# **Tradition & Discovery**

# The Polanyi Society Periodical

Volume XXVI	Number 3 (completes Volume XXVI)	19992000
Preface		2
Polanyi's Post-Critical	Thought and the Rebirth of Meaning	4
·	Call for Papers—June 8-10, 2001 Conference	
<b>Upcoming November 2</b>	2000 Polanyi Society Meeting in Nashville	5
"Polanyians on Realism	e: an Introduction"	6
·	Andy F. Sanders-Guest Editor	
"Polanyi's Problemation	c 'Man in Thought':	
	- an Exploration and a Critique"	15
	S.R. Jha	
"Beyond Epistemology to	Realms of Meaning''	24
v i sv	Walter B. Gulick	
Membership Information	n	41
"The Real As Meaningful	r'	42
8	Phil Mullins	
Submissions for Publicat	tion	50
"Some Aspects of Polany	i's Version of Realism''	51
1	Dale Cannon	
Information on Electroni	ic Discussion Group	61
"The Trust Relationship"	,,	62
	John C. Puddefoot	
Polanyi Society Members	ship Renewal/Fund Drive Information	71
"Recalled to Life': Cont	tact with Reality"	72
	Esther L. Meek.	
Information on WWW P	olanyi Resources	83
"Science, Religion and Po	olanyi's Comprehensive Realism''	84
	Andy F. Sanders	
Notes on Contributors	······································	03
	ship Renewal/Fund Drive Mailer	
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## **Preface**

Congratulations are due to Andy Sanders, who as Guest Editor of this issue, has pulled together a very interesting set of papers on Polanyi's realism. Start with Andy's excellent introduction to get the flavor of this ongoing discussion that was the topic of two sessions at the 1999 annual meeting of the Polanyi Society.

Many will be saddened to learn of the recent death of Bill Poteat. David Rutledge kindly provided the brief notice about Poteat's death which is included in "News and Notes." In an upcoming issue, there will be more material about Poteat's life and work.

The program for the November 2000 Polanyi Society is set; information about the meeting appears on page 5. Please remember that you will be able, before the meeting, to download the papers to be discussed from the Polanyi Society web site (<a href="http://www.mwsc.edu/~polanyi">http://www.mwsc.edu/~polanyi</a>).

Note that on page 4 there is information about a major conference sponsored by the Polanyi Society at Loyola University, Chicago, scheduled for June 8-10, 2001. This conference is a decade after the Kent State Centennial Conference and is modeled after that outstanding event. There will be plenary speakers as well as concurrent sessions with papers on many topics. Trips to the Regenstein Library to review the Polanyi Papers will be possible. Mark your calendars now and send in paper proposals. Further information about the conference willl be in future issues of TAD and on the Polanyi Society web site as soon as the Organizing Committee works on details.

For many years, the Polanyi Society has steadfastly resisted following the financial path of many academic societies: we have not regularly boosted our membership rate. Annual dues have been a very modest \$20 for almost a decade, and the decade before that they were only \$10. One consequence of our approach has been that we take in, each year, about what we spend for *TAD* and our annual meeting. This is quite a sensible way to operate but it means that the Society has no surplus resources to put into major events such as the upcoming Loyola conference. To be frank, we must raise a few dollars in order to fund this event. Please carefully consider the program described on page 71 that encourages folks to combine a gift with the payment of 2000-2001 membership dues.

Phil Mullins

Tradition and Discovery is indexed selectively in The Philosopher's Index and Religion One: Periodicals. Book reviews are indexed in Index to Book Reviews in Religion.

# **NEWS AND NOTES**

William Hardman Poteat, Emeritus Professor of Religion and Comparative Studies at Duke University, died on May 17, 2000 at the age of 81. Bill Poteat is familiar to students of Michael Polanyi as one of the primary agents for exposing Polanyi's thought to a wider American audience, through hosting Polanyi as a visiting professor at Duke University in 1964, through the book Intellect and Hope: Essays in the Thought of Michael Polanyi (1968), edited with Thomas Langford (who died just three months before Poteat), through mentoring numerous doctoral students who have carried on Poteat's reflections on Polanyi, and through several books published late in his career which extended these reflections in new directions. A future issue of TAD will say more about Poteat's life and thought; a memorial service was held in the Duke Chapel on May 24th. At that service Elon G. Eidenier read an "Elegy for Bill Poteat" beginning with these lines:

> It is not possible to impersonally think for thinking blooms within the incantations of another's voice.

Eva Gábor, President of the Michael Polanyi Liberal Philosophical Association has just reported the sad news that the memorial tablet placed on the Polanyi family home in Budapest has recently been destroyed for the third time. The plaque was first put up in connection with the centennial celebration in 1991 but was defaced in 1993, 1994 and again this Spring by antisemitic vandals. A new memorial tablet is soon to be put up.

The last issue of *TAD* (26::2) carried information on the electronic addresses for *Appraisal: Journal of Constructive and Post-Crtical Philosophy and Interdisciplinary Studies.* The web site has changed to: <a href="http://website.lineone.net/~philosophers/appindex.htm">http://website.lineone.net/~philosophers/appindex.htm</a>. You will find on the site complete

information about subscription, *Appraisal*-sponsored conferences, back issues as well as the table of contents for the current (3:1, March 2000) issue which reappraises Irving Babbitt.

There is a new link on the Polanyi Society web page: Short Essays by Michael Polanyi. So far only one essay, "The Republic of Science: Its Political and Economic Theory" (1962), is available under the link but others will be added in the fall. Putting some representative texts on the web should help solve the problem that people in some areas of the world have in locating copies of any of the shorter writings of Polanyi. Hopefully, teachers looking for brief and easily available texts will also find this selection useful. Take a look at <a href="http://www.mwsc.edu/~polanyi">http://www.mwsc.edu/~polanyi</a> If you are interested in this text project, send suggestions to Phil Mulllins (mullins@mwsc.edu).

Although we are a little late in acknowledging it, Lee Congdon was awarded the Order of Merit--Small (Knight) Cross by the Republic of Hungary in 1999. Professor Congdon has done extensive research on Hungarian intellectuals in the 20th century (see WalterGulick's review of Congdon's *Exile and Social Thought: Hungarian Intellectuals in Germany and Austria.* 1919-1933 in TAD 23:2 [1996-97]: 44-46) and earlier wrote a TAD article on Michael and Karl Polanyi ("Between Brothers: Karl and Michael Polanyi on Fascism and Communism," 24:2 [1997-98]: 7-13).

# Polanyi's Post-Critical Thought and the Rebirth of Meaning

# Call for Papers

The Polanyi Society will sponsor a conference on the theme "Polanyi's Post-Critical Thought and the Rebirth of Meaning" on June 8, 9, and 10, 2001 at Loyola University, Chicago. This conference is an occasion to reflect on themes and possibilities found in Polanyi's thought twenty-five years after Polanyi's death in 1976. Chicago is an apt site for the conference, since interested participants will be able to access the archival Polanyi papers during weekdays at the Regenstein Library of the University of Chicago.

Proposals are invited for papers that examine connections between Polanyian perspectives and those of other thinkers, schools of thought or domains of inquiry. Papers can explore prospects for post-critical thought. The following are some suggested general categories within which specific papers might be grouped. Please do not think of them as a limit for submissions but as a springboard for your own reflections. The final program will reflect groupings adjusted in light of proposals submitted.]

Postmodernism and Post-Critical Thought Polanyi and the Analytic Tradition Polanyi and American Thought Polanyi and Continental Thinkers

Polanyian Approaches to Conceiving God Polanyian Links Between Religion and Science Polanyi and World Religions

Post-Critical Ethics

Polanyi's Social/Political Thought

Polanyi in the Light of Developments in Psychological Theory The Tacit Dimension: Skills, Practice and the Subliminal

Polanyi's Axiology Personal Knowledge As True, Public, and Reasonable Post-Critical Aesthetics Polanyi's Antireductionism and the Logic of Emergence Polanyian Responses to Pluralism

Metaphysical Issues in Polanyi's Philosophy Developing Polanyi's Notion of Meaning

Community and Conviviality in Post-Critical Perspective Polanyi and Education

Proposals for papers should be no more than 250 words. Proposals will be reviewed by a panel of jurors. The initial deadline for receipt of proposals is November 1, 2000. Those who do not meet the November 1 initial deadline can submit proposals before the final deadline of March 30, but priority consideration will be given to proposals meeting the November 1 deadline. Mail an electronic copy to Phil Mullins at mullins@mwsc.edu. Those unable to provide electronic copy may send paper copies to Phil Mullins, MWSC, St. Joseph, MO 64507. Proposals should include e-mail address (or fax number) as well as preferred mailing address and phone number of the author.

Additional information about this conference will follow in future TAD issues and will also, along with the call for papers, be posted on the Polanyi Society web site (http://www.mwsc.edu/~polanyi).

# **Upcoming November 2000 Polanyi Society Meeting in Nashville**

The tentative program for the Polanyi Society annual meeting to be held in Nashville on November 17 and 18, 2000, is printed below. As in past years, papers will be posted for downloading (in October) on the Polanyi Society web site (<a href="http://www.mwsc.edu/~polanyi">http://www.mwsc.edu/~polanyi</a>). The sessions will focus upon discussion and papers will only be summarized..

The location for the meetings will be the Opryland Hotel and Convention Center. Rooms for the meeting have not yet been assigned; that information will be included in the next issue of TAD and on the Polanyi Society web site when it is available. As in past years, Polanyi Society sessions are held in conjunction with the annual meeting of the American Academy of Religion and Society for Biblical Literature. Because of pressure for space, these large umbrella professional organizations are now carefully monitoring hotel reservations. It is necessary to register for the AAR/SBL annual meeting to be eligible for hotel accommodations in one of the primary hotels near where meetings are held. However, anyone who is interested is welcome to attend the Polanyi Society meetings, whether or not they are attending the AAR/SBL meetings. There are, of course, many other hotels in the Nashville area. If you want information about registration for the AAR/SBL meetings (and information about selected nearby hotels), phone 888-447-2321 (US and Canada) or 972-349-7434 (other areas) or go to <a href="http://www.jv-site.org">http://www.jv-site.org</a>.

#### Friday, November 17, 2000—9:00-11:00 p.m.

Discussion of Resurrection Knowledge: Recovering the Gospel for a Postmodern Church W. Stephen Gunter, Candler School of Theology, Emory University

Gunter will review his book's thesis on the assumptions controlling modern scholarship on the resurrection and on his use of Polanyi's epistemology (\$13 Abingdon Press: ISBN: 0687071577).

Respondents: John Apczynski, St. Bonaventure Robert Martin, Saint Paul School of Theology

#### Saturday, November 18, 1999—9:00-11:30 a.m.

"Wittgenstein and Polanyi on Concepts of the Person." Phil Rolnick, Greensboro College

Respondent: Charles Lowney, Boston University

"The Cardinal and the Chemist: Exploring the Intersection of Newman and Polanyi's Epistemologies" Marty Moleski, Canisius College

Respondent: Joe Kroger, St. Michael's College

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# Polanyians on Realism: an Introduction

# Andy F. Sanders Guest Editor

ABSTRACT Key Words: Polanyi's realism; scope of realism; traditions of inquiry; uses of "real"; values and meaning

This introduction to a special Tradition and Discovery issue on Polanyi's realism summarizes, and comments on the views of Jha, Gulick, Mullins, Cannon, Puddefoot, Meek and Sanders. All agree that Polanyi advocated a scientific realism hanging on the theses that reality is independent of human conceptualizations and that it is partially and fallibly knowable. Major differences concern its scope. All agree that it is comprehensive, pertaining not only to common sense and science but to intrinsic and ultimate values, and perhaps the divine realities as well. Whereas Jha and Gulick argue a more limited scope, others defend a Polanyian position by drawing in various ways on the personal (Cannon) and social (Mullins, Sanders, Puddefoot) coefficients of the practice of inquiry. The debates show clearly that the relationship between Polanyi's epistemology, axiology and hermeneutics deserve further scrutiny.

#### 1. Introduction

The present issue of *Tradition and Discovery* on Polanyi's realism contains the papers that were written for the 1999 Annual Meeting of the Polanyi Society held in Boston, in conjunction with the AAR, on November 18-19. With the exception of Dale Cannon and John Puddefoot who had commitments elsewhere, the other contributors participated in the panel discussions. Afterwards, all papers were revised with the exception of that of Walt Gulick, which even to his own surprise appeared in *Polanyiana* (1999) soon after the annual meeting. Fortunately, Gulick graciously offered to write a new essay that would not only summarize and develop the main points of his earlier paper but also reply to his critics. As most of the authors have written on the subject before, the reader may expect to find here the intermediate results of an ongoing exploration and discussion by Polanyians.

The question "What is realism?" has many answers. It is not disputed, I take it, that it is a metaphysical thesis which says at least that reality exists independently of our conceptions of it. According to John Searle, for example, realism is an ontological thesis that says that there exists a reality totally independent of our representations. And whereas Michael Devitt distinguishes two dimensions, a claim as to what entities exist and a claim about their independent nature, Crispin Wright rightly points out that there is an epistemological side to realism as well: "we are, by and large, and in favorable circumstances, capable of acquiring knowledge of the world and of understanding it." But this is where apparent simplicity comes to an end. For realism is not only contested by idealism and skepticism, it comes itself in many guises. Not only one may find weak, modest and naive, robust or sophisticated versions but, as we'll see, it may vary across domains of inquiry as well. For example, it would not be inconsistent to uphold scientific and common sense realism but to reject realism in mathematics or in the humanities. Similarly, advocating theological realism or ethical realism (objectivism) while being an anti-realist vis-à-vis the unobservable entities of science is as such not inconsistent - though such a position would obviously be quite difficult to uphold in current Western culture. Again, someone might be a common-sense realist regarding objects like rocks, trees and trains, but an antirealist as regards subatomic particles, values or God. Such a person might hold that material objects exist independently of our knowledge or awareness of them but that muons, photons, and the like are mere

instruments for calculation and prediction. That person might also hold that aesthetic, moral or religious values lack any independent, objective existence but are mere human constructions.

As to Polanyi's realism, it is undisputed that he advocates the independence thesis: reality "is largely hidden to us, and existing therefore independently of our knowing it" (PK 311). It is also undisputed that he maintains that human beings are able to come to know and understand the world, albeit always partially and aspectually. But, as the essays will show, controversy crops up as soon as we start to ask for the details. According to the theory of personal knowledge, tacit knowing has not only functional, phenomenological and semantic features, but an ontological aspect as well. But how precisely are the ontological and epistemological aspects of Polanyi's realism related, especially when we take the "ontological equation," the claim that knowing and being are structurally analogous, into account? What to think of his ontology of hierarchical levels of knowing and being and of the claim that the differences between the humanities and the natural sciences is one of degree and not of a kind? How to take the meaning and scope of Polanyi's novel conception of reality and what is its relation to the concepts of knowledge and truth? Should we understand it as a panrealism that extends from common sense and the natural sciences all the way to axiology and theology? Or is this picture an earlier development, one that was abandoned somewhere in the late sixties in favor of a general hermeneutics of sense reading and sense giving? In what way do Polanyi's political, social and moral ideas shape his realism and how is he able to eschew both absolutism and relativism?

This list of questions is by no means exhaustive but it brings out clearly that many core elements of Polanyi's philosophical concerns are at stake. It should therefore not be surprising that the answers will sometimes differ as widely as the philosophical interests and agendas of the authors and that some are more strongly critical of Polanyi than others. The reader should therefore expect to find ample controversy and lively debate. As a taste of what's in store, I'll briefly summarize what seem to me the salient points of the contributions and then go on to add some comments on issues which are raised by more than one author and thus seem to offer interesting prospects for further discussion.

#### 2. A Plethora of Views

The Architectonic and Its Coherence

Stephania Jha's essay "Polanyi's Problematic 'Man in Thought'" focuses on the coherence of the overall structure, the architectonic, of Polanyi's work as it can be distilled from *The Tacit Dimension*. Jha's ancestry is Hungarian and as she belongs to the very few people who try to further Polanyi studies in the harshly critical and skeptical world of academic philosophy, she is well aware of the controversial nature of Polanyi's ideas vis-à-vis contemporary philosophy. Her central point is what she calls "the ontological equation," the thesis that there is a structural equivalence between knowing and being. By and large accepting the innovative epistemology of tacit knowing, Jha argues that Polanyi's ontology lacks "a simple coherence" and that it is "fragile, unscientific and philosophically troublesome" (cf. section 3a). Especially the ontology of living things is highly controversial because it not only challenges the standard scientific notion of evolution as a chance mechanism but also intentionally keeps open the possibility of an intelligent first mover.

Regarding Polanyi's realism, Jha points out that he not only took the abstract and natural objects of the exact and natural sciences as real, but also objects of mental life. But as this "general realism" or "modified rational realism" is not reductionist, her conclusion is that it "cannot be a mature realist-empiricist position" (section 3b).

#### Beyond Realism: the Problem of Meaning

This brings me to Gulick, who rejects Polanyi's realism of mental objects, not because it is not reductionist, but rather because it leads to a conflation of what is real and what is meaningful. Gulick's argues that the later Polanyi found a middle road between objectivism and relativism by transforming the theory of tacit knowing into a hermeneutics of sense reading and sense giving, of which scientific inquiry is but one version, as the center of his thought. Gulick rejects as inadequately discriminative two notions of reality which he thinks Polanyi employs: the "honorific" (real is what is valuable) and the notion related to IFM criterion (real is what produces indeterminate future manifestations). Also rejecting meaning/realism holism (real is what is meaningful), he holds that only what exists independently of human knowing deserves to be called "real." After an illuminating historical excursus (section 3) into the conceptions of reality employed by a number of great thinkers ranging from Plato to Derrida, Gulick then goes on to address the issue of "how to understand the ontological status of cultural forms of meaning." They may be called real, he concludes, "insofar as they manifest an empirical component that is determinative of what they are" (section 4). Thus, for example, the term "God" may be richly meaningful but God is no more real than beauty, truth or goodness. Still, values or ideals are assigned a special status in that they could be affirmed simultaneously (a) as universal and real and (b) as transnatural integrations bringing our experiences into ideal order (cf. ibid.). Finally, Gulick rejoins his critical conversations with Mullins (on sensation as ensuring access to reality), Cannon (on his use of the notion of "intrinsic meaning") and me (on relativizing the meaning of real to traditions of inquiry and my use of an "honorific" notion of the real).

#### The Real As Meaningful

Phil Mullins's essay is a rejoinder to earlier conversations between himself, Gulick and Puddefoot. Tracing the history of Polanyi's use of the term "reality" (section 1), Mullins argues that it gained special importance in his philosophy of science in the late fifties and sixties mainly as part of his critique of positivism. "Reality," as Mullins shows, is for Polanyi not some firm ground underlying all appearances, but rather something largely hidden and thus known only vaguely though with an unlimited range of unspecifiable expectations attached to it. Next, he summarizes the main points made in an earlier article (1997) on what he calls Polanyi's "participative realism." Pointing out that it is not some sophisticated ontological thesis, Mullins argues that it had best be understood in the context of his aim "to develop a panoramic vision of responsible humanity at home in the universe." He also emphasizes that "Polanyi's focus is upon persons as members of interpretative communities using our unspecifiable powers to indwell and discover new meaning that transforms us" (section 2). He then criticizes Gulick (1999) not only for making the distinction between the real and the meaningful unduly severe but also for trying to found the latter on an alleged direct access between uninterpreted sensation and reality. The distinction, Mullins maintains, "severs what Polanyi has worked so hard to show is one seamless piece," and the access cannot be direct but must be mediated because access "comes to us as we integrate that in which we dwell" (section 3). Considering the attempt to secure direct access to reality by appeal to sensation, a philosophical "cul de sac," his main objection is that Gulick is transforming Polanyi's realism into an ontological scheme for "clarifying the parameters of primitive causality."

#### Realism and Commitment

In his contribution, Dale Cannon concentrates on differences between Polanyi's realism and more traditional conceptions of it. Regarding the problem of its scope, Cannon emphasizes that, on Polanyi's construal, reality is itself a commitment target and that no contact with it is possible "except by way of passionate personal commitment." This raises "the paradox of transcendent reference," i.e., "how [it is]

possible to refer committally ... to a reality that transcends subjective grasp" (cf. section 2). The paradox can be solved by distinguishing between the subjective and the personal, the latter being in the nature of a first person accreditation as responsible judgment in virtue of one's participation in what genuinely transcends one's subjectivity and thus establishes relational rapport with reality. On this construal, Cannon maintains, Polanyi's realism is both coherent and comprehensive because such transcendence can also be achieved in the humanities. Next, Cannon deals with the status of values like reality, truth, beauty and justice as "sacred impassioning ideals," the self-transcending pursuit of which makes human life most worthwhile. Against the widespread hermeneutics of suspicion, self-transcending commitment to these values may restore their reality, authority and power over us (cf. section 3). Moreover, in transcending mere subjectivity, contact with and discovery of intrinsic or objective meaningfulness can be achieved, in human creations as well as in natural entities. In this connection, Cannon criticizes Gulick (1999) for defining meaning as necessarily extrinsic (cf. section 4). Finally, Cannon compares Polanyi's post-critical realism with Kant's critical idealism, arguing that the former allows us to achieve tacitly a relational contact with noumenal reality. Our representations of reality constitute a map of it and thus truth may be retained as correspondence, not between the map and noumenal indeterminate reality, but between the map and our tacit and fallible acquaintance as "lived rapport" with that reality. This, Cannon claims, goes not only for science, but also for common sense and the artistic, humanistic and religious aspects of reality as well.

#### Trust, Resonance and Worthwhileness

John Puddefoot characterizes Polanyi as primarily a political philosopher and the aim of his essay "The Trust Relationship" is to show that the traditional notions of reality, truth and knowledge had better be replaced by those of trust, resonance and the worthwhile. Unlike the former, the latter denote our inherently cultural accreditations not as absolutes to be forced upon, or to exclude others. An echo of this "imperialism" might still be heard in Polanyi's saying "that our vision must conquer or die" (PK 150). Interesting and novel is his suggestion that trust must be central to Polanyi's thought because it defines a person as a participant in cultural traditions. Provocatively calling them "tribes," Puddefoot argues that these traditions shape our knowledge and values and thus also our view of reality. Taking metaphysical realism, including a critical notion of truth as correspondence, as his paradigm example of an absolutist position, he sets out to deconstruct it in order to replace the rhetoric of universal truth (by our light) with a more human view of truth "as only the best we can do right now from our very narrow perspective on the world" (section 1). The obvious charge of relativism is eschewed by an appeal to the paradox of self-set standards, which allows members of traditions, that "maintain superior trust-structures to achieve superior understanding of what to affirm and deny" (section 2). Referring to his earlier essay on "Resonance Realism," Puddefoot expresses agreement with Jha on her misgivings about Polanyi's transfer of teleology into his ontology. Criticizing Cannon for his overemphasizing commitment to truth and reality as "sacred impassioning ideals," he concludes that Polanyi's supreme achievement lay in merging his epistemology and ontology into the personal and above all into the convivial or political. Finally, he argues that because there is no "view of nowhere," that is, an unattainable God's eyes point of view, what we hold to be true is what we live by.

#### Contact With Reality

With her contribution, Esther Meek returns to the field of Polanyi studies after an absence of almost fifteen years. Affirming that the concept of discovery implies something there to be discovered, she suggests that Polanyi provides a *tertium quid* between modernism and postmodernism. The summary of the main findings of her dissertation on Polanyi's realism (sections 3-8) provides a clear exposition of the nature and criteria of "contact" with independent reality. The experiential intimation of indeterminate

future manifestations that reality is going to reveal (the IFM Effect), and the criteria of contact are explicated in a way that lends further substance to Polanyi's definition of reality. After comparing Polanyi's ideas on the progress of knowledge and on truth with that of philosophers of science and analytical philosophers who were his conteporaries (e.g., Popper, Lakatos and Kuhn), Meek suggests that the notion of "correspondence with reality" may be retained in discovery in that we do not match what we know with the world "out there," but with what we have come to know tacitly. She criticizes John Puddefoot's proposal to replace "truth" tribally determined effectiveness, arguing that his view is not the only alternative to metaphysical realism, not Polanyian and open to similar criticism as metaphysical realism (cf. section 9). She concludes he article by pointing out that theorists of personal knowledge cannot do without sometimes even 'distructive' analysis - provided that they reintegrate their findings into the larger context of their striving for the reality and truth in which they are immersed.

#### Reality in Context

In my own contribution, I try to clarify the main ingredients of the comprehensive realism that I believe Polanyi was trying to develop. I start my exploration of the scope of his realism with his view of a hierarchy of the various levels of scientific and scholarly inquiry. After exploring the role and status of epistemic (truth), moral (goodness), aesthetic (beauty) and spiritual (charity) values, I try to explicate the way in which these intrinsic and final values shape the life of communities of inquiry and its participants. I suggest that implicit in Polanyi's realism is an axiology which has it that intrinsic values like truth, beauty, justice and love, are objective and thus real to those who are dedicated to their always partial realization. Contra Gulick, I argue that his proposal to restrict the scope of the concept of reality to what is empirically ascertainable leaves no room at all for the reality of such values. As ideal standards, I take them to be embedded in, and partly constitutive of, the exploratory practices in which varying communities of explorers are engaged. Though not denying the possibility of elaborating Polanyi's realism in a panentheist direction, I suggest a neo-Wittgensteinian solution to the problem of theological realism: what counts as "real" within a given context depends on, and should be interpreted in terms of, what the community of inquirers in question mean by it. This solution resists the unwarranted transfer of alien standards of reality to the humanities, eschews the grand metaphysics of theism but still gives room to the existential import and the experiential significance of artistic, moral and religious values.

So where do we stand on the matter of Polanyi's realism? Though we have a plethora of partly conflicting, partly consensual views, there is clearly also an awareness of what the core issues are. For reasons of space, I cannot do equal justice to all authors so in the remainder of this introduction I will briefly comment on what seem to me the more salient issues.

#### 3. Realism, the Social Coefficient and Relativism

Gulick's misgivings about relativising "real" to traditioned communities of inquiry and about overemphasizing the social coefficient, clearly applies to the positions of Puddefoot, Mullins and myself. Puddefoot is well aware that his "tribalism" may be charged with relativism and he therefore appeals to Polanyi's solution of the "paradox of self-set standards." Though his argument seems to me entirely successful, Gulick does not seem convinced. In order further to support the primacy of the social coefficient and my own emphasis on contextualizing "real" to traditions of inquiry, let me invoke a substantial notion of such traditions that may commend itself both to Puddefoot and Gulick. Obviously, it is not just any old community or group, but one defined by its practices and the values inherent in them. In Alasdair MacIntyre's words, it is:

[A]ny coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended (*After Virtue*, 1981, 175)

In the light of this definition, a number of examples that Gulick adduces to back up his misgivings about a communal or contextual interpretation of reality simply seem to be out of place. Of course, he may disagree with the definition, but, as he himself points out, "involvement in the church, at work, at home, in leisure activities, etc." are not properly called communities of inquiry (section 5). On my construal, participation in the church may count as such because religion can be seen as a cultural practice, whereas involvement at home or watching video movies cannot. Of course, they may be richly meaningful, just as having nightmares, telling or listening to fairy tales, playing video games and seeking stimulants. But how to distinguish between the richly meaningful and the altogether meaningless, or, what governs the meaningful? It appears that Gulick is now himself faced with the problem of relativism for it remains unclear how he is able to discriminate between degrees of meaningfulness without invoking values and all that comes in their wake. Moreover, as objects of inquiry of a host of social and cultural studies, the activities he mentions need not be "among the most real things there are" to the scholars who are investigating them.

Generally, the Polanyian-MacIntyrean notion of a tradition of inquiry can easily deal with the threat of radical relativism. Take Gulick's own example, belief in witchcraft (section 4). In a different culture than ours, it may be perfectly rational to act, think or evaluate things in terms of occult powers. Still, from our point of view, they are mistaken. Does this imply that their belief in the efficacy of the occult is equally well, let alone better, justified than our denial of it? Of course not. For in the light of what we, to the best of our abilities, have come to know about the workings of nature it is much more probable than not that we are right and occultists wrong. The latter may disagree, but that doesn't mean there is no fact about the matter. It may not be easy to settle the matter if that means that we have to reach a consensus. But why should we? We may lack the resources required for launching a joint investigation or we may prefer not to have conversations with occultists in the first place. Where is the relativism?

In other words, I think it is a mistake to think that from the crumbling of the Enlightenment's ideal of attaining a universal God's eye point of view, it follows that we now can have no view at all. Jettisoning absolutism, dogmatism and foundationalism does not saddle us with radical versions of relativism or skepticism as the only alternatives. It is precisely Polanyi's innovative proposal to reintroduce a traditionalism that combines the personal (Cannon) and the social coefficient (Puddefoot, Mullins) and offers a way between the horns of this alleged dilemma.

### 4. Reality, Values and Meaning

In reply to Gulick's challenge that we have to consider the way in which values "function in language" (section 5), I would like to point out a use of "real" which leads us away from lofty metaphysics to the world of daily language and the values embedded in it. Consider utterances like "That is a real democracy" or "That is real love." The meaning of "real" in these cases is virtually equivalent to that of attributive uses of "true." Just as love may fall (more or less) short of real or true love, an act of justice may not yet wholly be a case of real or true justice. What we take to be real justice doesn't have to exist in reality as such (or as yet). Thus to say "That is real justice" is to say that a certain action instantiates to some degree a particular conception

of ideal justice. But is it outdated Platonism or Kantianism to analyze phrases like this in terms of "trueness to some ideal X" or "satisfying certain standards of excellence which are constitutive of a cultural practice X"? Of course, we may be mistaken in identifying something as the real X for it may be that X turns out to be not the real or true X after all. Of course, Gulick is right in claiming that, although what is real (to us) may often be meaningful (to us), "real" is not strictly equivalent to "meaningful." To say "He is a real dictator" or "That's a real villain" is not to say that there is anything about the dictator or the villain that is (positively and existentially) meaningful.

Realism may well be a relatively minor issue in the hermeneutics of understanding and meaning creation. I have no quarrel at all with Gulick's important project of developing such a hermeneutics. My worry is only that on his account, perfectly normal and intelligible talk about real problems, real beauty, real justice, real love, real peace, etc. becomes merely "honorific." Does that mean that talk about, say, real justice or the reality of God is just honorific talk about ideal justice and the ideality of God? I don't think so. For when religious believers speak about the reality of God, they may be talking about God's presence and nearness to them or God's absence and distance from them, and not at all about God as an empirically ascertainable entity or being "out there." Surely it would be misconstruing what they mean, if they are to be understood as saying that the term "God" or God's "presence" is richly meaningful to them? Hence, to drop talk of "real" in favor of "meaningful" seems to me to make a virtue out of necessity and to gloss over not the sense of "real" as opposed to "illusory" or "fictitious," but the sense of "real" as "what matters (most)" to us.

As probably no hermeneutics is able to tell us "what matters most" (to whom?) and "what should matter most" (why?) in a way that is acceptable to everybody, the only way to proceed, as I see it, is to proceed from where we are - and this leads us back again to the personal and the social coefficient, to where we belong, to where we live by and to what we aim for.

Finally, in spite of Gulick's concession to allow ultimate values a special status as both "real" (as universally human) and "ideal" (as transnatural integrations), I still think his attempt to separate the real as what is empirically ascertainable from the meaningful, is too severe. If his equivocal account of values is meant to reflect the use of "real" in ordinary usage, we may have a beginning of agreement. Rather than trying to revive the axiology of premodern times, a viable way to approach the question of the reality of values seems to me to look and see what people mean by "real" in the contexts in which they use it.

#### 5. Cobblestones and Degrees of Realness

What keeps coming up in accounts of Polanyi's realism is puzzlement about his notorious remark on the tangibility of a cobblestone. In some way, it suggests an equivalence between "tangibility" and "insignificance." If it was meant as a general ontological thesis, surely Gulick is right in objecting to it. Here is another objection: in some contexts cobblestones may be extremely meaningful, as, for example, the story of David and Goliath bears out. Given sufficient imagination, virtually anything could be called meaningful in some context or other. So what are we to make of the tangibility of cobblestones in contrast to the significance of minds, persons, problems and theories?

Perhaps there is no a deep ontological thesis about the real and the meaningful at all. In addition, and not as an amendment, to Cannon's remarks about "intrinsic meaning" and my own about "intrinsic interest," I would suggest that at least part of what is behind the notorious cobblestone example is the metaphoricity of "hiddenness" and "profundity" or "depth" of reality. What is tangible and thus directly perceivable is what is

superficial in contrast to what is intangible, not directly perceivable and profound or "deep." The contrast is one of degree - the more profound, the more of reality is encompassed - and is meant to convey that as far as reality is concerned, it is to be found on the side of the latter. The more profound a problem or theory, a quality hard to assess and articulate empirically, the more significance it has for science because the more of reality it may be expected to tell us.<sup>2</sup> Of course, science has no privileged access to reality, as Cannon rightly points out (section 5), but it does seem to be Polanyi's paradigmatic example of reliable problem solving and discovery. And this would suggest that the hermeneutics of science as developed already in *PK*, was still very much in the background of his subsequent attempts to construct a hermeneutics of meaning for the humanities.

