

III

THE EPISTEMOLOGY OF COMMITMENT

Polanyi's account of knowing raises a variety of epistemological problems, centering around the involvement of the person in knowing. The most important one is that if knowing involves the satisfaction of self set standards, how does Polanyi avoid relativism? By understanding Polanyi's theory of the self-transcendent nature of knowing we will see that he is a realist who is neither an empiricist nor an idealist. We will also resolve the paradox of self-set standards; that is, how subjectivity can be "objective". The key to resolving these and other problems lies in Polanyi's understanding of knowing as a series of commitments.

1) COMMITMENT

A commitment is an action of a being which can succeed or fail, We find them in the lowest to the highest forms of life as well as in meaningful human actions and interactions, We do not find them on the level of chemistry and physics since chemical reactions, for example, do not succeed or fail; unless we are trying to understand them in the context of living organisms or human activities and purposes.

The evaluation of actions in terms of success and failure implies that commitments involve risks, This is easily shown for acts of knowing, Perceiving, understanding and judging can all fail to establish contact with reality, In addition, if we are committed to a perception as veridical, and it is not, this can lead to a series of mistakes in the future. If we are involved in a skillful performance it can mean failure to achieve our goal. If we use the perception as evidence for a judgment it can lead to

error, just as it can lead to a misunderstanding of our surroundings. Understanding involves risks also. If one devotes his professional life to understanding difficult problems, a failure to understand can place his career in jeopardy. Similarly, judgment involves a series of risks. An individual's role and worth in society is evaluated by others to a large extent in terms of their evaluation of his judgment. More importantly, by our judgments we constitute the world in which we live. This provides a context not only for ourselves, but also for others to rely on.

Epistemological commitment includes a sense of its own precariousness. Unless one has had experiences with sensory disorders, hallucinations, or has been extremely acute in understanding his own perceiving, the validity of perceptions is taken for granted. However, understanding and responsible judging rely on a greater involvement of the person. Not only do they require more effort, but intrinsic to both is an anticipation of the goal, the achievement of understanding, or assent to the reality of a coherence. The anticipation of the goal in terms of anticipatory intuitions and intellectual passions is also a guide to successful achievement. Not only do we make a series of evaluations that we are nearing our goal, but we can make the converse evaluations that we are on the wrong track. The achievement of understanding and judgment is never certain, and the uncertainty which we feel is also our intimation of the riskiness of the effort. This sense of uncertainty can merge with a more generalized insecurity depending on the context of our efforts to know. On the other hand, it may be reduced to a minimum if we are masters of our craft or field, or are dealing with merely routine problems.

Commitments are achievements and instances of emergence. As an achievement they involve the organization of a set of subsidiaries towards a comprehensive result. In

the case of cognitional commitments the achievement is a tacit integration. As instances of emergence they cannot be specified nor predicted in terms of their antecedents. The logical unspecificity of tacit integrating is evidence of them as emergent acts. These topics will be treated in more detail in the discussion of the structure of nature.

Commitments are also acts of active centers. Cognitional acts are acts of the person who spontaneously and usually willingly engages in them, and who has responsibility for them to varying degrees. Cognitional and ethical acts constitute and are our constituting of what we are. They constitute what we are in the sense of "construct" or "make" for as persons we are knowers and doers oriented to a universe of coherent reality and value. As such they are our native endowment. We also make ourselves what we are in a more specific sense. We can become a butcher, baker, scientist or scholar. Thirdly, by these acts we intentionally constitute ourselves in that we interpret or understand ourselves, recognizing that our actions are meaningful and what that meaning is. We also intentionally, or mentally, constitute our world. As actors we constitute the world in the first sense of "constitution", changing it by acting in and upon it. Thus, our capacity for being committed to a meaningful and valuable universe is what makes us persons, while the manner in which we do it differentiates us culturally and as individuals, and creates the culture and world we live in. Our intentional conscious acts mentally integrate what is in fact integrated by and in ourselves and in the world making both the world and ourselves accessible to us as realities.

Personal commitments, then, are achievements of individuals which include the recognition or acceptance of coherencies and values. As achievements of persons they are subject to standards which we set for ourselves to appraise our success. If the

standards are self-set, how do we avoid falling into relativism? Moreover, we saw last chapter that the standards can be embodied in and set by our intellectual passions. Is Polanyi's epistemology mere sentimentalism, or a sophisticated romanticism? What distinguishes the personal from the merely subjective?

2) INTELLECTUAL PASSIONS

Knowing involves an aesthetic appraisal of itself and its contents. This appraisal is a passionate recognition of the intellectual beauty of a discovery or a theory. It has its counterparts in the emotional responses we have to works of art, patriotic ideals, the fluid performance of an athlete, or the functioning of a finely tuned, sophisticated machine. While we have little trouble accepting our emotional responses to the above examples, we labor under the cultural truism that truth and individual feelings do not mix. Nevertheless, the strength of our feelings should not be overlooked. For the most part they provide the context for most of our concerns, spontaneously directing attention to what is biologically and psychologically of importance to us, and sustaining our performance in pursuit of these ends. However, when values are discerned, the passions directed to them can take over. We will sacrifice everything, including our lives, for the realization of values. Our intellectual passions respond to the value of a discovery or theory as well as its beauty. Hence, people have sacrificed themselves for the truth, for it has an attraction for us which pain and suffering cannot destroy.

With these feelings comes great responsibility and danger. While people have been willing to endure personal suffering for the truth, they have been just as willing to inflict it on others in its name. It is most probably a recognition of the dangers that has led to the cultural acceptance of the ideal pursuit of truth being dispassionate. However,

the denial of the feelings' existence and function does not make them go away. Instead it fosters personal and intersubjective tensions which cannot be resolved openly. In its mildest form it leads to such performative contradictions as a passionate defense of the dispassionate pursuit of truth. In Its strongest form it leads to moral inversion. In any case, it frustrates the proper intellectual development of the person. It can undermine the self-confidence of the creative person, causing him to distrust the very feelings in himself which can lead to the development of accomplished, self-confident intellectual performance.

