

# TACIT KNOWING: GROUNDS FOR A REVOLUTION IN PHILOSOPHY

MARJORIE GRENE

Although in general neglected by academic philosophers, Polanyi's philosophical work has been influential in several other disciplines, such as political science, law, theology, literature, education and psychology. So far as I have followed this influence, however, it has appeared to be chiefly features of his general cosmology, or of his concept of commitment, that have been adopted, and adapted, by other writers. If this impression is correct, his major contribution to philosophy has been ill appreciated even by many of those who have drawn heavily on his work.

Polanyi's unique contribution to philosophy is the theory of tacit knowing, the thesis that all knowledge necessarily includes a tacit component on which it relies in order to focus on its goal, whether of theoretical discovery and formulation or practical activity. It was this insight, expressed in the section on "Two Kinds of Awareness" in *Personal Knowledge* and elaborated in the first lecture of *The Tacit Dimension* and in some of the papers collected in *Knowing and Being*, that constituted, in his thought, a major break with the tradition and a possible foundation for a new turn in the theory of knowledge and, *a fortiori*, in philosophy as such. The conception of tacit knowing and some of its implications for philosophy have been clearly explicated by Polanyi himself, in the texts just mentioned, as well as by a few commentators. But it may bring his central thesis somewhat better into focus if I try, on this occasion, to recall a little about its development insofar as I happened to know about it.

First, however, to make it quite plain what

aspect of Polanyi's philosophy I am concerned with, let me take as illustrative of his basic insight a statement from the closing paragraph of "The Logic of Tacit Inference", an address presented in Jerusalem to what must have been an almost wholly uncomprehending audience of philosophers of science:

The original intention of logical positivism was to establish all knowledge in terms of explicit relations between sensory data. In the course of the last twenty years this programme has been gradually relaxed . . .

I suggest that we transform this retreat into a triumph, by the simple device of changing camp. Let us recognize that tacit knowing is the fundamental power of the mind, which creates explicit knowing, lends meaning to it, and controls its uses. Formalization of tacit knowing immensely expands the powers of the mind, by creating a machinery of precise thought, but it also opens up new paths to intuition; any attempt to gain complete control of thought by explicit rules is self-contradictory, systematically misleading and culturally destructive. The pursuit of formalization will find its true place in a tacit framework.

In this light, there is no justification for separate approaches to scientific explanation, scientific discovery, learning and meaning. They ultimately rest on the same tacit process of understanding. The true meaning of Kepler's Third Law was discovered by Newton, when he explained it as an outcome of general gravitation; and learning by insight has the same three aspects on a minor scale. (M. Polanyi, *Knowing and Being*, London and Chicago, 1969, p 156.)

This seems to me a clear and cogent statement of the thesis central to the theory of tacit knowing; it may be taken as the text around which I want to offer some chiefly anecdotal but also partly critical commentary.\*

\*A similar view can be discovered in Merleau-Ponty's *Phenomenology of Perception*; indeed, a number of readers, myself included, have found that work strikingly convergent with *Personal Knowledge*. Polanyi himself would never quite admit this convergence; in any event, the context within which he had developed his view is so different from the milieu of Merleau-Ponty's thought that the two works may certainly count as two major ways of philosophizing toward a similar outcome. Besides, in philosophy there is no question of "priority" in discovery, as there is in science. In a given historical situation, there are fundamental problems to be wrestled with, and a number of original thinkers may well work through them to convergent, yet equally original, conclusions. This seems to me to be the case with Polanyi and Merleau-Ponty, although I was never able to convince Polanyi of this fundamental difference between philosophical reflection and scientific research. The divergence of the two thinkers, e.g. the difference between Polanyi's cosmology and Merleau-Ponty's incompleting *Visible and Invisible*, is another matter, which is not at issue here.

One further preliminary: although this ought not to be necessary for my present readers, I should perhaps insert a warning against two common misreadings of Polanyi's view. By "the theory of tacit knowing" I do not mean either some kind of "subjectivism", or the principle that for any given cognitive statement or body of knowledge there is some residue that resists formulation. Against the first of these misunderstandings, the careful distinction made in *Personal Knowledge* between the subjective and the personal ought to have provided adequate protection. The second misinterpretation is not quite so far astray: it is of course true that there is some tacit component in all knowledge. Yet this assertion, taken as the gist of Polanyi's major thesis, also misses the essential point. What is essential is not the existence of the tacit, but the *relation* of the tacit to the explicit (or, more generally, so as to include cases of wholly tacit knowledge, as in practical skills, the relation of the subsidiary to the focal). The tacit component is not a residuum, but an indispensable foundation. What matters is not *that* there is something unspecifiable, for example, in science, but how unspecifiability works and what it accomplishes. It is the *function* of the tacit in all knowledge, however exact and "objective", that the tradition had neglected or denied, and that Polanyi's epistemology allows us to accept and articulate.

