

The Comprehensive  
Legacy of  
Michael Polanyi



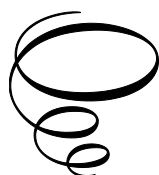
# The Comprehensive Legacy of Michael Polanyi:

*Dwelling In and Breaking Out*

Edited by

Walter B. Gulick and Paul Lewis

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*For Phil Mullins*



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## ACKNOWLEDGEMENTS

In the early 1970s, scholars convinced of the abiding importance of Michael Polanyi's work formed what was initially termed The Society of Explorers but then several years later was renamed The Polanyi Society. The penetrating essays in this volume suggest that the term "explorer" continues to be relevant for those stimulated by Polanyi's thought. It has been the editors' intention to provide essays that reflect the breadth of Polanyi's interests and explorations and so complement the articles published in the Polanyi Society's journal, *Tradition and Discovery*.

The editors acknowledge with appreciation the work Andrew Grosso did in securing some of these essays. We are especially grateful to the contributors for their unfailing interest in and support for this project.

If there is anyone other than Polanyi who holds Polanyi's diverse insights together in a way that illustrates the conviviality characteristic of Polanyi Society members, it is the person to whom this book is dedicated, Phil Mullins. Phil was for many years the editor of *Tradition and Discovery*, President of the Society, and webmaster of the Society's informative website. Readers will learn more about this researcher and interpreter in Chapter One. A bibliography of Phil's many journal articles will be published with the other essays on Polanyi in a forthcoming issue of *Tradition and Discovery*.

Of the two editors, Walt Gulick has known and worked with Phil the longest. His own thought has been immeasurably enriched by many conversations and exchanges with Phil over the years. Walt notes that Phil has consistently been the member of the Society most in touch with a wide variety of people showing interest in Polanyi. He has been the leader in soliciting articles for the journal and in developing Zoom discussion sessions.

Phil was one of Paul Lewis's undergraduate teachers, whose course on modern religious thinkers opened up new worlds for him. While Phil did not teach Polanyi in that class, Polanyi was always in the background and frequently was mentioned in the many long conversations that Phil graciously had with Paul. As a graduate student, Paul stayed in touch with Phil with the result that Paul became actively involved in the Polanyi Society, including following Phil as editor of *Tradition and Discovery*. He

finds the Society to be one of the most intellectually interesting among his professional organizations.

Both of us think that it is therefore fitting to dedicate this book to Phil, colleague, teacher, and most importantly, friend.

## INTRODUCTION

Michael Polanyi (1891-1976) was thrilled. For six months, while enrolled in medical school, he had diverted his attention away from studying to be a physician. He had become obsessed with exploring implications of the Third Law of Thermodynamics. He spent six months developing a paper on the implications of that law. The paper was sent to a professor he had studied with, who in turn forwarded it to Albert Einstein. The internationally famous Einstein, after reading it, wrote back to the professor, “I like the paper of your Mr. Polanyi very much.”<sup>1</sup> To have such a reception thrilled the twenty-one-year-old Polanyi. It set him on a course to leave medicine and become a prominent physical chemist.<sup>2</sup>

From 1923 to 1933 Polanyi was a member of the Kaiser Wilhelm Institute for Physical Chemistry in Berlin. He found that to be a profound experience. Then from 1933 to 1948 he continued his scientific work at the University of Manchester. “The quality and importance of his work was such that in 1944 he received the immense distinction of election as a Fellow of the Royal Society.”<sup>3</sup> However, in the mid-1930s, Polanyi began increasingly to devote his attention to the disasters that had overtaken Western civilization. The method he employed in the physical sciences

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<sup>1</sup> Polanyi, Michael. “Polanyi, Michael (March 11, 1891--).” In *World Authors, 1950-1970*, ed. John Wakeman (New York: Wilson, 1975), 1151.

<sup>2</sup> For an essentially chronological account of Polanyi’s scientific work, see William Tausig Scott and Martin X. Moleski, S.J., *Michael Polanyi: Scientist and Philosopher* (New York: Oxford University Press, 2005), especially 55-179. Mary Jo Nye has written several fine articles on Polanyi’s scientific work; see especially her *Michael Polanyi and His Generation: Origins of the Social Construction of Science* (Chicago: University of Chicago Press, 2011), and for a more focused summary of her work on Polanyi achievements, see M. J. Nye, “Michael Polanyi: Science as Personal Knowledge and Social Practice”, *Angew Chem Int Ed Engl.* Vol. 56, No. 13 (March 20, 2017) :3426-3433. doi: 10.1002/anie.201610716. Epub 2017 Feb 10. PMID: 28185439. The online journal *Polanyiana*, vol. 12:1-2 (2003) contains many articles in Hungarian (with English translation) devoted to Polanyi’s scientific accomplishments.

<sup>3</sup> John Wakeman, ed. *World Authors, 1950-1970*. (New York: Wilson, 1975), 1152. See also E. P. Wigner and R. A. Hodgkin, “Michael Polanyi,” *Biographical Memoires of Fellows of the Royal Society*, Vol. 23 (1977): 413-448.

greatly influenced his subsequent work. His analyses of the causes and potential remediation of such disasters as the world wars, the depression, and the rise of totalitarian regimes led him to publish a flurry of articles in the social sciences and then ultimately books in philosophy. It is evident that Polanyi was a curious man who felt driven to understand most everything that came to his attention. As a result, he can justly be called a polymath.

