

Marjorie Grene and *Personal Knowledge*

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This essay pulls together from myriad sources the record of Marjorie Grene's early collaboration with Michael Polanyi as well as her interesting, changing commentary on Polanyi's philosophical perspective and particularly that articulated in Personal Knowledge. It provides an account of the conflicting perspectives of Grene and Harry Prosch, who collaborated in publishing Polanyi's last work, Meaning.

These reflections are an historically-oriented review of Marjorie Grene's almost sixty year involvement with what I call the *Personal Knowledge* project.¹ In what follows, I pull together many of the important things Marjorie Grene said, during her long life as a philosopher, about *Personal Knowledge* (hereafter PK) after its June 20, 1958 publication. I cannot sensibly do that without also noting beforehand the important role that Grene played in working with Polanyi in the period leading up to the publication of PK. I also touch upon work Grene has done herself after the publication of PK, suggesting some of PK's impact upon Grene. The final section of the essay attempts to further illumine Grene's views by examining Harry Prosch's criticism of Grene's assessment of Polanyi's thought. I emphasize that this essay primarily attempts to interpret²—rather than criticize—the views and role of Marjorie Grene as Polanyi's able associate, advocate and critic, although at the end of the second section, I do briefly counter some elements of Grene's late reading of Polanyi.

I. The Collaboration on the Gifford Lecturers and *Personal Knowledge*

Grene met Polanyi in the spring term of 1950 when he came to the University of Chicago as Alexander White Visiting Professor to give several lectures, most of which were likely drawn from the material that in the next year was published as *The Logic of Liberty*.³ Grene heard at least one Polanyi lecture and apparently soon afterward became acquainted with Polanyi. What she heard in Polanyi's lecture and soon afterward read in the copy of *Science, Faith and Society* that she rounded up, she must have regarded as promising philosophical seeds that might grow (PMG, 12). She says of her earliest exposure to Polanyi that she "found his argument against positivism thoroughly convincing; in fact I thought he had found the very refutation of that movement that I had been unable to articulate twelve years earlier in Carnap's seminar."⁴ She also notes that she was (or quickly became) "deeply committed to what he [Polanyi] came to call [in his Gifford Lectures and later in PK] his 'fiduciary program': a kind of lay Augustinianism, in which we recognize that our reasoning always rests on the attempt to clarify, and to improve, something we already believe, but believe, of course, in such a way that we recognize that we might be mistaken" (PMG, 13-14). In any event, shortly after his Chicago lectures, Grene, who no longer had an academic appointment at Chicago, says she was asked by Polanyi to help him prepare his Gifford Lectures on which he already was hard at work. She reports that she was "delighted" to join in Polanyi's struggle to do what he called "'articulate the inarticulate'" and that one of her first tasks in working with Polanyi was to find for Polanyi in the literature of biology "heresies in evolutionary theory, specifically critics of the evolutionary synthesis" (PT, 91).

Grene's role in connection with the Gifford Lectures remains somewhat unclear. I think she may have helped a bit on the First Series delivered in May and early June of 1951, but it is almost certain that she helped on the Second Series in November of 1952 (PMG, 34). But the extent and full nature of Grene's work on the Gifford Lectures is a matter about which I have found few records. This is the somewhat unsettled period in Polanyi's life when he tried to leave Manchester to take an appointment at the University of Chicago but was denied a visa and then reassumed his position in Manchester.⁵ Grene was farming in Illinois and had small children, although she apparently did come to Manchester in the spring of 1952.⁶

Later in 1952, Grene moved to Ireland to farm and began a six year period in which she worked with Polanyi to turn his Gifford Lectures into PK.⁷ Although Polanyi somewhat naively hoped quickly to turn out PK,⁸ it was a long process that Grene was very directly and importantly involved in. There is no extant copy of Polanyi's original Gifford Lectures but Grene donated to Duke in 1969 two loose-leaf binders which Polanyi had given to her in May, 1957 in appreciation for her work on PK. This material is apparently a somewhat revised version of the Gifford Lectures; it differs substantially from the published *Personal Knowledge*. Some of the material may come from as late as 1954.⁹ After she moved to Ireland, Grene apparently came to Manchester at times to work with Polanyi and may have also worked in other settings and likely regularly corresponded with him, although very little of that correspondence is still around. She gathered material for chapters, discussed it with Polanyi, and reviewed and commented on drafts as they were written. Elizabeth Sewall, who was in Manchester from 1955 to 1957 and was also involved in work on PK and knew Grene, noted what she called the "close and constant professional connection" between Grene and Polanyi. Sewall says that she watched Grene work with Polanyi "with admiration and some astonishment" and recognized that Grene "was integral to Michael's professional life." She comments that

Marjorie's whole work time was devoted to the *Personal Knowledge* enterprise. A professional philosopher and a born teacher, explicator, redacteur . . . one had the sense of her constant presence in Michael's day-to-day endeavours, checking and suggesting references, discussing the work with him, arguing, extricating as far as possible the Germanic touches in his style.¹⁰

I have found few comments from Grene herself about her work with Polanyi in this period before the publication of PK.¹¹ In her PMG autobiographical remarks, Grene says she "acted partly as Polanyi's research assistant and chiefly, I think, as editor and as advisor in the history of philosophy" (PMG, 13). In another place, she admits being somewhat puzzled in 1953 or 1954 that Polanyi took a whole year to write the Articulation chapter of PK. She says she only later came to appreciate that this chapter treating the "understanding of understanding, of rationality itself" was one that demanded "an understanding of the way in which the subsidiary supports the focal, in particular of the way in which the ineffable supports the activities of voice and pen."¹² Grene acknowledges that she did not always see clearly where Polanyi was headed, but it seems likely that Polanyi himself did not always himself see how things were to be worked out. That is, there were topics like "Two Kinds of Awareness" in the Gifford Lectures that are broached but not developed until working out chapters like "Articulation."¹³ Grene's early interest in Polanyi's work was on the justification of dubitable belief, but she has acknowledged that she did not foresee the importance of Polanyi's early interest in unspecifiability as the key to the justification of dubitable belief (PT, 168).

If later correspondence between Grene and Polanyi is in any way representative, it seems very likely that Grene's working relationship with Polanyi was one in which she was a strong-minded and often blunt

critic who sometimes convinced Polanyi that she knew best. Sewell's reflections don't capture the fiery Grene. Her later letters to Polanyi about his writing often straightforwardly say to Polanyi what she thinks he should and should not claim; frequently, she insisted that he rework his prose.¹⁴ Grene was one of the small group of people Polanyi identified as having read the whole manuscript of PK before it was published after it was completed in March 1957.¹⁵ A May 12, 1958 Grene letter to Oldham indicates she, like Oldham,¹⁶ particularly wanted further work on the draft of the last chapter. She expressed appreciation for the criticisms of Oldham which apparently were the tipping point leading Polanyi extensively to rework the final chapter:

. . . having just finished re-reading Personal Knowledge , I really must tell you how very grateful I feel to you for your criticism of the MS a year ago. I was in despair over the then extant version of the final chapter, which at that stage was by no means up to the standard of the rest of the book, but until you read the whole thing I had been quite unable to persuade Professor Polanyi that it (the concluding chapter, I mean) did need radical rewriting. But when you wrote him (though more courteously) almost what I had been saying myself, he did of course really do it over—and as you will have seen achieved absolutely the right finale, and in fact some of the most important and original conceptions in the whole work. Western philosophy owes you a great debt!¹⁷

Although the records of Grene's work with Polanyi on *Personal Knowledge* are sketchy, what is clear is that Polanyi was immensely grateful to Marjorie Grene and intended in the Acknowledgments to *Personal Knowledge* to recognize that "she has a share in anything that I may have achieved here":

This work owes much to Marjorie Grene. The moment we first talked about it in Chicago in 1950 she seemed to have guessed my whole purpose, and ever since she has never ceased to help its pursuit. Setting aside her own work as a philosopher, she has devoted herself for years to the present enquiry. Our discussions have catalysed its progress at every stage and there is hardly a page that has not benefited from her criticism (PK, xv).

I don't think Grene, or Polanyi for that matter, in 1950 grasped the whole *Personal Knowledge* project. I do, however, suspect that Grene's role in putting together *Personal Knowledge* may have been more important than it will ever be possible definitively to establish. What is perhaps more important is that this collaboration later also yielded good fruit. One only has to read the final chapter of Grene and Depew's 2004 *The Philosophy of Biology: An Episodic History* to see this. Here these authors argue that philosophy of science, long caught between the residue of logical positivist views and social constructionist views, should be reshaped by the best of the recent tradition in philosophy of biology. Although there is but one reference here to Polanyi, the tracks of the *Personal Knowledge* project and Grene's work with Polanyi thereafter can be clearly seen.¹⁸ In her 2002 intellectual autobiography (as well as in PT) Grene explains that her post-PK philosophical career developed in two directions; she pursued interests in history of philosophy and philosophy of biology, and this 2004 book, of course, brings the two interests together.¹⁹ Clearly, Grene eventually came to be regarded as one of the seminal figures from the philosophy camp (as opposed to the biology camp) in the development of philosophy of biology after 1960.

II. Marjorie Grene and the Interpretation of PK—Early and Late

A. Early Comments

Soon after, if not before, the June 20, 1958 publication of PK, Grene seems to have become actively interested in seeing that PK was understood by philosophers and other readers. Grene apparently was interested, in the period immediately before publication, in the project of getting PK reviewed. Her correspondence with J. H. Oldham in May and early June of 1958 touches some matters other than her thanks to Oldham for his criticism of the first draft of the last chapter of PK (treated above).²⁰ It seems likely that the available record of the correspondence is incomplete. However, Oldham's June 4, 1958 letter to Grene (J. H. Oldham Archives, 10.4) outlines at length his thinking about what he dubs the "delicate matter" concerning "the question of reviewing." He proposes to Grene that "one or two people take a short time to think over one by one the journals and papers that are important." He notes that "the aim is not propaganda or advertisement or anything of that kind, but merely to ensure that a book of importance is not overlooked through accident or pressure of other things." Oldham views his (and presumably Grene's activity) as not "wire pulling" but a matter of "the editor's elbow should be nudged before he has decided what he will do about this review copy."²¹

Michael Oakeshott wrote an early review of PK for *Encounter* that was published in September of 1958.²² On the whole, it is a positive review,²³ but it did not please Grene. For purposes of simplification, I parse Polanyi's philosophical perspective in PK in terms of three elements: critical philosophizing that attacks some important elements of the modern tradition of philosophy; constructive philosophizing that articulates an alternative to some but not all elements of philosophy since the Enlightenment; and the articulation of a *Lebensphilosophie*. I think these three elements are woven inextricably together in PK—particularly the last two.²⁴ Oakeshott clearly sees the critical philosophizing elements in PK, but he is rather unclear about the constructive philosophizing and he does not see how in a post-critical philosophy the *Lebensphilosophie* is fundamental (although he does briefly praise Part IV of PK). Oakeshott does not see the order of PK; he describes the book as "disordered, repetitive, digressive, and often obscure; as a work of art it leaves much to be desired."²⁵ Although Oakeshott notices Polanyi's attention to discovery and his emphasis on skill and personal judgment, he fears that Polanyi's constructive philosophizing sets forth an understanding of knowledge as subjective and does not really provide a theory of scientific knowledge. He hints that Polanyi may be philosophically innocent, noting that he hears faint "Hegelian echoes" or perhaps a Platonic resolution to the problem of rationality, and certainly Polanyi does not give skepticism its due.²⁶