While it is necessary to cite extreme examples so people may advert to their intellectual passions, in normal life their manifestation need not be so violent. They are evident when we are trying to solve a problem or make a discovery. They sustain the inquiry, providing some direction for it. Failure to solve a problem results in dissatisfaction with ourselves. Similarly, the solution of the problem transposes our feelings. We are not merely satisfied, but have an appreciation of what we have done. This of appreciation can last a lifetime and is the ground of our acceptance/others' contributions to our intellectual life. We accept others' work partly because it is intellectually satisfying to us to appropriate it for ourselves. In the process our intellectual passions are molded in manners similar to theirs, Sharing an intellectual framework means accepting the same things as relevant and irrelevant, valuable and worthless, Transmission of intellectual achievements in the growth and development of culture is not simply the mutual acceptance of a set of articulate truths, but also an acceptance of similar feelings which sustain and unify group intellectual achievements,

As noted, the satisfaction we have in solving problems is also a sense of accomplishment. Knowing is a kind of doing. Just as the skillful performer has a sense

of mastery which comes with success in performing, so as knowers we develop similar feelings of competence in scientific and academic fields or in our daily lives, A sense of mastery, aesthetic appraisal of discoveries and theories, recognition of intellectual value, the drive to understand and the pleasure of contemplation are all manifestations of intellectual passions. However, if in satisfying our intellectual passions I we are satisfying ourselves in terms of standards we set for ourselves, what prevents these satisfactions from being merely subjective, or relative only to my own private concerns?

Merely subjective passions are for Polanyi what the term "subjectivity" literally implies. They are passions the person is merely subject to. In phenomenological terms, they are non-intentional, for there is no object in the world to which they correspond. Examples are fatigue, boredom and pain. Basic biological drives such as hunger are also subjective, but not to the same degree, There is some orientation to things other than the person. But they are appreciated not for their own sake, but simply as a means for satisfying our appetites. The satisfaction is private. However, intellectual passions set standards we find compelling for everyone. Intrinsic to them is a claim of universality, just as we think that what we have discovered is accessible to all who have the capacity to recognize it.

Intellectual passions are oriented to a reality independent of the knower, knowledge of which he pursues for its own sake. Unlike hunger, we are not merely subject to them, but can choose to reinforce them by pursuing their goals, or try to suppress or repress them. Or we may choose to pursue different kinds of knowledge, satisfying different feelings in ourselves. Thus, there is a degree of responsibility involved in the development of intellectual passions not present in the experience of

hunger. The development of intellectual passions demands personal involvement.

Because intellectual passions intend universally valid results the affirmation of them as guides in knowing does not involve Polanyi in relativism. Neither does it lead him into a romanticism or sentimentalism, for they are not the only guides nor are they the ultimate arbitrator in determining what we know. It is intuition/which is the primary guide in understanding. It is our personal judgment which is the final arbiter in any affirmation of reality. Polanyi's main point is that neither of these is dispassionate. Far from passions being a hindrance in knowing, they are essential to it. This will become clearer when I consider scientific value in the next chapter and discuss the heuristic and selective function of intellectual passions.

Showing that passions are not merely subjective for Polanyi raises another problem. If the ultimate basis of our knowledge is our judgment, we still face the problem of relativism as well as the question of whether we can ever be certain. A solution of these problems rests on an understanding of Polanyi's theory of truth and his notion of an a-critical philosophy,

3) TRUTH

By placing the ultimate criteria for knowing in the responsible commitment of the knower Polanyi effectively disengages himself from a false model of truth which implicitly precludes the possibility of determining what the criteria or standards of truth are. Because knowledge is personal, the standards for affirming an independent reality are the individual's. We may identify them with his rationality. The problem arising from such a notion of commitment to reality is that of establishing that the individual's beliefs are not merely subjective. A limitation to any solution to this problem is that it

must be explicitly compatible with a commitment to personal knowledge.

Basically, the limitation stems from the fact that any claim to truth is a claim made by a knower. This fundamental fact implies that there is no standard of reality which is completely independent of a knower. If there were some aspect or quality of objects which was a mark of their reality, still that quality would have to be discerned by a knower for the reality of the object to be affirmed unarbitrarily. For affirming reality within himself. Thus, the knower must have some criteria. Similar reasoning holds against the possibility of affirming a method or a set of rules for attaining objectivity independently of any personal, and hence "potentially arbitrary", standards. Any such method must also be accredited by a person or set of persons. Thus, the knower must have some immanent norms for discerning the objectivity of the method, just as he must have norms for the recognition of a real object.

By placing the norms for knowledge in the person Polanyi breaks with a traditional statement of the problem. Chisholm's analysis of the problem is representative of this tradition. He notes

...that if one man knows and another man has true opinion but does not know, then the first man has everything that the second man has and something else as well ... What is that which, when added to true opinion yields knowledge?

A prediction about tomorrow's events would be a true opinion on the day it was made if the events occurred in the manner predicted. A patient may make a conjecture about his illness, which turns out to be true. The patient would have a true opinion, but the doctor would have knowledge. This distinction is also made in terms of belief and statements of fact, belief and true belief, and belief and knowledge. In this distinction it is assumed that a belief can be true independently of its affirmation by a person as true.

In this case, then, the grounds of knowledge would not be immanent to the subject, but would consist in some objective relationship between belief and facts, opinion and reality. We would know that the relationship existed when we had adequate evidence, discerned some logical relation between our propositions, had direct observation of X, or had a coherent set of beliefs. Each of these overlapping possibilities (among others) has been construed in some manner as justifying true belief. However, in these cases the importance of the subject is overlooked. What is stressed is an aspect of the object of knowledge, our beliefs about the object, or the relation between our beliefs and the object. However, whatever the criteria are, the fact that they are met can only be recognized by the person. Thus, supposing that the coherence theory of truth is true, the coherence of any theory would have to be recognized by a person before that theory could be affirmed as true. Likewise, adequate evidence can only be evidence which someone affirms as adequate, else there could be adequate evidence, but we would not know that there was. Adequate evidence is constituted as adequate in the judgment it supports •

...