The articles in this book spotlight the significance of the ideas and insights he produced after he shifted his attention from the physical sciences to the social sciences and the humanities. The authors are convinced of the continued importance of reckoning with his thought. But inasmuch as the social and cultural context has changed in the 75 years since his death, a need exists to winnow his ideas and champion those insights that nurture creativity and reformation today. Thus, the book is divided into a section that situates his thought and illuminates its depth, and a section that primarily reflects on the rich possibilities for further development it bears. In Polanyian terms, the first set of articles dwells in and the second set breaks out of the insights he developed over the last forty years of his post-scientific productivity. In doing so, the book's organization reflects Polanyi's understanding of how knowledge grows.<sup>4</sup>

The scholar most responsible for the recovering of the way Polanyi's non-scientific thought evolved prior to the publication of Polanyi's magnum opus, *Personal Knowledge*, in 1958 is Phil Mullins. Both as an acknowledgement of his contributions and as a model of Polanyian interpretation, Mullins is the subject of the first article that follows this introduction. Without his historical bird-dogging, the comprehensive aspect of this book revealing Polanyi's prodigious accomplishments would not be possible. For decades Mullins has been browsing through institutional papers to ferret out often forgotten letters, articles, and other material from Polanyi's very rich life. Mullins has been especially adept at demonstrating

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<sup>4</sup> Polanyi speaks of "two kinds of intelligence: "one achieving innovations, irreversibly, the other operating a fixed framework of knowledge, reversibly" (Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* [New York: Harper Torchbooks, 1964], 76). In the process of creation or discovery, we interiorize newly formed ideas or processes. We can then make use of this *indwelt* innovation as an ingredient in our ordinary thought and practice. As familiarly used over time it loses its initial appeal. One then often finds that further experience reveals new insights that cause us to *break out* of previously *indwelt* ideas and practices and *indwell* new thoughts and practices that better account for experience. Thomas Kuhn arguably relied upon Polanyi's theory of dwelling in and breaking out in his theory of scientific paradigm shifts in his famous *The Structure of Scientific Revolutions*.

that Polanyi can rightly be considered one of the leading public intellectuals in the twentieth century. In responding to interview questions, Mullins describes what piqued his interest in Polanyi and suggests what he believes are reasons for taking Polanyi's philosophy seriously today. As long-time editor of *Tradition and Discovery, the Polanyi Society Periodical*, Mullins has sought out and nurtured a wide array of interpreters of Polanyi's thought. Without his leadership, it is quite likely that the collection of essays presented here would not be possible.

In the next article, Walter Gulick examines Polanyi's shifting career in terms of his theory of a calling. In brief, a person absorbs and interprets a wide variety of experiences. The lessons learned, *indwelt* (Polanyi's term), and consolidated serve as the basis for new, emergent insights. A person's calling brings the diversity of insightful experiences into purposeful harmony. A calling links background experience to meaningful long-term practice promising greater coherence and significance in thinking and doing. Polanyi's life history—surging from medicine to physical chemistry to social theory to philosophy—reveals a visionary pattern of breaking out from valued but limited experiences and insights into creative ways of thinking and doing. This trajectory of unfolding vocational commitments is mirrored in Polanyi's theory of tacit knowing. The creation of new knowledge moves *from* tacit, embodied understanding and skills *to* explicit new meaningful activities and insights. Thus, Polanyi's philosophy is explicitly grounded in the lessons of personal experience rather than based on metaphysical theories. Gulick charts the agglomeration of sequential events that mark Polanyi's course of living, citing the concerns, influences, mentors, events, and, yes, callings that shape his remarkable career. More long-lasting than transient cravings and the impulses of appetites, and more focused on transcendent truths than particular projects, his callings are what give continuity and meaning to Polanyi's life. His theory of callings allows readers to reflect upon their own courses of living.

Sociologist Richard Moodey in his article describes how social interactions devolve into disaster according to Polanyi in his explication of modernity. While examining Polanyi's model of exchanges between embodied persons, Moodey distinguishes between ideas as temporary moments of consciousness and dispositions as *indwelt* habit of thought and action. Precision in understanding one another is vitiated by the indeterminate character of what a person has absorbed from experience and integrated to form explicit language. Misunderstanding is minimized between members of a group—in Polanyi's model, a group of scientists—by the commitment of each individual to find and state the truth. Polanyi believes that groups that practice spontaneous order, namely a horizontal

type of mutual interaction, are more likely to grow in thought and discovery than those subject to top-down corporate order. When values such as truth and interdependency are reduced from their obligatory status through nihilism, self-seeking, hatred, and the like, moral inversion sets in—the cause of the disasters Polanyi sought to rectify. However, Moodey accuses Polanyi of falling into unsupportable social generalizations in his attempt to cure the modern mind rather than continuing to follow his fruitful analysis of how persons learn and societies flourish when in allegiance to such unifying notions as the truth.

Diane Yeager's bracingly fine article, "Confronting the Minotaur: Moral Inversion and Polanyi's Moral Philosophy," is the only previously published essay in this book.<sup>5</sup> It is cited several times in this volume. Let discussion of its contents be articulated in the author's own words. This is her abstract: "Moral inversion, the fusion of skepticism and utopianism, is a preoccupying theme in Polanyi's work from 1946 onward. In part 1, the author analyzes Polanyi's complex account of the intellectual developments that are implicated in a cascade of inversions in which the good is lost through complicated, misguided, and unrealistic dedication to the good. Parts 2 and 3 then address two of the most basic of the objections to Polanyi's theory voiced by Zdzislaw Najder. To Najder's complaint that Polanyi is not clear in his use of the term "moral," the author replies that the pivotal distinction in Polanyi's moral theory is not the moral against the intellectual, but the passions against the appetites. In considering Najder's complaint that Polanyi's argument represents a naive instance of ethnocentric absolutism, the author undertakes to show Polanyi's consistency and perspectival self-awareness by focusing on Polanyi's account of authority and dissent within a tradition, as well as on Polanyi's treatment of persuasion as a heuristic passion."