Grene responded to Oakeshott's review and this was published as a long letter titled "Personal Knowledge" in the October, 1958 issue of *Encounter*.²⁷ She concedes that the argument of PK is "difficult" but she affirms that it is "luminous" and "convincing" (67). She points out that PK is the only modern work in philosophy that focuses on a theory of knowledge which "can answer and therefore fittingly transcend the epistemological problems with which critical minds, from Descartes onward, have been preoccupied" (67). She counters Oakeshott's claim that PK recognizes the personal coefficient in knowledge but does not really offer a theory of scientific knowledge by laying out the argument of PK in terms of its four sections. Parts One and Two are "primarily descriptive" (67). Part One "establishes the basic analogy between scientific knowing and skilful doing" and Part Two "elaborates and extends it to a panorama of the inarticulate aspect of intellectual life" (67). Part Three addresses the problem of how personal knowledge can be justified. This is a section in

which the argument is “turned back upon itself” (67). It points to “the paradox of self-set standards—which is the argument’s recurrent theme” (67) and this theme is “restated in a reflective assessment of the calling of man” (67):

It is through the conception of the personal, involving both the givenness and the fallibility of situation and the dignity of universal intent, that the commitment of the philosopher and the scientist is justified. . . . The scientist is a believing, seeking, fallible person and this truth is essential to the nature of his scientific knowledge: that is the fact stated in Part One and exhibited on a broader canvas in Part Two. The philosopher, as such a person likewise, now turns in explicit reflection to recognise this paradox; and that very recognition, made explicit, resolves the paradox, or at any rate confirms it and makes it bearable (67).

Greene downplays any Hegelian echoes in PK by suggesting “if *Personal Knowledge* is Hegelian, it is a Hegelianism purged by the Kierkegaardian critique . . . for the existential root of philosophical reflection is an absolute, the only intellectual absolute” (68). She says that she would prefer to see the argument of PK in a Kantian context:

. . . if we take Kant’s argument seriously, unhampered by the limits of his formalism, it leads straight to the concept of personal knowledge—for it expresses the logical dependence of order on the person who both gives the order and submits to it. And when the transcendental unity is filled in to become a living person, the transcendental object is filled in also to be more than an X behind a phenomenal world. We cannot, indeed seize upon reality with our hands, but it is reality, not its shadow, which in hope and humility, we understand, misunderstand, and seek to understand anew (68).²⁸

Finally, Greene notes that while Polanyi in Part Three “has been reflecting on the scientist’s calling, which is in its essential structure his own calling too,” in Part Four he

puts this act of reflection, this person striving to make sense of things, into the context of nature: into the stratified world of ever richer living things. . . . The epistemologist knowing his own knowing, and the biologist knowing the ongoings of other living things, here coalesce (67).²⁹

B. Late Comments

Greene occasionally commented on elements of PK and, more generally, on Polanyi’s philosophical perspective in several of her publications over the last fifty years of her life. I have not carefully studied all of Greene’s many later publications; I am not confident that I have always understood everything in publications that I have studied. With this qualification acknowledged, I, nevertheless, attempt in this section to present what seems to me the pattern in Greene’s later discussions. Greene was a fertile mind whose achievements over a long life are nearly as remarkable as those of Polanyi. As I have noted above, it is a fair summary of Greene’s philosophical career to say that after working on PK, she wrote many things usually classified as philosophy of biology, but she also wrote about figures in the history of Western philosophy. She commented in 2002 that her post-Polanyi interests are “so to speak, decidedly extra-Polanyian” (PMG, 61) but I think Greene’s approach within these areas of endeavor is deeply Polanyian.

About her early work in the history of philosophy with Polanyi, she remarks, “I did indeed try to assist him with historical information when it was needed; but he thought of history from a scientist’s point of view—as a source from which to cull tidbits, but no more” (PMG, 61). As her books and chapters treating the history of philosophy show, clearly Grene believed the “tidbit approach” is inadequate. Nevertheless, at least some of Grene’s work in the history of philosophy—that is, elements of her trenchant analysis of the problems of significant thinkers—does reflect tacit assumptions that she shares with Polanyi. Also I think that it is clear that the inception of Grene’s work in philosophy of biology goes back to work with Polanyi on PK, and I believe some of her more recent work in this area, despite her later sharply critical words about Part IV of PK, still shares ground with Polanyi. Grene at least indirectly acknowledged the importance of the *Personal Knowledge* project on her later work when she commented in 2002 that it is “probably correct . . . that my years of working with Polanyi have continued to influence my thought, and writing, more than I have recently recognized” (PMG, 61).

A little over a year after Polanyi’s death, Grene published “Tacit Knowing: Grounds for A Revolution in Philosophy” (“TK”), which I regard as the finest short analysis of Polanyi’s philosophical achievement. It is a developmental analysis of Polanyi’s thought and it draws, at least indirectly, on Grene’s own developing post-PK work in the history of philosophy. This is also an essay that in some ways interprets Polanyi to contemporary philosophers with a more Anglo-American outlook. Grene both analyzes PK and situates it in a broader context of Polanyi’s emerging thought as well as some standard assumptions of contemporary philosophers. She says Polanyi’s first philosophizing was motivated by the “problem of the administration of science” (or the problem of “the structure of a ‘society of explorers’”) which led him to “the question of the justification of dubitable beliefs”³⁰ (“TK,”165) by 1950 when he is working on his Gifford Lectures (i.e., when Grene meets him). Polanyi addresses this question by working out what he calls the “fiduciary program,” which is the key to Polanyi’s early account of personal knowledge.³¹ The “fiduciary program” is the odd name for Polanyi’s constructive argument which ultimately articulates an “epistemology of science” (“TK,”166) in *Personal Knowledge*. The argument, Grene emphasizes, is basically analogical and likely to alienate many contemporary philosophers: Polanyi’s method “consisted essentially in broadening and stabilizing the interpretive circle through a series of analogies, by showing that human activities of many kinds are structures in the same hopeful yet hazardous fashion as those of science”(“TK,”167). Polanyi links his account of commitment in science with the broader range of responsible committed human endeavor:

. . . the account of commitment, expanded to a fiduciary programme, showed us science as one instance of the way in which responsible beings do their best to make sense of what is given them and yet what they, by their active powers, have also partly already enacted (“TK,”167).

The line between perception and scientific discovery is unbroken in Polanyi’s narrative. He carefully works out his themes concerned with self-set standards and universal intent.³² He is a realist³³ who pays attention to scientific practice and the history of science. Grene thus clearly recognizes that the “Two Kinds of Awareness” lecture in the Gifford Lectures is the seed that grows, by the time of PK, into Polanyi’s richer discussions of focal and subsidiary awareness, the operation of skills, problem solving and scientific discovery. But this germinating seed then becomes the mature Polanyi account we later know as the theory of tacit knowing. That is, “two kinds of awareness” is first the key to “the justification of dubitable beliefs” (“TK,”165) but then blossoms into the full blown theory of tacit knowing that gets worked out in the decade after PK.³⁴ This, of course, was a decade in which Grene was very involved in Polanyi-related projects and she ultimately edits

Knowing and Being (published in 1969), a collection designed primarily to show the interesting ways Polanyi's philosophical ideas were developing in the decade after *Personal Knowledge*, as her remarks on the third group of essays in the collection show:³⁵

Personal Knowledge was directed not so much to tacit knowing as to the problem of intellectual commitment, the question how I can justify the holding of dubitable beliefs. The theory of tacit knowing is indeed the foundation of the doctrine of commitment, but while the latter probes deeper into the foundation of human personality, the former is more far-reaching. It reveals a pervasive substructure of all intelligent behavior (KB, xiv).³⁶

C. Grene on Part IV of PK and Other Comments

Grene has been quite clear that the theory of tacit knowing is “revolutionary,” as the subtitle of her 1977 article on Polanyi's thought (i.e., “Tacit Knowing: Grounds for a Revolution in Philosophy”) indicates. What Polanyi offered is “a major break with the tradition and a possible foundation for a new turn in the theory of knowledge and a fortiori in philosophy as such” (“TK,” 164).³⁷ In “TK,” Grene, of course, not only outlines Polanyi's philosophical development and its importance, but she also sharply criticizes elements of his thought. She makes clear that she thinks some of Polanyi's late articles, particularly those attacking behaviorism, suggest that he has forgotten his own best insights about the “from-to” structure of knowing. He slips into a body-mind dualism that in fact his earlier work in PK and TD shows is a philosophical *cul-de-sac* to be avoided. He seems, Grene says, sometimes not to recognize “the incarnate nature of mind” which is “part and parcel of the theory of tacit knowing” (“TK,” 171).³⁸ Grene also suggests that some of Polanyi's very late writing is “tragically misguided” (“TK,” 168) since it manages to separate art and science, reversing the ways in which Polanyi had put art and science together in PK and *The Study of Man*. Polanyi's effort to extend his analysis of meaning by analyzing art, myth, and religion using an expanded version of the theory of tacit knowing is too grand and relies on sources that she thinks are not truly consistent with Polanyi's own revolution in philosophy.³⁹

A late criticism more directly aimed at PK is in Grene's 1991 Kent State address where she carefully goes through PK to show that “the contrast between the personal and the subjective forms is one of several basic theses carefully woven into the texture of Polanyi's argument in *Personal Knowledge*. . .”⁴⁰ Grene has long been vigilant to point out that philosophers who think Polanyi is a subjectivist simply have it wrong. She identifies this as one of two common misreadings in her 1977 article on Polanyi (“TK,” 165). Thus her 1991 Kent State address in which she carefully went through PK to contrast the personal and the subjective was in some ways nothing new. In her address, Grene shows that PK both sharply separates the personal and “subjectivity,” understood in one sense, but also links the personal, objectivity, and “subjectivity,” understood in another sense: “The subjective as just my passive experience, is other than the personal, but the personal contains an aspect of subjectivity, of mineness, in fusion with objectivity, the thrust toward something other than myself” (“PS,” 13). However, what Grene finds in 1991 in a footnote in Part IV of PK (PK, 374) suggests to her that Polanyi has not been consistent and may have introduced another notion of subjectivity (“commitments made to a mistaken system” [“PS,” 14]). In 1995 in PT, she dubs this a “treacherous footnote” (PT, 171). She thinks that any new notion of subjectivity which the footnote implies means Polanyi really may not have grasped the full implications of the “fiduciary program” that he sets forth in PK.⁴¹

Grene's 1991 question about Polanyi's account of subjectivity in PK is really part of a larger general dissatisfaction, made clear in several publications since 1977, with the fourth section of PK, and particularly the last chapter of the book.⁴² I have noted above that Grene's correspondence with Oldham indicates that she, like Oldham, was unhappy with the first draft of the last chapter of PK even before it was published. But much of what she says early in the response to Oakeshott (discussed above) and in KK imply support for Polanyi's views. But by her 1977 "TK," she notes Polanyi's

notion of a 'stratified universe' was always less than convincing; indeed, the final chapter of *Personal Knowledge* has only been saved from total disaster by the criticisms of his friend J. H. Oldham. And as I have learned a little more about evolutionary theory, both its subtleties and its limitations, I have grown more sceptical about cosmologies of emergence in any form ("TK," 168).