#### 6. The Architectonic and its Coherence

It is clear from their contributions that both Jha and Gulick agree that the overall structure of Polanyi's thought is perhaps not logically inconsistent but at least insufficiently coherent. Gulick rightly points out that this is just what is to be expected if, in the last ten years of his life, Polanyi was working his way towards a general hermeneutics of meaning. This is also the direction in which Gulick is himself working. Jha's critique of Polanyi's Architectonic seems to me especially important because she confronts us with criticism of Polanyi in the light of contemporary philosophical perspectives. Her critique of the ontological equation, especially the transfer of the teleological element in knowing to the realm of being, is shared by Meek, Puddefoot and me. By making the teleological issue explicit, a whole range of interesting questions is raised: the nature, status and role of aesthetic, moral and spiritual values both in science and other modes of inquiry, including not only the humanities but religious and nonreligious life view traditions as well. As Jha suggests, it leads us to the question of the meaning of life and of the Polanyian "good life."

Still, there is a sense in which Polanyians might be worried by the way in which Jha treats Polanyi's intentional dissent from the canons of modern philosophy. In the large and flourishing field of "religion and science," to give but one example, issues of naturalism, reductionism, top-down causation, chaos and complexity theory etc. are hotly debated by scientists and theologian alike. To many philosophers, this may all seem slightly exotic, but perhaps this tells more about their prejudices than about those debates. Whatever a "mature rationalist-empiricist position" is, not even academic philosophers do seem to have one. What about, for example, John Searle's naturalist argument for the ontological irreducibility of human consciousness and subjectivity?

#### 7. Tacit Access to Reality and Truth

Both Meek and Cannon suggest an interesting solution to the problem of how Polanyi may be seen to retain a common sense notion of truth as correspondence with reality: our (articulate) representations do not correspond with reality-in-itself, but with reality as it is (fore-) known tacitly. This solution seems to me ingenuous but it leads quite naturally to the question whether it is not in effect a coherentist account of truth: our representations fit with the vast array of our background knowledge, know how, stances etc. This, however, may leave noumenal reality as inaccessible as ever. If what is tacitly known and can be made explicit will come to consciousness as a representation, propositional or non-propositional, surely it will always be possible to ask what it is a representation of. However, on Cannon's construal, it cannot be a representation of reality-asiti-is. So then probably it corresponds to other tacit knowledge, which in its turn corresponds to still other tacit knowledge, and so on, *ad infinitum*. Coherentist holism is what we end up with, rather than with correspondence.

A further difficulty seems to me Cannon's map - territory analogy. When drawing a map of a particular territory, I must have some sort of mental representation of that territory (a faint memory, a picture, a story

or whatever) to begin with. However, on Cannon's construal, this is precisely what we cannot have of noumenal reality. The question on account of what we do the mapping, then, doesn't seem to have a clear answer. Moreover, the map - territory analogy also breaks down in the case of science. To check whether your map of, say, the city of Quito is correct, you might just go there and see for yourself. However, in the case of scientific theories, values and God, we can't do that. Here, I think the metaphor of the "split" between appearance and reality simply collapses and I suggest we consider the real possibility that reality presents itself gracefully in our (partial and aspectual) respresentations of it. This is not to deny tacit knowing, it is an objection to the use of tacit knowing as an alternative, or a replacement, of the epistemic foundations of modernity.

Perhaps at this point Gulick's proposal to assume direct access between pre-articulate sensation and reality might be invoked. But, like Mullins, I am not convinced by the idea that at some deep level reality is making us aware of things that we cannot ever be aware of. It makes cognition, however broadly defined, not less, but even more mysterious than it already is. Moreover, there seems to be an old skeptical worry behind the proposal that perhaps we might have no hold on, or contact with, reality, that we can't be sure about anything unless we have some anchoring in the world as it really is. In contrast, I would like to suggest we are like the sailors on Neurath's boat somewhere on the high seas: unable to dismantle it in dry-dock, they do their repairs while they sail.

#### **Endnotes**

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- 1. Cf. R. Trigg, Reality at Risk. A Defence of Realism in Philosophy and the Sciences, 2nd. ed., New York 1989, 3; J.R. Searle, The Construction of Social Reality, New York/London 1995, 155; M. Devitt, Realism and Truth, Oxford 1991, 2nd. ed., 14; C. Wright, Realism, Meaning & Truth, Oxford 1993, 2nd. ed., 1.
- 2. There are interesting parallels between Polanyi and Popper regarding "the problem of depth', cf. K.R. Popper, *Objective Knowledge*, London 1972, 196-204

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# Polanyi's Problematic "Man in Thought": the Tacit and the Real – an Exploration and a Critique

## S.R. Jha

ABSTRACT Key Words: architectonics, hierarchy, "ontological equation," tacit knowing, reals, inference, duality

Polanyi's philosophy of "man in thought," by all appearances, chronologically and structurally, seems to be founded on his epistemology. Polanyi's epistemology of tacit knowing as integration is teleological. By his "ontological equation," he patterned comprehensive (and complex) entities as emergence on his epistemology. This forces him to make puzzling formulaic statements which land him in trouble with fellow scientists. The equation also lends itself to unwarranted problematic interpretations. The exploration leads me to suggest that Polanyi may be understood as a "rational realist" who insisted on a tacit knowledge version of interactionist mode of mind-body relation.

#### 1. Introduction

Polanyi, in his book *The Tacit Dimension*, declared his wish to present a vision, an organizing principle, which links our way of knowing to our way of being and to our moral conduct. That is, he proposed an architectonic of epistemology, ontology and ethics, in which the organizing principle is "man in thought," innovation premised on freedom, both opened up and constrained by reality. His method of elucidation follows the pattern set in his epistemology (his "ontological equation"), which is teleological, i.e., vectorial, goal-oriented (see 2b.). And therein lies the problem.

Whereas purposive action (our shaping of a skillful achievement) in his theory of personal knowledge was innovative and a needed correction to older forms of epistemology, the teleological ontology he proposed - an emergent hierarchy of comprehensive entities - leads to either an unwarranted anthropological conception or may encourage a theistic interpretation. In any case, he was incorporating a troublesome final cause or value in his modified evolution of ideogenesis (cf. *TD* 48). He was reaching for a meaningful cosmos. The problems caused by carrying teleological notions from his epistemology through the rest of what he hoped to be an organic and unified vision bears examining.

The examination may show that we may more fruitfully take another approach instead of the angle of the ontological equation Polanyi suggested. We may ask a series of questions from Polanyi's perspective: how do we know the world, how do we know other minds, and what is real? These questions would be controversial, because they would open up the holistic embodied-knowing conception to asking questions about a "qualified dualism." It may also be fruitful to ask if Polanyi followed the pattern he assumed scientists in general follow, that is, he grounded his thinking in a metaphysics of blended scientific realism and redefined rationalism without declaring his ground. The paper explores some of these entanglements.

#### 2. The Place of the Ontological Equation in The Tacit Dimension – an Exploration

Taking the plan of TD as the outline of his architectonic, it seems that the triad of tacit knowing - from subsidiary to focal awareness mediated by the integration performed by the knower - is enlarged into the

architectonic triad he named "man in thought." The dynamic mover<sup>2</sup> or connector in this triad is innovation. In this larger triad, the epistemology of tacit knowing forms the "from" dimension, and the ethics of the society of explorers by their responsible action (TD 52) forms the "to" dimension. The two are mediated by the ontology of emergence - premised on the ontological equation of "what is comprehended has the same structure as the act that comprehends it" (TD 55) - which culminates in the ontological "innovation" of intelligent man capable of moral decisions. Thus, in Polanyi's vision, his ethics circles back to his epistemology of intelligent action, this time guided by standards and ideals, just as intelligent action in his epistemology of science was guided by the standards and principles of science.

By all appearances, this architectonic is patterned on a progressive evolution of higher intellectual performances, the emergence of progressively more complex entities<sup>3</sup> and ethically more evolved civilized societies – a teleological kind of evolution.

#### 2.a. Epistemology

In his epistemology of tacit knowing, the goal of knowing is making logical leaps to progressively greater understanding - a teleological act. Polanyi's epistemology explores the structure and function of these leaps. The structure of tacit knowing is comprised of various degrees of awareness. Its main structural features are presented by Polanyi as being of two levels of awareness, the subsidiary and the focal (cf. PK 55). One is subsidiarily aware of one's action while focusing on a problem, a goal, whether in physical or mental action. Focusing on the subsidiary, that is, on the action, destroys awareness of the goal; put in other words, focusing on the part destroys the sense of the whole. Polanyi called this "alienation." However, all learning consists of a dynamic oscillation between focusing on the part and focusing on the whole, that is analysis alternating with synthesis (cf. STSR 118f.). When seen this way, focusing on the part is not alienation, but redirecting the focus of activity, going beyond "alienation" to a renewed insight of the whole - it is a move freely and deliberately taken.<sup>4</sup> The insight is the logical leap, an integration or synthesis. Polanyi described the functions of tacit knowing in terms of the functions of intellectual passions in the sciences in the act of discovery and in the act of gaining validation from the scientific community for one's discovery. These functions are the selective, heuristic and persuasive functions, analyzed into conative and cognitive aspects. The operational functions in the individual act of discovery or insight are the selective and the heuristic ones. The persuasive function which is directed towards the scientific community is aimed to bring the same insight to the community at which the discoverer arrived. Both processes of knowing, the individual and the communal, encompass tacit and explicit components. These components form the two poles of knowing, the personal and the external. Since the goal of knowing is insight, in the process of learning, in the gradually higher levels and greater complexity of thought, the future scientist aims for progressively deeper insights into reality.

### 2.b. Ontology

In his ontology in *TD*, the goal of being is to make progressive leaps to greater complexity of physical structure, but especially to greater mental capability. Polanyi's ontology uses the notion of hierarchy controlled by boundary principles, where the principles governing higher levels cannot be derived from the rules of operation of lower levels. That is, the higher level is an innovation, a leap in complexity; it is emergence.<sup>5</sup> Even in his later Meaning Lectures<sup>6</sup> he defined "being" by the meaning of its function, teleologically. The notion of defining a thing by its function is borrowed from engineering where it is used to explain operational principles of machines (machines cannot be defined by principles applicable to the materials composing them). Polanyi also uses this notion to arrange the sciences in a hierarchy progressing

from physics to biology, according to the complexity of its object of investigation. If the criterion for the arrangement is a gradual increase in structural complexity, the notion is helpful as a partial analogy. However, as soon as one takes into consideration that the engineering example makes sense because a machine is a purposeful invention of a human mind, a teleological construct, a transfer of a hierarchical progression to an ontology of living things implies an inventor of purposeful complexification of these living things. Unless the notion is taken as a retrospective explanation of gradual complexity, using "function" in the sense of "purpose" as a heuristic device and not a full analogy, the operational principle governed by boundary conditions is highly problematic for any non-engineering conception or non-theological conception of ontology (since an intelligent first mover is required). *Polanyi's arrangement of the sciences as explanatory human constructs works because he patterned the arrangement on the gradual complexity of cognitive ability as performance in evolutionary time, that is, an aspect of his ontology is an ontology of mental performance as a noun (while his epistemology is an epistemology of mental performance as a verb). One must take care however, not to confuse the explanatory device with the content of what is explained. Kant has warned us against this error.<sup>7</sup>* 

Another way to see this is that Polanyi's explanatory device "emergence" is to be taken as a label for a set of logical relations (cf. *TD* 34), therefore independent of time, an abstract device on a meta-biological level. The content of what is explained may be biologically dependent, therefore in time. But then is the abstract mode still teleological? Is it required to predict the form emergence takes at the next level? Prediction needs "content" to give detail to the form "emergence" takes. Polanyi's definition of "being" in terms of function may do that – but then it changes questions of "what" and "why" into "how."

At the same time that Polanyi outlines a teleological ontology and his dissenting notion of psychology and sociology, he states that he shares the metaphysical beliefs of the scientific community about the nature of things. This belief confirms that there is a reality "out there" which is knowable, and inquiries can produce original and valid conceptions of this reality; that is, his "beliefs about the nature of external scientific truth [is] unaffected" (*TD* 70).

Initially, Polanyi sets aside the question of "how far does emergence go beyond man's moral sense" (TD 37). Later, he objected to and wanted to reshape evolutionary theory from a blind progression to a teleological notion: "The interest of evolution lies in the rise of higher beings from lower ones, and, principally, in the rise of man" (TD 46). According to him, the focus on the evolution of populations obscures "the more fundamental question: how any single individual of a higher species ever came into existence" (TD 47). This personified conception of emergence of a single historic event (an individual of a higher level) is a reflection of his interest in creativity and is a clear parallel of his conception in epistemology of how a higher level of thought emerges toward a goal – clearly teleological. This structural consistency lands him in a position where he has to leave emergence not only open, but also open to hints of a prime mover with a goal. It also lands him in difficulty as a scientist.

In the exploration of being in the ontological context, is one permitted to posit a goal of being? Wouldn't the question be better re-phrased as "What is the meaning of life?" and separated from ontological inquiries, placed in the ethical realm? Polanyi's ontological equation is a seemingly required intermediate step between his epistemology of tacit knowing and his ethics in the over-arching scheme of "man in thought." The equation makes his ontology teleological.

Polanyi's ontological equation has the flavor of a rationalist intuitionist move reminiscent of Spinoza's move in the *Ethica*, where Spinoza said "the order of connection of ideas is the same as the order and connection of things." The source is Aristotle's statement "And thought thinks on itself because it shares the nature of the object of thought; for it becomes an object of thought in coming into contact with and thinking its objects, so that thought and object of thought are the same. For that which is capable of receiving the object of thought, i.e. the essence, is thought." However, in the architectonic of *TD*, Polanyi has reversed Aristotle's equation, seemingly basing his ontology on his epistemology. If he were consistent, he would have started with an ontology of infinite mind.

It also bears mention that in Polanyi's scheme, not only are entities called "comprehensive entities" in accordance with the ontological equation, indicating that these are entities as we comprehend them, but also in keeping with the hierarchical arrangement of comprehensive entities with the operational feature of boundary conditions, the entities are of various levels of reality - the higher an entity is located on the hierarchy, the more real it is. Since the hierarchy, both in its subject matter and in its description of the subject matter (the object of knowing) is a progression from the physical to the mental, the mental (a person, a problem, i.e., thought) is more real than a stone (TD 32). Polanyi's definition of real is that which is yet to reveal itself in unexpected ways (ibid.)10 - that is, further innovations are to emerge. By this definition, a thought is more real than a stone. Polanyi puts this in terms of "significance of a thing is more important than its tangibility" (TD 33). Putting reality in terms of significance transposes it into the mental realm, and the value realm, which is the direction of "evolution" of Polanyi's ontological hierarchy. This makes his ontology teleological, fitting the pattern set by his epistemology. This transposition also makes his ontology controversial (TD 36), because it challenges the notion of a blind, chance mechanism for evolution, making human thought and especially man's moral sense not only the "goal" of evolution, but by ignoring the "unsuccessful" strands of evolution, an inevitable goal of evolution. This is evolution conceived in the image of Polanyi's architectonic. The unifying force between the levels of reality is "emergence," less mysteriously described by the general term "innovation," a term uniting the epistemological vector of "integration" and the ontological vector "emergence." Using the general term "innovation" is to dispel the use of "emergence" in a miraculous sense, and to cement the ontological equation.

Polanyi's "man in thought" conception makes teleology the most important underlying principle of *The Tacit Dimension* when he describes the nature of epistemology, ontology and ethics. In light of this, how does he approach the question of justification of his position on knowledge, ontology and ethics? His epistemology seems to pose a lesser problem, as he takes his cue from the practices of the scientific community. New knowledge is justified by the authority of scientific peers and the tradition and premises of science. His ontology is problematic however. Justification for his position in ontology is his definition of the real: that which is yet to reveal itself in unexpected ways (cf. *TD* 32). He offers two definitions of "being" or "non-being": the "definition" of "being" in terms of the meaning of its function and a variation of the definition of real – that which is to reveal itself. The first "definition" a *looks towards a goal*, the second *looks from a potential state* and is left indeterminate. He also offers a warrant for a true statement about facts: a true statement is one, which, when the content of one's assertion is checked in experience, there is evidence for the truth of the statement (cf. *PK* 254f.). This warrant keeps in mind that "there is something out there," but by his definition, he wants to keep this "something" both as a goal and indeterminate. This makes sense in his framework only if it is cast on "the two poles of knowing" schema: internal – external, self - world, potential – actual, intimation of reality – contact with reality, striving for the goal – reaching the goal. Justification for

his ethics, following the pattern of his epistemology, is in tradition excluding dogma (TD 62) and including the principle of justice.

To rehearse the equation: if (a) knowing is tacit as well as explicit thought aimed at innovation; if (b) being means that the mind is the meaning of the body, 13 the mind is free (self-directing) and has infinite potential to be realized; and in Polanyi's metaphysical belief the external world, is both knowable by the mind, and "determined" to emerge to the level of man; – do we have an ontological equation?

#### 3. Critique<sup>14</sup>

#### 3.a. An Unstable Equation ?

It seems to me that TD runs into problems when its design deliberately offers a plan in which epistemology is not only the foundation of the whole structure, but its structural pattern. Polanyi's epistemology of tacit knowing, a redefined epistemology incorporating the insights of psychology, is innovative. Epistemology is no longer exclusively the investigation of the nature and justification of explicit knowledge with emphasis on justification, but an investigation righting a lack, the nature of the knowing process in its tacit aspects. Its greatest contribution is its central theme, the mental process of scientific discovery in the context of a functioning scientific community, the analysis of learning, of apprenticeship, of insight, of connoisseurship, premised on creative freedom, yet recognizing the limiting function of the social and physical worlds.

The ontology is of two disparate parts. There is a seemingly rationalist ontology of real entities consisting of things we comprehend. Whether the thing is a stone or an idea, the emphasis is on "comprehend." Our theories about the world are coherent pictures (Gestalten) of the world. On the other hand, there is an ontology to which his scientific community subscribes and which he affirms – that there is an external reality, and it is knowable. This would seem to make him a scientific realist of a non-strict sort, who holds that claims of discovering something new must be verified in experience – there should be a correspondence between our claim and facts of experience. These two disparate parts of ontology carry two kinds of theories of truth, a coherence theory and a correspondence theory. Yet, Polanyi claimed, his theory of truth is probabilistic in the sense of "degree of confirmation" (cf. Jha 1997, note 14).

One should remember that Polanyi's aim was to describe a strategy for inquiry, one, that to him seemed more in keeping with the strategies of working scientists than the descriptions promoted by the logical positivists, or even by the "standard" line, including Russell. *Polanyi wanted to introduce a way to validate the discovery of the new, the unique act.* That meant, he had to open up the strategy for inquiry to the historic dimension and a teleological account of the progress of reason. This move exposed him to the charge of Hegelianism. The evidence for this charge was only strengthened by his ontology of hierarchy of comprehensive entities, which seem to be a Hegelian Reason unfolding in the world.

If one takes Polanyi's architectonic as he presents it (i.e., starting with his epistemology), then one notices that his epistemology evidences a series of transformations: from Gestalt to existential-phenomenological forms. Its earliest Gestalt notion is drawn from Kohler's studies of problem solving with the central notion of parts composed into a dynamic whole. Kohler's studies show traces of mechanistic notions of concept formation. This is the notion he explores in *SFS* and at the beginning of *PK*. Other mechanistic-like features show themselves in the notion of emergent properties in individual cases modeled on the functions of machines, and the notion of polycentricity for spontaneous coordination of multiple

individuals (i.e., a social group). The Gestalt notion is then transformed into a phenomenological-existential notion, where the organic whole is emphasized: knowing is embodied knowing, an integration of elements into an organic, new synthetic whole (cf. *TD* 46). This organic whole is not formed deliberately (as a mechanistic notion may suggest), but neither is it formed randomly. Organic notions of integration work best with a probabilistic notion of forming wholes. Note that Polanyi's notion of warranting the truth of a discovery is a probabilistic one, in which he held that the assertion of truth is a degree of confirmation of truth (cf. *PK* 31; *TD* 77).

But Polanyi's main purpose was to show the creation of a new idea, a unique event. He wanted to explore not only the quality and texture of a whole "intuited" and then analyzed in a situation, but how change and novelty can be analyzed in an epistemology which takes into consideration the context of discovery. The element of novelty and chance introduced the aspect of unpredictability and indeterminacy of the unique historic event. His "degree of confirmation of truth" version of probability theory of truth was designed to verify, or rather warrant, the reality of the unique event.

Up to this point in the discussion, we see Polanyi drawing on features and concepts generally associated with the hypotheses of mechanism, organicism and contextualism in building his epistemology. But he also drew on a Platonic-Aristotelian kind of formism relying on the general notion of similarity. His numerous analogies are built on the notion of similarity of some features, where to explain conceptions outside of or straddling frameworks, he relies on either a series of free-standing or of overlapping analogies. He built categories by having particulars participating in characteristics (again, a kind of triad – particular–participating–characteristic - working by a modified form of deduction reminiscent of Peirce's abduction). He first built his hierarchies of thought, then his hierarchy of entities which explain what there is in the world. A pair of levels of a hierarchy can be "intuited" together, as when one hears a musical chord consisting of individual notes on one level and a harmonious composite on the next level. Although Polanyi defines "intuit" as guessing right, the notion seems closer to apperception.

On a broader scope, Polanyi's metaphysics seems to be the following: hierarchies, categories and similarities lead one to postulate that there are regularities in nature. This is one of the basic premises of scientific inquiry. Another basic premise is that empirical statements are contingent, and true statements are those corresponding to what there is in the world. His epistemology, as I have indicated above, seems to be a blending of mechanism, organicism, contextualism and formism. His ontology seems narrower, a blend of formism and mechanism with an organicist overlay. From all appearances, it would seem that Polanyi attempted to synthesize a philosophy out of the major trends or hypotheses of the history of philosophy. The synthesis seems to be unstable, because it lacks a simple coherence. He named his hypothesis "man in thought" and tried to provide the coherence needed by the metaphor of "innovation" to complete his architectonic. However, the template of the structure of tacit knowing as applied to all aspects of being makes the ontology fragile, unscientific and philosophically troublesome.

#### 3.b. Reals/Things and Minds

Polanyi discussed "the real" in three aspects, although not delineated as such: external reality, which is the subject matter of science, other minds, and the other as "not self." Polanyi affirmed that he concurs with that aspect of ontology held by scientists which confirms the existence of external knowable objects (*TD* 68). "There are real objects existing independently of our consciousness" (*TD* 77). According to this, we may read him to be a realist. But again, he does not fit comfortably with his peer's worldviews. He objected to the

"scientific rationalism" of his time because to him it seemed to be based on radical doubt (cf. *KB* 8-13), which insisted on accepting only "statements based on tangible data and derived from these by a formal inference, open to testing" (*TD* 62).

His theory of tacit knowing, the foundation of all knowing upon unformalizable mental skills "cannot be disposed of within the framework of [scientific] rationality," he said (*KB* 106f.). This position would indicate that he is a realist. So what kind of realist is Polanyi? He accepts abstract objects of formal science – numbers, propositions, meanings – and the natural objects of the natural sciences as knowable. He is insisting on not treating the natural sciences, especially biology and psychology, with the same formality as the "formal" sciences. His epistemology of tacit knowing is especially developed for biology, psychology and sociology (*PK* vii). But it seems there is yet another set of "objects": thoughts, theories, problems – objects of mental life. All three sets of objects are real for Polanyi. So is his a "general realism"? Abstract and natural objects, as well as mental objects exhibited externally (i.e., ideas expressed) are objects of experience. Yet this cannot be a mature realist-empiricist position, which would be reductionist. It may be said that an epistemology for abstract objects and for "mental objects" may need to be intuitionist and apriorist and this would make it an anti-realist position.

But Polanyi's position seems to be that we can know abstract objects by inference, mental objects by tacit inference and natural objects by a combination of tacit inference and laws of causality. Since Polanyi redefined knowing as tacit knowing, a combined cognitive and conative process, he would have to be judged, from this angle of epistemology as a modified rationalist. Since his ontology makes him a "general realist," or better yet, a modified realist, his philosophy turns out to be a "modified rational realism," if labels from mainstream philosophy are insisted upon.

In keeping with the above, Polanyi insisted that there is a qualitative difference between mind and body, that one should recognize "thought as an independent self-governing force" (*STSR* 147). Although one knows other minds indirectly, by analogy to one's own, and one knows the thought of cultural leaders indirectly, from their works, one must make a conceptual leap – have an insight into – their innovative thoughts. This understanding of them is "indwelling" in the expressed thought of the other. Since one cannot indwell another body, one cannot ever know another in all particulars. Therefore, "indwelling" does not lead to collapsing the "other" into the "self." Polanyi insists on this, to maintain his anti-reductionism. Does this conception open the door to the "other" in the theological sense? His writings do not develop this notion. The idea of Ultimate Intelligence is not explored – Polanyi only expresses his doubt (in the context of his hierarchical ontology of emergence) that evolution is meaningless. Polanyi, sitting on the cusp of his confirmation of external reality conceived by science, and his confirmation of mental reality as he developed it, leaves the discussion of emergence of a "higher intelligence" untouched. It could have led him further into a position of having to explain a dualist stand.

The notion of knowing other minds is not explored thoroughly. A beginning has been made in 1968 in two essays<sup>19</sup> with the introduction of "from-at" knowing in addition to "from-to" knowing. *This signals a shift from the double-aspect theory to the interactionist theory on the mind-body question, and to a qualified dualism*<sup>20</sup> - not a Cartesian duality, "but interaction according to the logic of tacit knowing" (KB 223). In "Life's Irreducible Structure," he explained, "understanding hierarchies needs 'from-at' conceptions. We cannot analyze a higher level (the mind) by simply integrating the principles of the lower level (body).

These are two different logical levels" (*KB* 235). In a note to the Meaning Lectures he explained that the hierarchy forms a structure where levels play the role of parts to the structure's whole, each level having its intrinsic function, sustaining the level above it (cf. PP 21:15).

#### Conclusion

Polanyi's ontological equation, which at first sight seemed to be a useful explanatory device, created many problems for him from which he did not extricate himself with careful, warranted explanations and analysis. His strength in epistemology was not matched in his ontology.

#### **Endnotes**

Acknowledgements: I have received useful comments in writing from Phil Mullins, Andy Sanders and Israel Scheffler.

- <sup>1</sup> "Ontological equation" is my shorthand for Polanyi's phrase "a handy model," by which he meant a structural equivalence between knowing and being.
- <sup>2</sup> It is well to remember that *SFS* was originally tentatively titled "Science, Ideals and Society a Study of Dynamic Order," cf. the letter from Polanyi to Stolper, October 3, 1943, PP 4:10
- <sup>3</sup> It would be interesting to compare this to other anti-mechanistic notions of emergent evolution.
- <sup>4</sup> See Polanyi's note (PP 23:15): Hegel on "alienation" from G.W. Hegel, *The Phenomenology Of Mind*, Phil. Bib. German ed., p. 346.
- <sup>5</sup> Polanyi's notion of "emergence" may differ from most current philosophy of science notions. It seems to designate not only explanatory emergence (the laws of more complex situations in a system are not deducible by any composition of laws of simpler situations), but also presupposes descriptive emergence (properties of wholes cannot be defined through properties of parts), a legacy of the Gestalt model from *SFS*.
- <sup>6</sup> Meaning Lectures, University of Texas, Austin, 1971. There are "two kinds of complex entities: a) formed on one level of principles; b) formed by harnessing to an irreducible (higher) principles. Remember the instrument of unknown purpose. This was its meaning. The way a machine functions tells us the purpose of its parts. The way a living being sustains itself tells us the purpose of its parts. This is their meaning just as the purpose of action is its meaning." Notes to Lecture 4, p. 6, PP 41:9, cf. also *KB* 225-239.
- <sup>7</sup> Kant's notion that a teleological explanation is a heuristic to explain the technique of nature. That is, the "principle of ends" is a necessary maxim of reason to explain the products of nature, but it is only a heuristic for investigation, using the notion of "regularity of design." One cannot use a purely mechanistic explanation, but neither can one use a merely teleological one, as the later would be "visionary." One can use a "union" of empirical and teleological "explanations" (notice quotation marks; these two types cannot be actually unified because they rest on different principles) in the form of an exposition, which is not a true explanation generated from a principle it is only a heuristic. See Kant, *The Critique of Judgement*, Part II, [411], 69, transl. by J.C. Meredith (Oxford: Clarendon Pr., 1928/1952).
- <sup>8</sup> Benedict de Spinoza, *Ethics* II, prop. 7, in: *On the Improvement of the Understanding; The Ethics; Correspondence*. Transl. by R.H.M. Elwes, (New York: Dover Publ., 1955)
- <sup>9</sup> Aristotle, *Metaphysics* XII, 7, 1072b, 19-21, in: *The Basic Works of Aristotle*, ed. R. McKeon (New York: Random House, 1941)

- <sup>10</sup> This was his solution to Kant's "ignorabimus," the transcendent existence of objects. See Notes to Meaning Lecture 4, p. 2. PP 21:15.
- <sup>11</sup> PK, Ch.6: Intellectual Passions. Cf. my commentary on justification of knowledge in S. R. Jha, "A New Interpretation of Michael Polanyi's Theory of Tacit Knowing ...", Studies in Histy and Philosophy of Science 28 (1997), 611-631.
- <sup>12</sup> In the "Meaning Lectures," he restated his definition of reality in terms of integration: "It is the tacit integration of parts which realizes the reality of their coherence…" "Kinds of self-centered integration," p. 14, PP 21:10, n.d. probably 1969. The coherence is the anticipation of the real as defined (in *TD* 32) above teleologically.
- <sup>13</sup> "The relation between body and mind has the same logical structure as the relation between clues and the image to which the clues are pointing." Integrating the clues gives the image its meaning. By the ontological equation, the mind is a higher level integration (leap), an emergent quality of the body. Therefore, by this "deduction," the mind is the meaning of the body, see *KB* 213.
- <sup>14</sup> For an exegesis of Polanyi's work from a Polanyian perspective, see my (1997) paper in note 14.
- <sup>15</sup> Some freestanding analogies: whole-part (from Gestalt, from function of machines), etc.; some over-lapping analogies: from art: contrast of a flat surface having a deep perspective; from religion: Pauline scheme, and secular elements transmuted into sacred; from sport: skill of a bicyclist, etc.
- <sup>16</sup> Polanyi wanted to explore what (realist-empiricist) scientists mean by "theoretical reduction" without "logical reduction." In response to his question, Beloff's reply was on epistemological reduction: by use of a theory one can infer properties of a system from the properties of the parts and their interactions [explanatory reductionism/methodological individualism?], Beloff (1963), PP 6:3. Beloff, in the name of scientists in general, distanced himself from ontological reduction, as not relevant to theoretical reduction. Polanyi wanted to claim that scientists "forget that mechanical models are "as-if" models of biological processes", cf. Polanyi's letter to Gillespie (1966), PP 96:8. Problem discussed in Jha, *Polanyiana* 5 (1966), nr.2.
- <sup>17</sup>There are ambiguities in the term "indwelling." In "On Body and Mind," *The New Scholasticism* 64 (1969), nr.2, he defined "indwelling" as interiorizing parts of a comprehensive entity so as to attend from the parts to the meaning of the whole. This is tacit knowledge. Yet, it is explicit knowledge, which distinguishes humans from animals, and "explicit inferences operate with a minimum of indwelling." (*ibid*. 201) But in learning skills and expertise of the sciences, explicit is only a link between tacit "input" and "output."
- <sup>18</sup> Cf. PP 21:10. Occasionally Polanyi made statements on the function of the Christian religion. These seem to be either by way of analogy, or as a way of using the speech of the general public (his "everyday examples"). There is no serious analysis of theology in his works.
- <sup>19</sup> Cf.. LP 27 and KB 225-239.
- <sup>20</sup>The possibilities opened up by the "from-at" conception of knowing are discussed in S.R. Jha, "The Tacit-Explicit Connection: Polanyian Integrative philosophy and a Neo-Polanyian Medical Epistemology," *Theoretical Medicine and Bioethics* 19 (1998),547-568.