Who or what is the "person" Polanyi makes so important in his philosophy of personal knowing? A dictionary definition of "person" describes a term having many sorts of usage, but perhaps "the individuality of a human being: self" delineates ordinary usage best. R. Melvin Keiser shows that Polanyi better captures the signal importance of personhood through the structure of agency he terms tacit knowing. The Polanyian person is an embodied agent whose conscious reasoning and intentional acting arises from indwelt experiential particulars that are tacitly integrated within the constraints of specific frameworks of intentionality. As indwelt, experiences and ideas are trusted resources and sources of feelings.

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<sup>5</sup> D. M. Yeager, "Confronting the Minotaur: Moral Inversion and Polanyi's Post-Critical Philosophy," *Tradition and Discovery* Vol. 29, no. 1 (2002-2003): 22-48.

Thinking and acting in terms of this indwelt reservoir for merely egocentric interests is not yet personal action. A person cares more deeply and broadly about other people and the world in general than a mere self does. The personal transcends subjective narrowness in being connected, sometimes passionately, *from* the tacit realm *to* independent realities, including other persons, whether that connection be through perceiving, feeling, thinking, or imagining. Polanyi sees truth as revelatory contact with that reality. Heuristic acts of connecting subtly change one's responsible personhood and are distinguishable from routine performances. Keiser emphasizes that in contemplation, persons allow tacit inner resource to emerge as felt messengers of wisdom. That is, Keiser credits Polanyian contemplation as opening up the possibility of divine presence in a meaningful world of goodness and wholeness.

Esther Meek begins her discussion of the emotional and aesthetic dimensions of learning and knowing manifest in Polanyi's thought by speaking of the excitement she brings to teaching subject matter that elicits passion in her students directed toward their own learning. Her books, especially *Longing to Know*, *Loving to Know*, and *Contact with Reality*, convey the passion for learning that has successfully inspired a generation of readers. Meek notes that the excitement she feels in discovery and communicating that which is discovered is an excess of the intellectual passion that is central to Polanyi's thought. The excitement may ebb away with time, but the remaining intellectual passion can sustain long, drawn-out scientific research. A problem attracts intellectual desire that often takes selective, heuristic, and then persuasive forms leading to belief and knowledge. Meek captures the close connection in Polanyian philosophy between epistemology and ontology. Polanyi denies that there is some objective, formalized scientific method that leads to discovery. No, personal sensitivity to existing patterns is what almost demands acknowledgment. Knowers bring passion to inquiry, but it is the beauty and goodness of reality that lures that passion and is the measure of the validity of the investigation. Meek refers to the thought of Aquinas, Hans Urs von Balthasar, and D. C. Schindler as corresponding closely to the thrust of Polanyi's personal knowing. She suggests Aquinas's relational transcendentals of beauty, goodness, and truth, inherent in all things, are the attractive force driving the intellectual passions that bring meaningful knowledge.

Polanyi's understanding of religion and personal faith has been the subject of extensive and often conflicting interpretations. Andy Steiger presents a clear and convincing account of Polanyi's conviction concerning the social importance of religion and the reasonability of personal religious faith. Setting Polanyi's thought in opposition to Alex Rosenberg's scientistic

account of the world, Steiger notes that attacks on religion requiring perceptual vindication, such as presented by Rosenberg, have helped expose the need for faith as a basis of meaning in all walks of life. For Polanyi, faith and reason are intertwined in all thought and intended action. Religious faith, like art, creates meaningful interpretation of the world soaring beyond scientific factuality. Scientific passion ceases once discovery is generally accepted, whereas Polanyi's variety of natural theology (in contrast to revealed theology) embraces wonder, hope, and loving relationships. Religious faith, like all acts of knowing, entails risk. It comes into being through the integration of clues, emotional and factual. Polanyi acknowledges that some do not wish to pursue such integrations, fearing that they may thereby lose hold of reality. But Polanyi has a much broader understanding of reality and knowing than mere information. Formal thinking rarely leads to discovery whereas religious faith, looking at the unknown, provides insights that enrich life.

It was suggested above that Polanyi, based on his experience as a scientist in Berlin, saw the social order of science, caused by the trusting interdependence of scientists, to be a model for social order in general. He expressed his idealized view of social practice especially clearly in his 1962 essay, "The Republic of Science." Social theorist Stephen Turner persuasively argues that Polanyi's idealized view of science no longer (if it ever did) characterizes the forces at play in the world of science. Polanyi's ideal of pure science carried out for the satisfaction discovery provides has mostly been replaced by governmental funding for particular ends, corporate funding aligned with profit making, and university funding tied to the securing of grants. Thus, Polanyian spontaneous order in scientific practice, based on a shared communal vision of scientific principles and responsibilities, has eroded. Service to society, rather than pursuit of truth, has become a dominant guiding principle today. The competition for funding has made risky venturesome and creative projects less likely to be financed. Turner describes how diminishment of autonomy, the narrow use of modeling, the rise of regulation with concern for avoiding harm rather than finding truth, and the altered nature of scientific goals prevail now. But he concludes his essay by suggesting that the transcendent experience science provides has not entirely vanished.

Polanyi argued that humans interiorize telling aspects of what we perceive and think in a felt embodied way that overcomes the incoherent mind-body dualism advocated by Descartes. Philip Rolnick uses this notion of participating in reality as a basis for critiquing subjectivist and relativistic notions of knowing which he believes have resulted in moral confusion and social dissolution. He resists the idea that we construct reliable knowledge

and values; rather, we participate in reality as given. Part of that given reality are the transcendentals of truth, goodness, and beauty that exist in some form in every tradition. Rolnick states that C.S. Lewis and Aquinas join Polanyi in affirming as real higher orders of being and value that stabilize society and grant individuals meaning in life. Lewis argues for a version of natural law he terms the Tao; it includes the transcendentals as aspects of objective value that ought to be a centerpiece of education. Aquinas affirms God as being itself within which all things exist as created. Participation is not directly in God's transcendent being, but rather in God's created order. Persons, as God's ultimate creation, are lured by God's goodness toward ever closer participation in divine goodness. In tune with Polanyi's notion of reality as offering indefinite future manifestations, Rolnick celebrates the fecundity of participation in dynamic reality, leading humans to growth in ways we can only guess at.

