discovery of truth and preserved within the enterprise of science, will be given maximum interplay in the ordering of society toward the particular goods of each theater of human endeavor. Yet it will be disciplined by that ordering in a way which permits that good (and the communal Good) to be maximally realized. We should find some suggestion of a theory concerning how the tension between freedom and control is resolved both in the pursuit of discovery in the sciences and in the common pursuits of society. Without such a theory, we would find only a very sketchy and incomplete notion of the moral dimension.

It is clear that Polanyi cannot allow our freedom of choice to develop into anarchical social freedom. And, in order to clarify why he cannot do this, we must discover both what he conceives to be a free society and what he considers to be an "unfree" society. We can expect only "free" societies to be "moral" ones; and unfree societies cannot be moral. We should look for a thorough moral critique of non-free societies such as the Nazi regime and Marxism, as well as of societies which claim to be free but which do not obey the rules necessary to preserve both freedom and the pursuit of the Good. Without a critique of what does not count as a free (and moral) society paired with a description of what does count as one, we could confirm little of what we have argued concerning Polanyi's ethic.

We find, then, that, in order to confirm much of what we have argued concerning the structure and dynamic of a Polanyian ethic, we must turn to his social and political writings in search of scattered statements regarding moral life. For these alone can demonstrate (in so far as this is possible) not only that Polanyi puts his tacit ethical dynamic to work in these writings but also reveal a good deal of how that dynamic effects the functioning of society.

CHAPTER NINE  
THE SCIENTIFIC ENTERPRISE AS A MODEL  
FOR MORAL COMMUNITY

In this chapter I return to Polanyi's notion of the nature of the scientific enterprise in order to lift out the social dynamic of the search for truth (rather than the epistemological dynamic, which was dealt with earlier). My purpose in doing this is to demonstrate that science, considered as a human activity, involves essentially a moral strategy for achieving its purposes. Thus, science, replete with its commitment to truth, is a moral activity; and it binds scientists together as a moral community.. Commitment to truth, freedom of exploration, mutual control and polycentric interests, free competition for publication, etc., are all social and moral activities which make the achievement of truth possible. And, if truth is possible only under such conditions, then the development of moral truth itself can occur only under similar social structures. Hence, the republic of science is a model for the moral community. Its essential structure is the fundamental structure of all truth-finding, which is the root of all moral development (since without moral truth there can be no moral life).

I present evidence in this chapter that Polanyi intends to see his concept of personal knowledge extended to other domains of thought such as art and history. Thus, if the ethical domain is a legitimate field of thought, as I have argued that it is, then ethics itself must pursue ethical truths through the same truth-facilitating procedures which account for the success of science. And this means that a certain ethical structure must correspond to such an enterprise: the republic of science. The moral field of action requires a knowledge of moral truth which, in turn, depends upon a moral structure which permits truth to be discovered. Thus, moral decisions will be made in the context of a moral structure which allows its own self-revelation.

From this point, the "confirmation" slides into a description of how moral organization functions in society. And the description matches what we might have expected to be the case judging from the ethical theory I develop from Polanyi's epistemology and ontology. The chapter ends with a description of the communal movement toward the Good as a moral achievement. This chapter will demonstrate that the expectations outlined in the previous chapter are fulfilled by a close analysis of Polanyi's social and political thought; there is indeed an ethical substructure which functions

tacitly in Polanyi's thought. We shall, however, devote the last two chapters to Polanyi's concept of the free society (and the preversions of freedom).

### 1. The Moral Autonomy of Science

Science, as a human enterprise, provides a "mini-model" of an ethical society. Much of what we should expect concerning what Polanyi would say about the nature of morality may be found in his concept of the structure and functioning of the sciences. Thus, we may begin our investigation of Polanyi's explicit concepts of the moral domain by noting how they come to the fore in the scientific enterprise.

Polanyi explicitly declares that morality plays a significant role in the very foundations of science:

The third party in the scientist's mind which transcends both his creative impulses and his critical caution, is his scientific conscience. We recognize the note struck by conscience in the tone of personal responsibility in which the scientists declares his ultimate claims. This indicates the presence of a moral element in the foundations of science...<sup>335</sup>

This statement indicates clearly two important features of a moral dynamic: conscience (responsibility) and the freedom which this implies. The scientist has the responsibility to make true ultimate claims, or at least claims that are true in so far as he understands them. This

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<sup>335</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 41.

responsibility is prompted by conscience and is explicitly moral. A scientist would be wrong not to meet the standards of procedure and concern for truth that is inherent within the scientific enterprise. In so far as he achieves the communal aim of scientific truth in accord with the proceedings prompted by conscience, the scientist dwells within the moral framework of science.

The scientific enterprise, then, is deeply formed by moral considerations that flow directly out of the concern to guarantee the discovery of truth. The scientific community is a moral association of persons acting on the basis of a common belief.<sup>336</sup> That is, the scientist has a responsibility to speak to the common understanding of scientific truth, not only in the sense of the knowledge we have of particular truths but also in the sense of what generally counts as truth.

Polanyi sums up the moral structure of science in Science, Faith, and Society (pp. 55-6) as an emotional and moral surrender to truth. This surrender unfolds according to the following phases:

- 1) Love of science and faith in its significance.
- 2) Inspiration by and acceptance of past scientific heroes.

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<sup>336</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 169.

- 3) Striving to satisfy a feeling for reality by listening to scientific conscience
- 4) Fostering new original efforts and administering scientific culture.
- 5) Fellowship in a community of conscience rooted in the same ideals recognized by all.

The scientist is defined as such by his love of the adventure of discovery; and his commitment to the significance of science is essentially a moral one because it is a commitment to discover and be guided by truth. Thus, he relies upon the body of truth and propriety of procedure already firmly established in the scientific community. He is inspired by them and indwells them on his own odyssey. This indwelling forms a tacit understanding of what counts as true and worth researching, thus forming his scientific conscience. It is the lens through which he views and attempts to discover the truths concerning the natural world. And the fruits of his research constitute a new body of truth which provides new guidelines for discovering further truths. Guided by scientific culture, he assists in its administration. And, thus, he lives in, responds to, and participates in forming a fellowship in a community of conscience which guides the scientific enterprise.

We must define the scientific enterprise as a search for truth in relation to the natural world. The moral commitment to the discovery of scientific truth, as outlined



above, must be distinguished from the practical concerns of science. Science pursues knowledge simply for the sake of knowing and is not determined by practical, social needs.<sup>337</sup> Hence, Polanyi does not include the massive military-industrial concern to invent and produce a constantly renewed technology as essential to his definition of science: "We must reassert that the essence of science is the love of knowledge and that the utility of knowledge does not concern us primarily".<sup>338</sup> Indeed, practical discoveries are more the result of pure, theoretical research than the aim of them.<sup>339</sup>

This does not mean, of course, that science cannot be responsive to social needs; it only means that it cannot be subservient to them and that it must be developed on its own terms for its own purposes.<sup>340</sup> The independence of the search for truth represents a higher principle than that of the market.<sup>341</sup>

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<sup>337</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 4.

<sup>338</sup>Ibid., p. 6.

<sup>339</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: the Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), p. 19.

<sup>340</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), p. 18.

<sup>341</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), 25.

Polanyi, then, distinguishes between pure, theoretical science and technological invention. The former constitutes the moral association of persons engaged in the process of discovery, and the latter constitutes the application of discovery. The moral value pursued in science, considered as a morally disciplined enterprise, is truth. Thus, truth is a moral value realized within the moral guidance of the community of persons committed to it.

The commitment to truth in science functions as a moral absolute. It makes science morally autonomous in that no truth can be accepted or discarded on any grounds other than those which respect truth absolutely. Polanyi believes that the enterprise of science is grounded in our trust that society is in theory seeking truth and is willing to acknowledge the significance of discoveries even when they count against cherished prejudices. Every claim of science relies upon this trust.<sup>342</sup> Thus, no scientific theory can be criticized, rejected, condemned, or suppressed on political or ethical grounds.<sup>343</sup> The moral obligation of science to truth is an autonomous obligation which must be fulfilled according to standards projected solely out of that pursuit.

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<sup>342</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 73.

<sup>343</sup>"Can a Scientific Theory be Legitimately Criticized, Rejected, Condemned, or Suppressed on Ethical or Political Grounds?", R. Hollinger, Journal of Value Inquiry, 9, 1975, pp. 303-6.

## 2. The Ethical Dynamic of Science

The communal obligation to pursue truth in the sciences cannot proceed without order. Polanyi characterizes the community of scientists as a miniature "body politic" on the whole, though specifically established to pursue truth.<sup>344</sup>

If we can establish the means by which scientists control or regulate the body politic of science, we will be able to say something about the moral structure of science. For if science is morally committed to truth, then those means by which the scientific community is regulated properly to achieve this goal are fundamentally moral regulations; for their effectiveness rests upon the essential moral commitment to truth itself.

Polanyi believes that the way in which science actually functions in a successful way is the way in which it ought to be allowed to function. Science functions best when it functions as a republic consisting of a society of free explorers.<sup>345</sup> It functions successfully under a delicate balance of freedom and regulation. This balance is achieved

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<sup>344</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 49.

<sup>345</sup> Ibid., p. 70.

by self-regulation, which is generally effective in producing a fruitful conformity among scientists.<sup>346</sup> Most important, there is no central authority which exercises power over scientific belief.<sup>347</sup> Scientists are free to follow their hunches; but their hunches are valuable and worth following only in so far as they are informed by the communal sense of what counts as true.

Polanyi likens the self-regulation of the scientific enterprise to the way in which a group of people might accomplish the task of putting a puzzle together. Although there is no central plan governing the moves of each person, the puzzle is pieced together, and more quickly than it would be if only one person were working on it. The task is quickly accomplished because each person relies on the work of others while benefitting from each person's success in developing the picture.<sup>348</sup> Science, then, is a process of group cooperation and is more successful by virtue of being a group effort than it would be if it were the product of isolated

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<sup>346</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 57.

<sup>347</sup> Ibid., p. 51.

<sup>348</sup> Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), pp. 6-7.

individuals.<sup>349</sup>

The puzzle is put together in view of all. Each person responds to the total, joint effort of all. Thus, independent initiatives are organized to a joint achievement by mutual adjustment. There is a joint discovery of a hidden system of things. Attempts to organize the total effort under a single authority eliminates independent initiatives, reducing joint effectiveness and leading to paralysis of the operation.<sup>350</sup>

The ethic of the scientific enterprise, then, is constituted by the attempt to maintain the delicate balance of freedom and control within the communal framework of a self-regulation grounded in an eye for the truth. Mutual adjustment alone can insure the success of the scientific enterprise.

"Mutual control", then, is the means by which scientists "keep watch" over each other. Each scientists is subject to criticism by all others--or is encouraged by their appreciation. Of course, the scientific world consists of an unorganized melange of highly specialized fields; and no

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<sup>349</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), p. 8.; Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 50.

<sup>350</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), pp. 50-1.

scientist can claim to be competent to judge the work of those outside his field.

But scientific specialties are not each wholly unique. They generally overlap one another in the form of a "chain", so that one field may be in the "neighborhood" of another. One field has enough similarity to another that a scientist in one can comprehend and to some degree judge the validity of insights in another field. And the mutual judgment that arises out of this situation exercises the responsible control that maximizes freedom of exploration while minimizing stifling suppression. Out of such dynamic arises general standards of judgment which equalize standards of worthwhileness and plausibility throughout the scientific world.<sup>351</sup>

Thus, even though no single scientist can judge the validity of all research in a certain domain, he can critique the work of those who are themselves in a position to judge scientists whose work he cannot directly critique. This creates a continuous line of qualified critique and forms the ground of all mutual adjustments.<sup>352</sup>

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<sup>351</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 72.

<sup>352</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p 217.

Indeed, we trust specialists in knowledge only because we assume as true the cultural ideal that the domains of science are so coherent that specialists can supervise one another and, thus, warrant the confidence of society and its support of intellectual pursuits.

We must ask, then, by what standards this critique of mutual adjustment is carried out and how is it enforced. Polanyi says the main mechanism of control in mutual scientific authority is a mutual recognition of merit and contribution as well as a mutual censure of falsehood.<sup>353</sup> Such authority has the guardianship of the premisses of freedom in that it protects against lawlessness in the scientific community.<sup>354</sup> This means that a predominantly accepted scientific view of the nature of things must exercise a rather severe discipline over scientists.<sup>355</sup> For without respect for the ideals of science, scientists could only resort to charlantry, which would dissolve all scientific

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<sup>353</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), p. 21.

<sup>354</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 63.

<sup>355</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), pp. 92-3.

opinion, leaving no standards at all to satisfy.<sup>356</sup>

The discipline of mutual adjustment utilizes various means to assure a measure of control:<sup>357</sup>

- 1) publications in periodicals, books, papers, etc.
- 2) selection for scientific posts, research grants, etc.