In her 2002 intellectual autobiography, she acknowledges that when she re-read PK to prepare her 1991 Kent State address, she found "Polanyi's argument (in Part IV of *Personal Knowledge*) even more shocking than I had originally thought it." (PMG, 61). She says looking more closely at the literature of evolutionary biology—whose important developing course she has carefully followed for more than forty years—enhanced her discontent with Part IV of PK. She proclaims in her intellectual autobiography that Polanyi's "understanding of Darwinian theory was minimal, or worse, and I'm afraid mine at the time was not much better" (PMG, 16).

Although she still appreciates what she in 2002 calls Polanyi's/PK's "lay Augustinianism,"⁴³ Grene also became increasingly unhappy with the theistic hints and Christian overtones in PK and other Polanyi writings; as I have noted, she complained about such religious language in her Kent State address. She recognized these elements as sure to prevent philosophers of science from seriously reading Polanyi and recognizing his philosophical importance ("PS," 14). Grene discovers Merleau-Ponty shortly after the publication of *PK*⁴⁴ and somewhat later the writings of the Gibsons which develop an "ecological account" of perception and animal behavior.⁴⁵ She tends to fit these thinkers seamlessly with Polanyi in her later writing,⁴⁶ but she certainly recognizes that Merleau-Ponty and the Gibsons are likely not to be rejected out of hand by many professional philosophers quite so quickly as Polanyi. Grene also, even while Polanyi was alive, worked hard to bring into discussions of philosophy of science (and particularly philosophy of biology) connections with philosophical European scientists influenced by what once was called modern continental philosophy.⁴⁷ Clearly she tried to make Polanyi aware of this literature and of the importance of claims about "being-in-the-world" in figures like Merleau-Ponty.⁴⁸ She was very insightful about the links between this literature and Polanyi's own developing theory of tacit knowing.⁴⁹ There are, of course, some general references in Polanyi's writing after 1958 to some of this literature, but Grene is likely correct that Polanyi did not explore connections very much and likely did not want to explore them because of his inability to think historically about himself as a philosophical thinker.⁵⁰

Perhaps more important than Grene's complaints about the alienating (to philosophers of science) religious rhetoric in PK (and other Polanyi writing) are her substantial criticisms of philosophical ideas important in Part IV of PK. These criticisms unfortunately are often rather cryptic and are not, at least to this author, always clear. Although some of these I have sketched above, I want to try to develop them further. In her 1991 Kent State address, Grene claimed that she by now suspected that Polanyi slipped into "ontological dogmatism" and she found "the hopelessly anthropocentric evolutionism of the final chapter, as well as its closing

Christian apologetic, must be discouraging . . . to supporters of the model of commitment for epistemology and the philosophy of science”(“PS,” 15). Grene does allow that “Polanyi’s late work on tacit knowledge, being cosmologically less ambitious, may help to correct this imbalance” (“PS,” 15). About Polanyi’s discussion of evolution and emergence in his last section of PK, Grene says:

. . . while these chapters raise some important points against reduction in biology, the effort to locate homo sapiens as the apex of evolution is hopelessly mistaken. The ontological aspect of tacit knowing, proposed in *The Tacit Dimension*, being more limited in its import, is much more convincing. Commitment, however, has, I should think, to retain its precarious ontological position as the stance of a given embodied person, cast ephemerally into the flow of history, and pre- and posthistory, self-obliged to obey a calling that takes him (her) beyond the confines of subjective preference (“PS” 14).

While Grene’s several criticisms should be taken very seriously, the way they are interwoven makes it difficult to pull the elements apart and examine each carefully. In 1991, Grene said that she still stood behind the commitment chapter of PK, the last of Part III, as one that provides “an appropriate foundation for a philosophy of science, a theory of knowledge, and a perspective on the nature of responsible personhood.” This is a “precarious foothold” but “the best we can do.” However, in Part IV of PK, Polanyi wrongly thought he had “provided a more sweeping ontological location for the act of commitment”(“PS,” 14). The end of PK is cosmologically overly ambitious and focuses on human beings in evolution in a way that is very anthropocentric and simply wrong, in terms of modern evolutionary biology. Clearly, Grene thinks Polanyi’s field theory approach to emergence, using Driesch’s biology and to some degree models from physics, is not tenable. She seems, by 2002, however, to think any account of emergence is dubious, although it is rather unclear what she now means by “emergence.” Surely Grene is right that Driesch’s ideas are not viable in today’s biology. Yet Grene seems to accept the epistemological point, Polanyi’s antireductionism, which is deeply embedded in all of the discussion of Part IV and even in his account of evolution. She accepts what in TD (51) is called the “critical” and “convivial” nature of biology⁵¹ (i.e., knowing living forms necessarily involves recognizing their achievements) which is basically Polanyi’s claim that the study of life requires recognizing two levels of control. Lower levels bear on higher levels insofar as they “*define the conditions of their success and account for their failures, but they cannot account for their success, for they cannot even define it*” (PK, 382). Grene seems to me insightfully on target in recognizing that the critical and convivial nature of biology and the claims for two levels of control are what Polanyi after PK discusses (e.g., in TD) as the “ontological aspect” of tacit knowing. She seems to believe that working out the ontological aspect of tacit knowing in the years after PK tempers the element of Part IV of PK that she dubs “a more sweeping ontological location for the act of commitment” (“PS,” 14).⁵²

What should one make of all of this? Clearly, Grene does not like the grand cosmological vision at the end of PK. Perhaps she is correct in suggesting that the end of TD employs a less grand rhetoric, but the message is nevertheless in important respects much the same as that of Part IV of PK.⁵³ Polanyi says clearly in the Preface to the Torchbook Edition of PK (written in 1964) that “it is from the logic of indwelling that I have derived in Part IV of this book the conception of a stratified universe and the evolutionary panorama, leading to the rise of man equipped with the logic of comprehension” (x-xi). In TD, Polanyi affirms a “universe filled with strata of realities, joined together meaningfully in pairs of higher and lower strata” (TD, 35). What Grene still seems most to value in Polanyi is what in PK was called the fiduciary program with its emphasis upon commitment and fallibility (the “precarious foothold” she finds in the Commitment chapter),

although she understands that Polanyi's later theory of tacit knowing underlies and in some ways supersedes his early account of the fiduciary program.⁵⁴ At the least, she seems to find a tension between the emphasis upon commitment and fallibility and the vision of human beings articulated in Part IV of PK. Here Polanyi tries to deflect attention from mutation and natural selection and he does this in part by suggesting a parallel between epistemological emergence and the evolutionary emergence of more complex living forms. He portrays evolutionary history as a succession of achievements in which the complexity of life emerges as new levels of control come to be part of history. Polanyi argues that such an understanding of evolutionary history (focused on achievements) allows human beings better to know their natural heritage, their kinship with the non-human and what their opportunities and responsibilities are. All of this is concerned with the emergence of meaning in the natural and ultrabiological world. Polanyi's anthropomorphism so far as I can see does not suggest that evolutionary history ends with or culminates in the human, but it is a claim that evolutionary theory must ultimately recognize the intricate powers of human beings as creatures gifted with the complex skills to study and understand evolution.⁵⁵ This is an opportunity (an affordance, to use Grene's term appropriated from J. J. Gibson) in the human world. Polanyi situates biological study (or at least the biologist) in an ecological context. It is, to use another of Grene's terms, a manifestation of the minding of a human being with the specialized skills of a biological scientist.

III. The Contested Legacy of PK: Notes on Grene and Prosch

One of the most interesting discussions in Harry Prosch's 1986 *Michael Polanyi, A Critical Exposition* is his chapter attempting to refute Grene's late criticisms (i.e., those overt in "TK" plus possibly some interpretative comments in KK) of Polanyi (MPCE, 220-247). Prosch's chapter is extraordinarily dense and his argument is, to this reader, not always clear, but it is worth examining briefly because it illumines both Prosch's and Grene's philosophical convictions. In the final analysis, Prosch seems to understand Polanyi's "ontological aspect" of tacit knowing rather differently than Grene; he also likely misreads some of Grene's philosophical convictions. So far as I know, Grene never responded directly to the discussion in MPCE.⁵⁶

The chapter where the discussion appears is titled "Is Epistemological Antireductionism Sufficient?" and this query Prosch intends to respond to with a resounding "no." He thinks that Grene's late criticisms of Polanyi imply that she holds the contrary position, namely that "epistemological antireductionism is sufficient" but this phrase is hardly transparent. Prosch says,

It would appear that Grene thinks our recognition of the from-to structure of knowing alone is sufficient to preserve us from reductionism. Since it shows us that reductionism is not possible on epistemological grounds, she thinks there is no reason to try to refute reductionism on ontological grounds as well. Trying also to do the latter endangers the notion that mind must be embodied; and opens the door to dualism, which she thinks, philosophers today will not accept as a means of avoiding reductionism. (MPCE, 222-223)

Clearly, Grene appreciated the non-reductionist ambience of Polanyi philosophical perspective. In her own post-PK work in philosophy of biology, she became something of a champion of non-reductionism. Prosch is raising a question about the grounds for opposing reductionism. What Prosch seems ultimately to think is at stake is what Prosch dubs Grene's "rejection of his [Polanyi's] ontological hierarchies" (MPCE, 221). That

is, Prosch thinks Grene does not accept what he takes to be the full implications of Polanyi's ontology which Prosch sees as a very important foundation of Polanyi's critique of reductionism.

What is a bit curious in all of this is that Grene in KK (published in 1966, although written earlier) discusses and affirms what she holds to be Polanyi's ontology and its importance as a counter to reductionism. Her position can be summarized in a sentence: "To break the stranglehold of reductionism, we must acknowledge once more *the multiplicity of forms of being*" (KK, 219). Perhaps it is not entirely fair to criticize Prosch for making no use of Grene's discussion in KK, which was published before he even began his work on Polanyi. But Prosch was a careful thinker and it seems most likely that in his first year working with Polanyi in Oxford (1968) when he was studying all of Polanyi's writings that Polanyi's respect for Grene (and perhaps even this book dedicated to Polanyi) would have come up. Prosch may, of course, have believed that Grene changed her mind about views in KK between the writing of KK and the writing of "TK" (1976). Grene frequently did change her mind and she readily acknowledged it and she was eventually very critical of KK. Nevertheless, Prosch's limited familiarity with KK is a puzzle since there are ideas in KK that are important which might have helped Prosch better understand Grene's views. Grene does in KK take care to distinguish what she identifies as "three aspects of the situation [regarding ontology]: "(1) the double determinateness of comprehensive entities,⁵⁷ including living things and the achievements of living things, (2) the multiplicity of kinds of such doubly determinate entities, [and] (3) the question of their stratification relative to one another" (KK, 219). Prosch's criticisms of Grene do not distinguish these three aspects and he seems primarily to attack Grene for not supporting the third aspect, which indeed, her discussions in "TK" suggest she is wary of, at least as that appears in Part IV of PK.⁵⁸

It is also of interest that almost 25 years after the publication of Prosch's book (and more than 30 years after Grene's critical remarks in "TK," as well as 15 years after her remarks in PT and almost a decade after her "IA" in PMG), Tihamér Margitay's essay "From Epistemology to Ontology, Polanyi's Arguments for the Layered Ontology" in the new 2010 collection *Knowing and Being, Perspectives on the Philosophy of Michael Polanyi*⁵⁹ again raises some of the same kinds of questions that Prosch thinks Grene raised. For that matter, Edward Pol's 1968 essay "Polanyi and the Problem of Metaphysical Knowledge" in *Intellect and Hope*⁶⁰ and some of the more recent discussions in *TAD* and *Polanyiana* of "Polanyi's realism"⁶¹ also treat metaphysical issues akin to those that Prosch and now Margitay discuss. So matters related to Polanyi's ontology have for many years stirred—and continue to stir—scholarly discussion.