In "What is Beyond Nihilism?" Jon Fennell explores issues that (though he does not say so) resonate with current political situations around the world. He contrasts the thought of Michael Polanyi and Leo Strauss regarding their analyses of the origins, enactment, and overcoming of nihilistic belief in society. Strauss proposes that the rise of nihilism in Germany prior to World War II can be traced to a desire among the populous for a culture of heroism honoring self-sacrifice in contrast to the relativism of Enlightenment tolerance and English utilitarianism and liberalism. German nihilism embodies two aspects: the epistemic belief that in current civilization there are no valid normative principles and the active nihilistic belief that the current situation legitimates aggressively bulling through any resistance to the needed revolution. In contrast, Polanyi argued that nihilism in society springs forth from self-doubt that yearns for scientific certainty. Since traditional morality and religious belief cannot be proven, they can be set aside. The Christian hope for the Kingdom of God on earth continued after the Enlightenment in secularized form and created a passionate desire for social transformation unconstrained by values that only supported the status quo and its vested interests. Fennell goes on to suggest that Polanyi describes a way to overcome nihilism that differs from Strauss's appeal to returning to a Socratic form of education.

Timothy Simpson and Andrea Wells explore affinities between E. D. Hirsch's educational theory and Polanyi's theory of tacit knowing. Hirsch's controversial advocacy of cultural literacy had its foundation in his inquiry into reasons for the measured decline in students' reading comprehension in the 1970s. He rejected both the theory of educational formalism that stated education should be attuned to a child's natural interests and the prominent theory of reading achievement emphasizing the skill of reading as what is

most important to teach, not the content and its vocabulary as Hirsch argued. Hirsch declared that students advance in their reading comprehension when they understand the context, the background knowledge, in terms of which written material makes sense. He relied upon schemas, general frames of interpreted experience, as the basis for knowing. More general than Polanyi's subsidiaries, yet also not explicitly known, schemas organize content into useful background information. Hirsch is particularly interested in how background knowledge gives children confidence in reading and promotes civic understanding. Hirsch's emphasis on individual and social obligation correlates with Polanyi's theories of personal calling and the ingredients of a free society. Simpson and Wells further develop Jon Fennell's understanding of the importance of public education for individual and civic responsibility, and they call for more investigation into how Polanyi's existential understanding of tacit knowing both reflects and augments Hirsch's content-centered educational theory.

The last essay in the book fittingly casts a wide net that includes brief quotations from, or references to, many authors who have commented on different features of Polanyi's normative thought. Paul Lewis maps the territory that is relevant to a comprehensive theory of ethics by attending specifically to Polanyi's moral vision and moral agency. He notes that most commentators on Polanyi's ethics approach his thought by way of his theory of tacit knowing. Polanyi's moral vision is deeply influenced by his experience within a scientific community. The scientific pursuit of truth is carried out in allegiance to a tradition of scientific practice and standards that recognizes the multi-layered, elusive nature of reality. The partial understanding of scientifically studied reality is carried over to his understanding of moral values. Truth, goodness, and beauty stand as ultimate authorities guiding behavior, but those values are applied in different ways by persons sensitive to shifting contexts. That is, persons should be committed to moral truth affirmed with universal intent even in the face of admitted fallibility. A primary aim of moral agents is to promote healthy communities. As embodied and reliant on tacit knowledge and values, moral action is not simply a matter of following rules. Moral principles cannot be demonstrated with certainty; they must be applied like "rules of rightness" by socially sensitive persons. Lewis sprinkles his essay with several lists of features that any person resolving to write a comprehensive theory of Polyanian ethics is well-advised to consider.

Let the reader rejoice in the interacting common themes in Polanyi's thought described in these articles. But also notice the rich differences in perspective his thought also generates. The question about the coherence of Polanyi's comprehensive philosophy raised at the beginning of this

introduction may seem called into question by this diversity. However, the diversity should not be surprising, for Polanyi sought to embrace in a personal way the vast grandeur of reality. All interpreters, dwelling in the uniqueness of their experiences, will find different facets of his broad spread thought most attractive. Arguably, the different background experiences interpreters bring to Polanyi's thought accounts for any apparent incoherence. Such has certainly been the case regarding the variety of ways Kant's, Hegel's, or Marx's thought has been interpreted. It will be interesting to see what you, the reader, will find most profound or provocative in these essays. In any case, you are invited to feast on the delicious nourishment provided by these interpretations of Polanyi's visionary philosophy.

### Bibliography

- Polanyi, Michael. "Polanyi, Michael (March 11, 1891--)." In *World Authors, 1950-1970*, edited by John Wakeman (New York: Wilson, 1975), 1151.
- Scott, William Tausig and Moleski, Martin X S.J. 2005. *Michael Polanyi: Scientist and Philosopher*. New York: Oxford University Press.
- Nye, Mary Jo. 2011. *Michael Polanyi and His Generation: Origins of the Social Construction of Science*. Chicago: University of Chicago Press, 2011.
- . "Michael Polanyi: Science as Personal Knowledge and Social Practice." *Angew Chem Int Ed Engl*. Vol. 56, No. 13 (March 20, 2017) :3426-3433. doi: 10.1002/anie.201610716. Epub 2017 Feb 10. PMID: 28185439.
- John Wakeman, ed. *World Authors, 1950-1970*. (New York: Wilson, 1975), 1152.
- Wigner, E. P. and Hodgkin R. A. "Michael Polanyi." *Biographical Memoires of Fellows of the Royal Society*, Vol. 23 (1977): 413-448.
- Polanyi, Michael. 1964. *Personal Knowledge: Towards a Post-Critical Philosophy*. New York: Harper Torchbooks.
- Yeager, D. M. "Confronting the Minotaur: Moral Inversion and Polanyi's Post-Critical Philosophy." *Tradition and Discovery*. Vol. 29, no. 1 [2002-2003]: 22-48.