But the most important method in an area where controversy arises is that of persuasion, of critical argument aimed at making the truth manifest. Critical argument is not intended merely as a destructive force. Its aim is to isolate and evaluate the nature of falsehoods in the scientific world. And such a task cannot be achieved without two important elements of evaluation: consultation with other scientists both within and without the field in question and competition of ideas in the interest of establishing the truth. Thus, consultation and competition are also important aspects of mutual control.<sup>358</sup>

These methods of scientific discipline guide research and judge results by allowing or disallowing their publicity. But they also appeal to the scientific conscience to strive for the truth out of a free response to it.

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<sup>357</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), pp. 47-9.

<sup>358</sup> Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 165.



Indeed, the purpose of these means of discipline is to make possible a free and spontaneous order of individual initiatives. For this kind of order is possible only if each scientist takes into account what others have done previously in relation to similar problems. Of course the effectiveness of mutual adjustment may seem to diminish somewhat as the group to which one must adjust one's efforts grows larger. For where large numbers are concerned, each can only adjust himself to a general state of affairs which the others have bequeathed to him. Nonetheless, the method works better than alternatives such as control by a central authority. In general, the method of mutual adjustment works quite well, no matter how large a group is involved.

A centralized authority, apart from any private authorities, tends to destroy the motivation of the persons thus controlled so that they do not choose to adjust to one another but must be forced to follow a "party-line". <sup>359</sup>

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<sup>359</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), pp. 185-6.

Polanyi likens the breakdown of individual adjustments to the situation that would result if individuals in a line of battle did not meet their responsibility to adjust their efforts to one another in attack and defense: the entire line of battle fails.<sup>360</sup> Or again, a centralized authority might be able to plan a summary of goals and moves required to achieve them; but it cannot say exactly which moves at which times will be effective in accomplishing particular goals.<sup>361</sup>

Polanyi calls this system of mutual adjustment a "polycentric" system. Each center of research adjust itself in relation to the others to allow a maximum effect in the group task with a minimum of stress to each.<sup>362</sup> In such a system, the line of authority remains between scientists rather than over them.<sup>363</sup> Polycentric controls yield an

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<sup>360</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: The Contempt of Freedom (N.Y., N.Y., Arno Press, 1975), p. 35.

<sup>361</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 134.

<sup>362</sup>Ibid., pp. 173-5.

<sup>363</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 56.

indirect consensus between scientists<sup>364</sup> and cannot be formalized into a complete system of inflexible rules. Polanyi considers insight into the general will governing scientists to be a tacit skill as are other human capacities that are governed by polycentric systems, such as physical skills, intellectual tasks, and, as we shall see, social life itself. Polycentric adjustment is evident in all phases of biopsychological development and adaptation, from the specialized functioning of organs in respect of the health of the entire organism to the polycentric task of harmonizing the purposes in life, the task we call the achievement of wisdom.<sup>365</sup> The more highly specialized and the greater the number of individuals involved in mutual adjustment, the better the polycentric system works.<sup>366</sup> Thus, the more complex the world of science becomes, the greater becomes the effectiveness of each, individual pursuit of truth.

Polycentricity has its strong points and its weak points. It avoids the risk of creating an inflexible body of rules generated by one authority which is incapable

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<sup>364</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p 85.

<sup>365</sup> Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), pp. 177-8.

<sup>366</sup> Ibid., p. 118.

of following the many leads to truth generated in a single problem. But, on the other hand, it cannot guarantee that any particular pursuit of truth will be successful or that the pursuit will be good for the enterprise as a whole.<sup>367</sup> Nonetheless, no other system can avoid these risks or provide the benefits of polycentric control through mutual adjustment (ibid).

The scientific world, then, is motivated in its pursuit of the truth by a fundamental moral concern for the truth. And this moral concern grounds the procedure of the pursuit. The scientific community forms a body politic governed generally by an ethical commitment to the truth and specifically by procedures which procure an effective balance between free exploration and communal discipline. This balance is maintained by polycentric controls of mutual self-adjustment. Scientists judge the validity and worthwhileness of one another's work, exercising discipline and control through persuasion, denying or forwarding publication, and criticizing one another's research in a free market place of ideas. The individual is free in science to speak and

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<sup>367</sup> Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 157.

seek the truth even if his convictions oppose current beliefs,<sup>368</sup> thus preserving the right of opposition.

The ethical dynamic of science meets some of the expectations we have developed from an analysis of Polanyi's tacit ethical structure. But, if the world of science is a microcosm of ethical life, then we should expect the freedom, the pursuit of absolute values, and self-regulation to be a part of ethical life as a whole. Indeed, Polanyi expands the freedom to pursue truth as an ultimate value to academic institutions, asserting that they should be free to pursue the discovery of truth in all domains of knowledge.<sup>369</sup> They should be free to follow independently the inherent interest suggested in exciting problems suggested in research in any domain of knowledge.<sup>370</sup> The education of society should impart a commitment to truth and freedom

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<sup>368</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 70.

<sup>369</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 41.

<sup>370</sup>Ibid., p. 43.

as the general authority of all knowledge.<sup>371</sup>

Polanyi refuses, then, to allow a commitment to pursue scientific knowledge to produce a rationalism which denies truths not discovered by scientific method as understood by "scientific rationalism". He claims that such denials are evidence that scientific rationalism is out of hand, as when the neurologist is compelled to deny the unconscious or declare that it is an ineffectual, epiphenomenon.<sup>372</sup> Polanyi reminds us that even scientific rationalism is guided chiefly by the intellectual, moral, and social progress of the 20th century. The authority, custom, and tradition of this society constitute the very language in which rational thought is expressed.<sup>373</sup> Thus, we should not imagine that rational thought can successfully deny the categories of custom, including morality, in which it is rooted. We must, then, admit that categories other than "true" or "false" are operative in our lives. Polanyi says, "Knowledge can be true or false, while action can only be successful or unsuccessful, right

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<sup>371</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 72.

<sup>372</sup>Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), pp. 42-3.

<sup>373</sup>Ibid., p. 41.

or wrong".<sup>374</sup> And he claims that to assume an action can be explained without any evaluation is to assume acts can be performed without moral motive at all.<sup>375</sup>

The need to view human life from the perspective of categories other than those permitted by a strict scientific rationalism is, however, rooted even more deeply than in culture. Man needs a full understanding of his condition and, due to a biologically rooted inability to withstand protracted perplexity, he seeks understanding through categories other than scientific ones. Without the development of non-scientific categories for understanding, such full understanding cannot be achieved. And, with protracted perplexity, one begins to experience physical breakdown.<sup>376</sup>

We see, then, that the positivist conception of morality, which turns moral statements into nonsense because they have no verifiable meaning, is clearly

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<sup>374</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 175.

<sup>375</sup>Scientific Thought and Social Reality, ed. by Fred Schwarz, (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 143.

<sup>376</sup>Visual Presentation of Social Matters (n.d.), Econ file #6, box 25, folder 9, pp. 1-4.

unsatisfactory.<sup>377</sup> Positivistic science itself cannot sanction moral claims and in fact denies their validity by its emphasis upon "physicalism".<sup>378</sup> And as long as positivistic science remains the uncontested authority and perfect ideal of knowledge, ethics cannot be secured from a destruction by sceptical doubt.<sup>379</sup>

The ethical dynamic of science must, then, be extended to the pursuit of truth in all domains of knowledge. If freedom, the value of truth, and self regulation constitutes the dynamic of science, then they must be extended as the ethical dynamic of all domains of knowledge. For Polanyi makes the same demand of all domains of knowledge: that they should pursue the truth. And if the pursuit of truth in science is effective only under the polycentric control of a free mutual self-adjustment of scientists, it is reasonable to conclude that every domain of knowledge would benefit by a similar ethical dynamic.

Indeed, this seems even more reasonable when we find

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<sup>377</sup> Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 84.

<sup>378</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 46.

<sup>379</sup> Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p.27.



Polanyi saying "...truth of literature and poetry, of history and political thought, of philosophy, morality, and legal principles, is more vital than the truth of science."<sup>380</sup> If such truth is more vital than science, then the effectiveness in pursuing truth afforded by the ethical dynamic of science must be extended to other domains of knowledge. After all, non-scientific domains of knowledge are not thereby unscientific: "The study of man in humanistic terms is not unscientific, since all meaningful integrations (including those achieved in science) exhibit a triadic structure consisting of the subsidiary, the focal and the person, and all are thus inescapably personal"<sup>381</sup> Meanings in science are no more favored than meanings in art, religion, and moral judgments.<sup>382</sup> The passionate valuations that make scientific truth possible are also to be justified in other domains of culture, including morality,<sup>383</sup> and such domains possess their own kinds of formal excellence.<sup>384</sup>

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<sup>380</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 84.

<sup>381</sup>Michael Polanyi and Harry Prosch, Meaning (Chicago: The University of Chicago Press, 1975), p. 64.

<sup>382</sup>*Ibid.*, p. 65.

<sup>383</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 134.

<sup>384</sup>*Ibid.*, p. 133.

### 3. Truth and Morality

Responsible human choices are analogous to acts of discovery. They submit to the demands of their own self-set ideals. Responsible choice has, then, the status of being grounded in personal knowledge.<sup>385</sup> Indeed, Polanyi has explicitly stated that his purpose in formulating the notion of personal knowledge was to provide grounds for conceiving of man as the seat of moral judgment.<sup>386</sup> This means that he conceives of the moral life as involving a personal knowledge of values and of the ultimate purposes of life as well as sense of right action. He confirms in this statement the argument we have built out of the epistemological and ontological works that moral life is an independent domain of knowledge and action. Certainly, he intended to avoid the reductionistic tendency of naturalistic explanations of morality which deny the existence of human responsibility.<sup>387</sup>

If the responsible moral decisions of life, rationally guided by a personal knowledge of values and of the Good, are the essential aspects of ethical life, then

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<sup>385</sup> Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 46.

<sup>386</sup> Ibid., p. 28.

<sup>387</sup> Knowing and Being: Essays by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 42.

ethics is a force in its own right, a domain of knowledge in its own right. Polanyi again confirms our previous arguments in saying, "...freedom of thought is rendered pointless and must disappear, where reason and morality are deprived of their status as a force in their own right".<sup>388</sup>

This status comes as we see all knowledge as personal and all personal knowledge as a domain of discovery and of action. Only human actions, of course, are subjects of moral judgment, though even the sciences make value judgments of some kind. There is a continuous evaluation of standards of excellence from the sciences all the way to moral evaluations. But the same dynamic of indwelling functions throughout the continuum. By indwelling the mind of another through his actions we can understand the moral quality of his acts. Polanyi explicitly says that this moral knowledge, as often uncovered in history, is continuous with the sciences.<sup>389</sup>

Indeed, we develop and obey moral standards even when we do not intend to do so. We use moral standards

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<sup>388</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 107.

<sup>389</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1975), pp. 79-81.

when we express condemnation or approval or seek guidance in a moral dilemma. This use is uncritical, a matter of faith.<sup>390</sup> But we also use moral standards in a more explicit way, as when we raise moral issues in themselves and question their validity or forward their tentative conclusions. Indeed, this explicit focus on moral issues safeguards moral principles from the self-destruction that comes of boundless self-determination.<sup>391</sup> Such safeguards are necessary, for Polanyi claims that moral judgments cut deeper than intellectual valuations (as evidenced in the fact that a man consumed by intellectual passion may also be vain, envious, mean, etc.).<sup>392</sup>

Some human actions, then, can be explained only by reference to the exercise of moral judgment. And where we recognize moral judgment, we recognize the existence of human values as motivating persons. And, in recognizing this as true not only of others but also of ourselves, we refer to moral judgments which we hold to be valid and thus discover that we do in fact (and must!) make the distinction between moral truth and moral illusion. Moral truth is founded on

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<sup>390</sup>Scientific Thought and Social Reality, ed. by Fred Schwarz, (N.Y., N.Y.: International University Press, Inc., 1974), p. 84.

<sup>391</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 86.

<sup>392</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 215.

the recognition of a valid, rational claim; moral illusion is compulsive, like sensory illusory illusion.<sup>393</sup>

The standards of truth, justice, and morality, then, must be recognized as independent powers in public affairs.<sup>394</sup> Moral judgments arise out of the context of communal relations in which we indwell our religious, ethical, and intellectual commitments. They arise and are verified in much the same way scientific commitments are.<sup>395</sup> And morality, like all thought is valid by its own standards and its progress is everywhere prompted by its own passions.<sup>396</sup>

There is always, of course, a range of discretion in every moral choice. Choices are not determined by society. The "compulsion" of a choice comes from a valid submission to one's own sense of responsibility.<sup>397</sup>

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<sup>393</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 33.

<sup>394</sup> Ibid., p. 34.

<sup>395</sup> "A Bridge from Science to Religion Based on Polanyi's Theory of Knowledge". Willaim Scott. Zygon, 5, 1970, p. 57.

<sup>396</sup> Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 215.

<sup>397</sup> Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 22.