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In 1950, when I first read his work and discussed with him the project that was to issue in *Personal Knowledge*, Polanyi was wrestling with the problem, how to justify dubitable beliefs. As he has himself recounted, this problem had become a central one for him after his conversation with Bukharin in 1935. Against the follies of Soviet science he could not claim for the West some indefeasible truth, yet neither would it do to admit with an historicist sigh that we had our *partynost*, as they had theirs.

The problem appeared at first — and continued to appear, at one level — to be a problem of social and political organization. Against the centralization of research, urged also by British scientists of the Left, it was an urgent task to

analyze the life of science in order to display the social and political conditions necessary to sustain it. Admittedly, science is a cooperative enterprise, in which overlapping specialisms reinforce one another. But the practitioners of each specialism need a certain free space — a *Spielraum* — for the spontaneous development of the problems and solutions, carried by their own intellectual passions, which can lead them, given skill and luck and the support of the scientific community, to new insights and new prospects of further insights in the discipline their training has enabled them to interiorize. Thus the practice of science needs to be open in at least two respects: problems must arise spontaneously, not by command of any GHQ, and their solutions must be allowed to germinate, to be pursued, experimentally and theoretically, for a period not precisely specifiable. The problem of the administration of science, of the structure of a "society of explorers", was, I think it is fair to say, the problem that first motivated Polanyi's philosophizing and it was one that recurrently concerned him, not only in *The Logic of Liberty*, and in *Personal Knowledge* itself, but later, for example, in the last lecture of *The Tacit Dimension*.

These puzzles of the organization of science might have culminated in a philosophical ethic, or theory of natural law, and at one time, I believe about 1952, that is the direction in which Polanyi hoped the second series of Gifford lectures would take him. As it turned out, however, what may have seemed at the time a stage in his inquiry proved to be its most substantive result, and one which he elaborated in some at least — in my view, the best — of his later work. At this point, however, the theory of tacit knowing was still to be formulated. In 1950, as I said earlier, Polanyi was concerned primarily with a philosophical question that had emerged from his consideration of scientific administration and control: the question of the justification of dubitable beliefs. The distinction between two kinds of awareness was to provide the foundation for an answer to this question; but before I try to indicate how this seems to have happened, let me return briefly to the first, social and organizational question, and ask how it may have led Polanyi to the more directly philosophical question that formed his

chief preoccupation in the years in which he wrote *Personal Knowledge*.

Although I must hazard here a reconstruction for which I have no evidence, I would guess that the connection might have been somewhat as follows. Centralized science can foster a Lysenko and suppress for a generation or more the disinterested pursuit of truth in a given discipline, or, if need be, in all disciplines. A more libertarian society (especially before the epoch of massive dependence on government grants) can permit the kind of flexibility that allows scientific inquiry to grow. The case of genetics is the most dramatic one, massively attested, of this contrast. Any educated person in the West would have trusted the work of geneticists like Theodosius Dobzhansky, who was for many decades a "non-person" in his native country, and shrugged aside the quackeries of Lysenko and his like, who wanted to say what their masters wanted to hear, no matter what the evidence. Yet, as Hume had demonstrated, and as Polanyi himself had argued in *Science, Faith and Society*, all scientific allegations outrun their evidence. There is always what Polanyi was later to call a "logical gap" between data and hypothesis, between phenomena and their explanation. None of the intellectual contortions of philosophy of science, whether "inductivist" or "deductivist", "confirmationist" or "falsificationist", have managed to plaster over successfully this uncomfortable truth. As Polanyi put it when we first discussed his work, the data are indefinite, thus practically infinite, while the hypothesis is definite, and therefore finite. That is why, I suppose — or at any rate one reason why — Aristotle had to deny an actual infinite in order to justify certainty in science. If we acknowledge the logical gap, however, there is no cognitive certainty. That statement itself is either analytic, given the contrast of infinite and finite, or it is the expression of a fundamental belief. On either interpretation, however, its acceptance entails the further thesis that all the statements of science express opinions only, rather than knowledge in its traditional sense, knowledge as certain, permanent and different in kind from "mere" belief. In this situation one could, of course, as some philosophers still do, resort to skepticism. Knowledge is different from belief; all claims to knowledge express

