

Tradition & Discovery

The Polanyi Society Periodical

Volume XLI

Number 1

2014-2015

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See p. 52 for information on submissions

The Polanyi Society gratefully acknowledges the support of Mercer University, Macon, GA, for the publication and mailing of *Tradition and Discovery*.

Tradition & Discovery is indexed selectively in *The Philosopher's Index* and *Religious and Theological Abstracts* and is included in the EBSCO online database of academic and research journals. *Tradition & Discovery* is listed in the Directory of Open Access Journals and is also available online at www.polanyisociety.org.

PREFACE

In this issue of *Tradition and Discovery*, we look both back to the past and ahead to the future. Looking back, this issue opens with a tribute to Richard Gelwick, who passed away on June 29, 2014. Eloquently written by two Society members who knew Richard well, Walter Gulick and Phil Mullins, the essay discusses some of the high points of Richard's career, emphasizing his efforts at promoting the work of Michael Polanyi and building the Polanyi Society. Following is Richard's last paper, "From Tacit Knowing to a Theory of Faith," which was originally delivered at the June 2012 Loyola Conference. In this essay, Gelwick recounts how he came to see that Polanyi's account of tacit knowing provides a basis for recovering the expansive nature of faith. We had been encouraging Richard to prepare this paper for publication and so Walter Gulick and Phil Mullins edited it after Richard's death.

The next part of the issue looks ahead to the 2014 Annual Meeting, to be held in San Diego on November 21-22 in conjunction with the American Academy of Religion and Society of Biblical Literature. This year's meeting will consist of three sessions, all devoted to the work of Charles Taylor, who will be meeting with us. For the latest details on the schedule, see p. 3 of this issue. In order to whet our appetite for that meeting, John Apczynski has written an article exploring the relationships between the work of Polanyi and Taylor, both of whom call attention to "the hidden assumptions shaping our understanding of reality," thereby challenging reigning philosophical perspectives. Apczynski also demonstrates how their projects converge and complement one another. Phil Mullins has also provided a review of Taylor's recent book, *Dilemmas and Connections, Selected Essays*, a collection that serves as a concise overview of many of Taylor's main ideas.

Also in this issue, Stephen Turner contributes an extended and careful review of Neil Gascoigne and Tim Thornton's *Tacit Knowledge*. News and Notes, contains information about recent publications that will be of interest to Society members, as well as a call for papers to an upcoming conference in the UK.

News and Notes contains information on publications of interest and a call for papers. It is followed by a report on this summer's Poteat Conference, a report that also looks ahead to what may yet be. Readers will want to check it out and also visit the new Poteat website: <http://whpoteat.org>.

Finally, in keeping with the traditions of the seemingly ubiquitous fall membership drives, I remind Society members to renew their membership this academic year. *It is very important to keep up to date on this so that we can do more as a Society with the journal, annual meeting, and other projects.* For example, we currently mail out almost 250 copies of each issue, but usually have only about 90 memberships that are up to date. Think about what we could do if we were all current!

To make it easy, we are, as always, including a membership reply form as an insert in this issue. To make it even easier, we are making the PayPal option available for everyone's use, both domestic U.S. and foreign. Membership dues, as well as donations to the Endowment and/or Travel Funds are, as always, tax-deductible (in the U.S.). Your contributions make possible the publication of this journal, the Annual meeting, and other endeavors. More details can be found in News and Notes.

Paul Lewis

PS: Remember to send notices of recent publications related to Polanyi or other noteworthy achievements to me (lewis_pa@mercer.edu) so that we can publicize them in News and Notes.

NEWS AND NOTES

It's Membership Renewal Time

It is now time for all of us to renew our membership as the membership year follows the academic year.

Rates are: \$35 regular
 \$25 library
 \$15 student

Residents of the United States can do so either by completing the membership form that is inserted in this issue, including a check for U.S. funds made payable to the Polanyi Society, and mailing it to:

Charles Lowney
Polanyi Society Treasurer
Baker Hall 124
Washington and Lee University
Lexington, VA 24450.

or by using a credit card through PayPal
(<http://polanysociety.net/register/join-renew.php>.)

Those living outside the U.S. must use PayPal.

Many of those who read *Tradition and Discovery* and/or participate in Society-sponsored events have also been generous in the past by giving above and beyond their dues to the Endowment or Travel Funds, as well as to other special events such as the Loyola conferences. Such donations can be made online. All donations are tax-deductable in the U.S.

Endowment and Travel Funds Challenge

As in recent years, the Polanyi Society will sponsor a year-end challenge match to build the Endowment (presently just more than \$12,000) and the Travel Fund. The Endowment supports a variety of Society projects and the Travel Fund provides limited travel support for students and young scholars to attend Society functions. We have donors willing to match the first \$1000 of gifts sent to Charles Lowney, Treasurer (Department of Philosophy, Washington and Lee University, Lexington, VA 24450) or made through PayPal.

Recent Publications of Interest

Zhenhua Yu, a member of the Polanyi Society Board of Directors, published "Epistemology: End or Transformation?" in the French journal *Intellectica* 60:2 (2013), 1-9.

Esther Meek also reviews Gascoigne and Thornton's *Tacit Knowledge* in the on-line journal, *Notre Dame Philosophical Review* of 11 November 2013.

An entire issue of *Philosophia Scientiae* (17:3, 2013) is devoted to articles by and on Harry Collins, whose book, *Tacit and Explicit Knowledge*, was the subject of reviews by Stephen Henry and Charles Lowney in TAD 38:1 (2011-2012). Collins's article "Ships that Pass in the Night: Tacit Knowledge in Psychology and Sociology" (3-22) provides a dialogue between Collins and psychologist Arthur Reber (who gave a plenary address at the 1991 Kent State conference). Collins's "Refining the Tacit" (101-128) contains a response to his critics, including Stephen Turner.

The March 2014 issue of *Appraisal* includes the following articles: Wendy Hamblet, "Nature and Human Dwelling;" James Beauregard, "Science and Authority: Polanyi's General and Specific Authority in Current Science;" Mouhiba Jamoussi, "The Arab Spring: The New Arab Identity;" Shlomo Cohen, "Human Existence as Existential Paradox;" and Sietske Dijkstra, "Reaching Out for Skilful Performance: The Importance of Tacit Knowing in the Handling of Domestic Violence."

Call for Papers for U.K. Conference

A conference on British Contributions to Personalist Philosophy will be held March 18-19, 2015 at Oriol College, Oxford. Complete papers or abstract (500 wds) should be sent asap or by Oct. 31 to: secretary@britishpersonalistforum.org.uk.

Full details can be found at www.britishpersonalistforum.org.uk.

Polanyi Society Annual Meeting Features Presence of Charles Taylor

The 2014 annual meeting will take place November 21 and 22 in San Diego, in conjunction with the annual meeting of the American Academy of Religion. The talks and papers at this year's meeting will focus on the thought of the acclaimed Canadian philosopher Charles Taylor, whose religious, philosophical, social and political views intersect in intriguing ways with the thought of Michael Polanyi. Professor Emeritus at McGill University, Taylor will also receive the 2014 winner of the Martin Marty Award for the Public Understanding of Religion at the AAR. Visit the Polanyi Society web site (polanysisociety.org) after November 1, 2104 for copies of papers given in the first and third sessions listed below. **PLEASE NOTE THAT THE LOCATIONS FOR SOME SESSIONS HAVE BEEN RECENTLY CHANGED. THE LOCATIONS PROVIDED IN THE PRINTED PROGRAM IN THE OCTOBER 2014 ISSUE OF TRADITION AND DISCOVERY ARE INCORRECT.**

Friday, November 21, 4:00 to 6:00 PM, Room 24C, San Diego Convention Center

Walter Gulick, Montana State University Billings, Presiding

Polanyi and Taylor on How the Modern Social Imaginary Might Best Be Reshaped

Richard Haney, Independent Scholar

Polanyi, MacIntyre and Taylor on Authentic and Inauthentic Moral Traditions

Matthew Sandwich, Baylor University

Disclosing the Unspoken as a Locus of Meaning: Taylor and Polanyi on the Political role of the Tacit

Josée Boldoc, Carleton University

Elements of an Enchanted Naturalism:

Towards a Postmetaphysical Christian Theology from Polanyi to Hegel

David Stewart, Luther Seminary

Saturday, November 22, 9:00 to 11:30 AM, Coronado DE, Grand Hyatt Hotel

Charles Taylor, McGill University, will speak on tacit knowing in its relation to social theory

Responses:

Phil Mullins, Missouri Western State University

David Rutledge, Furman University

Andrew Grosso, Nashotah House Theological Seminary

General Discussion: Phil Mullins, Missouri Western State University, Presiding

Business Meeting (11:15)

Saturday, November 22, 4:00 to 6:00 PM, Torrey Pines Room 2, Marriott Marquis

David Rutledge, Furman University, Presiding

The Emergence of Authenticity

Charles Lowney, Washington and Lee University

Polanyi's Revolutionary Imaginary

Jon Fennell, Hillsdale University

Taylor and Polanyi on Moral Sources and Social Systems

Diane Yeager, Georgetown University

Response:

Charles Taylor

Report to Polanyi Society on Poteat Conference

The Polanyi Society sponsored the conference, “The Primacy of Persons: The Legacy of William H. Poteat” at Yale University June 6-8, 2014 to acknowledge, celebrate, and make better known and more accessible Poteat’s work. 35 persons attended the conference, two of whom came from Europe and one from Canada. There were 21 formal presentations plus sessions that were devoted to sharing of memories, anecdotes, and musings about Poteat, his teaching strategies, and implications posed by the conference. Thanks to the generosity of several participants, the entire conference was recorded by a professional videographer for video playback and is presently being edited.

The conference has so far resulted in two products. The first is a website, <http://whpoteat.org>, which features biographical and academic information about Poteat, links to articles, a detailed description of the conference, links to all papers presented at the conference, and, once editing is complete, a video of the complete conference. The second product is a Wikipedia article, “William H. Poteat.” Other articles are being developed. Also under consideration are publications, blogs, and future conferences.

The initial reason for holding the conference at Yale was to acknowledge and publicly introduce the archive of Poteat’s letters, lectures, and unpublished papers, which continues to grow as more contributions are received. In addition, a bronze sculpture was given to Yale Divinity School in Poteat’s honor. The sculpture, “From Catastrophe to Rebirth,” is by world-renowned Greek sculptor Evangelos Moustákas, a close friend of Poteat. Along with the sculpture, a stunning color print of Orpheus and Euridice by Moustákas and a beautiful art poster of haiku poetry by Moustákas’s wife, Zoe Sabina, herself a poet of international stature, were given to YDS in honor of Poteat.

The conference planning committee, comprising Dale Cannon, James Clement van Pelt, and Walter Mead, wishes to thank several people for their roles in the conference, especially the Polanyi Society for its official sponsorship of the conference. The Polanyi Society was represented at the conference by its President, David Rutledge, who presented the opening introduction and later gave two presentations in a special section devoted to the Poteat-Polanyi connection. The planning committee also expresses its gratitude to: donors who covered the deposit; donors who contributed canceled registration fees; donors who contributed to the artwork; Betty Eidenier, who coordinated the campaign for the artwork; Kieran Cashell and his wife Rachel, who set up and now administer the Poteat website; Yale Divinity School Special Collections Librarian Professor Martha Smalley and Walter Mead, who have worked to put the archive together; Yale Divinity School and Yale Conference Services for their hospitality and support; and finally the presenters and participants who, singly and together, made the conference an unforgettable experience of convivial scholarship at its best and deserve our deep gratitude for creating a treasure trove for future Poteat scholarship.

Polanyi Society members and others are encouraged to visit the <http://whpoteat.org> website, download papers of interest, as well as view and listen to the video recordings of presentations and discussions soon to be available there.

Dale Cannon, James Clement van Pelt, and Wally Mead

Homage to Richard Gelwick, 1931-2014

Walter Gulick and Phil Mullins

Key words: Michael Polanyi, Richard Gelwick, heuristic philosophy

ABSTRACT

This essay celebrates the life and achievements of Richard Gelwick, the man perhaps most responsible for not only recognizing the importance of the thought of Michael Polanyi, but also for communicating its significance and giving it institutional continuity.

The time has come to honor with gratitude the life and accomplishments of the man who, perhaps more than any other person, insured that the significance of the thought of Michael Polanyi would not be forgotten. Richard Gelwick died in hospice care on June 29, 2014; he was surrounded by his family. A memorial service was held on the morning of July 12 in Brunswick, Maine and was preceded by an evening celebration of Gelwick's life in his nearby hometown of Harpswell. Phil Mullins represented the Polanyi Society at these occasions.

Richard Gelwick is due commendation for many things. He early recognized the importance of Polanyi's work as setting forth a philosophy that spoke with power to personal and social ailments of late modernity. In 1962 and 1963, Gelwick collected and made available on microfilm Polanyi's scattered non-scientific writings. Based on this work, he wrote the first dissertation, the first book on Polanyi's thought, and created the first bibliography of Polanyi's non-scientific publications. The bibliography was published in Poteat and Langford's 1968 festschrift, *Intellect and Hope*. It was the tap root that nurtured the Polanyi studies of early Polanyi scholars like William T. Scott and Harry Prosch. Although other books introducing and commenting on Polanyi's thought have subsequently been published, Gelwick's *The Way of Discovery* (1977) remains an important book; it has been translated into Japanese and was republished in 2004. Gelwick played a large role in establishing the organization that eventually became the Polanyi Society. He served as the Society's General Coordinator from 1978 to 1999 and from 1978 to 1991 edited the Society's early publications that eventually became *Tradition and Discovery*. Gelwick's own creative Polanyi-based thought, articulated over the course of 50 years, amply demonstrates that he has been one of the most important interpreters of Polanyi's achievements. To better appreciate all of Gelwick's accomplishments, we review below his remarkable career.

Richard Gelwick was born on March 9, 1931 in Bristow, Oklahoma. At age 14, he had already chosen ministry as a path "to build peace in the hearts and minds of persons in the 'atomic age.'" He graduated with a B.A. from Southern Methodist College in 1952 and with a M.Div. from Yale in 1956. During an intern year in campus ministry at Temple University, Richard met his wife of 59 years, Dr. Beverly Ann Prosser Gelwick. After graduating from Yale, Gelwick served as an Assistant Professor of Religion at Washington and Lee University from 1956 to 1958. There he became involved in the civil rights movement, dissuading churches from allowing their facilities to be used as a means of escaping school desegregation. He was ordained as a Methodist minister in 1957 and transferred his ministerial standing to the United Church of Christ in 1963. From 1958 to 1960, he was Director of Religious Activities at Oberlin College. "There the challenge of holding together faith and reason, religion and science became more focal as many questioned the relevance of religious faith in 'a world come of age,' i.e., enlightened. That challenge led me to Berkeley and a doctor of theology degree at the Pacific School of Religion."²

At Yale, Gelwick heard from his primary mentor, H. Richard Niebuhr, about the importance of not getting stuck in one's own discipline. Niebuhr mentioned Polanyi as a good example of one who had creatively left his field of science and gained insights into the relation between science and religion and into social ethics. At Pacific School of Religion in Berkeley, where Gelwick went to work on a Th.D., Charles McCoy, himself a Polanyi scholar, became his primary doctoral mentor. Polanyi was invited to one of McCoy's seminars in conjunction with his trip to give the McEnerney Lectures at the University of California in February, 1962 (lectures that Gelwick attended). In the seminar, Polanyi discussed his article, "Faith and Reason," and Gelwick was impressed by his evident authority in attacking those who dismissed the importance of faith in all thinking. As Mullins reports,

After the class ended, Gelwick asked Polanyi if anyone had written a book or an overview of his thought on science, faith and reason and if it would be necessary to learn Hungarian to study his philosophical thought. Polanyi said no one had yet written any such study and most of his work in this area is in English. In late spring, Gelwick approached Polanyi about doing a dissertation using Polanyi's philosophical ideas, but he discovered that Polanyi himself did not know a great deal about the scope of his own non-scientific writing. This led to the project of collecting Polanyi's non-scientific writing, a project that was possible because Polanyi was in residence at the Center for Advanced Study in the Behavioral Sciences at nearby Stanford University in the fall of 1962.³

Polanyi brought Gelwick a box of about 21 of his papers, but it was soon evident that this was but a small portion of what Polanyi had produced. Gelwick notes that "When I began my research on Polanyi's theory of knowledge and its implications for theology, I found there was almost nothing in journals or books on his social and philosophical thought or his theory of knowledge. There was no introduction to Michael Polanyi except his own writings."⁴ Meeting with Polanyi at Stanford provided Gelwick with the springboard to launch an intensive search for what Polanyi had published. The wonderful resources of the library at the University of California, Berkeley, were of immeasurable assistance to Gelwick. Eventually, he collected over 120 social, political and philosophical papers, a few never published, and got the library at the Pacific School of Religion to make a microfilm of them all. One of Gelwick's last scholarly actions was to explain to Phil Mullins his process of gathering this collection of Polanyi materials; the contents of his microfilm are now available through the Polanyi Society web site (<http://www.polanyisociety.org>).

Gelwick not only gathered Polanyi's works; he indwelt their contents and produced the first dissertation on Polanyi's theory of knowledge and its implications for Christian theology. The 1965 dissertation, "*Credere Aude: Michael Polanyi's Theory of Knowledge And Its Implications For Christian Theology*," served as a foundation for the first book on Polanyi's thought, *The Way of Discovery*, published by Oxford in 1977 and republished by Wipf and Stock in 2004. Gelwick notes that in publishing these two works, "I felt . . . like the writer of the Gospel according to Mark or any other writer being the first one to provide a biographical interpretation of a significant figure. It's a wilderness and especially with such a polymath with several careers like Michael Polanyi."⁵

After year-long stints as a lecturer at PSR and as an assistant professor at Chapman College, Gelwick became the chair of the Religion and Philosophy Program at Stephens College in Missouri from 1967 to 1988. During this period he visited Polanyi a number of times, serving as a valued consultant on various projects, including the writing of *Meaning*. While in England, he had academic assignments at the Universities of Cambridge and Oxford.⁶ His career took a somewhat different turn when he later followed Beverly Gelwick to her university counseling appointment in New Hampshire: he eventually became the chair of the Department of Medical Ethics and Humanities at the College of Osteopathic Medicine at the University of New England from 1988 to 1998. After his retirement as Professor Emeritus, he taught courses at Bangor Theological Seminary in Maine. The variety of assignments at different types of in-

stitutions at which he taught, first as chaplain and then professor, suggest that he became something of a polymath himself, at least insofar as examining values from a variety of perspectives is concerned.⁷ In his passion for the social good and in his willingness to take on different sorts of assignments, Gelwick was a disciple of Polanyi, enjoying the lure and satisfaction of discovery.