As with all knowledge, the craving for the universal searches out the only thing that can satisfy the intellectual passion: the universal itself. Thus, though we are free subjectively to do as we please, this freedom is overruled by the responsibility to do as we must.<sup>398</sup>

In this vein, Polanyi says, "Moral judgments are approvals and as such are akin to intellectual valuation. The thirst for righteousness has the same capacity for satisfying itself by enriching the world that is proper to intellectual passions...moral man strives to satisfy his own standards, to which he attributes universal validity."<sup>399</sup>

These universal standards measure more than the rightness of an action. Men are valued as men according to their moral force. We do not judge the performance of the faculties in valuing a person, but the effect of it on the whole person. Moral rules control the whole self rather than the exercise of our faculties. Living by codes of morality, custom, and law is to comply to standards in a far more comprehensive sense than is involved in scientific and artistic standards.<sup>400</sup>

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<sup>398</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 309.

<sup>399</sup>Ibid., p. 214.

<sup>400</sup>Ibid., p. 215.

Truth and morality, then, are intimately linked. Just as there are ethical commitments to truth which ground the procedures which discover it, so does truth itself become a moral value. And this leads us to acknowledge the truths we discover within the moral domain as moral truths. These truths are independent in that they do not depend upon anything other than moral experience in the form of a sense of values and of right. Moral truths, then, form the grounds of moral decisions. And these decisions are stated as "oughts": they constitute moral "rules".

#### 4. Moral Rules in a Social Context

Polanyi says that men form a society to the extent that their lives are ordered by the same morals, customs, and laws.<sup>401</sup> This means that a society is essentially a moral organization of persons. And the fundamental moral ground of the society as a whole develops over time into the customs (mores) and laws of the society.

The moral ideals of a culture constitute its guiding precepts of right and wrong. Moral ideals are rules of rightness.

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<sup>401</sup> Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 215.

Whatever rules of rightness a person tries to fulfill he commits himself to an ideal; and again, he can do so only within a medium that is blind to this ideal. The ideal determines the standards to which a person holds himself responsible; but the ideal-blind medium both grants the possibility for striving for this ideal and limits this possibility. It determines his calling.<sup>402</sup>

Our society teaches us the moral rules, we indwell in order to project new ideals. And yet it also acts to "drag" us down from our commitment and effective action in realizing our highest ideals. Society is the medium of the ethical domain, not the self-identical scope of moral life. Our communal life, bound by the codes which form society, inspires us to ideals which are not wholly impractical. But they are not fully realizable either.<sup>403</sup>

This "seeing" of ourselves is the function of conscience. Conscience interprets and applies tradition. Tradition imposes a general authority in laying down the general presuppositions concerning value, right, and good which we indwell from infancy. But conscience alone is the specific authority for the explicit moral decisions we make. Tradition cannot impose specific moral applications, as this would

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<sup>402</sup>Michael Polanyi, Personal Knowledge: Towards A Post-Critical Philosophy (Chicago, The University of Chicago Press, 1962), p. 215.

<sup>403</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 63.



destroy its purpose as a guide.<sup>404</sup> Polanyi says, "A General Authority relies for the initiative in the gradual transformation of tradition on the intuitive impulses of the individual adherents of the community and it relies on their consciences to control the intuition".<sup>405</sup> Thus, the role of conscience is to interpret and develop the thrust of tradition toward a deeper insight into value and a more comprehensive movement toward the Good. For Polanyi, the words "conscience" and "moral" are never merely descriptive terms but carry with them the sense of "commendable" or "wrong".<sup>406</sup> For Polanyi, different moral systems are not just "different"; some are more commendable than others.<sup>407</sup>

Thus, the criterion for deciding which value systems are commendable and which are not lies in conscience. The final grounds on which one bases the premisses and decisions of conscience are moral truths we indwell. The criterion of conscience is not a pragmatic one which depends upon which

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<sup>404</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 57.

<sup>405</sup> Ibid., p. 59.

<sup>406</sup> Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), p. 369.

<sup>407</sup> Ibid., p. 373.

belief "works" to aid us in pursuing some particular goal. All beliefs "work" for those who believe in them.<sup>408</sup> But not all beliefs are true in that they do not all comprehend the proper values which, universally followed, lead toward the Good. Hence, we cannot rely upon what works pragmatically to lead us to particular goals. For we can be successful in accomplishing a goal even though we are mistaken in what we believe is true. For Polanyi moral truth is the ground of conscience; for we have a deeper inner impetus to seek truth than to succeed in a particular goal. And conscience itself attests to this when we avoid truth in favor of a self-justified pursuit of personal goals.

Conscience, however, is powerless without the will to act rightly. Once conscience has discerned the right action according to universal standards of action, it must take precedence over both will and our perception of the facts. We must sometimes even proceed with an insight into right as informed by conscience when the temporary facts count against it. The will must bow to the conscience, which may demand "conversion" even against our will.<sup>409</sup>

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<sup>408</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 61.

<sup>409</sup> Ibid., p. 67.

Conscience, then, is the final adjudicator in all moral conflicts: both when one is faced with a choice between two value systems and in conflicts within the scope of an accepted authority. But as long as conflicts are generated from two fundamentally different views of the same region of experience, they must proceed more by an attempt at persuasion and conversion by reference to the intrinsic worth and superiority of a particular position. And this is especially a matter of intuition and conscience.<sup>410</sup>

Polanyi says conscience functions by the interiorization of moral teaching. To interiorize is to identify ourselves with a moral teaching. This is what Polanyi means by "indwelling" a concept. Moral teachings form the proximal term of tacit moral knowledge, which in turn forms the framework for moral acts and judgments. All indwelling is "interiorization".<sup>411</sup>

A moral teaching appears meaningless until the student hits on the same indwelling that the teacher is practicing. We must dwell in the particulars while attending toward a comprehensive entity that these particulars constitute. This is acceptance of the teacher's authority. It

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<sup>410</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), pp. 66-7.

<sup>411</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 17.

requires "believing" before "understanding". For we must commit ourselves to communal life as a part of becoming human, of becoming a person. This commitment is an indwelling. And, more fundamentally, it is an acceptance and trust of communal modes of life: it is faith, a faith we adopt before we understand it.<sup>412</sup> We must not turn to blind traditionalism, of course, but must nonetheless recognize our limits and the necessity of reliance. Otherwise our path is self-destructive.<sup>413</sup>

We find, then, that our expectations concerning the nature of moral authority are met in Polanyi's social writings. Just as scientific conscience ensures the pursuit of truth in that domain, so does conscience in general ensure the pursuit of moral rightness. We may now ask how the rules developed out of moral conscience work to effect moral change in society as a whole.

##### 5. Communal Change of Moral Consciousness

The transmission of moral beliefs is accomplished not so much by precept as by example. The transmission of moral belief by example can occur via the symbols generated by

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<sup>412</sup> Scientific Thought and Social Reality, ed., by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 61.

<sup>413</sup> Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 61-2.

moral heroes. We have already examined the nature and dynamic of symbols; and we must view the ethical domain as generating its symbols in the form of "moral heroes".

Our modern, highly articulate culture flows largely from a small set of men whose works and deeds are revered and consulted for guidance. The knowing of these great men is an indwelling...our awareness of their works and deeds serves us...as a framework for unfolding our understanding in accordance with the indications and standards imposed by the framework.<sup>414</sup>

Indeed, the acts of "world historical personalities" like Alexander, Augustus, Charlemagne, Luther, etc., are the most striking examples of human decisions. Yet heroes of the moral world are even more influential in the long run, though political persons affect the framework of political power and create the drama of human history.<sup>415</sup>

Can unique moral heroes provide us with moral knowledge since they do not represent known patterns? Yes--the more unique the heroes are, the more interesting they are in themselves and the greater opportunity they offer for an intimate indwelling of their individuality.<sup>416</sup> We must

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<sup>414</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 136.

<sup>415</sup> Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), pp. 71-2.

<sup>416</sup> Ibid., p. 85.

recall that a symbol is a unique power which draws us into itself and integrates us into its meaning. In the case of the moral hero, his uniqueness creates a symbol which draws us into his moral reality and integrates within us a new insight into the Good. Thus, to contemplate a person as an ideal, as a moral hero, is to submit to his authority for judging oneself<sup>417</sup> and, ultimately, to be created by him in a new moral realm.

Our very calling as human beings is shaped and determined by the moral symbols that reach out to us and to which we willingly submit ourselves. Thus, our commitment to our social and mental milieu can be shaped and determined by who we recognize as our heroes and masters.<sup>418</sup>

Of course, not all moral change is determined through moral heroes. There is also a natural evolution of moral life. If tacit thought is the indispensable, ultimate power by which all explicit thought is endowed with meaning, then no one generation or individual can or should critically test all the teachings on which it relies. We always know more

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<sup>417</sup>Michael Polanyi, The Study of Man ( Chicago: The University of Chicago Press, 1958), p. 96.

<sup>418</sup>Ibid., p. 98.

than we can tell: the transmission of knowledge from one generation to the other is primarily tacit.<sup>419</sup> Thus, it is logically impossible for the moral tradition to operate without the addition of wholly original interpretive judgments, such as what "heroes" supply, at each state of transmission. This process of heroic reinterpretation introduces elements which are wholly novel,<sup>420</sup> a process which pertains to all fields of knowledge. But we must understand Polanyi when he says, "Further controlling principles of life may be represented as a hierarchy of boundary conditions extending, in the case of man, to consciousness and responsibility".<sup>421</sup> Polanyi refers here to the natural and continuous moral development of man. The heroic inbreaking of new moral ideas does indeed produce moral symbols which integrate us into the new discoveries that constitute the heroic insight. But there is a natural and continuous bio-psychic development that constitutes moral life as well. Thus, we can understand also how each act of understanding may lead to a conversion to a truer

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<sup>419</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 60-1.

<sup>420</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 58.

<sup>421</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 239.

way of being a man and of understanding him better.<sup>422</sup>

Thus, apart from the inspiration and insight generated by moral heroes, the natural tendency of man's evolution is toward moral insight. And his pursuit of the Good tends naturally, when guided by moral insight, to an increased interest in the welfare of the whole of society and to a lessened interest in his own welfare. Polanyi says,

I have said that at the highest level of personhood we meet man's moral sense, guided by the firmament of his standards. Even when this appears absent, its mere possibility is sufficient to demand our respect.

We have here a fact which sets a new major task to the process of evolution: a task which appears the more formidable as we realize that both this moral sense and our respect for it presuppose an obedience to commands accepted in defiance of the immemorial scheme of self-preservation which had dominated the evolutionary process up to this point.<sup>422</sup>

Carl Friedrich has pointed out<sup>423</sup> that Polanyi's insistence upon the universal intent of moral and intellectual passions leads to the suggestion that justice is grounded in a kind of natural law.<sup>424</sup> This natural law is the product of convivial discernment. The embodiment of justice, which

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<sup>422</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 51-2.

<sup>423</sup>"Man, the Measure: Personal Knowledge and the Quest for Natural Law in Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), pp. 91-109.

<sup>424</sup>Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat, (Durham, N.C.: Duke University Press, 1968), p. 91.



is grounded in human nature, within law is the main concern of natural law theorists,<sup>425</sup> a concern which is justified by the fact that the personal coefficient of knowledge cannot be removed from law any more than it can from science.<sup>426</sup> The basic law of human nature upon which natural law may be built is Polanyi's claims that man is moved by moral and intellectual passions which have a universal intent and bear upon an inexhaustible reality.<sup>427</sup>

Polanyi confirms in these passages the communal nature of moral experience. We would expect such a confirmation, of course, since we have already established the communal nature of knowledge and of science in particular. We discover in these passages that morality, as an independent force, is developed not only within the context of the community but that the community itself has a moral nature which may evolve toward higher moral insight or decay by neglecting its responsibilities. We see, then, that the Good cannot be separated from the communal Good.

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<sup>425</sup> Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), p. 92.

<sup>426</sup> Ibid., p. 101.

<sup>427</sup> Ibid., p. 109.

## 6. The Communal Good

A faith or confidence in the potential of the human bond and of shared obligations implies, as we have seen, a moral bond. Polanyi says,

.. the group has a claim to conformity of its members, and that the interests of group life may legitimately rival and sometimes overrule those of the individual. This acknowledges a common good for the sake of which deviation may be suppressed and individuals be required to make sacrifices for defending the group against subversion and destruction from outside.<sup>428</sup>

Thus, Polanyi explicitly outlines the origin of a notion of a common Good which places all persons under an obligation to cooperate as a community in its establishment.

The common Good is not merely a subjective idea about goodness or rightness, as we have seen in our discussion of the implications of Polanyi's epistemology. The Good, as we have also seen, is as much a reality as are those discovered in scientific pursuits.<sup>429</sup>

We aim, as a community, at the Good. But Polanyi declares that the communal aim is not the sole impetus toward the Good. Indeed, the community itself is not a single entity

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<sup>428</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 212.