# **Beyond Epistemology to Realms of Meaning**Walter B. Gulick

ABSTRACT Key Words: Michael Polanyi, realism, meaning construction, existential meaning, exemplification, Plato, Aristotle, Leibniz, Kant

Ultimately Michael Polanyi moved from theorizing about reality in terms of three overlapping frameworks of analysis (personal knowing, evolution/ecology, and tacit knowing) to a yet more comprehensive framework of interpretation: meaning construction. An analysis of the dimensions of embodied, symbol drenched meaning construction suggests that the modernist tendency to tether reality to epistemological analysis be replaced by an exploration of three interpenetrating ontological regions: experiences of existential meaning, cultural forms of meaning, and external reality. In support of this view, I make reference to earlier expressions of my work, utilize illustrations from philosophical history, and address comments from my critics.

The present article is the latest item of discourse in an ongoing conversation about the nature of Polanyi's understanding of realism. Phil Mullins initiated the dialogue in a paper that was presented to the AAR in 1991 and, after revisions, was eventually published as "Polanyi's Participative Realism" (*Polanyiana* 6 (1997) nr.2). I offered a critique of some aspects of that paper at the Polanyi Society meeting held in 1998 in Boston in conjunction with the World Congress of Philosophy. My critique evolved, in the process of two revisions, into a constructive proposal that was published in *Polanyiana* 8 (1999), nr.1-2 as "The Meaningful *and* the Real in Polanyian Perspective" (hereafter MRPP). When the articles in this issue of *Tradition and Discovery* critique my position, they are referring to claims articulated in MRPP.

My task in this article at hand is as follows: I will summarize key positions from MRPP, but I will do so in part by referring to modernist and recent philosophical developments which illuminate why I take the approach that I do. Then I will respond to the constructive proposals and the criticisms of my work offered by the other authors in this issue. The ongoing conversation of which this article is a part gives encouraging signs of advancing discussion of Polanyi's thought beyond the attack on objectivism, so important in Polanyi's time, to an engagement with leading intellectual issues of our own time.

#### 1. Modernist Construals of Reality and Three Polanyian Frameworks of Analysis

Michael Polanyi's thought is perhaps best known for the way it takes on and shows the falsity of objectivist accounts of knowledge which express modernist construals of reality. Characteristic of modernism is the view that claims about reality must be demonstrated with logical certitude before they are acceptable. Descartes, properly regarded as the archetypal modernist, refused to accept any claims that were not clear and distinct, that were dubitable. The three metaphysical ultimates that he identified through his method of doubt — God, mind and matter — encompass all of reality. But in practice, only matter was of ongoing systematic interest to Descartes. Matter, or extended being, was seen as knowable through science, for only matter is empirically accessible and available to mathematical analysis. The heritage of Cartesian philosophy, developed by such empiricists as Locke and Hume and continued into recent Anglo-American empiricism, was that an immaterial mind was set over against material reality, the repository of object truth. Philosophy's task was to provide the insight into the foundations which demonstrated how knowledge of the real through science was possible.

To retrace the well known arguments Polanyi uses to demolish the objectivism characteristic of modernism would be to rehearse the obvious. What is not so obvious is that Polanyi employed three overlapping frameworks of analysis to combat objectivism – overlapping, but clearly distinguishable. The first two of these frameworks are set forth in PK, whereas the third is rooted in PK but emerged most explicitly in his works published immediately thereafter.

The first framework of analysis is that of personal knowledge. Polanyi denies that there is any distinction in kind between statements of belief and statements of fact. He therefore acknowledges before it became a philosophical truism that empirical claims are theory-laden. All our knowledge is personal, although "the degree of our personal participation varies greatly within our various acts of knowing" (*PK* 36). The personal element in our knowing involves being passionately concerned for the truth as well as taking a propositional attitude of universal intent toward what we believe and claim (see *PK* 300). We are committed to it as being true, and we strain our intellectual resources so that we may adequately articulate the truth of our insight. We are not alone in making most of these claims, for our commitment to the truth of what we are claiming, whether it be a matter of scientific, artistic or humanistic content, arises out of our involvement in a community of those with shared interests, a community of interpretation. Personal knowledge is passionate and convivial.

The second framework of analysis, worked out in some detail in MRPP because it is not as well known as personal knowledge, is Polanyi's version of an evolutionary and ecological perspective. In Part IV of PK, Polanyi explains how it is that humans developed the capacity for personal knowing. His evolutionary and ecological framework of analysis shows how human knowing is a late product of evolutionary change. Life was responsive to its surroundings first through morphological and vegetative structures. Next an activeperceptive level of knowing evolved, and then finally the human symbol using level of knowing (which Polanyi discusses most fully in PK, Ch.5). Throughout his analysis, Polanyi speaks of the rise of gradually more complex living centers having interests of their own (feeding, reproducing, surviving, etc.). In order to survive in the midst of an excess of competing life forms, organisms had to be able to respond immediately to environmental signals which bear upon their most urgent interests. Any and all living things privilege mechanisms that utilize environmental signals and resources to fulfill these interests through responsive (and often integrative) acts. Such acts are primitive forms of meaning construction. Consequently, from an evolutionary perspective, meaning construction has from primeval times been in deep and, I would claim, causal contact with reality. To be sure, that causal connection is only to a very partial aspect of the immensely complex real world, the aspect that bears on the organism's interests. And the causal connection is frequently mediated through a translation process, which, as it gets increasingly complex, allows for a greater range of possible errors.

The third framework of analysis Polanyi develops is that of tacit knowing. I agree with Jha (section 3a) that this is an innovative epistemological notion. Personal knowing, having arisen primordially out of stimulus-response mechanisms, utilizes inarticulate skills and autonomic functions gained by evolutionary ancestors. Articulate (symbol using) systems of thought overlie and often obscure the many sorts of bodily skills humans possess. But our tacit skills are essential to conscious acts of knowing. They are carried out in a from-to structure of consciousness whereby we think from subsidiary materials to explicit objects of thought. All our knowing is embodied. If an individual forgets the embodied character of knowing and attends only to the ideas expressed or the linguistic symbol systems in which they are formed, that person may well

fall prey to some sort of objectivism, a stance which Polanyi has so forcefully shown to be fallacious.

Perhaps most interpreters of Polanyi find the first framework listed above most congenial to their own way of viewing the world. In showing that all forms of knowing – humanistic, artistic, religious, scientific, etc. — are personal in nature, Polanyi effectively countered the reductionistic dismissals of religion, art, and the humanities promoted by the logical empiricists and other objectivists of his day. But in our time, objectivists are a threatened species, in some part due to the power of Polanyi's arguments. The reigning mode of thought among postmodernists and many others today (including most of my students) is relativism: all views are but matters of opinion.

I find neither objectivism nor relativism to be adequate viewpoints. That facet of Polanyian thought espousing personal knowledge is of more help in dealing with objectivism than with relativism. Protestations that one is affirming a claim with universal intent do little to persuade a skeptic that such intent is warranted. One of my overarching aims in MRPP was to demonstrate that objectivism and relativism represent components of Polanyi's from-to framework of consciousness, components which are incomplete when taken by themselves. Relativism derives from emphasizing in isolation the necessary Background factors involved in knowing (the "from" dimension). Objectivism results from focusing alone on what is known (the "to"), as if knowledge were not constructed.

So did Polanyi ever bring these three frameworks into greater unity? Yes, but the process was gradual. His notion of personal knowledge softened the standards involved in judging what constitutes knowledge. Previously, the very term "knowledge" carried with it a bias toward objectivism. It suggested that the knower possesses a high degree of certainty about what is knows. At mid-century, analytic philosophers were wont to ask obsessively, "How do you know that p?" Then, "How do you know that you know that p?" Finding the foundation for certainty and avoiding infinite regresses proved not only elusive but impossible.

Wittgenstein, Quine, and many others gradually put an end to this self defeating quest within the analytic tradition for epistemological certainty and empirical foundations associated with knowledge claims. I find Polanyi's inclusion of evolutionary, embodied and psychological perspectives on knowledge gives his thought a richness often lacking in analytic discourse. That richness gradually led him to recognize that scientific knowing, his original paradigm of all knowing, is but one species of more comprehensive mechanisms for interacting with reality. In relation to human consciousness, the more comprehensive term Polanyi chooses is "understanding" (see *SM* 20).<sup>2</sup> More comprehensive yet, though, is the creation of meaning, a characteristic of all that lives, which Polanyi made the center of his unified thought.

#### 2. A Fourth Polanyian Framework of Analysis and the Status of the Real

So it is that toward the end of his career Polanyi increasingly explored meaning rather than knowledge. The common connotations of the two terms, meaning and knowing, suggest that meaning is a more comprehensive term. Even though personal knowledge is a more encompassing notion than (objective) knowledge, still it is a stretch to talk about a dream of conquest, a trance state, or even preferring chocolate to vanilla as examples of personal knowledge. But one can talk about each of these states as involving certain configurations of meaning. Therefore, he embraced the creation of meaning as basic to his philosophical quest.

A brief review of several characteristics of the creation and nature of meaning (especially human

meaning) as I understand it (expanding on Polanyi's thought) would be in order here. First, meaning is the product of integrations which create a dynamic unity out of subsidiary particulars. In its primitive evolutionary forms, meaning primarily initiates response or action; in its human form, it may engender inert types of consciousness as well as action. Second, human meaning is experienced by a person; it is not some preexisting feature of the world. Linguistic meaning, which is the only notion of meaning employed by many linguists and analytic philosophers, is parasitic upon the experiential notion of meaning (existential meaning) articulated here. Language is an example of what I call cultural forms of meaning, objective precipitates of meaning in use. Third, human meaning is created in the from-via-to structure of consciousness, in which the "via" stands for the symbols evoked to mediate sensations of interest into perceptions, or feelings of interest into thought. The "from" dimension of consciousness is the felt, embodied aspect of the Background . The "from" dimension supplies content and intentionality to our thought. Meaning itself, that which is produced by integrations, may be imaginal, representational, or embedded in activity. But how is meaning related to reality?

Polanyi's language about reality is indebted to his scientific background in general and his complementary goals of countering instrumentalism and supporting scientific realism in particular. The following quotation is characteristic of his thought influenced by this basic (and relatively early) motive for describing personal knowledge:

An empirical statement is true to the extent to which it reveals an aspect of reality, a reality largely hidden to us, and existing therefore independently of our knowing it. By trying to say something that is true about a reality believed to be existing independently of our knowing it, all assertions of fact necessarily carry universal intent (cf. *PK* 311).

The notion of reality implicit in this quotation can be called the "independent existence criterion" because it states that the real is that which exists apart from reliance on human consciousness. Our empirical statements are true to the extent to which they correspond to a noumenal reality whose ontic fullness cannot be fully captured by any proposition. Polanyi's statement expresses a representational view of empirical knowledge, a view denounced by Rorty, most famously in *Philosophy and the Mirror of Nature*, Derrida, Foucault, and many others. It's a view which I, however, find to be warranted provided that it is properly protected against false objectivism through such distinctions as primary versus secondary qualities and especially provided that its scope is limited to certain types of empirical claims. Such qualifications allow us to recognize the fallacy involved in saying: "That apple is red," because we know that redness is a property of human experience and not an objective property of the apple skin (although the property of reflecting light of a certain wavelength is an objective property). Moreover, Polanyi's correspondence notion of truth is necessarily fallibilist because one cannot jump out of one's skin to ensure there is an acceptable correspondence between one's proposition and the entity being referred to.

After Polanyi began investigating meaning construction, another way of construing reality began to be prominent in his thought .

[M]inds and problems possess a deeper reality than cobblestones, although cobblestones are admittedly more real in the sense of being tangible. And since I regard the significance of a thing as more important than its tangibility, I shall say that minds and problems are more real than cobblestones (*TD* 32f.).

In stating that degrees of reality are functions of significance, Polanyi quite dramatically shifts his notion of reality away from the independent existence criterion. In MRPP, I called this second approach to reality Polanyi's "significance criterion".

Polanyi uses a third criterion of reality, one that states that those things are real which "we expect to reveal themselves in unexpected ways in the future" (*TD* 32). I called this the "revelatory criterion," but Esther Meek perhaps more felicitously entitles this the IFM ("indeterminate future manifestation") Effect.

Now I believe that a significant cause of disagreements concerning Polanyi's notion of reality is that the IFM Effect applies both to independently existing things and significant things which may be mind dependent. One of my basic claims in MRPP was that the IFM Effect is better understood as a measure of important experiences of meaning than as a marker of the real. I argued that reality and meaning must not be collapsed into a whole, for the sort of reality referred to by the independent existence criterion is then imperiled because important differences in sources of conscious content are plastered over. Empirical signals, although accessed in thought by language, have an independence that is different in the way they impact ongoing consciousness from the way that non-empirical conceptuality impacts it. This point is at the very heart of my objection to Mullins' meaning/reality holism, which levels ontological differences.

At this point, the ground is prepared to highlight three notions of reality which seem inadequate to me. First, I reject an inclusive notion of the real in which anything that is tangible or conceptual – anything that is meaningful – is said to be real because it is existent in some way. "On this notion, quarks, colors, cars, unicorns, UFO's, even nothingness, all have some sort of existence and therefore reality" (MRPP 8). But this inclusive notion of the real has no discriminatory power. The crucial distinctions between reality and illusion as well as reality and appearance are lost because everything is real. Meaning/realism holism has tendencies toward this undifferentiated notion of reality. I propose using the term "existent" to indicate the encompassing notion of what is, and restrict "reality" to mean those entities which satisfy the independent existence criterion as qualified above.

I would like to point out - but only to disqualify - a second, related usage of "reality". "Reality" may be used (confusingly, I think) as an honorific term. This usage occurs when something is called "real" because it is seen as valuable. Beauty and truth are sometimes said to be real because they are valuable. Ugliness and falsity must then also be real. But should we return to Platonism? On the other hand, should we say values are merely subjective preferences? I'll address this issue in the next section, but for now I'll just warn against conflating value and reality.

A third problematic notion of reality targets the IFM Effect used as a criterion of the real. It seems insufficient to say that the capacity to produce an effect is a guarantee of the reality of the source of the effect. Delusions, daydreams, and artifice can all produce effects. Certainly they are existent in the broad, non-discriminatory sense of reality, but if they are without qualification accepted into the realm of the real, the distinction between reality and illusion is undermined. One could account for illusions with terms like "imaginative reality," but I would note that Polanyi never systematically differentiated domains of the real, whereas he did analyze many types of meaning. I agree with his approach: when distinguishing domains, it is cleaner to dispense with the language of reality and instead use the language of meaning.

Although I strongly support the wisdom of Polanyi's shift in his later years to an investigation of

meaning construction, it should be noticed that two of the three notions of reality I have just rejected are uses suggested by Polanyi. His significance criterion is an expression in heightened form of the honorific sense of the real. And I have already indicated why I find his IFM Effect to be problematic in indicating what is real. In defense of my rejection of these criteria as adequate markers of the real, I can only say that my aim is greater clarity in use of language. The ten indicators of the real which I cited from Polanyi (MRPP 22) do not cohere in a consistent vision. One of the reasons for the multiple views is that Polanyi's thought was in process and these indicators of the real are taken from different contexts. But those of us who want to use Polanyi's thought constructively must clarify potentially ambiguous reference if our thought is to communicate successfully and no doubt we'll go on to create our own set of ambiguities. The manner in which we try to resolve them will no doubt reflect our reading of what is needed for current thought in the light of previous successes and failures in intellectual history.

#### 3. An Historical Excursus

The current discussion about how best to understand reality and meaning in relation to Polanyi's thought mirrors analogous debates from times past. Three precursor debates in philosophical and theological history stand out for me as especially auspicious. The contrasting philosophical perspectives I will examine are Plato and Platonism vs. Aristotle, realism vs. nominalism, and Leibniz vs. Kant. I'll also take a sideways glance at deconstructionism. I believe a Polanyian position can help resolve the issues at stake in these encounters, and I'll also attempt to indicate how that resolution contributes to my position as expressed in MRPP.

Plato's considered notion of reality seems to be the following view, articulated in dialogue form by the Eleatic Stranger:

I suggest that anything has real being, that is so constituted as to possess any sort of power either to affect anything else or to be affected, in however small a degree, by the most insignificant agent, though it be only once. I am proposing as a mark to distinguish real things, that they are nothing but power (*Sophist* 247E).

Interestingly enough, this view has much in common with the IFM Effect. Plato goes on to call reality "the sum of things" (249D), and indicate that both the changing world of the senses and the changeless world of the Ideas are real. Here Plato correlates "reality" with the all encompassing notion which I find unsatisfactory because it has no discriminatory power.

Platonism (which I consider to be the tradition which arose from taking literally some of the likely stories Plato told) argues for the objective reality of Ideas (especially of value terms). The Ideas were seen as prior to and determinative of individuals. This view postulated the sensory world as a sort of shadowy duplicate of the world of Ideas, and it effectively challenged any cumulative attempts to learn about the world through the senses. Aristotle rejected the Ideas as having some sort of privileged ontological status. All knowledge of the world is ultimately derivative from sense perception for Aristotle. Ideas are abstractions from that which we sense, that which is most real. To be sure, our knowledge is made possible because the ideas we have abstracted actually exist in the sense object. In acknowledging the significance of the sensible world, Aristotle provided intellectual justification for the subsequent advance of science.

The contrasting perspectives of Platonism and Aristotelianism foreshadow the contrast between the medieval

debates between the realists and the nominalists. Augustine is the most important mediator of Platonistic thought to the debate. In Augustine's view, God and the Church are realities which have far greater ontological weight than individual persons; they are realities, wholes, in which persons participate. Indeed, God is the source of Ideas, including the Idea of God. But when all Ideas are immediate and prima facie inspired by God, how does one determine the adequacy of conflicting Ideas? Moreover, how does one support the ontological priority of language, given our knowledge of the fluid nature of language and the multiplicity of linguistic/cultural worlds?

The medieval realists concerned themselves above all else with metaphysical essences, for such universals were believed to provide a window onto transcendent reality, and comprehension of this realm was crucial to one's eternal salvation. The nominalists agreed with Aristotle in claiming that knowledge is irreducibly particular and that language and words are but abstractions from sense experience. Universals are simply linguistic signs. This did not lead the nominalists at once to the study of nature. Rather their concern shifted to determining the contents of revelation, particularly as expressed in the scriptures. But it opened the way for voluntaristic individualism which challenged the authority of the Church, grounded in realism, and prepared the way for scientific exploration of reality.

The debate between realists and nominalists is replayed in an interesting way today in deconstructionism. Derrida privileges language in apparent agreement with medieval realism, yet in agreement with nominalism he denies that words relate to essences. In fact, he thinks language does not reveal the real in any reliable way. Meaning is seen as arising from the network of differences between signs, but such meaning is always provisional and open to layers of interpretation. Through his denial of the priority of presence and his critique of logocentrism, Derrida in effect creates a crisis with respect to any possible knowledge of the real. But in affirming the provisional nature of language and its decentered meanings, Derridean deconstruction also creates a crisis of meaning, for to him meanings are fleeting – they provide no basis for programs of action or even for sustained critique.

The Polanyian interpretation of meaning and reality I support can be clarified through comparison and contrast with the foregoing positions. I take as my model Abelard's view, often called conceptualism, which forges a mediating position between realism and nominalism. So too I affirm important aspects of both realism and nominalism. Conceptualists agree with nominalists in rooting the origins of language in abstraction of similarities from sense experiences, but conceptualists state that the resultant concepts denote something real as a condition or state of things rather than an essence. Like the nominalist or conceptualist, I want to affirm the priority of sense experience over language with respect to knowledge of the real. But like the realist or the postmodernist, I also want to affirm the active contribution of language (and associated use of analogies, tropes, etc.) to the construction of human meaning. This is why I expand Polanyi's from-to structure of consciousness to a from-via-to structure in which the "via" acknowledges the crucial role of language or other symbols in the construction of human meaning.

Values are examples of cultural forms of meaning, that is, objective precipitates of experiences of meaning. Some cultural forms of meaning are physical (airplanes, toothbrushes, gardens), some imaginary (the infamous Mickey Mouse example from MRPP, the Holy Grail, Dante's Inferno), some practices (Sanders provides such examples as marriage, elections, duties), some symbolic (language in particular), and so on. It might be said that my basic ontological regions are experiences of existential meaning, cultural forms of meaning, and external reality. Humans participate in these regions, in respective order, psychically,

socially, and physically.

I see values as special expressions of language which play a major role in expressing interests, directing thought, and guiding action toward rich consummations of existential meaning. The manner in which value terms are used indicates the extent to which they participate in reality. "That garden is beautiful" may be primarily descriptive or prescriptive in intention. If the former, its meaning points out features that exist apart from our knowing them (the independent existence criterion of reality). At once the statement would be experiential (an expression of existential meaning), a cultural form of meaning capable of communicating to others, and a designator of a real feature. It would be like an empirical term. If used in a non-descriptive way, perhaps prescriptively (implying "You ought to like such a garden") or to ingratiate oneself with the gardener, the value term expresses a mind dependent meaning, and as used it would better be termed a meaning than a reality.

With the later Polanyi, I assert that the analysis of meaning construction and meaning use provides the standpoint, broader than epistemology, for comprehending what and how humans can understand. Cultural forms of meaning cluster in particular realms according to their function. Some realms of meaning rely first on sensation, other realms have their existence strictly through language and other forms of symbolism. If care is taken to ensure that the linguistic worlds into which we are socialized are connected in experience to the empirical world, we can assert, contrary to deconstructionism, that meaning is generally reliable and reality is knowable.

The next instructive philosophical conflict to be considered centers on the contrast between the views of Leibniz and Kant. Leibniz's rationalist worldview regards mind-like monads as "persons" within which the reality of all other monads is mirrored thanks to the pre-established harmony created by God. Within this mirroring the content of sense and reason (thought) are equally present to consciousness. Leibniz and his disciple Wolff considered sensation to be a confused, indistinct form of consciousness in essential continuity with the greater clarity characteristic of thought. Within the realm of the monad, only two principles are necessary to explain and clarify the specific content of consciousness: the principle of contradiction and the principle of sufficient reason. Each principle can be used indiscriminately to assess the contents of consciousness, and since clarity and consistency are taken as marks of the real, so the presumption of Leibnizians is that transcendent, logically coherent metaphysical knowledge is, if anything, more reliable than sensory knowledge in determining the nature of the real.

Kant was awakened from his "dogmatic slumbers" by Hume not only to counter Humean skepticism, but to oppose Leibnizian dogmatic metaphysics. For Kant the difference between sensation and thought is not a matter of clarity but a matter of different origins.

The philosophy of Leibniz and Wolff, in thus treating the difference between the sensible and the intelligible as merely logical, has given a completely wrong direction to all investigations into the nature and origin of our knowledge. This difference is quite evidently transcendental. It does not merely concern their [logical] form, as being either clear or confused. It concerns their origin and content. (*Critique of Pure Reason*, A44-B 61)

Sensory knowledge, in which sensation is organized by the forms of intuition and the categories of understanding, is different in kind and in validity from metaphysical "knowledge" which is based only on Ideas

or other forms of non-empirical conceptuality. Through the understanding, we comprehend empirical reality as it appears to us. Through metaphysical concepts unrestrained by critique, we enter a world of transcendental illusion. Thus sensibility relates us to the real world in a way that thought alone need not. Leibniz's privileging of clarity and consistency obscures comprehension of what is real. Consider the difference between a unicorn and a bandicoot. Most Europeans and Americans will have a clearer concept of the unicorn, but that does not make it more real.

My chief difficulty with semioticians, including Peirce, is that they basically follow the lead of Leibniz in making thought and logic the basis for ontological claims. Kant's important distinction between inner and outer sense is eliminated. Certainly our perception and how we use it are theory-laden, but that does not mean we are trapped in a homogeneous world of thought (signs, language, theory) as semioticians, idealists, post-modernists, and other pan-linguists are wont to claim.

Polanyi's post-critical thought is sometimes thought to oppose and transcend the critiques of Kant. But as I have argued elsewhere<sup>3</sup>, Polanyi's use of "post-critical" is primarily meant to oppose those who, like Descartes, think that doubt or skepticism provides a reliable road to knowledge. Polanyi criticizes Kant for using doubt in a search for certainty (see especially PK 269-272), but it should be noted that Kant advocates doubt be used against uncritical dogmatism rather than utilizes it as a methodological principle in the manner of Descartes. Surely Polanyi countenances such usage of doubt when scientists examine a new theory. Polanyi's negative comments about Kant's regulative principles (cf. PK 307) seem to be based on a misunderstanding of Kant's intended usage of this term. Polanyi states that one could treat regulative principles as true either in the face of thinking them false or while actually believing them to be true, and he sees problems with either approach. But Kant advocates using regulative principles to organize thought in those situations where systemic structure rather than truth is at stake or where it is impossible to know whether something is true or false. Otherwise, Polanyi's references to Kant are not very wide ranging and are generally positive (see KB 156; M 52, 87, 200 for instances of benign references; see KB 39, 68 for instances where Polanyi misinterprets Kant). All of this is to say that Polanyi should not be seen as opposed in principle to Kantian thought. As a matter of fact, Kant's views are far more congenial to Polanyi than Leibniz's thought is.

#### 4. Reviewing Reality Again

In MRPP, I highlighted Polanyi's view that human meaning is built upon a long evolutionary history of responsive immersion in reality. Our senses, I argued, must necessarily have developed in ways which provide accurate data regarding the real objects and activities that bear on our survival. Our primitive ancestors must have been ensconced in a unified world where stimulus and response prevailed. But meaning making crossed an important threshold in relatively recent evolutionary history. Humans developed the ability to symbolize experience, and human meaning was born.<sup>4</sup> Different possibilities can be simultaneously envisioned. This gives rise to freedom. But it also fractures the formerly unified world. Because humans can symbolize themselves, self consciousness results. Moreover, what is symbolized can be objectified and solidified in numerous ways. Momentary flashes of existential meaning may be memorialized in words, actions, or created objects and so take on objective status as cultural forms of meaning. In this way, the world of meaning making gains complexity and public existence.

I have been arguing that we ought to limit our reference to reality to what is gained through our sure relation to the external world provided (at least indirectly) by the senses. To be sure, we have, as self-conscious

individuals, no unmediated and pure access to sensation. We have seen that human meaning making arises within a from-via-to structure of consciousness where sensation enters consciousness at the "from" dimension and must be structured by thought at the "via" dimension before it can be considered as meaningful perception at the "to" dimension. Nevertheless, that which is known most directly as real impacts us with the power of independent existence through our sensation. My suggestion in MRPP was that we restrict our language of reality to this sensory material, and we label all that which we experience at the level of full human consciousness or above as meaning.

My critics have convinced me that tethering the term "reality" so tightly to sensation runs too deeply against deeply embedded usage to be wise or even feasible. Against my intentions, it may lead to an unwarranted dualism that creates more problems than it solves. The crux of the issue is how to understand the ontological status of cultural forms of meaning. For the sake of discussion here, let's distinguish two types of cultural forms of meaning.

First, let's consider those cultural forms in which meaning is intertwined with empirical reality. Some meanings have been developed through practical or formal testing so that they accurately display broad aspects of reality that are not immediately known through sensation: F=ma, today's exchange rate between dollars and the yen, and the function of organelles would be examples. In some cases, material has been shaped by human action and exists as a real artifact: a hairbrush, a sea dike, and a jet's contrail are illustrations. But there are a plethora of meaningful objects or events whose reality or plausibility is in dispute; we'll examine some of these shortly.

Second, there are many symbolic worlds, creations of human meaning construction having no empirical exemplification. Jokes ("There was a traveling salesman"), fairytales, and daydreams are clear examples in this category, but so are Kantian Ideas, which by definition are incapable of empirical exemplification (the transcendental Ideas of God, self, and world; normative Ideas like truth, beauty and goodness; practical Ideas like freedom, necessity, and harmony).

In MRPP, I argued that it made most sense to regard these two types as meaningful products of human construction, but to restrict the appellation of reality only to sensory aspects of whatever was being considered: the plastic of the hairbrush rather than to the particular function of the object. No doubt that is too restrictive a way to designate what is real, but it is no easy matter to determine a fitting boundary for discussion of the real. There are many admixtures of the empirical and the meaningful where what is real is a matter of contention. Thus William Alston argues for the acceptability of direct, non-sensory experiences of God. In these mystical experiences, God simply appears as God; God is not merely interpreted as manifest within or beyond perceptual experience of objects or events. But might not an Azande likewise perceive a person carrying out certain suspicious activities as a witch? The person and the activities are both empirically evident. Are the perceptions of God and a witch both real? Are they real only to a given community of interpretation? If so, are we then not conceding "reality" to be a relativistic or honorific term? This is not a concession Polanyi ever makes so far as I am aware, and it is not a concession one needs to make so long as reality is grounded reliably in sensation prior to human interpretation. Avoidance of such relativism is the major reason I restricted the term "reality" so tightly in MRPP.

The independent existence criterion of reality stands for me as the essential criterion. But how helpful is this criterion? A hairbrush but also "F=ma" and arguably a beautiful landscape seem to exist

independently of our knowing them. So does a witch for the Azande. Notice, however, that Polanyi's independent existence criterion is said to pertain to empirical statements. According to this criterion, then, that is real which is grounded in and makes reference to the world known through our senses. On this basis, one could say that a hairbrush is real qua hairbrush because not only the plastic exists apart from our thinking about it, but so does the empirically manifest function of brushing hair. A scientific law like F=ma can be called real on similar grounds; physical objects can be measured to act in accordance with the formula. The status of beauty, God and a witch are more difficult to resolve, and key to a determination of how each is best categorized is both a precise definition of what one means by each term and regard to how the term is used.

I understand "beauty" to be a normative, prescriptive term that is appropriately applied to certain harmonious affordances (to use J. J. Gibson's term) which are empirically evident. The Kantian Idea of beauty is not itself perceptible, and therefore the concept beauty itself would be meaningful rather than real, but empirical objects manifest the sort of harmony called beautiful independently of our knowing them. These beautiful relationships or patterns are therefore real (even though which manifestations are truly beautiful will likely be an irresolvable subject of debate). Similarly, if I define God as a spiritual being, a creator transcending yet also existing immanently within the world, and not directly capable of being perceived (and this is not the place to debate with Alston), then I would have to say "God" is a highly meaningful term, but also that God is no more (and no less) real than beauty, truth or goodness. Yet if God is understood as the creator of the world, then evidences of God's reality are ubiquitous. Still, the gap between creation and a creator must be bridged by a leap of faith because the world need not be seen as created, but only as existent.

Is a witch real? If by "witch" one means a person with magical powers to produce desired results, then such powers are not empirically evident, and a witch cannot be regarded as real. But one could infer from certain events in the world that they must have been caused by a person with magical powers, and through a leap of faith the witch could be regarded as real. However, it should be noted that the plausibility of this inference is suspect because of what we know about such psychological features of human existence as the dynamics of suspicion, defensiveness, and projection, as well as what we know of the limits of human capability with respect to magical powers.

Finally, another characteristic of reality mentioned in MRPP ought to be stressed in addition to the independent existence criterion. Reality is inexhaustible and indeterminate (*KB* 79). Consequently, competing claims about reality insofar as it is mixed with meaning are often irresolvable. There is no technique or algorithm available to adjudicate between claims so as to arrive at uncontested conclusions. "There is no incorrigible access to reality; all our knowledge of the real is fallible" (MRPP 9).

The upshot of all this is that it seems reasonable to speak of the reality of the cultural forms of meaning insofar as they manifest an empirical component that is determinative of what they are. But I must also say that the issue of where to draw the line between reality and meaning is not of great concern once the honorific aspect of reality is eliminated and the effect of how we use language is recognized. The frameworks of meaning production we bring to each statement about what is real influences what aspect of the real we target. The structures, sources, and backgrounds we utilize in the "from" dimension of the from-via-to structure of consciousness plus the conceptuality we employ at the "via" dimension all contribute to the meanings we generate. The variations in quality of life we experience is not so much due to what sort of objects, real or imaginary, we engage as it is due to the way we construct and indwell meanings. Zest and joy in life come not from our involvement with what we certify to be real but from our participation in what is

meaningful, including truth, beauty, goodness, justice, and God.

#### 5. Reaction to Other Accounts of Polanyian Realism

Together the seven papers comprising this issue of *Tradition and Discovery* present a variety of positions which are diverse enough to make me wonder if Polanyians truly do represent a community of inquiry, to use Sanders' term. Certainly the diversity is sufficient to underscore how many factors feed into our personal Backgrounds to contribute to strikingly different interpretations of the same body of work.

To be sure, these essays do not represent simply attempts at exegeting Polanyi's work. John Puddefoot is explicit that his paper develops implications of Polanyi's work, and my articles derive from a philosophical position, highly influenced by Polanyi, that is not fully expressed in any one place, but partially emerges in a number of writings. It is a tribute to the fecundity of Polanyi's thought that such interesting perspectives on meaning and reality are fostered by it. I'm grateful to the contributors to this issue, especially Mullins, Sanders, and Cannon, for the care they've devoted to critiquing my work.