In mentioning discovery, we arrive at the crux of Gelwick's understanding of Polanyi, already suggested by the title of his book. "The nature of discovery is the root idea that illuminates and motivates Polanyi's philosophy."⁸ Gelwick suggests that the most encompassing term for Polanyi's approach to philosophy is not William Scott's term, a "Gestalt philosophy," nor is it best to focus on Polanyi's terms, "tacit knowing" or "post-critical philosophy," important as those terms are. In Gelwick's view, they do not comprehensively gather up the decisive character of Polanyi's thought, nor do they suggest the range of its implications. Gelwick's candidate to designate the full range of Polanyi's thought is that it is "a heuristic philosophy," one dedicated to the increase of knowledge.⁹

Gelwick's interpretation of the comprehensive sweep of Polanyi's thought can be seen as a variation on the theme of "the one and the many." All thinking is carried out within the one structure of tacit knowing: subsidiaries bearing on a focal target. However, there are "many ways of knowing reality and many levels to our understanding of it. These differences make for a variety of studies and investigations."¹⁰ One of the important existential differences between scientific knowing and knowing in art, religion, and morality is that the latter "carry us away" to a degree not found in scientific knowing. Knowing in art and religion involves a deeper—or at least a different—kind of participation. It is clear that Polanyi understands science, art, and religion to be aspects of reality, but what has become an ongoing point of contention within the community of Polanyi interpreters is how best to understand the ontological nature of these realities. In a review of *The Way of Discovery*, Harry Prosch contended that Polanyi distinguishes the independent ontological status of science from the imagination-based status of religion and theology. Gelwick protested in an AAR Consultation in 1980 that Prosch thereby undermines one of Polanyi's signal contributions, his demonstration that our knowledge in both science and religion is of independent realities which we approach through faith. "The consequence of Prosch's view is extremely serious. It would mean that, while Polanyi restored the role of faith in all knowing, he had done it only to believe in God as a figment in our imagination."¹¹ Prosch replies that both science and religion "fit Polanyi's often expressed definition of reality as that from which we expect indeterminate properties to arise in the future, properties of which we have not yet dreamed. These properties have, as it were, a life and development of their own which we can neither control nor anticipate; they are not products of our subjective whims or fancies."¹² From the time of his earliest reflections, Polanyi understood the power of ideas in society. What seems at stake in the Gelwick-Prosch debate as expressed in the *Zygon* articles is what ontological status of referents is required to grant ideas authentic moral power.

In some of his later theological reflection, Gelwick seems closer to Prosch's point of view, as he suggests he does not believe in a supernatural God or the effectiveness of intercessory prayer.¹³ This seems to leave room for Gelwick to understand God as a culturally grounded, independent form of being, understood through imagination, a notion comparable to such other aspects of Polanyi's firmament of values as truth, goodness, and beauty. In this regard, Gelwick follows Polanyi, who writes, "God cannot be observed, any more than truth or beauty can be observed. He exists in the sense that He is to be worshipped and obeyed, but not otherwise; not as a fact—any more than truth, beauty or justice exist as facts."¹⁴

Gelwick contends that Polanyi's heuristic philosophy is dynamic so that one can never rest assured that one has found final answers. For the "commitments that form our explorations are diverse. A society of explorers is not just a society of theists. It is a society of seekers of truth. . . Reality as Polanyi saw it needs the contributions of all as we approach the reality that always exceeds our final grasp."¹⁵ Although Gelwick affirms the importance of many perspectives as avenues for increasing knowledge, he is most

comfortable writing from a theological point of view that seeks to overcome division and divisiveness. “When all religions are seen as all involving faith as a form of relying on and attending to in tacit knowing, we provide common ground for meeting differences. Instead of looking first at what teachings are believed, the structure of tacit knowing suggests that we look at how we each came to those beliefs on which we rely.”¹⁶ As his accompanying article displays in more detail, he wants to show that tacit knowing is an expression of faith. Gelwick suggests that it is important to understand the development of Polanyi’s perspective, moving from his early epistemologically-oriented books to his mature epistemological books, *The Tacit Dimension* and *Meaning*, which expand further tacit knowing’s fundamental role in all natural and cultural life.

Let us finally note again that Richard Gelwick was an institution builder who understood that to promote interest in Michael Polanyi’s thought required joining with others to create an organization that promoted scholarship and teaching. In the early seventies, he was involved in the conferences and programs that eventually led to the establishment of the Polanyi Society. Gelwick served as the chief officer of the Society for an incredible 21 years. He edited not only the regular publications of the Society for many years, but also, when nobody else rose to the occasion, the 900 pages of proceedings from the 1991 Kent State Polanyi Conference, which was published as *From Polanyi to the 21st Century*. He served as one of the Society’s primary links in the sixties, seventies and eighties with the British Polanyi group, Convivium, and, in the early nineties, with the Hungarian Polanyi group, the Michael Polanyi Liberal Philosophical Association. He was integral to the process of reorganizing the Society in the late nineties as an official non-profit group and he had a hand in recruiting many of those who have served on the Polanyi Society Board of Directors in the last 14 years.

Richard Gelwick appreciated Polanyi’s affirmation of the Pauline scheme of redemption, and indeed his faith in the significance of Polanyi’s philosophy and his consequent expression of that significance can be seen as a Pauline act of grace that has benefitted all of us. It is not clear what degree of recognition would be accorded Polanyi now without Gelwick’s pioneering work. Gelwick himself is to be honored not just for that work; he will be fondly remembered as a good man of passion and grace, of enthusiasm and support, a friend to many. In honor of what his life represents, the University of Houston Hobby Center for Public Policy is setting up an endowed annual lecture on ethics and public policy named the Richard L. Gelwick Lecture. Anyone interested in making a tax deductible donation to this new program can send a check to Ellen Happe Phillips at the following address:

The University of Houston Hobby Center for Public Policy
Dr. Richard Lee Gelwick Endowment
c/o Ellen Happe Phillips,
Chief Advancement Officer
University of Houston
402 Agnes Arnold Hall, Rm 644 AH
Houston, TX 77204

Donations honoring Gelwick’s many achievements can, of course, also be made in Gelwick’s name to the Polanyi Society. At the upcoming November 2014 meeting of the Polanyi Society Board of Directors there will be discussion of establishing the Gelwick Scholarship for Young Scholars.

In conclusion, Gelwick’s part in the vast saga of unfolding existence is nicely suggested by his eloquent recounting of Polanyi’s vision of anthropogenesis:

Polanyi’s work had provided a significant way of seeing that the structure of tacit knowing provided for science and religion a coherent way of understanding life from matter to energy, living cells, primitive forms of purposive activity, and finally to the

human person. This understanding saw in Polanyi at least two renewing philosophical principles for theology. One was the fiduciary basis of all knowing that recovered a common ground for scientific and theological dialogue. The other was the calling of the person and society to seek the truth, explore the universe with its potential meanings, and state their findings. In both of these philosophical reformations, Polanyi was reopening a panorama of inquiry and of achievement of meanings closed down by the influence of the objectivist ideal of knowing.¹⁷

Thank you, Richard, for the role you played in the cosmic drama.

ENDNOTES

¹Richard Gelwick, email to Phil Mullins and Martin Moleski, sent June 6, 2008, p. 1.

²Ibid.

³Phil Mullins, "An Introduction to the Gelwick Microfilm," Section B, on-line at the Polanyi Society web site, (<https://www.missouriwestern.edu/orgs/polanyi/essays.htm>).

⁴Gelwick, quoted in "Introduction," Section B.

⁵Ibid.

⁶"Beside working with Polanyi himself, my work with him led to a year with Arthur Peacock, biochemist and theologian at Oxford and Cambridge and T. F. Torrance at Edinburgh, student of Barth and Einstein" (Gelwick, email to Mullins and Moleski, June 6, 2008, p. 2).

⁷"While I have taught at 9 institutions including undergraduate, seminary and medical school, each has allowed me to sustain attention to the way knowing shapes our relation to the world" (Gelwick, Ibid., pp. 1-2).

⁸Richard Gelwick, *The Way of Discovery: An Introduction to the Thought of Michael Polanyi* (New York: Oxford University Press, 1977), 84.

⁹Ibid. Elsewhere, Gelwick observes, "Everyone admires discovery, yet few have studied it, and almost no one has seen in it the organizing point for a whole view of the world. Such a view is developed by Polanyi" (*Discovery*, xii).

¹⁰Gelwick, *Discovery*, 100.

¹¹Richard Gelwick, "Science and Reality, Religion and God: A Reply to Harry Prosch," *Zygon* 17/1 (March 1982): 24.

¹²Harry Prosch, "Polanyi's View of Religion in *Personal Knowledge*: A Response to Richard Gelwick," *Zygon* 17/1 (March, 1982): 41.

¹³See Richard Gelwick, "Michael Polanyi's Search for Truth: Michael Polanyi's Daring Epistemology and the Hunger for Teleology," *Zygon* 40/1 (March 2005): 75, n. 5. This point is also made in Gelwick's final essay, published in this issue of *Tradition and Discovery*, starting on the next page.

¹⁴Michael Polanyi, *Personal Knowledge* (New York: Harper Torchbooks, 1964), 279.

¹⁵Gelwick, "Polanyi's Search for Truth," 72.

¹⁶Richard Gelwick, "Notes toward Understanding the Hungarian Roots of Polanyi's Heuristic Philosophy of Religion," *Tradition and Discovery* 32/3 (2005-2006): 32.

¹⁷Gelwick, "Polanyi's Search for Truth," 64.

From Tacit Knowing to a Theory of Faith¹

Richard L. Gelwick

Key words: Michael Polanyi, tacit knowing, a theory of faith

ABSTRACT

Both Polanyi and many of his interpreters saw the implications of tacit knowing for restoring the Augustinian principle that faith precedes understanding. Polanyi's contribution to the rediscovery of the essential role of faith in the achievement of knowledge has, however, had a limited impact in science, philosophy, and in Christian theology. Polanyi's epistemological contribution, nevertheless, is much more than a restoration and a reformulation of tradition. Tacit knowing provides a new vehicle for deeper interpersonal understanding.

This essay is a beginning attempt to propose how tacit knowing provides a theory of faith and why a new theory is now needed. Just as process philosophy changes metaphysics, tacit knowing changes epistemology. Just as a change in metaphysics reorients concepts, language, perspective, and worldview, tacit knowing affects basic terms and worldview. One of these changes is to provide a new way of discussing the relation between faith as trust or *fides qua creditur* and faith as a set of beliefs or *fides quae creditur* so that faith is replaced by the tacit dimension. A second change then is to widen the range of faith from a religious framework to the total framework of knowing or epistemology. A third change is to coordinate and integrate the vast contributions of evolutionary biology and neuroscience into the general epistemology of our age. These changes are all nascent in Polanyi's writing, but await an adequate theoretical development as a theory of faith.

1. Polanyi's epistemology developed from his experience over his lifetime and led to his theory of tacit knowing, the central principle of his philosophy. His four major books show a development toward tacit knowing and then an application to the achievement of meaning in society.

- a. His first book length treatment of the epistemological problem of our time was in *Science, Faith and Society* in 1946. The book is what I call his inaugural address for his epistemological career. Within this elegant discussion, many of the primary notions that will later flower into tacit knowing are present. Chief among his discussions are the fiduciary components in traditional authority, a community of inquirers, apprenticeship, intuition, and the process of scientific discovery. Guiding Polanyi's argument for political and intellectual freedom is the role of faith in guiding us toward finding and serving the truth. He speaks passionately for a free society guided by commitment to transcendent ideals. (Polanyi once told me that T.S. Eliot said that he thought that *Science, Faith and Society* read with the excitement of a novel.) In this book, Polanyi has not yet found the heart of his epistemology: how a society confused and often dominated by a mistaken understanding of science can be reformed through a new, improved theory of knowledge.
- b. Freed from teaching duties, Polanyi produced over a number of years many articles, radio addresses, and lectures (including the Gifford Lectures of 1951-52) that culminated in the publication of *Personal Knowledge* in 1958. The problems raised in *Science, Faith and Society* are approached with the general thesis that all knowledge from the most exact sciences to religions and worldviews is personal and rooted in tacit components and coefficients. *Personal Knowledge* is a panoramic laboratory of analysis and demonstration of the evidence for the tacit dimension in Polanyi's epis-

temology. Here Polanyi boldly aligns his fundamental findings from across the academic fields with the principle of the Christian traditions that faith precedes understanding and also that growth of knowledge and discovery are like the Pauline paradigm of grace and faith (*PK*, 266, 285). *Personal Knowledge* earned for Polanyi an important reputation in universities, professional societies, and international conferences; he received visiting professorships and appointments in advanced studies groups such as the Center For Advanced Studies at Stanford University. He chaired grant-funded programs such as the several conferences sponsored by the Study Group on the Foundations of Cultural Unity and the Study Group on the Unity of Knowledge. As Polanyi lectured across the world, he kept working and trying to condense into theoretical simplicity his driving insights into the fiduciary nature of knowing that is rooted in our personal and embodied being in the world.

- c. This desired goal of theoretical simplicity was achieved with the Terry Lectures at Yale in 1962 and published later in 1966 after many lectureships and revisions. In *The Tacit Dimension*, Polanyi presents the theory of his epistemology and briefly applies it to the grand crisis of culture. Compared with the over four hundred pages of *Personal Knowledge*, *The Tacit Dimension's* ninety-two pages seem incredibly concise. The point, however, is that Polanyi sets forth here with clarity and evidence the far-reaching principle that makes possible human knowing. The principle is tacit knowing which consists of the way we rely subsidiarily upon clues in order to attend to a focal awareness. This principle can explain the universe of human knowing and judgment by emergence through biological and cultural evolution to the development of societies that now struggle for truth, freedom, and justice. Strikingly, Polanyi consistently maintained that faith precedes understanding and is thus best understood in terms of tacit knowing; this is especially important for a theory of faith, as I will later argue.
- d. After the publication of *The Tacit Dimension*, Polanyi began the task of bringing together his epistemological discovery with its relation to his driving concern for a free society and human responsibility. To the crisis of modern culture, rooted in a mistaken, powerful, and intellectually attractive cultural bifurcation of the knower and the known, the tacit dimension is applied more explicitly as a principle and remedy. Though hindered by his age, Polanyi managed to produce a series of six papers on the subject of meaning that would become the basis of his final book, *Meaning*. The term “meaning” itself tells what tacit knowing leads us to find. Meaning is achieved through the deliberate and surprising acts of ourselves in cumulative cultures arising out of a long history of evolution and human striving. At our current stage of history, we are faced with destructive influences from the pervasive disease of the objective ideal of knowledge that denies the tacit dimension essential to human knowing and flourishing. Professor Harry Prosch, one of the members of the conference on “The Crisis of Culture” in 1972 sponsored by the Consortium for Higher Education Religion Studies in Dayton, Ohio, was asked by Polanyi to coauthor the book. In 1973-74 during a sabbatical at Cambridge, I also worked with Polanyi on Prosch’s final draft of *Meaning*. *Meaning* expands further tacit knowing’s fundamental role in all cultural life. Prosch, following Polanyi’s guidance, emphasizes intellectual freedom and a free society as essential for the long term nurture of human knowing and responsible action. The application of tacit knowing to major domains of human knowing is demonstrated again, but a new step is made by focusing on the way tacit knowing illuminates the achievement of meaning from self-centered integrations of subsidiary clues to a focal target as in a scientific discovery to the self-giving integrations of subsidiary clues to a focal target as in metaphors, art, and religious frameworks. Here Polanyi adds a new feature to tacit knowing. In perception and the physical sciences, the clues or subsidiaries are of little interest except insofar as they contribute to what is focused upon. In poetry, drama, painting, myth, and religion the self-involving subsidiaries are of more intrinsic interest than the focal target to which they contribute. This difference between the intrinsic interest of the subsidiaries

between science and poetry, myth and religion clarifies the common ground of tacit knowing in all cognition but indicates their differences.

2. Polanyi's popularity across the world promised at first a possible rethinking of the role of faith in knowing. Those impacted, however, mainly took Polanyi to be important because he was a renowned scientist challenging the dominant view of authoritative and reliable knowing and claiming a place for personal judgment and religious faith in all knowing. This view of Polanyi was based mostly on Polanyi's *Science, Faith and Society* and *Personal Knowledge*. It does not follow through Polanyi's last two epistemological works. Consequently, tacit knowing is usually not sufficiently incorporated, mistakenly assuming it is basically another version of the earlier works.

3. After finishing my dissertation using Polanyi's thought at Pacific School of Religion in 1965 ("*Credere Aude: Michael Polanyi's Theory of Knowledge And Its Implications For Christian Theology*"), I anticipated that as Polanyi's work became more widely known in theology there would be significant notice and impact. In the spring of 1965, I published my first journal article on Polanyi, "Michael Polanyi—Modern Reformer" in *Religion in Life*, and I received almost immediately a complimentary letter from Ian Barbour with a request for more papers if I had any. Barbour did, in his magisterial works on science and religion, often take note of Polanyi's thought on the human element in science and the roles of community and tradition. In 1970, Langdon Gilkey, in his book *Religion and the Scientific Future*, went further than Barbour (in *Issues in Science and Religion*) in making through Polanyi and others a case for the religious dimension of ontological ultimacy in science (40, *et passim*). In 1980, Thomas Torrance and a conference of theologians and scientists produced a book of seven essays on Polanyi's "integrative way of thinking which heals the cultural split between science, the arts and theology and brings to light a gradient of meaning rising through them all to the higher intangible levels of reality" (see the book cover).

4. The Polanyi Society began with a large number of persons in the fields of religion and philosophy of religion meeting annually at the American Academy of Religion. Here we explored extensively the implications of Polanyi's thought about faith in religious studies, philosophy, theology, and social science as well as many other issues relevant to Polanyi's thought. Nevertheless, Polanyi's original contribution to epistemology has had a helpful but limited creative impact in changing the general understanding of faith within theology and science.² There is much in the Polanyi Society's work that explores the premise that faith precedes understanding and the ways that tacit knowing has enriched and illuminated that principle.³ On the other hand, even with the expansive growth of religious studies in universities and colleges, the role of faith in knowing remains a problem in the academic and public domains. Unfortunately, as we painfully experience today, the term "faith" in public and general university discourse is still misunderstood as indicating subjective and unexamined beliefs. Paul Tillich wrote in *Dynamics of Faith* in 1957:

There is hardly a word in religious language, both theological and popular, which is subject to more misunderstandings, distortions and questionable definitions than the word "faith." It belongs to those terms which need healing before they can be used for the healing of men. Today the term "faith" is more productive of disease than of health. It confuses, misleads, creates alternately skepticism and fanaticism, intellectual resistance and emotional surrender, rejection of genuine religion and subjection to substitutes. Indeed one is tempted to suggest that the word "faith" should be dropped completely; but desirable as that may be it is hardly possible. A powerful tradition protects it. And there is as yet no substitute expressing the reality to which the term "faith" points. So, for the time being, the only way of dealing with the problem is to try to reinterpret the word and remove the confusing and distorting connotations, some of which are the heritage of centuries (ix).

Tillich's judgment remains true today, but we have had at hand in Polanyi's formulation an answer to what we indicate by "faith." Polanyi's approach came to Tillich too late in Tillich's life for him to appreciate well Polanyi's epistemology. Polanyi and Tillich, who met in 1963, were what Durwood Foster aptly and regretfully called in 2009, "A Dynamic and Uncoordinated Duo." It is in Polanyi's demonstration and conception of tacit knowing that we meet the depth of his epistemology. His work contains the basic evidence, terms, and concepts for recovering the basic meaning of faith in the biblical and western religious traditions. Polanyi anticipates that his epistemology will enliven religion and theology, but he humbly left the development of the theology and philosophy to their practitioners.

5. Looking at Polanyi's major writings from 1946 until his death in 1976, it is striking to see his persistent epistemological aim is to bring new life to society and religion in the future. In all four of his books featuring epistemology, the final paragraphs are like a calling or a commissioning for theologians and philosophers to carry on his mission. Notice Polanyi's anticipation that his theory of knowledge will lead to a major contribution to society and to religion.

First, the last paragraph of *Science, Faith and Society* in 1946, which is virtually Polanyi's inaugural address for his project of post-critical thought, states that "...modern man will eventually return to God through the clarification of his cultural and social purposes. Knowledge of reality and the acceptance of obligations which guide our consciences, once firmly realized, will reveal to us God in man and society" (84).