<sup>429</sup> "Politics and Science: A Critique of Buchanan's Assessment of Polanyi", P.C. Roberts, Ethics, 79, April 1969, p. 239.

but is a collection of different people who share some beliefs, ideals, and motives in life. Individuals can differ from one another in the community to the extent that the society they compose contains a mixture of both highly developed persons in the moral domain and those of lower development. We have already noted the role of heroes of discovery and attainment in the community. Thus, it should not surprise us that society fosters both individual and communal ("civic") thought.<sup>430</sup>

The community must foster the individual thought which forwards the life of the community as a whole while maintaining itself as a community against forces which would rend it asunder. This demands a delicate balance between freedom and control similar to that maintained in science.

The community must maintain this control in a manner similar to the way in which it is maintained in science: by moral inspiration combined with some procedures for enforcing the basic order which allows society to function most effectively in its pursuit of the Good. The fundamental method of control, as in science, remains a moral control. Civic sense and moral convictions are embodied in society and form the "civic home" in which we live. We cannot force individuals to indwell the moral life of the community; for moral standards

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<sup>430</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 215.

are rightly rendered suspect when they are upheld by force, are based upon property and wealth, or are imbued with a local loyalty.<sup>431</sup>

Polanyi acknowledges four "coefficients" of societal organization, each of which plays a role in a communal cohesion and realization of the Good:<sup>432</sup>

1. shared convictions
2. shared fellowship
3. co-operation
4. authority or coercion

The joint functioning of these elements of communal life is responsible for social cohesion and are the grounds upon which all social institutions (family, religion, education, etc.) are built. The first three are essentially moral since they involve a free response to the beliefs, friendship, and goals of others. We must acknowledge our natal embodiment of these and choose them in the process of attaining social maturity. But the last element mentioned represents the public power which shelters and provides effective control of societal institutions.<sup>433</sup>

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<sup>431</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 215-16.

<sup>432</sup>Ibid., p. 212.

<sup>433</sup>Ibid., pp. 212-13.

Inherent within this difference between the first three coefficients of societal organization and the fourth one in a polarity of communal life. On the one hand, social progress in achieving the Good proceeds by shared passions and standards. On the other hand, some external control is necessary because individuals can rise above or fall below general societal standards. Thus, individuals are not dependent upon the societal moral life they indwell. They can form a moral pole which, for the better or worse, are at variance with the civic pole of communal moral life.<sup>434</sup> Yet both the "moral" and the "civic" poles are necessary to communal life: "... the restraint which power incurs as the price of employing morality for its own coercive purposes proves only that morality for its own coercive purposes proves only that morality is an indispensable, though self-willed, ally to power."<sup>435</sup> All elements are necessary for achieving the social Good.

The Good, then, is not just a personal achievement, though it is uniquely personal. The Good is a communal achievement, so far as it is achievable at all. Only by

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<sup>434</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 215.

<sup>435</sup>*Ibid.*, p. 226.

indwelling communal norms can we be informed concerning any notion of the Good and work to transcend it--or fail it and experience guilt. Communal life is a delicate balance between external control and a moral commitment to obey the standards of society. Freedom, commitment, and external control are blended within the community to make the Good both an individual and communal achievement.

Finally, we can now observe that our conception of a moral reality, developed from an analysis of Polanyi's epistemological and ontological works, is explicitly confirmed as an extension of conscience as we find it in the scientific enterprise.<sup>436</sup> Polanyi says,

A personal knowledge of man may consist in putting ourselves in the place of the persons we are studying and in trying to solve their problems as they see them or as we see them. That opens the door for our entry into human personality in its whole moral, religious, and artistic outlook, as the bearer of a historical consciousness, a political and legal responsibility. Thus, it introduces us through an extension of scientific enquiry straight into the whole sentient, creative, and responsible life of human concerns.<sup>437</sup>

The ethic of discovery, then, which extends itself to moral truths, must, by implication, extend itself to the

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<sup>436</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 55.

<sup>437</sup> Scientific Thought and Social Reality, ed., by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 96.

moral governance of society as a whole. The same ethic which undergirds the free pursuit of truth also undergirds the moral conscience of a free society. What works in the process of scientific discovery<sup>438</sup> also works to establish the political and moral truths which undergirds a free society.<sup>439</sup>

Polanyi claims, however, that the norms for judging concrete truths within particular domains may differ; but he does not admit that what is essential for truth in any domain (i.e., the intent to discover truth within a context of free inquiry) may be sacrificed in any domain of knowledge. And this is precisely what determines his affirmation of the necessity of the free society as a social truth: freedom in society is an implication of the need to freely pursue the

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<sup>438</sup> Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), p. 5.

<sup>439</sup> To be more specific, the extension of the dynamic of social organization is based on exactly the same kind of truth which science discovers. Frank Knight ("Virtue and Knowledge", Ethics, 59, July, 1949, pp.271-284) early raised the issue whether the norms applicable to science are applicable to other domains of knowledge or to society as a whole. His aim was to question whether social-political, communal norms are true or false in the same sense in which scientific ones are. Certainly, the kinds of truths involved are different. Communal moral truths and norms of pursuing the Good are not true or right in the sense of passing muster before present concepts of scientific truth. But the ethical dynamic of truth-seeking and norm-setting is not dependent upon truth being specifically scientific; scientific truth is, rather, a species of tacit knowledge. And the dynamic of tacit knowing, applicable in all domains of knowledge, is the real root of the ethical dynamic of knowledge and action.

truth in any domain. He emphasized science because he was a scientist and because science is supposed to be the major source of truth in society.<sup>440</sup>

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<sup>440</sup>Polanyi has been further criticized, however, for claiming his notion of truth-judgment is not subjective but personal. We will remember that a personal judgement abides by standards set by the judgment itself and, thus, is not subjective since it aims at universal coverage. The judgment then becomes the standard of the community of knowers within the domain of knowledge at issue. This notion has been misunderstood to mean that the standard is merely what the community tends to believe rather than what they are supposed to believe according to the standards they obey. Thus, some have argued that Polanyi is a subjectivist in so far as political truths are concerned since in this field there is often no agreement as to the best idea or course of action to follow. Such critics claim that Polanyi would leave such truths up to pure choice as to how to view things, a choice that may not represent the truth at all ("Politics and Science: Reflections on Knight's Critique of Polanyi", James M. Buchanan, Ethics, 77, '66-'67, pp.305-6). They often turn to a more "pragmatic" standard of truth: the "best" social order is that which works the best, that gives us what we want. And such considerations makes "truth" an irrelevant consideration (ibid., 308). But clearly Polanyi does not claim that political truth--or any other truth--is constituted by social agreement. The agreement of society is formed by a social acknowledgment of truth and a commitment to obey the standards of truth in so far as they are known. Thus, the agreement is based on truth; it does not itself constitute the truth. Such a notion would make truth subjective, and all political truths would be relative to choice in such a view. But foremost in Polanyi's mind is that we discover political truths in themselves and then forward them by agreement and obedience to the standards of knowledge that the truth implies. Political truths are, then, agreed upon only because they are acknowledged as such; and the prime social and political truth which this procedure necessitates is the truth that persons must be free to discover the truth in all areas of knowledge supported in society.



We have, then, established both the fact and nature of the domain of societal, ethical truths. We may now examine the ethical structure of society as a whole, as evidenced in its social institutions and political dynamic. We can best begin this investigation by examining how society goes wrong. For we can most easily discern a correct functioning of society by comparing such structures with the fundamental immoral structures of society.

## CHAPTER TEN

### THE MORAL INVERSION OF THE FREE SOCIETY

This chapter is a propadeutic to the final chapter on Polanyi's notion of a free society. In it I analyze what Polanyi considers to be various moral inversions of freedom and the common Good as exemplified in certain social-political structures such as Marxism, democratic liberalism, Nazism, etc. An understanding of what is wrong with these attempts to give a moral organization to society (attempts which are moral even when they focus on giving an amoral structure to society) will help us grasp the nature of the free society. We shall see that Polanyi's dissatisfactions with social structures that differ widely from the ethical structure which makes science successful is that they fail to provide the means to discover in a free manner the very truths (moral and otherwise) which they require in order to maintain themselves.

#### 1. Moral Inversion in Society

Communal moral truths are, then, important aspects of truth and are very much linked to the method of establishing scientific ideas. Indeed, Polanyi claims that the modern mind, with its penchant for science, is a fusion of scientific

skepticism and a passion for moral progress.<sup>441</sup> But this fusion has not been a healthy one, for the most part. Instead of producing a commitment to moral and scientific truths, it has made science itself a standard for moral truth. Indeed, modern society has paradoxically believed that it is morally necessary to judge all truths by the standards that pertain to science. So our culture seems pervaded by a dissonance of extreme critical lucidity and intense moral conscience.<sup>442</sup> The problem with modern society is not moral laxity. We have never seen so much moral intensity, much of which has been aimed at humanitarian reform. Polanyi affirms that there has been moral excess and that ethics must catch up to the pathological forms of morals created in this era of excess.<sup>443</sup> The root of this pathology lies in the peculiar cooperation which skepticism gave the passion for social betterment in the philosophy of the enlightenment.<sup>444</sup> This skepticism criticized all pronouncements on moral truths, thus releasing persons from falsehoods and prejudice. But such skepticism did not distinguish true moral ideas from

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<sup>441</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 57.

<sup>442</sup>*Ibid.*, p. 4.

<sup>443</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 3.

<sup>444</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 57.

false ones; moral ideas in general came under attack. Thus, men were also freed to follow a-moral courses of action. In this sense, a concern for true morality leads to a protest against falsehoods which inevitably include all moral values.<sup>445</sup>

Polanyi insists that the development of moral passions and scientific skepticism into moral skepticism is not just an accidental, historical development. This development was a logical development of these attitudes.<sup>446</sup> And he claims that we now face the same outcome today as we grope our way back to the sceptical ideals of the 18th century.<sup>447</sup>

Polanyi says that the passions generating moral scepticism were not religious but moral, though their moralities were perverted and immanent only in brute force.<sup>448</sup> Elevations of nationhood as a law unto itself above moral standards are, according to Polanyi, the ultimate logical end of the enlightenment.<sup>449</sup> Clearly, he sees our present danger

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<sup>445</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 8-9.

<sup>446</sup> Ibid., p. 10.

<sup>447</sup> Ibid., pp. 10-11.

<sup>448</sup> Ibid., p. 17.

<sup>449</sup> Ibid., pp. 9-10.

of moral skepticism as leading logically to the ends which threatened enlightenment society in the rise of nations and in moral libertinism and to the end that development implied: the collectivisms of communism and nazism. These threats are not political or economic in Polanyi's view, but are most intimately connected to the moral values we hold and the way these values open us to truth in all domains of knowledge, including the political domain.

Polanyi refers to the improper development of moral ideas in society as "moral inversion", claiming that it is rooted in the skepticism that destroys the belief in truth, justice, law, etc., which are supposed to embody the social passions. Without these, social passions are perverted into brute force.<sup>450</sup> The national sense of "moral responsibility" then becomes the capricious shaper of all personal knowledge making all knowledge dependent upon social compulsions.<sup>451</sup> Such a move makes knowledge dependent upon the collective social needs, no longer allowing free pursuit of the truth.

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<sup>450</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 5.

<sup>451</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 43.

This essentially denies the reality of science as well as the realities of other domains of knowledge such as law, art, religion, etc. And, by denying them, it takes the first step in destroying them and confirming its own perverted doctrine as "truth"<sup>452</sup>

Polanyi also calls this inversion "nihilism".<sup>453</sup> Nihilism and moral inversion are identified in Polanyi's writings, and the ends of each are the same. But one small difference between them lies in the fact that moral inversion may be hidden somewhat from the view of society, whereas nihilism is an explicit attitude. As Polanyi says, the nihilistic revolutionary gives effect to his immanent morality by his manifest immorality.<sup>454</sup>

Nihilists, then, function under the principles of absolute skepticism. They are attracted to those types of political positions which share their skepticism, finding identity in a violent narrow political creed. This gives the nihilist a sense of moral superiority. But since he cannot demand justice in the name of justice or humanity in

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<sup>452</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 81.

<sup>453</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 43-4.

<sup>454</sup> Ibid., p. 44.

the name of humanity, he must turn to developing a perfect, "scientific" society. He develops a sense of righteousness about calculated brutality. Nihilists become impenetrably skeptical fanatics, and the pursuit of naked power becomes a blind moral passion.<sup>455</sup> Thus, the nihilist accredits intrinsic righteousness to revolutionary power.<sup>456</sup>

Polanyi affirms, then, that modern nihilism is not a moral laxity but is a part of the comprehensive moral protest of our time. The intensification of moral demands has led to a sense of moral degradation in relation to our failure to live up to self-professed principles. And it leads to a rebellion which aims at establishing another center of power, free from traditional compromise. This center must proclaim itself groundlessly as the absolute good--and amoral reign begins.<sup>457</sup> Such societal essentials as justice and charity, in so far as they are truths held by society, are transferred to party interests.<sup>458</sup>

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<sup>455</sup>Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), pp. 16-17.

<sup>456</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 237.

<sup>457</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 4-5.

Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 78.