While I'm grateful for the critiques, that doesn't mean that I agree with the substance of all that's written. I continue to feel that Phil Mullins undermines the embodied character of knowing and meaning (his "polyvalent aspect"), which requires a situated knower experiencing specific content, with his abstract characterization of real entities as being "preeminently signifiers". As an embodied person continuously involved in meaning making, I am most immediately impacted by reality through the witness of my senses, and I can rely upon scientific and practical generalizations that have been tested against the sensed world, but beyond that one enters into conjecture. While Mullins appropriately notes that "a god's eye view is impossible for humans who are bodily or incarnate knowers," speaking of real entities as signifiers or signs (and then moving on to talk about what they signify) and saying that real things are marked by power (here recapitulating the point made by Plato quoted earlier) moves awfully close to such a view.

Mullins rejects my proposal that sensation provides direct access to the reality in which we at any moment dwell. He counters my position by stating, "Sensation provides mediated and not direct access to real entities. All our access to reality comes to us as we integrate that in which we dwell." My claim is that perception, not sensation, provides mediated access to reality, because "sensation" refers to that content upon which perception relies. To become perception, sensation must first be schematized, and then to communicate what we perceive, it must be cast into language. These latter two processes add possibilities of interpretive error not found in sensation alone; we may then see the wavy lines on the hot road in the distance as water. In saying that I make the relatively error free sensory contact with reality into a metaphysical claim which grounds my thought, Mullins misunderstands the true starting point for my philosophical view — although I want also to acknowledge that Mullins generally understands my views well. The experiencing of meaning in its many varieties, existential meaning, is my beginning point, a point I believe Polanyi arrived at late in his career when the infirmities of age made it difficult for him to develop and articulate fully the implications of this novel beginning point. A more complete rendering of this beginning point than has already been provided will be found in sections II, III, and V of MRPP as well as elsewhere in my writings.<sup>5</sup>

Why do I insist on the comparative veridicality of sensation? Without doing do, then meaning loses its bearing in the world. Science at best becomes accepted on instrumental grounds: it seems to work, but not necessarily because it is true and based on confirming sensations at some level of analysis. Then discussions of truth are likely to be decided on political grounds, much as Puddefoot suggests. Relativism then reigns, and

the most powerful advocates for a position win the day, even when discussing scientific matters. This sort of situation is precisely what Polanyi fought in pre-World War II Russia, when the needs of the state dictated scientific research and influenced perceptions of truth. I am not claiming that the reliability of our senses is the only bulwark against relativism, but it is an important one. Mullins' claim that "all our access to reality comes to us as we integrate that in which we dwell" seems to overvalue ordinary states of human consciousness and understress the important questions of where we get what we integrate and how reliable is it. Some access to reality (e.g., scientific knowledge, our everyday practical knowledge) is provided by the integrations producing human meaning, but "man" is not the measure of all things. Here I reiterate the point Kant makes about the important issue of the sources of our knowledge against Leibniz's rationalism.

Since my beginning point is with experiences of existential meaning, then it most certainly is not accurate to characterize it as a reductionistic type of ontology. Mullins seems to suggest that my prime concern is with "clarifying the parameters of primitive causality or articulating an ontological scheme of existents." I see my comments about reality and sensation as representing an impure sort of transcendental argument. I reflect upon the conditions which make meaning making possible, but I do so in terms of ideas provided by many sorts of disciplines or perspectives, including the visions of personal knowledge, the evolutionary and ecological perspective offered in *PK*, Part IV, lessons from philosophical history as suggested in section 3 above, and the investigations into the character of tacit knowing that Polanyi provided.

Further insights into the nature of experiencing existential meaning can be obtained by entering into conversation with points raised by Dale Cannon and Andy Sanders. Probably my position is closer to that expressed by Cannon than that described by any of the other authors. We both find reference to Kant helpful in interpreting Polanyi, although I would not concur that Cannon's points a) – d) in section 5 of his paper is a full or accurate depiction of problems in Kant's thought, and I'd have some other quibbles as well. But I appreciate the way Cannon stresses the importance of commitment in our acts of knowing, though we also need to back away from blind commitment in order to analyze our thought dispassionately. I think it important to recognize that dispassionate analysis is still undergirded by a motivating passion or commitment to find the truth. I'd prefer to use, with Sanders, the term "truth" rather than Cannon's "transcendent reality," for the latter phrase tends to support the honorific notion of reality, as when he speaks of reality as a "sacred, impassioning ideal" (section 3). Not everything we're excited about or seek to know is real.

Cannon underscores how the committed individual is motivated by the lure of reality, which involves "her participation in, her connection with, that which transcends her subjectivity" (section 2). He creatively interprets Polanyi's discussion of submission to ideals of human greatness as involving "a transcendence of human subjectivity from its passive, given state to a responsibly impassioned state of responsible personhood" (section 3). At this point, Cannon shows how fact, value and a sense of the real (I'd prefer "a love of truth") are conjoined in the framework of responsible personhood. Sanders develops a somewhat similar view. This position has many of the key elements I ascribe to strong experiences of existential meaning, but it perhaps does so in a more direct and fetching manner. Nevertheless, there are aspects of my understanding of experiences of existential meaning which I think enrich the conversation, so I will outline my notion briefly. My thought about these matters has been influenced by Polanyi and Prosch's *Meaning*, but also by many other sources, particularly Robert Neville's explication of thinking as a valuing activity as discussed in *Reconstruction of Thinking*.

Experiences of existential meaning take place within the from-via-to structure of consciousness.

They involve thinking about and/or acting upon issues about which we care, and thinking and/or acting so as to achieve goals associated with these issues. We thereby arrive at meanings which satisfy us in felt ways. Much of our conscious activity is carried out along routes which are routine, and in such cases our emotional involvement, our level of care, falls below a threshold of notice and is an example of what Cannon calls passive subjectivity. In dramatic cases of existential meaning, however, our existence is enlivened by feelings of engagement and vigor, and life is felt to be intrinsically meaningful.

What are some typical events involved in such experiences of existential meaning? Typically we find that we include values that matter to us, fundamental interests, in our integrations. The scope and depth of our integrations increase, and we feel connected (we are connected) to an increasing range of persons, ideas, and issues that we care about. Scientific investigation which flows along a gradient of increased meaning, to use Polanyi's language, is an example of a process manifesting existential meaning. So might be a romantic interlude or successful business transactions. It is important to see that we don't just will ourselves into such experiences. They are supported by certain personal or social practices in which we dwell. The pleasure of the satisfactions we experience evokes our increased passionate participation in our project and pulls us into new opportunities to enjoy the satisfactions associated with the problem solving meanings we produce through integrations.

At this point, a rather significant difference seems to arise between my take on the world and Cannon's. He wants to distinguish our personal, extrinsic sense of value from the intrinsic meaning that objects possess. "Polanyi's idea of the meaningfulness of real things is a matter of intrinsic meaning, as opposed to extrinsic or derived meaning" (section 4). Cannon thus speaks of our meaningful comprehension of comprehensive entities and the intrinsic meaning these entities have. My issue with Cannon here is not so much a conceptual one as a terminological one. Just as I want to avoid equivocation in talking about reality both as describing what is and as something valuable for human life, so I want to avoid talking about meaning both as a human creative process/experience and something inherent in real entities. Minds and problems are far more complex than stones, and they afford opportunities for much richer experiences of existential meaning. But I find it confusing to say they are either more real or more endowed with intrinsic meaning. I would propose that Cannon's "intrinsic meaning" be replaced with "intrinsic richness".

The discussion of values and richness provides a nice segue to Sanders' article. The highlight for me among its rich layers of interpretation occurs in section 4. I find much that is compelling about Sanders' discussion of Polanyi's implicit axiology. To parcel out a core notion of goodness in the cognitive, aesthetic, moral, and spiritual realms of meaning into corresponding ideals of truth, beauty, justice, and charity seems to me an inspired move. While I have usually regarded them as guides to more fulfilling meaning creation, Sanders does not shy away from discussing the ontological status of these ultimate values. Because they "originated in human culture," he writes, "[u]nlike natural entities, these values are not independent, but they may be said to have a relative independence and thus objectivity in that they over-arch a large part of human culture" (section 4). I quite agree with this analysis; I too see such values as having an independent, objective status within human culture and in an individual's life. So despite these values being examples of Kantian Ideas, which by definition are not real, according to the independent existence criterion, they should still be seen as real. Can the apparent conflict be resolved?

Where do the Kantian (or Platonic) Ideas, ideals incapable of empirical exemplification, come from? According to Kant, Ideas develop out of and express the legislative and system-creating thrusts of reason as

it seeks unity in thought and action.

This Idea lies hidden in reason, like a germ in which the parts are still undeveloped and barely recognisable even under microscopic observation. . . . Systems seem to be formed in the manner of lowly organisms, through a *generatio aequivoca* from the mere confluence of assembled concepts, at first imperfect, and only gradually attaining to completeness, although they one and all have had their schema, as the original germ, in the sheer self-development of reason. (A 834-5, B 862-3)

The image Kant uses is suggestive. Ideas lie embedded within us, and out of our interactions with the world they are increasingly drawn out of us. It is but a small step beyond Kant to think of the Ideas as having evolved within human nature and culture as guides not only to surviving but for thriving. Their intellectual expression as Ideas may be but the external pole of an indwelt thrust toward fittingness and rightness. If so, then the way each of these Ideas may be applied is largely a cultural, communal matter, but the rational core of these Ideas would be universal, that is, inherent in all human existence. In sum, Ideas could be affirmed as being real because they are grounded in human nature, but simultaneously as transnatural integrations bringing into ideal order the diversity of our experiences.

There are at least two important implications of this view. First, it provides a way of escaping the fragmentation of reality into many separate communal enclaves. Second, it again alerts us against falling prey to traditional epistemological and ontological ways of conceiving reality. Values need not be seen simply as matters of intellectual idealism as Plato and Kant were prone to do, but the way they function in language should be examined, as should their possible status as bearers of reality in an embodied sense and/or as indicating real patterns in empirical reality.

At least as important as explicit value terms in guiding our behavior, however, are our interests, which indeed may influence the making of meaning at least in part through values. But the ways we make meaning are diverse not least because of the capacity of consciousness to roost in many levels and take many perspectives. Catherine Elgin illustrates these points well: "What we notice is a function of our interests. Things we overlook in one frame of mind another renders salient. Emotions are sources of salience." Elgin, building on Nelson Goodman's thought, brilliantly shows how our minds are able use diverse materials – metaphors, works of fiction, emotions – to increase our understanding of (in contrast to our knowledge of) our incredibly multifarious world. Especially fertile in helping humans understand their world is the symbol-creating and utilizing activity Elgin calls exemplification, the process of taking something as an instance of something else:

Exemplification's epistemic contribution has little to do with justified true belief. . . . An exemplar is vindicated not by what backs it up but what it brings forward. . . . Experiments and pictures, paint samples and fabric swatches, inform by means of exemplification. Being nonverbal, such symbols are neither true nor false. . . . An illuminating exemplar need not even affect belief. Its cognitive contribution may consist in augmenting one's conceptual repertoire, refining one's discrimination, honing one's ability to recognize, synthesize, reorganize, and so on (Elgin 1996, 182f.).

If one combines insight into how exemplification dynamically extends traditional epistemology with an appreciation for the protean quality of language when viewed historically, one is less inclined to rely on traditional epistemological categories like warranted true belief, and one is more inclined to highlight the

importance of human meaning making. Polanyi's "ontological equation" questioned by Jha falters before the process of exemplification. Similarly, my concern to distinguish the real and the illusory is diminished.

One strategy for reasserting more stable traditional notions of epistemology and ontology in an unstable world is to embed them in certain coherent social groupings for certain periods of time. Sanders makes this move by arguing that "acceptance of, and striving towards these ultimate values in action and judgement is feasible for a knower only in virtue of her affiliation to a community of inquiry" (section 4). I want to affirm with Polanyi that there is a very important social component to knowledge, but I find several problems with any move to tie reality to the reciprocal inquiry exhibited in a community of inquiry. There is real merit to this suggestion when regarding the production of knowledge within the sciences and some other academic disciplines; this of course is precisely why Polanyi emphasized this approach in SFS. But how far ought this model be extrapolated? Most people develop their understanding of the real informally through participation in many communities: involvement in the church, at work, at home, in leisure activities, etc. If one properly objects that these examples are not basically communities of inquiry, and the results of such informal attention to reality are questionable, then one must still ask if the alternate is a form of scientism, of undue reliance on a small group of "experts". It seems preferable to be more inclusive by talking of traditions and communities of meaning construction.

Of course the most basic problem of talking about a communal definition of reality is the relativism it expresses, as indicated earlier. Again Sanders: "what counts as 'real' is relative to a particular tradition of of inquirers" (section 6). If so, then we are again stuck with an inability to distinguish reality and illusion. Benge and its powers are real. Dialectical materialism is a description of reality. Anything is real if a person or community believes it so. The shared human capacity to sense a common world and test hypotheses offers a better alternative. I continue to stand by the independent existence criterion for knowing an inexhaustible, complex reality.

In addition, Sanders' spectrum of the real, shading from the natural to the biological sciences to "social and cultural entities" (end of section 3), does not work for me. In stating that the latter are "even more real in that they require a larger degree and range of dwelling in subsidiary particulars (including feelings, emotions, stances, belief, etc.)," Sanders seems to commit himself to saying that nightmares, an engrossing video game, Pentecostal praise, and experiences while under the influence of stimulants are among the most real things there are. The spectrum works far better in describing meaning than in describing reality.

I truly appreciate the care with which Sanders examined my thought in section 5. I have benefited from his suggestion that I defined reality too narrowly in MRPP, although I am not sure the adjustment I made in this essay is broad enough to satisfy him. But I must also say that I felt he forced my thought into a pre-existing category of thought rather than fully took account of its novelty. I sound like – good God! – a logical positivist on Sanders' rendering: the empirical world alone is real and all else is emotive. His statement that my position "implies that, for example, God may be more richly meaningful than Santa Claus, but both would still be less real than a stone" is not inaccurate, but it gains its apparent punch only through use of an honorific notion of reality. In contrast, maybe I have too honorific a notion of meaning, except that my notion of meaning acknowledges that meaning is value drenched through and through. His interpretation does not even begin to understand how seriously I take dynamic experiences of meaning or acknowledge that I insist reality and meaning interpenetrate one another. But, through his prodding, I hope I have made my position clearer.

Finally, I offer a couple of brief comments on Puddefoot's article. His critical attitude toward ontological schemes as disguised recipes for totalitarianism reflects a viewpoint most commonly found among postmodernists like Emanuel Levinas and Mark Taylor. But all the essays collected in this issue articulate a stance of falliblism with regard to epistemology and ontology, so where is the threat here? Doesn't a plausible demonstration of what exists and what can be known offer better protection against extremism than a nihilistic stance which in its cynical disregard for theories of reality or morality is free to argue for violence, authority, and other tokens of totalitarianism? I simply cannot agree that metaphysical realism is totalitarianism in disguise (cf. his section 5).

Moreover, Puddefoot seems less than fair to Cannon in criticizing his claim that "truth and reality . . . are sacred, impassioning ideals" (section 3). Puddefoot admonishes Cannon by saying that "passions inspired by absolute dedication to truth and reality – or our version of them – are as "inspiring" to devotees of their totalitarian manifestations as they are to others with whom we are more sympathetic" (section 3). But Cannon admits as much and protects his view by contrasting a totalitarian frame of mind which "results from a comprehensive failure to differentiate map from territory," with commitment to the transcendent ideal itself in a way which is open and vulnerable to having expressions of that ideal called into question.

Be that as it may, I think Puddefoot's claim (end of section 3) that Polanyi's "supreme achievement lay in eliminating the boundary between epistemology and ontology" is a provocative and interesting insight. Of course, Puddefoot sees the political realm as the basic category from which to proceed, whereas I argue for experiences of existential meaning as the best starting point. I hope by now that the latter comment is happily redundant.

#### **Endnotes**

- 1 MRPP is also available for a limited time on the Polanyi Society Website:http://www.mwsc.edu/~polanyi/
- 2 At the very least Polanyi's movement from an emphasis on knowledge to understanding seems consistent with a similar move made by Quine as he sought to naturalize epistemology (see Quine's "Epistemology Naturalized," in: *Ontological Relativity and Other Essays* (New York: Columbia Univ. Pr., 1969, 69-90). More strikingly, Charles Taylor sees Polanyi's development of the dynamics of tacit knowing as subsidiary to explicit knowing to align Polanyi closely to Wittgenstein and Heidegger as thinkers who transform modernist epistemology see Taylor's *Philosophical Arguments* (Cambridge: Harvard University Press, 1995, 68-70).
- 3 See my "An Unlikely Synthesis: What Kant Can Contribute to a Polanyian Theory of Selfhood," *The Personalist Forum* 9 (1993), 81-107. For an interpretation of Kant's thought that suggests that he, like Polanyi, moved increasingly toward ideas akin to meaning as his thought matured, see my "The Creativity of Intellect: From Ontology to Meaning. The Transmutation of the Sensible and Intelligible Worlds in Kant's Critical Work," *Ultimate Reality and Meaning* 17 (1994), 99-108.
- 4 In MRPP I make clear my dependence on Susanne Langer's distinction between signal and symbol. While I am critical of one aspect of Peirce's thought, I also recognize that his sophisticated understanding of signs could be very useful if set in the context of an embodied knower. Peirce's "index" and "icon" are approximately equivalent to Langer's "signal," and the two use "symbol" in roughly the same way. Terence

Deacon's *The Symbolic Species* (New York: Norton, 1997) appears to offer a helpfully updated version of Langer's work (even though Langer is not referenced) and to fit harmoniously into the Polanyian evolutionary perspective, as indicated by the subtitle of the book: *The Co-evolution of Language and the Brain*.

- 5 In "Archetypal Experiences" (*Soundings* 64 (1981), 237-266) I set forth some of the grounds for understanding existential meaning. "Reconnecting Geertz's Middle World" (*Soundings* 71 (1988), 113-153) provides a more explicit account see especially pp. 143-146. In "The Thousand and First Face" (in: (ed.) Daniel C. Noel, *Paths to the Power of Myth: Joseph Campbell and the Study of Religion*, Crossroad, New York 1994, pp. 29-44) I explore existential meaning in relation to religious life.
- 6 I find much in Neville's thought brilliant and stimulating. Unfortunately, my one article on Neville ("Neville's Projects of Reconstruction and Recovery: How Firm a Foundation?," *American Journal of Theology and Philosophy* 16 (1995), 199-208) is critical rather than appreciative in nature. Others in recent years who have decisively influenced my understanding of the life of existential meaning include Albert Borgmann, Jerome Bruner, Henry Bugbee, Alastair MacIntyre, and David Strong.

7 Considered Judgment (Princeton: Princeton University Press, 1996), p. 149.

## Polanyi Society Membership

Tradition and Discovery is distributed to members of the Polanyi Society. This periodical supercedes a newsletter and earlier mini-journal published (with some gaps) by the Polanyi Society since the mid seventies. The Polanyi Society has members in thirteen different countries though most live in North America and the United Kingdom. The Society includes those formerly affiliated with the Polanyi group centered in the United Kingdom which published Convivium: The United Kingdom Review of Post-critical Thought. There are normally three issues of TAD each year.

Annual membership in the Polanyi Society is \$20 (\$10 for students). The membership cycle follows the academic year; subscriptions are due September 1 to Phil Mullins, Humanities, Missouri Western State College, St. Joseph, MO 64507 (fax: 816-271-5987, e-mail: mullins@griffon.mwsc.edu) Please make checks payable to the Polanyi Society. Dues can be paid by credit card by providing the card holder's name as it appears on the card, the card number and expiration date. Changes of address and inquiries should be sent to Mullins. New members should provide the following subscription information: complete mailing address, telephone (work and home), e-mail address and/or fax number. Institutional members should identify a department to contact for billing. The Polanyi Society attempts to maintain a data base identifying persons interested in or working with Polanyi's philosophical writing. New members can contribute to this effort by writing a short description of their particular interests in Polanyi's work and any publications and /or theses/dissertations related to Polanyi's thought. Please provide complete bibliographic information. Those renewing membership are invited to include information on recent work.

# The Real As Meaningful Phil Mullins

ABSTRACT Key Words: Polanyi's use of "real"; reality and meaning; polyvalence, bodily realism, Polanyi's participative realism; Gulick

This essay examines Michael Polanyi's comments about "reality" over a forty year career and argues that there are many nuances. However, Polanyi is a peculiar kind of philosophical realist, a participative realist. There are polyvalent and a bodily aspects of Polanyi's realism. Against Walter Gulick's criticisms of Polanyi, I contend that a strong distinction between reality and meaning is not warranted.

#### 1. Introduction

As he acknowledges, Walter Gulick's interesting essay "The Meaningful and the Real in Polanyian Perspective" was in part provoked by my own and John Puddefoot's efforts to set forth a clear account of Polanyian realism.¹ Puddefoot has written about Polanyian "resonance realism" and the limits of a correspondence theory of truth.² I have dubbed Polanyi a "participative realist." Gulick (1999, 8) finds that both of these readings of Polanyi "amalgamate reality and meaning into a reality/meaning holism." His essay argues against such "monistic interpretation of Polanyi's thought" (*ibid.*). Gulick's argument is a complex and lengthy one that I cannot hope here to address systematically. Perhaps, however, the three short sections of discussion that follow will help to sharpen the issues. In the opening section, I note that Polanyi's writing, spanning a long career, includes many comments about "reality" and that these references do not all have the same nuance. However, I conjecture that Polanyi's took a new philosophical interest in "reality," beginning about the time of *Personal Knowledge*. I look briefly at relevant sections of a few late articles to show how Polanyi makes "reality" central to discussion. Since I continue to believe the case I made for Polanyi's "participative realism" is cogent, in the second section, in modestly recast form, I succinctly review the major claims put forth in my *Polanyiana* (1997) article. In the final section, I respond to a few carefully selected points Gulick argues in his effort to separate and yet link the real and the meaningful.

#### 2. A Historical Note on Polanyi's Interest in "Reality"

A reader can find many references to "reality" if he or she examines a large sample of Polanyi's non-scientific writing selected from every period of his life (roughly the thirties into the seventies). To this reader, there seem to be tensions between some uses—surely this is normal for a forty-year stretch. Different uses don't always seem to imply that Polanyi has exactly the same thing in mind. In some early discussions, for example, Polanyi identified science as a "spiritual reality" even though he described scientific research in terms of making contact with "reality" (e.g., SFS 24, 35; LL 39, 40). He speaks of the "spiritual reality of science" (LL 40, italics mine, PM) as well as the efforts of the discoverer to "reach out for contact with a reality in which all other scientists participate with him" (*ibid*.). The "spiritual reality of science" seems to be an expression Polanyi uses to point to his conviction that scientists accept transcendent ideals such as truth and affirm that they must be at liberty to pursue such ideals. The reality that the discoverer contacts is a reality that is there for other investigators also to grasp or discover as well as a reality that remains partially hidden.

It appears that about the time of the publication of *Personal Knowledge*, Polanyi rediscovered his own emphasis upon "reality" in earlier writing. I think John Puddefoot is basically right in saying that in some ways realism was simply something Polanyi took for granted and it has a largely "subsidiary status in most of

his written work" (Puddefoot 1993-94, 30). Nevertheless, in writing of the late fifties and sixties, in what appears to be a more deliberate fashion, Polanyi seems to have chosen to make "reality" a more important term in his philosophical lexicon. There is ample evidence for this; below I briefly comment on three different essays from this period, which reflect somewhat different nuances of Polanyi's renewed emphasis.<sup>3</sup>

In the 1963 new introduction to the University of Chicago reprint of SFS, Polanyi comments that

to hold a natural law to be true is to believe that its presence will manifest itself in an indeterminate range of yet unknown and perhaps yet unthinkable consequences. It is to regard the law as a real feature of nature which, as such, exists beyond our control (*SFS* 10).

He identifies this view as "a new definition of reality" but one which he regards as presupposed throughout his writing:

Real is that which is expected to reveal itself indeterminately in the future. Hence an explicit statement can bear on reality only by virtue of the tacit coefficient associated with it. *This conception of reality and of the tacit knowing of reality underlies all my writings (SFS* 10, italics mine, PM).

In a 1967 essay titled "Science and Reality," Polanyi forthrightly announces that

The purpose of this essay is to reintroduce a conception which, having served for two millennia as a guide to the understanding of nature, has been repudiated by the modern interpretation of science. I am speaking of the conception of reality (SEP 225).

Clearly, Polanyi believes that Marxist, positivist, and other interpretations of science have dropped the connection between science and reality. Even those who oppose positivism, Polanyi says provide "no statement on the true metaphysical foundations of science" (SEP 227). Science and philosophy of science are thereby "left today without any accepted theory of the nature and justification of natural science" (SEP 227). Reintroducing "reality" is thus an important corrective:

Rarely will you find it taught today, that the purpose of science is to discover the hidden reality underlying the facts of nature. The modern ideal of science is to establish a precise mathematical relationship between the data without acknowledging that if such relationships are of interest to science, it is because they tell us that we have hit upon a feature of reality. My purpose is to bring back the idea of reality and place it at the centre of a theory of scientific enquiry (SEP 226).

Polanyi acknowledges that his effort to reintroduce "reality" is effectively an effort to reintroduce into accounts of science a notion that differs somewhat from earlier conceptions of reality in philosophy:

The resurrected idea of reality will, admittedly, look different from its departed ancestor. Instead of being the clear and firm ground underlying all appearances, it will turn out to be known only vaguely, with an unlimited range of unspecifiable expectations attached to it (*ibid*.).

Those things that are real, as far as science is concerned, Polanyi is claiming, are not merely those things that underlie appearances, despite the fact that the recent philosophical tradition has framed the matter in this dualistic fashion. But science does pursue and affirm a "hidden reality underlying the facts of nature" (SEP 223). Such hidden real things are presently vaguely known entities that hold yet unrecognized potential meaning. That which is real, for Polanyi, seems unquestionably to be tightly linked to future investigation and future meaning discovered in such investigation. Further, Polanyi argues that his conception of truth necessarily is intimately bound to his resurrected idea of reality:

If anything is believed to be capable of a largely indeterminate range of future manifestations, it is thus believed to be real. A statement about nature is believed to be true if it is believed to disclose an aspect of something real in nature (*SEP* 240).

In his 1963 "The Republic of Science" essay, Polanyi seems to have focussed new attention on "reality" in part as a way succinctly to convey a perspective which binds together the metaphysics of science and the governance of science. Professional standards in science, as they are embodied in the practices of scientists and in scientific institutions (in journals, appointments, etc.), in Polanyi's account, provide the essential structure for the governance of science. Standards embodied in practices and institutions generate scientific opinion that stretches across the overlapping neighborhoods of science. Standards enforce discipline and also promote progress in science. But such standards are in a strong sense rooted in certain metaphysical convictions. Polanyi makes this clear by pointing out how the functioning of standards to encourage both conformity and originality entails certain broader presuppositions about the nature of the things:

This dual function of professional standards in science is but the logical outcome of the belief that scientific truth is an aspect of reality and that the orthodoxy of science is taught as a guide that should enable the novice eventually to make his own contacts with this reality. The authority of scientific standards is thus exercised for the very purpose of providing those guided by it with independent grounds for opposing it. The capacity to renew itself by evoking and assimilating opposition to itself appears to be logically inherent in the sources of the authority wielded by scientific orthodoxy. (*KB* 55)

In this essay, Polanyi suggests that governing through scientific opinion does not mean, in a simple sense, that authority is evenly distributed in the scientific community. Clearly, some scientists are distinguished figures and their ideas carry special weight in scientific affairs. Nevertheless, Polanyi claims, the authority of scientific opinion is in important ways a mutual authority between scientists; that is, "scientists exercise their authority over each other" (*KB* 56). Every mature scientist (i.e., those who have assimilated professional standards and other requisite skills) is recognized as capable of making independent contact with reality. Such contact joins all scientists in a rational enterprise which Polanyi dubs an exploration striving towards "a hidden reality, for the sake of intellectual satisfaction" (*KB* 70). Once the novice becomes a mature scientist, she joins a "chain of mutual appreciations" and bears an "equal share of responsibility for the authority to which he submits" (*KB* 56). It is the mature scientist's contact with reality that provides the "independent grounds" (*KB* 55) for opposing and reforming prevailing scientific opinion.

To summarize, Polanyi claims that professional standards in science are "the logical outcome of the

belief that scientific truth is an aspect of reality" (*KB* 55). He is arguing that the metaphysical foundations of science have lead to the governance structure found in science. That is, belief that scientific truth is an aspect of reality leads logically to governance through scientific opinion generated by the teaching and enforcement of professional standards.

#### 3. Main Points in "Polanyi's Participative Realism"

- 1. Polanyi's uses the term "reality" in a striking way. His notions of reality seem to come primarily from experience as a research scientist rather than from acquaintance with medieval philosophy or interest in modern debates by professional philosophers; he does however, as the previous section has argued, intend to counter philosophical accounts of science that fail to link science and reality.
- 2. Polanyi's interest in the indeterminate range of meaning of real things might be termed the polyvalent focus (or aspect) of his realism. Real things are preeminently signifiers for Polanyi. He affirms that some real things or kinds of real things are potentially more richly meaningful and thus "possess a deeper reality" (*TD* 32) than other real things. When Polanyi dubs minds and complex problems "more real" (*TD* 33) than merely tangible cobblestones, he means that they are richer signs that seem to hold the potential to generate a whole field of meaning or future significance not presently recognized. Sometimes Polanyi links the indeterminate range of meaning of real things with his discussions of that which is true. He argues we recognize true statements by appreciating the wealth of yet undiscovered consequences. Humans can do this because we "have a tacit foreknowledge of yet undiscovered things" (*TD* 23).
- 3. Polanyi's interest in the tacit foundation of human knowledge of real things can be somewhat distinguished from (although it is woven with) his discussion of the polyvalent aspect; this interest might be dubbed the bodily or incarnate focus (or aspect) of his realism. The bodily focus of Polanyi's realism is concerned with all the elements of the process of tacit integration.
- 4. Polanyi suggests real things are marked by power—they are frequently portrayed as animated or agent-like and revelatory. Real things can and do affect knowing persons. Human beings are engaged in adjustive acts of sense-reading; so also are other living creatures to whom we are akin, but human sense-making is much more sophisticated since we use language. Certainly, sense-reading which deploys tacit powers is fallible, but Polanyi does affirm that we can know the truth. Polanyi suggests that richly real things that affect us are also largely hidden; the composite of all real things seems to be an inexhaustible, interesting field that humans are peculiarly challenged and gifted to explore. Humans are, of course, a part of that very field and are capable of recognizing this. Our inquiry into the field (into different aspects of reality or different real things) is a discovery process that presupposes those real things we seek to understand are "there to be discovered" (KB 172). Discovery "comes to us accredited by our conviction that its object was there all along, unrecognized" (ibid.). Polanyi notes that the "paradoxical qualification of all intellectual creativity" is that "we can exercise originality only while assuming that we originate nothing but merely reveal what is there already" ("Beauty" 105). Further, "the nature of what it is that we discover" is presented "as something possessing reality" and that reality is "external to us" which means that when it "satisfies our intensely personal intellectual passions, it satisfies them impersonally, with universal intent" (ibid.). Truthful human claims, our discoveries, disclose in part that which is hidden about real things but they also anticipate the emergence of yet unknown or presently still hidden things.
- 5. Especially in the period of Personal Knowledge, Polanyi emphasizes that personal commitment is bound

up with acts of understanding and should be acknowledged. The closure of any serious effort to understand has linked to it "universal intent" (cf. *PK* 311). A god's eye view is impossible for humans who are bodily or incarnate knowers. Nevertheless, in serious acts of embodied, personal knowing, humans believe that similarly skilled social companions can and should arrive at the conclusions we believe to be true. That is, our discoveries, disclosing in part that which is hidden about real things, are not private. Human knowledge, however partial or fragmentary, about real things, is public. To affirm the independence of real things is *de facto* to affirm the power of real things to affect humans and that knowers can arrive at common truth. After the period of *Personal Knowledge*, Polanyi emphasized overt commitment less because he understood the pervasive tacit underpinnings of knowledge more adequately (cf. *TD* x). In this sense, it seems appropriate to suggest that "universal intent", the claim that others can and should acknowledge discoveries, is always already embedded in knowing as a tacit presupposition; it is an element in the bodily or incarnate aspect of Polanyi's realism. Thought "lives by the body, and by the favour of society" (*KB* 134) and pursues truth, which means that thought is "free to act on its own responsibility, with universal intent" (*ibid.*), Polanyi claims.