beliefs; therefore there is no knowledge. But to say that scientific knowledge is *not* knowledge is to practice philosophical acrobatics; no scientist, certainly no scientist of Polanyi's stature, would make so foolish a move. Although one has to admit that the cognitive claims of science are claims only and that their expression consists in the assertion of beliefs, one wants to claim at the same time that it is reasonable to accept these beliefs and unreasonable to reject them. But how do we distinguish such "reasonable" beliefs from unreasonable ones? Why should we listen to Dobzhansky and turn a deaf ear to Lysenko? If all science is guesswork, how can we tell good guesses from bad? If the social and political conditions necessary to the existence of science are to be maintained, if scientists are to give their lives to the pursuit of discovery, and if their contemporaries are to support them, both "morally" and financially, in that pursuit, we need to understand better than we have done the reasons for their devotion and our respect. So the account of the organization of science needs to be grounded in an epistemology of science: in a philosophical interpretation of the claims of scientists to know about nature, claims which are in principle susceptible of error, yet also, in circumstances that need to be elaborated, worthy of acceptance. Thus reflection on the social organization of science needs to be grounded in a philosophical understanding of the way beliefs are, or ought to be, justified.

Admittedly, as members of the philosophical establishment would be quick to point out, this question has been discussed repeatedly in two different contexts. In epistemology, the common definition of knowledge as "justified true belief" has led to much tricky to-and-fro about "justification". Even serious philosophers, whose work one cannot help respecting, have fallen prey to the fascination of fashionable counterexamples to the "justified true belief" theory. In the philosophy of science, the canonical separation of the "context of discovery" from the "context of justification" has moved the problem of "justification" to center stage in professional argument. What distinguishes Polanyi's inquiry, however, from both these approaches is that he came to the problem, raised it and grappled with it from within the life of

science. It was knowledge in the concrete context of existence, the existence of science and scientists, that he was concerned to vindicate. What resulted was often obscure, sometimes mistaken, and couched in a rhetoric that most professional philosophers find it hard to tolerate; but it was a philosophy rooted in reality, neither the clever gymnastics of analysis, nor the prophylactic debate of a philosophy of science based on a grave misconception of, and almost entirely out of contact with, its alleged subject matter.

Nor, further, was it "justified *true* belief" Polanyi was concerned about, but the justification of dubitable beliefs, that is, of beliefs of which one hopes, but is never apodeictically certain, that they are true. The whole heritage of human knowledge, as he would declare at the close of *Personal Knowledge*, comprises everything "in which we may be totally mistaken". Yet this is an expression, not of cynicism, but of faith, and yet not a faith held "quia absurdum", but a reasonable faith. This seems to take us in a circle: the question, how to justify belief, falls back on the belief, which we believe to be reasonable, that our beliefs are justified. If the search goes in a circle, however, it does so in the fashion of a hermeneutical circle, not a vicious one. The interpreter, already holding certain beliefs, tries to clarify, criticize and perhaps improve them. Interpretation takes place within a domain that interpretation itself may alter.

Still, this situation is uncomfortable. How can one stabilize it? There are two sides to the story, the development on the one hand of the fiduciary programme and on the other of what Polanyi was afterward to call the theory of tacit knowing. Although my theme here is the second of these, let me dwell briefly on the first, in order to show why, as I now believe, the second was in fact uniquely significant.

Polanyi's method, as it developed in *Personal Knowledge*, consisted essentially in broadening and stabilizing the interpretive circle through a series of analogies, by showing that human activities of many kinds are structures in the same hopeful yet hazardous fashion as those of science. The section on "The Educated Mind" or that on