## CHAPTER ONE

### BIRD-DOGGING MICHAEL POLANYI: AN INTERVIEW WITH PHIL MULLINS

#### WALTER GULICK AND PHIL MULLINS

**Gulick:** What circumstances unfolded in your personal life and your studies that led you to become interested in Polanyi and his thought?

**Mullins:** I was an undergraduate literature major at Vanderbilt in the late sixties. In my senior year, I was also a leader in a student social action project sponsored by the university chaplain's office. The chaplain convinced me to apply for a fellowship sponsored by the Rockefeller Brothers Foundation. Unexpectedly, I received this fellowship which paid for a "trial" year in seminary (1969-1970) and I spent that in Berkeley at Pacific School of Religion (PSR), one of the several linked educational institutions constituting the new administrative nightmare called the Graduate Theological Union (GTU) that also included faculty at the University of California, Berkeley (UCB).

I found my "trial" year and the GTU, UCB and Berkeley in this period enormously stimulating. My intellectual interests expanded significantly in this and the two succeeding years in seminary. I did an MA thesis, working with Charles McCoy and others, using Polanyi to discuss the problems of interpreting literature. I enrolled in a seminar on Polanyi's thought with McCoy in 1969 or 1970 and this led to my later MA thesis. McCoy encouraged many of his graduate students to study Polanyi and for several of them (e.g., Richard Gelwick, Doug Adams, Phil Rolnick, and Parker Palmer) this importantly contributed to later scholarly and other academic activities.

McCoy sent my M.A thesis to Stanley Fish, a UCB English professor and a 17<sup>th</sup> century English literature scholar who also was a prominent Reader Response theorist. In literary studies, this was the early days of the blossoming of literary critical theory when the grip of the New Criticism waned and literary scholars began to ask broader philosophical questions

about how to treat literary texts. Fish kindly took an interest in my effort to think about literary interpretation using Polanyi and he introduced me to a whole world of unfamiliar ideas (stylistics, structuralism, transformational grammar, reader response theory, etc.) just beginning to be explored in literary critical circles. After a brief stint studying in Germany, I returned to the GTU with its rich and diverse academic resources for PhD work in a very eclectic program that allowed me to continue to work on literary theory and Polanyi.

Fish left UCB but I continued to work with McCoy and found other interesting faculty at UCB and the GTU to work with on a staggeringly diverse and confusing array of growing interests (e.g., Heidegger, Merleau-Ponty, religious painting, Wallace Stevens, H. Richard Niebuhr, Whitehead, Plato, Luther, etc.) that I tried to align. I took classes from or worked with interestingly different Berkeley figures, including not only McCoy but Wayne Rood, Kenan Osborne, Jim Luguri, Murray Cohen, Bernard Loomer, Hubert Dreyfus, Charles Taylor (when a visiting UCB professor), and several others. I also had a dramatic and important encounter with blunt speaking Marjorie Grene who lived in Berkeley. Eventually, I worked out an acceptable dissertation topic with McCoy, treating aesthetic and hermeneutical implications of Polanyi's philosophical perspective. From McCoy (or perhaps Richard Gelwick) I acquired what I now know were some then unpublished parts of Polanyi's 1969 Meaning Lectures; I was using these to frame some of my dissertation's discussion but in 1975 the Polanyi and Prosch book *Meaning* (which incorporates a fuller set of Meaning materials) was published. I had to re-work some of my dissertation in light of *Meaning* but I did finish my doctoral work in 1976. Perhaps because my graduate study as well as my later life in academe has been so wildly eclectic, I simply fit reasonably well with Polanyi's eclecticism; in any event, I have continued to be vitally interested in Polanyi and the implications of his thought for fifty years.

**Gulick:** Early in your academic career you directed attention to ethics (especially social ethics), aesthetics, and Bible interpretation, but you eventually developed a broader and somewhat odd array of intellectual interests. The curious phrase, "emerging digital culture," often pops up in your talks and writing as a term that seems to bring together some of your diverse interests and this, in turn, you have linked to Polanyi's ideas. Reflect on your developing interests and on what has shaped these interests. How does your approach to Polanyi studies fit into things?

**Mullins:** While in graduate school and for a couple of years after, I worked at the Center for Ethics and Social Policy (CESP) which brought together GTU and UCB resources to work on several innovative policy ethics projects (e.g., corporate ethics, global resource ethics, and implementation of post-Watergate political reform in CA). My ongoing interest in ethics grew out of my study with McCoy and working at CESP with him and others. Later, I helped organize an ethics committee at a regional hospital in MO and was a committee member for several years; I regularly did ethics and policy programs in my local community and university. I also was invited to write the background paper that eventually led to a national NEH “food and people” ethics project.

In the fall of 1978, I took a job teaching in a small interdisciplinary humanities program at what later became a regional Missouri university, Missouri Western State University. Over 31 years as a teacher at Western, I taught or team-taught undergraduate classes on a bewildering array of topics. For more than a decade, for example, I coordinated an introductory history and philosophy of science class that I taught with a physicist, a chemist, a biologist and a mathematician; my primary role seemed to be to get these faculty to cooperate, although this was one of the few classes in which I ever managed to teach any of Polanyi’s writing. I also frequently planned and team taught cross disciplinary classes in the Honors program. Two immediate colleagues in my interdisciplinary humanities program I found especially insightful, one a Renaissance historian who worked on early print culture and the other a gifted philosopher with diverse interests who wrote about philosophical questions computer technology was bringing. I also, of course, was for many years in something like a running dialog with Gulick, Gelwick, and McCoy and sometimes others about Polanyi’s thought via letters, e-mail and phone calls.