There is, then, an ellipsis in Chisholm's presentation of the problem of truth. The subject is left out. Because truth is not personal, beliefs can be conceived to be true when we do not know that they are true. Polanyi does not think that truth can be truly abstracted from the subject. There are, he says, two parts to any assertion. There is a sentence by which we express our meaning and there is a tacit act by which this sentence is asserted. Now, it is proper to state that "p is true" where p denotes a sentence. But the sentence p is not true outside the assertion "'p" or "'p' is true." Truth resides in the appropriateness of the asserting, not in the sentence by itself. Thus, the

assertion" " p' is true!" uttered by me is equivalent to the assertion "I believe that p. " Truth is neither a quality of sentences or of a non-personal relation of sentences to reality. Instead it is the rightness" of a commitment by a person to his recognition of reality.

The difference between true opinion and knowledge can only exist if there is a knower. Likewise, it can only be for a knower. If someone has true opinion and not knowledge, then he does not know that he has true opinion. That p is true is only a possibility for him. It is a misnomer to term his belief true opinion if he does not know whether or not p is true or false. If he asserts that p is true, then he does not have true opinion, but is claiming to have knowledge. The dichotomy between true opinion and knowledge presented in this discussion is false.

This raises another problem. As we all know, we often claim to believe, , or know, things we later discover to be false. Polanyi claims there is no way to avoid this possibility. We must commit ourselves to knowledge which is conceivably false. In short, for us knowing is an achievement, and we can succeed or fail in our attempts to know. Again, our claim that something is real does not guarantee that it is in fact real, just as our claim that p is true does not guarantee p's truth. However, for Polanyi we also cannot speak of truth outside of such a claim. The conclusion that we can do so is in fact an extrapolation to a possible judgment where the tacit commitment is overlooked. The distinction between true belief and knowledge has cast a spell over philosophy since Plato, and the strength of Polanyi's analysis can be demonstrated by accounting for the origin of the distinction. As I noted, the dichotomy can only exist for a knower, and in any particular instance it cannot exist for the knower who is deliberating about the truth of a proposition, because he is not in touch with a reality

with which to compare his opinion. If he were, he would not have opinion, but knowledge. However, the dichotomy could exist for a second person who claims to have knowledge. He could then compare the opinion of the person who has not yet arrived at a firm commitment with his own knowledge. A similar situation could be envisaged where I am the first knower at T1 and the second knower at T2. If the comparison were favorable, then he could claim that the first person had a true opinion. However, the opinion is only true for the person who had knowledge. There is, then, no difference between true opinion and knowledge in this instance either, unless we surreptitiously ignore the fact that the opinion is true for the second knower; that is, that truth is personal. The real difference is between knowledge that one person has and an opinion that another person has which would be true if he were committed to it as true. Belief is not merely subjective, but is a claim to know facts. Thus, Polanyi not only undercuts the distinction between true opinion and knowledge, but he also eliminates the distinction between belief and knowledge, where belief is where we assent to mere matters of fact and knowledge is where we assent to what is true beyond any conceivable doubt.

We do not accept things because they are true beyond any conceivable doubt, but because in the light of our personal judgment they are so. The most common criteria for supposing that knowledge is true beyond every conceivable doubt are immanent in necessary knowledge. The principle of non-contradiction is central to such knowledge. Even though it may be an immanent norm for judging, we can doubt its universal applicability. Indeed, it seems that we must if we are to consider whether or not it is true, for to raise the question of its truth is to consider the possibility of its falsehood. The only other alternative is to accept the philosophically untenable positions of

affirming true innate ideas or self-evident truths. Any necessary knowledge is only as true as the premises from which it is derived. We have yet to find a way to guarantee the truth of premises in logical argument. On the contrary, in so far as we accept something as true beyond any conceivable doubt we do so because we recognize that it follows with necessity and is, as far as we know, impervious to the doubts we ourselves have.

This suggests that the notion of certainty should be redefined. Polanyi equates certainty with accuracy. However, his philosophical position demands a wider definition than this if we can be sure of facts and cannot fully specify all the reasons for our assurance. For him certainty cannot require that what we claim to know is true beyond any conceivable doubt. Nor can it entail that we cannot be wrong. I propose that it is consistent with his thinking to claim that we can be certain beyond any reasonable doubt where what is a reasonable doubt and what is not is determined by the responsible knower. This means that our judgments about our certainty are fallible, just as our judgments about other things are. However, that we can be wrong does not imply that we are never right, and, thus, that we can never be certain.

Marjorie Grene has a more skeptical interpretation of Polanyi. For example she states that "if we are wrong, we may also be right, although we can never know for certain that we are so." She also thinks that knowledge is merely stabilized conjecture, continually open to transformation. In the same vein she notes that there is no "higher power of certain understanding beyond the middle range of conjecture, a Reason at the top of the scale no longer open to doubt." Though knowledge is open to continual transformation this does not imply that everything we now accept will eventually be proven false. Of course, she does not conclude this. But if it is possible for us to know

truly, then it should be possible for us to know this, not beyond any conceivable doubt, but beyond reasonable doubt. Of course there is no reason at the top of the scale not open to doubt by someone. But if I accept something as true, I should no longer have doubts about it. If I do then I am not fully committed to it. If I am fully committed to it, then, for me there is a knowledge which is, at least at the present time, not being doubted. But the fact that I could doubt what I now hold to be true does not imply that I cannot be certain of what I know. Indeed, the judgment that I am certain is itself open to doubt. I could be wrong. But just as knowledge could be wrong, even if it is true, yet still is knowledge, so I can be certain, though I could be wrong. Unless someone is struggling with the philosophical problems of skepticism, they should be able to identify some set of judgments they hold with certainty.

