

SOME TRACES OF PRAGMATISM AND HUMANISM IN MICHAEL POLANYI'S *PERSONAL KNOWLEDGE*

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Labels and names are not entirely unimportant or irrelevant to philosophy. Michael Polanyi is a good case in point, as is also the title of my paper. I wish to argue that there are some very meaningful points of commonality between his personal knowledge and the insights of the American pragmatists. Yet the term "pragmatism" rings with pejorative overtones, and so I feel compelled to qualify it with a synonym, "humanism," the same word chosen by William James after he regretted having popularized the misunderstood label and the philosophy which we call pragmatism.

Polanyi's philosophy has been variously characterized as "personal knowledge," "post-critical philosophy," and "heuristic philosophy". But for the purposes of this paper I prefer to call it a "new world philosophy," and by this to suggest that it shares deep affinities with American pragmatism. I do this because I believe that the only meaningful historical context within which we can locate it is the cartographic revolution of the 16th century (the *novum mundus* of the cartographers), and the cosmographic revolution of Copernicus and Galileo which also emerged in 16th and 17th century Europe. These two transformations of thought and experience, the cartographic and the cosmographic, are hardly isolated and unrelated incidents. They are dimensions of the same identical breakthrough (along with the Reformation) in the 16th and 17th century experience of human life and its place in the terrestrial and celestial universe. Polanyi's philosophy is an effort to take this breakthrough with utmost seriousness and to work through all its implications.

I would also add that there has always been more interest in Polanyi in the U.S., in the New World, than in Europe. It seems to me to be quite clear that he belongs in a central way to an American philosophical tradition as represented in the work of Charles Sanders Peirce, William James, and John Dewey. This tradition represents an attempt to construct a new paradigm and a new set of philosophical metaphors in the light of the 16th century transformations of human experience.

It is to me more than a curiosity that he opens his *Personal Knowledge* by discussing the humanistic impact of the Copernican revolution which was, he

tells us, "as anthropocentric as the Ptolemaic view, the difference being merely that it preferred to satisfy a different human affection".

As human beings, we must inevitably see the universe from a centre lying within ourselves and speak about it in terms of a human language shaped by the exigencies of human intercourse. Any attempt... to eliminate our human perspective from our picture of the world must lead to absurdity.¹

It is precisely this angle of vision within human life, in the new Copernican perspective, which generates American pragmatism. The American philosopher, John Herman Randall, is remarkably similar to Polanyi in his understanding of the anthropocentrism of Copernicus who had really elevated the terrestrial globe to the status of a star:

We are accustomed to think of Copernicus as lowering the dignity of the earth and of man by removing them from the central position in the universe, as reducing man to a tiny speck on a third-rate planet revolving about a tenth-rate sun drifting in an endless cosmic ocean of nothingness. Far from it! Such an emotional reaction is the product of Romantic Weltschmerz and the fin de siècle wailings of the last generation; it has no counterpart in the seventeenth century. Then men thought the earth had been raised immeasurably in value, made equal to those noble stars, the planets... As Galileo put it,

As to the earth, we seek to make it more noble and perfect, since we succeed in making it like the heavenly bodies, and in a certain fashion place it almost in Heaven, whence your philosophers have banished it.

Randall concludes that "the whole impact... of the Copernican revolution was humanistic, and pointed to a new glory of man in this world".²

Polanyi tells us that he turned to philosophy as "an afterthought" to his career as a scientist. The turning point occurred in 1935 in a conversation he recalls having with Bukharin, the leading theoretician of the Communist Party in the Soviet Union. Bukharin told him that "pure science was a morbid symptom of a class society; under socialism the conception of science pursued for its own sake would disappear, for the interests of scientists would spontaneously turn to problems of the current Five-Year Plan".

The irony in this statement struck Polanyi. It amounted to a denial of the very existence of pure science in the name of a "scientific socialism" which derived its claim to validity from the source it was denying. "The scientific outlook appeared to have produced a mechanical conception of man and history in which there was no place for science itself."³ This was a "self-immolation of the mind" and threatened to undermine the freedom of thought and the foundations of a free society.