This process of inversion is deeply intensified by positivism. Under the influence of positivism, which elevates the standards of science to a position of judging validity in all domains of knowledge, truth became identified with science. Science, in turn, became, under positivism, a mere ordering of experience. Thus, justice, morality, custom, and law became mere conventions charged by emotional approval.<sup>459</sup>

Undergirded by positivism, then, science produced a skepticism in domains of knowledge in which it had no right to judge. The moral passions are then displaced to a fevered attempt to apply scientific categories of understanding to morality, politics, and law, thus destroying the inherent standards by which such fields judge their concepts valid. In summary, Dr. Jim Wiser has said "...nihilism sooner or later generates a political creed which functions in the place of the discredited moral ideals of the tradition."<sup>460</sup>

Polanyi is not willing to admit, however, that all modern achievements are simply products of moral inversion

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<sup>459</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 8.

<sup>460</sup>Human Reason and the Quest for Meaning, Jim Wiser; Paper given at the Canadian Political Science Association, Fredericton, New Brunswick, June 9-11, 1977, p. 3.



(nihilism) or are themselves nihilistic. Some movements need to be distinguished from nihilistic ones. Freud, eg., asserted that all value judgments are guided absolutely by the desire for happiness and are all illusions bolstered by argument. Therefore, he admires people who spurn false standards. But this is only a spurious moral inversion since Freud holds the ideal of a society in which all work for the happiness of all.<sup>461</sup> Again, utilitarianism may seem to be morally inverted when it decries moral sentiments as hypocritical while asserting itself as scientific. But this, too, is only a spurious nihilism, since utilitarianism achieves to ethical standards.<sup>462</sup> Thus not all modern movements are nihilistic. The danger is more specific (eg., Naxism and Communism) and its results are more concrete than vague moral disease.

Despite the danger Polanyi says we face of moving back to nihilism, he claims that our present health is well grounded and is a natural power of all societies. Societies have a natural power for recovery from moral inversion and moral pathologies. Fanatical hatreds, lies, and cruelties can become pointless with an upsurge of national feeling for dignity and the hope of freedom and need for truth.<sup>463</sup>

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<sup>462</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 233.

<sup>463</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 18.

Polanyi points to the Hungarian revolution as an example of how the demand for truth can receive the explicit support even of those involved in denying this, such as the secret police.<sup>464</sup> There is, then, a natural recoil from the nihilistic effects of scientific rationalism. And in our times, it has hardened our moral tone and cleared the ground for relaying the foundations of morality.<sup>465</sup> Polanyi calls this "recoil" revisionism.<sup>466</sup>

Thus, although all of the logical antecedents of inversion are present today just as they were in the enlightenment, we are still beyond nihilism. We can suspend the logic that leads to inversion by establishing a civic partnership united in its resolve on continuous reforms and in its refusal to be led by radicalism into the logic of moral inversion.<sup>467</sup> We can recognize that it is logically false to deny truth since such a denial affirms truth. And this truth has an operative power, a spiritual reality, which is merely transferred to temporal political exigencies when

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<sup>464</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 20-21.

<sup>465</sup> Ibid., p. 44.

<sup>466</sup> Ibid., p. 21.

<sup>467</sup> Ibid., pp. 22-3.

this truth is denied.<sup>468</sup> We break out of such denials and move out of the path to nihilism not by a mere intellectual achievement (e.g., the discovery of truths), since all truths can be shadowed by a commitment to nihilism; but rather we accomplish this by dissolving nihilism as an existential commitment<sup>469</sup> through a renewed commitment to truth over party or social interest.

In sum, we see that for Polanyi there is a general passion for social justice, freedom of thought, and the desire for increased prosperity. The original impulses toward these were, however, perverted through moral inversion, an inversion which is deeply grounded in intellectual error because of its denial of moral, political, and social

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<sup>468</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 78.

<sup>469</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 31.

<sup>471</sup>Polanyi's affirmation of political truth as linked to commitment in an important sense should be adequate evidence that Najder's complaint that Polanyi is "merely intellectual" in his view of historical change and does not pay attention to social and economic causes is a mistaken judgment; Intellect and Hope, ed. by Thomas A. Langford, and William H. Poteat (Curham, N.C.: Duke University Press, 1968), p. 379.

truth<sup>471</sup> Nihilism, however, cannot satisfy this passion because of its denial of truth, which is essential for any social order, even a nihilistic one. But this logic of nihilism can be suspended by a commitment to truth. For only such a commitment can dissolve the view of all truths as being dependent upon party interest.

The issue of freedom for truth is the basic determinant of the government and form of society in which we live. If we cherish truth and promote its free pursuit, we move toward the free society in which moral values have a voice of truth in their own right. But if we seek only the interest of the party we choose, truth cannot survive. And, without truth, we cannot establish a society which is responsive truly to the needs of its people.

Polanyi does not leave us with abstract statements concerning social-ethical dynamics and the way in which they go wrong. He gives concrete illustrations of the essential forms of moral inversion which afflict humanity. We can firm up our confirmation of the moral structure of society by more deeply investigating moral inversion in its concrete forms.

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<sup>471</sup> Michael Polanyi, The Study of Man ( Chicago: The University of Chicago Press, 1958), pp. 2-3.

## 2. Marxism as an Example of Moral Inversion

Polanyi defines society as a form of human existence which attempts to make sense of the relations between persons.<sup>472</sup> And he says that adherence to truth implies adherence to a society which respects truth; thus, love of truth reappears as love of a society which fosters truth. Submission to intellectual standards implies participation in a society which accepts the cultural obligation to serve these standards.<sup>473</sup> The search for truth, then, is itself a move to establish a society which respects truth and all of the forms of organization that commitment implies. We have already outlined the societal structure of the "republic of science". We shall now see how, according to Polanyi, the refusal to make truth primary and an end in itself has quite different ramifications for the society which pursues this path.

The organization of society is a necessity, even when there is an agreement of convictions: "Though men be harmoniously guided by their agreed convictions, they must yet form a government to enforce their purpose".<sup>474</sup> Polanyi

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<sup>472</sup>Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C., Duke University Press, 1968), p. 3.

<sup>473</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 203.

<sup>474</sup>Ibid., p. 224.

refers to this government as a "moral culture" and emphasizes the essential difference between two types of moral cultures: the free society and Marxism, which interpret the same data differently and do not accept the same facts as real and significant.<sup>475</sup> The former is free in so far as it acknowledges thought as an independent force in society; and the latter is totalitarian in so far as it in principle denies this.<sup>476</sup>

We cannot, of course, choose to live in a state of total anarchy, for Polanyi, such a state is inconceivable. Human conviviality is a brute fact which we cannot escape. "We embody our own temporal, inchoate experiences stretching over a long period of time, in the unification of one moment-- which also embodies our unification with one another in the same moment".<sup>477</sup> We do not need to deal at length with conviviality here, since we have already dealt with it. But we do need to recall that conviviality is at the root of society and of the government that reflects its organization toward common purposes.

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<sup>475</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 240.

<sup>476</sup>Ibid., p. 376.

<sup>477</sup>Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1962), p.153.

Marxist totalitarianism is Polanyi's prime example of a "moral culture" that places the interest of the party over the independent pursuit of truth. Marxism is a form of totalitarianism which sublates thought in the service of the proposed welfare of the state and denies independence and free activity to thought.<sup>478</sup> In Polanyi's opinion, Marxist totalitarianism shapes the facts at will and gets these accepted not only by coercion but also by persuasiveness, including a wholesale corruption of the principles of factual evidence.<sup>479</sup>

Because of this, the Marxist state functions without regard for voluntary support. Persons in such a state can become convinced that it is right to obey no matter what is commanded; and one can be silenced out of any disaffection by the weight<sup>480</sup> of social disapproval.<sup>481</sup> But most of all, the impact of Marxism is the denial of any intrinsic creative power of thought, a denial which makes independence in thought

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<sup>478</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 214.

<sup>479</sup>Ibid., p. 241.

<sup>480</sup>Ibid., p. 225.

<sup>481</sup>Ibid., p. 224; Polanyi affirms that Stalin's regime is an example of such a state's ability to exercise power without voluntary support.

unthinkable for Marxists.<sup>482</sup>

Marxism unites moral passion and skepticism into a political doctrine. Political power is scientifically sanctioned, so there is no room for moral truth.<sup>483</sup> For this reason Marxism can act unscrupulously in a deliberate manner because it can claim that its righteousness is embodied in its power. And this makes Marxism "morally" attractive to those seeking a perfect justification of the use of power.<sup>484</sup> It allows Marxists to argue for their position on "moral" grounds, even though Polanyi claims their arguments represent a moral inversion.<sup>485</sup>

Marxism is, according to Polanyi, the most interesting case of the "moral force" of immorality.<sup>486</sup> As dialectical materialism, Marxism makes stern scientific objectivity the proper moral response to our challenge of high moral dynamism, thus collapsing the proper antinomy between them.

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<sup>483</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 59-60.

<sup>484</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 231.

<sup>485</sup>*Ibid.*, pp. 231-233.

<sup>486</sup>*Ibid.*, p. 227.



Moral force is transformed into a commitment to amoral objectivism. Morality, as a concern for a scientific objectivity which controls the "facts" of life, becomes imminent within the material concerns of the proletariat. Thus, the science of Marxist society provides objective view that gives the moral force to create the Marxist "utopia". Morality--what is done--no longer has intrinsic worth<sup>487</sup> It becomes a function of decisions to structure society "scientifically". Thus, moral objections to Marxism are answered by reference to its scientific correctness; and it does so by asserting the "morality" of using power to shape society by "scientific principles" without being committed to these principles as a value in themselves.<sup>488</sup>

Such a philosophy leads to a "logic of revolution". If society is not divine, it is made by man, who then is free to do with it as he likes. There is then no excuse for a bad society, so a good one can be made without delay by seizing power through revolution. All resistance must be put down as treason.<sup>489</sup> Eventually messianic violence is transformed

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<sup>487</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 228-30.

<sup>488</sup>Ibid., p. 231.

<sup>489</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 13.

from being a means to an end to being an end in itself,<sup>490</sup> and this constitutes the worst aspect of moral inversion. Combined with such force, truth becomes identified with the value of party expediency, and the critical faculties are paralyzed to the point that one can no longer apprehend truth at all. The distinction between objective truth and party truth collapses into the latter.<sup>491</sup> No human judgment in any field--politics, law, art, etc.--can be valid except in the sense that it serves a particular power and end.<sup>492</sup>

Polanyi attributes the immorality of Marxist action to the logic upon which it is founded; but he does not deny that Marxists, like anyone else, may act contrary to the logic of revolution. Indeed, he says that, as a matter of fact, despite Russia's explicit totalitarian planning of science,

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<sup>490</sup>Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 14.

<sup>491</sup>Ibid., p. 29.

<sup>492</sup>Scientific Thought and Social Reality, ed., by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 64; Najder has criticized Polanyi's claim that a commitment to Marxism necessarily fosters the love of state power, denies moral motives in public life, and openly declares inhumanity. He agrees that Marxism may be guilty of a logical discrepancy between scientific and moral claims, but does not follow Polanyi in claiming that Marxists must necessarily be immoral; Intellect and Hope, ed. by Thomas A. Langford and William H. Poteat (Durham, N.C.: Duke University Press, 1968), p. 376.

for the most part science proceeds in the same way as it does everywhere else.<sup>493</sup> Thus, the logic of revolution can be "suspended" at any point; but the suspension is always contrary to the movement of the logic and, hence, to the depth meaning of a culture. As long as the logic is merely suspended, the immediate danger exists that revolution morality will recapture the movement of a culture.

The fact that the logic of revolution is sometimes suspended, however, is significant evidence of its falsehood in Polanyi's view. Scientific truth, eg., in so far as it aims at discovering the truth, is not and cannot be dependent upon the interests of a party. Newton's work on gravitation, eg., was a direct result of a pursuit of truth: the work of Copernicus, Galileo, and Kepler. It was not a response to the maritime interests of Newton's time.<sup>494</sup>

Marxist philosophy of science cannot integrate party interest with the bald fact that no one can tell what the results of a discovery will be. And this necessary ignorance makes it impossible to claim that discoveries are motivated by historical interests.<sup>495</sup> The Marxist attempt to do so is an example of "writing history backwards", i.e., infusing

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<sup>493</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p.84.

<sup>494</sup>Ibid., p. 78.

<sup>495</sup>Ibid., p. 80.

into historical characters foreknowledge of their own future.<sup>496</sup> Nonetheless, in so far as the logic of revolution functions tacitly even in the committed Marxist society, pure science remains impossible.<sup>497</sup>

### 3. The Logic of Liberalism

In view of Polanyi's distaste for Marxism, one might think that he would support the liberal, democratic institutions of England and America in opposition to Soviet Marxism. But, although he has much respect for the positive aspects of their political and social institutions, he does

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<sup>496</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 81.