The basic reasoning supporting Polanyi's rejection of the distinctions between true opinion and knowledge, and belief and knowledge underlies his argument against the correspondence theory of truth. Because all external standards of truth are open to doubt since they must be recognized and accepted by the person, one who thinks that truth is objective and must be certain beyond any conceivable doubt is caught in what Polanyi terms the "objectivist dilemma",

The correspondence theory of truth is another instance of it. He states:

This dilemma has long haunted philosophy in the guise of the "correspondence theory of truth." Bertrand Russell, for example, defines truth as a coincidence between one's subjective belief and the actual facts; yet it is impossible, in terms which Russell would allow, to say how the two could ever coincide. The answer is this. The "actual facts" are accredited facts, as seen within the commitment situation, while subjective beliefs are the convictions accrediting these facts as seen noncommittally, by someone not sharing them. But if we regard the beliefs in question non-committally, as a mere state of mind, we cannot speak confidently, without self-contradiction, of the facts to which these beliefs refer. For it is self-contradictory to secede from the commitment situation as regards the beliefs held within it, but to remain committed to the same beliefs in acknowledging their

factual content as true. It is nonsense to imply that we simultaneously both hold and do not hold the same belief, and to define truth as the coincidence between our actual belief (as implied in our confident reference to the facts) and our denial of the same belief (as implied in our reference to it as a mere state of our mind concerning these facts),

However, one can generalize from particular acts of commitment in judgment and affirm some variation of the correspondence theory of truth avoiding the contradiction Polanyi presents. The actual facts, or what is so, are not merely the "accredited facts". They also include what remains to be known or accredited. Thus, while we can define reality as what will be known truly, we should not confine it to what is known truly at some particular time. For example, I can wonder if the intelligible pattern which I understand in fact exists. The problem is not whether or not the intelligible pattern is true, but whether it is real. Is it merely an idea of mine, or are things that way? The problem is not whether or not my understanding is true, for understanding by itself does not make any claim to existence. Again, the problem is whether or not what I have understood actually exists as I have understood it. In this case, then, the actual facts are not the accredited facts; they are what remain to be accredited. I do not know what the actual facts are, but I can know that there is something to be known. Trying to determine if what I have understood is real is not a matter of comparing my understanding with the facts and seeing if it "corresponds" with them, for I do not know what the facts are, That is precisely what is in question. It is here that Polanyi's point is well-taken.

Now I do not think that Polanyi gives a complete characterization of judging, and I do not wish to engage in a detailed phenomenology of the process. I simply wish to affirm that the correspondence of knowing with reality is actualized in a true judgment. There is an ambiguity here. Judgment can be taken to mean a proposition, a statement,

or the content of an assertion. However, judgment can also refer to an act of the mind which affirms that something is so where what is affirmed can be expressed in a statement. In the latter case, judgment would not be distinct from a proposition, but the proposition would not be the whole of judgment, but only the affirmed or rejected content. Thus, when we claim that a judgment is true, we claim not only that what is expressed in the proposition is so, or real, but also that the judging is "right", "correct" or true. And the judgment is true when what is affirmed as real is real. Conversely, it is false when what is affirmed as real is not real. This places us in the unavoidable position of not knowing that we are wrong when we make a false judgment. However, it does not preclude eventual self-correction. Thus, my judgment that X is the case, or that an understood pattern is the real pattern, conforms to reality, or corresponds with it, if X is the case or if the pattern is the real pattern. In this case, then, reality should not be considered as external to the subject. Neither should it be conceived as internal. Instead, it should be conceived as what is known in true judgments, If so, we can retain a variation of the correspondence theory of truth and also retain the definition of truth as the "rightness" of a commitment.

Polanyi avoids idealism by claiming that we affirm a reality which exists independently of our knowing it. However, sometimes he appears to equivocate. The above claim that "the 'actual facts' are accredited facts" is a case in point, for there could be no facts which were independent of our knowing them, Claims such as these border on extreme subjectivism where reality is simply what each of us affirms it to be. I think that if Polanyi had realized the discrepancy involved, he would have re-thought his view on the correspondence theory of truth, rather than his affirmation that truth is the "rightness" of a commitment. His analysis here is unbalanced, for he discusses the

personal conditions for truth, but not the metaphysical condition. The metaphysical condition is that what I have affirmed as existing does exist. Indeed, our questioning implicitly presupposes that there is a reality to be known which is independent of our present knowledge. However, he at least implicitly acknowledges the metaphysical condition in many places with statements like "truth lies in the achievement of a contact with reality--a contact destined to reveal itself further by an indefinite range of yet unforeseen consequences." There would be no "contact" if there were no reality independent of us with which to establish "contact".

The discussion of truth has imbedded us deeper in the commitment situation, making the problem of relativism even more acute. If knowledge is limited to our commitments, how can we ever transcend ourselves and know the real world?

4) STANDARDS: PERSONAL AND IMPERSONAL

A step towards a solution is the recognition that, paradoxically, personal knowing follows impersonal standards. As impersonal these standards exhibit an independence of any arbitrary relationship to the person. However, at the same time, the standards are not fully impersonal, nor are they completely independent of the person. They result in the knowledge of an impersonally given reality, that is, one which is not created by the person. The person knows this reality in the last analysis, not so much by following rules, but by being himself.

I have already noted that standards are dependent because they cannot be applied without a personal judgment. If they are actually to be followed, they are subject to a personal appraisal. This in turn implies that if we do establish contact with reality, we have natural standards which we adhere to in unarbitrarily appraising other standards.