It became clear to him that there was an urgent need to rethink our understanding of scientific knowledge, and that what was needed was nothing short of what Richard Gelwick calls "a general epistemological reform" if "the institutions of a free and human society" are to survive.⁴ His philosophy of personal knowledge must not be construed as a narrowly focused epistemology, but a wide ranging reform of our understanding of human knowing in relation to every significant aspect of human life.

Polanyi's initial venture into this program of philosophical reform occurred in 1936, in a short paper in which he addressed the importance of ambiguity and imprecision in science. "The mere fact," he writes, "that there is no absolute security for the validity of what we consider exact natural laws should lead to the conclusion that these laws are only valuable in combination with the element of uncertainty in them."⁵ By acknowledging the value of the inexact ideas in science Polanyi took the first step toward the radical reformulation of the foundations of all human knowing, a program which, as I will argue, occupied a central place in the work of the American pragmatists.

Polanyi's personal knowledge

The philosopher-mathematician, Alfred North Whitehead, tells us to seek simplicity, but then to distrust it. This is especially good advice for studying Polanyi's philosophy, for it is deceptively simple on first inspection, but becomes increasingly complex and profoundly rich as we probe it more carefully.

His philosophical odyssey begins with the famous paradox in Plato's *Meno*:

MENO: How will you inquire, Socrates, into that which you do not know? What will you put forth as the subject of inquiry? And if you find what you want, how will you ever know that this is the thing which you did not know?

SOCRATES: I know, Meno, what you mean; but just see what a tiresome dispute you are introducing. You argue that a man cannot inquire either about that which he knows, or about that which he does not know; for if he knows, he has no need to inquire; and if not, he cannot; for he does not know the very subject about which he is to inquire.

Polanyi's answer to Plato's paradox is a deceptively simple statement: "We know more than we can tell." He proposes that there are two types of awareness: one which is *focal* (this awareness is public, objective, and explicit); and the other which is *subsidiary* (an awareness which is personal and private as opposed to public, subjective as opposed to objective, and implicit as opposed to explicit).

There is no knowledge which is wholly focal (i.e. explicit) that is not in some way related to that of which we are only tacitly aware.

The ideal of a strictly explicit knowledge is indeed self-contradictory; deprived of their tacit coefficients, all spoken words, all formulae, all maps and graphs, are strictly meaningless. An exact mathematical theory means nothing unless we recognize an inexact non-mathematical knowledge on which it bears and a person whose judgment upholds this bearing.⁶

So we do not know, in an explicit sense, what we are looking for, and yet we do look for it because we have clues to what it is in our subsidiary awareness.

It was Gestalt psychology that first demonstrated for Polanyi that there is indeed a tacit dimension to all our knowing. We know a whole by integrating our awareness of its particulars without being able to identify the particulars. But Gestalt psychology commits the error of assuming that our perception of the Gestalt is a passive experience. It is an active thing. The knower is active and participates in the act of knowing. Polanyi describes the theory of knowledge which he draws from this reinterpretation:

I am looking at Gestalt... as the outcome of an active shaping of experience... This shaping or integrating I hold to be the great and indispensable tacit power by which all knowledge is discovered and... held to be true.⁷

This active shaping of experience is a central theme in the pragmatism of William James:

In our cognitive as well as in our active life we are creative. We *add* both to the subject and to the predicate part of reality. The world stands really malleable, waiting to receive its final touches at our hands. Like the kingdom of heaven, it suffers human violence willingly. Man *engenders* truths upon it.⁸

This active shaping of experience, moreover, occurs in an act of empathy, or indwelling. Every act of knowledge is a form of indwelling in the object known. There cannot be a Cartesian dichotomy of mind and body, for it is through the body that we know and dwell in the object. Polanyi speaks of "the bodily roots of all thought".

Our body is the ultimate instrument of all our external knowledge... In all our waking moments we are *relying* on our awareness of contacts of our body with things outside for *attending* to these things. Our own body is the only thing in the world which we normally

never experience as an object, but experience always in terms of the world to which we are attending from our body.⁹

For both Polanyi and James, then, the very essence of knowing is relational. James, in *The Principles of Psychology*, asserts that "knowledge of a thing is knowledge of its relations". Polanyi specifies this knowledge in terms of a from-to relation. We know something from a subsidiary awareness of its particulars to a focal awareness of it as an object of our understanding.