Prosch thinks that Grene regarded the "ontological aspect" of tacit knowing "as simply meaning that the two levels in entities we find in our world are only analogues to the two levels we find in our knowing processes" (MPCE, 230). This position, Prosch suggests, is a weak account that is "simply epistemological" and fails to make "the leap out of them [i.e., such analogues] into a 'real' world structured by them" (MPCE, 232). Prosch certainly found an emphasis on analogues in Grene's careful writing about "comprehensive entities" going back to *The Knower and the Known*.⁶² He claims that Polanyi's "intention" was "to project the comprehensive entities into what exists beyond his own grasp of them" and this "is a most important part of his thought, without which all things have only the reality of the meanings or focal integrations we happen to achieve" (MPCE, 233). Prosch contends that he sees "no sufficient reason why the ontological projections of an epistemology should not be respected as much as the epistemology itself is" and he concludes "I think Polanyi's basic ontological foundations are as sound as his epistemology" (MPCE, 233). He suggests that in his view it is "reasonable to assume that there is a marvelous coincidence between the way we know things and the way they are, in and of themselves, in the universe" (MPCE, 235). Nevertheless, Prosch acknowledges

a “logical gap” exists “between our own accepted ontology and the belief that it does in fact accurately state the way things are”(MPCE, 233). He concedes “there is no way to demonstrate with logical rigor that we must believe that any given ontology is true of the world. There is no way to match the two”(MPCE, 233).

At least in part Prosch arrives at his criticism of Grene by drawing certain conclusions from the fact that Grene suggested (as I outlined above) some late Polanyi articles (in his eagerness to attack behaviorism) seem to re-institute a mind-body dualism. In his best writing, Polanyi offers a consistently incarnate or embodied perspective, Grene argues, but he seems late in life at times to have forgotten the implications of this. Positively stated, Grene contends that the “concept of from-to knowledge” opens a subtle perspective that “should certainly prevent, not support a return to a notion of a ‘separate’ consciousness or thinking thing” (“TK,” 170). But she says Polanyi either “never realized, or ceased to realize, the subtlety of his own anti-reductionist position”; because he was too much preoccupied with the matter of refuting “the ‘denial of consciousness’ by behaviourists . . . he failed to recognize how essential to his own philosophical position was the insistence on embodiment as the framework of mentality” (“TK,” 170).⁶³

Prosch contends that Polanyi held that it was not possible to have a mind without a body so “he [Polanyi] did not hold to anything like a Cartesian dualism. The mind was nothing and nowhere without the body. Mind was indeed incarnate” (MPCE, 227). Prosch seems to think the central issue is “whether or not the mind does possess powers that its parts (its body and so its brain) do not possess” (MPCE, 227). He seems to believe that Grene’s views merely conflate mind and body and mean she does not recognize how “consciousness or sentience became so important to Polanyi”(MPCE, 227). Prosch likely is correct that by the time of “TK” and certainly by the final years of her life, Grene thinks most philosophical talk about “consciousness” is misguided; “consciousness” is a reification that has misled philosophy by diverting attention from the ways in which humans and other animals are always actors deeply and inextricably embedded in a particular historical-social and natural niche. Whatever perceptions or reflections—responses—that even language-using human animals have are profoundly contextual (and grounded in the pre-reflective embodiment of a context). Grene likely would prefer to call such responses “minding”⁶⁴ rather than positing some sort of inner state identified as “consciousness.”⁶⁵

It is important to remember that by 1977, when Grene published “TK,” she had long ago linked Merleau-Ponty (discovered in 1960) to Polanyi and he is a figure who for her has a profound understanding of embodiment in terms of being-in-the-world. This absorption is in fact also reflected somewhat in KK. Grene thinks Merleau-Ponty, unlike Heidegger, gets being-in-the-world right because he unpacks perception in terms of the embodied person. Grene effectively integrates many of Polanyi and Merleau-Ponty’s views. She held that Merleau-Ponty’s account of embodiment complemented and strengthened Polanyi’s account of indwelling and, more generally, tacit knowing and the person. It is this connection between embodiment, being-in-the-world and Polanyi’s post-PK “strengthening and extension of his [Polanyi’s] conception of the tacit foundation of knowledge” (“TK,” 168) that is the context for Grene’s suggestion (in “TK”) that Polanyi’s “notion of a ‘stratified universe’ was always less than convincing: indeed the final chapter of *Personal Knowledge* had only been saved from total disaster by criticisms of his friend J. H. Oldham” (“TK,” 168). It seems likely that this comment significantly shapes Prosch’s reading of Grene’s account of Polanyi.⁶⁶ Prosch, of course, knows nothing about the controversy (noted above) over the final chapter of the draft of PK (he does not meet Polanyi or seriously study his writings until about a decade after the publication of PK). Perhaps more important is the fact that he seems to have little knowledge or interest in Merleau-Ponty and Merleau-Ponty’s ideas about being-in-the world. At the least, there is little evidence that Prosch, unlike Grene, was impressed

with the way that Polanyi's account of a person and tacit knowing could be linked to Merleau-Ponty's account of perception, embodiment and being-in-the-world.

There is but one reference in MPCE to Merleau-Ponty. Prosch notes that Polanyi was not even aware when working out the views in PK that

some continental phenomenologists were bringing forth considerations similar in many respects to his. He discovered Merleau-Ponty later and realized that an affinity existed and yet he correctly rejected the notion that their views were identical. His position therefore, turned out to be a fresh one even when compared with the current phenomenologists. It lacked the peculiar style and framework of assumptions within which they work. And so also it incorporated certain features altogether lacking in them (MPCE, 52).

There is a footnote in Prosch's discussion that cites the last section of Polanyi's essay "The Structure of Consciousness" (KB, 221-222) which comments very briefly on Merleau-Ponty, the body-mind problem and being-in-the-world. Polanyi's concluding comment on Merleau-Ponty is a critical comment that Prosch likely took to be very important:

These remarks [i.e., quotations from Merleau-Ponty] foreshadow my analysis, but I find among them neither the logic of tacit knowing nor the theory of ontological stratification, which I regard as indispensable for the understanding of the phenomena described by Merleau-Ponty (KB, 222).

Polanyi's discussion ends by suggesting that Merleau-Ponty's views, shorn of "their existentialist perspective" (KB, 222) cannot be distinguished from the views of Ryle, a contemporary offering an anti-Cartesian view that is nevertheless fallacious.

Interestingly, Prosch does suggest Grene's reading of Polanyi emphasizing the epistemic (or embodied) is an account that construes Polanyi as "only a phenomenologist" (MPCE, 232) which he thinks is inadequate.⁶⁷ It seems likely that Prosch was generally dismissive of what he took to be "phenomenology."⁶⁸ Prosch argues that Polanyi was not "only a phenomenologist" because he was a scientist who thought discovery uncovered the nature of external reality. Polanyi was a fallibilist; this essentially posed the question of how mistakes could be recognized if "there were no touchstone of reality against which to measure them?" (MPCE, 232). Also Prosch argues that Polanyi was striving to articulate a rich post-positivist vision of science, one that went beyond the phenomenal orientation of positivism.⁶⁹

What seems clear in Prosch's discussion is that he holds Polanyi was not a "phenomenologist," but he thinks Grene makes Polanyi into a "phenomenologist." It seems very likely Prosch and Grene, although they both seem critical of "phenomenology," have quite different readings of what a "phenomenological" approach is and what its problems are. More important is the fact that Prosch gives no indication that he thinks it important to link Polanyi's ideas about tacit knowing and embodied "being-in-the-world." On this point, Prosch's account of Polanyi's metaphysics and Grene's metaphysics are indeed sharply at odds. As Grene put metaphysical matters in KK (written at the time of or shortly after her discovery of Merleau-Ponty), the kind of central philosophical reform called for in the twentieth century "would make *time* the fundamental category of metaphysics" (KK, 243). I think she believes that is what Merleau-Ponty does in his account

of embodied being-in-the-world and what Polanyi does in a parallel fashion in his theory of tacit knowing. Both approaches are a temporal re-orientation of fundamental philosophical thinking about the person. This is one of the themes in Polanyi that William Poteat's work picks up and develops.⁷⁰ In terms of Polanyi's tacit knowing, Grene speaks about the "tension of the act of tacit knowing in which we attend from the clues which we know only subsidiarily to the object of our focal attention":

This directedness, from the proximal to the distal pole of tacit knowing, is a reaching out from ourselves to the world—and by the same token a reaching out from past to future, a reaching drawn by the focal point of attention, temporal activity, drawn by the future pull of what we seek to understand" (KK, 244).

The structure of temporality for Grene provides the key to a "tenable theory of action as responsible and free" (KK, 252). A person engaging the world in terms of his or her unfolding attention reliant upon ongoing tacit integrations operates under "the protensive pull of our transcendence" (KK, 252). The last sentence in KK puts matters very directly: "The structure of tacit knowing is mirrored in the structure of comprehensive entities because they both mirror the metaphysical structure of time" (KK, 252).

Grene holds that the restoration of the temporal in our account of knowing will help

to articulate an analytical pluralism, a metaphysic which will allow us to acknowledge the existence of a rich variety of realities, not all of which need exist in identifiable, spatio-temporal separateness. Minds are not separate from bodies, yet persons capable of 'minding' are richer and more highly endowed than persons, or individuals, not so capable (KK, 242).