Standards are independent because they must be followed to attain the desired

result. We can decide to follow them, but they are impersonally given. This means that we do not choose what they are to be. A natural law is impersonal in the same sense. If certain conditions are given, X will occur (or there is a greater probability that X will occur), whether "e like it or not. In a fully rule-governed activity the same kind of "necessity" holds. In informal activity in which the standards may be a set of maxims and in which the "premises" do not imply the "conclusion" with logical necessity, we can only claim that the probabilities of X occurring are greater. Thus, there are standards we must meet if we are to do X. We can choose to adhere to the standards and appraise our performance in terms of them. Hence, they are self-set. However, we cannot choose which standards will result in a successful performance. Thus, they are independent. But because our performance is appraised by us, we must determine if the standards are met by a personal appraisal.

Lest we engage in an infinite regress of standards, we must admit that there are some natural standards immanent in our personal appraisals of our activity. Polanyi did not systematically develop this line of thought, but he did acknowledge some of its implications. These standards are not separate from our striving and our appraisal of it. They are immanent in our striving for coherencies, reality and values. Though they can be reinforced or suppressed, they cannot be totally suppressed, for that suppression requires the use of them. However, we did not choose these standards, but find ourselves following them despite ourselves. Thus, they are impersonally given. Also, since they are ourselves, they are personal, Since we follow them, we implicitly affirm them. Thus, the facts that the standards are part of ourselves, that we did not choose them (though we can), but that we follow them and can either try to suppress or reinforce them, demonstrate how independent standards can also be personal, self-set, and

dependent without being "merely subjective" or arbitrary.

But what are these natural standards? Knowing is a series of achievements. The ultimate standards of knowing are set by the successful achievement of knowing. Thus, when have I achieved a possible solution to a problem? It is when I have an insight into it; when I achieve a coherence which satisfies my questioning. When do I have the correct solution to the problem as opposed to a possible solution? With due acknowledgement to the fallibility of judgment, it is when I make a judgment. Since the achievement of a successful act is the ultimate standard, rules are good if they lead to the achievement and bad if they do not. Rules in knowing, then, function like precepts in skills, and, as in skills, they are derived from an analysis of a successful performance.

Objective standards for knowing also function as rules, or heuristic precepts. The general form of such a rule is "do not assent unless X is the case" (i.e. X can be "The argument is consistent."), In general these standards are known after the fact, However, we can also conceive of standards for a possible achievement being discovered, In this case, they would be good standards if they led to a successful achievement, The application of the standards, or rules, would also rely on our tacit powers,

The person, then, knows reality not so much by following rules, as by being himself, As Polanyi acknowledges, "Authentic feeling and authentic experience jointly guide all intellectual achievements". Though in a sense we create ourselves by constituting ourselves as I pointed out at the beginning of this chapter, we can do so only using those tacit powers natural to us, We did not create these powers, though we can improve on them, Nor can we completely refuse to use them, since such an act relies on our freedom and some recognition of what not to do. They are impersonally given to us; setting standards which we strive to meet but cannot change. These

standards are embodied in the dynamism of our emotions, our imagination, our intelligence, and our responsible judgment striving for self-transcendence.

If explicit rules can only arise after partially objectifying a successful achievement, then we must acknowledge that knowing is not guided by explicit rules alone. But we do not need to affirm that it has no standards at all. Instead, we affirm that it has standards, but that these are tacit. Thus, the intimation of coherence which we have when we try to understand is both the striving for understanding and the standard by which we appraise whether there is a possible coherence. The standards are embodied in the efforts to achieve and in the achievements themselves.

For the objectivist there is a problem with acknowledging that the achievement of a successful act sets the standard for knowing. This is a problem which he has with Polanyi's theory of knowledge in general. The fulfillment of certain conditions for knowledge on the part of the person, the performance of a set of acts, may be a necessary condition for knowledge, but it is not sufficient. Polanyi acknowledges this point in claiming that knowing is an achievement. Because knowing is an achievement the objectivists' demand for necessary and sufficient conditions is misplaced. We can make mistakes. Now, we could claim that the necessary and sufficient conditions for knowledge are the achievement of a set of acts by the person culminating in a claim that something is the case and the fact that it is the case. Such is the minimal correspondence theory of truth I suggested above. However, the problem recurs, for we cannot acknowledge that the key condition for affirming the sufficiency of knowing is met, the metaphysical condition that X is the case, outside of a commitment.

The problem recurs yet again when we affirm standards for knowing. Clearly, we can be wrong about what a successful achievement is, but this does not mean that a

successful act does not set the standard, but that we may not know what a successful act is until we have achieved an adequate characterization of it,

Because an analysis of acts of knowing does not provide a set of necessary and sufficient grounds for knowledge, objectivists have turned from them to some non-personal aspect. However, this is a mistake. The solution to not achieving knowledge is not to disregard the acts of knowing and give up the project, but to begin the process anew. Analogously, what the objectivist should do is extend his analysis from one set of acts concerning one solution to one problem to the development of knowledge as a progressive advance into the unknown. If we are wrong, we can only recognize it using our own judgment. Thus, the objectivist criticism of an analysis of cognitional acts relies on the powers he wishes not to analyze. Can we correct ourselves? If we can, then, though the knowing process is not always sufficient, it is sufficient at times. Indeed, it would have to be to recognize any necessary and absolutely sufficient conditions if they in fact existed. Thus, the affirmation of truth is not a piecemeal, once and for all affair. It is the progressive development of knowledge set within an intellectual context inherited from our culture and modified by ourselves. Modern science provides us with an example of the development of knowledge. It's earlier work confirms itself in its later fruitfulness, constituting what Polanyi terms a self-confirmatory progression. Thus, the primary criterion of truth for Polanyi is the intimation of further, unpredictable consequences of our present knowledge. Conversely, if we are wrong, avenues for further knowledge will decrease. Unfortunately, it takes a long time to recognize the errors of genius.