When we make a thing function as the proximal term of tacit knowing, we incorporate it in our body—or extend our body to include it—so that we come to dwell in it... Indwelling, or empathy, is the proper means of knowing man and the humanities.¹⁰

To return to Meno's paradox, if all knowledge is explicit, i.e., capable of being clearly stated, then we could never know either a problem or its solution. But we do indeed know problems, or to be more precise, we do indeed *have* problems. And we look for their solutions with a tacit sense of clues which are yet to be discovered. James also acknowledges the existence this tacit dimension and regards it as having the utmost importance. To illustrate this, he asks us to consider how we strive to recall a forgotten name:

The state of consciousness is peculiar. There is a gap therein; but no mere gap. It is a gap that is intensely active. A sort of wraith of the name is in it, beckoning us in a given direction, making us at moments tingle with the sense of our closeness, and then letting us sink back without the longed-for term.

There is an ineffable dimension to our knowledge which we cannot account for in terms of the clear and distinct ideas of René Descartes. In his essay on "The Stream of Consciousness" James gives an account, of mental life as an ongoing, processive "stream" in which the connections between various states are "sensibly continuous". The result is an outright rejection of Cartesian clarity and distinctness as any kind of measure of authentic knowledge:

It is, the reader will see, the reinstatement of the vague and inarticulate to its proper place in our mental life which I am so anxious to press on the attention.¹¹

In like manner, so also does Polanyi put Descartes behind him:

Strictly speaking nothing that we know can be said precisely, and so what I call 'ineffable' may simply mean something that I know and can describe even less precisely than usual, or even only vaguely.¹²

The tradition of American pragmatism

American pragmatism seems to have suffered the reputation, especially among European intellectuals, of having a split philosophical personality. On the one hand it is regarded as a serious attempt to deal with some of the central issues of classical modern thought from Descartes to Kant and Hegel. Both continental phenomenology and the British analytic school express some regard for the work of Peirce and James.¹³ So long as American pragmatism could be tied to a European intellectual tradition, it was and continues to be taken seriously. I believe this to have been the case with Polanyi. He certainly acknowledges throughout his work that he had read and gained much insight from Peirce, James, Dewey, and Whitehead.

But on the other hand, much of the work of James and the other pragmatists tends to be regarded as superficial and trivial, a "practical, strenuously optimistic, all-American dismantling of philosophical pretensions to higher authority and truth... an effort to sweep away the cobwebs of theory and speculation with the broom of experiment and everyday experience" as one writer recently put it.¹⁴ Such works as *The Will to Believe* and *Pragmatism* are dismissed as popularizations of profound philosophical questions. They were written for a popular audience – a sort of philosophy-made-easy for the common man. There is a widespread belief that it is a method of philosophizing which glorifies action for its own sake and elevates it to an end in itself.

This is perhaps why Harry Prosch warns us that we should not confuse Polanyi's thought with that of the pragmatists:

It is true enough that [Polanyi] shared with Dewey the notion that significant thought begins with problems; but the impetus propelling a mind toward both a recognition and a solution to its problems was not for him the itch to restore ongoing activity, but rather a passion to attain comprehensive and meaningful wholes... The psychology from which he took his bearings, in other words, is quite different from that from which the American pragmatists took theirs. Instead of seeing organisms as primordially blind activists... he saw [them] as primordially meaning-seeking centers, already oriented toward the goal of finding or attaining structural ordered holistic entities both within and without themselves.¹⁵

But Charles Peirce reminds us that "the pragmatist does not make the *summum bonum* to consist in action, but makes it to consist in that process of evolution whereby the existent comes more and more to embody generals," i.e., a body of rational tendencies or generalized habits. There are two commonly committed errors concerning pragmatism, according to John Dewey.