Second, *Personal Knowledge's* last paragraph is where Polanyi completes his discussion of knowing and being and the rise of sentient centers to the appearance of humans who can study and know the world: "We may envisage then a cosmic field which called forth all these centres by offering them a short-lived, limited, hazardous opportunity for making some progress of their own towards an unthinkable consumption. And that is also, I believe, how a Christian is placed when worshipping God" (*PK*, 405).

Third, note *The Tacit Dimension's* last two paragraphs:

I have tried to affiliate our creative endeavors to the organic evolution from which we have arisen. This cosmic emergence of meaning is inspiring. But its products were mainly plants and animals that could be satisfied with our manifest moral shortcomings and with a brief existence. Men need a purpose which bears on eternity. Truth does that; our ideals do it; and this might be enough, if we could ever be satisfied with a society which has such shortcomings fatally involved in its workings.

Perhaps this problem cannot be resolved on secular grounds alone. But its religious solution should become more feasible once religious faith is released from pressure by an absurd vision of the universe, and so there will open up instead a meaningful world which could resound to religion (*TD*, 92).

Finally, *Meaning*, begun by Polanyi and completed by Harry Prosch, states:

We must somehow learn to understand and so tolerate—not destroy—the free society. It is the only political engine yet devised that frees us to move in the direction of continually richer and fuller meanings, i.e., to expand limitlessly the firmament of values under which we dwell and which alone makes the brief span of our mortal existence truly meaningful for us through our pursuit of all those things that bear upon eternity (*M*, 216).

6. The ambiguity of the word “faith,” as Tillich suggested, and its multiple uses combined with the skeptical attitude toward unproven beliefs obscure and hinder the initiation and development of a philosophical understanding of the priority of faith in knowing for our world today. The word “faith” connotes unquestioning belief, belief in God, belief in religion, belief in a particular religion, only a particular religion, complete trust, confidence, loyalty, good faith, bad faith, and sincerity. “Faith” is also used by opponents of religious belief as a description for persons who accept unproven beliefs and irrational views such as belief in spite of the evidence. When persons discuss “faith” the default stance is often one of skepticism. Polanyi’s target is the skeptical attitude toward any fiduciary component in knowing. Yet even religious believers and theologians need help to clarify and make sense of their usage. Nevertheless, in Polanyi’s epistemology all people know by “faith” whatever their beliefs are. As Andy Sanders has shown so well in his 1988 work, *Michael Polanyi’s Post-Critical Epistemology*, Polanyi is a fallibilist (227-264). All of our knowing seeks a bearing on reality but it is not completely final.

7. After many years of expounding Polanyi’s epistemology in courses, conferences, and publications, I now recognize that for intellectual clarity, philosophical adequacy and coherence, the term “faith” is like the word “God.” Outside of a limited theological context, the word “God” implies a supernaturalistic frame of reference. In a similar way, “faith” carries an irrational connotation that defeats its substantial role in knowing. Recently in teaching a seminary course on “Faith, Science, Religion and Society,” I decided to begin with Polanyi’s *The Tacit Dimension* in order to define faith and set up the basis for relating faith to science, religion and society. One day while we were discussing tacit knowing, I had to make explicit the connection between this concept and faith. I found myself saying:

Tacit knowing is what faith is. Faith is a way of relying on for attending to a focal awareness or concern. Relying on is a trusting activity of the self. Everything we do from ordinary skills such as walking, speaking, thinking, and eating we do by relying upon countless subsidiary elements for reaching a focal aim.

At first my explanation did not immediately succeed but gradually it did. As we turned to varying relations of science and religion in terms of conflicts and confrontations, contrasting and independent views, points of contact and dialogue, and confirmations and integrations as John Haught and Ian Barbour categorize them, we began to discover how tacit knowing helped to show why these differences exist. Usually one could turn to the background of the speaker and discern what kind of subsidiary awareness likely formed the outcome of the person’s views. It helped to show the way the tacit dimension determines our knowing. This experience led me toward recognizing that teaching that faith precedes understanding works better when persons can see the basic structure of tacit knowing.

8. Further reflection since that course has led me to the conclusion that tacit knowing needs to be developed into a theory of faith. My attempt here is only a beginning, but it is a necessary step for “faith” to become a more universally helpful word.

- a. The first step of providing a theoretical statement is already accomplished in *The Tacit Dimension*’s presentation of tacit knowing. *Personal Knowledge* and *Meaning* provide evidence and application of tacit knowing on a comprehensive scale so that tacit knowing is shown to be the basis of a general theory of knowledge that shows the essential fiduciary component in all knowing.
- b. The second step is to develop more explicitly the priority of tacit knowing in all knowing. For faith to be understood properly today, religious groups and their theologies must begin to recognize that all knowing—from established beliefs about facts, doctrines, practices to hypotheses about the way reality is—are based on the working of our tacit powers of learning, thought, and understanding.

The usual way of arguing that everyone actually operates with some form of basic assumptions does not carry enough intellectual force. Emphatically, tacit knowing is a universal principle underlying all knowing and discovery in science, creative religious experience and practice. Tacit knowing is basically an operational disclosure of faith. So reformed, the term faith can be applied within Christianity again as the primary principle of knowing that it is. As long as faith remains as a term for only religious discourse, we support the continuation of the separation of religion from its connection with the rest of life, the separation of mind and of body in our worldviews, and the persistence of scientific objectivism.

- c. During my academic life as a professional in higher education beginning in 1954, I have observed the growth of process theology from its second and third generation of thinkers after Whitehead. When I began studying Polanyi in 1962, I found myself with almost nothing to read about Polanyi's epistemology except some very brief and often mixed reviews. I took heart from the fact that Whitehead's *Process and Reality* of 1929 did not begin to flower with influence until after his death and even then his influence depended on the openness and freedom of a few centers of higher education, especially the University of Chicago. It was not until the 1970's that the thought of Whitehead and of Charles Hartshorne expanded into the wider world of churches and of theology due to the beginning of The Center for Process Studies at The Claremont School of Theology led by John Cobb and David Griffin. It may take a similar development for Polanyi's epistemology to make a similar impact. In the meantime, we can begin to develop tacit knowing as a better way to express and to interpret faith just as process theology and Tillich's existential theology has helped us to reinterpret and understand the nature and meaning of God for today.
- d. There are two major ways that the term "faith" is used by the church since it began trying to formulate and to systematize its basic beliefs. One is the way of *fides qua creditur*, the faith by which one believes. The other is *fides quae creditur*, the faith which is believed. These two Latin phrases contain the two poles of Polanyi's tacit knowing, the subsidiary awareness and the focal awareness. Foremost in Polanyi's thought is that the subsidiary leads to the focal awareness. *Fides qua creditur* is a theological expression of our subsidiary awareness. Our reliance upon our subsidiary awareness in order to know is a trusting activity that we tacitly and mostly naturally do. Tacit knowing includes both the mindbody subsidiaries and the focal integrations by which we believe. It must be emphasized that all knowing begins in a trusting mode that is as tacit and personal as breathing. Or we might say all knowing begins in our "mindbodyliness" to use William Poteat's neologism. *Fides quae creditur* is the theological expression of what we believe or what we accept. Therefore, tacit knowing contains the two fundamental sides of faith, the act of trusting, *fides qua creditur* and the cognizing of what is our focus, *fides quae creditur*.
- e. In everyday usage and even often in religious speech, the one term "faith" for both the act of trusting and the statement of beliefs is confusing. The saying "You have to have faith" may mean trusting in a process to lead toward fulfillment *or* it can mean a particular set of beliefs such as "you must believe that Jesus is the Christ." Polanyi's distinction between the tacit and the explicit clarifies this problem. All persons as knowers have, to use a phrase from H. Richard Niebuhr's 1951 *Christ and Culture*, "little faiths" as they work out their lives (239). The little acts of trusting as we grow, mature, work, play, and find direction need a bearing on more than the immediate choices of existence. They need a bearing on the greater reality in which we live and have our being. This process of working out our lives is very much the interplay of the subsidiary and of the focal in tacit knowing and implies a relativity of the faith that is believed. Every act of trusting is a renewing of a former focal awareness or revising it in light of the totality of our continuing experience which leads to a another major feature of tacit knowing.

- f. Tacit knowing is an active mode of being. Finally, there is no fixed or static knowledge. All knowing is an action from the moment it begins to the moment it is saved in practice or records to the moment it is followed or used and revised according to our experiences, practices, skills, patterns of culture, apprentices, masters, or traditions. Until one interacts with received knowledge, or experiences it, cognitive experience is not proximal and distal enough to become our knowing.
- g. Carl Rogers in 1962 said at lunch with Polanyi “that tacit knowing is gerundive knowing.” Grammatically, Rogers is not only correct, but more important he is highlighting that Polanyi’s view of knowing is verbal. Polanyi’s book *Personal Knowledge* which meant so much to Rogers is truly about doing, acting, and being. One of the largest flaws in the objectivist model of knowing is its separation of knowledge from knowing itself, a philosophical mistake that as Polanyi often said was saved only by practices that ignored the philosophy itself.
- h. Significant for clarifying religious usage of faith is that the biblical roots of faith are verbal and close to Polanyi’s tacit knowing. The Hebrew word for faith is *emunah*; it generally means firm or steadfast, a description of someone or something holding on or standing strongly. In the well-known text used by Augustine to support his statement “unless you believe you will not understand,” Augustine refers to the prophet Isaiah (7:9) standing firm and trusting in God’s righteousness. Similarly in Paul’s letter to the Romans, he draws upon the prophet Habakkuk standing bravely at his watch post and teaching “the righteous live by their faith” or standing firm with God’s promises. In the gospel according to John, the noun for belief is avoided and the active word “believe” is used instead. Perhaps most generally, the biblical story that calls Israel and the New Israel is an action story calling for a response and continual deciding to stand in relationship to God’s covenanting promises. In a sense, a large part of modern misunderstanding of Jewish, Christian, and Islamic teaching is to convert it into a completed past perfect tense, a faith or tacit knowing finished with no continuing present or future. This knowing produces a static set of beliefs without correlation to worldviews of our time. Someone once said that there ought to be a word like “faithing” so that people could more easily avoid thinking first about assent to a set of doctrines instead of learning what they are asked to be trusting in now. Tacit knowing is a step in that direction.

9. Tacit knowing, however, is not faith in faith. Tacit knowing has an object or focal target bearing on an aspect of reality. Two of the most helpful developments showing this difference are in the areas of (1) evolutionary biology and neuroscience and (2) the psychology of faith development. Several examples suggest that these fields converge with Polanyi’s tacit knowing.

First, Polanyi’s development of tacit knowing in *Personal Knowledge* drew upon a vast range of pre-articulate and articulate purposive biological phenomena before the current neuroscience developed significantly (see *PK*, 69-124, 327-405). One area of evolutionary science that accords with Polanyi’s appreciation of religion is represented by David Sloan Wilson’s work on altruism in group selection described in his 2002 book *Darwin’s Cathedral*. Wilson takes a controversial approach which is gaining some ground. He takes the daring step of joining evolutionary development from the gene level to the group level capacity for survival through altruism, a merger that leads to religion. He argues that natural selection works at multiple levels from beginning cellular life to humans. Human groups are a continuation of an emerging altruistic principle. At first glance in the battle for survival, altruism might seem to be the way of death for an organism and its DNA. But Wilson thinks that genes with high prosociality have a better chance of enduring than genes without sociality. Finally, Wilson sees religion as an evolutionary development through its function of bringing about group cooperation.

Tacit knowing with its structure of relying on and attending to a focal target to find adaptation to surrounding reality fits the altruism found by David Sloan Wilson. As Polanyi described in *Personal Knowledge*, there is in evolution a process of organisms exploring and finding what he calls “rules of rightness,” meaning processes, or behaviors that work. At the highest levels of human development, such as in science, social and mutual support for finding true results are essential for success.

Second, Eric Kandel, in “The Molecular Biology of Memory Storage: A Dialogue Between Genes and Synapses,” his Nobel Laureat Lecture in 2000, reports on his pioneering work in neuroscience on the storage of memory. In *Tradition and Discovery* (36:2), Walter Gulick reviewed insightfully and helpfully Kandel’s work and found that “Polanyi’s epistemological theory, although established on quite different grounds, accords well with Kandel’s description of how the brain operates. In particular, Polanyi’s theory of tacit knowing seems to be both enriched and validated by Kandel’s account of how memory functions” (73). By studying invertebrates such as the giant snail, *aplysia*, Kandel found that there are “no fundamental functional or biochemical differences between the nerve cells and synapses of humans and those of a snail, worm, or fly” (Nobel Laureat Lecture 2000, 395).

Gulick points out the scientific interests of Polanyi and Kandel overlap on the “dynamics of tacit knowing.” Virtually the same kind of signaling molecules in the neurons of simple animals are also found in human brains. Evolution seems to use the same set of genes repeatedly in slightly different ways. Furthermore, Kandel’s work on memory uncovers brain processes that correlate with the subsidiary awareness (called implicit memory in Kandel’s work) and explicit awareness (called explicit memory). In a detailed discussion, Gulick shows how Kandel learned that short-term memory is converted into long-term memory that forms the skill of riding a bicycle or other integrative feats. This area of neuroscience deserves extended discussion and pursuit, but its basic implications are in line with Polanyi’s theory of tacit knowing developed at a neurological level. One possible implication of Kandel’s work, it seems to me, is that it may suggest a possibility for enriching Wilson’s work on prosociality leading to religion. The short-term memories selected and retained by long-term memory seem to be selected by association of feelings such as fear and happiness. Kandel states that “In the course of studying classical conditioning, Pavlov discovered two nonassociative forms of learning: habituation and sensitization. In habituation and sensitization an animal learns only the about the features of a single stimulus; it does not learn to associate two stimuli with each other” (2006, 76).

Next, Kandel goes on to distinguish two important different functions of habituation and sensitization. He says, “In habituation the animal learns to ignore a stimulus because it is trivial, whereas in sensitization it learns to attend to a stimulus because it is important” (76). These two different functions found in our brain seem to underlie the more complex operations of our knowing. Gulick points out their role in the three types of tacit animal learning that Polanyi identified as trick, sign, and latent learning. More significant is that habituation organizes perception. Animal habituation discards responses that do not serve a useful purpose in favor of ones that do. This function would comply with Polanyi’s view that discovery in science is made by ignoring trivial data and paying attention to coherent data for making contact with reality. Gulick’s work here has pointed to an area of immense significance to pursue. For the present purpose, I see it as a strong step toward establishing the importance of tacit knowing and adding a compelling reason for using tacit knowing to clarify the nature of faith. Besides Polanyi’s use of Gestalt psychology, we can now see tacit knowing through Kandel’s work in neuroscience.

Third, the developments of the psychology of faith, moral, and intellectual development done by William Perry, James Fowler, Lawrence Kohlberg, Blythe Clinchy and others have strongly pointed to the great role of tacit knowing in shaping our ways of socialization and moral behavior. This area has been more extensively explored by members of the Polanyi Society than evolutionary biology and neu-

rosience. In particular, Dale Cannon has called attention in *Tradition and Discovery* articles to this area of confluence with the depth of Polanyi's epistemology. Since religious faith is concerned about moral development and behavior, tacit knowing has already been recognized as a way to examine, expose, and to recognize how authorities, traditions, and social arrangements participate in and affect our values. A wider use of tacit knowing in faith development could help leaders, teachers, and the public understand the relation of what we conceive to be true and right to the grounds of those convictions.

10. In concluding this beginning attempt, I want to return to Polanyi's words about faith in the chapter in *Personal Knowledge* on "The Critique of Doubt:"

Christianity is a progressive enterprise. Our vastly enlarged perspectives of knowledge should open up fresh vistas of religious faith. The Bible, and the Pauline doctrine in particular, may be still pregnant with unexpected lessons; and the greater precision and more conscious flexibility of modern thought, shown by the new physics and the logico-philosophic movements of our age, may presently engender conceptual reforms which will renew and clarify, on the grounds of modern extrareligious experience, man's relation to God. An era of great religious discoveries may lie before us (*PK*, 285).

It is striking to me that if you take Polanyi's belief in the Pauline principle of justification by faith in Romans 1:17, you could restate it as follows: The one who is righteous shall live by tacit knowing of God's grace.

ENDNOTES

¹This essay is Richard Gelwick's hitherto unpublished paper presented at the Polanyi Society-sponsored conference at Loyola University, Chicago in June 2012. The ideas developed here complement Gelwick's recent February 2014 *Tradition and Discovery* essay, "A Clue Toward Knowing Truth and God: Polanyi's 'Forms of Atheism.'" Together these late essays reflect Gelwick's emphasis upon the centrality of faith and truth-seeking as a key to Polanyi and the relevance of a Polanyian perspective. This essay was edited for publication by Walter Gulick and Phil Mullins after Gelwick's death on June 29, 2014.

²Robert John Russell's 2009 *Tradition and Discovery* essay, "Polanyi's Enduring Gift to Theology and Science," assesses Polanyi's contribution to theology and science. Russell notes Polanyi's emphasis on personal knowledge, the community of knowers in science, the tacit dimension, and the use of Polanyi's fiduciary approach by Ian Barbour, Thomas F. Torrance, John Polkinghorne, and John Haught. Russell's survey shows Polanyi's usefulness and compatibility with significant leaders in the science and theology discussion. There is not, however, recognition of any revolutionary change due to Polanyi's epistemology.

³Among a wealth of Polanyi Society scholarship on tacit knowing and its bearing on the understanding of faith is John Apczynski's 1993 *Tradition and Discovery* essay "Polanyi's Augustinianism," and Walter Mead's two unpublished Polanyi Society annual meeting papers, "Some Reflections on the Unknown and the Unknowable and the Relevance of These Concepts to the Epistemological Endeavor" (November 22, 2003) and "A Polanyian Resolution of the Age-Old Conflict Between Faith and Reason" (November 17, 2006).

REFERENCES

- Apczynski, John. 1993. "Polanyi's Augustinianism," *Tradition and Discovery* 20 (1): 27-41.
- Barbour, Ian. 1966. *Issues in Science and Religion*. New York: Harper & Row.
- _____. 2000. *When Science Meets Religion*. New York: Harper Collins.
- Cannon, Dale. 2007. "A Serendipitous Convergence: Blythe Clinchy and Michael Polanyi," *Tradition and Discovery* 34 (1): 9-14.
- _____. 2007. "How Clinchy's Two Minds Become One Flesh: A Response to Blythe Clinchy's Essays," *Tradition and Discovery* 34 (1): 32-39.
- Foster, Durwood. 2009. "Michael and Paulus: A Dynamic and Uncoordinated Duo," *Tradition and Discovery* 35 (3): 21-39.
- Gelwick, Richard L. 1965. "*Credere Aude*: Michael Polanyi's Theory of Knowledge and Its Implications for Christian Theology." Ann Arbor: University Microfilms.
- _____. 1965. "Michael Polanyi—Modern Reformer," *Religion in Life* 34/2: 224-234.
- Gilkey, Langdon. 1970. *Religion and the Scientific Future*. New York: Harper & Row.
- Gulick, Walter. 2010. "Polanyi's Epistemology in the Light of Neuroscience—A Review Article." *Tradition and Discovery* 36 (2): 73-82.
- Haught, John. 1995. *Science and Religion: From Conflict to Conversation*. New York: Paulist Press
- Kandel, Eric R. 2000. "The Molecular Biology of Memory Storage: A Dialogue Between Genes and Synapses," Nobel Laureat Lecture 2000 available at NobelPrize.org.
- _____. 2006. *In Search of Memory: The Emergence of a New Science of Mind*. New York: W. W. Norton & Company.
- Mead, Walter. 2006. "A Polanyian Resolution of the Age-Old Conflict between Faith and Reason." Unpublished Polanyi Society Annual Meeting paper for November 17, 2006.
- _____. 2003. "Some Reflections on the Unknown and the Unknowable and the Relevance of These Concepts to the Epistemological Endeavor." Unpublished Polanyi Society Annual Meeting paper for November 22, 2003.
- Niebuhr, H. Richard. 1951. *Christ and Culture*. New York: Harper & Brothers.
- Polanyi, Michael. 1946. *Science, Faith and Society*. London: Oxford University Press. Chicago: University of Chicago Press, 1964.
- _____. 1966. *The Tacit Dimension*. Garden City, NY: Doubleday.

