Michael Polanyi’s Philosophy of Science

Positivism may be said to be the outcome of the changing contours of modern science that relies solely on observation, experimentation, and measurement. Experiments in modern science are designed solely to elicit ‘yes’ or ‘no’ for an answer. The resultant facts can be fitted into clusters, groups, manifolds, and sets. This yields a framework of more or less empirically ascertainable regularity, pattern or design, and predictability of outcomes. If the facts don’t accord with experience, one hypothesis can be discarded in exchange for another. Thus, truth itself becomes the product of its functionality. Truth is whatever works. Instead of ends and purposes, it is cause and effect, stimulus and response, which become the keynote of inquiry. If the cause can be replicated, the effect too can be simulated. In the resulting control over the process, knowledge and power become conjoined.

Much of Michael Polanyi’s philosophic writing is directed at unraveling the concealed ideology of positivism. The implications of positivism are not so readily apparent, for it is well camouflaged by sloganized neutrality and objectivity. Besides, it has developed an invasive professional jargon that threatens to regiment the mind and replace all thinking and inquiry. Polanyi’s undertaking can be said to be akin to the Socratic effort to disentangle philosophy from the sophistry of his contemporaries. In the Platonic dialogue The Meno, the inquiry into how we come by knowledge enters an intellectual cul-de-sac, with the sophist Meno trying to confound Socrates with a powerful eristic: Knowing makes all inquiry superfluous, and equally, not knowing renders all inquiry redundant. One is either in the know, or one is simply not. Consequently, no research or inquiry is possible. Socrates, true in keeping with his pretense to ignorance, suggests a way out of this predicament. He invokes what he has heard from priestly sources: The soul, walking in the wake of the gods, knew everything. It is only on its descent into the body at birth that it has forgotten what it knew, largely through “inattention or neglect”. Learning, therefore, Socrates declares, is the recovery or recollection (anamnesis) of knowledge. He buttresses it with a practical demonstration by way of an interview with Meno’s slave; he draws out of him purely through the elenctic (= yes / no) method of questioning, the geometric knowledge that he had been previously ignorant of. (It may be noted that the term education is derived from this process of drawing out or ‘eduction’.)

Michael Polanyi too in his The Tacit Dimension demonstrates how in recognizing the face of a person from among a million faces, we are unable to spell out how we have recognized, for in internalizing the features of a particular face we are “attending to” than “attending from”. Yet, as in the case of crime investigation, police can put together a rough sketch of the criminal by piecing together in their individuality the several parts of the face in question. In a sense,
Polanyi’s investigation is very much similar to the Socratic undertaking: recovery of knowledge is not the effort to recover the algebra or geometry we knew in a previous birth. It is, as the poet Kalidasa has shown in his play Abhignayana Shakuntalam, the recovery and recollection of the lost ring. In the play, the fisherman who dives deep down to find the ring in the belly of a fish symbolizes the descent of King Dushyanta into the inmost recesses of the self. In plumbing the depths, he recollects and recognizes the ring he had once given to Shakuntala. In other words, anamnesis is not so much the recovery of the knowledge of the whole but the knowledge of the articulation of the whole. For this reason, Polanyi asserts, “we can know more than we can tell.” Such a style of knowing may lack precision or accuracy, though not at the expense of truth. It is only after the remarkable successes of modern natural science that we have come to mistake precision for truth. In circumventing Meno’s eristic that perilously leads to idle inquiry, Polanyi points toward the subliminally present features of the object under investigation in the inquiring subject itself. It is this dim initial awareness that triggers our urge to know. To use an expression of the political philosopher Eric Voegelin, it is “questioning knowing” and “knowing questioning” that set in train all research and inquiry (zetesis). At bottom, it is this that enables us, even as we perceive ourselves to be part of nature, to look at it as apart from ourselves, and likewise, to view ourselves as part of society and also at society as apart from ourselves.

Polanyi’s Personal Knowledge proceeds from this viewpoint to examine the natural as well as the social sciences and to discredit all scientism and positivism. It becomes acutely clear that in the umbral areas of participation and experience, the putative scientist or academist is virtually subjective but in the penumbral areas of non-experiential observation, he professes objectivity because the latter do not enter his subjective experience. And here comes the snag: why can’t the subjective be objective about itself? Should reason end where experience begins? The scientific pundit has not cared to resolve this chasm, this contradiction, in his psyche, between the subjective compulsion in one’s own experience and the objective option in the observation of the other. Experience is value-bound, but observation must be ‘value-free’! Values rule experience, but facts must be hijacked by observation. How does the scientist legitimize or justify this studied ambivalence? If his subjective cognition is authentic and unquestionable, not subject to objective scrutiny, how does he fail to concede the same privilege to the existential cognition of the cultures and traditions he chooses to study, accept and respect their own norms and values for themselves? Is objectivity no more than a professional pose, a professional nonce?

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