- 6. Interpreters such as Prosch argue that Polanyi sharply distinguishes the ontological status of external, natural "real" entities from that of humanly created "real" entities of the noosphere. While natural realities can be affirmed to exist independently from human articulate systems (i.e., they already existed before being known), non-natural realities, must be recognized as existing only in conjunction with articulate systems (i.e., they do not exist before being known). Fairness requires admitting that there is some warrant for such a reading of Polanyi's discussons of "real" entities, although clearly many of these discussions are extraordinarily dense and ambiguous passages. On the whole, however, I believe Polanyi's discussions of "reality" should not be construed in this bifurcated way since Polanyi does not give philosophical priority to the project of articulating an ontological or metaphysical scheme. His claim concerning the independence of real entities is not primarily an ontological or metaphysical claim (i.e., a claim that affirms as a philosophical beginning point a metaphysical dualism). The independence thesis is fundamentally an affirmation about the nature of discovery, the public nature of knowledge and the importance of inquiry. The few ontological or metaphysical claims that Polanyi makes grow out of epistemological claims and not vice versa.
- 7. A reading of Polanyi's realism that is preoccupied with metaphysical dualism is a reading that makes Polanyi's constructive thought more conventional than it is. In the final analysis, many of the dualistic conceptual metaphors—mind and matter, subject and world, idealism and materialism—that are deeply embedded in the traditions of modern philosophical thought are not very helpful points of reference for Polanyi's constructive thought. From his interest in political questions bearing on the success of scientific work, Polanyi's thought grows into a Lebensphilosophie and an evolutionary cosmology, but both components are grounded in an epistemological model. The broader aim of Polanyi's constructive thought is to reject reductionism and recast evolutionary theory in order to develop a panoramic vision of responsible humanity at home in the universe. It is important to situate Polanyi's discussions of "reality" in a context serving these larger ends. Polanyi's idea of the comprehensive entity is a key idea that helps clarify Polanyi's realist stance. It is an idea that seems to bring together the polyvalent and bodily aspects of reality discussed above. Comprehensive entities unite higher and lower strata of reality; higher principles operate in the margin left open by lower levels of control. Polanyi's open-ended evolutionary vision reflecting the growth of complexity among living beings incorporates his ideas about comprehensive entities. Evolutionary emergence for Polanyi is an analog of discovery. Comprehending is also something knowers do; comprehensive entities are thus a skillful achievement, a conjoining of particulars into the unity of personal understanding. The theory of tacit knowing, with its emphasis upon the physical, social, and fiduciary roots of knowledge is

a vision of persons deeply participating in their environment. Polanyi's focus is upon persons as members of interpretative communities using our unspecifiable powers to indwell and discover new meaning that transforms us.

#### 4. Response to Gulick

As a global criticism, Gulick (1999) suggests that I am interpreting Polanyi through C.S. Peirce. He uses some of the familiar philosophical criticisms applied to Peirce (monist, idealist, rationalist) to characterize my reading of Polanyi. I acknowledge that C.S. Peirce's resolution to some important philosophical problems seems akin to Polanyi. This should not be a great surprise: although Peirce was an American and was fifty years older than Polanyi, he was a first rate scientist and polymath like Polanyi. Peirce was deeply interested in nurturing and justifying the traditions of modern science and in linking them with the broader modern problems of justifying and recovering meaning. I take it as confirmation of some of Polanyi's basic claims about knowledge that ideas of philosophers with similar background and interests should converge. Truly, I have regarded such convergence as an opportunity rather than a threat.

Gulick's paper in its constructive thrust develops a vision of human meaning around seven points. His criticism of Polanyi is that Polanyi's scheme does not have a rich enough account of symbols and their bearing upon human life. This is an interesting criticism and one that I believe has some warrant. However, I do not believe that Polanyi's shortcomings can be repaired, as Gulick proposes, following Langer, by building upon a sharp distinction between denotation and connotation. This distinction Gulick ultimately seems to extend into his account of the difference and overlap of "reality" and "meaning." Gulick, of course, begins by criticizing Polanyi's notion that some real things can be "more real" than others (cf. *TD* 32f.). Ultimately, he argues for a strong distinction between what he terms the "realm" of reality and the "realm" of meaning:

My proposal, already ventured in slightly different form, is that we acknowledge that culture belongs to the vast realm of meaning and distinguish this realm from the infinitely vaster realm of reality. Reality is known through sensation vaguely, through perception within a restricted area, and through scientific knowledge in ways that reach from the micro- to the macrocosm (Gulick 1999, 19).

Gulick's strong distinction severs what Polanyi has worked so hard to show is one seamless piece. In *PK* and *SM* (and other writings), Polanyi struggles to sketch out the spectrum of scientific and humanistic thought (the overlapping neighborhoods which run from physics to dramatic history) whose kinds of inquiry do have some differences. But it is the connection of all kinds of inquiry and the value of inquiry across the spectrum that Polanyi primarily emphasizes.

I do not find warrant for Gulick's strong distinction between the realm of reality and the realm of meaning since it appears that he roots this distinction in certain metaphysical suppositions. Gulick (1999, 15) posits a direct link between sensation and reality: "The sensation that is available to us as potential subsidiaries is mediated by sensors, the activation of nerves, and brain states, but it is nevertheless in contact with reality in this transmuted, translated form" (9). He invokes what Sanders (1988, 150f.) terms a homomorphic account of the fit between tacit knowing and the object it knows<sup>6</sup>, points out the risks involved in sophisticated knowing and concludes: "That is, healthy individuals are veridically in contact with reality via our senses in the from dimension of experience" (1999, 15). In his reference to the "from dimension of experience," Gulick seems to be claiming that uninterpreted sensation functions as a tacit element in human (and perhaps

all) life, an element that directly wires persons to the realm of reality: "On the whole, it is legitimate to claim that sensation prior to its interpretation gives us veridical (although, of course, partial) access to contiguous reality" (1999, 18). Following Polanyi, I affirm the contrary position: sensation provides mediated and not direct access to real entities. All our access to reality comes to us as we integrate that in which we dwell. While Gulick might not deny that access comes through integration, he, nevertheless, re-orients Polanyi's approach to philosophy by focusing not on indwelling, integration and meaning but on the dynamics through which an external world impacts a worldless subject.

Clearly, I would concur it seems correct to say Polanyi holds all living forms are in tangible contact (i.e., are immersed, inseparably, in) and respond to their environment. Such responsive action is ongoing and, of course, occurs, in more simple forms in amoebas than in human beings, where Polanyi is more apt to talk about sense-reading and sense-giving. Although all living forms are in tangible contact with real things, I see no reason to hold that human beings are any less importantly in contact with largely intangible, complex real entities (e.g., problems and persons). Gulick does not claim that human beings are less significantly in contact with persons and problems. In fact he argues to the contrary. But persons and problems are classed as primarily part of the realm of meaning which he grounds in the realm of reality, a much broader domain which he links to the senses, some perception and scientific investigation. As I have noted above, what Gulick objects to is Polanyi's notion that entities like persons and problems can legitimately be called "more real" than merely tangible entities. Gulick would prefer to claim only that persons and problems are "more meaningful." But he can make this claim only by positing a primordial direct link between uninterpreted sensation and the realm of contiguous external reality that is describable primarily in terms of primitive causality. Thus, as he acknowledges, Gulick transforms Polanyi into a metaphysical or ontological dualist.

Polanyi develops a portrait of living beings as skillful beings. Human beings are especially skillful and our higher level skills are always built upon and work in combination with lower level skills. Since this is the case, it is not a surprise that Polanyi does not privilege tangible contact or the tangible level of real things by identifying this contact as veridical, although it is clear that without some tangibility no real things of any sort can appear. When Gulick argues that sensation is "our surest contact with reality" (1999, 18), he translates, into a metaphysical or ontological claim, Polanyi's claim that pre-articulate tacit processes are not subject to the same kinds of errors as articulate processes.

In the final analysis, what Gulick's account implies is that there are some brutal facts deep down at the bottom of things (an external world impinging upon our senses) and ultimately philosophizing must begin here in order to properly honor the rich domain of cultural meaning built upon them. As he sees, when one does begin here, many will dismiss all the rest as epiphenomena, although Gulick himself clearly does not wish to do so. I contend that beginning with sense contact with the external world is a philosophical cul de sac that I believe Polanyi avoided by focusing his attention on developing the theory of tacit knowing, which consistently avoids reductionism. Polanyi emphasizes indwelling and integration by a person. He does not take up the problem of knowledge at a point that already presupposes that there is matter and mind and a fundamental problem is access to an external world. A Polanyian approach is not one oriented toward articulating a metaphysical or ontological scheme and clarifying the parameters of primitive causality. Instead Polanyi was interested in meaning and the responsible meaning-seeking endeavors of human beings.

At the end of my essay, I pointed out, using John E. Smith's lucid summary, that Charles Peirce's comments about philosophical preoccupation with causality seem apt to Polanyi's position. At the risk of exciting Peirce-aphobia, let me end, by rephrasing Smith and Peirce.<sup>7</sup> Peirce acknowledged as an internally

logical and sometimes useful explanation the philosophical account that thinks about real things primarily as externalities. He accepted that such externalities cause in human beings a common result and common belief in one identical object. The problem with such an explanation is that it fails to explain—and likely defers attention from—the more important philosophical issue, namely the issue of how we should search for and serve the truth. For this reason, it seems best to emphasize that real things in a Polanyian perspective—whether or not they belong to the noosphere—are not so much simple causes of cognition as they are the comprehensive entities whose emergence depends upon the active indwelling and integration of a person engaged with social companions in a community of inquiry.

#### **Endnotes**

<sup>1</sup> Cf. *Polanyiana* 8 (1999), nr.1-2, 7-26. For my part, I originally took an interest in questions about Polanyi's realism because they seemed (and still seem) to me a key to addressing the kinds of questions at the heart of the Gelwick-Prosch debate in *Zygon* 17 (1982), 25-48, and other publications about the ontological status of entities in the noosphere. I commented briefly on the Gelwick-Prosch debate in both my introduction to the 1982 *Zygon* volume on science and religion in Polanyi's thought ("The Spectrum of Meaning—Polanyian Perspectives on Science and Religion," 3-8) and in a later review of Prosch's *Michael Polanyi—A Critical Exposition (Zygon* 23 (1988), 215-220). My recent essay "Polanyi's Participative Realism," *Polanyiana* 6 (1997), nr.2, 5-21, grew out of a 1991 AAR paper in which I first explored Polanyi's realism as a key to resolving the debate. Sporadic discussions with Gulick, Sanders and others have followed since 1991. My article is on the Polanyiana WWW site: http://www.kfki.hu/chemonet/polanyi/9702/contents.html

<sup>&</sup>lt;sup>2</sup> John Puddefoot, "Resonance Realism," Tradition and Discovery 20 (1993-94), nr.3, 29-38.

<sup>&</sup>lt;sup>3</sup> There is much in *PK* that implies that Polanyi intended, as I have carefully put it, to make "reality" a key term in his philosophical lexicon. He frequently comments on the "conception of reality" and what it means to "designate" something real. See, for example, *PK* 116f. Other articles in the period often overlap material in *PK*. See, for example, "Beauty, Elegance, and Reality in Science" in: *Observation and Interpretation: A Symposium of Philosophers and Physicsts*, (ed.) S. Korner (New York: Academic Press Inc., 1957) [hereafter cited as "Beauty"]. Such articles also seem rather self-consciously to explore the meaning of "reality." But as the citations discussed below from articles from the sixties show, Polanyi's references to "reality" become even more overt a little later.

<sup>&</sup>lt;sup>4</sup> For a succinct account, see Prosch's "Polanyi's View of Religion in *Personal Knowledge*: A Response to Richard Gelwick," *Zygon* 17 (1982), 41-47.

<sup>&</sup>lt;sup>5</sup> I take it as significant that Polanyi claims that from the other three aspects of tacit knowing, "the functional, the phenomenal and the semantic—we can deduce" what he calls the "ontological aspect" of tacit knowing (*TD* 13). That is, conclusions that we can legitimately draw or hold about the being of something (or what tacit knowing is knowledge of) should be recognized as inferences that follow from other aspects. Later in *TD*, referring back to his discussion on *TD* 13, Polanyi suggests that tacit knowing produces understanding of a comprehensive entity and what we understand should be identified as "an ontological reference" (*TD* 33) to the entity. This emphasis upon reference introduces his suggestion that it is "plausible" to assume in all instances of tacit knowing "correspondence between the structure of comprehension and the structure of the comprehensive entity which is its object" (*TD* 33f.). In discussing control in comprehensive entities, he also

speaks of "the ontological counterpart" (*TD* 34) of some elements of tacit knowing. He uses the same phrase in "The Body-Mind Relation" (*SEP* 322) where he ends his discussion on this note: "The logical structure of tacit knowing is seen to cover the ontological structure of a combined pair of levels" (*SEP* 323). In these references, it seems important to notice that Polanyi is also concerned with parallelism of levels, the way the logical structure of tacit knowing is mirrored. From the careful way in which Polanyi couches his discussions of "ontology," it seems clear that ontological claims follow from epistemological claims. Also it should be emphasized that Polanyi does not think "knowledge" is in any way finished or complete; we don't have nor can we get an "ontological" map. In his essay "Knowing and Being," Polanyi focuses on a discussion of knowing as an ongoing activity. He says of knowledge, "Knowledge is an activity which would be better described as a process of knowing" (*KB* 132). It is worth noting that when Polanyi speaks of "being" in this essay from which Grene's volume takes its title, it is in terms of the way the human being is altered by indwelling in frameworks with different standards and outlooks: "All thought is incarnate; it lives by the body and by the favour of society" (*KB* 134).

<sup>6</sup> Cf. Andy F. Sanders, Michael Polanyi's Post-Critical Epistemology (Amsterdam: Rodopi, 1988), 151.

## **Submissions for Publication**

Articles, meeting notices and notes likely to be of interest to persons interested in the thought of Michael Polanyi are welcomed. Review suggestions and book reviews should be sent to Walter Gulick (see addresses listed below). Manuscripts, notices and notes should be sent to Phil Mullins. Manuscripts should be double-spaced type with notes at the end; writers are encouraged to employ simple citations within the text when possible. Use MLA or APA style. Abbreviate frequently cited book titles, particularly books by Polanyi (e.g., *Personal Knowledge* becomes *PK*). Shorter articles (10-15 pages) are preferred, although longer manuscripts (20-24 pages) will be considered.

Manuscripts normally will be sent out for blind review. Authors are expected to provide a hard copy and a disk or an electronic copy as an e-mail attachment. Be sure that electronic materials include all relevant information which may help converting files. Persons with questions or problems associated with producing an electronic copy of manuscripts should phone or write Phil Mullins (816-271-4386). Insofar as possible, *TAD* is willing to work with authors who have special problems producing electronic materials.

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<sup>&</sup>lt;sup>7</sup> See John E. Smith, "Community and Reality," in: *The Relevance of Charles Peirce*, (ed.) E. Freeman (LaSalle, IL: Monist Library of Philosophy, 1983), 39.

## Some Aspects of Polanyi's Version of Realism

### **Dale Cannon**

ABSTRACT: Key Words: Michael Polanyi, realism, idealism, truth, reality, responsible commitment, autonomy of thought, intrinsic meaning, tacit knowing, knowing by acquaintance, knowing by representation, Kant.

This essay attempts to clarify certain aspects of Polanyi's version of comprehensive realism: the irreducible role of responsible personal commitment as transcending human subjectivity in any meaningful reference to transcendent reality, and thus for any coherent realism; realism as a fundamental presupposition of intellectual responsibility in the humanities and in the sciences; a conception of intrinsic (vs. extrinsic, anthropocentrically projected) meaning characterizing real things, in greater and lesser degrees; a conception of embodied tacit knowing as a relational, acquaintance knowing that achieves contact with reality-in-itself, transcending our grasp — hence, transcending our representational or propositional knowing (which is always reality-as-constituted or construed-by-us).

#### I. Introduction

Among Polanyi interpreters, there is little controversy over whether Polanyi was a realist. But in what sense he was a realist and how extensive was the range of his realism is a matter of considerable ongoing controversy. This small paper is an attempt to address four aspects of the controversy, but not all of the aspects of those aspects unfortunately (for lack of time and space).

I have sought to articulate my remarks simply and in a relatively non-technical way. I am aware that my brief remarks may well seem fragmentary and incompletely developed, and certainly incompletely justified, to some readers. A full account and justification of my interpretation of Polanyi would take a small monograph, I am sure. Yet these features of Polanyi's realist position do cohere – so I believe. It is, however, important to try them on for size, to think with them, to see how well they handle traditional epistemological and metaphysical issues – methodologically to suspend one's disbelief concerning them — and not attempt to force fit them to sensibilities incompatible with them. Polanyi was up to some very radical conceptual innovations and, allowing for this, we should at least do our best to give him the benefit of our doubt and learn what good sense can be made of what he was up to, doing our best to interpret any given passage in his works in relation to what he was up to as a whole.

#### II. The Paradox of Transcendent Reference

Traditional philosophical realism insists that reality as such is independent of the knower, independent of its being perceived and known – a reality in itself, objectively out there unto itself, external to human knowledge, external to conscious awareness of it, hence not in need of acknowledgement for it to be. Polanyi, however, has many things to say about reality and our knowledge of it which appear not to coincide with this conception of reality and have accordingly led those who identify with traditional philosophical realism to be uneasy with him, to distance themselves from certain of his philosophical views, or to regard these views as philosophically incoherent.

Consider for example the following passage:

I can speak of facts, knowledge, proof, reality, etc., within my commitment situation, for it is constituted by my search for facts, knowledge, proof, reality, etc., as binding on me. These are proper designations for commitment targets which apply so long as I am committed to them; but they cannot be referred to non-committally. You cannot speak without self-contradiction of knowledge you do not believe, or of a reality which [you are convinced] does not exist (*PK* 303).

Here Polanyi identifies reality as a "commitment target" and speaks of such targets as apparently in some sense relative to persons who are committed to them. This way of speaking would seem to make reality dependent upon the person committed to it, even while that person maintains that the reality to which she is committed exists independently from and prior to her acknowledgment and commitment. On a surface (and superficial) reading, this would seem to be not all that far removed from idealist George Berkeley's "To be is to be perceived" – but in this case it would be "To be is to be the object of someone's (specifically my) commitment." Many readers might be willing to concede that meaning, purpose, beauty, normativeness, and the like, being abstract, are relative in an idealist sense to human acknowledgment, to human consciousness of them. But can reality, especially objective realities of the sort investigated by natural science, be so considered?

Regular readers of this journal are aware that some Polanyi interpreters – notably Harry Prosch and now Walter Gulick (in his contribution to this symposium) – resolve what appears to be an ambiguity in some of what Polanyi wrote in favor of distinguishing the objects of humanistic and artistic concern from the objects of natural science: the latter are alone real, whereas the former meanings are created and sustained by the comprehensive, indwelling integrations of human beings. Prosch and Gulick do point out that natural science and natural scientific understandings of the world are human cultural meanings as well, but these latter meanings point beyond themselves to, and allegedly correspond with, realities in themselves. They are verifiable whereas the latter are only validatable. Thus it would seem that Prosch and Gulick hold to an idealist interpretation of Polanyi's account of natural science. This position would then take the above passage from Polanyi as conceding, perhaps, that the concept of reality (as a "commitment target"), but not natural real things themselves, is itself a culturally constituted, humanly created meaning and that as such it is relative to ("validated by" but not "verified by") those who are committed to its pursuit.

On my reading, however, Polanyi is saying something different. Earlier in PK, Polanyi wrote:

... both *verification* and *validation* are everywhere an acknowledgement of a commitment: they claim the presence of something real and external to the speaker. As distinct from both of these, *subjective* experiences can only be said to be *authentic*, and authenticity does not involve a commitment [i.e., commitment involving submission to an external, objective reality] in the sense in which both verification and validation do (*PK* 202; emphasis in original).

And on the page immediately prior, he wrote,

Artistic beauty is a token of artistic reality, in the same sense in which mathematical beauty is a token to mathematical reality. Its appreciation has universal intent, and bears witness

beyond that to the presence of an inexhaustible fund of meaning in it which future centuries may yet elicit. Such is our commitment to indwelling (*PK* 201).

In these passages at least, Polanyi seems to be disagreeing with both Prosch and Gulick. He does not hesitate to speak of validating realities here, and he clearly identifies art and mathematics as both concerned with reality. So what are we to make of it? Are we to conclude that Polanyi is simply inconsistent, or at least not careful enough with his categories? That he can't make up his mind between realism and idealism? A possibility that should be considered is that he is adumbrating a novel but coherent philosophical position that is neither realist nor idealist as traditionally conceived, a comprehensive (post-critical) realist position that concedes some truth to each – somewhat analogous to Kant's critical idealist position (as I will attempt to explain in part 5 below) but nevertheless quite distinct from Kant's position.

As Polanyi explicitly pointed out, "Epistemology has traditionally aimed at defining truth and falsity in impersonal terms, for these alone are accepted as truly universal. The framework of commitment *leaves no scope for such an endeavor*; for its acceptance necessarily invalidates any impersonal justification of knowledge" (*PK* 303, my emphasis). If we take what Polanyi is saying here seriously and appropriate it, we cannot do epistemology or metaphysics in the traditional, non-committal way. Polanyi claims that one cannot refer to, or make contact with reality itself (or any other of the commitment targets of which he speaks) – that which objectively transcends human subjectivity – except by way of passionate personal commitment. The question, then, is how is it possible to do this (and still be a realist)? How is it possible coherently to refer committally (by way of what is, on traditional reckoning, to be an expression of passionate subjectivity) to a reality that transcends subjective grasp? I shall call this the paradox of transcendent reference.

The idiom of traditional modern realism consistently refers to reality-in-itself, the reality to which our claims to knowledge are to correspond, in impersonal, non-committal terms (even though tacitly the philosophers in question may be very passionate in setting forth their views about it and disagreeing with contrary views). That is to say, that idiom does not explicitly acknowledge the irreducible role of personal commitment that Polanyi contends should be highlighted. Moreover, that idiom consistently refers to the person who perceives, knows, acknowledges, or is conscious of reality and to that person's cognitive relationship to reality in impersonal non-committal terms as well. But Polanyi shows that to consider the commitment situation thus non-committally is to fragment it, such that its mutually entailed parts – namely, personal passion, confident utterance, and accredited facts – fall apart – into subjective belief, declaratory sentence, and alleged facts (or simply facts accredited as such surrepticiously by the would-be non-committal observer) – and no longer require each other (see *PK* 303).

The paradox of transcendent reference is solvable only if we differentiate, as Polanyi proposes, the personal (as in responsible personal judgment, thus a normative concept, implicating our commitment to it) from the subjective (which is merely descriptive, non-normative, and non-committal).

The fiduciary passions which induce a confident utterance about the facts are **personal**, because they submit to the facts as universally valid, but when we reflect on this act non-committally, its passion is reduced to **subjectivity**. (PK 303, emphasis in original)

Personal fiduciary passion, in the sense here described, is essentially a transcendence of subjective human belief, of mere subjectivity – ultimately implicating our first person accreditation in identifying it as such,

whether in other persons or in ourselves. It cannot without distortion be characterized as human subjectivity traditionally understood, for as such it is no longer about the human subject in question; it is rather about some aspect of the reality with which the person in question is concerned. It is her participation in, her connection with, that which transcends her subjectivity – that which exists apart from her, independently of and pre-existing her subjectivity and capable of manifesting itself in yet indeterminate ways. It establishes her contact with, her acquaintance with, her relational rapport with reality. As such it cannot itself be referred to non-committally. Reference to it (her genuine knowledge, not merely to her alleged or claimed knowledge) entails (of we who are third person observers) our own first person accreditation of it as genuine transcendence, as genuine connection with the reality in question – as we have come to know it. Reference to it is thus a knowing of the person's knowing, an acknowledgement by us of its presence, its being, in the world before us or alongside of us.

Note too here that the fiduciary passion involved is directed (primarily) to the reality itself transcending whatever happens to be our aspectual grasp of it. (By "aspectual grasp" I mean that our grasp of reality is always of some aspect, some facet, and never definitive or exhaustive of that reality in its entirety, especially insofar as the reality is capable of manifesting itself inexhaustibly in new and surprising ways.) The fiduciary passion, if rightly oriented, is secondarily or derivatively directed to our representation of that reality (a fallible, partial, specific grasp of certain of its aspects), as our best present grasp of it. It is this differentiation between transcendent reality and our specific representation of it that enables us to be genuinely open to the reality, learning new and different aspects of it that may contradict, and lead us to revise, our current grasp. Again, the passionate commitment is, or should be, directed to the transcendent reality, not to our explicit account of it – which, without that differentiation, can easily become the focus of an idolatrous fixation.

So is Polanyi a realist? Yes, but a realist with a difference. Not a realist who presumes to speak of noumenal reality, reality in itself, non-committally. Considered apart from the framework of commitment that Polanyi sets out, to presume to speak of noumenal reality non-committally, as if it could be discussed from a non-committal standpoint – outside the human condition of being an embodied speaker-knower alongside other speaker-knowers – is to beg the question of what is reality and how it is to be determined. What Polanyi is implying, as I read him, is that an accounting of the condition of human knowledge vis-á-vis reality developed in a non-commmittal manner – especially an accounting that presumes to be realist – is incoherent. Conversely, only a position which gives account of the condition of human knowledge vis-á-vis reality in the committal manner outlined by Polanyi can hope to be coherent.

Is Polanyi a crypto-idealist? Insofar as we regard human beings as unable to transcend their subjectivity in responsible personal judgment, it would appear that he is. That is what Gulick and Prosch take Polanyi to be in regard to humanistic and artistic concerns. But insofar as human beings within these fields are genuinely able to transcend their subjectivity in responsible personal judgment, then, as Polanyi himself maintains, a coherent, comprehensive realist position is possible, and makes the most sense, in regard to humanistic and artistic concerns as well as the natural and social sciences.

## III. Polanyi's Primary Motivating Concern: To Justify Our Belief in the Power and Autonomy of Thought

In making sense of Polanyi's realism, it seems to me essential that an interpreter of Polanyi needs to keep freshly in mind what was his primary motivating philosophical concern, or at least one of them, if there

can be said to be more than one. And that is his objective to establish grounds for justifying the power and autonomy of thought in responsible pursuit of the transcendental ideals of truth, justice, morality, etc. This objective was behind his efforts to counter the subjection of scientific research to social planning, which got him into philosophy (social philosophy) in the first place. It was behind his efforts to counteract the nihilistic tendencies of the modern mind. It was behind his identification with and praise for the freedom fighters in Hungary and elsewhere in Eastern Europe in their struggle against Soviet totalitarianism. Truth and reality, for Polanyi, were sacred, impassioning ideals. This is not a thesis independent from his philosophical realism. To say it more appropriately: truth and reality, as Polanyi repeatedly brought to our attention, are sacred, impassioning ideals. It is easy, terribly easy in contemporary intellectual, "post-modern" culture, even among students of Polanyi, to forget this. To say that these ideals should not (he actually says "cannot") — be treated non-committally is, as it were, an understatement. To presume to treat them non-committally or indifferently is a kind of sacrilege. The extent to which we find ourselves able to treat them non-committally or indifferently or, as several contemporary philosophers have proposed, to jettison them altogether — is a measure of how far we have come from integrity and mental/moral well being. They are the ideals the pursuit of which makes our lives worthy of respect and reverence. Their pursuit is what makes human life, or at least human intellectual life, most worth living.

Human greatness which evokes our admiration and deep respect does exist. It is a real feature of our world. However, as Polanyi writes,

... human greatness can be recognized only by submission to it and thus belongs to the family of things which exist only for those committed to them. All manner of excellence that we accept for our guidance, and all obligations to which we grant jurisdiction over us, can be defined by our respect for human greatness. And from these objects of our respect we can pass on continuously to purely cognitive targets, such as facts, knowledge, proof, reality, science – all of which can likewise be said to exist only as binding on ourselves (*PK* 380).

Reading this passage non-committally – i.e., reading it critically – as is our disposition as possessors of modern minds, Polanyi seems to be saying that the ideals that constitute human greatness don't exist in the sense with which traditional philosophical realism is concerned – even cognitive targets such as facts and reality! What he means here, however, is not that our granting jurisdiction over us creates them or brings them into being. Rather is he saying that an attitude, a hermeneutic, of reverence and submission to them is what enables us to be cognizant of them. There is simply no other way to become cognizant of them, no other way to take them in. Without that attitude, we are at best left with a pretense or mere claim to human greatness. Cognizance of them requires a transcendence of human subjectivity from its passive, given state to a responsibly impassioned state of responsible personhood; we have to develop the capacity to apprehend them or allow that capacity to develop in us. When we do attain this cognizance, we discover their power and capacity to guide us: we thereby discover their reality, the peculiar sense of reality that they have. To be committed to them is to be committed to their independent power and authority over us, and thus to them as real.

The problem of the modern mind, that Polanyi sought to lay bare, is that in some respects at least we have gotten ourselves into an intellectual predicament where these ideals no longer appear credible – where them seem, in Nietzsche's words, no longer worthy of belief. They have no authority over us, no power to move us and guide us. It is as if we (or at least many in our contemporary intellectual culture) cannot but approach

them non-committally and with an attitude of critical suspicion. And with that frame of mind, with that hermeneutic, they appear completely unimpassioning and unworthy of belief – indeed, non-existent in any realist sense.

One manifestation of this predicament is the suspicion that the horrors of totalitarianism derive from just such passionate commitment to reality and truth (i.e., from uncritical and blind commitment to what people take to be reality and truth) — leading many in our post-modern world to be wary of passionate commitment to anything (see Puddefoot's section 2 which makes this claim.) Polanyi's understanding of the Logic of Affirmation, properly understood, clarifies and resolves this confusion. The problem is not passionate commitment but misdirected, idolatrous passion. A totalitarian frame of mind results from a comprehensive failure to differentiate map from territory, a failure to differentiate a specific representative, explicit version of a social ideal from the transcendental ideal itself (reality, truth, justice, and/or beauty) with which we are acquainted in acritical fiduciary passion for it. When we keep that differentiation clear (between the image and the reality) and maintain the focus of our commitment upon the transcendental ideal – again, not on this or that version of it but on that of which our version held with universal intent fallibly represents and that inexhaustibly transcends every presumption to complete and final grasp of it – we are open and vulnerable to having our specific representations appropriately called into question by the ideal, or at least called into question by others who are able to bring to light the inadequacy of our version of it.

It was Polanyi's primary intention to restore to us the grounds for believing in our own most fundamental beliefs, for drinking deeply without qualm in the wellsprings of our intellectual passions, for believing in the reality – the authority and power over us – of this firmament of values.

We attribute absoluteness to our standards, because by using them as part of ourselves we rely on them in the ultimate resort, even while recognizing that they are actually neither part of our selves nor made by ourselves, but external to ourselves. Yet this reliance can take place only in some momentary circumstance, at some particular place and time, and our standards will be granted absoluteness within this historical context. So I could properly profess that the scientific values upheld by the tradition of modern science are eternal, even though I feared that they might soon be lost [to us] for ever. (*PK* 183f)

The question of what Polanyi's realism consists in then is at the heart of this concern, and no account of Polanyi's realism – of his conceptions of reality or truth or any other aspect of his epistemology – can begin to be adequate that does not fully take this concern centrally into account.

## IV. Natural Realities That Are Intrinsically Meaningful

In his contribution to this issue, Walter Gulick questions what he takes to be Polanyi's equation of the meaningful and the real. Gulick's proposal is that meaning and reality must be kept distinct to avoid the dangers of conflating them. Polanyi's innovation, it seems to me, is not to conflate them but to bring to light how they overlap in important and interesting ways: some things are meaningful but not real, some things are real and have little if any meaning, but some things are real and, in themselves, are of more or less great, or more or less profound, meaning. Gulick's conception of meaning as "that mental process which produces the noosphere", a concept borrowed from Teilhard, meaning "the lasting articulate framework of thought created by humans (*PK* 388)" [Gulick 1999, 9] or (in his present contribution, section 2) as "the product of integrations which create a dynamic unity out of subsidiary particulars", is not what Polanyi has in mind when

he speaks, for example, of the significance of minds. Here Polanyi speaks, contrary to current common intellectual usage, of the intrinsic meaningfulness of certain things (e.g., living organisms and minds), as distinct from the extrinsic meaningfulness of things which have what meaning they have relative to the specific interests of a living organism. Andy Sanders (cf. his section 4) makes a similar point when he speaks of Polanyi's recognition of the "intrinsic value" of things – their potential or capacity to embody, sustain, and bring about tokens of ultimate values like truth, justice, beauty, and love. Gulick's definition of meaning makes it necessarily extrinsic. Polanyi doesn't deny the existence of extrinsic meanings. But the meaning in which he is primarily interested, in relation to pursuing and apprehending hidden or incompletely disclosed realities, is intrinsic or objective meaning (i.e., meaning pertaining to the object rather than to the subject). The intrinsic meaningfulness of such things (at one with, though I think not simply identical to, their capacity to manifest new aspects of themselves inexhaustibly) is not "constructed" or "produced." It is discovered, through the responsible exercise (with universal intent) of our cognitive capacities seeking contact with aspects of reality that transcend their immediate or surface appearances.