<sup>497</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), p. 3; Polanyi says that a similar point is intended in the Hungarian revolution. The failure of Marxist Hungarian society to allow truth--and moral truth--to have its own say in the domain of politics and history brought forth a rebellion against oppression. The rebellion itself was a message concerning the nature and role of truth. The message of the Hungarian revolution is that truth must be recognized as an independent power in public life. The press must be free to tell the truth; Knowing and Being: Essay by Michael Polanyi, edited by Marjorie Grene, (Chicago: The University of Chicago Press, 1969), p. 24; The Hungarian revolution recognized the metaphysical reality of truth, justice, morality, and art; and that such an acknowledgment should serve as an axiom of further political thought; Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), p. 24; For freedom is possible only if truth, justice, humaneness, etc., stand above society as ideals which it serves. Only then can society be free to judge itself; Michael Polanyi, History, Philosophy and the Sociology of Science: the Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), p. 11.

not consider them an ideal paradigm of what he calls the "free society". Their institutions are based on liberalism and utilitarian philosophy. Liberalism in England and America implies that only beliefs which are demonstrable should be imposed on others (otherwise the conflicting beliefs must be tolerated). This in turn implies only demonstrable ethical beliefs should be imposed. But liberalism, in Polanyi's view, also holds that ethical principles cannot be demonstrated. Thus, absolute doubt is applied to traditional ideals, weakening their force in culture and threatening to destroy the basis of freedom of thought.<sup>498</sup> Indeed, where the logic of liberalism was not suspended but given free reign in Europe, the result was its self-destruction through pacifism in the face of the Nazis and the fascists.<sup>499</sup>

In practice, however, the logic of liberalism was suspended in the U.S. and England. Skepticism was not applied to religious beliefs and, thus, moral beliefs. And democratic institutions were allowed to grow while religious belief was strong, giving effect to moral principles in a free society.<sup>500</sup> The free society, then, relies upon a suspension

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<sup>498</sup> Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), p. 10.

<sup>499</sup> Ibid., p. 13.

<sup>500</sup> Ibid., p. 11.

of the liberalism-logic which would, given free reign, destroy the foundations of freedom. Utilitarianism, eg., a product of liberal thought, cannot condone commitment to ideals which demand serious sacrifices. For the principle of utilitarianism is to pursue happiness as the highest Good. Nevertheless sincerity is often measured by a lack of such prudence in pursuing committed ideals which do not lead to happiness but to loss.<sup>501</sup> Utilitarians attempt to camouflage selfishness as a lack of self-interest.<sup>502</sup>

Even if the liberal and utilitarian aspects of democratic institutions are dangerous potentials toward the incursion of a logic of revolution, they still have elements to recommend them that are foundational in a free society. For they allow everyone to state his beliefs and allow others to listen and form their own opinions, which result in a free exchange of mind. Such exchanges come as close as possible to the truth and are the anti-authoritarian formula of liberty.<sup>503</sup> In a free society, the art of free discussion,

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<sup>501</sup>Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), p. 10.

<sup>502</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 98.

<sup>503</sup>Meaning, Michael Polanyi and Harry Prosch (Chicago: The University of Chicago Press, 1975), p. 7.

as the ground of democratic institutions, is the tradition which guides conscience in its decisions. Free discussions proceed by the principles mentioned: fairness and tolerance. Fairness is putting one's case objectively by sorting out facts, opinions, and emotions. Hence our position is clearly laid out for opponents. Tolerance is the capacity to listen to our opponents and sort out the sound from the unsound points. Fairness and tolerance must be exercised in the face of a listening and judging public, which is an essential partner in free controversy.<sup>504</sup> Interference with the pursuit of truth in a free society comes only in the interest of truth itself and not of some particular social interest.<sup>505</sup>

Marxism and democratic institutions grounded in liberal utilitarianism, then, both represent moral inversions of society. Marxism denies the social freedom necessary to pursue truth as an end in itself, particularly in the domains of historical and political truth. Hence, moral truth has no independent force, and the society is ordered by a "moral" concern for dispassionate objectivity in the form of an unjustified use of power and oppression. Liberal-utilitarian

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<sup>504</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 67-8.

<sup>505</sup> Ibid., p. 69.

institutions allow for tolerance of conflicting points of view, unlike Marxist societies. But this only means that demonstrability has become the sole criterion of truth, a criterion that becomes more and more harsh as demonstration becomes more difficult. And the criterion of happiness as the ultimate moral guide of action becomes necessary when the indemonstrability of moral truth becomes evident. And the "happiness principle" is obviously inadequate when we are called upon to make ultimate sacrifices for a principle we cannot deny as essential for attaining or moving toward the Good!<sup>506</sup>

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<sup>506</sup>We might take exception to Polanyi's conception of Marxism and a liberal, utilitarian society. We might point out concerning Marxism that a commitment to truth might be extended from the sciences to all other domains of human thought without changing the fundamental principle of Marxist socialism. Polanyi might argue that only the economic freedom of capitalism can allow an economy to truly prosper. But this only means that Polanyi presupposes that the actual discovery of truth, economic growth and stability, etc., are marks of the moral truth of his ethical dynamic. If we suppose with him that such achievements are movements toward the Good, then we shall be inclined to his view. But we cannot exclude the possibility that, even if Marxism is saddled with developmental problems which prevent its proper functioning in Polanyi's own time, its principles of centralized control and solidified, co-ordinated societal structure and power cannot "work". Polanyi argues that the logic of Marxism leads to a necessity to acknowledge its self-defeat. But we must admit that the word "logic" is ill-chosen, since an historical outcome can hardly be seen as a logical implication of the statement of an historical principle. We may not, then, be able to agree that Polanyi's critique of Marxism is necessarily correct. But this does not mean that Polanyi is wrong about the possibility of achieving the Good



These examples of "moral inversion" have the useful purpose of throwing into relief Polanyi's notion of a free society. We earlier pointed out that the free exploration of truth was, in Polanyi's opinion, essential for scientific discovery. And we have outlined the ethical dynamic implied in the structure of such scientific investigation. Now we can proceed to outline the ethical structure of the free society as informed by the ethic of the republic of science.

in a free society. It only means that Marxism and a free society are not necessarily mutually exclusive in respect to the possibility of achieving the Good.

Concerning a liberal and utilitarian society, we must note that again Polanyi has not met the arguments of these positions head on, except for the issue of the absolute demonstrability of knowledge. His argument that an absolute sacrifice can be made only on principles inimical to the happiness principle of utilitarianism is easily answered by the reply of an altruistic utilitarianism which values such sacrifice as a part of the meaning of utilitarianism. Polanyi has furthermore never clearly distinguished between his concept of the Good and the Good as understood by utilitarians. Quite possibly, they are not mutually exclusive. But again, despite Polanyi's ineffective critique of utilitarianism, he cannot be judged thereby to be wrong about the ethical dynamic of the free society.

## CHAPTER ELEVEN

### THE FREE SOCIETY

This chapter on the free society integrates many of the arguments developed in my discussion of the republic of science as a model of the ethical community and the insights gained through an analysis of moral inversions with explicit statements Polanyi makes about a free society. The result is an overview of the free, moral community; and this overview makes it plain that the expectations concerning the nature of ethical society which developed as a result of explicating the tacit ethical structure of Polanyi's epistemology and ontology have been met. This discussion of the free society concludes the argument of the work as a whole and demonstrates the importance of a commitment to continued explication of ethical knowledge in the communal context.

Inherent within the ethical structure of the republic of science is the freedom to explore domains of scientific knowledge and to pursue truth as a value in itself. Marxism and utilitarianism represent perversions of our freedom to explore, adopt, and reject ideas in the pursuit of our "hunches" or insights into truth. Hence, freedom must be the fundamental reality of the ethical society: the ethical society is a free society.

The term "free society" refers to the freedom individuals have to make significant choices in respect to their own lives and for structuring their society. Such a concept of freedom would be nonsense unless man's choices made real differences. Polanyi is a proponent of political and social freedom in so far as he believes in a more fundamental moral freedom: man bears responsibility for what he becomes and blame or praise may be attached to his deeds. Polanyi is not a determinist, as we have already noted.

Political and moral freedom are grounded in man's capacity to perform acts that serve no material need merely because they are deemed excellent in themselves.<sup>507</sup> Polanyi calls this the "spiritual" foundation of freedom and mutual respect. Polanyi does not meet head on the epistemological and ontological problems that have perennially beset anyone who asserts either a doctrine of determinism or of human moral freedom. He seems simply to assume naively that an observed capacity in man to act in contradiction to his apparent benefit is the manifestation of his freedom. His approach here remains phenomenological in respect to

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<sup>507</sup> Michael Polanyi, The Study of Man ( Chicago: The University of Chicago Press, 1958), p. 86.

a description of freedom, while he improperly assumes this description is itself sufficient to establish the case that man is free. This assumption is, no doubt, grounded in his belief that any explicitation of tacit knowledge manifests an aspect of reality. While this assumption may be proper in the sense that something of reality is revealed even in mistaken ideas and that we are justified in committing ourselves to what we believe is the best interpretation of experience, we cannot assert with Polanyi's uncritical attitude the reality of human freedom. We must say simply that Polanyi may be right and even that we prefer along with him to assume the reality of human freedom and to perceive social structures as amenable to change through man's own free capacities.

Whether the free society is grounded in human moral freedom is not, however, an essential point to decide for the case I am presently establishing. We need only acknowledge that Polanyi himself believes in human freedom and that this belief plays a key role in his concept of the scientific enterprise and of the nature of social change and development. Polanyi deems science as the prime example of man's capacity to act beyond his needs in accordance with what is "excellent in itself": truth. Dedication to science is at

the same time the acceptance of an obligation to be free.<sup>508</sup> There is no demand for absolute conformity in free science, since the professional standards of science themselves impose a discipline that recognizes and encourages the right of rebellion against these standards for the sake of preserving originality.<sup>509</sup> We should, then, expect Polanyi to champion not only the moral freedom which grounds human responsibility but also the exercise of that freedom within the social and political structure of society.

For Polanyi, moral freedom shades into political freedom as the moral power of self-determination becomes enmeshed with a cultural tradition. A self-determinative society thus achieves the power to achieve knowledge and transform itself while preserving individual initiative. The freedom of social self-determination is grounded not only in moral freedom but, perhaps just as importantly, in the freedom to pursue truth for truth's sake. But freedom of thought cannot be restricted to the scientific enterprise. Polanyi extends the need for pure, theoretical knowledge of truth to all domains of knowledge, including morality.<sup>510</sup>

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<sup>509</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 54-5.

<sup>510</sup> Michael Polanyi, History, Philosophy, and the Sociology of Science: the Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), p. 10.

Moral knowledge, knowledge of what is right and of what is good, is, then, an important part of the self-determination of the free society. The free society must be free for the sciences as well as for truth in every domain including the truth of what it ought to do and to value.

Polanyi does not believe that either utilitarian or totalitarian societies include the general respect for truth that is essential for social freedom.<sup>511</sup> His misunderstanding that utilitarianism is fundamentally egocentric is, as we have seen, responsible for his belief that it overlooks the need for general rules of conduct and tends to nihilism.<sup>512</sup> And his perception of totalitarianism as requiring blind submission to impersonal standards of knowledge and action is responsible for his assertion that this also denies a respect for truth. Concerning such respect for truth, Polanyi says,

The recognition granted in a free society to the independent growth of science, art and morality, involves a dedication of society to the fostering of a specific tradition of thought, transmitted and cultivated by a particular group of authoritative specialists, perpetuating themselves by co-option. To uphold the independence of thought implemented by such a society is to subscribe to a kind of orthodoxy which though it specifies no fixed articles of faith, is virtually unassailable within

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<sup>511</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 19.

<sup>512</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), pp. 32-3.

the limits imposed on the process of innovation by the cultural leadership of a free society.<sup>513</sup>

Truth in all domains of human thought, including morality, is the fundamental drive of a society that dwells in the freedom to pursue the Good on its own flexible terms. This general drive to truth includes a search for moral truth; and this search is successful in its continued confirmation of truth as the sine qua non of achieving the Good and in its discovery of universal principles of conduct which guide society to ever more profound realizations of the Good. We can understand, then, why Polanyi considers freedom of thought in general as the essence of moral thought and freedom. And we can appreciate his acknowledgment that such freedom is a privilege to be gained through political struggle, a struggle which demands our total commitment which cannot be met by proposing an ideal of superior detachment. Rising above the struggle with an attitude of detachment withdraws us from the struggle and jeopardizes freedom itself.<sup>514</sup>

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<sup>513</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 244-5.

<sup>514</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. I.

The necessity of freedom to pursue truth in every domain for the sake of discovering and preserving the moral truth that enables society to freely pursue the Good demands a reasoned effort to shape society toward maximum freedom and to discover truth. In the social context, Polanyi means by "reason" a commitment to fairness and tolerance.<sup>515</sup>

Fairness and tolerance must be exercised in the face of a listening and judging public, which is an essential partner in free controversy.<sup>516</sup> Any interference with the pursuit of truth in a free society must come only in the interest of truth itself and not in the interest of some particular social commitment.<sup>517</sup>

Free thought, then, demands the fairness of putting one's case objectively, of sorting out facts, opinions, and emotions. And it demands the capacity to listen to opposing points of view, to sort out the sound points from the unsound points. It demands that society give independent status and a theoretically unrestricted range to thought, even if in

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<sup>515</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 29.