Though we may now conclude that because knowing is personal it need not be relative, we have still not established why knowing is not relative for Polanyi. This

demands a further analysis of personal commitments. Knowing is self-transcendent. We come to know a reality we did not create, though knowledge of it requires a series of integrations on our part. The same integrative powers can be used to create skillful performances, artifacts, and illusory worlds. However, our drive for self-transcendence is a desire for results, the acceptance of which we find universally compelling. They should not satisfy me alone, but anyone with sufficient development to recognize them. Polanyi notes that commitment combines "satisfaction, submission and universal legislation. ,t We submit to standards we did not create, but which we accept and set for ourselves. We find this satisfying when they lead to knowledge. The standards we submit to are those which anyone should submit to if they are to achieve similar results. Thus, they are universal. The results are also universal, for they are there for all to affirm if they pursue the same questions. At least that is what we claim and strive for. We are satisfied intellectually with nothing less. Though we can be wrong, thus failing to achieve adequate self-transcendence, in being wrong we are not being merely subjective, or -arbitrary, but personal.

Paradoxically, the degree of commitment can be gauged roughly by the degree of freedom the person has in making the commitment. The paradox is resolved if we acknowledge that freedom is tied to responsibility. This is manifest in choices where we are trying to perform the right action. While we are free to perform any number of actions we generally acknowledge that there are few truly good actions in the pertinent situation. In choosing responsibly we are satisfied if we judge that we chose correctly. We submit ourselves to our notion of right action. This notion transcends our mere subjectivity, for it focuses not on any pleasing activity at all, but on the right activity. This transcendence of our subjectivity is also evident in our view that anyone else with

our background in a situation similar to ours should have acted in the same way. This is an example of a commitment combining satisfaction, submission and universal legislation.

5) A POST-CRITICAL PHILOSOPHY

Another aspect of commitment is that it is a-critical. This should not be confused with uncritical. Polanyi confines the scope of criticism to the questioning of articulate forms. Criticism is confined to the process of coming to a judgment regarding an assertion. Now the judgment itself is an a-critical commitment, as are all tacit operations and the performance of skills. It is contradictory for us simultaneously to commit ourselves and to question the commitment. We may be critical of the commitment after we have made it, or before, but while we are questioning it we have not made it, or we are suspending it. The commitment, while made, is ultimate. It is the constitution of our acting and a part of the framework for future thought and action. Thus, while judging can be critical, we cannot be critical of our judging at the time we are making the judgment or we undermine the basis for making a judgment. The issue is transposed from the particular judgment to the possibility of making any judgment.

Critical thinking, then, rests on an a-critical basis. We cannot help but commit ourselves. Even if we adhere to the principle of universal doubt, we are still committed to a method. To bring universal doubt into question while accepting nothing else would seem to be impossible also, for questioning itself is an a-critical commitment, a tacit acceptance of the possibility of an answer. To evade commitment we would have to evade our own existence. The contradiction is apparent. We can evade ourselves only by making a commitment. The "best" we can do is to commit ourselves without acknowledging the fact. We are inextricably involved, Detachment for Polanyi is

involvement. It is not taking myself out of the situation, controversy, and so on, and supposing that I am not there. It is, rather, a withdrawal from other concerns so that I can be involved in the issue at hand, Detachment is involvement, for it is a commitment. "To hold the balance between our alternative possible approaches is our ultimate commitment, the .most fundamental."

As a-critical, Polanyi's is a post-critical philosophy. To understand what he means by this we should first determine what he means by a critical philosophy. For Polanyi critical philosophy at its most extreme tries to supply us with a set of basic principles which we accept as true beyond any conceivable doubt. It takes its cue, then, from Descartes' method of universal doubt. Statements which are accepted as true must be supported by explicit arguments for them. They are explicitly demonstrable. If they are to be true beyond any conceivable doubt, the conditions for their acceptance must not be merely sufficient, but must also be necessary.

It is a second characteristic of critical philosophy to overlook the personal dimension, Descartes is not as guilty of this as many other philosophers. He based his philosophy on his own appraisal of the clearness and distinctness of his ideas, thought he established contact with reality through his own judgment, and based his first principle, "I think, there- fore I am" to a large extent on his own conscious experience. In fact, Husserl thought Descartes was an incipient phenomenologist. However, Descartes' viewpoint was mixed, for he based the objectivity of knowledge of the world on the goodness of God, and sought the same certainty for philosophy that his analytic geometry enjoyed. It is his concern with the necessity of knowledge that shifts the emphasis of his methodological concern from the personal dimension to a method which approaches a purely objective method. If we have the Cartesian concern for

method and overlook the personal dimension, those areas where a personal appraisal is necessary to apply any method, then we are left with an objective method which has the characteristics of a technique for acquiring impersonally given results. We base the objectivity of our knowing not on ourselves, but on something beyond ourselves; that is, beyond ourselves as we are empirically conscious of ourselves.

A third characteristic of critical philosophy is the rejection of authority and tradition. Though Descartes' rejection of both was intended to be provisional, the condition for eventually accepting them was determining "how they (fit) into a rational scheme." Such a scheme was envisaged to be a deductive system.

Polanyi terms his philosophy post-critical for he rejects all three of these philosophic positions. First, he does not think something needs to be justified beyond all conceivable doubt before it is accepted. It need only be justified beyond all reasonable doubt. I discussed this earlier. Second, what is reasonable can only be determined by us in the context of personal knowledge. In other words, we can rely ultimately only on ourselves. We reach an irreducible personal component in any inquiry. Polanyi thinks, for example, that "the ultimate justification of my scientific convictions lies always in myself. At some point I can only answer, 'For I believe so.'" To criticize this involvement is to undermine the possibility of any knowledge, as I noted above. However, this reliance on ourselves does not exclude our reliance on others, Thus, the third reason his philosophy is post-critical is that he thinks that knowledge is possible only within the context of such beliefs. An a-critical acceptance is required to believe another. We must trust the sources of our beliefs, but this trust need not be uncritical. I will develop this further in Chapter V. Finally, though Polanyi's philosophy is post-critical, I think that it can be critically grounded, if we accept a looser sense of the term

"critical", a sense which should become clear below.