A richer appreciation for the temporal will dislodge philosophy from "the alternative 'separate mind' or 'no mind', two reals or one real only" which "has been too long dominant over western thought" (KK, 242). She says we "need to recognize the richness of reality, including the achievements of human persons and human traditions" (KK, 242). So Grene's "analytical pluralism" recognizes a variety of types of realities. I suspect that she believed that Polanyi had prepared the way for such a metaphysic but she eventually came to fear that that Polanyi's sketch of a hierarchical cosmos at the end of PK (if not also his comments on dualism) could displace his own central insights about the temporal. She believed that the theory of tacit knowing as it was developed after PK and as it could be further articulated in terms of Merleau-Ponty's account of embodiment and being-in-the-world made clearer the centrality of the temporal.⁷¹

Harry Prosch did not appreciate—and perhaps simply did not grasp—the subtlety of Grene's metaphysical orientation. His metaphysical account of Polanyi was preoccupied with, first, Polanyi's from-to structure as it operates for the scientist interested in the discovery of external reality and, second, with how that from-to structure operates to legitimate what Prosch took to be Polanyi's vision of the distinctly different realities of the noosphere. Defending his position on this latter topic, Prosch provided chapters immediately following his criticism of Grene. Prosch treats what he calls "the problem of Polanyi's divarication" (MPCE, 235). Here Prosch lays out and defends against criticism the position he had previously articulated in the Gelwick-Prosch debate played out earlier in Polanyi Society papers and in publications in *Ethics*, *TAD* and *Zygon*.⁷² He argues (and the *Meaning* material suggests this) for a distinction between how the from-to structure of knowing operates "in our perception and our knowledge of nature and the way in which we make use of it in the arts and religion (and possibly in our moral life)" (MPCE, 235). Prosch contends that the ontological

status of the realities of the noosphere differ in an important way from the realities known in perception and science.⁷³ Grene's few critical comments about *Meaning* do come up (MPCE, 237-238) and Prosch addresses them in the context of his larger argument. Grene's comments on *Meaning*, although general and not focused directly on metaphysical matters, could certainly be linked to her metaphysical orientation.

Although I have in these reflections tried primarily to interpret Grene, I acknowledged at the end of the last section my perplexity about some elements of Grene's account of Polanyi. I also acknowledge, in concluding this discussion of Grene and Prosch, that I find what seems to be the presupposed framework underlying Prosch's account of Polanyi's metaphysical views, as well as Prosch's criticism of Grene, to be problematic. Prosch lapses into an idiom (and a presupposed picture of the nature of things) that I believe too sharply separates knowing and being. Prosch seems to defend, to paraphrase Grene's criticism of Polanyi, a view that the from-to processes that constitutes minding is dissectable into two "things," the corporeal and the mental. In his criticisms of Grene, Prosch underplays the way that Polanyi strongly emphasized how indwelling reshapes a person's being.⁷⁴ Grene is ever mindful that the knowing person who integrates subsidiaries to attend to a focus is a real "comprehensive entity" but this seems not to be something central in Prosch's account. Even in scientific study,⁷⁵ a knowing subject is not simply an independent thinking being wholly separated from and different in kind from a comprehensive entity existing in some external sphere. The "knowing subject" and the "world" are profoundly and almost inextricably woven together for Polanyi and for Grene (and especially for Grene after she digests Merleau-Ponty). As Grene put it, "This interpenetration of 'self' and 'world' is not only a central characteristic of mind; it is what mind is" (KK, 56). Despite the fact that at his best, he recognizes there is no mind without a body, Prosch seems often to be seeking some type of external, impersonal ontological realm to serve as a trump card to ground human knowing. He was not always keenly attuned to the reach of the personal, a topic that Grene, of course, emphasizes in her 1991 Kent State address and in other writing, as I have noted in my discussion. A little known comment of Polanyi on the personal, made in response to a question from William Poteat, is a remark Grene would likely have approved and a remark that seems in sharp tension with some of Prosch's account of Polanyi:

... I think that "personal" is the effort of this integration and the sustaining of this integration; they are all important. It is conceptually misleading, I think, to believe that such an integration can exist without somebody being there to sustain it, because only in ourselves can two levels of awareness exist. They can't exist outside somebody, and therefore there is an ineluctable presence of the person in knowledge, so far as it is knowledge with that structure (and of course all knowledge has that structure); this ineluctable presence is logically necessary in view of the two levels of awareness which can be present only in a person.⁷⁶

Endnotes

¹This essay is a revised version of a paper delivered at the "*Personal Knowledge at Fifty*" conference at Loyola University, Chicago in June of 2008. I appreciate the helpful comments of three reviewers which led to further revisions.

²Interpreting Grene, I emphasize, is a complex matter and I acknowledge that I am not always confident that I have seen through to the heart of things. Although she writes very clearly, there are many interesting points that I wish she had said more about. As I later note, some of her criticisms of Polanyi are rather cryptic. She acknowledges that her own ideas have changed over her long life. Reconciling early and later comments is guesswork.

³See Marjorie Grene's "Intellectual Autobiography" (hereafter occasionally abbreviated to "IA" in notes) in *The Philosophy of Marjorie Grene*, Library of Living Philosophers, Vol. 29. eds. Randall E. Auxier and Lewis Edwin Hahn (Chicago and LaSalle, IL: Open Court, 2002), 12. *The Philosophy of Marjorie Grene* is hereafter cited as PMG. "IA" is PMG, 3-28 and I draw extensively on "IA" here as well as my essay "On Persons and Knowledge: Marjorie Grene and Michael Polanyi" (PMG, 32-60), which treats a number of the things discussed early in this essay (see especially 32-36). See also Marjorie Grene, *A Philosophical Testament* (Chicago and LaSalle, IL: Open Court, 1995), 91. *A Philosophical Testament* is hereafter cited as PT. There are many comments on Grene and her work with Polanyi in the Polanyi biography (William Scott and Martin Moleski, SJ, *Michael Polanyi, Scientist and Philosopher* [Oxford: 2005] cited hereafter as Scott and Moleski). See Scott and Moleski, 216 for comments on meeting Grene and 216-231 for various comments on her role with the Gifford Lectures and *Personal Knowledge*. My debts in this paper to the biography are many and I suspect sometimes that I am no longer clearly distinguishing these debts to the biography (or early drafts of the biography material) from archival material and the many scattered comments Grene makes in her own writing. Most of the citations here are to sources other than the biography (although the biography may have comments similar and may be relying upon the same archival sources).

⁴PT, 91. See also PMG, 257.

⁵This is discussed a bit in the biography. See Scott and Moleski, 217ff. The letters in the not-yet-public Shils archives at the University of Chicago, however, make clear that stress of this encounter with the US immigration authorities in the era of McCarthy was much more traumatic than the biography indicates.

⁶PT, 5 and PMG, 32-33.

⁷Scott and Moleski, 216-236, in the discussion of Polanyi's visits to Chicago, his preparation of the Gifford Lectures and the years of work on *Personal Knowledge*, mention several details about Grene's work with Polanyi. For my attempt to summarize some of this and link it with things Grene has said and archival tidbits, see PMG, 34-36.

⁸Polanyi letter to Oldham, 5 March 1953, Box 15, Folder 5, Michael Polanyi Papers, Special Collections Research Center, University of Chicago Library. Citations to Polanyi archival materials are used with permission and are hereafter foreshortened to the box and folder number.

⁹Gerald Smith's "Introduction" to the Duke microfilm of this material suggests this dating. I agree with Smith that the sometimes ambiguous penciled notes on this typescript likely imply that this material is a very early (some of it perhaps as late as 1954) step toward PK—in other words this material is likely close to the original Gifford texts. Polanyi probably had some of the lectures carefully typed up for the original delivery but may have had only handwritten texts for some. A handwritten note included with Gifford Series 1, Lecture 1 indicates this material was given to Grene in May, 1957.

¹⁰The block quotation and quotations in the preceding sentences are from Elizabeth Sewell, "Memoir of Michael Polanyi," Box 46, Folder 12, typescript p. 20 and pp. 14-15.

¹¹Grene's statement in "IA" (PMG, 13) says much of her work with Polanyi was in correspondence; very little of this, however, is in the Michael Polanyi Papers.

¹²Marjorie Grene, "Tacit Knowing: Grounds For A Revolution in Philosophy," *Journal of the British Society for Phenomenology*, Vol. 8, No. 3, October 1977, 168. Hereafter this article is cited as "TK."

¹³Grene implies this in "TK," 165 when she says "these puzzles of the organization of science might have culminated in a philosophical ethic, or theory of natural law, and at one time, I believe about 1952, that is the direction in which Polanyi hoped the second series of Gifford lectures would take him."

¹⁴Some of the archival correspondence related to the work on *Knowing and Being: Essays by Michael Polanyi* (Chicago: University of Chicago Press, 1969) [hereafter KB] make Grene's approach plain. She refused to include some essays Polanyi wanted that she thought inferior and she refused to allow Polanyi to do some revisions on ones she did include. It seems very likely that she did some revisions in articles that she did want herself rather than trust Polanyi to make the changes. Grene made rather clear that she sometimes thought Polanyi's continual revisions marred the quality of his writing and she seems to have thought his writing often had Germanic elements that should be eliminated.

¹⁵See PK, xv. Although he is not listed as one of the readers of the full or even part of the manuscript, Joseph Agassi notes in *A Philosopher's Apprentice: In Karl Popper's Workshop*, (revised, extended and annotated edition [Amsterdam and New York: Rodopi, 2008], 179) that he read the manuscript and declined Polanyi's invitation to come to Manchester and help Polanyi put PK in its final form.

¹⁶Oldham's earlier letter to Polanyi specified his criticisms and Grene apparently had seen the letter: Oldham letter to Polanyi, May 11, 1957, Box 15, Folder 5. This careful 6.5 page letter criticizing the manuscript of PK was certainly an important response to Polanyi. See my discussion of the concerns in this letter and Oldham's influence more generally in "Michael Polanyi and J. H. Oldham: In Praise of Friendship," *Appraisal*, vol. 1, no. 4 (Oct. 1997): 179-189.

¹⁷Grene letter to Oldham, May 12, 1958. (J. H. Oldham Archives, 10.4.), Edinburgh University Library, Edinburgh University, Edinburgh, Scotland (hereafter cited in shortened form).

¹⁸Marjorie Grene and David Depew, *The Philosophy of Biology: An Episodic History* (Cambridge: Cambridge University Press, 2004): 348-361. This final chapter much resembles the argument in Grene's 1985 article, "Perception, Interpretation, and the Sciences: Toward a New Philosophy of Science" (*Evolution at a Crossroads: The New Biology and the New Philosophy of Science*, ed. David J. Depew and Bruce H. Weber [Cambridge: MIT Press]: 1-20). As I note below, I argued in 2002 that Grene's 1995 PT, which reflects on her work in several areas of philosophy over her long career, shows philosophical convictions that are generally consistent with Polanyi's perspective (PMG, 47-54). Grene's brief response to my case suggests I was "also probably correct in believing that my years of working with Polanyi have continued to influence my thought and writing, more than I have recently recognized" (PMG, 61). She does go on to say she later developed interests "decidedly extra-Polanyian" (PMG, 61), which certainly is the case, but my point is that the way in which she pursues these interests bears the mark of her collaboration with Polanyi.

¹⁹See her discussion in "IA," especially PMG, 14-26.

²⁰Grene's May 29, 1958 letter to Oldham (J. H. Oldham Archives, 10.4) responds to an earlier Oldham letter recommending that she and Polanyi read John Macmurray. She reports that she has run down some Macmurray literature, read some of it and turned it over to Polanyi.

²¹All quotations are from Oldham letter to Grene, June 4, 1958 (J. H. Oldham Archives, 10.4).

²²Michael Oakeshott, "The Human Coefficient," *Encounter* vol. 11, no. 3 (1958): 77-80. This review is hereafter noted by page number and the author's name.

²³Scott and Moleski, 231, note that there were more than twenty reviews between 1958 and 1960 and they were decidedly mixed.