"Implicit Beliefs", for example, show us how the calling of every human being parallels that of the scientist, dwelling in a human world he has already interiorized and relying on clues inherent in that world in order to seek something as yet informulable that lies not quite at hand. The analysis of skills, and even the expansion of the argument to include the life of animals, also helps to stabilize by analogy the central claim. The development of this analogical foundation Polanyi called "the fiduciary programme", a programme supporting, by extending, his view of the role of commitment in science. It was this programme that seemed to me, at the time, the heart of the enterprise. Empiricism had reduced to mere habit ("animal inference", as Russell called it) the ways in which we make sense of things. In contrast, the account of commitment, expanded to a fiduciary programme, showed us science as one instance of the way in which responsible beings do their best to make sense of what is given them and yet what they, by their active powers, have also partly already enacted. There may be a parallel here to Dewey's concept of "intelligent habit", yet Polanyi, it appeared to me, was developing an account very much solidier and more illuminating than any form of pragmatism (haunted, heaven help us, by both Hume and Hegel) had ever managed to achieve. Polanyi himself set great store by the fiduciary programme. Witness the fact that when (with the indispensable help of my children) I was preparing the index for *Personal Knowledge*, over the Christmas holidays in Ireland, he had specially requested that I stress all passages that showed the book to be a *credo*. He really wanted every "I believe . . .", "I hold . . ." to be coordinated, so that the reader could see at a glance that, as any responsible person might do, this person, Michael Polanyi, was putting on record what, in all conscience, he felt himself, as an educated European scientist of the mid-twentieth century, called upon to believe. Again, the religious language may be offensive to philosophical readers, but it had its grounds, grounds which I am confident Professor Scott will have illuminated in his paper on commitment.

At the same time, however, so sweeping a claim, supported largely by analogies from every walk of life, may prove as insubstantial as it feels

exhilarating. Even when I was most committed to commitment and the fiduciary programme, I remember, the whole edifice Polanyi was constructing would suddenly vanish like Cinderella's coach, without even a pumpkin left behind. If every one — scientists, artists, infants, madmen, mystics — if everyone is committed in the same way to what he is called on to believe, what have we explained? The whole series of analogies can provide a solid foundation, or it can just collapse.

The point is, I now see, that the fiduciary programme is supported, not so much by its expansion through analogical reasoning, as by the foundation common to all its instances, the foundation of tacit knowing. When we had first discussed his project in 1950 Polanyi had already spoken of the strange way in which, in all knowledge, the inarticulate outruns and outweighs its articulate aspect. Unspecifiability was a constant preoccupation in his thought; sometimes he seemed just hypnotized by it, to the exclusion of what philosophers might have considered much more substantive problems. Indeed, when he had completed *Personal Knowledge* — with all the effort he had put into its organization, its writing and rewriting — he once remarked, “The most original matter in the book is the distinction between focal and subsidiary awareness.” I was surprised, since it had been the statement of the doctrine of commitment, and its development into a fiduciary programme, that had constituted, in my view, the major achievement of the work. But its author was quite right. He had good reason, for example, to spend a year writing the “Articulation” chapter. I recall being puzzled by this delay — some time about 1953 or 1954. Although I collected a vast number of extracts to assist in the composition of the chapter, I did not really understand at the time why just this problem: the grounding of articulation in the inarticulate, should need to be spelled out so painfully. But it is indeed the heart of the matter — not, again, because Polanyi was developing an “irrationalism” (a “neo-obscurantism”, as one reviewer called it), but because the understanding of understanding, of rationality itself, demands an understanding of the way in which the subsidiary supports the focal, in particular of the way in which the ineffable supports the activities of voice or pen.

As a matter of fact, I would go further. Polanyi was not only right to call the distinction between two kinds of awareness the most important feature of *Personal Knowledge*; he was righter than he knew. For in the development of his thought that followed *Personal Knowledge*, it was the strengthening and extension of his conception of the tacit foundation of knowledge that, in my view at least, proved most fruitful. His notion of a “stratified universe” was always less than convincing; indeed, the final chapter of *Personal Knowledge* had only been saved from total disaster by the criticisms of his friend J. H. Oldham. And as I have learned a little more about evolutionary theory, both its subtleties and its limitations, I have grown more sceptical about cosmologies of emergence in any form. Polanyi's later work on art, especially on metaphor, moreover, seemed to me tragically misguided, a betrayal, in its separation of art and science, of his own best insights. I tried repeatedly to tell him this, to no avail. Yet if you look at an essay like “The Logic of Tacit Inference”, from which I quoted earlier, or “Sense Giving and Sense Reading”, or for that matter the first lecture in *The Tacit Dimension*, you find a clear, relatively economical, well-articulated statement of what should be the conceptual instrument for a one hundred and eighty degree reversal in the approach of philosophers to the problems of epistemology. The tradition, whether Platonic or Aristotelian, dogmatic or sceptical, rationalist or empiricist, analytical or phenomenological, had been searching in the main for totally explicit knowledge, wholly focal awareness of what is to be known. Polanyi's distinction between subsidiary and focal awareness permitted the enunciation and elaboration of the thesis that all knowledge, however precise and however impersonal in its formulation, is grounded in clues that the knower must already have assimilated and of which he can be at best only subsidiarily aware. As the passage quoted above indicates, moreover, it is this thesis that permits the assimilation of the so-called “context of justification” to the context of discovery. How much wasted time and effort might have been spared if philosophers of science had listened with attention to that address!