For the first twenty years at Western, my small interdisciplinary humanities program was nested in a communication studies and theatre department which I eventually chaired for a few years. In a later academic re-alignment, I was moved for ten years to a history and geography department. I also spent many years deeply involved in typically contentious faculty senate and institutional committees and projects. Although I don’t particularly like controversy, I think I perhaps chaired the senate three years and spent several years leading committees to reform tenure and grievance policies. I believe in building institutions. Looking back, I also now see that my interaction with colleagues with different backgrounds—and perhaps especially with the variety of communication studies faculty—helped shape my own expanding scholarly interests in media and culture, and particularly philosophical and religious ideas and

practices in the presently emerging culture shaped significantly by digital tools. These interests I, of course, have linked to my continuing interest in Polanyi's sharp cultural criticism and "postcritical" thought.

Two projects that I was involved in the eighties and nineties, as well as my university work and work for the Polanyi Society, were important learning opportunities.

- (A) For many years, I participated in a Kansas City discussion group on the thought of Charles S. Peirce led by a polymath, Eliseo Fernandez, who was an academic librarian with a philosophical and scientific background. Fernandez had read Polanyi and helped me begin to understand Peirce's thought and make connections between the ideas of Peirce and Polanyi. Putting Peirce and Polanyi together is a topic that continues to interest me. I have tried to use some of Peirce's insights about semiotics to better understand Polanyi's participative realism and his consistent anti-Cartesianism.
- (B) Secondly, some odd papers and essays that I did on topics like "sacred text in an electronic context" caught the attention of a few biblical scholars and I was invited, in the nineties, to join an experimental American Bible Society scholarly team that worked for several years on a project attempting to "transmediate" a New Testament parable into a hypermedia format. With my interest in Peirce, Polanyi and philosophical hermeneutics, I was something like a utility infielder in this Bible and new media project, and I learned a great deal. Certainly, some of my scholarly interest has been an effort to sort out what Polanyi and Peirce might have had to say about the Bible and culture, and I extended my interest to investigate the broader matter of other sacred texts and their traditions and how sacred texts are likely to fare in emerging digital culture.
- (C) I was also involved in higher education in the period in which the tools for teaching and scholarship became digital tools (roughly 1980-2010). In the mid-eighties, I was given an early desktop PC (a Commodore 64!) by my university's administration and advised to learn how to use it since I was a department chair working with communication studies faculty. I also chaired an institutional "technology" committee for several years and this group sponsored many campus projects on new digital tools. Like others, I acquired some new hands-on skills over the years, but, as I have suggested above, I also became interested in the connection between "post critical" thought and orality, literacy and evolving digital literacy.

- (D) After several years in the eighties coordinating the Polanyi Society annual meetings, I became the TAD editor in 1991 in a period in which everything changed very quickly for small academic journals. I (with the help of others, especially Gulick and Lewis) was challenged to adapt *Tradition and Discovery* (TAD) to the emerging digital world which included such things as incorporating desktop publishing and digital text, setting up an electronic discussion group, and establishing the Polanyi Society website and using it to organize Society events. Perhaps most important for Polanyi studies has been the project of developing and expanding this website to include a large collection of digitized Polanyi resources, some unpublished (e.g., Polanyi's Gifford, McEnerney, Duke and Wesleyan Lectures, and the Gelwick microfilm collection), and establishing TAD as an indexed, regular journal (now digital-only) with an online archive.

**Gulick:** Much of your scholarly work on Polanyi digs into the historical context of Polanyi's life and ideas and particularly his connection with other intellectuals. At one time or another, you have written or spoken about Polanyi's work with Dorothy Emmet, J. H. Oldham, Marjorie Grene, Edward Shils, Harry Prosch, Karl Popper, Karl Mannheim, Karl Polanyi, Friedrich Hayek, T. S. Eliot and perhaps others. You have explored Polanyi's correspondence and archival texts to sort out interesting things bearing on the development of Polanyi's ideas in connection with other intellectuals. Please comment on this aspect of your scholarly work. How did you become so interested in history?

**Mullins:** My interests and much of my scholarly writing has indeed been a historically-oriented analysis of Polanyi and some of his primary intellectual companions. I understand my own life, as well as the life of Polanyi and other intellectuals, as rooted in a particular but changing social context in which there are other primary figures. Intellectuals try, of course, to make sense of things, of nature, society, and themselves, and this sense-making is significantly influenced by interaction with primary social companions so far as I can discern. So, as you note, I have written essays that examine Polanyi's interaction with, for example, Oldham, Shils and Grene and, more recently, Dorothy Emmet. I have also tried to articulate an historical account attentive to the growth of Polanyi's ideas and this overlaps with the treatment of the interaction between Polanyi and specific intellectual friends and opponents.

I see Polanyi's philosophical thought as becoming more robust and complicated over the course of his life and I have labored to understand and

to sketch out this developmental pattern. I have sometimes portrayed this trajectory in what are perhaps some odd ways. For example, I have tried to show that Polanyi's early social and political thought is rooted in Gestalt notions (i.e., primarily in ideas borrowed and transformed from Kohler) but his later and broader epistemological philosophy also takes and reframes Gestalt ideas in a different way. I have picked out a motif like the "growth of thought in society" and traced how this is a persistent theme in Polanyi but its contours are reshaped. My historically oriented perspective on Polanyi reflects the influence of Charles McCoy and H. Richard Niebuhr, but I also read Polanyi as articulating a postcritical philosophical perspective rooting changing ideas in persons and history.