In accepting Polanyi's account of knowing, or a similar account, we make a series of what Polanyi calls "consciously a-critical statement(s)." "Such an endorsement is an action of the same kind as that which it accredits". In other words, knowing establishes itself as objective in its action, and it is again its own action which establishes the explicit account of itself as true. It is self-justifying. This is a condition of any true epistemology. It must include the acts by which it is known in the theory. But this action is not uncritical. The explicit account can be critically grounded, for knowing what we experience involves the verification of what we understand in our experience. Since we can experience our knowing, we can critically ground our account of knowing by attending to our experience of it. The coherencies postulated as being acts of knowing are progressively "more focally grounded in focally observed evidence." This critical grounding does not take the account beyond all conceivable doubt. It is conceivable that our knowing could be otherwise than it in fact is. Also, the grounding is consistent with the affirmation that it could be wrong. The critical grounding is not established primarily by argument, but by prolonged self-attention, understanding, and responsible judging. It is in a true judgment about judging that we have the epitome of an endorsement which is "an action of the same kind as that which it accredits."

6) CRITICISMS

Perhaps the most challenging criticism of Polanyi's epistemology comes from Adolf Grunbaum. He correctly points out that Polanyi does not accept Hans Reichenbach's distinction between the context of discovery and the context of justification. The context of discovery concerns the psychology of knowing, It is the

actual process by which we know, and its articulation is a task for the psychologist. The context of justification is a reconstruction of our reasons for affirming the truth in as logically consistent a form as possible.

There is a great difference between the system of logical interconnections of thought and the actual way in which thinking processes are performed. The psychological operations ••• almost never keep to ways prescribed by logic and may even skip whole groups of operations which would be needed for a complete exposition of the subject in question.

Thus, the task of rational reconstruction is

••• to construct thinking processes in a way in which they ought to occur if they are to be ranged in a consistent system; or to construct justifiable sets of operations which can be intercalated between the starting-point and the issue of thought processes, replacing the real intermediate links. Epistemology thus considers a logical substitute rather than real processes.

The critical task of the epistemologist is to evaluate the rational reconstruction "in respect of its validity and its reliability." There are problems with this distinction, and to discuss Grunbaum's criticism intelligently they should be elucidated.

A first problem is that discovery is associated with psychological processes, but justification is not. Insofar as it is possible to justify something it is done in terms of an articulate system and the logical connections within the system or the connections of the system with experience. This is possible, it is claimed, for there is a translation of the psychological processes into a logical system. It may legitimately be asked, what psychological processes are being translated? They are the processes of discovery. But as I have pointed out, the processes of discovery are not justificatory, while the processes of judgment are. Of course, if we confine ourselves to discovery it is legitimate to relegate the analysis to psychology and let the epistemologist concern himself with the objectivity of discovery. However, if the objectivity of discovery can

only be established within the context of personal knowledge in judgment, then an investigation of judgment, its psychology, and its objectivity coincide.

A second problem concerns the constructing of a logical substitute for the real thinking processes. How do we justify the objectivity of rational reconstruction? It is objective because it is a reconstruction of the thinking processes. But then the thinking processes must be objective. It seems odd that we should investigate the substitute for the thinking processes rather than the processes themselves to determine whether our conclusions are true. Furthermore, can a logical reconstruction be a translation of -the thinking processes? One of the aims of a rational reconstruction is to determine the consistency of thinking. However, this can only be done by the thinking processes and cannot be logically justified, Gödel's proof grounds the latter conclusion and indicates that logic itself is in need of a further non-logical context.

I think that the rational reconstruction is not primarily logical, nor a substitute, It does not reproduce the thinking processes, but is an expression of an argument, This expression is considered objective only within the context of personal knowing. I find support for this last conclusion in Reichenbach's contention that the rational reconstruction "is even, in a certain sense, a better way of thinking than actual thinking. In being set before the rational reconstruction, we have the feeling that only now do we understand what we think. First, we have the unexpected appeal to a feeling of better understanding. Second, we have the contradictory assertion that the rational reconstruction is somehow a way of thinking which is not actual thinking. It seems to me that Reichenbach is implicitly championing a better way of thinking, and not simply a reconstruction of thinking which abstracts from the thinking processes.

However, a rational reconstruction does i(; have the virtue of being an attempt to

make the grounds of our judgments explicit. (These cannot always be put in the form of an argument. Consider "This is blue.") It is in this connection that I think Grunbaum has a legitimate criticism of Polanyi, and I have criticized Polanyi for claiming that it is impossible to specify them. However, Grunbaum also claims that given his affirmation of the unspecifiability of clues and his admission of their fallibility, (Polanyi does not provide) a consistent articulation of the epistemological attributes of a bona fide discovery as contrasted with those of an initially plausible, passionately espoused but wholly abortive speculation. He goes on to note that

(I)n the absence of precisely such an articulation, what is to be our verdict on his indictment of Mehlber, Reichenbach and others who do invoke the distinction between the psychology of the propounding of scientific hypotheses, ••• and the epistemological justification of these hypotheses on the other? It can be none other than that Polanyi's indictment is altogether gratuitous.