It is often said of pragmatism that it makes action the end of life. It is also said of pragmatism that it subordinates thought and rational activity to particular ends of interest and profit... But the role of action is that of an intermediary... Pragmatism is, therefore, far from being that glorification of action for its own sake which is regarded as the peculiar characteristic of American life.¹⁶

If there are affinities between Polanyi's personal knowledge and the insights of pragmatism, then we must look for them in the most original and creative contributions of both. Whitehead is especially instructive here. His work in mathematics led him to the same conclusion as Polanyi, viz., that "logic... is struggling with the discovery... that every set of finite premises must indicate notions which are excluded from its direct purview".¹⁷ He argues that philosophy never starts from the explicit systematization of thought. It starts from what he calls assemblage. And there are, according to him, "four great thinkers whose services to civilized thought rest largely upon their achievements in philosophical assemblage... Plato, Aristotle, Leibniz, and William James". Of James, Whitehead has this to say:

The essence of his greatness was his marvellous sensitivity to the ideas of the present... He systematized; but above all he assembled. His intellectual life was one protest against the dismissal of experience in the interest of system. He had discovered intuitively the great truth with which modern logic is now wrestling.¹⁸

It strikes me that truth is precisely what Polanyi had discovered in his doctrine of personal knowledge. I do not think it is presumptuous to characterize Polanyi as an "assembler" in the same sense as James. For his insights are as seminal as those of James, and they take philosophy in a new direction. If there be validity to this assertion of Whitehead, then some commensurate place should be made, I believe, for Polanyi if only because he worked, independently of James to be sure, but from a remarkably similar standpoint, and moved the general themes of a post-Copernican New World Philosophy in dramatic new directions. No less than Peirce, James, and Dewey (or Whitehead, Heidegger, and Wittgenstein for that matter), his work may be viewed as an attempt to rethink and reconstruct the very foundations of the modern mind.

In the history of philosophic thought each major epoch begins with a cosmology, in the broadest sense of this term, as a unified world view, a *Weltanschauung* in which science, philosophy, religion, art, and mythology come together to create a new image and a new way of understanding the universe and the place of human life in it. Most especially does a cosmology in this sense propose a theory of correspondence between the macrocosm, the

world at large, and the human live creature. It is at this cosmic level of a new paradigm for the universe and of human life that we find the deepest meaning of the philosophy of pragmatism as espoused by Peirce, James, and Dewey. And it is at this level that Polanyi's personal knowledge meets this tradition.

Both pragmatism and personal knowledge represent nothing less than an attempt to construct a new theory of truth and of meaning within the context of the major historical shift which occurred in the modern world, a shift from a pre-Copernican and pre-Kantian universe which was finite, fixed, and essentially finished, to a universe which is in all its important dimensions infinite, unfolding, and still in the making. When read from this point of view, Polanyi joins company with the American pragmatists. Together, they constitute a group of cosmologists, or assemblers, who are essentially concerned with the relationship between the human live creature as a self-initiating purposive agent as we find him in the *novum mundus* of the 16th century cartographers and cosmographers. This New World is a cosmic wilderness: unfenced, unfinished, and to a considerable measure still largely unpredictable.

Human experience brims over with non-explicit factors in this cosmic wilderness; it abounds with "the dark and the twilight" (Dewey's words) with "the vague and the inarticulate" (James), and with the "tacit dimension and the ineffable" (Polanyi).

Nature, far from being all distinct, explicit, and evident as scientific positivism would have it, teems with novelties, hidden possibilities, ambiguities, obscurities and all those qualities which make things lovable or odious, beautiful or ugly. When we define the items of our experience exclusively in accordance with the prescriptions of clear and distinct and explicit knowledge, we are compelled to deny the existence of these other qualities which nevertheless inhere in the objects of our ordinary experience. In denying their existence we commit what James called a "vicious intellectualism": "The treating of a name as excluding from the fact named what the name's definition fails positively to include." Polanyi found this fallacy at the heart of the scientific ideal of objective knowledge. And James summed it all up in his characteristic manner, in this inimitable, eloquent statement:

All "classic," clean, cut and dried, "noble," "fixed," "eternal," *Weltanschauungen* seem to me to violate the character with which life concretely comes and the expression which it bears of being, or at least involving, a muddle and a struggle, with an "ever-not-quite" to all our formulas, and novelty and possibility forever leaking in.

Qualitative thought and personal knowledge

To illustrate the commonality of attitude and outlook between Polanyi and the pragmatists, we may look at the striking similarities between the principal characteristic of personal knowledge and what Peirce and Dewey characterize as qualitative thought. The most obvious feature of our ordinary, commonly shared human experience is that it is qualitative. For Dewey, "the world in which we immediately live, that in which we strive, succeed, and are defeated is pre-eminently a qualitative world."¹⁹ This is a most direct, simple and immediately accessible truth. But at the same time (like Polanyi's "we know more than we can tell") it is elusive, complex, intricate, and profound.