“Changing camp” is not easy, however. To persuade a loyal army to join what they conceive

to be the enemy takes a rhetoric beyond my powers, as it was, unfortunately, beyond Polanyi's. No one listened, and although it is by now crystal clear to almost all that "logical reconstruction" failed, no one wants to take the obvious way out. But that is by the way; my aim here, as I said at the start, is a more or less anecdotal one: to record, insofar as I knew of them, some of the stages along the way that led to the consolidation of the theory of tacit knowing.

An important step was the formulation of the two aspects of cognition, subsidiary and focal, as "knowledge by relying on" and "knowledge by attending to". I think this must have been some time in the early sixties. The usage is not yet present in "Knowing and Being", not quite consolidated in "The Unaccountable Elements of Science", but has become routine in "The Logic of Tacit Inference" and "Sense-Giving and Sense-Reading". In fact, the distinction is transcended, or abbreviated, in the assertion that all cognitive processes (and that includes learning and discovery as well as developed knowledge) have a from-to structure.

This thesis was only obscured, in my view, by the distinction Polanyi later introduced between "from-to" and "from-at". In the example he liked to use, of a neurologist looking at my brain while I am looking at a cat (one should introduce a screen, so that the neurologist does not see the cat), the neurologist is relying on clues in his own body in order to attend to my brain. I am relying on clues in my body in order to attend to the cat. The neurologist does not see my seeing — and that's Polanyi's point. Knowledge of the brain is not identical with knowledge of the mind, nor is the brain identical with the mind, even though the latter depends necessarily upon the former for its operation and its existence. Fair enough. But the neurologist's knowledge of my brain has the same from-to structure as my recognition of the cat. No cognitive performance ever has any other structure. That is what it is absolutely essential to recognize if the problems of epistemology and philosophy of science are to be rescued from triviality.

At this juncture, however, Polanyi himself, I am afraid, gravely misunderstood his own place

in contemporary philosophy. Most of his conclusions in "Tacit Knowing: Its Bearing on Some Problems of Philosophy" are both sound and important. The theory of tacit knowing helps us to reinterpret the problem of universals, to refute behaviourism, to approach fruitfully the problem of induction or the concept of truth. But what Polanyi later came, it appeared, to value most in his own thought, beyond the theory of tacit knowing as such, was something it did not achieve; indeed, it helped to achieve the very opposite. Polanyi believed that he was reviving dualism, when in fact he was helping to refute it. For the theory of mind mediated by the doctrine of tacit knowing is a theory of mind as fundamentally and irrevocably incarnate. In fact, Polanyi is one of the few thinkers of this century to have found adequate concepts through which to overcome Cartesian dualism, and to philosophize outside the impoverished traditions of empiricism and rationalism that it had generated. Charles Taylor in his *Hegel* refers recurrently to Heidegger, Merleau-Ponty and Polanyi as those who have made some kind of new start in philosophy. I am surprised that he did not add Wittgenstein, and I would also mention Helmuth Plessner. All these thinkers are at one, it seems to me, in trying to provide us with a way out of what Plessner calls "the Cartesian alternative". Yet, as I discovered only slowly and sadly, when Polanyi talked (for example, in "The Structure of Consciousness") about the "problems of Cartesian dualism", he did not mean the problem of overcoming the conception of mind as separate from body, overcoming it, of course, in a fashion adequate to account for our intellectual powers, rather than behaviouristically, but overcoming it all the same. No, by the "problem of Cartesian dualism" he meant, I must reluctantly admit, the problem of *defending* mind's separateness from body. Thus he stated at the close of "Logic and Psychology", "mind and body are two different things, just as our common sense tells us they are". But surely the from-to processes that constitute "mind" (or "minding") are precisely not dissectable into two "things", the corporeal "from" and the mental "to". Their integral, indeed, internal, relation is just what Polanyi had been concerned to defend, and what he had succeeded in defending. It was certainly the relation his theory of knowledge seemed to support.