_____. 1958. *Personal Knowledge*. Chicago: University of Chicago Press.

_____ and Harry Prosch. 1975. *Meaning*. Chicago: University of Chicago Press.

Poteat, William H. *Polanyian Meditations*. Durham, NC: Duke University Press.

Russell, Robert John. 2009. "Polanyi's Enduring Gift to Theology and Science," *Tradition and Discovery* 35 (3): 40-47.

Sanders, Andy. 1988. *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of Tacit Knowing*. Amsterdam: Rodopi.

Tillich, Paul. 1957. *Dynamics of Faith*. New York: Harper & Brothers.

Torrance, Thomas F., ed. 1980. *Belief in Science and Christian Life*. Edinburgh: The Handsel Press.

Wilson, David Sloan. 2002. *Darwin's Cathedral*. Chicago: University of Chicago Press.

The Projects of Michael Polanyi and Charles Taylor

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Key words: Michael Polanyi, Charles Taylor, objectivist ideal of knowing, embodied knowing, language as constitutive, moral values, transcendent ideals, historical indwelling, cultural assumptions, hidden assumptions, pluralism, religious belief in secular culture, discovery of truth

ABSTRACT

This essay contends that Polanyi's groundbreaking effort to formulate a more adequate understanding of scientific knowing by acknowledging its practice of operating on the basis of shared assumptions bears striking parallels to Taylor's subsequent efforts to disclose the cultural assumptions sustaining our sense of identity. Both projects had to uncover normally ignored cultural values and practices sustaining scientific knowing and our identities as moral beings. Given this connection, students of Polanyi would be well-served to explore Taylor's works in order to develop further implications of Polanyi's thought. Given Taylor's later exploration of belief in a secular era motivated by his Catholic faith, he offers additional examples of developing Polanyi's thinking for students exploring theological questions.

My earliest encounter with the thought of Michael Polanyi came as a result of the recommendation of John Brennan, a former teacher, who had returned to England to continue his studies. He observed how, upon the recent publication of *Personal Knowledge*, Polanyi's theory had become all the rage among the Oxbridge intelligentsia.¹ Once I began to engage this work at the beginnings of my graduate studies, I came to understand why: here was a physical scientist who challenged the dominant understanding of detached scientific activity by uncovering the actual, normally unnoticed, practice of working scientists. Polanyi had created a project whose aim was to overturn the positivist picture of objective, scientific knowledge upheld impersonally by verifiable—or, for some, falsifiable—empirical evidence. He painstakingly illustrated how every stage of inquiry was carried forward by the personal engagement of members of the scientific community relying on a broad range of assumptions sustaining the endeavor. Not only did his comprehensive theory challenge the dominant philosophical orientation of the analytic tradition, he did so as an “outsider,” a scientist who had become a public intellectual without the requisite apprenticeship in the guilds of professional philosophy. Even more profound were the implications of Polanyi's theory beyond the practice of science for understanding wider cultural issues, such as aesthetics, morality, and our highest transcendent values, including religious visions. Here I had found a project that I could incorporate into my own goals of studying religious traditions intelligently.

Toward the end of my graduate studies I encountered the work of Charles Taylor through reports about him in the student newspaper, the *McGill Daily*. The favorable stories appearing there were about an up-and-coming political scientist who engaged students morally in public fora and who participated actively in a left-leaning political party in Quebec, something which resonated with my Catholic social sensibilities. I was strongly tempted to try to meet Taylor, but the press of my own work, reinforced by my American presuppositions regarding the practice of political scientists, which assumed that Taylor's disciplinary assumptions probably would not fit my Polanyian-informed project, led me to drop the attempt. Some twenty years later, after I began reading *Sources of the Self*, I discovered how wrong I was.² Taylor's self-acknowledged ambitious project (ix) of attempting to articulate the constitutive features of our cultural heritage which shaped our sense of being a self was groundbreaking in a manner

reminiscent of Polanyi's earlier work on the practice of science. Just as Polanyi attempted to uncover the features of scientific practice that were hidden or obscured by the dominant philosophical tradition of analysis, so, too, Taylor attempted to delineate the contours of our identities that were hidden or obscured by the dominant philosophical assumptions of modernity. It was as though Charles Taylor had taken up the larger project of Polanyi and begun to apply it to an exploration and defense of our morally informed heuristic visions with a philosophical rigor of a trained philosopher. His was a project that a student of Polanyi should find invaluable.

Polanyi devoted the latter part of his career to exploring the implications of his theory of knowledge for our larger cultural meanings and values. The last part of *Personal Knowledge* consisted in his initial foray into this effort (PK 327-405). He began to solidify his understanding in his characterization of a "Society of Explorers" in the *Tacit Dimension*.³ His final efforts to formulate his position on our ability to discover and uphold our highest cultural values were expressed in his lectures, delivered under the title of "Meaning," that were brought to print with the help of Harry Prosch.⁴ Throughout this final period of his career as a public intellectual, Polanyi was attempting to provide an account, and support for, our holding to transcendent values and ideals as necessary for our self-understanding as humans continuing to "break out" toward ever greater discoveries of reality (PK 196-197). Polanyi was painfully aware that his account was his "best effort" at formulating and defending his position. His theory of knowledge precluded any attempt to prove impersonally or objectively his view. Indeed, he acknowledged the possibility that his efforts could be wrong (PK 404). That was inherent in the risk of knowing as he understood it. His initial project was rather successful in transforming the understanding of science in Western culture.⁵ Because of its ambitious, fundamental character, however, his larger project of applying his basic insights to sustaining the values of our cultural heritage required an ongoing and continuous effort.

This is where I believe the student of Polanyi can fruitfully enter into the project of Charles Taylor. This does not mean that Taylor should be taken to be a "disciple" of Polanyi in any straightforward sense. Rather, it would be much more helpful to approach Taylor's work as a political philosopher by acknowledging that early in his career he assimilated many of the basic insights of Polanyi's thought along with a broad array of thinkers required for his apprenticeship into the guild of professional philosophers. Then, in light of this more expansive framework, he formulated many of Polanyi's fundamental insights about our cultural condition in way that went beyond Polanyi's own abilities insofar as they were dependant on his more focused apprenticeship in physical sciences. Taylor's thinking, then, should not be taken as merely a commentary on, or development of, Polanyi's work; it is his *own* project which has been influenced by Polanyi's earlier efforts but recast by Taylor in a way that he believes addresses the wider philosophical community. Because both thinkers are trying to draw their readers' attention to the hidden assumptions shaping our understanding of reality, there are many possibilities for considering the connection. What I am attempting here is to highlight a few pertinent examples of the way in which students of Polanyi can appreciate how Taylor's reflections expand and clarify Polanyian insights with the hope that they may take up their own reading of Taylor's works.

Let me begin by portraying how Taylor depicts the fundamental reality of the self in *Sources of the Self*. Keep in mind that Taylor is attempting to uncover normally hidden assumptions to which we rarely advert: the self, as is often assumed in modernity, is not an isolated consciousness with an articulate picture of external data, but a reality that is constituted by a vast array of relationships, most of which function in a pre-articulate manner. In its most basic case, this is certainly presumed in our ability to acquire and uphold simple factual knowledge based on our perceptions. Our presumptions that we know where we are, or can correct what we thought we saw, are based on our sense of a "perceptual purchase" on things (74-75) which is implicit in our normal daily maneuvering through life. Analogously, the locus of our existence as a self is most correctly acknowledged to be in the "webs of interlocution" (36) through which

we come to constitute ourselves. Included in this ability to have an identity is our sense of the good, in particular our “location” or “how we are placed” or have a “contact” with respect to the good (44). This characterization of ourselves within some sense of the good and its bodily, linguistic, social, historical, and cultural embodiments points to “transcendental” conditions (39) necessary for the constitution of our identities. Moreover, our selves cannot be adequately identified only by knowing who we currently are; we must also address the matter of what we can become, so that the location of our sense of the good must include a narrative form (47).

Even if we grant this depiction of significant features of a “self” which are normally unnoticed by the larger culture’s understanding, we need some assurance that this is realistic and valid. For Taylor it is necessary not to confuse or reduce this issue with what the natural world is like (56). Here an impersonal, third-person account may be adequate. But when the meaning of our lives and what we value as human beings is at stake, our personal involvement in these meanings must be acknowledged. Any attempt to account for our selves solely in terms of material constituents or mechanical processes is incomplete. What we need is the “best available” account at any given time (57-59) that realistically and fairly explains our identities in relationship to the goods that sustain us.

A major feature of any best available account, according to Taylor, requires the articulation of our “hypergoods,” those “goods which not only are incomparably more important than others but provide the standpoint from which these must be weighed, judged, decided about” (63). Since these are qualitatively different from and establish a hierarchical ranking of other goods, they are a potential source of conflict because of the substantial differentiations they inspire. There is no way of adopting independent criteria allowing one to stand outside one’s identity to evaluate these goods. Rather, accepting a particular formulation of a hypergood signals the transition to what appears a superior stance (72). This very articulation of hypergoods, that which enables us to make qualitative distinctions in our lives, provides the reasons for our accepting them (76-78). We judge that our articulation has withstood all relevant challenges, so that it is our (provisionally) best available account (74).

Clearly such a representation of the validity and reality of our moral goods presumes that articulating them (in a broad sense) is a necessary (but not a sufficient) condition for their existence, in the sense of their availability for us and our ability to recognize them (91-92). Moreover, since a defense of any particular account of the validity of a hypergood depends on a reading of its genesis (73), it is necessary to examine concretely the way in which the identity of the self has developed in the West by means of its transitions to presumably superior relationships with the source of the good. This effort indicates the intrinsic connection between the first, philosophical, part of Taylor’s work and the last four, cultural-historical, parts.

Even though these broad strokes that attempt to encapsulate the thrust of Taylor’s uncovering of the modern sense of the self are all too brief, any attentive student of Polanyi’s thought can easily detect many features of his own program of personal knowledge here. There is, of course, a significant difference insofar as Taylor’s background concerns, deriving from political philosophy, lead him to focus on hermeneutical questions of meaning and value instead of the practice of scientific knowing and epistemological matters in general (I intend to return to this point later in this essay). Still, even with Taylor’s hermeneutical focus, the similarities with Polanyi’s thinking emerge when we consider Polanyi’s reflections on what he terms “indwelling” and the process of validation.

In order to support his theory of personal knowledge, Polanyi takes great pains to examine pre-articulate patterns of intelligence, including the ability to recognize signs and solve problems shared by animals and children (*PK* 71-75). This bodily indwelling provides the perceptual basis for our meaningful

dealings with our environment. It is an active process enabling all animate life to recognize shapes that now have coherence in order to appear as physiognomies. This process of recognizing patterns in sensory experience involves two elements, the subsidiarily known disparate features whose integration allows the meaningful whole to emerge and with which we interact.

This fundamental capacity is vastly expanded by the use of our linguistic powers (*PK* 69-131). Grounded in the activities informing perception, our linguistic indwelling relies not only on our pre-articulate sensory experiences, but also on our subsidiary grasp of the potentialities of our language. Language is far from being merely denotative; it forms a system of meanings upon which we rely in order to dwell in a meaningful world of practices, social relationships, values, and transcendent ideals in addition to objects. Only by relying tacitly on words can we use their potential for discovering novel meanings. Just as in the case of perception, then, our linguistic indwelling also operates as an activity relying on subsidiaries to comprehend a focal whole, which in its highest forms include our ideals.

Polanyi understands knowledge not as a static achievement capable of detached or impersonal analysis in the manner of the modern objectivist ideal, but as an activity always in process. As we observed above, our perception involves a process of attending from subsidiarily known particulars which we integrate into a focal whole. A similar directedness and duration is discernable in our linguistic indwelling. Aside from the fact that we must learn a language over time, the very use of a language is conditioned by its involvement in time. Insofar as our language functions as a repository of our frameworks through which we meaningfully understand the world, its present development is not ultimate. We expect our reliance on our intellectual assumptions to allow us to expand the realm of meaningful experience, thereby modifying our conceptual systems. Historical indwelling constitutes the matrix upon which we rely to break through to new discoveries.

Just because we acknowledge that our cultural horizons are historically conditioned, this does not mean that we are condemned to some form of relativism as an objectivist framework tends to assume; rather, we must judge that our cultural horizons are reliably true and that through them we can continue to break through to new discoveries.⁶ Keep in mind that for Polanyi this does not mean that our present horizons embody the fullness of truth as some rationalist posture may affirm. This claim means, more modestly, that our reliance on our cultural horizons provides us with an adequate orientation to reality in our present historical situation. Through our cultural indwelling, we have an ability to discern and formulate expressions that we judge to be true, some of which allow us to go beyond the historical limits enabling these expressions. At the level of transcendent ideals, the degree of personal participation is greater and the existential import of accepting a new insight is more profound. Consequently, Polanyi describes such judgments as “validation” instead of “verification.” “But both verification and validation are everywhere an acknowledgment of a commitment: they claim the presence of something real and external to the speaker” (*PK* 202). As we explore new and sometimes even alien frameworks, we must hold fast to our ultimate aim: individuals can rely on their cultural background as a basis for probing the frontiers of knowledge in responsible dedication to the truth and, once they discover something valid, they affirm it with universal intent (*PK* 379). Accepting such a project constitutes our “calling” as members of a “society of explorers” (*TD* 80-82).

This brief overview of pertinent elements of Polanyi’s account of “indwelling” should suffice to mark out several ways in which Taylor’s position develops significant features of Polanyi’s. Both projects aim to uncover normally hidden and unnoticed presuppositions that influence our understanding of our selves and our natural and cultural worlds. Both, in addition, aim to challenge the dominant philosophical outlooks that, they contend, restrict a richer understanding of science and our ability to discern meaning and uphold values. Even granting such fundamental similarities, little has been presented so far to commend inquiring

into Taylor's thought to a student of Polanyi. When I claimed at the beginning of this essay that such an effort would be invaluable, I did so because of the way Taylor's reflections are developed in dialogue with the philosophical traditions of the West. Precisely because of the similarities in their projects, his more technical reflections provide, indirectly, a rich resource for contextualizing and developing Polanyi's thought. The breadth and diversity of Taylor's dialogue with modern and contemporary philosophical and cultural movements is almost overwhelming. The examples I offer here are not so much representative of the breadth of his corpus as more an idiosyncratic selection that I hope will be helpful for exploring Polanyi's thought. Let me turn then to a few of Taylor's analyses that I have found valuable.

That our knowing has a bodily component is a commonplace. What do we mean by embodied agency? This does not mean merely that we are causally dependent on bodily features, such as not being able to see if we are blindfolded. This claim is not in the first instance an empirical one. Polanyi grasped this by proffering an array of scientific cases of divergent interpretations of data. Underlying this was a structure, our tacit reliance on bodily processes that were known subsidiarily and interpreted by a focus on a pattern. Can this be clarified further? Taylor utilizes Maurice Merleau-Ponty's analysis of perception to clarify how embodiment is essential to our activity as agents.⁷ Perception has an orientational structure because it is a field of potential action. It is pre-articulate and functions as an essential basis for articulation. It functions as a permanent background to the kind of agents we are. This is not something we discover empirically, but rather provides the framework enabling a field of potential action. It represents the kind of beings we are. This sense of ourselves as embodied agents is constitutive of our experience. This background understanding of ourselves as embodied agents exhibits these features: "it is a form of understanding, a making sense of things and actions; at the same time, it is entirely unarticulated; and third, it can be the basis of fresh articulation."⁸

This tacit basis grounding our experience allowed Polanyi to develop a rich understanding of the varying dimensions of language, including how language functions to allow us to create and communicate meaning.⁹ This represents a major advance and challenge to the dominant representational view of language that presumed totally explicit accounts which limited meaning to corresponding to objects in the world. Taylor very helpfully offers an expansive account of this view by showing how it has sources in the Romantic heritage represented by Herder and subsequently developed in contemporary philosophy by the later Wittgenstein and Heidegger.¹⁰ The use of language constitutes new dimensions of meanings for human agents, which cannot simply be reducible to rightness of identification or even tasks.

Opening up discussion of worlds of meanings eventually requires some understanding of how developments in such worlds take place and how the multiplicity of such worlds might be acknowledged. Polanyi has treated these issues in a variety of ways in his own creative fashion. He discussed, for example, how fundamental systems of beliefs sustain themselves by a consideration of anthropological research on the Azande (*PK* 288-292). Similar processes are at work to sustain scientific practice in Western culture. The major difference is that this is a tradition fostering the growth of thought. It expects individuals who have submitted to the authority of scientific tradition to strive to uncover new truths which, upon discovery, transform the existential stance of the person who declares the new insight with universal intent and invites others to do likewise (*TD* 63-84). Taylor helps clarify these issues through his consideration of Hans-Georg Gadamer's notion of "fusion of horizons." The acknowledgment of multiple worlds of meanings upon which humans tacitly rely has raised the specter of relativism—particularly from within the tradition of detached, impersonal knowing. One response Taylor notes is the sort of non-realism espoused by the pragmatism of Richard Rorty.¹¹ But this still is implicitly captive to the thrall of the impersonal ideal of knowing. Even a view which strives to replace a point-of-view-less science by developing as complete an account of language to which, somehow, all cultural frameworks might subscribe misses the mark because it must develop anew once future changes are acknowledged.¹² To deal with a plurality

of horizons in a realistic manner we must recognize three important features of such efforts: they are bilateral, they are party-dependent, and they involve revising goals.¹³ This means that in order to come to understand the other with some degree of accuracy we must enter into the other's framework; and this entails some modification of our goals and our selves. The challenge is to recognize their different and perhaps disconcerting way of being human while still being able to live ours. Such responsible judgments resulting from this sort of fusion of horizons made with universal intent will modify our sense of identity and—we trust—will have a reciprocal effect on our dialogue partner.¹⁴

When reflecting on such ultimate beliefs, Polanyi acknowledges the circularity involved in upholding, modifying, or transforming them. The structure of commitment, nonetheless, allows such responsible judgments to be personal, as distinct from subjective or impersonally objective. Here truth is rightness of action, with varying degrees of personal participation. Our fundamental commitments provide us the opportunity to exercise our personal judgments, which constitutes our calling (*PK* 299-324). Setting our acceptance of fundamental beliefs within such a historical and cultural panorama is valuable, but falls short of providing explanations in specific instances. Is there any way of specifying in some sense how we might defend our upholding some articulation of a fundamental belief? I would suggest that Taylor's reflections on his analysis of "transcendental arguments" may contribute to a clarification of how we accept or validate our position on some fundamental questions. The impetus derives from the thought of Kant, but Taylor's concern is their applicability to contemporary questions. They typically adjudicate questions about our fundamental assumptions. They work by a regressive argument to some strong conclusion about our selves or our purchase on the world from some features of our experience which are generally taken to be indubitable.¹⁵ The stronger conclusion, if formulated adequately enough, is seen to be necessarily based on the features of our experience. "So transcendental arguments are chains of apodictic indispensability claims which concern experience and thus have an unchallengeable anchoring. What they show things to be indispensable *to* can't be shrugged off."¹⁶ Since they purport to demonstrate the point of some of our activities, that specific formulation is open to debate and improvement. Still, I believe Taylor has offered an interesting way of getting at some of the justifications for our fundamental beliefs that may be applicable to developing Polanyi's insights.