Until we can get clear that Polanyi's idea of the meaningfulness of real things is a matter of intrinsic meaning, as opposed to extrinsic or derived meaning, I suggest that his further conception that things can be accordingly more or less real will make no sense at all. Because Gulick apears not to have gotten that clear, he accordingly finds that the latter makes no good sense. Part of Gulick's problem appears to derive from his being perhaps misled into conflating Polanyi's way of speaking about our comprehension-of-a-comprehensive entity (itself a meaningful comprehensive entity constituted by ourselves) with the comprehensive entity being comprehended (itself meaningful in one or another respect but not constituted by ourselves) – which, on my reading, Polanyi keeps distinct. Some comprehensive entities (as in art, for instance) are themselves human creations and would, on the face of it, neither be valued and appreciated nor even exist apart from a living center for whose interests they are significant. In this respect, they are extrinsically meaningful.<sup>2</sup> But other comprehensive entities – e.g., healthy, functioning, living organisms – are not themselves human creations. They are natural, real, existent. And their meaning is intrinsic. The autonomous, steady-state functioning (and living Gestalten) of living organisms is an intrinsically meaningful, objective, normative achievement – involving, according to Polanyi's ontology, a successfully functioning hierarchy of levels within a comprehensive entity that need not have been and is liable to breaking down.

In any case, the things that are human creations, considered (from the point of view of a third party) not unto themselves but in relation to (and thus as part of a larger comprehensive entity including) the living human centers for whose interests they are significant, considered committally, are themselves really existent (i.e., real) comprehensive entities of intrinsic meaning. They are so in basically the same way that intrinsically meaningful, natural interactions of animals of a given species with, say, elaborate nests they have constructed, are real instances of intrinsic meaning.

Quite apart from more problematic and controversial things such as the meaningfulness of works of art or of religious experiences, there do exist intrinsically meaningful natural entities wherever there is a case of normative achievement – which, as Polanyi points out, is everywhere that we have living systems. Intrinsic meaning exists, is objectively real, at least wherever there is life. But it takes a capacity for critical appreciation to take it in.

Since all life is defined by its capacity for success and failure, all biology is necessarily critical ['critical' in the sense here of being normatively governed and normatively

assessed]. Observation, strictly free from valuation, is possible only in the sciences of inanimate nature. Traces of criticism [i.e., normative assessments] are present even in some of these sciences.... Each new branch of biology that was developed to cover the increasingly complex function of higher animals sets up additional standards, to which the observer expects the animal to measure up. And this intensification of criticism coincides with an increasing enrichment of relations between the critic and his object. We know an animal, as we know a person, by entering into its performance, and we appreciate it as an individual, in the interests of which these performances have their meaning. . . . All biology is, in this sense, convivial. But this conviviality rises to emotional concern as the animal approaches the human level. We then become aware of its sentience, of its intelligence, and above all its emotional relations to ourselves. . . . [A]t the highest level of personhood we meet man's moral sense, guided by the firmament of his standards (*TD* 50f, bracketed interpolation DC).

Intrinsic meaningfulness is a curious thing. It is capable, via the help of those with ears to hear, of calling our obliviousness and obtuseness into account. It resists our modern technocratic disposition to treat all things as means for the ends we self-servingly postulate. It calls for our honor, our respect, and perhaps our celebration. While our account of it may well be linguistically constituted (such that the account might be said to be extrinsically meaningful to the persons who find the account intelligible), the account refers beyond itself (fallibly to be sure) in order to honor and pay due respect to features of reality which it alleges to be meaningful in themselves. Recognition of the latter requires our responsive and responsible indwelling of its intimations, reaching out to it with universal intent, committed to making contact with whatever it is that is there, even though we may not at any given point be quite sure yet what it is, and even when it would call us and our enterprises into question. Intrinsic meaningfulness is not recognizable apart from an openness to and responsible pursuit of discovery of transcendent meaning, nor apart from one's developed/developing capacity to take it in.

"We need reverence to perceive greatness, even as we need a telescope to observe spiral nebulae" (*SM* 96). Does this claim locate such meaning merely in the eye of the beholder – i.e., merely correlative to the interests of some living center? I, and I believe Polanyi, would say no. But we would find it impossible to convince a skeptic who is not himself committed to the responsible pursuit of discovering intrinsic meaningfulness. That its recognition and acknowledgment is dependent upon that commitment doesn't make it not real, or reduce it to the realm of the merely meaningful-to-the-interests-of-a-living-center. Here too the issue relates to the question whether responsible personal judgment really does transcend mere human subjectivity.

## V. Polanyi's Post-Critical Realist Epistemology: A Thumbnail Sketch

In the second part of this essay, I introduced the paradox of transcendent reference: how is it possible to acknowledge as an object of our passionate commitment a transcendent reality-in-itself lying beyond our subjectivity, indeed beyond all of our representations of it? In phrasing the question in this way, I was already deliberately drawing on some of the vocabulary of Immanuel Kant in an attempt to make clear the issues with which Polanyi was struggling.

Kant called his position a form of critical idealism, not critical realism, despite his references to, and belief in, reality-in-itself, the noumenon. Why? Kant was convinced that for a philosophical position to qualify as realism, it had to establish how epistemological access to reality was possible. But because he

became convinced on the basis of his assumptions that epistemological access to noumena was impossible, he was forced to identify his position (the most coherent that he thought possible) as critical idealism. We can know only representations that the mind has produced from the raw data of sense, never the thing itself: first of all, the pre-articulate representations experientially ordered and presented to us by our sensibility and, secondly, the explicit representations by means of which the mind categorizes and gives an intelligible account of what we experience. We never encounter reality-in-itself, on Kant's account, but only reality as constituted and construed by us.

Kant characterized his philosophical position as a culmination of critical philosophy. I would like now to characterize in a fuller way Polanyi's post-critical realist philosophy, which solves the paradox of transcendent reference, using Kant's position as a foil. Presuming to do so in the simplified way that I do runs many risks, but I believe the sketch will be helpful in putting the pieces of Polanyi's position together as a whole. Please realize that I am not attempting to fit Polanyi into the Kantian scheme.

From the perspective of my understanding of Polanyi, Kant did get several things right. However, Kant also got many important things wrong or skewed because of his unquestioned acceptance of several problematic, unquestioned assumptions: (a) the Cartesian cogito as the starting point of philosophical reflection; (b) a conception of the mind as a closed container (cut off from any possibility of direct acquaintance with the external, noumenal world as well as from any convivial relation with other persons); (c) a representative theory of perception (with sense impressions conceived as representations, wholly immanent to the subjective mind, of what appear to be features of the external, transcendent world); and (d) the Cartesian critical method – namely, "Doubt (or at least be non-committal), unless you have sufficient reason to believe", while rejecting by default the parallel maxim of methodical belief, "Believe, unless you have sufficient reason to doubt" - which, as William James pointed out, amounts to adoption of the maxim, "Avoid error", in the absence of its essential dialectical complement "Seek the truth." Polanyi, by way of contrast, begins with fundamentally different assumptions: (a) the person immersed in thought responsibly seeking truth; (b) the knowing person embodied and situated vis-á-vis the known, alongside and in convivial relation to other persons and other living organisms (down to the lowly planarium); (c) the person known and knowable in her knowing; and (d) perceptual knowing conceived as a from-to stretch of attention, achieving contact with reality itself in its capacity to manifest itself in indeterminate ways.

In consequence, for Polanyi, the indeterminate reality with which he claims we achieve contact in our knowing (note: knowing is here conceived as relational, not representational) is noumenal, the very thing that Kant thought impossible. Contact here is a relational knowing of reality in its transcendence beyond our determinate representative grasp. Reality, the reality we can and do know, is knowable qua independent of us – i.e., somehow knowable in its very transcendence. That is Polanyi's claim and it is why he defines reality as that which is capable of manifesting itself inexhaustibly. However, we can make reference to it as such only committally – otherwise it becomes a mere claim, a mere representation immanent to the mind, concerning a reality allegedly out there. Our representations of reality, on the other hand, developed by way of our cultural powers of articulation – constituting our explicit, critical knowledge of reality, our determinate propositional representations (which for them to be knowledge, according to Polanyi, must be regarded committally<sup>3</sup>) – have the status not of noumenal reality in itself but of reality as constituted or construed by us, reality somehow immanent to the mind, which is what Kant characterized as the phenomenal realm. Our representations of reality are our construal of reality (personally and culturally); they constitute our map of reality. They are reality made intelligible to us, the indeterminate rendered determinate, and are therefore in significant

measure a product of the articulate framework we bring to the reality known tacitly, by acquaintance. They are human constructions. Such truth as they have is a matter of correspondence. Correspondence with what? With reality, reality in itself, noumenal reality, verification of which, in natural science at least, may involve experimental testing. But how is that possible? To what do we compare our explicit representations to establish correspondence? We compare them not with noumenal reality itself (certainly not non-committally considered). Rather we compare them with what we are able to become acquainted with of noumenal reality. For scientists, this acquaintance knowing may involve the use of sophisticated instrumentation and theoretically informed sensibilities, which, as Polanyi describes, become extensions of the from-to stretch of their embodied tacit perceptual knowing. Transcendent noumenal reality is the territory of which our explicit knowledge is the map (Polanyi himself uses this metaphor--SM, 14f).

Contact with the territory, familiarity with the territory, is achieved not by explicit knowledge but by our acritical acquaintance knowing, a tacit knowing, a relational knowing – which is always embodied and first person, a from-to stretch of conscious, integrative attentiveness and indwelling. It is not just pre-reflective and pre-explicit, however. It is also post-reflective and post-explicit when we resume our tacit powers after critical reflection. Thus our tacit knowing stands in dialectical relationship with our efforts to render reality explicit. But it remains something distinct from our explicit representations. It is relational, an establishment of contact, of rapport, with reality, whereas our explicit mappings of reality involve a suspension or drawing back from the immediacy of that contact, seeking to give it voice, to say what we have become acquainted with. Moreover, our tacit knowing is also fallible, but fallible in a different way than explicit knowledge. To fail in acquaintance knowledge is to fail in one or another respect (e.g., through blindness, selective attention, mishandling) to establish rapport with, familiarity with, and due respect toward reality. Truth in acquaintance knowledge is not a matter of correspondence (between accurate representation and reality represented) but of fidelity or faithfulness of our person to noumenal reality as it continues to show more of itself to us through our deepening acquaintance with it. The trustworthiness of our acquaintance, the trustworthiness of our contact with reality, has to do with our adherence to reality in its transcendence beyond our explicit grasp of it, our being true to it as it progressively reveals itself, the respect we show toward its peculiar being or essence as that reveals itself in our ongoing acquaintance with it, our lived rapport and acknowledgement of it in all of its progressively disclosed aspects. All explicit, representational, determinate knowledge, as Polanyi has stressed, is rooted and grounded in tacit knowing of an indeterminate or never fully determinate reality – both in its grounding in an acquaintance with the territory it represents and in our practical acquaintance knowledge of the explict map itself and the map's relation to other maps.

Thus, for Polanyi, the scientist in his tacit knowledge by acquaintance, regarded committally, does succeed in making contact with and in becoming familiar in a limited and partial way with certain aspects of the indeterminate noumenal world, and, on that basis, with the aid of the articulate framework of modern science, in rendering in determinate explicit form, though never exactly, what he has come to know by acquaintance. He knows, if he is honest, that the reality he thus articulates transcends his articulations. In his acquaintance with the very aspects of reality he is seeking to articulate, he always knows more than he can tell. But what he tells, being articulated within a pre-existing framework that is used to take in far more than this aspect of reality, will be freighted with manifold associations and connections beyond simply mapping what tacitly he has come to know. In that respect, our explicit knowledge is in large measure constructed by us, much as Kant maintained.

exhaust all that might be truthfully articulated about it. From other angles of approach, Polanyi allows for other, "non-scientific" but no less cognitive approaches to acquaintance with, and representation of, the noumenal world – humanistic, artistic, and religious – especially in regard to the more complex aspects of the biosphere and of human life in particular. Indeed, for Polanyi, our unscientific, commonsense, perceptual experience of the world connects with fundamental aspects of the noumenal world as it truly is, though certainly not all of its aspects (e.g., the very large and the very small). We need not wait solely upon the scientific expert to tell us how things really are. Science has no privileged access to noumenal reality. Genuine access it does have, but its access is aspectual no less than that of other approaches.

I am keenly conscious of many aspects of this brief sketch that cry out for fuller elaboration and the many questions readers will have that press to be answered. Yes, indeed, there are many unanswered questions. But I gave prior warning: this is only a sketch in which I had to work within a limited space under limited time. It is, however, how I see Polanyi's realism.

#### Endnotes

- <sup>1</sup> Some readers may wonder about the weight being placed here on the framework of commitment, on which Polanyi claims to "reduce" his reliance in the "Introduction" to TD (x) and which does not explicitly appear in his writing subsequent to PK. It is my conviction that the framework of commitment was never abandoned by Polanyi. It simply was not needed to be brought explicitly into account where he was not forced to discuss fundamental presuppositions as he was in PK. But for an outsider needing to learn what is involved in the transition from a critical to a post-critical perspective, it is essential that it be well understood and appropriated.
- <sup>2</sup> Independently of the line of thinking that would classify works of art as having only extrinsic significance, I am inclined to think that authentic works of good art, and certainly of great art, also may be intrinsically meaningful though in important respects different in their intrinsic meaningfulness from natural comprehensive entities. Artists don't hesitate to insist that the art work must be allowed to "speak for itself." Moreover, many artists and connoisseurs of art speak of art, at least sometimes, as apprehending and giving voice to meanings transcendent to the artworks and to the artists. One of my favorite poets, William Stafford, regularly spoke this way about his poems.
- <sup>3</sup> Regarded non-committally, these explicit representations constitute mere alleged knowledge, mere representations that may or may not be true. As a matter of fact, according to Polanyi, we can regard something non-committally that is, we can reflect on something critically only insofar as we succeed in representing it to ourselves explicitly. See the first few pages of *SM*.

#### **Electronic Discussion List**

The Polanyi Society supports an electronic discussion group exploring implications of the thought of Michael Polanyi. Anyone interested can subscribe; send a query to owner-polanyi@lists.sbu.edu Communications about the electronic discussion group may also be directed to John V. Apczynski, Department of Theology, St. Bonaventure University, St. Bonaventure, NY 14778-0012 E-MAIL: apczynsk@sbu.edu PHONE: (716) 375-2298 FAX: (716) 375-2389.

## The Trust Relationship

## John C. Puddefoot

ABSTRACT Key Words: Polanyi's realism; resonance realism; the metaphysics of reality, knowledge and truth; limitations of the rhetoric of truth; epistemology and ontology; objectivism and relativism; trust. Polanyi's philosophy requires a synthesis of ontology and epistemology through the resonances that structure personal knowing. Its convivial elements make it political; self-conscious circularity distances it from metaphysical realism; the paradox of self-set standards accomodates dissent. The roles of reality, knowledge and truth in metaphysical realism are better understood in terms of resonance, trust and worthwhileness if we follow Polanyi's lead. This more humane vocabulary saves us from the tyrannies of the truths and realities others would impose upon us. Polanyi points the way towards a position that avoids the worst of both absolutism and relativism.

#### 1. Introduction

Michael Polanyi was primarily a political philosopher whose lifelong opposition to all forms of controlling, totalising tyranny must occupy a central place in any attempt to understand him. The essence of his thought lies, on this reading, in the exploration and elucidation of the relationship between convivial assent and personal dissent, of social obligation and personal freedom and responsibility.

Polanyi's philosophy entails the rejection of objectivity as a false ideal in favour of personal judgement. He avoids reducing knowledge to subjectivity by setting it within a moral and political context governed by the self-set standards of communities of enquiry. Inasmuch as no knowledge can be impersonal, no knowledge is exempt from the need to be ratified by such communities of enquiry. Polanyi's epistemology is therefore profoundly social and political. It sets persons in a social context that provides the authentication, filtration and affirmation required to turn individual opinion into collectively-endorsed knowledge. Many of Polanyi's disciples are uncomfortable with the implications of this position, for many of them retain some kind of attachment – often without realising that they do so – to some of the tenets of a metaphysical realism that believes that something can be known or said about the world as it is when nothing is being known or said about it. This, as I showed in "Resonance Realism" (RR), is an illusion (*Tradition and Discovery* 20 (1993-94) nr.3, 29-38).

What saves Polanyi from subjectivism is not, therefore, his devotion to realism, but his articulation of the epistemic-ontological structure of any coherent socio-political system. Inasmuch as he saw the places of persons in societies and cultures in terms of contingency – that without those societies none of us would have access to anything remotely worthy of the name "knowledge" – he stepped beyond the individualism and scepticism of the philosophical traditions going back to Descartes, and merged epistemology with ontology. For Polanyi, we are what our social systems make us, what they allow us to be, and what they allow us to resonate with as trustworthy and worthwhile. Such things the members of those cultures call "truth." We are unreformed – and unredeemed – metaphysical realists to the extent that we demand more of truth than that by, so to speak, wanting to be able to sidestep our culture and its all-embracing world-view to get a grip on "reality" without any of its filters and accreditations. To want, as I put it in RR, to know the world as it would be known were it not being known.

One difficulty with reconstruing truth and knowledge in terms of cultural accreditation – we, and people like us, recommend that in such-and-such an instance you do, believe or trust this – is that it seems too weak to bear the weight of our very considerable convictions. Once we have decided upon "truth" we want it to be everyone's truth; we want to advocate it with universal intent, as Polanyi said we should. "True for me and my tribe" has to become "true for all tribes." In Polanyi's own words, "our vision must conquer or die" (PK 150).

Another difficulty concerns how best to treat the inevitability of dissent. Whatever my culture deems "true" seems to have no status from the perspective of another culture that, or a dissentient who, does not endorse that truth, and it is far from clear why your truths should become mine any more than mine yours. If the principle holds that individual freedom should not be exercised to the detriment of others' freedoms, the same seems to apply to your truths and mine. We may try to persuade one another, but the language of conquest and death sets altogether the wrong tone. Yet tribes do want their truths to be in the ascendant, their readings - however perverse - to hold sway. The universalising and totalising vocabulary of truth becomes inexorably the vocabulary of conflict, tyranny and oppression. Polanyi's heuristic passion seeks "not to conquer, but to enrich the world" (ibid.). If we replace the language of universal truth with the accepted and accredited set of beliefs and practices of a culture, the things that culture deems trustworthy, reliable and worthwhile, the collage of human conflict is changed, and the imposition of someone else's collective view - however wise and justified it may seem to them – seems somehow less justifiable. The language of truth, when it presumes to an absolute domain, steals all the space properly occupied by the different precepts that others deem reliable, trustworthy and worthwhile. So the eclipse of the rhetoric of truth in favour of a softer, more human acknowledgement that truth is only the best we can do right now from our very narrow perspective on the world, may one day prompt a similar eclipse of conflict, and make the world a better place. But what of the relativist charge?

Relativism and trust are related by the requirements of Polanyi's intentional circularity. Once we acknowledge the inevitability of circularity, we have already abandoned metaphysical realism, for our systems of thought are not tied to some putative reality by inexorable bonds or derived from it by fail-safe procedures and methods of enquiry. We can deceive ourselves. The most significant personal skill we deploy to avoid such self-deception is trust. Yet we seldom realise it. Trust is central to Polanyi's thought, yet he scarcely mentions it. Science is based more deeply upon trust than upon experiment or theory because it has adopted processes that could not work but for the presence of trust and the constant monitoring of its adequacy and appropriateness. Scientists trust their forebears, their contemporaries, their senses, their judgement, their imagination, their intuition, their sense of a good idea to pursue. That which is trusted constitutes the body of science; that which is distrusted is beyond science. At what is generally supposed to be the other end of the spectrum, our religious beliefs are based upon trust of forebears, contemporaries, cultural transmission, texts, sense, judgement, intuition, and a notion of the worthwhile in much the same way.

The way we treat a religious or a scientific text makes clear our dependence upon trust, and the seamlessness of the religious and scientific enterprises when seen from a perspective that integrates, or rather fails ever to separate, knowing and being. Why should I take a religious or scientific text seriously? Because of its human provenance; because it originates from a community of inquiry worthy of your trust. When is a community trustworthy? When its methods and internal self-regulation convince us that it is not systematically deceiving itself, and when its goals and values, the things it deems worthwhile, we are able to trust and share.

Trust is a primitive: it defines me in my tribe and is defined by me and my tribe. Personal knowledge manifests and is a product of what I and my tribe trust. What we treat as reality is entirely a product of trust. It is perfectly possible that all our trust is misplaced, but it is not possible for it to be eliminated.

In RR, I argued that individuals are able to resonate to the depths of reality – and their societies to identify what is genuinely real – because they are empowered by tacit socially-embodied subsidiaries, and that socially-embodied capacities to engender susceptibility to deep resonances are dependent upon the fervent assent and dissent of attuned persons. I need to learn how to appreciate Beethoven, but learning who I should trust to tell me that it is worth learning to appreciate Beethoven is more fundamental. Conversely, where a culture's capacity to inculcate responsiveness to resonant depth is degenerating, it will be from the inspirational dissent of persons who appreciate the greater depths that are possible if we change our cultural parameters that regeneration will have to come. It is because I owe my culture everything that I have a duty to say when it is wrong; it is because I love my neighbour so deeply that I have a duty to say when she is wrong.

In RR, I attempted to shift the visual metaphors we employ in our philosophy towards other, quasiauditory metaphors that are better able to accommodate Polanyi's profound, if tacit, reintegration of epistemology and ontology – knowing and being – in post-critical personal knowledge. This essay attempts to move further by replacing the impersonal nexus defined in terms of knowledge, reality and truth with an altogether more personal one articulated in terms of trust, resonance and the worthwhile.

#### 2. The Metaphysics of Reality, Knowledge and Truth

The dominant metaphysical systems of the western world encourage us to base our lives upon something that they refer to as "reality," pursue something that they refer to as "truth," and strive to attain something they refer to as "knowledge." Their primary epistemological goal is to be able to equate knowledge of reality with truth. To express the matter thus is to have shifted our emphasis away from the territory that metaphysical realism recognises as its own. All this "reference" is linguistic and so on the human side of what a metaphysical realist likes to call "the way things are"; and "the human side" is always, for the metaphysical realist, the weaker side.

But this shift in emphasis, far-reaching as it is already, does not go far enough. Recent philosophy has taught us to respect the human side of the epistemological enterprise. Hitherto it has been "reality" that has been definitive and our appreciation of it that has been "defective." We can now rebalance this polarisation. Use of terms such as "reality," "truth" and "knowledge" – with or without the qualifier "what they like to refer to as" – involves a fundamental piece of misdirection: our attention is directed to what we cannot have in such a way as to make us believe that we could, in some putative asymptotic theoretical sense, have it.

A traditional metaphysics wants to say that somehow, independently of trust-criteria, the community has grasped what it refers to as reality, truth and knowledge. This demand for independence is what objectivity amounts to, and Polanyi perceives that it is unattainable, because all we know must be filtered through human minds, and a false ideal, because it threatens to separate epistemology and ontology, destroying the integrity of our being. Traditional realisms express doubts about all this because they worry about the uncertainty and arbitrariness of the kinds of free-floating systems that result: is not every rational community as good as any other? Polanyi steadfastly refutes this point. That the paradox of self-set standards leaves us open to circularity, self-deception and folly he concedes; but, since it is only by deciding to accept some things and

reject others that we have any hope of improving our understanding of the world, the fact that decision entails risk of systematic error is a risk we have no choice but to take. The Azande were not irrational and their system of thought was not incoherent; but both were, at least for Polanyi, profoundly wrong. And to the retort "And how do you know that your own system is not?" he would say, "I make up my mind as best I can in the face of the full force of my responsibility to do and believe as I feel I must." The paradox of self-set standards demands that we trust our own and our community's judgements in deciding what is right and wrong, true and false, rational and irrational. Polanyi places his confidence in the trustworthiness of convivialities of rational human beings.

Realists want "right" to have some impersonal external reference, and criteria of rightness to be ascertainable by reference to that external reality. But any method we employ to ascertain such a "rightness" would have to be based upon trust, and the trust would need to have emerged alongside our understanding of that to which we hoped to refer. So we still end up saying "this is the best we can do right now" and hoping that we are not wrong in some catastrophic way. Super-bugs, nuclear energy, and genetically-modified foods, however popular or unpopular, could save or destroy us, but we are compelled to decide for or against them. However well we believe that we have understood the truth, it always remains the best we can do right now as judged by our lights. To want more is more than to want certainty or reassurance: it is to want to be released from the human condition by separating our being from our knowing.

Those who wish to affirm the inerrancy of sacred religious texts, to exempt them from human error and their interpretation from human preference, ask us to trust absolutely what cannot be trusted absolutely. No religious text is more trustworthy than those who wrote it or the tradition that transmits it; to want more for it is to wish to extract it and the tradition that affirms it from the human condition. But it is worse than that. It exemplifies the violence and tyranny that the name of truth is made to serve.

To forget the social coefficient in knowing that reflects the unity of knowing and being is to forget that truth, knowledge and the view of reality they confer, are all only as trustworthy as the traditions that articulate and affirm them. Yet "The Truth" is commonly supposed to be so far above such relativities as to exercise an authority above and beyond the authority of the communities that affirm it as truth. It is supposed to be "Objective" in the strongest sense of the word. But truth so employed is an instrument of control: it amounts to "stealing another man's space," to the attempt to make my views, or the views of my tribe, society or culture, more authoritative than the full collective weight and power that is mine, my tribe's, my society's or my culture's. It does violence to others because it takes away the space that is theirs and that their notions of truth occupy.

We are not far here from the way Karl Marx defined his concept of "alienation": human beings set up systems that become idols (in this context, systems of what they call "The Truth"); those systems, despite their origins in human self-expression, assume a life of their own; we find ourselves obliged to worship them; we become alienated from our own creations; this alienation belittles and potentially destroys us. In the hands of the bourgeoisie – for Marx – these idols become instruments of repression. As I am arguing for it, this analysis remains true of systems of metaphysical realism that idolise the notions of reality, knowledge and truth we have constructed, and we become subservient to what are essentially our own intellectual children, which then become instruments of oppression. Michel Foucault connects knowledge with power in much the same way. You may, with your influence, crush me; you may, with your violence, kill me; you may, with your lies, deceive me; you may, in your duplicity, fool me; you may, by laying claim to more for your version of

the truth than is your share, bully me; but in all these regards you betray a more fundamental responsibility than that you have to what you refer to as reality, truth or knowledge; you betray your responsibility to preserve and increase the fund of trust upon which the whole edifice of human civilisation stands; and in that respect, you are a traitor to yourself and to us all.

Trust is to the economy of human knowledge rather as money is to the economy of markets: they do nothing in themselves, but both can be devalued if taken for granted to the point where trade becomes impossible because nobody believes any longer in the value of the currency. Those who betray trust are akin to those who counterfeit money: they devalue the coinage; their actions subvert and will eventually destroy the civilisation in which they arise.

Metaphysical realism propagates the view that reality and truth have some power of themselves to persuade us what they are, and in so doing it diminishes our sense of our own vital responsibility to oppose what we deem to be wrong or misguided, dishonest or hypocritical. It therefore makes us feel less responsible than we are, and so plays into the hands of those who would usurp our freedom and our space by laying claim to a larger share of truth and reality than their voices justify.

Polanyi saw that the edifice of human culture hinges directly upon trust, that once trust is lost, or its significance diminished, we are powerless to defend ourselves against the forces that would destroy us, and that in such circumstances it is only the voices in the wilderness – the dissidents – that can call us back from error. Reality, truth and knowledge, as metaphysicians conceive them, have no power to do so, and so, when we are in the hands of metaphysicians, we are at our most vulnerable, for their gods cannot save us and yet they persuade us that we are too weak to save ourselves.

Metaphysical realism does not understand the currency of trust. Neither does relativism. The former places too much faith in a fictitious capacity of human discourse to find itself locked to the real world, and so underestimates the importance of trust in the establishment of secure sustainable societies. The latter places insufficient faith in the self-regulating capacities of trusting societies to reject inferior and adopt superior views. Relativism, especially in its most overtly ironist forms, despairs of the notion that one view could be superior to another, because it rejects – rightly – the metaphysical realist claim to a stronger hold over truth by virtue of a more certain and secure link between its discourse and reality. This we too reject, because no such link exists. But so too do we reject the ironist's smug despair, because we embrace the view that societies which establish and maintain superior trust-structures – convivialities governed by the paradox of self-set standards, for example – achieve superior understanding of what to affirm and what to deny, and so accredit more reliable elements of their discourse as worthy of the epithets "true," "known" and "real." Ironism, insofar as it fails to notice the role of trust in human societies, is miserably condemned to wallow in a sea of relativisms. Neither extreme will do.

Knowing the truth of "this computer keyboard allows me to type this paper" enables me to "get along." Truth is an epithet we use to describe accredited, reliable human practice. "This computer keyboard allows me to type this paper" is "true" because you would be well-advised to rely upon this affirmation – or so likeminded human beings with a similar acculturation suppose – if typing a paper seems to you presently to be ultimately worthwhile. "Jesus Christ rose from the dead" is "true" on this reading because you would be well-advised to rely upon this affirmation – or so like-minded human beings with a similar acculturation suppose – if you wish to decide upon a human being to whom to devote your life, which religion to adhere to, and so

forth.<sup>2</sup> Others will disagree. The majority view may well be wrong. That is just the human condition: nothing can exempt us from the need to make up our own minds, not even the majority view. The fact that some of us want more than this, more certainty than is rightfully ours or rightfully accrues to us within the framework of our cognitive space, is beside the point. We cannot have what we cannot have. Stamping our feet like petulant children because reality, truth and knowledge are more elusive and less attainable than we would like, does not solve the problem. Nonetheless, precisely this need to take responsibility for ourselves, akin to what Sartre described as our being "condemned to freedom," causes us to generate all sorts of subterfuges by means of which either to try to exempt ourselves from the consequent responsibility or to relieve others of it to our own benefit.

The power structures that rely upon appeals to some putative "reality" or "truth" short-circuit – to good effect and bad – the obligation to decide for ourselves. Once something is supposed to be "established fact" or "a property of the real world" or simply "accepted truth," anyone who then denies or opposes it must be a fool, a liar or an anarchist. The instruments of the totalitarianisms against which Polanyi fought are in place. "Reality" becomes someone else's chosen reality; "truth" someone else's preferred view; "facts" things in which others have a vested interest. Almost everything we know relies upon our re-accreditation of realities, truths and facts affirmed by others that we have not verified or cannot verify for ourselves. Unfortunately, our very dependence upon the affirmations of others makes us vulnerable to their lies and vested interests and deceptions. Somewhere we need to learn when and how and whom to trust.

#### 3. Epistemology and Ontology

RR was trying to carry forward Polanyi's epistemology/ontology holism: to establish that all knowing is bound up with being and all [human] being with knowing, and that human knowing and being is inescapably communal, and therefore political. RR was set in the context of Hilary Putnam's and Nelson Goodman's consideration of the cultural imperialism implicit in much realism, a theme subsequently taken up by many others, for example, J. Richard Middleton and Brian J. Walsh in their *Truth Is Stranger Than It Used To Be: Biblical Faith in a Postmodern Age* (1995).

There are two central issues here: whether the western philosophical tradition, with its stress upon one particular metaphysical realism, amounts to a violent imposition of one world-view upon all competing world-views, and therefore underpins the very totalitarian political systems that Polanyi spent his life opposing; whether the alternatives to such a system are inescapably relativist. Andy Sanders was kind enough to say of RR that I had transferred the visual metaphor typical of most epistemology into an auditory metaphor. Resonance is as much a metaphor as sight; but it captures something of the ontic holism required if we are to understand Polanyi's radical turn. His emphasis upon passion, commitment, judgement, is an attempt to eliminate the distinction between epistemology and ontology by unifying them in the concept of the personal.

In fact, in the second lecture in *The Tacit Dimension*, "Emergence," Polanyi deals primarily with the ways in which we comprehend other persons, not the natural world, in ways consistent with the notion of resonance. But the same structural correspondences do not carry over into our knowledge of the natural world, and therefore into the reality in which Walt Gulick wants us to believe. The strength of *TD* lies in its psychology; it is weakest where it attempts to carry the same insights and structures over into natural science.

Polanyi, in other words, demonstrates the architectonic structure of human knowing and being, but he does so in a way that fails to bridge the gap between "how human beings get on in the world by seeking the best understanding they can manage," as one might put it, and some kind of deep ontological harmony between human understanding and whatever it is that we should credit as "reality." It may have been his failure in this respect that led him mistakenly to conceptualise the natural world using the same teleological categories that he properly identified as essential to the understanding of human life and action.