²⁴I have elaborated in several places this admittedly artificial but nevertheless useful, three-pronged approach to PK and, more generally, to Polanyi's thought. See "The Spectrum of Meaning: Polanyian Perspectives on Science and Religion," *Zygon: Journal of Religion and Science* (vol. 17, no. 1), March, 1982: 3-8, and the first section of "On Reading Polanyi and Reading About Polanyi's Philosophical Perspective: Notes on Secondary Sources," *The Political Science Reviewer* (Vol. XXXVII) 2008: 158-240.

²⁵Oakeshott, 77.

²⁶Oakeshott, 79.

²⁷Marjorie Grene, "Personal Knowledge," *Encounter* vol. 11, no. 4 (1958): 67-68. Since Grene's response is printed on only two pages, citations hereafter are in the text in parenthesis following the quotation. Grene apparently sent the draft of this letter to Oldham since a typescript is in the J. H. Oldham Archives, 10.4.

²⁸See also Grene's discussion of Kant (especially 140-156) in her chapter on Kant in *The Knower and the Known* (Berkeley: University of CA Press, 1966): 120-156. *The Knower and the Known* is hereafter foreshortened to KK. There are also many comments about Kant in PT. See especially her chapter "Rereading Kant"(PT, 29-46).

²⁹Many scholars interested in Polanyi know Grene's KK which was published in 1966 but she says was mostly written from 1961-1963 (KK, "Preface to the Paper-bound Edition of 1974"). The book draws on articles written in the late fifties and early sixties and is an example of both Grene's developing interest in his-

tory of philosophy and philosophy of biology. KK has chapters on important figures in the history of philosophy as well the interesting chapter “The Faith of Darwinism,” which by 2002 Grene regarded as misguided (PMG, 16-17). There are many references in KK to Polanyi and/or Polanyi’s writing, including PK. In many ways, this book reflects that Grene has digested PK, and other Polanyi writing from just after PK. Certainly one could argue that this book deserves attention in this section of the discussion as an early Grene response to PK but space does not permit such a discussion here. Also, unless I have overlooked it, there is no section in KK that is a sustained reflection on PK as a whole. More typical are discussions like that in “The Faith of Darwinism,” a chapter discussing the assumptions of Neo-Darwinism. The references to Polanyi and PK are scattered but it is easy enough to see that Grene’s questions and responses are very akin to things that are developed in discussions in PK. KK is dedicated to Polanyi. Grene’s letter to Polanyi of January 19, 1963 (Box 16, Folder 1) provided an early outline of the book and advised him that this book should be dedicated to him; she also suggested that the book’s title “reflects its Hungarian origins.”

³⁰Grene makes clear that Polanyi’s interest (as well as her own) in “dubitable belief” is quite different than the standard discussion in philosophy of justified true belief. She suggests that Polanyi is generally not attuned to all the philosophers’ talk about justification but he wrestles with the problem coming from a background in science. See her discussion in “TK,” 166-167.

³¹Polanyi notes in the 1964 Torchbook edition of PK that there are forty declarations of belief listed under “fiduciary program” in the index (PK, ix). Grene and her children did the index so she is certainly mindful of the importance of this key term (see “TK,” 167), which however goes back earlier than PK. In the syllabus of the Gifford Lectures, First Series, similar language (“fiduciary mode” and “fiduciary philosophy”) is used in the précis of Lecture 6 (Box 33, Folder 1). There are indications Polanyi was already discussing “the fiduciary mode” in 1948 before he met Grene. See my discussion of Polanyi’s correspondence with J. H. Oldham about his paper “Forms of Atheism” prepared for a December, 1948 Oldham gathering (“Michael Polanyi and J. H. Oldham: In Praise of Friendship,” *Appraisal*, vol. 1, no. 4 [Oct. 1997], p. 184). Polanyi’s comment in *The Logic of Liberty* (1952—as well as comments in the syllabus for the First Series Gifford Lectures of May and June 1951) make clear that Polanyi understood “post-critical” in terms of the fiduciary program: “We have thus begun to live in a new intellectual period, which I would call the post-critical age of Western civilization. Liberalism to-day is becoming conscious of its own fiduciary foundations and is forming an alliance with other beliefs kindred to its own” (LL, 109).

³²Grene emphasizes Polanyi’s notion of the human obligation “to fulfill demands made on us by something that both defines and transcends our particular selves;” she identifies it as “what Polanyi called the paradox of self-set standards. We accept with universal intent principles or patterns of behavior that we have at one and the same time both happened to develop and enacted as responsibly our own” (PT, 169-170).

³³Grene to my mind is very insightful about the character of Polanyi’s realism (a realism to which she herself subscribed and explained in terms of orientation and ecology, which draws on the language of the Gibsons. See KK, x where she first uses “orientation”; see also PT, 108, and more generally PT, 113-191, as well as her response (PMG, 61-62) to my essay on her links to Polanyi. She notes that recognition of the from-to structure of knowing is “indispensable if we are to escape the to-and-fro of realism-anti-realism arguments” (PT, 123) which are found in contemporary philosophy of science (PT, 169-170). Grene offers an interesting analysis of contemporary discussions of realism in PT, 113-126. She suggests that much contemporary discussion in philosophy of science has formalistic suppositions about knowledge and misguided notions about perception going back to empiricism. It is really an in-house debate about “scientific realism” and it is a debate into which neither Polanyi nor Grene fit. I have recently argued (“Comprehension and the ‘Comprehensive Entity,’” *TAD* 33: 3 [2006-2007], 26-43) that Polanyi is closer to a medieval realist (a position that opposed nominalism) than a modern realist.

³⁴“Polanyi was not only right to call the distinction between two kinds of awareness the most important feature of *Personal Knowledge*; he was righter than he knew. For in the development of his thought that followed *Personal Knowledge*, it was the strengthening and extension of his conception of the tacit foundation of knowledge that, in my view at least, proved most fruitful” (“TK,” 168).

³⁵As Grene notes, the analogical reasoning of PK with its focus on commitment is in some ways superseded by the stronger general affirmation of unspecifiability in the theory of tacit knowing: “The point is, I now see, that the fiduciary programme is supported, not so much by its expansion through analogical reasoning, as by the foundation common to all its instances, the foundation of tacit knowing” (“TK,” 168).

³⁶Polanyi makes this interesting comment about Grene’s “Introduction” to *Knowing and Being* in a Nov. 22, 1968 letter to Grene (Box 16, Folder 3): “I thank you also for your introduction, which I read with great interest. You do make me gradually familiar with a number of toes on which I have trodden. It is fascinating.” Polanyi, however, says much the same thing as Grene about the development of his ideas in his April 1966 Introduction to *The Tacit Dimension*: “Viewing the content of these pages from the position reached in *Personal Knowledge* and *The Study of Man* eight years ago, I see that my reliance on the necessity of commitment has been reduced by working out the structure of tacit knowing. This structure shows that all thought contains components of which we are subsidiarily aware in the focal content of our thinking, and that all thought dwells in its subsidiaries as if they were parts of our body” (TD, x).

³⁷Against common misreadings of Polanyi, Grene insists “what is essential is not the existence of the tacit, but the relation of the tacit to the explicit”:

The tacit component is not a residuum, but an indispensable foundation. What matters is not that there is something unspecifiable, for example, in science, but how unspecifiability works and what it accomplishes. It is the function of the tacit in all knowledge, however exact and “objective”, that the tradition had neglected or denied, and that Polanyi’s epistemology allows us to accept and articulate (“TK,” 165).

³⁸Harry Prosch (*Michael Polanyi: A Critical Exposition* [Albany: SUNY, 1986]: 220-234—hereafter MPCE) spends much time trying to refute Grene’s criticisms of Polanyi; the final section of this essay discusses Prosch’s views of Grene which I argue helpfully illumines Grene’s position but also make clear Prosch’s agenda. It is worth laying out Grene’s position carefully. Grene does, in some of her letters to Polanyi, vigorously object to the way Polanyi frames matters regarding body and mind in some late essays. Her October 28, 1967 letter to Polanyi (Box 16, Folder 1), commenting on a draft of Polanyi’s essay “Logic and Psychology” (*American Psychologist*, 23 [January 1968]: pp. 27-43), sets forth her case succinctly. She tells Polanyi “there is surely something radically wrong with the distinction [between body and mind] as you make it. When I see an external object, I rely on subsidiaries in my body to see the object out there—this is my mind at work, but not, as such, known by me. My brain, on the other hand, as observed by a neurologist, is known by him.” She later emphasizes that “mind is not known in either case. You are not contrasting either mind & brain or knowledge of mind & knowledge of brain, but mind working & brain known. Besides, how can there be any knowledge that isn’t somebody’s from-to knowledge?” She concedes that knowing a mind is somewhat different from perceiving: “. . . perception is, I suppose, a primordial case of understanding; knowing minds, like knowing Shakespeare or relativity theory, entails attention to higher levels of integration.” But she insists Polanyi’s terms of comparison are mismatched: “. . . a mind on the other hand exists only in the process of from-to knowing, whether perceptually or any other way. Then, indeed, the mind is imperceptible but not a different ‘thing’ from the brain as you say it is—it’s not an object, but how a certain organized being deals with its world.” Interestingly, in Grene’s subsequent letter of Nov. 1, 1967 (Box 16, Folder 1), she notes that, having tried to formulate what is wrong about Polanyi’s formulations, she does understand what Polanyi was struggling to distinguish, although he is wrong in assuming this is Cartesian two substance dualism. In Polanyi’s November 6, 1967 reply to Grene’s two previous letters, Polanyi comments (and seems to acknowledge Grene’s point) “referring to my formulation of dualism. You seem to have satisfied yourself about it, while I myself was induced by your first letter (October 28th) to pursue your criticism and suggest a slight amendment. I still think that an amendment would be useful.” This leads in subsequent letters to further discussion and a Grene attack on Polanyi’s discussion of “from-at” as something apparently different than “from-to” knowledge: “. . . if all knowledge is from-to knowledge, how do we suddenly turn up something that isn’t?” (Grene to Polanyi, November 7, 1967, Box 16, Folder 1). Finally, when the galleys of the article under discussion come to her, Grene makes a few changes which she thinks mandatory. In “TK,” Grene says Polanyi “believed that he was reviving dualism, when in fact he was helping to refute it”

because “the theory of mind mediated by the doctrine of tacit knowing is a theory of mind as fundamentally and irrevocably incarnate” (“TK,” 169). She praises Polanyi (and points out Charles Taylor also praises him) as one of the few twentieth century thinkers to develop concepts that “overcome Cartesian dualism” and philosophize “outside the impoverished traditions of empiricism” (“TK,” 169). She says she was sad to discovery in Polanyi’s essay “The Structure of Consciousness” (KB, 211-224) that when Polanyi refers to “the problem of Cartesian dualism,” he did not “mean the problem of overcoming the conception of mind as separate from body. . . in a fashion adequate to account for our intellectual powers, rather than behaviouristically” but, instead, he meant “the problem of defending mind’s separateness from body” (“TK,” 169). She concludes, “surely the from-to processes that constitute ‘mind’ (or ‘minding’) are precisely not dissectable into two ‘things’, the corporeal ‘from’ and the mental ‘to.’ Their integral, indeed, internal, relation is just what Polanyi had been concerned to defend, and what he had succeeded in defending” (“TK,” 169).