Any attentive student of Polanyi's thought will have noticed by now that there is a glaring omission in my topics of comparison with Taylor's thought. Where is the discussion of epistemology proper? After all, developing, expounding, and defending his theory of personal knowledge was a primary concern of Polanyi's later public career. In my reading of his thinking on this topic, Taylor exhibits a fundamental ambiguity here. When he discusses cultural matters and our moral thinking, Taylor operates much as Polanyi would expect, namely that we rely tacitly on our values and assumptions to attempt to understand various dimensions of our world. Relying on our subsidiarily held premises and ideals, we focus on meaningful wholes that our horizons open up for us. While he would not articulate it precisely in this manner, this basic "from-to" intentional structure operates continuously and pervasively for Taylor. The glaring exception arises when he considers natural science. In her fine early study of Taylor's philosophy, Ruth Abbey seems to attribute this tendency to distinguish sharply between the natural sciences and human sciences to his concern to defend the fundamentally different kinds of meaning examined in the human sciences.¹⁷ His basic attitude may be detected in the title of his important essay, "Overcoming Epistemology," in which he contends that it is insufficient to "replace" an inadequate epistemology with a more adequate version.¹⁸ The principal reason for such a judgment is that the epistemological tradition is part of a wider cultural heritage that made epistemology possible in the first place: the view that knowledge is a correct representation of an independent reality, an inner depiction of an outer reality. This in turn is connected with a mechanistic view of nature discovered by a proper method – all of which implicitly becomes a moral ideal upholding a detached, disengaged subject. Granted the way in which epistemology is implicated in such a variety of objectionable assumptions, a significant debate has emerged into just

what it means to overcome epistemology represented, for example, by disputes between neo-Nietzscheans and defenders of critical reason. How one even approaches this issue is tied in with some of the most important spiritual and moral issues of our time.¹⁹ When viewed in this way, it is difficult to fault Taylor for making such a sharp distinction between the realms of scientific and humanistic meanings. For the sake of a more adequate appreciation of science, however, I would commend Polanyi's understanding of the various modes of tacit knowing as forming a continuum between minimal participation in scientific indwelling and the maximal participation in religious indwelling.²⁰ When viewing personal knowledge as a heuristic endeavor seeking various dimensions of meaning, the result is not only a more integral understanding of scientific inquiry but also an ability to uncover the sorts of values and meanings that Taylor is aiming to highlight in contemporary Western culture.

A new facet of Taylor's project emerged explicitly once he delivered his Marianist award lecture, "A Catholic Modernity?" in 1996.²¹ Here he acknowledged in a public, academic forum that he operates out of a committed, Catholic perspective. There were numerous instances in his previous works that indicated his appreciation of the religious heritage of the West, as when he explores how the contemporary emergence of pluralism opens the possibility for our culture to reconsider that our modern senses of the good had its sources in Christian faith or how the best available interpretation of moral resources requires a God.²² But these were more like tentative possibilities, rather than firm declarations that they provided the best possible explanation in our post-modern, pluralist context.²³ After this, though, Taylor does begin to explore the value of religion in a more positive and open manner, especially in his recent *A Secular Age*.²⁴ The general topic he examines here offers a clarificatory background to his earlier reticence in defending appeals to a transcendent reality: how is it that over the course of the past half millennium the West was transformed from a culture where the default, unarticulated position moved from a posture of belief to unbelief?²⁵ To speak to reflective human beings in contemporary Western culture requires acknowledging this pervasive and largely unexamined presupposition. This is not simply a pragmatic matter of obtaining tenure at a major secular research university; more importantly it is essential to gain a respectful hearing among one's peers. The esteem with which Taylor is held by the academic world of Western scholars is an indication of his success in this effort. Even now that he more explicitly acknowledges his religious commitments, he still proposes his arguments in a manner that is understandable to colleagues with alternative fundamental frameworks.²⁶

Once we take this formally explicit development of Taylor's project into account, it becomes necessary to adjust our efforts to relate his thought to Polanyi's. Throughout his efforts to defend the practice of scientists as members of a community of inquirers seeking truth, he understood this to be providing a clearing within Western society for a more meaningful appreciation of religious values. Up until his last published works, he defended the value of religious ideals for sustaining a proper understanding of science (*M* 132-160). But Polanyi's appreciation of religion was that of a respectful outsider. He never made a commitment to a specific Christian (or other religious) tradition. Consequently, his appreciation of religion was not existentially grounded in his practice.²⁷ The significance of this observation becomes evident when we consider that, while Polanyi made important and helpful cultural observations defending religious practice, he was not able to speak in a similar manner to those dwelling within religious traditions. His theory of knowing accounts for this sort of deficiency. So the latter phase of Taylor's career addresses issues Polanyi never could have.

Let me illustrate this with a few examples. In "A Catholic Modernity?" Taylor calls for the Catholic community to recognize the service that modernity has provided it by ending Christendom, which allowed the flourishing of implicit Christian values of human good to emerge. The Church needs to become a community of compassion and love, not exclusive rules. (Undoubtedly, it's too much to presume that, while still Jorge Bergoglio, Pope Francis I had studied Taylor and taken his advice to heart;

but his papacy marks an uncanny turn of events in light of Taylor's reflections.) In his reflections in *A Secular Age*, Taylor not only points to the limitations of an exclusive humanism which an openness to a transcendent reality might address, he calls on religious traditions to make adjustments to accept many of the human goods and social forces which the modern era has unleashed. More specifically, he calls on the leadership of the Catholic Church to modify its modern attempt to impose a reform clericalism on Catholics by acknowledging alternative forms of human expressions of love. The flaw in this moralist version of clericalism, Taylor has contended, "was to make this take on sexuality mandatory for everyone, through a moralistic code that made a certain kind of purity a base condition for relating to God through the sacraments. What Vatican rule makers and secularist ideologies unite in not being able to see is that there are more ways of being a Catholic Christian than either have yet imagined."²⁸ The fact that as a committed, reflective Catholic Taylor is able to make significant recommendations for modifying the practice of the Church is a significant contribution that someone with Polanyi's outsider stance might appreciate but would not be able to originate.

One final example of the way in which Taylor's commitment to the Catholic tradition allows him to interact creatively with it can be adduced by recalling Polanyi's early reflections on authority. Polanyi claimed that authority promoted freedom in science provided that it functioned in a general way; any specific authority, determining the conclusions of research, for example, would destroy scientific practice. In illustrating this distinction Polanyi pointed to the structure of authority as he saw it practiced in the Catholic Church.²⁹ His analysis depicted the way the Vatican exercised authority since the end of the nineteenth century fairly accurately. But he could do no more than portray this from the outside and express the judgment that it would impede mature judgments and could not function in science without destructive consequences. Here is where Taylor has been able to go beyond Polanyi's appraisal. In a recent essay he argued on the basis of teachings from Vatican II that ecclesiastical authorities should not impose abstract norms on contingent, particular situations:

In the final analysis, to recognize that freedom of conscience is a fundamental right, that it is an essential component of human agency, must require a recognition within the church itself that each Christian must be free to exercise his or her judgment in applying the gospel to contingent moral or political circumstances, in finding a language to articulate the faith, and to make whatever sense they can of the enigmas we live with and in. Each Christian can (and should) be part of the conversation from which the *consensus fidelium* will emerge....³⁰

What has happened in the past century, Taylor argues, is that the *magisterium*—the teaching authority embodied in the Vatican—has failed to observe four limits: there have been failures to respect the contingency of moral judgments, the application of a false sacralization, an imposition of legalism, and a lack of reserve before the enigmatic.³¹ This latter deficiency is particularly grating in the context of our contemporary awareness of pluralism. To affirm the truth of the faith does not require denying that some very saintly and spiritual people practice alternative faiths. We must learn how to live with such uncertainty and ambiguity while attempting to grow spiritually. The point of such reflections is not to declare the superiority of our modern age over the past formulations of the Catholic faith, but more humbly to take "our modern civilization for another of those great cultural forms that have come and gone in human history, to see what it means to be a Christian here, to find our authentic voice in the eventual Catholic chorus."³²

I trust that this exercise in comparing the projects of Polanyi and Taylor has been enlightening. Polanyi's earlier breakthroughs in exposing the unnoticed assumptions operating in the practice of science and his attempts to expand this effort to exploring how we uphold our cultural ideals have been appropriated and developed by the more technically informed analyses of Taylor. Additional or alternative examples

could just as well have been explored. Nonetheless, I trust that a sufficient exposure to Taylor's project has been provided to entice students of Polanyi to work through Taylor's corpus to discover even more profound meanings.

ENDNOTES

¹*Personal Knowledge: Towards a Post-critical Philosophy* (Chicago: University of Chicago Press, 1958). The Harper Torchbook edition of 1964 includes a new introduction by Polanyi. Subsequent references to this work will be indicated parenthetically as *PK*.

²*Sources of the Self* (Cambridge, MA: Harvard University Press, 1989). Subsequent references to this work are indicated parenthetically in the text of the essay.

³*The Tacit Dimension* (Garden City, NY: Doubleday & Company, Inc., Image Book, 1967), pp. 80-92. Subsequent references to this work will be indicated parenthetically as *TD*.

⁴Michael Polanyi and Harry Prosch, *Meaning* (Chicago: The University of Chicago Press, 1975). Subsequent references to this work will be indicated parenthetically as *M*.

⁵See Mary Joe Nye, *Michael Polanyi and his Generation: Origins of the Social Construction of Science* (Chicago: The University of Chicago Press, 2011), pp. 259-95.

⁶*The Study of Man* (Chicago: The University of Chicago Press, Phoenix Book, 1972 [1959]), pp. 86-89; see also pp. 76-77.

⁷"The Validity of Transcendental Arguments," in *Philosophical Arguments* (Cambridge, MA: Harvard University Press, 1995), pp. 23-26.

⁸"To Follow a Rule," in *Philosophical Arguments*, p. 173.

⁹For a representative sample of these reflections see "Sense-Giving and Sense-Reading," in *Knowing and Being: Essays by Michael Polanyi*, ed. Marjorie Grene (Chicago: The University of Chicago Press, 1969), pp. 181-207.

¹⁰See "The Importance of Herder" and "Heidegger, Language, and Ecology" in *Philosophical Arguments*, pp. 79-126.

¹¹"Rorty in the Epistemological Tradition," in *Reading Rorty*, ed. Alan R. Malachowski (Oxford: Basil Blackwell, 1990), p. 258.

¹²"Understanding the Other: A Gadamerian View on Conceptual Schemes," in *Dilemmas and Connections: Selected Essays* (Cambridge, MA: The Belknap Press of Harvard University Press, 2011), p. 32. This is parallel to Polanyi's claim about understanding history in *The Study of Man*, pp. 11-12.

¹³"Understanding the Other," p. 26.

¹⁴*Ibid.*, pp. 37-38.

¹⁵“The Validity of Transcendental Arguments,” p. 20. Here following Merleau-Ponty Taylor argues that our awareness is necessarily embodied.

¹⁶*Ibid.*, p. 28. I would argue here that so conceived “transcendental arguments” have a pedigree that goes beyond Kant to several medieval thinkers. For example, Bonaventure argued on the basis of the features of our experience (or powers) of our self-identity (memory), of our making truth claims (intellect), and of choosing goods (will), that a necessary condition for these to operate is an openness of our minds to God. See *Itinerarium mentis in Deum*, III, 2,3,4. That he did not take such arguments in the manner of “moderns” who presumed these were positing “evidence” for the claim that God exists is clear from his characterization of such arguments as “exercises of the mind” to get us to think properly. See *Quaestiones disputatae de mysterio Trinitatis*, I, 1, resp. 12.

¹⁷Ruth Abbey, *Charles Taylor* (Princeton: Princeton University Press, 2000), pp. 152-65. She notes, however, that Taylor does not intend to make a radical separation between the domains; just enough to maintain the way that human sciences must take into account the self-interpretations of its subjects. I call her study “early” because it appeared before Taylor’s most recent formulations of the place of religion in secular culture.

¹⁸“Overcoming Epistemology,” in *Philosophical Arguments*, pp. 1-19.

¹⁹*Ibid.*, pp. 17-19.

²⁰See, *inter alia*, *The Study of Man*, pp. 73-93; “Faith and Reason,” *The Journal of Religion*, 41 (1961), pp. 237-247; “Science and Man’s Place in the Universe,” in *Science as a Cultural Force*, ed. Harry Wolf (Baltimore: Johns Hopkins, 1964), pp. 54-76; and “Science and Religion: Separate Dimensions or Common Ground?” in *Philosophy Today*, 7 (Spring, 1963), pp. 4-14.

²¹The lecture was published as *A Catholic Modernity? Charles Taylor’s Marianist Award Lecture with responses by William M. Shea, Rosemary Luling Haughton, George Marsden, Jean Bethke Elshtain*, ed. James L. Heft (New York: Oxford University Press, 1999), pp. 13-37. This essay is also available in *Dilemmas and Connections*, pp. 167-187.

²²See, e.g., *Sources of the Self*, pp. 312, 319, 342.

²³Indeed, in his reflections on Taylor’s lecture, George Marsden wonders “if *Sources* would not be a more complete, well-rounded, and effective book if it included something like the present essay as its conclusion.” See his “Matteo Ricci and the Prodigal Culture,” in *A Catholic Modernity*, p. 89.

²⁴*A Secular Age* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2007).

²⁵*Ibid.*, pp. 12-14.

²⁶For an example, see William E. Connolly, “Catholicism and Philosophy: A Nontheistic Appreciation,” in *Charles Taylor*, pp. 166-186.

²⁷For a fair and balanced treatment of Polanyi’s religious posture, see William T. Scott and Martin X. Moleski, *Michael Polanyi: Scientist and Philosopher* (New York: Oxford University Press, 2005), pp. 287-291.

²⁸“The Future of the Religious Past,” in *Dilemmas and Connections*, pp. 251-52.

²⁹*Science, Faith and Society* (Chicago: The University of Chicago Press, Phoenix Books, 1964), pp. 57-59.

³⁰“Magisterial Authority,” in *The Crisis of Authority in Catholic Modernity*, ed. by Michael J. Lacey and Francis Oakley (New York: Oxford University Press, 2011), p. 265.

³¹*Ibid.*, p. 262.

³²*A Catholic Modernity?* p. 15.

REFERENCES

Abbey, Ruth. *Charles Taylor*. Princeton: Princeton University Press, 2000.

Connolly, William E. “Catholicism and Philosophy: A Nontheistic Appreciation.” In *Charles Taylor: Contemporary Philosophy in Focus*. Ed. Ruth Abbey. Cambridge: Cambridge University Press, 2004, pp. 166-186.

Nye, Mary Jo. *Michael Polanyi and his Generation: Origins of the Social Construction of Science*. Chicago: The University of Chicago Press, 2011.

Polanyi, Michael. “Faith and Reason.” *The Journal of Religion* 41 (1961):237-247

_____. *Knowing and Being: Essays by Michael Polanyi*. Ed. Marjorie Grene. Chicago: The University of Chicago Press, 1969.

_____. *Personal Knowledge: Towards a Post-critical Philosophy*. Chicago: The University of Chicago Press, 1958. The Harper Torchbook edition of 1964 includes a new introduction by Polanyi.

_____. “Science and Man’s Place in the Universe.” In *Science as a Cultural Force*. Ed. Harry Wolf (Baltimore: Johns Hopkins, 1964), pp. 54-76.

_____. “Science and Religion: Separate Dimensions or Common Ground?” *Philosophy Today*, 7 (Spring, 1963), pp. 4-14.

_____. *Science, Faith and Society*. Chicago: The University of Chicago Press, Phoenix Books, 1964.

_____. *The Study of Man*. Chicago: The University of Chicago Press, Phoenix Book, 1972 [1959].

_____. *The Tacit Dimension*. Garden City, New York: Doubleday & Company, Inc., Image Book, 1967.

Polanyi, Michael and Prosch, Harry. *Meaning*. Chicago: The University of Chicago Press, 1975.

Scott, William T. and Moleski, Martin X. *Michael Polanyi: Scientist and Philosopher*. New York: Oxford University Press, 2005.

Taylor, Charles. *A Catholic Modernity? Charles Taylor's Marianist Award Lecture with Responses by William M. Shea, Rosemary Luling Haughton, George Marsden, Jean Bethke Elshtain*. Ed. James L. Heft. New York: Oxford University Press, 1999.

_____. *Dilemmas and Connections: Selected Essays*. Cambridge, MA: The Belknap Press of Harvard University Press, 2011.

_____. "Magisterial Authority." In *The Crisis of Authority in Catholic Modernity*. Ed. Michael J. Lacey and Francis Oakley. New York: Oxford University Press, 2011, pp. 259-269.

_____. *Philosophical Arguments*. Cambridge, MA: Harvard University Press, 1995.

_____. "Rorty in the Epistemological Tradition." In *Reading Rorty*. Ed. Alan R. Malachowski. Oxford: Basil Blackwell, 1990, pp. 257-275.

_____. *A Secular Age*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2007.

_____. *Sources of the Self*. Cambridge, MA: Harvard University Press, 1989.

Tacit Knowledge Meets Analytic Kantianism

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Neil Gascoigne and Tim Thornton, *Tacit Knowledge*. Durham, UK and Bristol, CT: Acumen, 2013. Pp. 210. ISBN 978-1-84465-545-8 (hb) and 978-1-84465-546-5 (pb). \$85.50 & \$29.95.

Key words: tacit knowledge, normativism, Pittsburgh School, John McDowell, Hubert Dreyfus, Michael Polanyi

ABSTRACT

Neil Gascoigne and Tim Thornton's Tacit Knowledge is an attempt to find a place for tacit knowledge as "knowledge" within the limits of analytic epistemology. They do so by reference to Jason Stanley and Timothy Williamson's analysis of the term "way" and by the McDowell-like claim that reference to the tacitly rooted "way" of doing something exhausts the knowledge aspect of tacit knowledge, which preserves the notion of tacit knowledge, while excluding most of Michael Polanyi's examples, and rendering Hubert Dreyfus's and John Searle's accounts irrelevant. This is more a redefinition of terms than an account of tacit knowledge.

Philosophers writing on tacit knowledge understand the topic in two radically different ways. One takes tacit knowledge to be a generic term for an actual phenomenon: the background to action and thought that is captured by such terms as "political tradition" and "culture," and in science by such notions as paradigm, and beyond this, such things as laboratory skills and skills of many other kinds that can't be reduced to verbal instructions, such as the knowledge of a good manager or of the team players in an effective work group. This approach is concerned with illuminating the various forms which tacit knowledge takes. It comprises the knowledge necessary for skilled performances and skilled perception. Many of these skills are embodied: embodied knowledge that is at least in part the product of embodied cognition. Understanding these things is usually taken to be a matter for cognitive science, psychology, science studies, and social science, which all have an interest in the actualities of these performances. This knowledge that goes beyond the explicit instructions, and perhaps beyond any possible list of explicit instructions, is difficult to make sense of theoretically, and there are various ways of thinking about it, which compete in the way that ordinary explanatory theories compete.