The most effective way to approach the richness and complexity of the idea is to begin with a distinction which Dewey, Peirce, James, and Polanyi implicitly share: the distinction between experience and discourse. The universe of experience is a precondition of the universe of discourse. Whatever meaningful discursive utterance can be made by anybody about anything must ultimately be referred to and located within a universe of experience as the commonly shared context from which the utterance will derive its final meaning.

To illustrate this point, in his essay on "The Sentiment of Rationality" (a title with a Polanyian ring), James supposed that one could describe a Beethoven string-quartet as "a scraping of horses' tails on cats' bowels".²⁰ But this banal discursive utterance falls infinitely short of the qualitative experience of *music* which gives a Beethoven quartet its meaning. To cite another example of this point, Dewey asks us to consider

the difference between movement as qualitative alteration, and motion as $F=ma$; between stress as involving effort and tension, and as force per unit surface; between the red of blood issuing from a wound, and red as signifying 400 trillion vibrations per time unit.²¹

Similarly, Polanyi tells of an incident which occurred to Professor Richard Pipes who, in an essay, wished to express the idea that intellectuals in the Soviet Union have a yearning, a craving, for the truth. On the advice of friends Pipes omitted the passage because it sounded "naive" and "unscientific". Four years later he changed his mind, but the "truth" which the Russian intelligentsia craved for was defined by Pipes as "the right to surrender to one's impressions without being compelled for some extraneous reasons to interpret and distort them". Polanyi calls this a "labyrinth of subterfuges [and] involuted words". Like James's "horses' tails and cats' bowels" these words "do not begin to express what is actually taking place in Eastern Europe".²²

There is a commonly shared world of experience and a common-sense way of apprehending that world. There is, in other words, a universe of experience which is qualitative. Physical science belongs to the universe of discourse as a mode of abstract thought. It transcends the universe of experience; it prescind from quality in its pursuit of abstract objectivity. As Polanyi says, the ideal of knowledge for physical science is completely explicit and objective. But he also adds: this is nonsense. Common sense refers to a type of thinking "which has to do with objects involved in concerns and issues of living".

What, then, does Dewey mean by quality? And how may it help us better to comprehend tacit knowing? In addition to the traditional distinction between primary qualities (which inhere in the object) and secondary qualities (which reside in the perceiving subject), there are tertiary qualities of which the first two are but dimensions. A tertiary quality pervades an entire field of experience; an entire experiential situation takes on a qualitative character. The situation itself may be described as tense or relaxed, as cheerful or somber, as exciting or tedious.

It can never be articulated in any explicit way, for it is always there, taken for granted as the integrating principle which gives to an experience its coherence, its direction, its shape. It allows for the possibility of discursive thought because it enables us to fix our attention on a particular problem without at the same time having to make the entire context problematic. We are aware of situation "not by itself but as the background, the thread and the directive clue in what we expressly think of". [Cf. the clues contained in the tacit dimension whereby Meno's dilemma is solved by Polanyi.] Dewey remarks that James's use of such metaphors as "fringe" and "penumbra" in describing the underlying qualitative character that constitutes a situation is unfortunate because these terms convey the meaning of something that is a distinct and additional entity. This is surely the reason why Polanyi is careful to insist that the tacit dimension, or "subception," should not be confused with the "Jamesian fringe of awareness".

What is most distinctive about the fringe of awareness for James, what is its most striking or salient feature, is its indeterminateness, "the indeterminateness of the margin". Dewey says that we are never "wholly free from the sense of something that lies beyond". The margin of our field of experience shades "into that definite expanse beyond which the imagination calls the universe". When we turn our attention to this marginal life we call it "dim and vague". But this is because it is a function of the whole field of experience and not of any specific part. Dusk is a meaningful quality of the whole situation we call twilight. Only when it prevents us from viewing some particular object clearly do we call it dim and vague. And yet its function is not to render any object

visually acute. The sole purpose and meaning of dusk is to be found in the way in which it binds together all the defined elements of our world, at the time of day when night approaches, into a qualitative whole.