³⁹Such criticisms appear in Grene’s letters to Polanyi in the period in which he was delivering some of the lectures and writing some of the articles (most of which Grene read) that Prosch eventually synthesized and were published as *Meaning* in 1975.

⁴⁰“The Personal and the Subjective,” *TAD* 22:3 (1995-1996): 6. This Kent State address is hereafter cited by page as “PS.”

⁴¹What Grene finds objectionable is Polanyi’s introduction of “subjective validity” as one of the “four grades” for classifying “reasonable action and perception, as well as animal inference” (PK, 374). Subjective validity is “the correct use of a fallacious system” which is an “incompetent mode of reasoning” (PK, 374). The PK footnote to “subjective validity” refers back to the Zande discussion in PK, 286-288. Thus it appears that Polanyi regards Zande practices as not truly personal knowledge and thus, in Grene’s heavily sarcastic words: “We, the heirs of a modern European liberal tradition, turn out to be the only human beings who make commitments with universal intent. Everybody else is following a mere subjectively valid impulse” (PT, 170). Grene does seem to make a good point in suggesting that this classification does not fit with Polanyi’s primary notions of the subjective outlined in the fiduciary program which presumably applies to all human persons, Zande and non-Zande. However, I think she may be overestimating the importance of this inconsistency as she herself seems to hint when she points out that at the end of Part IV Polanyi refers to the “social lore” which includes the traditions of all societies, “and that includes science, religion, the arts —as ‘everything in which we may be totally mistaken’” (PT, 170). Polanyi should, however, have avoided the term “subjective validity.” I think the Zande, Marxists, Freudians and trout mistakenly consuming the angler’s fly can be said to have made competent but erroneous judgments (advanced with universal intent); much that is embedded in the frameworks brought to bear in such judgments is fallacious from the perspective of a judgment informed by a scientific framework. Perhaps one must claim that any “contact with reality” for these interpretative systems will not stand the test of time in the long run. I acknowledge that this is a Peircean metaphysical solution to an epistemological problem. Grene seems to think Polanyi’s claim for “subjective validity” makes clear what she dubs a Western scientific species of “ontological dogmatism” (“PS,” 15) which has ceased to be properly mindful of commitment and its universal aspiration which can only occur in a changing historical-cultural context. Grene does not mention that Polanyi’s earlier section titled “Existential Aspects of Commitment” (PK, 318-320) does articulate a scheme in which he speaks of rising “to the level of the personal by reaching out to reality” (PK, 318). He raises a question regarding “an active mental process, aiming at universality” (PK, 318) which turns out to have been fundamentally mistaken: if such an error is possible, can one still hold that the knowing subject “has risen to the level of the personal by reaching out to reality?” (PK, 318). Following this question, Polanyi then claims the Zande witch doctor is a rational person but his rationality is deluded. Polanyi concedes that the witch doctor’s “intellectual system” can serve, within his society, to provide a “form of leadership” and “the means for deciding disputes, however unjustly” (PK, 318). Polanyi allows (in what seems the weakest of affirmations) that the witch doctor’s intellectual system acquires a “limited justification” (PK, 318). Next, however, Polanyi ends his discussion by denying that the Zande intellectual system is a true account of nature: “But as an interpretation of natural experience it is false” (PK, 318). Immediately following, in a new paragraph, he “replies” to the above account by “distinguishing between [A] a competent line of thought, which may be erroneous, and [B] mental processes

that are altogether illusory and incompetent” (PK, 318). Polanyi links those processes that are [B] “altogether illusory and incompetent” with [C] “passive mental states, as purely subjective” (PK, 318). A footnote indicates that in Part IV of PK, he will separate this combined class of [C] passive mental states and [B] illusory and incompetent processes into elements that are merely incoherent and elements that are “systematically pursued misinterpretations.” This apparently looks forward to PK 374. Further, Polanyi acknowledges that the line for judgment between competent mental activity and superstition, madness and twaddle is “determined by my own interpretative framework” (PK, 319). He ends his discussion by acknowledging also that “different systems of acknowledged competences are separated by a logical gap, across which they threaten each other by their persuasive passions. They are contesting each other’s mental existence” (PK, 319). In sum, the discussion on PK, 318-319 does not resolve all the issues Grene raises, but it suggests that Polanyi was struggling with them. It does appear that Polanyi thinks that the Zande have “risen to the level of the personal by reaching out to reality.” Polanyi holds, however, the Zande happen to be fundamentally wrong about the true nature of reality. This commitment (tacit or explicit) about Zande error reflects Polanyi’s acceptance of the intellectual framework we call a scientific point of view. Polanyi thus seems to be, once again, simply affirming that you cannot make claims or commitments except from within a framework of belief that is largely subsidiary.

⁴²Clearly, Grene’s writing in the years soon after the publication of PK show that she does share Polanyi’s interests in attacking what was then called “reductionism” in biology and even in her 2002 intellectual autobiography she affirms that she “still appreciates his [Polanyi’s] dubbing epistemology, or philosophy of science, “ultrabiology” (PMG, 61, see also PT, 25 where she approving uses Polanyi’s term “ultrabiology” to link Polanyi’s philosophy and Merleau-Ponty). See also Grene’s discussions from the early sixties in KK in Part Three, “The Complexity of Things” where her views seem reasonably well aligned with Polanyi. As I have noted, she, by 2002, in her intellectual autobiography, says she regards the chapter “The Faith of Darwinism” (in this section) as “a really bad chapter” (PMG, 17) which, like much of her writing on evolution in most of the sixties and perhaps the seventies, is “in large part indefensible” (PMG, 16). However she identifies an early publication (1963) in philosophy of biology, “Two Evolutionary Theories” (I and II), *The British Journal for the Philosophy of Science*, IX: 34 and 35: 152-54, 349-51) as still a reasonable piece of “conceptual analysis” (PMG, 16). In this article, she applies the insight in PK about two kinds of awareness to debates among then contemporary evolution theorists and argues for more attention to structure in evolutionary theory.

⁴³PMG, 13-14. In 2002, she says she does still have some sympathy with “Polanyi’s Augustinianism. I do believe that faith is prior to reason—only I don’t believe it has to be faith held dogmatically, let alone faith in the supernatural. It’s the difficult position described in the chapter on the critique of doubt that we ought to try to maintain” (PMG, 62).

⁴⁴In “IA,” she dates her first reading as 1960 (PMG, 14-15, 20). See also PT, 69.

⁴⁵She says that she read J. J. Gibson’s 1979 book *Ecological Approaches to Visual Perception* and by late 1980 began to grasp its implications “for my problems: the nature of persons, of knowledge, of the practices of the sciences” (PMG, 21-22). See her extended discussion of the Gibsons’ work and “the ecological approach” in PT, 129-151.

⁴⁶See her discussion throughout PT as well as her discussion in her intellectual autobiography (PMG, 20-23): “. . . looking back. . . it is successively Polanyi, Merleau-Ponty, and Gibson who mark the significant stages on my (intellectual) life’s way” (PMG, 81). See my effort to show how she fits these figures together in “In Memoriam: Marjorie Grene” (*TAD* 36:1[2009-2010]: 50-63).

⁴⁷See her discussion in “IA” (PMG, 18-19) as well as Grene’s 1965 book *Approaches to a Philosophy of Biology* (New York: Basic Books) which treats some of this literature. Her correspondence with Polanyi in the sixties reflects her interest in some of these philosophical European scientists and she encouraged Polanyi to read them. Polanyi wrote a favorable review of *Approaches to a Philosophy of Biology* in *British Journal for Philosophy of Science* 22 [1971]: 307-308.

⁴⁸The incomplete Grene-Polanyi correspondence record from the early sixties does include letters in which Merleau-Ponty is mentioned. Grene links him with other European scientists doing philosophy that she thinks is akin to Polanyi’s views. She encourages Polanyi to read Merleau-Ponty and they apparently discuss

his work in some letters that are referenced but were not preserved. I believe that Polanyi begins to see the connection between his theory of tacit knowing and Merleau-Ponty's account of embodiment, a connection however that he, unlike Grene, never seems overly enthusiastic about exploring. See my comments in the final section. Perhaps the most interesting comment about Merleau-Ponty is in Polanyi's January 27, 1963 letter (Box 16, Folder 1) to Grene:

Got your SOS about Merleau-Ponty. I have a theory about what went awry with these people. They discovered an epistemology, or at least sighted it on a distant horizon, which represented knowledge as shaped by the knower, and instead of worrying about the jeopardy of truth, turned a blind eye on this, while fascinated by the jeopardy of man as shaper of his own knowledge. Our business is to restrain this extravagance by a theory of knowledge which implies a limited responsibility of the knower and thereby restricts the range of his self determination. This will enrich the conception of P.K. by feeding it with the more violent existential passions discovered by our age. You know that I always felt that my ideas are lacking in vital concern. I think they can be given a deeper foundation by grafting them on outcroppings of existentialism.

⁴⁹See, for example, KK, 202-225. I have tried to lay out Grene's work here in "Comprehension and the 'Comprehensive Entity': Polanyi's Theory of Tacit Knowing and Its Metaphysical Implications" cited above.

⁵⁰See the footnote discussion on "TK," 164.

⁵¹See my discussion of this element in Polanyi in "Polanyian Footnotes To 'From Biology To Consciousness To Morality'" (*TAD* 30:3 [2004-2005]: 23-25). Here I also try to show the way in which in the early sixties in KK, Grene, perhaps even more clearly than Polanyi, shows what acceptance of the critical and convivial nature of biology involves philosophically: "To know life is to comprehend comprehensive entities; to know knowing is to comprehend those particular achievements of living things which consist in their acts of comprehension. Mind is once more a natural reality, and nature once more both the medium and the object of mind's activity" (KK, 224). As I have noted above, Grene says in 2002 that she "still appreciates his [Polanyi's] dubbing epistemology, or philosophy of science, "ultrabiology" (PMG, 61). Although she does not say much, I think Grene very illuminatingly comments (in 2002) on one of her 1990 articles criticizing extreme "population thinking" as "pure nominalist" (PMG, 17); as noted above, she insists that she is a realist of the sort that her mentors Polanyi, Merleau-Ponty and the Gibsons are and the discussions of realism and anti-realism in contemporary philosophy of science are artificial debates that really are only about scientific realism.

⁵²This is an ambiguous but apparently important element of Grene's critique of Part IV of PK. She never says this but I speculate that late in her life (after spending forty years deeply immersed in philosophy of biology), she found many of the Part IV discussions of matters related to evolution to be overly "cluttered." That is, Polanyi's persistent attempts to show a parallelism between epistemological emergence and ontological emergence I suspect she came to believe were simply untenable. Because it is a motor driving much of the Part IV discussion, the discussion does not do justice to evolution, not to mention the fact that developments in science simply make this sort of account excessively mindful of parallels something most contemporary scientists cannot fathom. Because TD is a more circumspect book, I think Grene found it less "cluttered."

⁵³Andy Sanders interestingly argues ("On Reading Part IV of *Personal Knowledge*: A Finalistic or a Simple Vision?" *TAD* 30:1: 24-34) for a reading of the end of PK as "a modest speculative attempt to fulfill the requirements of a Gifford Lecturer" (24). He emphasizes Polanyi's emphasis on religious practice in other writings rather than metaphysical theorizing.