Another way of looking at tacit knowledge is by way of analytic epistemology. This kind of epistemology is not concerned with such things as the actualities of science, and works with what philosophers call "toy examples," which are supposed to reveal intuitions against which an analysis can be tested. For this kind of epistemology, tacit knowledge is a puzzling concept, even an impossible category, because it cannot conform to the standard definition of "knowledge" as justified true belief. Nothing "tacit" can be, by definition, justified: justification is an explicit act. The problem of tacit knowledge in this approach is focused on the term "knowledge" in this very specific sense. Gascoigne and Thornton's *Tacit Knowledge* is squarely within this approach. For them "part of the challenge here is the tendency to take as one's paradigm propositional knowledge and then wonder how, given that, anything non-propositional (untellable) could be classed as knowledge" (36-37). This problem overlaps with another issue. Justification is a normative concept. For some philosophers in this tradition, the "problem" to be addressed by any consideration of man in the world is seen through the concepts in which justified true beliefs are expressed

or how these normative things relate to the world. “Concepts” are themselves understood to be “fraught with ought” or normative things, rather than empirical facts of psychology. So knowledge needs to be something normative itself, within “the space of reasons.” So, to address the problem of tacit knowledge *as knowledge* requires us to address the problem of the normativity of the tacit.

Some writers on tacit knowledge, including John Searle and Hubert Dreyfus, want to bring the two approaches together, though not so much to solve the puzzle of how anything tacit can be knowledge, but to answer questions about the extent to which intentionality and normativity extend into, and can be explained by, the tacit.¹ Gascoigne and Thornton are not gentle critics of these approaches. They comment that “talk of being ‘untrue to the phenomenon’ is one of those irritating methodological tics inherited from the phenomenological tradition” (McDowell 2007a, 353; quoted 156). Dreyfus is described as obtuse. What the writers they object to are trying to do, however unsuccessfully, is to describe real phenomena which a theory of tacitness needs to explain. The basic strategy of their book is to deny that the proffered explanations explain anything and that anything of the sort needs to be explained. They call this “therapeutic,” after Wittgenstein. At one point they discuss Dreyfus’s concern with the question of “how the nonconceptual given is converted into a given with conceptual content” (Dreyfus quoted by McDowell 2007a, 349; quoted 164). They endorse John McDowell’s line: “That question should be rejected, not answered” (McDowell 2007a, 349; quoted 164).

The philosophical perspective from which these problems are addressed is that of the Pittsburgh School, a group of philosophers including Robert Brandom (1994, 2002), McDowell (on whom Thornton published a book [2004]), and the late John Haugeland (1998), all influenced by Wilfrid Sellars ([1949] 1980). These thinkers fall into a category the authors call “conceptualist,” but which is part of a category we can more conveniently call normativists. What these thinkers typically believe is that there is a realm called “the space of reasons,” governed by normative relations; that “concept” is a normative concept, as is intention; that there is a radical difference between animals and humans, because the latter partake in the space of reasons and are bound by the normative constraints that go with reasons. There are many ancillary doctrines that go along with this, such as the idea that the norms of reason are produced or sanctioned by collective intentionality, on which they may diverge. There is a large problem for these philosophers: how does this “normative” realm relate to the real world as understood by naturalists, science, social science, cognitive science, and to the world and human action and belief that can be explained in ordinary terms? As we will see, there is an answer to this question from within the realm of the normative, so to speak, to which Gascoigne and Thornton appeal.

Normativists as a group, which is much larger and more diverse than this Pittsburgh group, disagree about almost everything related to the topic, so it is difficult to generalize about their claims, but it is possible to identify some standard argument forms.² Typically, they are concerned, as McDowell specifically was, to overcome the suggestion that there is something spooky about the notion that there are normative forces which work apart from the ordinary stream of explanation but nevertheless have some explanatory role in accounting for actions and beliefs. They are anti-naturalists about the actions of human beings, though they often claim to be the true naturalists, and much of what they say competes with or supplants ordinary social science and psychological explanation, though they rarely acknowledge that such explanations exist. When they do, they are hostile to them. Brandom is quite explicit in his admiration for German idealism (Brandom 2002) and his desire to re-enchant the world that was disenchanting by natural science and then social science (1994, 48-50). The idealism that influences them the most is Kant’s, and when they talk about knowledge and perception, their aim is to vindicate the idea that the world of experience, the world that we cannot go beyond, is conceptually constituted for us, and thus intrinsically normative and for this reason beyond normal causal explanation.

Why is this relevant to tacit knowledge? The answer is simple: to be knowledge, for this kind of philosopher, is to be within the space of reasons. As noted, tacit “knowledge” is a problem by definition: if the definition of knowledge is “justified true belief,” that is to say belief supported by a determinate and explicit reason, “tacit” means unjustified and also not a matter of “belief” in the usual sense, which is consciously held belief. So tacit knowledge, if it is to count as knowledge at all, needs to be slipped into a larger conception of the conditions of justified true belief, in a supporting role. For thinkers who do not share this particular definition of knowledge, or this particular form of normativism and Kantianism, there is no need for arguments of this kind: there is an actual phenomenon that needs to be understood theoretically. The same holds for the terms used by these philosophers. There are philosophical concepts of “concept” and the psychological facts about cognition that the term “concept” is supposed to cover. There is no necessary connection between the two. Similarly for rationality: there is the normative conception and the one that explains how people actually think. “Naturalists” typically think that once one has explained what actually happens there is no additional fact to be explained; one can have a normative theory of rationality, for example, but it adds nothing to the explanation of how people think. Normativists reply that whatever it is that psychologists explain, it is not “knowledge” in the true sense, but merely something like behavior. Similarly for rationality, concepts, and the rest. Naturalists are claimed to have “changed the subject” and thus do not explain “knowledge” but something else.

This long prolegomenon is necessary because some of the main points of contention relate directly to the tacit/explicit distinction. If concepts constitute reality for us, what produces conceptual change and learning? The image of people trapped within conceptual schemes does not allow for it, or even for much novelty in scientific discovery. Where do these concepts come from? If all we can perceive is via concepts, how do we get them in the first place? The slogan that McDowell uses, following Sellars, which deals with this kind of question, is: “conceptual capacities are not merely natural, but acquired along with acquiring mastery of a language” (McDowell 2003, 76; quoted 159). So there is a special normative admixture or layer that comes along with language and conceptualization. But this is not an empirical claim, despite appearances: “conceptual capacities” is not meant here in a psychological sense, but in the special normative and Kantian sense of “concepts” employed by this school. Normativists or conceptualists generally argue “transcendentally,” to the effect that something we accept as happening, once it is described in the way the normativist favors, presupposes concepts or norms. In the case of knowledge, the normativist description presupposes, by definition, “justification,” and thus a normative rather than a psychological concept of justification. But this kind of argument only works when one is starting with something explicit to transcendentalize. The tacit as such is left to psychology.

The Puzzle of Tacit Knowledge Defined and Solved

This is background to understanding the puzzle Gascoigne and Thornton attempt to solve: is there anything in the category “tacit” that is “knowledge,” that is to say knowledge in the special sense of a normative rather than a psychological fact, and that is also *personal* knowledge, in some sense akin to Polanyi’s? They approach this problem by considering three propositions:

- PC All knowledge can be fully articulated, or codified, in context-independent terms.
- PI There can be knowledge that cannot be articulated.
- PA All knowledge can be articulated, either in context-independent terms or in context-dependent terms. (16)

For there to be such a thing as tacit knowledge, as they understand the problem, they must resist two very powerful lines of argument, “the naturalistic and Platonic,” which “pull in different directions: the former towards a reductionism that would favor PI and the other towards the sort of intellectualism that

supports PC” (24). For them, “the question is: can this tension be overcome in such a way that it gives us a satisfactory account of tacit knowledge *qua* personal knowledge” (24). This drives them to a version of PA which they think allows for such an account.

The argument develops from an extended discussion of Gilbert Ryle’s distinction between knowing how and knowing that (Ryle 1945-46). Gascoigne and Thornton are impressed by a critique of this distinction by Jason Stanley and Timothy Williamson (2001) who claim that knowing how can be assimilated to knowing that. The argument is that knowing how is thus not a separate category of knowing because one can say things like this: “That is the way to ride a bicycle.” The reasoning here is that this is a statement; it is explicit; thus knowing how to ride a bicycle is, in some sense, a case of knowing that.

This may seem pretty trivial, indeed, merely a verbal solution to the problem of understanding tacit knowledge. We don’t know what a “way” is, even if we can recognize the surface manifestations of a particular one when it is pointed out to us. One might conclude that the “analysis” of “knowing how” into “knowing that” statements leaves something out, namely the crucial things we would like to know about knowing how. This is where Gascoigne and Thornton find inspiration in McDowell. McDowell faced a parallel problem about non-conceptual knowledge. If we see a particular color, but it is a shade we have no word for, it seems that we know what the shade is, and could recognize it if we saw it again. This seems to mean that we do have non-conceptual knowledge and that is also non-linguistic. McDowell denies that there can be any such thing. Language and concepts do not leave anything left-over to fall into the category of non-conceptual content. As he says:

In the throes of an experience of the kind that putatively transcends one’s conceptual powers . . . one can give linguistic expression to a concept that is exactly as fine-grained as the experience, by uttering a phrase like “that shade” (McDowell 1994: 56-7).

“That shade” is not “codifiable” in the sense that one could call a paint store and ask for it without providing them an example—as you could ask for a can of “flat white.” The designation is context-dependent. Yet it exhausts the experience: you can’t add anything to it that would give more information about it, even if there was a named color that corresponded to the shade. That would codify it, but add nothing factual about the shade itself.

One is reminded of Bertrand Russell’s remark that “I” was the most ambiguous word in the English language because it referred to something different every time it was uttered. Similarly, statements like “That is a way to ride a bicycle” need a “context” and are “demonstrative,” since the “way” needs to be pointed out and recognized. Our knowledge here is conceptual, but it is “personal” in this sense: the pointing out is based on personal knowledge that enables the speaker to make true demonstrative statements about the “way” or the shade. And if it succeeds, it conveys content: the person to whom the sentence is said can recognize the shade, or the way to ride a bicycle. Because this knowledge can be put into a sentence, even though it is one that is context bound and therefore not codifiable, it represents a kind of knowledge that is a bit like the kind of knowledge that one has when “one knows more than one can say,” if we fiddle with the definitions a bit, to replace “say” with “say in a codifiable way.” It is personal because the meaning is tied to a personal act of demonstration.

This slight rearrangement of the concepts gets them over the initial hurdle: showing that there is something in the category. But does this something correspond to anything like what tacit knowledge was supposed to be? Gascoigne and Thornton argue that it does correspond with a very important part of what tacit knowledge has been supposed to be: a regress-stopper. The problem with “justification” is that justifications need to end somewhere. Gascoigne and Thornton identify the dilemma posed by these

regresses as follows: “if knowing how is to be understood in terms of the application of propositional knowledge in concrete circumstances then either the rules for the application must be propositional in form (inviting a regress) or no such rules are required in which case know-how is a cognitive primitive” (46). The question then becomes: what stops this regress? The familiar form of this problem, for the realm of the normative, involves rule regresses. If one claims that actions are done according to a rule, one may ask for the rule governing the application of the rule, and ask for the rule governing this rule, and keep doing so ad infinitum; rules are not self-applying. This problem was one of the main motivators for Searle’s revision of his early views, because, from the point of view of cognitive science, a brain could not be modeled as a rule-applying machine because such a machine would loop into an infinite rules regress. Thus what he calls “the Background” has to consist of something different than rules. Brandom and others think that “practices” are regress-stoppers, at least for linguistic rules. “Practices” are somewhat mysterious objects. But here we have a mystery for which tacit knowledge seems to be the answer.

From Wittgenstein, read in a Kantian way, we can extract a transcendentalized form of this problem, in the question “what makes the application of a rule possible?” Rule application does seem like a case in which the “ways” idea is helpful: there are “ways,” right and wrong, and nothing beyond recognizing the way itself as a justification of the rightness of the way. The version of this problem in Kant is “how do the categories determine the manifold by making it intelligible?” As Gascoigne and Thornton explain it, the answer is through the intervention of schemata: products of the imagination that constitute rules for “determining our intuition in accordance with such and such a general concept” (Kant [1781] 2003: A141/B180; quoted 26). For Kant, there is no question here of asking what rule governs this rule: it is a “secret art residing in the depths of the human soul” (Kant [1781] 2003: A141/ B180-81; quoted 26). By definition, this would not be codifiable, for a codifiable rule would just continue the regress: we would still need to “know” how to apply it. But this “art” needs to be linguistic and conceptual, in order to be knowledge, or to be within the space of reasons. Gascoigne and Thornton’s problem is to get it there.

The problem is to make this rule which is not a rule into “knowledge.” Knowledge has to be knowledge of something. So what is the something for tacit knowledge to be knowledge of? What is the *content*? Gascoigne and Thornton return to the argument they took over from Stanley and Williamson to get an answer to the question of what the content is:

Suppose that Hannah does not know how to ride a bicycle. Susan points to John, who is riding a bicycle, and says, “That is a way for you to ride a bicycle.” Suppose that the way in which John is riding a bicycle is in fact a way for Hannah to ride a bicycle. So, where the demonstrative “that way” denotes John’s way of riding a bicycle, (28) seems true: (28) Hannah knows that that way is a way for her to ride a bicycle (Stanley and Williamson 2001, 428; quoted 63).

Stanley and Williamson take this to be an example of knowledge how that can be expressed as knowledge that, but under a “practical mode of presentation,” meaning that the “content” is identified through something like pointing out. As Gascoigne and Thornton explain, “the idea is that a demonstrative indication of a *way* of riding can carry the content that is known in such a case” (63).

“Content” and “known” are terms of art in this kind of philosophy: “content” is normally that which is conceptualized, “known” means justified true belief or something like it.³ In this case John doesn’t need to know anything about any “content” to ride a bicycle perfectly—he need not know that what he is doing is a “way” or indeed have any beliefs at all. Although Stanley and Williamson do not put it this way, their account implies that John can be a chimpanzee, even though, by definition he cannot have knowledge because he cannot be in the space of reasons. In short, what has normally been thought of as tacit

knowledge here, the embodied skill, is not the content at all. The “content” of the “knowledge” is limited to whatever is being conveyed by the demonstrative “That is a way to ride a bicycle.” It is conceptual, because “way” is a concept, and indicating “that way” exhausts its content.

Gascoigne and Thornton demur from this interpretation in some respects. They think that the knowledge Stanley and Williamson’s account gets you is *theoretical* practical knowledge, which they do take to be a form of knowledge of the tacit. But Gascoigne and Thornton recognize that this is not what the concept normally means. Their response is to deny that this disconnection between knowledge and ability holds generally. “Irina knows how to add,” for example, seems to imply that she can actually add (66-67). This move finally gets us to something significant.

The obvious application for this kind of ability that can be recognized and where one can say “she knows how,” is to the problem of mathematical rule-following made famous by Wittgenstein and Kripke.⁴

Kripke’s reading of Wittgenstein’s argument suggests the following central role of a tacit dimension underpinning the conceptual order. The content of a rule cannot be made explicit. It cannot be reduced to any finite examples, nor to the grasping of any symbols. Nor does it consist in the dispositions of individuals or communities to make particular judgments. Nevertheless, individuals whose judgments or actions do not diverge from that of a community can be deemed to have mastery of a rule or to have grasped a concept. But such mastery or grasp is not guided by anything that is explicit to them. It is not encoded in their mental states, for example. Thus such understanding seems clearly tacit. Of necessity, it transcends anything that can be made explicit. It is essentially implicit (95-96).

This gives us something beyond mere recognition of a way that is *like* knowledge, namely “understanding.” But is it “knowledge”? It is, in the appropriately Wittgensteinian-Kripkean sense, if we add in a few elements. They do so in several steps. The first is to connect meaning recognition to practical competence:

Wittgenstein’s regress argument balances what is explicit in explanations of meaning with what is tacit in the sense of situation-specific practical ability. To grasp the meaning of a word is to have a potentially unlimited competence in its use even if it is explicable, to those with eyes to see, in finite and particular explanations. But such grasp of the meaning involves the recognition of any particular use that *that!* use is correct, accords with its meaning. Such recognition is a context-dependent demonstrative thought which accords with what we take to be the most promising understanding of what is tacit (176-77).

So out of recognizing meaning, we get “context-dependent demonstrative thought.” This counts as “personal” and includes the elements of skill and having eyes to see, thus bringing together the personal and the practical. Now the problem is to make it an object of linguistic expression:

The equation of “personal” and “practical” flags the fact that such knowledge can only be articulated practically and from within. It requires not just a context, which would be sufficient for context-dependent spectator knowledge, but also a skilled agent both to perform the practical demonstration (in the role of the teacher) and also to have “eyes to see” the import of the demonstration (as the “learning-ready” pupil) (167).

“Practical” thus means there is a “skilled agent” who can see the “import” of the demonstration, not merely recognize it as a “way.”

This notion of practical knowledge gets us something that is not codifiable, and therefore not a case of propositional knowledge. But we still face “a by now familiar dilemma, [that] such a conception may merit the description tacit but only at the cost of failing to count as knowledge” (176). The problem here is that what is being transmitted still seems to be no more than knowledge of something as a “way,” although it is knowledge that has practical import for the skilled agent. And this raises a question about the content. The claim they want to make is this: “Although we know more than we can tell, we can articulate, and hence (in principle) transmit to others, all that we know” (189).⁵ The “all” is the critical word here. What we can transmit is recognition, which will be different for the skilled agent. The skilled agent’s ability itself is another matter, which may help with recognizing a “way,” but which is itself quite different from the capacity to recognize a way. The “all” does not include it.

This is the trade-off that needs to be accepted to accredit this kind of personal, context dependent, demonstrable stuff as knowledge: we give up what was formerly thought of as tacit knowledge, but retain a part of it, which *can* count as knowledge, and specifically as personal knowledge. How much we are giving up is acknowledged:

This may sacrifice (the reductive) part of the “natural” aspect of tacit knowing that Polanyi wished to preserve through the connection with the abilities of animals, and as a consequence render largely irrelevant most of Polanyi’s empirical examples. But it gives more traction to the notion that tacit knowing is in some sense personal knowing (31).

Limited in this way, we can solve the problem of tacit knowledge as knowledge.

Tacit knowledge might indeed be described as unformulated or untellable. But that is not because we cannot say or tell how we do something or how we know something... Rather, it is because the knowledge we have of something when we are doing it is knowledge-how, and knowing how is untellable in the limited sense that it cannot be articulated in depersonalized, context-independent terms (31).

There is no mystery about these demonstratives. They fall between the categories of codifiable and ineffable. And thinking that these were the only options is where they think Polanyi goes wrong:

Accordingly, the mistake Polanyi makes is to conclude that because something is untellable in the sense that it cannot be codified and is thus not subject to PC it must as a consequence fall under something like PI. That implies that putative untellability gestures towards something hidden, mysterious or ineffable and in turn shapes his particular, unworkable version of naturalized Platonism (31).

They thus preserve the idea that everything that is “knowledge” is tellable, albeit not codifiable, but dispense with what normally is thought of as tacit knowledge, namely embodied skills and habits of mind, as well as the as yet unarticulated ideas struggling to be articulated. These are Polanyi’s examples. The fact that they can be transmitted as something that can be recognized, the “way,” like the shade of color, rather than the embodied content of the way, comprises the “knowledge” part of all of this. The rest is outside of the space of reasons, the conceptual, and the tellable.

Searle and Dreyfus: The Problem of Getting to Concepts

There is a general problem here, which one finds throughout the normativity literature, and which is behind a number of the issues which Gascoigne and Thornton take up in relation to Searle and Dreyfus. The problem arises for all terms which are supposed to have, or are taken to have, a normative character,

including rationality, concepts, intelligence, intentionality, correctness, and so forth. If one is committed to the idea that there is something intrinsic to these concepts that prevents them from being understood and described as natural facts, and that only humans have these things, one is faced with problems about when they begin, how a person moves, for example, from an infantile pre-normative state to a normative one, and how animals that are in a normative state, namely humans, evolved out of animals that are not. To the extent that the normative concepts in question are local norms, such as the norms of a given language, the problem is quite precise: one must explain how a non-normative infant, making and responding to utterances, turns into a normative being. Learning the language can't be the answer: learning is a psychological process, and in this sense non-normative. The learning done by a child can't be guided by the relevant norms if the norms themselves can't be learned. But learning, for example by trial and error, does not involve anything that adds normativity. If the normative concepts are non-local or generic ones, such as intelligent embodied coping, one faces different issues, notably the problem of distinguishing animal coping from human coping. McDowell insists that the human sort of coping is "permeated with rationality" which is unlike that of animals (2007a, 344). These are not normal empirical claims, but involve mysterious processes or outright fictions, such as McDowell's claim that at some point a child comes to recognize the normativity of reason.