<sup>516</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), pp. 67-8.

<sup>517</sup>*Ibid.*, p. 69.



practice it must impose a particular code of laws and a public education on society.<sup>518</sup> Only then, under such circumstances, can truth open onto the moral realities by which we pursue an ever more profound realization of the communal Good.

The free society is defined, as is science (a society of free explorers), mainly by its attitude toward the discovery of truth. Four elements constitute the relation between society and truth in general:

- 1) a belief that there is such a thing as truth
- 2) a belief that all members of society love truth
- 3) a belief that all members of society feel obliged to follow the truth
- 4) a belief that all members are in fact pursuing truth

These elements are quickly lost in a society which fails to preserve them or profoundly doubts any one of them. Polanyi says that we must have confidence in them in order to create them in society.<sup>519</sup> We cannot expect truth to discover itself, nor can we proceed alone without the support of the community. All four of these elements are necessary. We

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<sup>518</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 214.

<sup>519</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 71.

must call forth the respect latent in every man for the truth by placing as much confidence as possible in his actual pursuit of it. In this area, doubt itself can destroy the honest effort on the part of others to cooperate in the discovery of truth.

The social dimension of truth, then, is very important in Polanyi's view. In an ideal free society, everyone would have perfect access to the truth in all domains. But this is not practicable in concrete society; each person must rely on others for truth since he is capable of knowing very little directly himself.<sup>520</sup> Society, then, functions to foster mutual reliance of persons in pursuit of truth, as exemplified through the services of social institutions. These institutions aid the discovery of truth, even though they limit each man's freedom.<sup>521</sup>

The coherence of a free society is spontaneously established by self-coordination (polycentric or mutual control). Thus, authority is exercised by equals over each other, and all tasks are set by each to himself. In Polanyi's view, such a social dynamic opens man radically to an emerging sense of meaning that is cosmic in proportion and gives

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<sup>520</sup>We have already noted the importance of this in the previous discussion of the nature of social relations.

<sup>521</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 68.

man a purpose bearing on eternity because of its fruitfulness for truth. The actions of individuals in a society ordered by spontaneous interaction are said to be free in so far as they are not determined by a specific command. Their compulsions are only impersonal or general.<sup>522</sup>

Polanyi says,

Public liberty can be fully upheld as an aim in itself, in so far as it is the method for the social management of purposes that are aims in themselves. Freedom of science, freedom of worship, freedom of thought in general, are public institutions by which society opens to its members the opportunity for serving aims that are purposes in themselves. By establishing these freedoms, society constitutes itself as a community of people believing in the validity and power of things of the mind and in our obligation to these things.<sup>523</sup>

This belief acknowledges that in a free society, society as a whole cannot know the public interest. Rather, this is known only fragmentarily and is left to be achieved as the outcome of individual initiatives aiming at fragmentary problems.<sup>524</sup>

This does not mean, of course, that there is no supervision of group efforts. Group efforts are sometimes

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<sup>522</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 159.

<sup>523</sup>Ibid., p. 193.

<sup>524</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago: Roosevelt University, 1962), pp. 26-7.

supervised by some form of centralized planning. But such instances are designed to serve the goal of maximizing all possible individual initiative. Polanyi says,

As long as certain guiding principles--of truth, of justice, of religious faith, of decency and equity--are being cultivated, and as long as commerce is protected, the sphere of supervision will predominate and planning will be limited to isolated patches and streaks.<sup>525</sup>

Thus, only if civic thought is shaped by the same principles that sustain the freedom of individual thought can civic thought be free and powerful to shape ideal free society.<sup>526</sup>

A dynamic orthodoxy, then, claims to be a guide in the search for truth and, thus, grants the right to opposition in the name of truth. Truth, considered broadly here, is any mode of excellence in which we recognize the ideal of self improvement. Freedom is safeguarded in that, although there are restrictions on what people can do (one cannot simply do as he pleases), there is an assured right to speak the truth as one knows it. The cultivation of public freedom in this sense--and not as a private freedom to do as one

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<sup>525</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: the Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), p. 39.

<sup>526</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 222.

pleases--is the distinguishing mark of a free society.<sup>527</sup>

This freedom takes on the form of polycentricism within the societal context. But, although Polanyi explicitly extends the preferability of a polycentric system of mutual adjustment beyond science to literary and artistic circles, he is ambivalent about whether such a system applies to the appreciation of moral ideas. In the Tacit Dimension, a later work, he denies the validity of polycentric mutual control to moral ideas and asserts indirectly that such controls do not apply to politics since politics is a deliberate organization of moral ideas.<sup>528</sup> But in Science, Faith and Society, he says that the way in which each person is an equal partner in the development of the "general will" in the Republic of Science may be generalized to other modes of discovery in literature, the arts, and in politics.<sup>529</sup> Thus, he implies that moral ideas also fall under such a system.

This contradiction does not receive clarification in Polanyi's works. But I do not think it represents a fatal slip. Obviously Polanyi believes that moral ideas are truths

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<sup>527</sup>Michael Polanyi, The Republic of Science: Its Political and Economic Theory (Chicago, Roosevelt University, 1962), p. 26.

<sup>528</sup>Michael Polanyi, The Tacit Dimension (Garden City, N.Y.: Doubleday & Co., Inc., 1966), pp. 83-4.

<sup>529</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), pp. 16-17.

which are discovered in their own right. My previous arguments have shown that Polanyi clearly implies this. Further, we have already noted that moral change comes about by allowing our behavior to be guided by higher principles than they were before. So moral ideas are truths about principles of human conduct which lead toward the realization of our highest values: The Good. These ideas are parallel to scientific truths in that both they and scientific truths should be distinguished from the societal procedures which make possible their discovery. These procedures, as, eg., a system of mutual adjustment, may be more applicable to some domains of knowledge than others. Since some domains, such as science, require and generally operate through the efforts of large numbers of scholars, they are most amenable to systems of mutual control. But this does not mean that the ideas discovered are true or false by virtue of public opinion. It only means that certain lines of research are supported by the community according to the public opinion of the scientific community. In the case of moral ideas, there is no large number of scholars which must adjust their findings in the light of one another's research. Indeed, the content of ethical discoveries are not the result of empirical researches as in science but are more personal appropriations of meaning within the community. Activities, such as

political, economic, and legal activities, may be adjusted mutually; but the values and principles of the ethical domain require communal support as absolute goals and rules of behavior.

What appears to be a contradiction in Polanyi, then, is really his indirect way of affirming the autonomy of the moral domain of knowledge and action. He denies the principle of mutual control to moral truths because they represent absolute intentions of the community. But he affirms mutual control to those institutions which are formed in the context of realizing these moral goals: the functioning of society which undergirds its realization of moral truth and the Good.

Thus, Polanyi can say that it is the orthodoxy of free thought that forms the coercive power of the state and its institutions. For the institutional framework of a society that forwards free thought is the free society, which gives the maximum opportunity for the realization of moral truth.<sup>530</sup> And so also he can affirm that even the laws of the free society are developed by a form of mutual control in that each judgment relies on that of previous judgments.<sup>531</sup>

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<sup>530</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 245.

<sup>531</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), pp. 162-3.

This mutual control, however, cannot be accomplished via a central authority. No committee of scientists, eg., could forecast the further progress of science, except for routine extensions of the existing system. No scientific advance can be foretold by a committee. Such a committee could consider only problems of no real scientific value, totally devoid of originality. Only individuals can, by life-time concentration, discover really worthwhile problems.<sup>532</sup> Individuals, then, must be free to follow the insinuations of truth in any direction which can be supported by the scientific community as a whole. Where specific authority, claiming alone to have contact with the center of general authority, demands obedience through an abdication of ultimate judgment to their center, the result is the loss of this precious freedom.<sup>533</sup>

Polanyi, then, argues that polycentric adjustment is essential not only in science, which flourishes only under such a system, but also for the development of culture. The freedom inherent in such polycentricity is, by implication, also necessary. Indeed, he says that a collectivist revolution must, for the sake of itself, suppress the liberties of

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<sup>533</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 59.



universities, law courts, churches, the press, etc.<sup>534</sup> Again, Again, "General planning is wholesale destruction of freedom; cultural planning would be the end of all inspired enquiry, of every creative effort, and planned economy would make life into something between a universal monastery and forced labor camp".<sup>535</sup>

These criticisms do not mean that Polanyi believes polycentric systems of government do not have inherent risks. He acknowledges that without a centralized specific authority, it is impossible to safeguard entirely against arbitrariness and decisional mistakes. But this risk does safeguard the freedom necessary for any field of human endeavor to survive as such. Competent opinion as normative must be given freedom of expression, though no degree of infallibility should be attached to these.<sup>536</sup>

The free society, then, is essentially a community of persons bound by ethical values of truth, right action, and the ideal of maximal freedom within a society ordered toward the realization of the Good and the preservation of justice.

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<sup>534</sup>Michael Polanyi, History, Philosophy, and the Sociology of Science: the Contempt of Freedom (N.Y., N.Y.: Arno Press, 1975), p. 40.

<sup>535</sup>Ibid., p. 60.

<sup>536</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), pp. 60-1.

The same human ordering that makes the discovery of truth possible in science and other intellectual endeavors is essential to the political truths which make order possible at all.<sup>537</sup> And the preservation of human order toward realization of the Good is essential to human success in any broad ranging social venture. Identifying free self-determination with democratic institutions, Polanyi says that the "democratic spirit" which guides the life of a free nation is parallel to the scientific spirit that underlies the activity of the scientific community, particularly in its sharing of fundamental beliefs on a communal level.<sup>538</sup> Thus, Polanyi, seems committed to the establishment of a free society that is free by virtue of its commitment to freedom, to truth, and to a moral order that preserves these ideals.

The principle of the embodiment of higher levels in lower ones is, thus, extended to the moral and social relations of responsible choices.<sup>539</sup> Morality is on a level higher than society's organization for power and profit. The

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<sup>537</sup> Knowing and Being: Essays by Michael Polanyi, ed. by Marjorie Grene (Chicago: The University of Chicago Press, 1969), p. 68.

<sup>538</sup> Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 70.

<sup>539</sup> Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), pp. 67-8.

higher principle is rooted in the lower one, so that moral progress is rooted in an exercise of power and in aiming at material advantage. Absolute morality cannot be applied to society, since power and wealth are always limiting mechanisms and act as mediums.<sup>540</sup> Nonetheless, such mediums cannot sustain themselves; they require an ultimate aim at the social and intellectual skills and tasks, including morality.

And because our participation is most deeply tacit, even new values within society are bred tacitly, by implication. Within the social context, we do not explicitly choose a new set of values as though they pre-existed and had only to be chosen. Rather, we submit to them in the very act of creating them.<sup>541</sup> Thus, our tacit indwelling within the social context of the search for the Good is in context, not only of the moral life in which we presently participate, but also of the originating forces of new values.

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<sup>540</sup>Michael Polanyi, The Study of Man (Chicago: The University of Chicago Press, 1958), p. 87.

<sup>541</sup>Michael Polanyi, The Tacit Dimension (Garden City N.Y.: Doubleday & Co., Inc., 1966), p. xi.

Polanyi views society as having both an intellectual and moral task in preserving and forwarding the Good, a task he says rests in the last resort on the free conscience of every generation.<sup>542</sup> And the call of conscience involves the aspiration to preserve the ideal of the free society: a good society; i.e., one which respects the truth, desires justice, and loves its fellows.<sup>543</sup> And only a nation which is sensitive to the claims of conscience and can follow them is free.<sup>544</sup> Society, then, is an instrument of our conscience. It protects us from our own greed and ambition as well as from corruption from others. Thus, man is morally dependent on his civic contacts through which his moral life is organized. Social responsibilities provide the occasion for moral

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<sup>542</sup>Michael Polanyi, Science, Faith, and Society (Chicago: The University of Chicago Press, 1966), p. 84.

<sup>543</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 30. Scientific Thought and Social Reality, ed., by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 65.

<sup>544</sup>Michael Polanyi, The Logic of Liberty (Chicago: The University of Chicago Press, 1969), p. 45.

life. In this sense, then, the free society is an end in itself.<sup>545</sup>

Polanyi says,

But the restraint which power incurs as the price of employing morality for its own coercive purposes proves only that morality is an indispensable, though self-willed ally to power. It does not demonstrate that morality can ever control power according to its own principles; civic culture still remains dependent on force and material ends, and remains therefore suspect. Nor does the history of free societies dispel this suspicion. We see, on the contrary, how every new moral issue has evoked a clash of interests, how often moral progress had to be forced upon the privileged by the pressure of the oppressed...<sup>546</sup>

The reality of the moral domain provides the ground for the possibility of a conflict between forces which restrict freedom and those which forward it. But Polanyi explicitly sums up the relations between the moral power of a free society and the political, social, and legal changes within it:

To describe the institutional framework within which moral, legal and political opinions are thus continuously re-moulded in a free society would lead us too far. Suffice it to give some of the results of this process, which has radically changed life in the free countries since the principles of social reform gained wider acceptance some 130 years ago. There has taken place a far reaching humanization of the criminal law and of the prison system, and similarly of discipline in the army and the navy, while the same changes have gone on in the schools,

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<sup>545</sup> Scientific Thought and Social Reality, ed. by Fred Schwarz (N.Y., N.Y.: International Universities Press, Inc., 1974), p. 65.