I will digress briefly on a few historical details of my own life that may be of interest and which contributed to my interest in Polanyi's life:

- (A) In March 1972, with Charles McCoy and a group of graduate students, I visited Michael Polanyi in Oxford and participated in an interesting conversation with Polanyi, who remained sharp in the discussion. He kindly signed and dated a page in my copy of *The Tacit Dimension*, but he missed the date by 50 years!
- (B) In the eighties, my university gave me a number of small summer grants to go (for about 3 days in a row) to the University of Chicago Regenstein Library to read materials in the Michael Polanyi Papers; I purchased a few microfilms (then available for \$25/roll) and began to study things like Polanyi's many letters to Oldham and Grene. I thus had an early opportunity to discover the complex history embedded in the rich Polanyi archival material. Twenty years later, after the Michael Polanyi Liberal Philosophical Association in Budapest digitized 44 boxes of the Polanyi archival collection, I got a copy of this collection and learned to use it; I have continued to study Polanyi archival materials and these materials have also led me to visit other interesting Polanyi-related archival collections (e.g., Oldham, Shils, and the Manchester Chemistry Department).
- (C) I came to know Bill and Ann Scott through Charles McCoy before Bill began the Polanyi biography in 1977. In 1991, the Scotts formed a committee (McCoy, Gelwick, Gulick and Mullins) to advise Bill about how to finish up the already extended biography project. I have in my files drafts of some of the very earliest versions of Bill Scott's chapters. Soon enough, it became clear that Bill could not finish up the Polanyi biography since he was dying of Parkinson's Disease and his work likely had been, for many years, impeded by early symptoms. Marty Moleski, S.J. volunteered to finish the biography. Marty and I went to California in the

summers of 1996 and 1997 and worked out an agreement with the Scotts that led to Marty's several years of work to put the Scott manuscript in good order and find a publisher. I did not provide Marty much good advice about reordering the 293,000-word Scott manuscript/behemoth, as did several other readers (e.g., Robin Hodgkins, Mary Jo Nye and the rest of the committee), but I did study some of the manuscript and later the volume published in 2005 and I have promoted and helped organize several TAD issues on the biography. Certainly, my involvement in the biography project stimulated and enriched my interest in Polanyi's life and his work with other intellectuals.

(D) Finally, let me also note that my historically oriented inquiry into Polanyi's thought also grew out of a few peculiar opportunities that came my way.

(1) Even before I became the TAD editor in 1991, I realized there is an array of quite different things that scholars take from Polanyi and some views are certainly at odds. Perhaps this is the case with all thinkers who are polymaths. I moderated one of those early Polanyi Society annual meeting sessions that pitted Prosch against Gelwick and I later wrote the introduction for the essays about the so-called *Meaning* controversy in *Zygon*. I have several times attempted to sort out the issues in the Prosch-Gelwick debate about the ontological status of "transnatural artifacts." The large questions about how to interpret the late Polanyi writing, of course, was at the center of my earliest work on Polanyi in my dissertation on the *Meaning* material. I also spent an entire summer writing a *Zygon* review of Prosch's book on Polanyi after it was published. Later I followed up on this work in an essay (using much archival material) with Moleski on Prosch and Polanyi.

As the TAD editor, I was always in the middle of discussions about debated topics like "Polanyi's realism" and I have argued that Polanyi consistently emphasizes the personal participation of the knower in the known; first, he emphasizes "belief" but then later works out the structure of tacit knowing which is a deeper step. I have been involved in several projects to publish online or in TAD unpublished but interesting and little-known Polanyi materials. As the TAD editor, I wrote reviews of books and essays that attempted to sort out Polanyi's ideas about many matters. At Wally Mead's request, for example, I wrote a very long essay that summarized the perspectives found in a number of books that sometimes serve as introductions to Polanyi. I have,

in sum, written quite a number of reviews, review articles, interviews, and essays for TAD and other journals that attempt to clarify the lay of the land in Polanyi studies and to generate interest in Polanyi and Polanyi scholarship. More recently, I have been involved in setting up a number of Polanyi-related online Zoom discussions. I have also had an opportunity, because of this work, to articulate my own account of Polanyi. Reviewing and editing and other work with TAD and the Society was an opportunity for me to get clearer about the various readings of Polanyi. And it was a path that led me deeper into more historically-oriented study of Polanyi as a way to sort out my own account of Polanyi's thought.

- (2) Somehow years ago, Australian scholar Struan Jacobs and I recognized we were both interested in Polanyi's work with some of his intellectual contemporaries. We passed questions and comments back and forth across continents via e-mail and eventually hammered out a number of jointly authored essays on topics treating Polanyi, Popper, Mannheim, Eliot and Hayek and topics like Polanyi's use of cultural anthropology. Also, Gus Breytspraak and I worked together on Polanyi and Poteat, and later on Grene and Polanyi's late participation in the so-called "Study Groups" and the bearing of this on Polanyi's late thought. We had the good luck to interview George Gale who was Grene's only doctoral student and was Grene's administrator who coordinated the many threads of the later Study Group programs. I have also worked with Eduardo Beira on his many Polanyi-related projects. I have written, often with other people (especially Gulick and Moleski), a number of historically-oriented notes of appreciation when Polanyi scholars like Gelwick died. I like to collaborate with others interested in Polanyi. And collaboration has not only been for scholarly writing projects. I also had three short-term teaching gigs in Budapest. I had an opportunity to work with some gifted students and faculty who saw Michael Polanyi in his Hungarian context and who were working on interesting Polanyi-related projects that I had never even dreamed of.
- (3) When Marjorie Grene learned the Library of Living Philosophers would do a volume honoring her, she realized (about 2000) that she must come up with someone who would comment on her years of work with Polanyi. She nominated me because, as she candidly told me, she considered my TAD review essay on her

1995 book generally fair minded and perhaps somewhat insightful. This review, of course, tried to show how much Grene's own philosophical work was akin to Polanyi, even if she did not often say so, and I recycled much of my TAD review in my essay on Grene and Polanyi in the volume honoring her. In her charmingly blunt way, she did make it clear that she nevertheless found it reprehensible that I still value her 1966 book dedicated to Polanyi, *The Knower and the Known!* I must simply admit that my scholarly work has shown a certain obsession with Grene, who I think rarely receives what she is due.