⁵⁴I speculate that Grene's early work on Kierkegaard and Heidegger (not to mention other writing on so-called existentialists) has influenced her on these points, although she has little good to say about either Kierkegaard or Heidegger.

⁵⁵This is rather close to what Grene herself said about Part IV in her 1958 response to Oakeshott's review. See the discussion of this response above.

⁵⁶Greene did make comments in 1977 in “TK” (168) (i.e., before the publication of Prosch’s MPCE) suggesting that the orientation of *Meaning* was a betrayal of the best of PK and other Polanyi philosophical writing. Her letters to Polanyi (written in the period in which the material that became *Meaning* was first drafted as articles and lectures) raise many questions with Polanyi about what seem to be his emerging ideas. One can link these early Greene comments to her reading of Polanyi’s ontological account.

⁵⁷This term she borrows from R. O. Kapp (another philosopher): “. . . the whole depending on the parts as conditions of its existence, but the parts existing as parts only as so constituted by the unifying principle of the whole. Thus in themselves, at least in living nature, all entities exist on a least two levels at once” (KK, 218).

⁵⁸As I hinted in a note above, I suspect that as Greene studied biology and understood evolution more deeply, she came to believe that the picture of things projected by Part IV of PK was one that paid too much attention to human beings in the larger family of nature; because of its focus on human beings, I suspect that Greene came to believe this was a picture that emphasized hierarchical stratification at the expense of dynamics.

⁵⁹Tihamér Margitay, ed. (Newcastle upon Tyne: Cambridge Scholars Press): 128-140.

⁶⁰Thomas A. Langford and William H. Poteat, eds. (Durham, NC: Duke University Press, 1968): 58-90.

⁶¹See *TAD* 26:3, 33:3, and *Polanyiana* 6:2.

⁶²See, for example, discussion on KK, 241 concerning operative principles in entities: “Comprehensive entities if they mirror our tacit knowing of them should display an analog of both of these properties. . . .”

⁶³See note 38 above for further discussion of Greene’s critique.

⁶⁴See her use of this term in “TK,” 170 and PMG, 221, but note that she is careful to distinguish her position in “TK” from what she regards as a degenerate version of “minding” in “Rylean behaviourism, let alone . . . some kind of ‘central-state materialism’” (“TK,” 170). “Minding” also emphasizes Greene’s emphasis upon the temporal, which she emphasizes in KK, as I discuss below.

⁶⁵In her recent responses to Anthony Perovich (PMG, 194-197) and David Rosenthal (PMG, 221-224), Greene very directly takes on the criticism that she neglects consciousness as a central feature of the human. She concedes that many organisms are “conscious” insofar as they are not asleep or dead, but she argues that “consciousness tells us nothing about a unique human condition, if such there be” (PMG, 194). Further, if one posits some special form of human consciousness like self-consciousness, she suggests that she does not “see how anything purely subjective or inward can tell me who I am, what kind of life it is that marks mine out as human” (PMG, 194). Her response also points out that in her view her opposition to the “consciousmongers” (PMG, 194) seems to be a lone voice in the wilderness but her views are grounded in her concept of the person which she draws primarily from Polanyi and Merleau-Ponty.

⁶⁶Especially is this the case given Polanyi’s own comment in the 1964 Torchbook Preface to PK: “Indwelling is also the instrument by which comprehensive entities are known throughout the world. It is from the logic of indwelling that I have derived in Part IV of this book, the conception of a stratified universe and the evolutionary panorama leading to the rise of man equipped with the logic of comprehension” (PK, x-xi).

⁶⁷Greene would agree Polanyi is not a phenomenologist but she certainly has a much richer understanding of this tradition than Prosch. Greene, it should be noted, argued (though perhaps not before the publication of MPCE) that Merleau-Ponty was not a phenomenologist; she distinguishes his views from Heidegger who she contends has nothing to say about embodiment. She had little positive to say about some other so-called phenomenologists (e.g., Husserl and Brentano). See her discussion in PT (67-85) of Merleau-Ponty’s being-in-the-world, his realistic account of perception and particularly his distance from “phenomenology” (85-87).

⁶⁸I am indebted to an reviewer of this essay for pointing out that Prosch’s views of phenomenology (as his *Genesis of Twentieth Century Philosophy* reflects) are likely strongly shaped by his teacher Richard

McKeon's typology describing four types of metaphysical paradigms. The diversity of phenomenology and the richness of Merleau-Ponty are poorly represented in McKeon's typology. More generally, I suspect that the reviewer is correct in suggesting that a more careful study of Prosch's *Genesis of Twentieth Century Philosophy* and McKeon's influence might better illumine Prosch's perspective on Polanyi.

⁶⁹A reviewer pointed out, Prosch perhaps confused or conflated phenomenology and phenomenalism.

⁷⁰See David Rutledge's excellent recent orientation to Poteat ("Willaim Poteat: The Primacy of the Person," *Appraisal* 7:2 [October 2008]: 31-37) for a discussion of Poteat's treatment of this theme.

⁷¹Kyle Takati's recent discussion in "Embodied Knowing: The Tacit Dimension in Johnson and Lakoff, and Merleau-Ponty" (*TAD* 36:2 [2009-2010]: 26-39 [see especially 35-37]) is a rich and fascinating one that treats some issues related to Polanyi's ontology and its connection with Merleau-Ponty's perspective. Takati argues for "Polanyi's 'enactive realism'" which is "a fusion of being-in-the-world with consequential commitments and that aim at levels of achievement—levels that include emergent comprehensions of the world, and their related commitments to emergent realities yet to be discovered" (36). He is certainly right that Grene picks up and emphasizes the achievements that living comprehensive entities make and that this is deeply connected to Polanyi's claim that some existents are "more real" than others and Polanyi's emphasis upon discovering richly real entities that must be recognized as having an emergent nature. Takati argues that Merleau-Ponty's realism "goes back to revealing the tacit modes of being-in-the-world" (36) but that in a certain sense Polanyi's realism does not simply reach "back" to the primacy of perception, but also look[s] forward to what our commitments demand as we expand tacit knowing's hermeneutic circle" (37). Perhaps Grene's last chapter in *KK* ("Time and Teleology") recognizes this futural emphasis in Polanyi's metaphysics, although I am not sure that she would see this a move "beyond" Merleau-Ponty. Takati intriguingly suggests "a new philosophy of embodiment may want to seriously consider the metaphysical status of embodied, enactive constructs and Polanyi's insights" (37). The yet unpublished paper "Of One Mind? Merleau-Ponty and Polanyi on the Reduction of Mind to Body" (given at the 2009 Polanyi Society annual meeting) by Charles Lowney (with Florentien Verhage), although not focused directly on Grene and Prosch is an outstanding essay that tries to tease out the similarities and differences between Polanyi and Merleau-Ponty. The essay does examine some of Polanyi's criticisms of Merleau-Ponty which Prosch apparently relies upon. The discussion is attentive to subtle matters linking and distinguishing epistemology and ontology, matters that I don't think Prosch clearly saw.

⁷²For a full discussion of the *Meaning* controversy and Prosch's MPCE see the discussion of MPCE in my *Political Science Reviewer* article "On Reading Polanyi and Reading About Polanyi's Philosophical Perspective: Notes on Secondary Sources" (203-233) cited above.

⁷³Briefly stated, Prosch argued that Polanyi intended to emphasize the ontological discontinuity between natural realities and what in Polanyi's later writing were referred to as the "transnatural" realities of art and religion. The latter classes of realities do not exist independent of the articulate system of a particular community of inquiry as do natural realities known in science and perception.

⁷⁴In the essay "Knowing and Being," Polanyi points out that "there is a close analogy between the elucidation of a comprehensive object and the mastering of a skill" (KB, 125). For Polanyi, the arts of knowing and doing are structurally akin and always are blended. This leads Polanyi to say, "it is apposite therefore to include skilful feats among comprehensive entities" (KB, 126). He acknowledges that most frequently we speak of "understanding a comprehensive object or situation and of mastering a skill," but he points out that we also are comfortable speaking of "grasping a subject or an art" (KB, 126). The way in which comprehension is always a skillful integration of elements Polanyi often treats by discussing knowing in connection with indwelling. He claims that "the structure of knowing, revealed by the limits of specifiability, thus fuses our subsidiary awareness of the particulars belonging to our subject matter with the cultural background of our knowing" (KB, 134). The knower's physical and mental habits or skills must coalesce in an achievement or performance and this performance makes possible—and indeed is—what a "comprehensive entity" is: "our subsidiary awareness of the particulars of a comprehensive entity is fused,

in our knowing of the entity, with our subsidiary awareness of our own bodily and cultural being” (KB, 134). Polanyi thus describes knowing as an indwelling—an activity of distributing our intentionality across a range of different particulars which must then be coordinated. He acknowledges that when the indwelt structure changes, the knower’s being changes. Knowing involves “a utilization of a framework for unfolding our understanding in accordance with the indications and standards imposed by the framework. But any particular indwelling is a particular form of mental existence. If an act of knowing affects our choice between alternative frameworks, or modifies the framework in which we dwell, it involves a change in our way of being” (KB, 134). In the 1964 “Preface to the Torchbook Edition” of PK, Polanyi says “Indwelling is being-in-the-world. Every act of tacit knowing shifts our existence, re-directing, contracting our participation in the world. Existentialism and phenomenology have studied such processes under other names. We must re-interpret such observations now in terms of the more concrete structure of tacit knowing” (PK, xi). These discussions clearly show that Polanyi did not think of a “comprehensive entity” as merely an external thing or a focal object to be sharply distinguished ontologically from the knowing subject. The theory of tacit knowing rejects the simple internal-external framework as adequate to represent human participation in the world. Edward Pols (“The Problem of Metaphysical Knowledge, *Intellect and Hope*, 58-90) suggests Polanyi has an embedded “metaphysical claim” in his contention that when the knower makes a commitment, the knower “too is a comprehensive entity and his cognitive act can therefore be understood as a level of reality making use of subsidiary levels.” (73). See also my extended discussion in “Comprehension and the ‘Comprehensive Entity’: Polanyi’s Theory of Tacit Knowing and Its Metaphysical Implications” (*TAD*, 33:3: 26-43).

⁷⁵Polanyi does suggest that all knowing involves participation, although the kind or degree of participation in scientific study differs from that found in knowing historical figures or works of art. Nevertheless, different kinds of participation do not warrant the conclusion that any knowing is unmediated. Prosch’s sharp distinction between the ontological status of realities known in perception and science and those known in the noosphere seems to me a distinction that comes close to affirming that perceptual and scientific knowledge are unmediated or less mediated than knowledge of other realities. Prosch slips into a preoccupation with the nature or character of what exists, and forgets or does not properly emphasize that even affirmations about this nature or character (i.e., existence) are themselves inferences held tacitly and with conviction by persons in a community.

⁷⁶This is a response to a question posed by William Poteat in a discussion of “The Creative Imagination” after presentation in the 1965 meeting of the Study Group on Foundations of Cultural Unity. See *Toward a Unity of Thought*, ed. Marjorie Grene, *Psychological Issues*, vol. vi, no. 2, monograph 22 (NY: International Universities Press, Inc., 1969): 77. Grene perhaps did in fact approve of this comment since she edited the material here!