<sup>546</sup> Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 226.

assylums, hospitals and within the family itself; the Factory Laws have enforced more humane conditions of employment in an immense variety of ways; new welfare institutions have been set up to provide for the sick and the aged, for the disabled, the unemployed and the slum dwellers; free education has greatly widened the prospects of poorer people's children; the legal disabilities of women, of Catholics, Jews and of the colonial peoples have been removed or at least greatly reduced; the extension of the franchise and the recognition of Trade Unions have shifted the balance of power in favour of hitherto subordinate classes. All these were moral improvements of society which in England's history, for example, can be traced back to a series of specific movements appealing to the public conscience; movements which had usually been evoked in the first place by persuasive individuals devoted to the advocacy of one particular reform. Such is the dynamism of the modern free society. It consists in the moral progress of civic thought, which transmits its conclusions, through the machinery of self-government, into acts of social reform. It is the practical outcome of an intellectual process, moved by its own passions and guided by its own standards.<sup>547</sup>

This quote shows the distinctly positive role of the moral domain in the free society. It sums up the unique interrelations between the moral, political, and generally social forces of the community, showing how moral directions undergird other social developments. And each social change is a change for the better, a "better" informed by the insight into the Good within the moral domain.

But to what extent can we take the power of the moral domain in society? I do not intend within the scope of this

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<sup>547</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), pp. 222-3.

work to delineate in detail the functions of moral life in the total development of society, though such an investigation would be highly valuable. We can, however, observe some very general statements in Personal Knowledge which confirm our argued expectation that a powerful, independent moral domain actually directs through a pursuit of moral knowledge our movement toward the Good--and carries us beyond society to the heart of the Good!

We have spoken of Polanyi's ontology as an "ultra-biology", according to his own notion of the import of his work. In this respect, he says,

The whole ontology of commitment and of a free society dedicated to the cultivation of thought by responsible commitments of its members can in fact be built up, in this manner, as a generalization of biology followed by reflection on this generalized biology.

Thus, at the confluence of biology and philosophical self-accrediting, man stands rooted in his calling under a firmament of truth and greatness. Its teachings are the idiom of his thought: the voice by which he commands himself to satisfy his intellectual standards. Its commands harness his powers to the exercise of his responsibilities. It binds him to abiding purposes, and grants him power and freedom to defend them.<sup>548</sup>

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<sup>548</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 380.

The purpose to which we are bound and for which we are empowered ultimately is the evolution of our personhood, which Polanyi says produces novel centers of being.<sup>549</sup> The capacity of the free society to sustain such evolution is grounded in its nurturance of a free exploration of new responses to moral dilemmas. Such explorations are "random impacts" which release the functioning of a novel ordering principle. Polanyi perceives such random impacts as producing biotic achievements.<sup>550</sup>

But the direction of evolution transcends mere intellectual and social development:

The appraisal of living beings merges into an acknowledgment of the ideals transmitted by our intellectual heritage. This is the point at which the theory of evolution finally bursts through the bounds of natural science and becomes entirely an affirmation of man's ultimate aims. For the emergent noosphere is wholly determined as that which we believe to be true and right; it is the external pole of our commitments, the service of which is our freedom. It defines a free society as a fellowship fostering truth and respecting the right.<sup>551</sup>

Finally, what is the point of arguing for the reality of the moral domain and its power to shape society? The

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<sup>549</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 401.

<sup>550</sup>*Ibid.*, pp. 402-3.

<sup>551</sup>*Ibid.*, p. 404.



point is that man bears a moral responsibility for what he becomes; and that he bears the potential of becoming something so much greater than what he is at present that his future is inconceivable.

So far as we know, the tiny fragments of the universe embodied in man are the only centres of thought and responsibility in the visible world. If that be so, the appearance of the human mind has been so far the ultimate stage in the awakening of the world...We may then envisage a cosmic field which called forth all these centers by offering them a short-lived, limited hazardous opportunity for making some progress of their own towards an unthinkable consummation.<sup>552</sup>

We end this long and complex argument for knowledge of values and of the right within a Polanyian context of personal knowledge with this quotation from Personal Knowledge. I have argued that, since the dynamic of tacit knowledge is the same throughout all domains of knowledge such as science, history, art, political science, etc., then one ought to extend the form of personal knowledge to which it commits us to the moral domain as well. The evidence, both tacit and explicit, for such an extension was shown to be abundant. Furthermore, Polanyi's ontology provided grounds for an argument for a notion of the ethically right, of a standard of

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<sup>552</sup>Michael Polanyi, Personal Knowledge: Towards a Post-Critical Philosophy (Chicago: The University of Chicago Press, 1962), p. 405.

behavior which is comprehended in terms both of Polanyi's biotically oriented ontology and his epistemology.

Finally, the argument for knowledge of the Good (and values) and of the right was confirmed in its correctness through an analysis of Polanyi's social and political thought. We were able to discern the structure of moral knowledge within Polanyi's social thought, though such discernment would be impossible without a clear knowledge of what to look for, a knowledge gained in the analysis of his epistemology and ontology. Let us review briefly what these expectations were and how they were met. Based upon the tacit ethical structure which we explicitated, we should have expected to find:

- 1) that science itself would be viewed as an enterprise amenable to an "ethics" of procedure which guarantees the discovery of truth.
- 2) that science would reveal most if not all of the elements of a moral community: it would be a mini-model of the ethical community.
- 3) that a moral community would include (following the lead of the republic of science) freedom (and free exploration), committed conviction, autonomy, and a role for conscience.
- 4) that Polanyi would show a belief in the reality and importance of moral rules in a social context. He should believe in some kind of Good and in the possibility of right action.
- 5) moral rules should be principles we can learn, indwell, and develop to higher principles.
- 6) that there should be a role for symbols in the moral community, particularly in the form of moral heroes.

- 7) that Polanyi would present a theory which would attempt to resolve the tension between societal control and freedom, since he believes in both of these.
- 8) that there should be evident some vision of a free society that functions according to moral principles.

Now it is evident in these last three chapters that these expectations have been met. Expectations 1-3 were met in the discussion of the republic of science when I showed that science does have a commitment to truth that demands certain behavioral recommendations and restrictions: in short, science proceeds on the basis of an ethical dynamic which holds truth as its highest ideal. Truth is the moral ideal of science and, as such, it directs the activities of those who would pursue it. Hence free exploration (including the sort of freedom which grants us moral responsibility), personal conviction, autonomy, and social conscience all form a part of the republic of science.

In Polanyi's discussion of rules of rightness as applied to communal life and as informed by social conscience and a concern for both moral truth and truth in general we find expectation 4 met. Further, in this discussion, Polanyi refers to the interiorization of moral teaching. And this is essentially a concept of moral knowledge as indwelt (meeting part of the fifth expectation). In my discussion of the communal change of moral consciousness, I show that Polanyi not

only believes in moral development but allows for the role of moral heroes in this development, satisfying the rest of the fifth and all of the sixth expectation. Thus, there is development toward the communal Good as a change of moral consciousness toward a greater and more profound grasp of moral principles.

The seventh expectation is satisfied in Polanyi's application of polycentric adjustment and mutual control. The inversions of morality which come from restricting the freedom to pursue truth through the dynamic of these maximally free controls throw into relieve the vision of the free society which Polanyi gives us in satisfaction of our last expectation.

I hope that this delineation of the ethical dimension of personal knowledge will provide a fresh and interesting approach to the questions: What should I value? and What should I do?

THE END

## BIBLIOGRAPHY

- Agassi, Joseph, "Can Religion Go Beyond Reason?", Zygon, 4, 1969.
- Buchanan, James M., "Politics and Science: Reflections on Knight's Critique of Polanyi", Ethics, 77, '66-'67.
- Conn, Walter, E., "Michael Polanyi: The Responsible Person", Heythrop Journal, 17, 1976.
- de Chardin, Pierre, Le Phenomene Humain, Paris, 1955.
- Greene, Marjorie, The Knower and the Known, Faber and Faber, London, 1966.
- \_\_\_\_\_. Knowing and Being: Essays by Michael Polanyi Chicago: The University of Chicago Press, 1969.
- Hollinger, R., "Can a Scientific Theory be Legitimately Criticized, Rejected, Condemned, or Suppressed on Ethical or Political Grounds?" Journal of Value Inquiry, 9, 1975.
- Knight, Frank, "Virtue and Knowledge", Ethics, 59, July 1949.
- Kuhn, Thomas, S., The Structure of Scientific Revolutions, Chicago, The University of Chicago Press, 1964.
- Thomas A. Langford and William H. Poteat, Intellect and Hope, Durham, N.C.: Duke University Press, 1968.
- Musser, Don, "Review of Meaning", Zygon, 12, Sept. 1977.
- Polanyi, Michael, Personal Knowledge: Towards a Post-Critical Philosophy, Chicago: The University of Chicago Press, 1962.
- \_\_\_\_\_. The Tacit Dimension, Garden City, N.Y.: Doubleday & Co., Inc., 1966.
- \_\_\_\_\_, The Study of Man, Chicago: The University of Chicago Press, 1958.
- \_\_\_\_\_. Science, Faith, and Society, Chicago: The University of Chicago Press, 1966.

\_\_\_\_\_. The Logic of Liberty, Chicago, The University of Chicago Press, 1969.

\_\_\_\_\_. History, Philosophy, and the Sociology of Science: the Contempt of Freedom, N.Y., N.Y.: Arno Press, 1975.

\_\_\_\_\_. The Republic of Science: Its Political and Economic Theory, Chicago: Roosevelt University, 1962.

\_\_\_\_\_. "Science and Conscience", Religion in Life, XXIII, 1953.

\_\_\_\_\_. Notes on a Film, Chicago: Special Collections Library, The University of Chicago, 1936.

\_\_\_\_\_. Suggestions for a New Research Section, Chicago: Special Collections Library, The University of Chicago, box 25, folder 9, 1937.

\_\_\_\_\_. On Popular Education in Economics, (speech to Political Society) Chicago: Special Collections Library, The University of Chicago, box 25, folder 9, 1937.

\_\_\_\_\_. Prologue (never given) to On Popular Education in Economics, Chicago: Special Collections Library, The University of Chicago, box 25, folder 9, Econ File 10, 1937.

\_\_\_\_\_. Visual Presentation of Social Matters, Chicago: Special Collections Library, The University of Chicago, box 25, folder 9, Econ File #6, not dated.

\_\_\_\_\_. Historical Society Lecture, Chicago: Special Collections Library, The University of Chicago, box 25, folder 14, 1937.

\_\_\_\_\_. Delivered at the Meeting of the Chemical Society in Manchester, (after dinner speech), Chicago: Special Collections Library, The University of Chicago, box 25, folder 15, 1937.

\_\_\_\_\_. Notes on Prejudice, Chicago: Special Collections Library, The University of Chicago, box 26, folder 1, 1939

\_\_\_\_\_. Remarks sent to M. Roupise, Chicago: Special Collections Library, The University of Chicago, box 26, folder 1, 1939.

\_\_\_\_\_. Untitled, unpublished manuscript #8, Chicago: Special Collections Library, The University of Chicago, box 26, folder 1, 1939.

\_\_\_\_\_. Untitled, unpublished manuscript on the nature of science, Chicago: Special Collections Library, The University of Chicago, box 26, folder 1, 1939.

Michael Polanyi and Harry Prosch, Meaning, Chicago: The University of Chicago Press, 1975.

Prosch, Harry, "Polanyi's Ethics", Ethics, 1972.

Roberts, P.C., "Politics and Science: A Critique of Buchanan's Assessment of Polanyi", Ethics, April 1969.

Schwarz, Fred, ed., Scientific Thought and Social Reality, N.Y., N.Y.: International University Press, 1974.

Scott, William, "A Bridge from Science to Religion Based on Polanyi's Thoery of Knowledge", Zygon, March 1970.

\_\_\_\_\_. "Tacit Knowing and the Concept of Mind", Philosophical Quarterly, 21, January 1971.

Wiser, J.L., Human Reason and the Quest for Meaning, Jim Wiser Paper given at the Canadian Political Science Association, Fredericton, New Brunswick, June 9-11, 1977.

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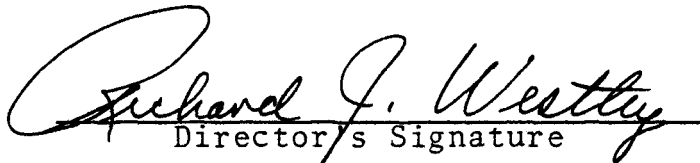
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The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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