I am enough of a realist to accept, with John Searle, for example in *The Construction of Social Reality* (1995) that, were there no conceptualising entities, there would still be a world; I can assent to his distinction between brute facts and constitutive facts. But his "brute facts," such as that there would be cold white stuff at the top of high mountains whether we were here or not, are vacuous: the point is not whether there is a world, but whether we can trust what we think it is like. I am enough of an anti-realist to say that we have no business claiming to know more than that what we "know" enables a species constituted and situated as we are to "get along right now."

RR also tried to break down the subject-object dichotomy by choosing a metaphor which integrates knower and known inseparably. I specifically wanted to avoid the temptation to make the world solely responsible for how we see it. The opening paragraph of Dale Cannon's section 3 in this issue worries me in this respect. "Truth and reality, for Polanyi, were sacred, impassioning ideals." Assuredly, and the example of Hungarian freedom-fighters is well-chosen, but this just won't do as any kind of criterion, because everybody's truths and realities impassion them; it is just that in this case Cannon and Polanyi share the same ones. Passions inspired by absolute dedication to truth and reality – or our version of them – are as "inspiring" to devotees of their totalitarian manifestations as they are to others with whom we are more sympathetic. The question is not whether our lives are impassioned by truth, reality and ideals, but who we are to trust to tell us which truths, realities and ideals to deem worthwhile. Everyone whose life is based upon metaphysical realism thinks his or her truths, realities and ideals are the "best" and "only" ones that would be embraced by "any rational being." We have to abandon the illusion of final vocabularies, the conviction that any position is definitively the "best" or the "only" one possible. The only thing that can save us from a blind commitment to the "power and authority over us" (Cannon, section 3) supposedly exhibited by some truths and realities, is to refuse to acknowledge that we are ever free from the obligation permanently to readjust our lives to changing resonances in the world.

No reality ever exempts us from the responsibility we have to question it. No truth ever attempts to relieve us of the obligation to doubt it. So I do not agree with Jha that Polanyi's ontology was less effective than his epistemology. I agree that his teleological understanding was mistaken and over-played, but his supreme achievement lay in eliminating the boundary between epistemology and ontology by absorbing both into the convivial, or, rather less technically, the political. It was to articulate the deep structure of this new synthesis that I attempted in RR to say something different not, perhaps, as exegesis of Polanyi, but as a presentation of the position to which his thought leads.

### 4. Worthwhile Action and the Eclipse of Truth

Matters of fact and truth are matters of assent and dissent. A critic will retort, "No, the facts are the facts"; it is not so. "The facts" are the things we or almost all of us agree upon universally, where the "almost all of us" refers to the qualification "or all those competent to judge." Attempts to climb out of our minds and the human situation to vantage-points capable of affording us a view of the relationship between truth and how we see things are futile. There is no "view from nowhere." Were we not here, our words would neither exist nor refer. You may say, "the things our words refer to would still exist." But would they? Searle wants to say that there is a representation-independent world – and I absolutely agree – but he also wants to populate that world with "facts," the trappings that only come from particular kinds of representation – names like "Mount Everest" and "snow" – and there I disagree, for the representation-independent world can be re-represented (redescribed) in infinitely many ways, almost all of which we could not comprehend, especially if they arise

from species constituted and situated differently.

Because there is no "view from nowhere," we need a better notion – a more honest, explanatory, human notion – than "truth" to guide us. We act in accordance with what we take to be most worthwhile, and what we deem most worthwhile reflects and governs who we are. Who I am governs what I deem worthwhile, and what I deem worthwhile governs who I am. There is no other truth by which I may live; there are no other actions by which you may know who I am.

When I use the language of truth, I invoke greater authority than my own. What a tribe holds to be true is what a tribe lives by, and therefore what it deems worthwhile. When I say that something is "false," I mean that I do not live by it and do not think it worthwhile. I may assign degrees of interest to it, but I mean that these degrees of interest will only affect me peripherally. I respect many of the teachings of Hinduism, Buddhism and Islam in this category: as interesting but not things I feel moved to take very seriously. On the other hand, I take the Four Sublime States of Buddhism - loving-kindness; compassion; appreciative joy; equanimity - very seriously as insights into the human condition, and I do try to live by them; I deem them worthwhile; I wish them to reconfigure my being. It is irrelevant to me that they are "Buddhist"; I take them seriously.

From this perspective, it is simply irrelevant – or, worse, mischievous – to ask whether the teachings of the Buddha are "true" in some deeper "metaphysical" sense; as irrelevant as it is to ask whether the teachings of Jesus are "true." Do we as a matter of practice deem them worthwhile? Do we seek to reconfigure our lives as a result of encountering them? Are there those – whether numerous or otherwise – who allow these teachings, narratives and legends to change them? These are the only questions that matter. Everything else is subterfuge and violence, an attempt to invoke truth to make me believe what your tribe believes. Culturally-induced susceptibility to appropriate resonances is the best guide to genuine "intimations of fruitfulness" that we have, not bogus tyrannies of "truth."

Some of us are prepared to acknowledge that we have made a personal choice for or against certain "truths," and others want to pretend that the choice was somehow made for them by an impersonal process that left them no such choice. Where we find some putative reality described in terms that suggest that it "requires" us to assent to it, there violence is done to the human situation and condition. Science and its truths are frequently presented in the latter sense: their devotees deny that they have any choice but to believe them. This is what worries me about Dale Cannon's talk about finding ourselves compelled to assent to an external reality: it quickly becomes a way of denying that we had any choice in the matter.

Resonance realism denies that there are external points of view from which to assess the rightness or wrongness, advantages and disadvantages of a system of thought or a set of actions. That we repeatedly refer to such external authorities as if they dictate our "oughts" is an example of the naturalistic fallacy. Another person's external "ought" is his or her individual or tribal statement of preference for one thing rather than another. Dale Cannon's (section 3) defence of the passion for truth and reality he finds in Polanyi strikes me as a veiled example of the naturalistic fallacy: an attempt to make the nature of the "external" reality overwhelm our responsibility for accrediting it as such (Some theologians write of their understanding of God in a similar vein).

#### 5. The Trust Relationship

Trust is underemployed as a philosophical category. Without trust there can only be my truth, the truth of my personal life and its experiences, and so only subjectivism. I must trust others if my grasp of truth is to be more than a merely subjective whim; I must trust my culture if I am to learn which resonances to trust.

In large measure, I would attribute the decline of Christianity to its failure to command trust now, and

that perhaps to its failure to do so in the past. We are so familiar with its failings in this respect that other religions appear more trustworthy, perhaps in proportion to our ignorance of them. Christianity cannot speak with an authoritative voice even about the direction in which spiritual regeneration may be found, because it has squandered the trust of the populations whose spiritual health it has supposed itself to direct and shape. And once trust is lost, especially in the realm of the spirit, it is almost impossible to recreate it. An important asymmetry arises here. I have no first-hand experience of any of the experiments, and little enough knowledge of the underlying theories, that justify our belief in quarks or even atoms. Yet the community of particle physicists commands my respect and trust in ways that reassure me that I should nevertheless take quarks and atoms seriously. On the other hand, I am not trustful of research into the effects of tobacco sponsored by the tobacco industry, or into food safety and genetic modification sponsored by the food industry. For similar reasons – the vested interests that potentially distort and destroy the integrity of the accreditation we all rely upon – I have the gravest doubts about many of the things that mainstream religions tell me that I have to believe and do in order to be "saved."

Resonance cannot be achieved in the absence of trust; distrust creates dissonance; it twists and distorts everything. When we are mistrustful, even the initial echoes that indicate the presence of a potential for resonance – echoes which pick up on the rhetoric of transforming discourse – are suppressed. This is one reason why Buddhism insists upon the pursuit of trust and equanimity: that when our minds are disturbed by the distortions attendant on mistrust, we cannot resonate to the world appropriately; it is as if the air were disturbed before the ripples of sound begin; we are overwhelmed by noise. An environment in which trust is disturbed or from which it is largely absent is not an environment in which human life can flourish. That is true of the workplace and of the home.

One of the noisiest things in the world is the tyranny of other people's truths. That noise prevents us from seeing clearly that things need not be as they seem or as we are told they are; and it prevents us from being ourselves. I have not, perhaps, done justice to this notion here. The forces that seek to monopolise "reality" by affirming certain claims to be "realist" are the disciples of a view of truth that has robbed too many people of their lives already. Foot-stamping reflects the modernist impersonal objective view of knowledge: that the facts are the facts and that is all there is to it; that the way the world is commands assent; that we are not responsible for what we treat as reality because reality is reality; that we are not responsible for what we treat as truth because truth is truth; that if you do not see things the way my tribe sees things, there must be something wrong with you. Theism can be the ultimate form of a foot-stamping, shoulder-shrugging attempt to have absolute certainty without responsibility: we simply claim that our view is God's view, and so that is that. When someone asks how we know that our view is also God's view, we usually pretend not to understand, or quote the Bible, thus instituting an infinite regress.

Metaphysical realism is foot-stamping totalitarianism in disguise. It is concerned to impose one truth and one reality as the "best" or "only possible" truth and reality on the basis of some putative "method" that exempts it from the fallibility and diversity of the human condition. But today's totalising discourse is tomorrow's totalitarianism. And Michael Polanyi would have none of it.

#### **Endnotes**

- <sup>1</sup> The contributors to this volume who think that Polanyi has no ontology to speak of are missing the point: Polanyi's epistemology is his ontology because he can conceive of no divide between them.
- <sup>2</sup> Readers may like, as an exercise, to construe the truths of statements like "Napoleon lost the battle of Waterloo"; "water is  $H^2O$ "; " $2^8 = 256$ " and "Bach was a great composer" in similar vein, and then try some examples from the Azande, horoscopes and the daily newspapers.

## MEMBERSHIP RENEWAL/FUND DRIVE

In this issue (p. 4), there is a call for papers for an international Polanyi conference set for June 8-10, 2001 at Loyola University, Chicago. This is the largest single event ever sponsored exclusively by the Polanyi Society. Most previous major conferences have been smaller in scale or have been subsidized by generous institutions such as Kent State University. The Polanyi Society thus needs to raise the funds necessary to cover basic expenses of organizing the conference. The Organizing Committee is investigating several possibilities. One option is described below.

Membership dues for the Polanyi Society are regularly paid in the fall at the beginning of the academic year. The first issue of a new TAD volume normally includes the dues payment notice. This year, in both this issue (26:3) and the next *TAD* (27:1), you are invited to combine your dues payment with a contribution. In order to encourage you to "think generously," you may get a first and second payment notice and/or an e-mail notice reminding you that it is time to renew. The chart below sets forth some "rungs" on the contribution ladder. We hope you will reach as high as it is possible for you conveniently to stretch. Unlike the Public Broadcasting System and National Public Radio drives in the US, we do not have Polanyi Society coffee mugs, book bags and other memorabilia to distribute to those who are generous. But for those who do stretch (at least the first 50), we can provide a copy of Andy Sanders' very good 1988 (Rodopi) book, *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of "Tacit Knowing*" (currently being sold by Amazon.com for \$47).

Donation Range	Designation	Acknowledgment
\$20-50	Associate	-1 year membership -Listed in gift acknowledgments
\$51-\$100	Friend	-1 year membership -Listed in gift acknowledgments -Copy of <i>Guide to the Papers of Michael Polanyi</i> (TAD 23:1[1996-97] or other old issues available).
\$101-\$500	Benefactor	-1 year membership -Listed in gift acknowledgments -Copy of Sanders' book
>\$500	Patron	-3 year membership -Listed in gift acknowledgments -Copy of Sanders' book

The Polanyi Society is presently applying for tax deductible status in the US. If that application is approved and we are allowed to provide a charitable donation letter, we will do so later in the year. Dues and donations can be sent by post, fax or e-mail. Credit cards donations are welcome.

MEMBERSHIP/DONATION FORM is on the inside back cover(p. 95)

## "Recalled to Life": Contact with Reality

## Esther L. Meek

ABSTRACT Key Words: Michael Polanyi; contact with reality; correspondence; indeterminate future manifestations; truth; progress; analysis; discovery

A reengagement of my 1983 dissertation, this essay describes and amplifies the commitment to realism presupposed by Michael Polanyi's alternative model of knowing, recommending its value for thought and life. The idea of contact with reality replaces an unworkable traditional notion of correspondence. Truth bears indeterminately on reality and thus its assessment is ultimately unspecifiable. We assess successful contact by our anticipation of the discovery's indeterminate future manifestations (IFM Effect, the reality criterion) as well as the radicality of the integrative coherence achieved (the integrative criterion). Polanyi's realism offers grounds for a critique of postmodernism. Alternative concepts of truth and progress as well as the value of the analytic method, are examined in light of the Polanyian model.

In the course of his study of Michael Polanyi, Andy Sanders came across my unpublished 1983 dissertation on Polanyi's realism, and has utilized it in support of his own theses.<sup>2</sup> His and others' continuing references to the dissertation has kept it on the edge of Polanyian discussion, particularly in this journal. Until he and Phil Mullins came after me, I am embarrassed to say, I had no knowledge of this, having received no encouragement to publish from a heavily analytic philosophy department, and having been pregnant with a few unforeseeable implications of my own.

I appreciate Sanders' invitation to rejoin the discussion. Because the need to explicate realism and truth has become, if anything, even more critical, and because some of you have found my formulations of Polanyi's concepts helpful, I believe is will be useful for me to recapitulate my theses from that dissertation, making them more accessible to Polanyi enthusiasts.<sup>3</sup>

My brief synopsis is more a reengagement than a description. It will also serve to launch a few comments on recent works by others. Throughout the variety of topics here presented, I mean to defend Polanyi's commitment to realism, to develop the concepts he suggested in order to recommend their value for thought and life.

#### 1. Why resurrect a dated work on realism?

Whatever the other merits of that project, *Contact with Reality* offers perhaps the most exhaustive catalog of Polanyi's comments concerning the real. I was fascinated by that aspect of his work and so attended with great care to it. At that time Polanyi's emphasis on personal commitment gave him what little press he had, and that, "bad press". It was deemed a pseudophilosophical offering. Classified as relativist, subjectivist, fideist, and psychologistic, his system would have been expected to contain little if any support for realism.<sup>4</sup> As a child of the thought of the early decades of this century, I was disturbed by the philosophical question, is there a world out there that we can be justified in claiming that we know?<sup>5</sup> Hence my fascination with Polanyi's talk about reality and the fresh grounds upon which he said it.

Polanyi's unprecedented approach also shed light on my everyday human experience in a way that the highly technical problems and proposed solutions of analytic philosophy did not. The Polanyian perspective made it possible for me then to leave the formal debate of philosophy departments and journals, as my station in life compelled me to, and still do philosophy, by dint of living it. At least in ordinary living, he helped to allay my realist uncertainties.

In recent years, as I have been able to return to more formal philosophical pursuits, I still value Polanyi's approach to realism. For it has become apparent that Polanyi offered not only a definitive critique of and alternative to modern philosophy (before many others did, contributing to his unpopularity), but also an alternative to postmodernism as well. Popular consensus has only in the last decade shifted away from modernism. Its assumption that postmodernism offers the only alternative to modernism often goes unchallenged.<sup>6</sup> Polanyi, although not familiar with the fruit of the postmodernist worldview, nevertheless offered the *tertium quid* that people uneasy with the false dichotomy continue to explore. My driving concern to develop an epistemology compatible with the historic biblical tradition has involved me (and others) in exploring the Polanyian *tertium quid*, since neither modernism nor postmodernism does justice to biblical epistemic claims.<sup>7</sup> Polanyi's realism is just that ingredient in his philosophy that prevents its classification as postmodernist, and thus his realist theses retain strategic importance.

# 2. Something there to be discovered

Hence the value of furthering the discussion about reality in Polanyi's thought. My dissertation contains four parts. The first introduces Polanyi's epistemology, drawing attention to the fact that Polanyi regards scientific discovery as the paradigmatic epistemic feat. Part II, entitled "Contact With Reality," documents and explicates Polanyi's realism, the reality statement (as I called it), the notion of contact with reality, and criteria of reality. Part III, "Polanyi and Realism in Contemporary Philosophy of Science," contains three chapters - on progress, truth, and contemporary realist issues - in which I examined the thencurrent debate, and related Polanyi's position to the positions of the participants. Part IV attempts to ground Polanyi's realism in its rightful bedrock of subsidiary, bodily indwelling, drawing on the complementary and profound insights of Maurice Merleau-Ponty.

No need exists to recapitulate Part I for this audience, except to say this: The very word, "discovery," implies something there to be discovered. With discovery as the central paradigm for knowing, realism arguably constitutes the linchpin of Polanyi's entire epistemology. In order to "save discovery" from elimination by modern philosophies, Polanyi had to profess realism and explore the act of contact with it. It turns out, as I have already noted, that the changes he persistently and courageously rings on the realist theme also save discovery from postmodern philosophies.

# 3. Independent Reality and Tacit Knowing

Consider the following theses described in Part II of *Contact with Reality*. Reality exists independently of our knowing it. But, far from this rendering the question of its nature irrelevant to our knowing it, this is the very thing that forcibly compels the knower "not to do as he pleases, but to act as he believes he must." (*PK* 310)

Further, it is only in the context of the possibility of successful contact with reality that the essential features of Polanyi's structure of knowing make any sense: "We can account for this capacity of ours to know more than we can tell if we believe in the presence of an external reality with which we can establish contact. This I do." (*KB* 133) We know more than we can tell. The inarticulate always outruns the articulate. The explicit only exists by virtue of its grounding in the tacit. The subsidiary launches the focal. The kind of foreknowledge that leads to a discovery must be accredited. Polanyi rightly says that you can't justify this most Polanyian aspect of his theory of knowledge without reference to both external and bodily reality.

A "clue," for example, makes sense only in light of an as-yet unspecified focus. To deny the possibility of a truthful contact with reality - one that is successful even though (or perhaps precisely because) it is more (not less) than precisely specifiable - means you couldn't call anything a clue, nor accredit the requisite heuristic feats that in fact any teacher, parent or scientist observes daily.

This realist assumption attends every stage of a discovery. (TD 69) Also, it alone accounts for the kind of tenacious passion that sustains a discoverer or learner, even in the absence of explicitly specified "facts." (PK 7)

To acknowledge reality as existing independent of my knowing it may sound like a thinly veiled attempt to appeal to a "view from nowhere. But Polanyi nowhere denies that his use of "real" and "true" involve personal accreditation or the kind of normativity that pervades every single word we ever use. The point is that reality is accessed, not obscured, only by accrediting personal, normative, embodied features.

### 4. The IFM Effect

If reality exists independently of our knowing it, then how can I know it? What tips me off to its presence? This is the part I love best - Polanyi's "reality statement": "We meet here with a new definition of reality. Real is that which is expected to reveal itself indeterminately in the future. Hence an explicit statement can bear on reality only by virtue of the tacit coefficient associated with it. This conception of reality and of the tacit knowing of reality underlies all my writings." (SFS10)<sup>9</sup> The "indeterminate future manifestations" phrase led me to call it IFM Effect. (Meek, 1983, Chapter 5) Key characteristics of the experience include these: the manifestations are future, hence intimated rather than confirmed; they are infinite in number, indefinite in range; unpredictable yet systematic, expected to be unexpected; exceeding our understanding; appearing partially hidden. The IFM Effect authoritatively speaks for itself, attracting us to itself.

Polanyi's unique IFM Effect renders his system truer to ordinary human experience. The idea of a gestalt-like pattern expresses aptly that reality is both coherent and inexhaustible, both temporally and spatially, and that it is always partially hidden but nevertheless partially anticipated. Always it will surprise us, not by inconsistencies, but by what I might call transforming consistencies. By dint of our unspecifiable foreknowledge of these outcomes, we can experience recognition even as we register surprise. The real so construed properly corresponds to the irreducible integration of particulars which is the cognitive act.

When reality is experienced as being pregnant with unforeseeable implications, it is impossible to devise a picture of reality or a verbal description that exhausts the subject matter and thus is completely true in an exhaustively specifiable sense. Nor do we need this simplistic idea of correspondence to be confident

of the real; the IFM Effect regularly knocks us over in a way that makes us sure we didn't contrive the experience ourselves. Nor do we want such a concept; the IFM Effect better expresses the humbling admixture of success and failure which characterizes any epistemic act.

## 5. Contact With Reality

Polanyi speaks rather of *contacting* reality: "truth lies in the achievement of a contact with reality - a contact destined to reveal itself further by an indefinite range of yet unforeseen consequences." (*PK* 147) Polanyi also describes contact using metaphors such as bearing on, holding or grasping reality. I prefer the idea of grasping; it captures the flavor of the very human drive that vectors us outward continually in our world, which fuels the epistemic integration, which guarantees that the focus itself, once achieved, will only be a way station this side of the unspecifiable "beyond" toward which we always strive.

Polanyi stipulates that we lay hold of *an aspect* of reality. Never is it perfectly clear that we've got hold of the whole thing. The fact that we experience the IFM Effect in no way guarantees, for example, that the effect is caused by the thing that we think is causing it, under the description that we have attributed to it. Joseph Priestley, Marjorie Grene says, "the 'discoverer of oxygen', clung so resolutely to the phlogiston theory of combustion in its death throes, that he refused to admit it was 'oxygen' that he had discovered. He never believed in the existence of such a substance."

Truth as contact is never wholly specifiable or determinate. It will always have to be personally appraised. Contact preserves realism without requiring an unworkable correspondence theory. It corroborates just the tacit powers that Polanyi was concerned to champion. And it means that learning and discovery always retain their beguiling character: we need not suffer disillusionment from thinking no solution exists, nor will we ever abandon an enterprise because we have explained everything.

### 6. Criteria of Contact

Polanyi's operational definition of reality lends itself to use as a criterion. How do we know that we have made contact with reality? While such an assessment is always a personal appraisal based substantially on less (more, actually) than specifiable features, we can nevertheless identify the aspects of our experiences that compel us to suspect the presence of some independent reality (comparable to sensing without seeing that someone else has entered the room, or sensing, in the dark, that you are near a wall). Experiencing the IFM Effect is an obvious criterion. I called this "the reality criterion." An unspecifiable apprehension of indeterminate future manifestations signals contact. It relies on what I have termed a "prospective indeterminacy": I sense future manifestations while they remain unspecifiable.

This is to contrast it with the other criterion of contact with reality, what I have called "the integrative criterion." The other experience which compels us to believe that we have made contact with reality is the success of the epistemic integration itself. In explaining integration to my students, I always use as an illustration the experience of finding the pattern hidden in one of these Magic Eye pictures. Submitting to the authoritative promise and directions of its composer, the subject struggles gamely to focus beyond the surface of the page (whatever that means). After a fight of shorter or longer duration, depending on a number of factors, even the novice can see the pattern and actually recognize his own success. That wonderful, "Oh, I see it!" moment is a Polanyian one. The integrative act itself signals our success. The integrative criterion involves a "retrospective indeterminacy," a comprehension of largely unspecifiable particulars that we've already relied on in achieving the integrative focus in terms of which they are transformed.

These two criteria of reality also infuse a uniquely Polanyian import into three other terms he uses to indicate contact with reality: coherence (the phenomenal aspect of tacit knowing), rationality (the semantic aspect of tacit knowing), and intellectual beauty (the heuristic passions of the knower). Part II of the dissertation closes with an exposition of these concepts, as well as with my justification for not taking Polanyi's idea of an isomorphic correspondence (Sanders' term) between knowing and being as the central meaning of the ontological aspect of tacit knowing.

### 7. Engaging Analytic Philosophy: Progress

Orienting Polanyi's contributions in the constellation of mainstream philosophical discussion constituted the task of part III of *Contact With Reality*. This interaction was essential for me to satisfy my philosophy department concerning Polanyi's credibility (the other stipulation was that Marjorie Grene, a one-time visiting professor, serve on my committee, because nobody in my department knew anything about Polanyi.). Part III corresponds in intent to Sanders' efforts. In the following paragraphs, I will allude briefly to the analytic discussions in the early eighties, while primarily developing Polanyi's position. I am grateful that Sanders and others continue to pursue a rapprochement with analytic philosophers, an effort of strategic importance.

Chapter 8 describes positions held then by Karl Popper, Imre Lakatos, Thomas Kuhn, and Paul Feyerabend concerning the prospect of progress, continuity, success and growth in scientific knowledge. In particular, are successive scientific theories related commensurably (comparable rationally in light of independent standards) or incommensurably? Is scientific knowledge "additive" with respect to truth? It would seem that those who champion some form of realism would have to hold that truth is additive, theories are commensurable, and progress, success, and growth possible. To believe otherwise, apparently, would entail an antirealist position. While Polanyi's unqualified admission of features of the epistemic act which seem to support incommensurability in science - personal commitment, self-set standards, an irreducible integrative feat as the source of new truth - would indicate an antirealism, nevertheless he maintains vociferously that his is a realist position. Hence the apparent problem.

Popper popularized the attempt to express a rational format for testing two hypotheses for comparative superiority, with falsification as a determinative ingredient. Lakatos offered a more sophisticated version that took account of the fact that evidence is evidence generally by virtue of human decision; nevertheless he wished to defend the rational reconstructibility of scientific progress, as over against the "post-critical-mystical message" of people like Kuhn and Polanyi.

Kuhn and Feyerabend, by contrast, emphasized the more discontinuous aspects of the history of science, with a generally chipper attitude toward irrationalism or anarchism. The history of science, they felt, demonstrated the incommensurability of rival hypotheses. Both viewed the change from one paradigm to the next as a gestalt switch. Kuhn offered guidelines concerning how, nevertheless, holders of rival hypotheses may communicate and presumably reconcile differences. For Feyerabend, no switch could ever be conducted rationally. Rather, incommensurability replaced any realism with judgments of taste and subjective wishes. For each, "progress" in science only describes what goes on within the reign of a paradigm, and never the relationship between competing paradigms.

Polanyi speaks little either for or against progress in science, at least in the way it was construed by others. He explicitly corroborates the experiences which Kuhn sums up as evidence for incommensurability; in fact, he probably inspired Kuhn's position. Nevertheless, several features of Polanyi's thought support an optimism concerning growth in knowledge: the possibility of learning - it is possible to advance into the unknown; the sense of a deepening coherence, the irreversibility of the integrative leap; the gradual extension of ourselves into the world; success over time in solving scientific anomalies.

Three things set his approach apart, allowing him to be bullish about progress even as he reconceives the notion. First, for Polanyi, the notion of progress toward truth must be construed as normative as much as it is descriptive. It is a transcending commitment, a moral task. We are committed to pursuit of truth in principle as much as we are in fact. And rather than this rendering science antirealist, this normativity is just what fuels the scientific enterprise and precipitates its success.

Secondly, acknowledging the legitimacy of the indeterminate keeps incommensurability from swallowing up progress, or commitment from swallowing up realism. Progress in science, he says, "is determined at every stage by indefinable powers of thought." Subtract the preobjective, embodied, functionally unspecifiable subsidiaries - easy to do because by definition we don't focus on them as we use them, hard to do once you realize they make everything we call knowledge possible - subtract them, and personal commitment naturally seems arbitrary and advance into the unknown almost logically impossible (right, Meno?) This is just the feature of knowing that analytic philosophers, if they mark it at all, consider anomalous, lucky, or anarchistic.

From a Polanyian point of view, many positions such Popper's and Lakatos's contain Polanyian features, as I show in this chapter. I generally find that a Polanyian "criticism" of just about any system involves, not so much out and out contradiction, but rather the addition of an insight that infuses a transforming consistency, bringing out the best in the "opponent's" position - much as a discovery doesn't so much contradict as transform previously held claims. Continuity, on Polanyi's terms, should be construed less as additive and more as what we might call transformative. This is true of rationality, too. A Polanyian approach challenges old views of rationality. But the result is not irrationality, but profounder rationality, and one that accords better with a systematically inexhaustive world.

### 8. Engaging Analytic Philosophy: Truth

Chapter 9 describes contemporary puzzles about truth, particularly the correspondence theory of truth. The success of a realist position appears superficially to require construing truth as correspondence to the real, rather than as mere coherence or workability or redundancy or performance. The question of truth turns out to blur several more specific questions: the question, what does "true" mean?, is different from the question, how does it get used linguistically?, and the question, "what experiences prompt me to use the word?", and the question, "by what standards do I assess that something is true?" While the correspondence idea expresses what we think truth means, it is pretty useless as a criterion to direct my usage, requiring as it would, a view from nowhere, which is impossible. Theorists have labored to express just what a viable correspondence theory would say a truth is supposed to correspond to, and to articulate the essential role of a background theory in furnishing standards for assessing truth.<sup>13</sup>

In contrast to progress, commensurability, etcetera, Polanyi speaks of truth often (though he says

little about correspondence). But because this system taken as a whole so transforms our understanding of knowing, it can be difficult to compare his position with that of others. I believe that his system addresses the difficulties, if only by showing us why such difficulties are unavoidable outside a fiduciary framework. But rather than such a fiduciary framework cutting us off from truth, it identifies for perhaps the first time the very features by which truth is accessed.

Truth is thought of only by believing it, says Polanyi. (PK305) Thus, to say something is true is like endorsing a check. This is similar to positions held by Black, Ramsey and Strawson, except I do not believe Polanyi means to say that this is all that we mean when we use the word, true. (Meek, 1983, 187) Truth, he also says, is the external pole of belief. (PK286) To say that p is true is to say p, with universal intent, never merely private intent. To say p is "true for me" is a contradiction in terms.

Why must truth be "personal" - where personal means, not private, not nonexistent, but a matter of accreditation as universal? Grene suggests it must be this way because we determine truth by relying ultimately on tacit powers. Antirealists, typically, have not recognized the existence of tacit powers. When we know something, we will certainly still be unable to tell what all its implications are or even whether there is any admixture of error. To know something is to know more than we can tell; thus to know something is true is going to involve knowing more than we can tell. Because we cannot fully spell out all of a claim's implications, even though we anticipate them, we cannot determine explicitly the claim's truth. (Meek, 1983,188) In addition to an inexhaustive indeterminacy in reality that always outruns our grasp, the very conception we employ to capture it itself contains indeterminacies. To Polanyi's aphorism, "We know more than we can tell," I always add, "We say more than we know."

This is not a "poor substitute" for correspondence. It is a far more accurate description of the experience of truth we in fact have, where an idea of correspondence based on knowledge of a merely explicit sort simply is logically flawed.

The assessment of truth is an expression of normativity: Polanyi speaks of truth as the rightness of an action of mental acceptance. (*PK* 320-21) It involves reliance on self-set standards and a robust "background theory." But these fiduciary aspects grow out of a foundation, reality as bodily experienced and subsidiarily held, never unaffected by our interpreted input, but never determined by it alone, not explicitly expressed in a way that captures it as we live in it, and never held to be unrevisable or mistake-free - contrast the standard stipulations of foundationalism in knowledge. (Meek, 1983, 203ff.) Normativity shapes but doesn't prevent our immersion in reality.

Once the common reception of more-than-articulate experiences is acknowledged and taken seriously, what Polanyi says about truth makes good sense. A statement is true if it reveals an aspect of reality, if it achieves contact with reality, if it bears indeterminately on reality. (Meek, 1983, 192) This bearing is, by virtue of its indeterminacy, apprehended by our tacit powers. What makes us think that we are in touch with a reality external to ourselves? The criteria of reality, as we said before: the IFM Effect, and our integrative success.

Correspondence, in the sense of a picture-like representation, is both too detailed and too impoverished to accommodate the adequation of thought and things. Contact replaces correspondence. To say we lay hold of truth does not mean that we lay hold of the whole truth and nothing but the truth.

Indeterminacy means that it is not contradictory to claim truth despite the unavoidable admixture or error. We may be better able, in days to come rather than now, to identify the respects in which a claim was true and those in which it proved false, but even this will itself be a personally accredited claim capable of revision.

If truth lies in indeterminate bearing on reality, then on the articulate level, we seek truth by justifying our beliefs as responsibly as possible. But we justify our beliefs not merely with reference to explicitly stated "facts," but also with reverence for the fiduciary features and powers on which any explicit assessment must rely. Justification itself never replaces or defines truth. It is always conducted "in the hope of truth," as Grene says. (Meek, 1983, 207-8) Nor could truth as mere justification ever explain the very common experiences of learning, learning from our mistakes, and discovery.

We do have ordinary experiences that feel very much like what we might call correspondence. A kind of matching takes place within the course of a discovery. Our tacit foreknowing precedes a discovery, extending out in advance of our explicit knowledge, both as our creative intuition focuses on the unknown comprehensive entity and our creative imagination scrabbles in search of clues (whose significance can at that point be only tacitly grasped). As a result of this preceding of ourselves, when the "Oh, I see it!" moment finally arrives, we recognize it as matching or corresponding with the tacit conclusions already reached. Thus a discovery comes to us with the conviction of its being true. While the ins and outs of this experience would be very difficult to specify, Polanyi has done tremendous service to call attention to the queerness of "the sense of increasing proximity to a solution," "clues," and so on. And of course, even if we ever can specify it, the act itself would always be functionally unspecifiable. (Meek, 1983, 196)

# 9. Puddefoot and Polanyi

In his article in this volume, John Puddefoot summons readers to redefine "true" and "real" in a way that removes traces of metaphysical realism, a doctrine which he calls arrogant, childish and irresponsible, that he believes has been invoked to support unjust violation of other persons' free space, both verbally and in the devastations of actual war. <sup>15</sup> Given his concern, and the seriousness of the issue at stake, it is important to ask how Puddefoot's claims comport with Polanyi's realist theses as described here.