Gascoigne and Thornton are highly critical of Dreyfus's and Searle's solutions to these problems. Both solutions work by pushing the problem of explanation back to some supposed prior capacity, such as intelligent bodily coping in Dreyfus, or in Searle to a tacit "Background" together with normativizing capacities.⁶ Dreyfus proposes a two-level model in which coping comes before and is a condition of explicit conceptualized perception, thinking, naturally, that novel perceptions without concepts have to be possible in order for change, among other things, to occur.⁷ This parallels Polanyi's idea that all knowledge is either tacit or based on tacit knowledge. Searle makes a similar move, in invoking the Background as a condition of explicit knowledge.⁸

There are, however, nuances to these views, notably about when intentionality comes in. Dreyfus and Searle, reasonably, give the tacit a kind of preconceptual intentionality, which opens the door to a counter-argument that intentionality is always already normative and conceptual. In McDowell we get an explicit version of this counter-argument, in terms of the form of normativity that he attributes especially and exclusively to humans, practical rationality. This normative stuff permeates even unreflective embodied coping, according to McDowell:

I do not have to ignore embodied coping; I have to hold that, in mature human beings, embodied coping is permeated with mindedness. And that is exactly what I do hold (2007a, 339).

What makes these "permeate" claims interesting is the way they interact with the refusal to answer explanatory questions that characterizes McDowell's normativism and many other versions of normativism. Here the argument works like this: there is nothing to explain about how one acquires practical rationality, mindedness, normativity, intentionality, and so forth, because it is always already there in every form of coping that humans do. Moreover, and this is a point reiterated by Gascoigne and Thornton: there is something distinctively and exclusively human here, *contra* Polanyi and Dreyfus. McDowell conceives of this distinctive thing in terms of "openness."

What is in question between Dreyfus and me, once we are focusing on that aspect of what perception does for us, is precisely whether our perceptual openness to affordances, which I agree is necessarily bound up with our embodied coping skills, is permeated with rationality. That cannot be set aside as something we need not go into. I do not

dispute that perceptual responsiveness to affordances, necessarily bound up with embodied coping skills, is something we share with other animals. And I can accept that there is a sense in which familiarity with affordances is a background for our openness to objects. But I can still hold that our openness to affordances is part of the way of being that is special to rational animals (McDowell 2007a: 344).

What he has in mind here is this:

when our embodied coping skills come to constitute a background for our openness to the world, the openness to affordances that is an element in what it is for us to have embodied coping skills becomes part of our openness to the world. Openness to affordances draws on the rationality of subjects who are open to the world just as much as any other part of openness to the world does (McDowell 2007a, 345).

So if one concedes that openness is uniquely human, then it too is permeated with a specific sort of distinctly human rationality.

An interesting aside to this argument involves the phenomenology of action in the case of expert performers, one of Dreyfus's long-standing interests. For Dreyfus, these are cases of action beyond rule following, which are different in character. When expert baseball players throw to first, presumably they are not making any rational calculation or conceptualizing: they are performing habitual actions that they have practiced endlessly so that they are performed without the slow brain. Moreover, expert performers feel this as part of the flow of the game, or performing, not cogitating. As Dreyfus puts it, "expert coping . . . [is] direct and unreflective, which I take to be the same as being nonconceptual and nonminded" (Dreyfus 2007a: 354; quoted 157). Dreyfus and McDowell discuss the case of a second baseman named Chuck Knoblauch, who couldn't throw to first if he thought about what he was doing (Dreyfus 2007a & b, esp. 2007a: 354; McDowell 2007b). This is the kind of difference Dreyfus wishes to capture, which is a signal of the difference between tacit and non-tacit. McDowell's response is that the action is already permeated with practical rationality and already conceptual.

When Knoblauch still had the bodily skill that he lost, his mindedness was in operation in exercises of his skill. His throwing efficiently to first base was his realizing a concept of a thing to do (McDowell 2007b, 367).

For McDowell, the example shows nothing other than "when mindedness gets detached from immersion in activity, it can be the enemy of embodied coping" (2007b, 367).

The effect of these "permeate" arguments is that there is never a moment "before" the conceptual (or after, in the case of the expert) and therefore no transition to explain. So refusing to explain is merely to refuse to explain something that we have to accept as already part of the supposed foundational or background stage. Dreyfus responds by noting that "current neurological models of skilled action, (such as actor-critic reinforcement learning models) . . . claim that consciousness is only called into action once the brain has detected something going wrong" (Dreyfus 2007b, 377 n4). McDowell would respond by saying that consciousness is not necessary for an activity to be permeated with rationality, mindedness, intentionality, normativity, and so forth. Needless to say, there is nothing in McDowell about any of the distinctions marked out by phenomenology or experimental cognitive science. His is an exercise in definitions, and there is no additional empirical question raised or resolved by defining practical rationality as permeating anything. But McDowell recognizes that there needs to be some sort of empirical story here, and occasionally gestures to notions of developmental psychology and evolution before returning to narrowly philosophical sources.

Gascoigne and Thornton distance themselves from McDowell's gestures to the empirical. But they endorse McDowell's idea that the questions Searle and Dreyfus want answers to are questions that should be rejected. They articulate it as an argument that Dreyfus's and Searle's explanations explain nothing about what Gascoigne and Thornton have established is the content of tacit knowledge, which, as they admit, also eliminates Polanyi's examples. This rejection follows directly from the definition of knowledge as a specific kind of normative fact, not from any empirically relevant concept of knowledge.

What is the Picture?

How do all these arguments fit together, and what picture of tacit knowledge are we left with? A summary is in order. Start with "knowledge." If we go a little bit beyond the propositional model, which Gascoigne and Thornton associate with codification and depersonalization, we do have something that can be called knowledge, on the model of McDowell's "this" in identifying a color. Knowledge has to be knowledge of something, meaning that it has to have content. To have content is to be conceptualized. It also needs to be answerable. We have demonstrative sentences that refer to practices: "That is a way for you to ride a bicycle" and the conclusion, "Hannah knows . . . how to ride a bicycle" (63). That gets us what we need. There is content, namely the way to ride, it is conceptualized, it is a demonstrative sentence, so the content is expressible and thus effable. It is "context-dependent but still conceptually articulated personal knowing how" in the following sense: it is not codifiable, any more than McDowell's "this;" and like McDowell's sentence, we can say that it is "tacit" knowledge in this sense: "because it cannot be put into words independently of a context." It is knowledge because it conforms with the "*Principle of Articulacy*:"

PA All knowledge can be articulated, either in context-independent terms or in context-dependent terms (126).

Thus we have found something in the category of tacit knowledge, with tacit and knowledge both (some-what, or radically, depending on one's tastes) redefined.

What does this have to do with Polanyi? Gascoigne and Thornton refer to various parallels throughout the text, but a lot hinges on the claim that demonstrative knowledge is personal, requiring "'eyes to see' the import of the demonstration" (167). What is actually transmitted by these demonstratives is not knowledge that enables one to ride a bike, but the capacity to recognize a "way" together with its "import." This gives a very specific and limited significance to the claim that "Although we know more than we can tell, we can articulate, and hence (in principle) transmit to others, all that we know" (189). The issue is the "know": the thing transmitted is no longer what Polanyi or anyone else thought tacit knowledge was, but something much more limited—that which is not, as they put it, quoting Wittgenstein, "hidden." This is what warrants their claim that "tacit knowledge can be articulated without remainder" (192). What counts as tacit knowledge is thus something far more limited than normally understood. This is indeed "a more svelte and amenable Polanyi" (37), which is what they wanted to produce. But it is amenable primarily to a very specific philosophical position, namely that of McDowell and his confreres.

Their project makes sense for this very specific purpose. And it must be said that Gascoigne and Thornton achieve the aim they set for themselves. From another point of view, it is something different, and something very common in philosophical argumentation: an attempt to resolve a conflict that appears insoluble in some standard terms by changing the terms and providing a solution to a restated and different problem. From this point of view, they have re-labeled something explicit, namely demonstrative talk of "ways," as tacit, and called this thing, "tacit knowledge."

Gascoigne and Thornton talk about being answerable to the world, and of course tacit knowledge as traditionally understood *is* answerable to the world in very specific ways. The fielder throwing to first base does not merely act according to some sort of inner disposition untouched by the world. Far from it: the whole point of practice is to receive the tacit feedback of making the throw to the target in order to improve habits and instill the right dispositions for the task. And what holds for this purpose-oriented habituation also holds for habituation generally. Habits are formed from feedback. They are thus “accountable to the world” in whatever factual, non-normative sense can be given to the normative notion of accountability. Gascoigne and Thornton sharply distinguish habits and dispositions from knowledge and then dismiss habits and dispositions as irrelevant to the problem of tacit knowledge because they are non-conceptual and therefore without content. But doing this tells us nothing empirical about the difference between habitual throwing and conceptualized throwing, because there is no empirical difference. Insisting that feedback is not real accountability, because accountability is a normative concept, which is how normativists would respond, merely shows that accountability is not an empirical concept.

This argument is clear. But writers like Searle and Dreyfus typically muddle the issue themselves by extracting something from the tacit to support their own larger philosophical purposes. In the case of Searle, it has been the notion of “conditions of satisfaction” (1983: 145; 1992: 238-39) which he thinks can be traced to fundamental roots in the Background, and then be used to justify claims about the normative character of explicit thought. One can see how this goes: even feedback loops of the sort involved in learning require some threshold of results to be a positive feedback loop. But claiming that facts like this can be built into a general theory that justifies an elaborate social ontology, as Searle does, leaves hostages to fortune, and opens him to responses like McDowell’s, that rationality of a specifically human kind permeates human action from the start. Dreyfus opens himself up to analogous arguments by using Heideggerian language which allows McDowell to insist that concepts and some sort of distinctive human rationality is always already there in whatever activity Dreyfus is describing. Gascoigne and Thornton are right to object to Searle and Dreyfus on these grounds. But their real flaw is that their arguments are too much like those of McDowell in the first place.

A few other cautionary comments on this project are justified. Many philosophers reject as mere dogma such theses as the claim that there is no world that is experienced other than through linguistic concepts. For them, this is just linguistic idealism. Similarly, animals obviously share our world, share many of our means of accessing the world, are capable of such things as joint attention (which is all that “recognition” is in the examples used in the book), and of learning. Arguments that animals do not have these things have a steep hill of fact to climb. Philosophers of this school typically claim, for example, that animals have no intentions. As the ethologist Frans De Waal says, “Sometimes I read about someone saying with great authority that animals have no intentions and no feelings, and I wonder, ‘Doesn’t this guy have a dog?’” (Dreyfus 2001). It is not enough to redefine concepts to suit one’s philosophical prejudices, if these are also concepts with a life in the real world.

A similar point about philosophical method might be made about transcendental arguments and regress arguments of the sort that figure in the text. They have an unhappy history, to say the least: genuine transcendental arguments are supposed to exclude the alternatives. The whole history of these arguments, from the neo-Kantians to the Pittsburgh school itself, is one in which alternative competing transcendental claims have been generated, with no way to decide between them. Similarly for notions of normativity: the sheer variety of claims of different kinds of “normativity” is astonishing. Making Polanyi amenable to one, very implausible, account of normativity, is an intelligible project, but one with limited significance.

Gascoigne and Thornton try to avoid the implausibility of McDowell’s general philosophical claims by rejecting his “empirical” or rather pseudo-empirical claims in favor of what they take to be a thera-

peutic approach. The strategy, a common one in the normativist literature, is to have one's cake and eat it too: to appeal to a problematic notion, like "practice," without facing the problems with it.⁹ What they mean by "therapy" is better expressed by McDowell when he rejects questions, which amounts in each case to denying that something needs to be explained. This is not Wittgensteinian therapy, which involves assembling reminders to prevent language going on a holiday.

The notion of knowledge in play here, which is derived from analytic epistemology, has little to do with Polanyi, who thought science produced beliefs with an element of faith, not beliefs that could be "justified" in the absolute sense. To restrict one's notion of knowledge to justified true belief and then extend it to the tacit, as Stanley and Williamson do, manages to miss all of the interesting problems with the tacit—the idea of embodied cognition, the idea of extended minds, and much more. For most of us who are philosophers of science, what we care about are real cases in science, as Polanyi did, cases in which the claims of science are fallible, dependent on a complex supportive social world and traditions. As I noted in the opening paragraph, this "explanatory" approach diverges radically from Gascoigne and Thornton's. So does the notion of knowledge with which it is associated.

ENDNOTES

¹Dreyfus has been concerned with aspects of these issues for decades, notably in *Mind over Machine* with Stuart Dreyfus (1986), *What Computers Still Can't Do* ([1972] 1992), and his writings on expertise, "From Socrates to Expert Systems" with Stuart Dreyfus (1985) and "What is Morality?" with Stuart Dreyfus (1990), but most recently in debates in "Overcoming the Myth of the Mental" (2005), "The Return of the Myth of the Mental" (2007a), and "Response to McDowell" (2007b). Searle's views on tacitness appear in his discussions of what he calls "the background," which evolved out of his initial writings on social life as undergirded by tacit rules in *Speech Acts* (1969), a position he recognized as untenable, and revised, notably in his 1983 *Intentionality*, which introduces the notion of "the Background" to a "Network" made up of a mixture of conscious and unconscious intentional states. This was further elaborated in the 1990s in such books as *The Rediscovery of the Mind* (1992), and extended to social explanation and ideas about collective intentionality in a 1990 chapter, "Collective Intentionality and Action." These new ideas were synthesized into an extensive account of the social, first in *The Construction of Social Reality* (1995) and revised in *Making the Social World: The Structure of Human Civilization* (2010).

²I should declare my own interest here. I have a book dealing with both the argument forms and the history of this problem, *Explaining the Normative* (2010). The book is critical of normativism, and of the many argumentative tricks needed to sustain it.

³"Content" is an important term in normativism, meaning "conceptual content." This raises the question of whether there could (or must) be non-conceptual content. The question is the subject of a large literature that parallels and interacts with the tacit knowledge literature. For examples, see Cuzzins, "Content, Conceptual Content, and Nonconceptual Content" ([1990] 2003).

⁴See Wittgenstein, *Philosophical Investigations* (1953) and Kripke, *Wittgenstein on Rules and Private Language* (1982).

⁵See Polanyi, *The Tacit Dimension* ([1966] 2009, 4).

⁶The evolution and point of Searle's claims up to 1995 are discussed in my 1999 review of *The Construction of Social Reality* (Searle 1995). Their most recent form is discussed in Paul Roth's 2012 review of *Making the Social World: The Structure of Human Civilization* (Searle 2010).

⁷Dreyfus calls this “a ground level floor of preconceptual, preobjective/presubjective, prelinguistic coping” (2007a, 364).

⁸Searle uses the language of “permeation” as well, but to make the exact opposite point: that the workings of conscious intentional states are permeated with the “Background,” “since without the Background the states could not function” (1983, 151).

⁹Some of which, such as what I have elsewhere called the Maussian problem, go to the heart of the claim that ways are recognizable objects free of the problem of nature and culture (cf. Turner 1994, 19-24).

REFERENCES

- Brandom, Robert. 1994. *Making It Explicit: Reasoning, Representing & Discursive Commitment*. Cambridge, MA: Harvard University Press.
- _____. 2002. *Tales of the Mighty Dead: Historical Essays in the Metaphysics of Intentionality*. Cambridge: Harvard University Press.
- Cuzzins, Adrian. [1990] 2003. “Content, Conceptual Content, and Nonconceptual Content.” In *Essays on Non-Conceptual Content*, edited by York H. Gunther. Cambridge, MA: MIT Press, pp. 133-63.
- Dreyfus, Claudia. 2001. “A Conversation With Frans De Waal; Observing The Behavior Of Apes, Up Close.” *The New York Times*. June 26, 2001. <http://www.nytimes.com/2001/06/26/science/a-conversation-with-frans-de-waal-observing-the-behavior-of-apes-up-close.html>.
- Dreyfus, Hubert L. and Stuart Dreyfus. 1985. “From Socrates to Expert Systems: The Limits of Calculative Reality.” In *Philosophy and Technology 11: Information Technology and Computers in Theory and Practice*, edited by C. Mitcham and A. Huning. Boston: Riedel Publishing, pp. 111-130.
- _____. 1986. *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*. New York: The Free Press.
- _____. 1990. “What Is Morality? A Phenomenological Account of the Development of Ethical Expertise.” In *Universalism vs. Communitarianism: Contemporary Debates in Ethics*, edited by D. Rasmussen. Cambridge, MA: MIT Press, pp. 237-64.
- Dreyfus, Hubert L. [1972] 1992. *What Computers Still Can't Do: A Critique of Artificial Reason*. New York: Harper & Row.
- _____. 2005. “Overcoming the Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise.” In *Proceedings and Addresses of the American Philosophical Association* 79 (2): 47-65.
- _____. 2007a. “The Return of the Myth of the Mental.” *Inquiry: An Interdisciplinary Journal of Philosophy* 50 (4): 352-365. <http://dx.doi.org/10.1080/00201740701489245>.
- _____. 2007b. “Response to McDowell.” *Inquiry: An Interdisciplinary Journal of Philosophy* 50 (4): 371-77. <http://dx.doi.org/10.1080/00201740701489401>.

- Haugeland, John. 1998. *Having Thought: Essays in the Metaphysics of Mind*. Cambridge, MA : Harvard University Press.
- Kant, Immanuel. [1781] 2003. *Critique of Pure Reason*, trans. J. M. D. Meiklejohn. <http://www.gutenberg.org/ebooks/4280>.
- Kripke, Saul. 1982. *Wittgenstein on Rules and Private Language*. Oxford: Blackwell.
- Machery, Edouard. 2011. "Thought Experiments and Philosophical Knowledge." *Metaphilosophy* 42 (3): 191-214. DOI: 10.1111/j.1467-9973.2011.01700.x
- McDowell, John. 1994. *Mind and World*. Cambridge, MA: Harvard University Press.
- _____. 2003. "Hegel and the Myth of the Given." In *Das Interesse des Denkens: Hegel aus heutiger Sicht*, edited by Wolfgang Welsch and Klaus Vieweg. Munich: Wilhelm Fink Verlag, pp. 75-88.
- _____. 2007a. "What Myth?" *Inquiry: An Interdisciplinary Journal of Philosophy* 50 (4): 338-351. <http://dx.doi.org/10.1080/00201740701489211>.
- _____. 2007b. "Response to Dreyfus." *Inquiry: An Interdisciplinary Journal of Philosophy* 50 (4): 366-370. <http://dx.doi.org/10.1080/00201740701489351>.
- Polanyi, Michael. [1946] 1964. *Science, Faith and Society*. Chicago: The University of Chicago Press.
- _____. 1958. *Personal Knowledge*. Chicago: The University of Chicago Press.
- _____. [1966] 2009. *The Tacit Dimension*. Chicago: The University of Chicago Press.
- Roth, Paul. 2012. "Searleworld: Review Essay of John R. Searle, *Making the Social World*," in *History and Theory* 51: 123-142.
- Ryle, Gilbert. 1945-46. "Knowing How and Knowing That." In *Proceedings of the Aristotelian Society* 46: 1-16.
- Searle, John. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.
- _____. 1983. *Intentionality: An Essay in the Philosophy of Mind*. Cambridge: Cambridge University Press.
- _____. 1990. "Collective Intentionality and Action." In *Intentions and Communications*, edited by Phillip R. Cohen, Jerry Morgan, and Martha Pollack. Cambridge, MA: MIT Press, pp. 401-415.
- _____. 1992. *The Rediscovery of Mind*. Cambridge, MA and London: MIT Press.
- _____. 1995. *The Construction of Social Reality*. New York and London: The Free Press.
- _____. 2010. *Making the Social World: The Structure of Human Civilization*. Oxford: Oxford University Press.