From the discussion of Reichenbach, it should be clear that Polanyi's indictment is not altogether gratuitous. As regards the first charge; this is not so much a refutation of Polanyi as an exemplification of the fact that there are two approaches to epistemology. Though there are attributes of a discovery which render it true, these attributes have to do with its relation to other cognitional contents and acts. Indeed, I think these need to be specified in more detail than Polanyi thinks possible, but he has made significant advances in this area. If we should not claim that a proposition is true independently of judgment, then subjectivity (in the sense of personal acts) is intrinsic to objectivity, and intrinsic to judging is a normativity which is objective. But this means that any account of objectivity is going to have to include the fulfilling of the normativity of personal knowing. But that means that we do not compare two discoveries only as contents to determine the grounds for affirming one as true. We must also analyze the comparing to determine the general grounds for judgment. It has

generally been thought that logic is the objectification of these general grounds. I think that it is true that logic is a partial objectification of the grounds in some cases. That it is not sufficient in these cases is shown by the fact that logic concerns itself primarily with validity and not truth per se. But even if logic is the partial objectification of the general form of some of the grounds, by attempting to reconcile objectivity and subjectivity and by overcoming Polanyi's objection to the specifiability of the grounds of judgment, it is possible to objectify the grounds which are experienced. There is, then, a general form of experience, which, because it is a human achievement can go wrong, but which is necessary for anything to be objectively established. Thus, though we critically examine a discovery to determine if it is true, we go beyond the attributes of the discovery when we are concerned with determining why discoveries in general are true. In fact, merely as understood, true and false discoveries appear the same. There are no hard and fast rules for distinguishing between them, for there are no rules for applying rules. At some point a personal appraisal must enter. Again, this precludes the possibility of providing a complete set of rules to determine with certainty whether a discovery is true or false. Thus, Polanyi really-does not need to claim that we cannot enumerate all the clues which precede discovery or all the grounds for judgment to demonstrate the necessity for concluding that knowledge is personal. All he need point to is the logical unspecifiability of an integration in terms of its subsidiaries. When the integrating yielding the integration is a commitment, there is a point where we stand alone, beyond rules, beyond our previous knowledge, striving to discover the solution or deciding whether to accept or reject a discovery as true. Also, as we shall see in the discussion of the confirmation of scientific theories, this does not mean that there are no rules at all for evaluating discoveries, and Polanyi does give a "consistent articulation" of them.

Another problem is that Polanyi considers judgment to be a decision. This has led Marjorie Grene, with the apparent approval of Polanyi, to identify the valuing process with the knowing process. First, we should acknowledge that if judgment is a decision, it differs from ethical decision. Ethical decisions concern actions we can freely perform. We can try not to judge or we can try to set up conditions which may help us come to a judgment, but we do not have the same control over our judging that we have over our ethical decisions. We cannot decide that something is to be true. Either it is or it is not. Likewise, we cannot decide that something is good. This is because determination of the good is a question of ethical judgment. But we can decide to actualize the good. "Actualizing the true" is not a prerogative of judgment. The issue is complicated by two further considerations. First, human knowing is evaluative. Determining what "blue" refers to demands personal evaluation, and a personal appraisal is operative in all judging due to the limitations inherent in rules. Second, the process of knowing can be valued or not. It is true that we all know, whether we like it or not, and that we cannot divest ourselves of our cognitional process without surrendering our humanity. There is, then, an intrinsic, evaluative orientation to truth in each of us. But there is a difference between evaluating the truth and valuing the evaluating process. The second is a higher order operation, presupposing the functioning and at least partial objectification of the first. Because of the evaluative component in knowing, Grene concludes that there is an identity of facts and values. However, to establish that, she must establish that judging not only constitutes facts, but constitutes them as good. She rejects this alternative.

If judging does not establish facts as values, then there must be another process which does. This is what I have called ethical judgment. While a judgment of fact is in

answer to the question "Is it so?" the question of value is "Is it good?" However, because we can ask whether knowing is good we can come to value our evaluating. Thus, knowing is set within the context of human responsibility.

The two become intertwined. While she notes that "Objectification, evaluation and freedom are inseparable" I claim that objectification, evaluation and freedom become inseparable. Again, she notes that "if all knowing is essentially a kind of doing, and human doing is always value-bound, then knowledge is so as well.~· I have pointed out that knowing is a different kind of doing than the doing which results from ethical decisions. Also, human doing is not value-bound per se. It becomes value-bound. If this were not the case, valuing would not be an achievement, and I doubt if either she or Polanyi would want to affirm that.

However, that judging as a decision and ethical decision have some aspects in common should not be denied. In both there is an element of risk, for both can be wrong and both commit us beyond what we presently know and can specify. We live in concrete, particular situations. Our ethical deliberations do not regard all the aspects of these situations. We cannot foresee all the consequences of our actions though we are often responsible for them. Judging takes on an additional risk insofar as it is within the context of an ethical framework. Such is the risk taken by the scientist who stakes his professional life bit by bit on what he considers worth understanding, to paraphrase Polanyi. But there is also a commitment to unknown consequences of our knowing. If we accept a truth we are committed to the implications of that truth, though we may not know what they are. If we are not committed to the consequences we either contradict ourselves or we must change our commitment. Likewise, we are committed to the unexpected future manifestations of the reality we have affirmed. This is clearly the

case in universal judgments. We expect the same relationship to hold in different places and times. We expect that realities we have affirmed will have consequences we cannot foresee in particular (though we can foresee that something will happen). For example, past and future events in history or evolution, though unique, often bear some relation to each other. This is similar to the manner in which our field of responsibility extends beyond what we can presently specify. Thus, our commitment to being takes us beyond what we presently know as well as what we can presently specify.

7) CONCLUSION

The final task is to summarize how we affirm that tacit knowing is indeed knowing. Metaphysically an assertion is true in that it is of reality. Thus, tacit integrating is knowing because it results in the positing of reality. How is this established? The first step is an empirical investigation of consciousness. Does tacit integration occur? Can we distinguish the integrating of perceiving, understanding, and responsible judging? Do we make a claim at the end of this process? Is this claim that what we have integrated exists? If the answer to all these questions is "yes" then we have the apparently circular notion that tacit integration is knowing because it yields a positing of being and that being is what is posited" at the term of tacit, integrating as well as anticipated by it. However, this circularity is not vicious, but is present in any defining of a basic relation. Consider, for example, the second law of dynamics. Force, mass, and acceleration are all defined in terms of one another, What this analysis presupposes is the fact of knowledge. However, the fact of knowledge is established in the simple operation by which the skeptic refutes himself. He must accept something in order to reject anything. What is the form of that acceptance? I have outlined Polanyi's answer to that question in this and the previous chapter, His answer is empirical, factual

and personal.