In a certain sense, the dim and vague do have their proper place (to paraphrase James), for they constitute the stable context of every experience and are, in Dewey's words, "the essence of sanity". Without a sense that there is an indeterminate setting not needing our attention to determine it, all our experiences would be uprooted out of context and would float in an incongruous and chaotic vacuum.

For Dewey, a work of art performs the very special role of putting us into contact with this qualitative whole by eliciting and accentuating a vivid awareness of its presence. It arouses in us a "sense of belonging to the larger, all-inclusive whole which is the universe in which we live". He is worth quoting at length on this point:

We are, as it were, introduced into a world beyond this world which is nevertheless the deeper reality of the world in which we live in our ordinary experiences. We are carried out beyond ourselves to find ourselves... Only one frustrated in a particular object of desire upon which he had staked himself, like Macbeth, finds that life is a tale told by an idiot, full of sound and fury, signifying nothing. Where egotism is not made the measure of reality and value, we are citizens of this vast world beyond ourselves, and any intense realization of its presence with and in us brings a peculiarly satisfying sense of unity in itself and with ourselves.²³

It would be misleading to think of a quality as some kind of ethereal or mystical force. To the contrary, it is as tangible and outstretched as the items residing in the foreground of the experience which it embraces. The quality is there in all its concreteness in every enumerated item of the experience, as the ubiquitous stuff or subject-matter of which that particular experience is made. It is not an object of knowledge; it is never directly known. But the quality is immediately grasped *as* experience.

The affinities between Polanyi's personal knowledge and the American pragmatic tradition are too numerous and too profound to go beyond the brief illustrations which I have offered. But, having made an initial investigation of this topic, I am convinced that his philosophy not only possesses these affinities, and that to uncover them will enable us to probe more deeply into his thought, but also that his work truly belongs to this tradition and deserves to be called a New World philosophy, a humanistic philosophy. Michael Polanyi gives us a glimpse of a post-Copernican, post-Kantian, post-modern world that is just now beginning to unfold before our eyes.

Notes

1. *Personal Knowledge* (Chicago: University of Chicago, 1958), pp. 3-4.
2. John Herman Randall, *The Career of Philosophy. From the Middle Ages to the Enlightenment* (New York: Columbia University Press, 1962), pp. 309-10.
3. *The Tacit Dimension* (New York: Doubleday, 1966), p. 3.
4. *The Way of Discovery. An Introduction to the Thought of Michael Polanyi* (New York: Oxford University Press, 1977), pp. 46-47.
5. "The Value of the Inexact," *Philosophy of Science*, Vol. 3 (April 1936), p. 233.
6. "Sense-Giving and Sense-Reading," *Knowing and Being. Essays by Michael Polanyi*, ed. Marjorie Grene (Chicago: University of Chicago, 1969), p. 195.
7. *The Tacit Dimension*, p. 6.
8. *The Writings of William James*, ed. John J. McDermott (New York: Random House, 1967), p. 456.
9. *The Tacit Dimension*, pp. 15-16.
10. *Ibid.*
11. William James, *Psychology: Briefer Course* (New York: Crowell-Collier, 1961), p. 179.
12. *Personal Knowledge*, pp. 87-88.
13. Husserl considered the *Principles of Psychology* an important influence in the development of his thought, and Wittgenstein was reported to have no other book in his study except the *Principles* which he recommended to his students.
14. L. S. Klepp, *The New York Times*, 2 December, 1990.
15. Harry Prosch, *Michael Polanyi. A Critical Exposition* (Albany: State University of New York Press, 1986), p. 8.
16. "The Development of American Pragmatism," *Philosophy and Civilization* (New York: Capricorn, 1963), pp. 15-16.
17. *Modes of Thought* (New York: The Free Press, 1968), p. 2.
18. *Ibid.*, p. 3.
19. "Qualitative Thought," John Dewey *On Experience, Nature, and Freedom*, ed. Richard Berstein (New York: The Liberal Arts Press, 1960), p. 176.
20. *The Writings of William James*, p. 325.
21. "Qualitative Thought," *op. cit.*, p. 177.
22. Michael Polanyi and Harry Prosch, *Meaning* (Chicago: University of Chicago, 1975), pp. 26-27.
23. John Dewey, *Art as Experience* (New York: Capricorn, 1934), p. 195.