Two further anecdotes may perhaps illustrate my meaning here. When Polanyi came to lecture at Austin in 1968, during a year I was spending as visiting professor there, he and Philip Hugly and I had a conversation about his view of mind and of the mind-body relation. When Hugly and I discussed afterwards the position Polanyi seemed to be taking, we agreed that, in his terms, walking would appear to be a case of "minding". In walking as in speaking, or writing, or thinking, we are relying on clues within our bodies in order to focus on a performance, or the solution to a problem, located somehow "out there". The analogy with skill as Polanyi had constantly used it would seem to confirm this interpretation. Or, if one wants to restore the mental to something closer to its traditional range, one would say that what constitutes my mind is a certain class of competences that make possible focal-subsidary performances in which I rely especially on clues interiorized through the central nervous system in order to execute not so much motor as cerebral activities. In fact it occurred to me that much as, by Wittgensteinians, the meaning of a word was alleged to be its use, so for Polanyi (and in fact) the meaning of the brain was the mind, or the meaning of the brain was its use, which is the mind. Such a formulation is a crude beginning; it needs to be refined so as not to degenerate into Rylean behaviourism, let alone into some kind of "central-state materialism". But the concept of from-to knowledge should allow one to work along these lines, and should certainly prevent, not support, a return to the notion of a "separate" consciousness or thinking thing. Yet Polanyi never realized, or ceased to realize, the subtlety of his own anti-reductivist position; he was so much concerned to refute the "denial of consciousness" by behaviourists that he failed to recognize how essential to his own philosophical position was the insistence on embodiment as the framework of mentality.

The same unwillingness to see where his own fundamental distinctions should have led him was evinced in a conversation with Hubert Dreyfus, in which I also participated. Initially, in *Personal Knowledge*, Polanyi's basic distinction had been that between two kinds of awareness, of which the subsidiary could range from preconscious or

subconscious to any degree of consciousness. His favourite examples, of course, were taken from practical skills. The violinist focussing on the passage he is playing is only subsidiarily aware of his fingering; the tight-rope walker, focussing on the goal of getting to the other side, is only subsidiarily aware of the exact position of his limbs. In the process Polanyi called "detailing and integrating", however, one can reverse, and then once more reverse, the relation of subsidiary to focal. So clearly it is a case of two kinds of awareness, not of "consciousness" as against something of which we are in no way "conscious". Polanyi always retained this distinction, rendering it often in the maxim that "we know more than we can tell". Yet as the role of bodily, and in particular neurological, processes in our cognitive orientation became a more significant ingredient in his account, it seemed as if much of which one could not in principle become aware formed part of the subsidiary. Am I aware of the neurons firing in my brain as I write this? They are subsidiary to the focus of my attention; I rely on them in order to accomplish my task. But surely, I am not aware of them at all. Dreyfus had a long discussion with Polanyi, probably about 1969, in which he argued that it was quite inappropriate to speak of "awareness" in this context: it is the integral bearing of the subsidiary on the organization of the focal that matters, whether we can be in *any* sense aware of it or not. Thus subsidiaries may lie, and often do, beyond the range of awareness altogether. Polanyi was adamant; it was two kinds of awareness he had started from and would stick to, the kind of awareness exemplified in the learning and practice of skills. Yet the "from" of the from-to relation does seem to range from any degree of awareness to none at all. When we see stereoscopically, for instance, a favorite example of Polanyi's recorded among other places in "The Structure of Consciousness", we see one picture, relying on clues from two. Granted that when it is a piece of machinery we are using we may be said to be subsidiarily aware of the two images involved in producing one; of the two images on my retina, I have never been aware in any way at all. I rely on them in order to attend from them to one spectacle out there in the world. What is fundamental about the from-to relation, in fact, is the way in which I have *bodily* assimilated not

only visual "images" or other perceptual clues, but even the most general "intellectual" beliefs. These might have been, and probably often have been, expressed explicitly. Yet I have grown into them and the culture they express, through what Polanyi calls "indwelling", and by the other vector of the same two-way process, through "interiorization", they have become part of the very fabric of my being. But my "being" means my bodily being, for that is the only kind of being I have. This recognition of the incarnate nature of mind seems to be part and parcel of the theory of tacit knowing. Here, however, as in a few other areas, Polanyi resisted the consequences of his

own most profound and important insight. So much the more urgent is it to sort out what he *had* recognized as his most significant contribution and separate it from misinterpretations in his own thought and in that of others, whether critics or disciples. The dilemma of modern philosophy sprang from a mistaken epistemology, the Cartesian program of clear and distinct ideas. The conception of tacit knowing, if plainly understood and implemented, can provide us with a means of going between the horns of the dilemma and beginning to philosophize to more effect on the far side of it.

University of California, Davis