Sellars, Wilfrid. [1949] 1980. "Language, Rules and Behavior." In *John Dewey: Philosopher of Science and Freedom*, edited by Sidney Hook. New York: The Dial Press, pp. 289-315. Reprinted in *Pure Pragmatics and Possible Worlds: The Early Essays of Wilfrid Sellars*, edited with an introduction by Jeffrey F. Sicha. Reseda, California: Ridgeview Publishing Company.

Stanley, Jason and Timothy Williamson. 2001. "Knowing How." *The Journal of Philosophy* 98 (8): 411-44.

Thornton, Tim. 2004. *John McDowell*. Chesham Bucks, UK: Acumen.

Turner, Stephen. 1994. *The Social Theory of Practices: Tradition, Tacit Knowledge, and Presuppositions*. Oxford: Polity Press; Chicago: University of Chicago Press.

_____. 1999. "Searle's Social Reality." Review of John R. Searle, *The Construction of Social Reality*. *History and Theory* 38: 211-231.

_____. 2010. *Explaining the Normative*. Cambridge: Polity Press.

Wittgenstein, Ludwig. 1953. *Philosophical Investigations*. Oxford: Blackwell.

REVIEWS

Charles Taylor, *Dilemmas and Connections, Selected Essays*. Cambridge MA and London: Belknap Press of Harvard University Press, 2011. Pp. 414. ISBN 978-0-674-28436-4, \$22.95 pb. ISBN 978-0-674-05532-2, \$43.50 hb.

This collection of essays by Charles Taylor, published early in 2011, includes twelve articles published after 1995, plus four previously unpublished essays. In most essays (written after or during the writing of his recent big books, *Sources of the Self and A Secular Age*) Taylor is relatively succinct, so sampling some of this collection may be a good way for anyone unfamiliar with his work to taste the fare before Taylor's appearance at the 2014 Polanyi Society annual meeting. It is easy enough to link the discussions in several of the essays (as Taylor sometimes does) to sections in his big books.

What may be of interest to those who know Polanyi is to point out that Taylor, too, appreciates Polanyi. Taylor is not a prolific footnoter, but there are in his other writing some direct references to Polanyi and there are many riffs in which it is easy to see that Taylor's perspective is consistent with some of Polanyi's primary philosophical commitments. In the sixties, when Taylor was a young philosopher, he was a participant in the two conferences sponsored by the Study Group on Foundations of Cultural Unity in 1965 and 1966 and in all but one of the many conferences sponsored by the successor Study Group on the Unity of Knowledge held from 1967 to 1972. Although Marjorie Grene seems to have been the force on the ground in pulling together these important meetings on different aspects of reductionism in contemporary culture, Michael Polanyi chaired the organizing committee and delivered important papers at several of the conferences he attended. Taylor's essay, "How Is Mechanism Conceivable?" appears in *Interpretations of Life and Mind: Essays around the Problem of Reduction*, (New York: Humanities Press, 1971, pp. 38-64), a volume edited by Marjorie Grene and presented to Polanyi on 11 March 1971 for his eightieth birthday.

The essays in this collection are helpfully grouped in three categories which place them on the landscape of Taylor's expansive interests. The four essays in the opening section ("Allies and Interlocutors") display Taylor in appreciative dialog with

other significant recent thinkers. The essays treating Robert Brandom ("Language Not Mysterious?") and Paul Celan ("Celan and the Recovery of Language") were interesting, but focused on figures with whom I am less familiar. Taylor praises Brandom, a contemporary Wittgensteinian, for his innovative discussion of language but suggests that this would be richer if Brandom better treated both the assertive and disclosive dimensions of language. The essay on Celan, a German-speaking, post-Holocaust poet, is a sensitive comment on Celan's poetry and on the power of symbol in modern poetry, which Taylor links to Heidegger's reflections.

Taylor's concise essay on Gadamer ("Understanding the Other: A Gadamerian View on Conceptual Schemes") shows how Gadamer addresses the dilemmas of modern social science, avoiding ethnocentrism and relativism. With his "bilateral" (25) approach (a "conversational model" [25] unlike the objectivist unilateral approach in natural sciences), he recognizes humans as cultural creatures for whom reckoning with cultural difference is a challenge, but not an impossible one. Taylor's Gadamer is a very creative thinker who shows how pervasive is our drawing on ordinary tacit understandings in the social scientific study of human beings. Understanding the other requires patiently identifying and undoing "those facets of our implicit understanding that distort the reality of the other" (29). All of this gets masterfully worked out in Gadamer's ideas calling for a "fusion of horizons" (30).

"Iris Murdoch and Moral Philosophy" is Taylor's assessment of the achievement of Murdoch, one of his teachers, but it becomes an occasion to develop further themes he affirms with Murdoch. Murdoch was part of the narrow world of analytic moral philosophy (whose evolution Taylor explains), but she moved ethics beyond rights discourse; she "opens up the question of what it is good to be," and "she takes this beyond the question of a good and satisfying life to the consideration of a good which would be beyond life" (4). Taylor is not a Buddhist like his teacher, but wants to extend Murdoch's effort to move ethics discourse "to the almost untracked forests of the unconditional" (5). Rejecting the analytic split between philosophical and religious ethics, Taylor argues that "exemplary figures body forth life goods" (11). Giving the full

range of ethical meanings its due requires focusing not only on doing but also on being and on what we love, which is Taylor's terminology for being moved by some constitutive good. Taylor suggests that "articulating the good is in a way providing reasons." (13). Although he recognizes this affirmation goes against the grain in contemporary humanist culture, he suggests that "'thy will be done' does not reduce merely to 'let human beings flourish'" (17). Otherwise put, Taylor says that "entering the forest means being called to a change of identity" (17). Taylor thus exposes the conflict between modern culture and forest dwelling.

The second four essays, situated under the rubric of "Social Theory," reflect Taylor the social and political philosopher. "Nationalism and Modernity" argues that both modernity and nationalism need to be conceived much more broadly than has often been the case in political philosophy. Taylor shows why "one-line theories of nationalism" (81-82) are inadequate. Much of his discussion is rooted in concrete situations of recent conflict about which Taylor knows a great deal. He builds on Ernest Gellner's discussions of nationalism and modernity, showing that the variety of ways in which the modern state forces homogeneity both encourages and provokes nationalist reactions. Modernity has displaced the traditional "hierarchical mediated-access society" with "horizontal, direct-access societies" (86). Belonging is now more direct and so direct access images have shunted "forms of mediacy to the margins" (86). People who conceive of themselves as participating directly in the public sphere see others as individuals and equals. Just as Taylor shows that recent nationalism is a complex phenomenon, he also argues that we need to recognize "alternative modernities" (94). Modernization is like a wave flowing over and transforming traditional cultures across the world, but insofar as traditional cultures are quite diverse, the modernities imagined and created are diverse.

"Conditions of an Unforced Consensus on Human Rights" is a fascinating effort to approach human rights questions cross-culturally. Taylor proposes efforts aimed to produce norms for behavior while acknowledging that it may not be possible or necessary to agree upon a conceptual basis for such norms. He succinctly lays out the western conceptual basis for the language of rights but then shows how this conceptual basis does not work very well, for example, in a more Confucian context. He looks at a variety of concrete instances of conflicts between

the language of human rights and different cultures. What Taylor emphasizes is ways to mediate common political and legal practices based in different underlying justifications. He concludes that we need to distinguish between norms, legal forms and background justifications in the discussion of human rights and cross-cultural possibilities.

"Democratic Exclusion (and Its Remedies?)" shows that it is an element of the "dynamic of democracy" (124) to create exclusions as a byproduct of efforts to create a common identity. Exclusion is morally objectionable and causes difficult problems in modern democratic orders. Taylor argues, however, that understanding the "democratic dilemma" (145) of exclusion is an important step and that exclusion could be better mediated if democratic orders worked more creatively to negotiate and share "identity space" (140). "Religious Mobilizations" is Taylor's discussion of some modern religious forms that have adopted new structures and altered their followers' "social imaginaries and sense of legitimacy as well as. . . their sense of what is crucially important in their lives or society" (147). These are "religious mobilizations" and modernity is an "age of mobilization" (147). In the post-Newtonian disenchanted cosmos, God came to be regarded as present in the design of the cosmos and in the moral and political order in society, which is grounded in free rights-bearing individuals. Primarily what Taylor does in his discussion is show how this new outlook produces new connections between religion and state, moving ultimately through "neo-Durkheimian" (150) permutations to the contemporary scene in which often "the spiritual dimension of existence is quite unhooked from the political." (150).

Part three, "Themes from a Secular Age," contains eight essays. As with the four essays in part two, they are either warm-up reflections for or fallout extensions of Taylor's almost 900-page 2007 book which analyzes the development and nature of the modern and postmodern religious outlook/orientation to life. "Social imaginary" is a provocative Taylor notion that he defines as "socially shared ways in which social spaces are imagined" (86) and develops in essays in this section, the "Social Theory" section, and in his very interesting short book, *Modern Social Imaginaries* (Durham and London: Duke University Press, 2004). Indeed, I find that Taylor's analysis of the "social imaginary" is the key to his work as a thinker who narrates an unfolding account of the history of modern and postmodern consciousness. In the eight essays in

his “Themes from *A Secular Age*” section, Taylor analyzes and interestingly praises and criticizes aspects of the dominant cultural outlook in our secular age. I can do no more in this short review than mention the titles and topics treated in most of the essays in this section.

“A Catholic Modernity?” is an insightful reflection drawing in many elements, and certainly one important one is the case Taylor makes “for unity-across-diversity, as against unity-through-identity” (168). In “Notes on the Sources of Violence: Perennial and Modern” Taylor confronts Girard and offers an interesting meditation on modern categorical violence against whole categories of others. “The Future of the Religious Past,” one of the longer essays in the collection, summarizes many ideas developed in *A Secular Age*. The essay lays out major elements of what Taylor acknowledges is his “grand narrative” of Western civilization. He gives “an account of the vectors of religious development up to the present” (214) and then speculates about how this religious past will fare in the future. Taylor ends this essay with some tentative comparisons between the West and some other parts of the world. “Disenchantment-Re-enchantment” covers some of the same ground as “The Future of the Religious Past,” but here Taylor’s angle of vision focuses on problems of meaning; he ends by opening up the question about possibilities for re-enchantment in the contemporary world.

“What Does Secularism Mean?” briefly unpacks the emergence of ideas about secularism in the West, but then turns to Taylor’s carefully reasoned account of how certain principles of secularism should be applied in modern democratic and pluralistic societies. Taylor seems most often to be praised or condemned for his captivating account of the history of ideas (or, better stated, the evolving history of social imaginaries) and particularly his analysis of contemporary culture. However, as this essay—like those in the “Social Theory” section—clearly shows, Taylor is a very insightful political philosopher attuned to the global arena. His constructive political philosophy should not be overlooked.

“*Die Blasse Vernunft* (‘Reason Alone’)” shows how certain myths of the Enlightenment underlie much moral and political thought in modernity. Taylor analyzes ways in which certain suppositions get combined in many strands of modern thought. This essay fits seamlessly with the following essay, “Perils of Moralism,” which is a detailed analysis of what

Taylor dubs “code fixation” (348) or “nomolatrý” (351) in modern liberal society in academic moral and political philosophy as well as politics. Taylor shows how “code-centrism” (351) overlooks what Polanyi regarded as the tacit background. He suggests how the modern orientation toward codes is a byproduct of the development of Latin Christianity and shows the ways in which a variety of forms of modern humanism can be understood as a reaction to code-centrism.

The last essay in *Dilemmas and Connections*, “What Was the Axial Revolution?” develops ideas in the third chapter of *A Secular Age*. This essay I read as a remarkably concise but highly abstract précis of Taylor’s intellectual project in his recent big books (and some smaller ones) as well as in many of the essays in *Dilemmas and Connections*. What Taylor finds in the discussions of the “axial revolution” is fundamentally a sea change in the history of consciousness concerned with human understanding of the good. Much of what Taylor has been up to now for many years is tracing the trajectory of what he terms the “disembedding” (368) of our human account of ourselves and the good.

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NOTES ON CONTRIBUTORS

JOHN V. APCZYNSKI (APCZYNSK@sbu.edu) is professor emeritus at Saint Bonaventure University. A long-time student of Polanyi's thought, he currently is exploring ways of reconsidering issues in the Catholic tradition.

RICHARD GELWICK had a long and distinguished career as a teacher and scholar. He was also a central figure in the founding of the Polanyi Society and the publications that became *Tradition and Discovery*. His life and work are profiled in the tribute that begins on p. 5 of this issue.

WALTER GULICK (wgulick@msubillings.edu) is Professor Emeritus at Montana State University Billings; **PHIL MULLINS** (mullins@missouriwestern.edu) is Professor Emeritus at Missouri Western State University. Mullins was a friend of Richard Gelwick's for almost forty years, while Gulick knew Richard for almost as long. Mullins succeeded Gelwick as editor of TAD; Gulick succeeded Gelwick as General Coordinator. Together, Gelwick, Mullins, and Gulick were the principle architects (aided by good advice from Mullins' lawyer friend Creath Thorne) of the Society's by-laws. Gelwick, Mullins and Gulick, along with Charles McCoy, served in an advisory, supportive role to William Scott as he battled Parkinson's Disease while trying to complete the Polanyi biography. Mullins spoke on behalf of the Polanyi Society at Gelwick's memorial service in Brunswick, ME.

STEPHEN TURNER (turner@usf.edu) is Distinguished University Professor of Philosophy at the University of South Florida. He has written extensively on Polanyi and issues associated with Polanyi, such as the planning of science dispute of the thirties and forties. A collection of his essays on tacit knowledge, *Understanding the Tacit*, was recently published by Routledge, together with a selective collection of his writings on expertise and science, *The Politics of Expertise*.

SUBMISSIONS FOR PUBLICATION

Articles, meeting notices, and notes likely to be of interest to persons interested in the thought of Michael Polanyi are welcomed. Manuscripts normally will be sent out for blind review.

Articles should be sent to Paul Lewis at lewis_pa@mercuer.edu.

Book reviews should be sent to Walter Gulick at wgulick@msubillings.edu.

All manuscripts should be submitted as a Microsoft Word file attached to an email message (.doc or .docx) and formatted as follows:

- double-spaced
- with 1" margins
- in a reasonable typeface (Times New Roman 12 is preferred)
- with paragraphs indented 0.25"

As to other matters of style:

1. *Spelling*: We recognize that the journal serves English-speaking writers around the world and so do not require anyone's "standard" English spelling. We do, however, require all writers to be consistent in whatever convention they follow.

2. *Citations*: We recognize that Polanyi's work connects with scholars who work in diverse disciplines and typically use different style guides such that we are "fluent" in different conventions for citations, capitalization of titles, and so forth.

- Our preference is for Chicago's parenthetical/reference style in which citations are given in the text as (last name of author year, page number), combined with bibliographical information at the end of the article.

- Endnotes should be used sparingly and be placed before the reference section.

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<i>CF</i>	<i>Contempt of Freedom</i>
<i>KB</i>	<i>Knowing and Being</i>
<i>LL</i>	<i>Logic of Liberty</i>
<i>M</i>	<i>Meaning</i>
<i>PK</i>	<i>Personal Knowledge</i>
<i>SEP</i>	<i>Society, Economics, and Philosophy</i>
<i>SFS</i>	<i>Science, Faith, and Society</i>
<i>SM</i>	<i>Study of Man</i>
<i>STSR</i>	<i>Scientific Thought and Social Reality</i>
<i>TD</i>	<i>Tacit Dimension</i>

Deadlines:

- For Number One of a Volume (October): 1 July
- For Number Two (February): 1 November
- For Number Three (July): 1 April

WWW Polanyi Resources

The Polanyi Society web site (polanysisociety.org/ or polanysisociety.com/) provides information about Polanyi Society membership and meetings. The site also contains the following: (1) digital archives containing all issues of *Tradition and Discovery* and its predecessor publications of the Polanyi Society going back to 1972; (2) indices listing *Tradition and Discovery* authors, reviews and reviewers; (3) the history of Polanyi Society publications; (4) information on *Appraisal* and *Polanyiana*, two sister journals with special interest in Michael Polanyi's thought; (5) a link to the "Guide to the Papers of Michael Polanyi," which provides an orientation to archival material housed in the Special Collections Research Center of the University of Chicago Library, Chicago, IL 60637; (6) photographs of Polanyi; (7) links to a large selection of primary material, including (a) Collected Articles and Papers of Michael Polanyi (the 1963 Gelwick microfilm collection of more than 100 items); (b) Polanyi's 1940 film, "Unemployment and Money;" (c) unpublished texts of Polanyi's Gifford Lectures (1951-1952), Duke Lectures (1964) and Wesleyan Lectures (1965), (d) audio files for Polanyi's McEnerney Lectures (1962), Ray Wilken's 1966 interview of Polanyi (audio and text), and Polanyi's 1966 conversation with Carl Rogers (audio and text).

Electronic Discussion List

The Polanyi Society supports an electronic discussion group that explores implications of the thought of Michael Polanyi. Anyone interested can join. To join yourself, go to the following address: http://groups.yahoo.com/group/polanyi_list/join. If you have difficulty, send an e-mail to James van Pelt (james.van-pelt@yale.edu) and someone will see that you are added to the list.

In Support of the Polanyi Society

Support the work of the Polanyi Society by (1) regularly paying *annual dues* (\$35 for individuals, \$25 for libraries, and \$15 students), and (2) contributing to the *Travel Assistance Fund*, and/or *the Endowment Fund*. Those living in the United States can either do so via the PayPal option on the Polanyi Society membership web page (<http://polanysisociety.net/register/join-renew.php>) or by sending a check with the fund designated in the memo line to Charles Lowney, Dept. of Philosophy, Baker Hall 124, Washington and Lee University, Lexington, VA 24450. Those living outside of the U.S. should use PayPal.

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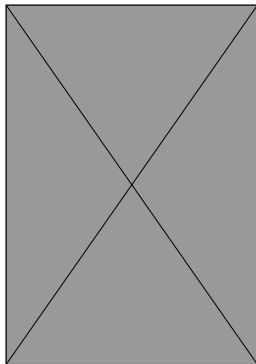
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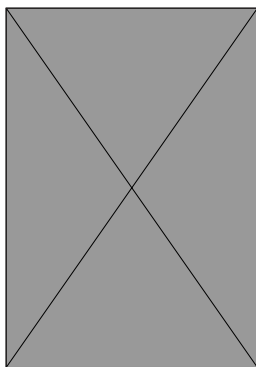
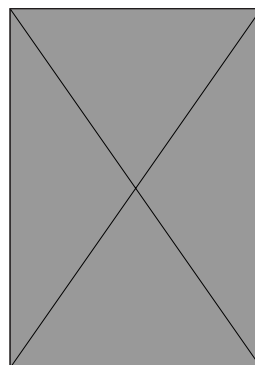
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Charlotte C. S. Thomas, editor

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COSMIC DEFIANCE

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