**Gulick:** You do work to account historically for Polanyi's growing body of philosophical ideas but you also, to put it straightforwardly, strongly emphasize certain themes in Polanyi. One persistently important aspect of your interpretation of Polanyi's thought includes a participatory notion of involvement in the world that does not distinguish strongly between epistemology and ontology. You dub Polanyi a "participatory realist." You put an emphasis on the importance for Polanyi of his ideas about comprehensive entities and marginal control. You suggest a rather Peircean distinction between "reality" and "existence," and make much of some of Polanyi's provocative comments about "reality." You stress the social shaping of thought, Polanyi's orientation to problem solving and discovery, and his insistence on cultivating thought in skillful communities of interpretation, plus Polanyi's corresponding emphasis on public rather than private liberty. You pitch Polanyi's liberalism as a median position between what he calls "excessive liberalism" and too much confidence in planning and centralization, both utopian social and political philosophies. Comment on any of these or other aspects of Polanyian philosophy that you believe are overlooked or misinterpreted and which are simply crucial to the most powerful and coherent version of his thought.

**Mullins:** Let me simply plead guilty as charged but also acknowledge Charles McCoy's continuing influence on me in exploring these themes. But you succinctly and clearly identify most of the Polanyian themes that I have focused upon. I believe "participation" is a central idea in Polanyi and I have tried to unpack Polanyi's ideas about the "comprehensive entity" which is a way Polanyi's unpacks the nature of participation. I see these notions as pillars in his anti-Cartesian effort to have reflection not overvalue doubt, undervalue belief, and avoid reifying an ontological starting point that separates living things from the dynamic niche in which they are always already embedded.

**Gulick:** How have you found it necessary to supplement or adjust Polanyi's ideas? What ought Polanyi's legacy to be?

**Mullins:** I have had my hands full trying to understand Polanyi and particularly to see the developmental pattern in Polanyi's thought. I want to see together Polanyi's critical and his constructive ideas and to grasp how this is bound up in a *lebensphilosophie*. Certainly, I do have a sense that Polanyi got many things right—he offers a sweeping challenge to much modern and post-modern thought. He saw the problems created by excessive skepticism, objectivism and scientism and seems generally to have been hopeful that these problems could be addressed. I don't think he foresaw the ways in which the emergence of digital culture was going to complicate matters concerned with constructing sensible cultural and political environments in which human beings can thrive. And he did not anticipate large problems like climate change. I am not sure what Polanyi's legacy in the broader stream of the history of ideas will be. I would like to see broader interest in Polanyi as a thinker who might stimulate some contemporary innovative ideas. But I am not sure that I am the kind of creative thinker who can significantly supplement or recalibrate Polanyi's ideas. His ideas are not always well worked out and they seem worth struggling with to clarify and that is what I have worked on.

I have, nevertheless, also suggested that Polanyi's ideas have some rich implications as a resource in two possibly odd but important areas, biosemiotics and philosophy of technology. Most North American scholars don't take much interest in the new cross-disciplinary area called "biosemiotics;" many European scholars interested in biosemiotics see figures like Peirce and Uexküll as resources but have not discovered Polanyi. I continue to be interested in Polanyi's reflections on biology. I have argued that the theory of tacit knowing is in fact an account of living agency and biosemiotics seems the area in which this might be most appreciated. I also believe Polanyi's ideas can be developed to articulate what I call a "postcritical philosophy of technology." Recently, I published an essay (which I hope was suggestive) on Polanyi and AI; I am continuing to work on some questions about Polanyi's challenge to the Turing test and his insistence on distinguishing mind and machine.

**Gulick:** What Polanyian projects are you working on now? Are there other aspects or implications of Polanyi's life and thought you would like to examine further in the future?

**Mullins:** For the last couple of years, I have been working on several new historical projects. I plan to continue working on these projects, but I hope they will interest others who will also join me. I have been examining the ways Polanyi and his Manchester philosopher colleague Dorothy Emmet influenced each other in the forties. Polanyi seems particularly to have drawn on some of Emmet's ideas about metaphysical thought in the period of *Science, Faith, and Society*. I have also recently been scrutinizing Polanyi's many published short book reviews and book notes, looking at how they shed light on the development of Polanyi's ideas. I have been investigating Polanyi's socio-economic and political philosophy in the thirties, forties and fifties, and I am digging more deeply into the connections and disconnections between Michael and Karl Polanyi. Michael Polanyi's political and economic thought should not be construed—as it sometimes is—as merely the mouthpiece for contemporary conservative and neoliberal views. Polanyi is sharply critical of utopian schemes on the left and the right and a close examination of the variety of Polanyi texts makes this clear.

Finally, let me note that I am now again digging into the Meaning materials which I first tried to do about fifty years ago. The published Polanyi biography as well as the much longer Bill Scott first draft does not say a great deal about these late materials and more needs to be said. If you examine the archival materials in the Michael Polanyi Papers at the University of Chicago. This material is complicated and confusing. There were lectures in Chicago and Austin on meaning in 1968 as well as the following three years. Further, the lectures and class-related presentations were not the same from 1968-1972, although there is overlap in content. In fact, the first Series 2 Gifford Lecture way back in 1952 was titled "Meaning" but there is another lecture titled "Meaning" that seems to have been prepared and delivered in 1970 and 1971. Also in the summer of 1968, Polanyi gave a talk "What is a Painting?" at one of the Study Group meetings and this was later published independently but is clearly related to the Chicago and Austin Meaning materials. In a word, as I noted, this Meaning material is complicated. Its relation to the final book *Meaning* needs to be sorted out more carefully. *Meaning* is primarily Harry Prosch's synthesis pulled together as he devotedly worked with the increasingly fragile Polanyi in the early seventies. Perhaps Michael Polanyi's last coherent thoughts about meaning cannot be ascertained but this is a project that interests me.