Puddefoot identifies metaphysical realism with the claim that reality and truth (as defined by a claimant) exist independently of all knowers. An appeal to its authority encroaches on another person's free space. Puddefoot rightly asserts that a "view from nowhere" is inherently inconsistent. He rightly sees that when such an appeal is used, apart from alternative justification, to legitimate acts of human injustice, it is abhorrent. He rightly claims that such a view fails to recognize the human condition of knowledge as tied inseparably to the personal and the social dimensions of human experience, a condition of inescapable risk and responsibility in knowing. He rightly believes that Polanyi helps us recognize this aspect of knowing.

I would like to suggest, however, that Puddefoot is mistaken in thinking that the alternative he proposes (1) is the only alternative to metaphysical realism; (2) is the Polanyian alternative; or (3) escapes the same criticisms he levels at metaphysical realism, namely that it is societally dangerous, that it promotes epistemic irresponsibility and that it is internally inconsistent.

According to Puddefoot, we should see that knowledge must be ratified by communities of enquiry, and that truth should be reconstrued in terms of cultural accreditation, or currently advisable human action

(section 1).

It should already be clear how Polanyi's model offers an alternative to the false dichotomy of modernism and postmodernism. Contact replaces an unworkable correspondence, strengthening rather than weakening the case for realism by bringing to light the traditionally unnoticed epistemic realm of subsidiaries, a rich array of more-than-specifiable experiences. Puddefoot, while taking seriously what Polanyi said about the social dimension of knowledge, overlooks other facets of the tacit coefficient we all embody. Puddefoot's alternative to metaphysical realism could be the only alternative only if one fails to see or accredit these other facets. It is a mistake to reduce the tacit to the political. I teach my child to objectify a certain item as a baseball, using a societally developed term and concept. But no tribal ratification or its absence could mitigate entirely the effect of her getting mashed in the face with one.

Already we see, secondly, that Puddefoot's theses are not exactly Polanyian. I am unclear whether for Puddefoot this is good or bad. The two positions obviously diverge: Polanyi, as we have seen, insists that his entire system presupposes that there is something there to discover, a reality existing independently of my knowing it. Granted, *we accept* personal knowing as a token of reality. Polanyi's profound insights compel a more sophisticated handling of notions of truth and reality. But that sophistication accredits the fiduciary in the pursuit of truth; it doesn't give up the pursuit.

Thirdly, I suggest that a political reinterpretation of truth actually shares with metaphysical realism the epistemic irresponsibility Puddefoot longs to avoid, for both positions seek to reduce truth to something exhaustively describable, that involves no personal risk. Many people today believe that it is self-evidently and universally wrong to risk violating someone else's space. To define truth in a way that might risk an intrusion would be intrinsically abhorrent. Yet the human experience regularly requires and appraises such risk. I intervened in my daughters' lives, for example, to insist on piano lessons as long as we were able to afford it. I refused to entertain complaints. Recently, I heard my youngest, now 12, tell someone that my policy "had worked," meaning that they all like music and recognize that they are skilled now in a way they would not have been had I not violated their personal space. I silently exulted, realizing that my responsible risk had paid off, but realizing, humbly, that it might not have. Such decisions are regular occurrences - the emergency room offers a hotbed of similar examples. Polanyi's view embraces the risk and responsibility of truth in a way that the proposed political reduction of it does not.

Nor is the proposed eclipse of truth any more likely to save lives, for it offers even less ground for intercultural interest, let alone respect. If another tribe's truth by definition has no bearing on my truth, no impetus remains for mutual acquaintance or restraint.

Most importantly, the proposal that truth be defined as tribally determined effectiveness fails because of unavoidable internal inconsistency. If this is how we define "true," then we must define "effective," and specify criteria for its assessment. But for a claim to be "effective," it must in some way have gotten it right about the world - there must be some successful contact, and intimations in light of which we gauge how we are doing. "Effective," or "worthwhile," Polanyi would say, are pseudosubstitutions for truth. The charges he leveled at positivism in "Science and Reality" also apply to a political eclipse of truth.

Puddefoot cannot avoid using evaluative language that presupposes a conception of an independent truth or reality. How do I decide whether I can trust a person or a tribe? Does my decision not involve assessing

what they tell me against my experience? Oh, but my experience is tribally conditioned. Granted, but what I experience can be revised by me whenever I sense that it is mistaken. "Mistaken," a word that Puddefoot also uses, is one of those magic Polanyian words - explicable only if subsidiary, more-than-we-can-tell knowledge exists. And that sort of knowledge only exists if by it we grasp an unspecifiably rich reality. A political redefinition of truth can't consistently explain mistakes or their correction.

I believe that part of the solution lies in realizing that concepts of truth and reality often function normatively rather than descriptively. They are norms to which we aspire, which shape the enterprise which is our life; they are norms that we cannot eliminate no matter how hard we try. If we eclipse "truth," we will find ourselves inventing another word for the same thing. *This* is the unavoidable risk of the human condition; we can only choose to act responsibly or irresponsibly. No attempted definition of truth will free us from the responsibility of asking, regarding any claim that appears to measure up, "Yes, but is it true?" For ultimately, truth lies in its indeterminate bearing on reality, and thus is ultimately unspecifiably and fallibly determined.

# 10. The place of analysis

I wish also to comment on Sanders' and Cannon's interaction concerning whether a philosophical analysis of an analytic sort essentially obscures the Polanyian message. Does an articulation of the subsidiary destroy it? Is the attempt to communicate Polanyi's thought in the style of analytic philosophy essentially self-defeating? Cannon suggests an affirmative answer (Cannon, 1996-97, 22)

Sanders replies that a theory of tacit knowing need not and could not have the character of the tacit knowing itself. A theory should be explicit and thus susceptible of analysis, even if it is a theory of tacit knowing. While this is a helpful distinction, there remains a sense in which Cannon is still right. But for reasons neither of them has mentioned, the program of analysis can go forward even admitting Cannon's concern.

Cannon is right in the sense that nothing ever is exhaustively expressed. If your goal is exhaustive articulation, it just will never happen, even if you are convinced otherwise. We need to remember that a statement, no matter how explicit or well articulated, always retains an allusive, evocative, aspect (call this the indeterminate bearing on reality, IBR!). Even the soundest specification of the theory of tacit knowing will bear this mark, and not because it is a theory about tacit knowing. Careful articulation never obliterates the IBR. Polanyi warned of the dangers of "unbridled lucidity"; but his own theses show that such a state of affairs never in fact pertains (*TD* 18).

In fact, careful articulation, according to both Polanyi and experience, most likely serves to enhance this IBR, and to increase the range of our contact with reality. I have in mind Polanyi's discussion of destructive analysis (*TD* 19). Subsidiary clues embraced within the integrative feat are, in reference to that feat, *functionally* unspecifiable. Not all of them are intrinsically unspecifiable. We can specify at least some of the subsidiaries. It's just that to specify them is to focus on them and this destroys the first integration. But I think we have to refrain from interpreting the word, "destroy," in an, of-course-we-would-never-want-to-do-that sense. The sense he means it to have is, of-course-we-would-never-want-to-do-that-permanently, and, of-course-you-shouldn't-expect-a-reintegration-unless-you-stop-it. But experience teaches, as Polanyi knows, destructive analysis is a, perhaps the, key tool for learning. Would-be pianists think about how their thumbs cross under their fingers while doing scales; would-be golfers study in slow motion videos of Tiger

Woods; would-be painters study techniques of water color. They do so, not to obliterate their talent, but to *extend* it. Analytic philosophy has brought a precision and sophistication to the discipline. We have gained much in the way of carefulness in our work, and also skill in exploring concepts and distinctions. This destructive analysis (*analysis*, please note) extends us into our world, as does any tool we have learned to wield with skill. The mistake Polanyi would have us avoid is rather a *fixated* destructive analysis - one which restricts knowledge to its result. But even this, as I have shown, where it is attempted, fails to neutralize the Polanyian features present.

## 11. Immersed in reality

In closing, a brief word about Part IV of the dissertation. While philosophical analysis may extend the range on which we contact reality, few analysts seem to explore the bodily rootedness of all thought. No amount of analytical articulation will make us feel what it is like to live in the subsidiaries as extensions of our body, even though it extends that experience. We know the subsidiaries truly as we live through them as an extension of our lived bodily experience. Hence the value of Merleau-Ponty's remarkable, very unanalytical "analysis" of what he calls perception. Any discussion of truth, therefore, will always in some measure fall short - not because there is no external world, nor because we're doomed to be separated from it, but because we are immersed in it.<sup>17</sup>

### **Endnotes**

- <sup>1</sup> Charles Dickens' phrase, expressing a major theme in his *Tale of Two Cities*.
- <sup>2</sup> A.F. Sanders, *Michael Polanyi's Post-Critical Epistemology: A Reconstruction of Some Aspects of "Tacit Knowing,"* Amsterdam: Rodopi, 1988; "Truth in the Fiduciary Mode: A Reply to Professor Emmet," *Tradition and Discovery* 15 (1987-89), 2, 27-33; "Criticism, Contact with Reality, and Truth," *Tradition and Discovery* 23 (1996-7), 3, 24-37. Esther L. Meek, *Contact With Reality: An Examination of Realism in the Work of Michael Polanyi;* Temple University, October 1983.
- <sup>3</sup> University Microfilms #85-09387, Ann Arbor, Michigan,
- <sup>4</sup> Sanders carefully responds to charges such as these in his 1988 book, according to Cannon, "Sanders' Analytic Rebuttal to Polanyi's Critics, With Some Musings On Polanyi's Idea of Truth," *Tradition and Discovery*, 23 (1996-7), 3, 20.
- <sup>5</sup> See for example Bertrand Russell's *The Problems of Philosophy*, (1912 (Oxford, 1959)) Ch. 1.
- <sup>6</sup> Lesslie Newbigin, *Proper Confidence: Faith, Doubt and Certainty in Christian Discipleship* (Grand Rapids: Eerdmans, 1995),74.
- <sup>7</sup>I hope someday to show how Polanyi's structure of tacit knowing offers an undergirding and elucidation for the proposals of thinkers such as theologian John Frame, in his *Doctrine of the Knowledge of God* (Phillipsburg, NJ: P&R, 1987), and Reformed Epistemologists such as Alvin Plantinga and Nicholas Wolterstorff.
- <sup>8</sup> See Marjorie Grene's wonderful critique of Russell's protocol sentence, "This is red", *The Knower and the*

Known (Los Angeles: University of California Press, 1974), 160ff.

<sup>9</sup>Note that he wrote this in 1946. The claim remained with him, unrevised, for his entire writing career.

- <sup>12</sup> In my dissertation at this point I referenced Alasdair MacIntyre's work, "Objectivity in Morality and Objectivity in Science," and Grene's response to it in *Morals, Science and Sociality*, the Hastings Center Volume III of The Foundations of Ethics and Its Relationship to Science, 1978.
- <sup>13</sup> I discuss the work of several philosophers, including Strawson and Quine, Contact with Reality, 179-86).
- <sup>14</sup> "Tacit Knowing: Grounds for a Revolution in Philosophy," *Journal of the British Society for Phenomenology* 8 (October 1977), 168.
- <sup>15</sup> John C. Puddefoot, "The Trust Relationship," this issue.
- <sup>16</sup> Dale Cannon, "Sanders' Analytic Rebuttal to Polanyi's Critics, With Some Musings On Polanyi's Idea of Truth," *Tradition and Discovery*, 23 (1996-7), 3, 17-23; Andy Sanders, "Criticism, Contact With Reality and Truth," *Tradition and Discovery*, 23 (1996-7), 3, 24-36.
- <sup>17</sup> "Why can't we check our beliefs against reality?" asks Marjorie Grene. "Not, as sceptics believe, because we can't reach out to reality, but because we're part of it." "Knowledge, Belief and Perception," The Andrew W. Mellon Lecture, Tulane University, Fall 1978.

# **WWW Polanyi Resources**

The Polanyi Society has a World Wide Web site at http://www.mwsc.edu/~polanyi/. In addition to information about Polanyi Society membership and meetings, the site contains the following: (1) the history of Polanyi Society publications, including a listing of issues by date and volume and a table of contents for most issues of *Tradition and Discovery*;(2) a comprehensive listing of *Tradition and Discovery* authors, reviews and reviewers; (3) information on locating early publications; (4) information on *Appraisal* and *Polanyiana*, two sister journals with special interest in Polanyi's thought; (5) the "Guide to the Papers of Michael Polanyi" which provides an orientation to archival material housed in the Department of Special Collections of the University of Chicago Library; (6) photographs of Michael Polanyi; (7) the call for papers, programs and papers for upcoming (or recently completed) meetings.

<sup>&</sup>lt;sup>10</sup> The Knower and the Known, 147.

<sup>&</sup>lt;sup>11</sup> For bibliographic information on these writers, see my dissertation.

# Science, Religion and Polanyi's Comprehensive Realism Andy F. Sanders

ABSTRACT Key Words: scientific realism; value realism; comprehensive realism; Polanyi's axiology; Polanyi's definition of "real"; theological realism; contextual interpretation of "real"; Gulick In this essay, I argue that Polanyi developed a realism which ranges over the sciences and the humanities as well as over values. I argue that his comprehensive realism had best be understood as relative to veracious inquirers participating in communal traditions of inquiry and that this leads to a theological realism according to which the divine realities are interpreted contextually, i.e., in terms of a particular religious form of life, rather than in terms of the grand metaphysics of classical theism.

### 1. Introduction

In what follows, I will take up again the issue of the two cultures where it was left in the *Zygon* discussion on Polanyi's realism nearly two decades ago. The question then was whether, and to what extent, Polanyi's post-critical philosophy supports theological realism. Phil Mullins put the problem as follows "How did Polanyi understand the distinction between science and religion with respect to their bearing on reality? What is the ontological status of religious meaning within a Polanyian paradigm?" Some Polanyi interpreters hold that the ontology of hierarchical levels leads to a theological realism according to which the reality of God is not just another way of imaginative and meaningful world-making but an ultimate reality independent of our conceptualizations and knowledge. Others reject this claim and, since both parties appeal to Polanyi's work, re-opening the discussion seems all the more interesting.

My aim in this paper is to try to shed some light on the way in which Polanyi tried to bring theology (and, *mutatis mutandis*, the other humanities) under the scope of his definition of "real." I will argue that out of his work a comprehensive realism can be distilled that includes a realism of values. The issue is large and complex because various aspects of his epistemology, ontology and axiology will have to be considered before we can turn to the question of theological realism.

### 2. The Definition of "Real"

It is undisputed, I take it, that Polanyi was a scientific realist. Already in his earliest work, he maintained that it is the aim of science "to discover the hidden reality underlying the facts of nature" [...] and, as to scientific propositions, that it is "of their essence to be concerned with reality" (SFS 23). Similar allegations can be found in an article of 1967 in which it is argued that scientific theories give a true description of the real world, and that science can discover new knowledge about fundamental reality (cf. SR 176). By "fundamental," I think Polanyi meant realities at a deeper level than the tangible and directly observable ones. Since reality is hidden and we can make contact only with aspects of it, it is indeterminate as well. Still, scientific theories claim "to represent empirical reality" (PK 133) and scientific beauty "establishes a new contact with external reality" (PK 148). In staking these claims, Polanyi's aim wanted to oppose the anti-realism of logical positivism according to which scientific theories and the theoretical entities ("electron," "proton") postulated by them are not descriptive of anything but mere constructions to facilitate deductions or to derive testable predictions. Against anti-realist theologians (Osiander, Bellarmine and Melanchton) and physicists (Mach, Poincaré and Duhem), Polanyi (like Popper) defended the metaphysical conception of "a reality underlying mathematical relations between observed facts" (SR 178f.).

But was he as ardent a realist regarding the humanities? For an answer, we have to consider, first, his bold redefinition of "real" and, second, his anti-reductionist ontology, including his thesis that knowing and being are structurally similar. In the new preface (1963) to SFS, Polanyi proposed a new definition of "real":

(R<sub>1</sub>) Real is that which *is expected* to reveal itself indeterminately in the future. Hence an explicit statement can bear on reality only by virtue of the tacit component associated with it. This conception of reality and of tacit knowing of reality underlies all my writings (*SFS* 10, my italics, AFS).<sup>2</sup>

In "Science and Reality," "real" and "true" are defined in terms of each other:

(R<sub>2</sub>) If anything *is believed* to be capable of a largely indeterminate range of future manifestations, it *is* thus *believed* to be real. A statement about nature *is believed* to be true if it *is believed* to disclose an aspect of something real in nature. (SR 191, my italics, AFS)

Notice that the phrases "is expected" and "is believed" are not used accidentally. The question "By whom?" has, at least on my reading, a clear answer: "real" and "true" are defined from the point of view of the veracious inquirer who is as such a member of what Polanyi called the Society of Explorers (SoE). In other words, "real" should be understood in the sense of "real to a veracious inquirer." No subjectivism flows from this for such an inquirer is by definition participating in a particular tradition and practice of inquiry, affiliated to the community which sustains it and dedicates itself to the transmission and improvement of the values, standards, problem solving techniques, etc. inherent in it.

From (R<sub>1</sub>) and (R<sub>2</sub>), a general and quite remarkable definition of "real" can be distilled:

® that which is believed to be capable of a largely indeterminate range of surprising future manifestations.

Whether a comprehensive entity has this "veridical quality" is intimated at a tacit level. When making contact with some aspect of reality in trying to solve a problem (discovery), an inquirer may become aware of this in virtue of the presence of intimations of future manifestations of that aspect. Meek has aptly called the experience of these intimations "the IFM Effect," that is, "the feeling that the resulting conclusion will go on being confirmed in as yet inconceivable and *surprising* ways." In particular, experiences of intellectual beauty, harmony and coherence are indicative of contact with reality.

Since capacities allow of degrees, ® implies that some things may exhibit surprising manifestations to a larger degree than others. Polanyi explicates this in terms of profundity and significance (cf. *TD* 32f.). Persons, theories and problems are much more profound entities than grains of sand or cobblestones. Both are real but persons, theories and problems are "more real" or "deeper" in virtue of their greater capacity for surprising future manifestations. The crucial point is not the scope or quantity of the manifestations (in that case the fundamental laws of nature would be supremely real) but rather their surprising character. The use of "surprising" in the definition indicates that the future manifestations of a pending discovery will be unexpected, of lasting interest to the field of inquiry in question and thus exciting, enjoyable, fruitful, projectable and the like.

An obvious objection to ® is, as we will see shortly, that it appears to conflate what is real and what is meaningful and thus to allow almost anything to be called real. Many things are meaningful but not real and so confusion results. Though the point of this objection is clear and distinct, it does seem to me to gloss over Polanyi's claim that the sciences and the humanities differ only in degree, not in kind, as well as his attempt to dissolve the fact-value dichotomy and his realism of values.

### 3. From Knowing to Being

As Polanyi developed his ontology out of his epistemology, it may be useful at this point to consider briefly the idea of a hierarchical ordering of the various kinds of inquiry. A corollary of the theory of tacit knowing is the rejection of "any discontinuity between the study of nature and the study of man" (*SM* 72). The exact sciences like logic and mathematics require a relatively low degree of personal participation but in the natural sciences, the sciences of life, and the social sciences, indwelling increases both in profundity and in complexity and reaches its most comprehensive and intimate form in history, particularly in the study of great historical figures (cf. *SM* 72, 80). Understanding or "indwelling" at these higher levels is deeper and more comprehensive because the range of subsidiary particulars involved becomes larger and more intimate: in order to understand, a person has to become wholly or largely "immersed" in them. But indwelling cannot be construed as the basis for a sharp distinction between the natural sciences and the humanities. Quite simply, "indwelling is less deep when observing a star than when understanding men or works of art" (*KB* 160) and so the difference is one of degree, not of a kind. Hence, a methodological (epistemological) dualism is rejected because "science, conceived as understanding nature, seamlessly joins with the humanities" (*PK* 1964, xi).

The idea that the more a subject matter can be made explicit and precise, the lower the degree of indwelling or personal participation required for understanding it, can be developed further by taking scientific inquiry as a functional structuring or cognitive ordering of a certain domain of reality. The sciences may plausibly be seen as hierarchically ordered along a continuum stretching from a relatively small meaning variance of the concepts employed in the exact and the natural sciences to an ever increasing meaning variance in the social sciences and in the humanities. For example, in psychology, sociology and history, forming successively higher levels of structuring, the possibilities of attributing meaning to the data become progressively more numerous. Obviously, this has important consequences for the possibility of testing and thus for their status as empirical sciences. In the humanities, the degree of indwelling, meaning variance and theory-ladenness of the data increases even more, while empirical testability becomes proportionally more difficult, if not impossible.

Levels of cognitive structuring can be found even within certain disciplines. For example, in psychology such levels can be discerned in mechanistic, organismic and humanistic theories. Mechanistic theories aim at hypothetico-deductive explanation. Its hypotheses are more easily testable than those put forward in (higher level) organismic and humanistic theories. In the latter, often at most a loose "fit" can be claimed on the basis of the trained personal insights of the investigator. In brief, the higher the level of cognitive structuring, the greater meaning variance, the lower the degree of empirical testability, the less the possibility of (actual) falsification and the more strongly observation of data becomes "theory-laden." Testing becomes here virtually theory-immanent. The higher the level of structuring, the less the possibility of precise explanation, and the larger the role of understanding. However, even at the lower levels, understanding is never absent, just as at the higher levels explanation will never be completely absent.<sup>4</sup> Finally, on all levels of cognitive structuring, new (non-trivial) knowledge is achieved by acts of tacit integration as self-transcending feats of human creativity and imagination, rather than by deduction or probabilistic inference according to

some set of specifiable rules.

So far the epistemological side of the coin. What about its ontological counterpart? Realists, and Polanyi is no exception, typically take it that the hierarchical ordering of the sciences is paralleled by an hierarchy of comprehensive entities, such as natural systems and processes of varying levels of complexity. The higher up the hierarchy, the more complex and the longer evolved in time such systems and processes are. So far so good, but in the ontology delineated in *The Tacit Dimension*, Polanyi construes a structural analogy between human knowing and its objects (cf. *TD* 33). The act of integration that brings particulars to bear on a comprehensive entity is said to be analogous to the evolutionary emergence of higher level entities, the boundary conditions of which cannot be inferred from the laws governing their parts.

Though the thesis of a structural similarity between knowing and being is puzzling, I would suggest two plausible readings of the "ontological equation," to use Jha's handy term. The first is to take it as an attempt to ensure the possibility of contact with reality. Polanyi may then be seen to argue that (at least so far) the human mind has turned out to be a highly successful product of evolution. Since the cognitive capacities of the mind display emergent features (self-transcendence) and the mind is itself an emergent feature of the body, it would not be implausible to expect nature to exhibit similar features. In this way, human knowing is at least potentially attuned to reality and true discovery and real novelty are possible. This reading seems to foreshadow the "anthropic principles" which have been proposed in philosophical cosmology since the end of the sixties. The world is compatible with human knowing or, stronger even, the world has structural properties which allow knowing (as human being) to develop.

On the second reading, the ontological equation is part of a comprehensive argument against materialist naturalism to the effect that certain types of ontological or causal reduction (colors as nothing but certain sorts of photon emissions, genes as nothing but DNA molecules, and especially consciousness as nothing but neurons firing) are either mistaken (as for instance in the case of consciousness) or destructive of meaning, especially in the social sciences. This reading brings Polanyi's concerns in contact with the ongoing debates in the philosophy of mind about the ontological status and (ir)reducibility of consciousness and subjectivity. Surely, this issue is of central importance to Polanyi's ontological stratification thesis. It may be interesting to point out in this connection that a powerful case for the ontological status of consciousness has recently been made by Searle who argues against materialism that consciousness is not only both a mental and a natural (biological) phenomenon but also irreducible, at least as far as current science goes.<sup>5</sup>

So far it seems safe to say that, according to Polanyi's realism, natural reality is independent (not constituted by human concepts, language or knowledge), but nonetheless knowable. Reality as we know it, is stratified in that it is made up of levels of certain types of comprehensive or comprehensible entities of increasing complexity and profundity. Natural and biological entities are real but independent of human knowing, while social and cultural entities are real but dependent on human activity for their existence and their continued functioning. They are even more real in that they require a larger degree and range of dwelling in subsidiary particulars (including feelings, emotions, stances, beliefs, etc.). As they are more real, they are also more meaningful.

### 4. Intrinsic Interest and Value

An interesting notion to be considered in this connection is that of intrinsic interest. I think it plays an

important role in getting us from knowing and being to the issue of meaning. Consider for example the following passage in which morality and spirituality are talked of in terms of degrees of "intrinsic interest":

In man himself his moral life is more interesting than his digestion; and, again, in human society the most interesting subjects are politics and history, which are the theaters of great moral decisions - while ... closely interwoven with these human concerns, there is great intrinsic interest also in the subjects which affect man's contemplation of the universe and his conception of himself, his origin and destiny (*PK* 138f.).

*Prima facie* the idea seems simple: human concerns are to be put back in the center of our view of life and, accordingly, the subject matters of the various modes of inquiry may be hierarchically ordered in proportion to their "intrinsic interest." However, as intrinsic interest cannot be arbitrary, what determines it? The answer I think lies partly in Polanyi's traditionalist conception of inquiry, partly also in his axiology.

As virtually anything might be interesting to somebody, how to avoid whim and arbitrariness? How are we to make out which properties of a thing are, and which are not interesting in themselves? At this point we have to invoke Polanyi's "firmament of universal values," viz., truth, beauty, justice and charity. Jointly, these values constitute the good, both intrinsically and as an end. As "deposits of a ... historic succession of intellectual upheavals" (*PK* 158, 201), they emerged in the cultural realm. Unlike natural entities, these values are not independent, but they may be said to have a relative independence and thus objectivity in that they overarch a large part of human culture.

Polanyi expresses his adherence to these values with universal intent: from his perspective, they are universal. Acceptance of, and striving towards these ultimate values in action and judgment is feasible for a knower only in virtue of her affiliation to a community of inquiry, such as the SoE (and, beyond that, the Free Society). In fact, the SoE is wholly shaped by its adherence to these values, both in its practice of "the art of free discussion" and in its dedication "to the fourfold proposition (1) that there is such a thing as truth; (2) that all members love it; (3) that they feel obliged and (4) are in fact capable of pursuing it" (SFS 71). Here we see clearly that for Polanyi science and other modes of inquiry are both fact- and value-based.

Since truth as such is abstract, appraising things in terms of it is always relative to particular contexts of inquiry. In virtue of her intellectual passions, the knower is able to discern (selectively), and is guided by (heuristically), tokens of reality and truth, such as the IFM Effect and experiences of beauty, coherence and harmony. Since they foreshadow the grasping of aspects of reality, they attract and evoke the intellectual passions. Evolved from biological appetites and drives, these passions fuel the cognitive efforts of inquirer in the various stages of her search for reality, such as finding a good problem, intimating future and surprising manifestations, solving a problem, making a discovery, constructing a new theory, contributing to the growth knowledge, finding a correct interpretation of a painting or text, and so forth. The sustained effort to achieve these things in groping one's way towards reality is "[a]cting responsibly under an over-arching firmament of universal ideals" (SM 41). If these things are successfully achieved, intellectual joy and delight will be an accompanying result and there is value in that as well.

Putting this in Polanyian idiom, we might say: what is believed to be more valuable or worthy in itself is also believed to be more intrinsically interesting. This is not a theory about human beings in general but a thesis about a special class of them: veracious inquirers in search of an ever deeper understanding of the

domain of reality they happen to be interested in. Hence the "intrinsic interest" of an entity is determined by the degree to which its properties exemplify or exhibit any or all of the four fundamental values. The higher up an entity is on the ontological scale, the more real it is and the more its properties may be expected to exemplify these values.

It would also seem natural to suppose that for Polanyi what is (more) intrinsically interesting is also (more) meaningful. The kinds of meaning he seemed to be particularly interested in are those which people attribute to their experiences of tokens of intrinsic value (e.g., beauty, harmony, coherence, novelty, pleasure) in striving to bring about valuable things (e.g., knowledge, understanding, justice, charity, self-realization) and in having certain attitudes towards ultimate or ideal values (e.g., contemplating, loving, admiring).

Finally, I think we should be careful not to draw the conclusion from this that, say, the results of physics and mathematics are less meaningful, because less intrinsically valuable than say, the results of cultural anthropology. Some champions of the cleavage between the sciences and the humanities might be inclined to do so. From a Polanyian point of view, they are mistaken. For they would be overlooking the fact that that future discoveries may lead to changes on lower ontological levels that may well influence (via changes in their boundary condition) levels above them and that the natural sciences are in fact constantly producing such changes.

In sum, Polanyi's axiology and his value realism is an essential component of both his ontology and his epistemology. Let us put this finding to the test by briefly considering Gulick's critique of Polanyi's comprehensive realism for its conflating the real and the meaningful.<sup>6</sup>

# 5. Realism and Meaning

Recently, Gulick argued that the idea that the more meaningful a thing is the more real it is, results in "a blurring of genuine differences between reality and meaning" and "an ambiguous idealistic ontology" (1999, 8). There is a massive disagreement here on the scope of "real." In contrast to Polanyi, Gulick restricts the extension of "reality" to what exists as discernible by our senses and by science. For him, reality comprises the empirical sensible world including human cultural artifacts. The humanities deal with "cultural forms of meaning" but apart from their material basis, these forms are not real.

Clearly, on Gulick's account, Polanyi's comprehensive realism must be rejected (though not the scientific realism contained in it). As the issue is deeper than a mere quarrel about the meaning of the word "real," let us have a look at the Gulick's two main objections. The first I'll call "the falsity objection" which says that the meaningful should be separated from the real because knowledge of reality is fallible: "[o]ur claims about the real may be meaningful but false" (p.9).

Why would this objection falsify Polanyi's proposal to consider what is more significant as also more real? What precisely is the argument? Supposedly, a claim about reality is as such meaningful and thus something significant. The argument might then go as follows: (1) if something is significant, it is real, and if (2) what is real is true, it follows that (3) if something is significant it is true. But from the fact that (4) even significant things may be false, it follows that (3) is false. Thus (1) and (2) cannot both be true, and since (2) is true, (1) must be false.

In my view, this argument is irrelevant because (1), (2) and (3) are not correctly representing Polanyi's

position. In accordance with his definitions of "real" ( $R_1$  and R2), we have to introduce intensional (modal) terms, for example by reformulating (3) into: (3') if something is expected to reveal itself ..., this indicates that it is true. If we take this into account, it is immediately clear that (4) does not contradict (3'). Believing something as true while acknowledging that it may turn out to be false is not contradictory but precisely the risky predicament of any veracious inquirer.

But I may have misconstrued Gulick's argument. Perhaps he is only saying that Polanyi's comprehensive realism implies that truth-claims in the humanities cannot be falsified or verified. This would put the matter in a different light for, surely, his demand that "real" and "true" should be distinguishable from "false" is right. Of course we now might invoke Polanyi's fallibilism (e.g., *PK* 164, 314f., 404), but this may not convince Gulick. After all, Polanyi might be paying only lip-service to the thesis of human fallibility.

The worry might be that the IFM Effect lacks adequate discriminative power: too many things could be called "real" on account of it. However, this would be overlooking that the IFM Effect and experiences of intellectual beauty, etc. have their place fully in contexts of discovery. Alleged novelty (discovery) still must prove its mettle and gain its status of real or true novelty by becoming accepted as such within the relevant tradition of inquiry. That Polanyi never made a serious case for the importance of rules for testing in the natural sciences can be explained easily. He took them for granted as part and parcel of normal scientific practice and his endeavor in the philosophy of science was mainly concerned with the context of discovery. After all, he wanted to show that those who kept philosophy of science confined strictly to the context of justification were seriously distorting scientific practice.

The relevance of this is not confined to the natural sciences only. As I pointed out earlier in regard to the social sciences and the humanities, verification or testing becomes increasingly less empirical, more theory-immanent and thus also more difficult. Different schools and approaches may exist even in one and the same discipline. But that is not to say that no checking or evaluating procedures exist at all. For example, criteria like coherence, comprehensiveness, plausibility and even much less exact means of evaluation may be used (beauty, harmony). Again, how these criteria are to be applied in any particular case is relative to the field of inquiry in question, its tradition, its paradigmatic examples, values, standards, maxims, etc. and a matter of personal judgment, skill and competence as well. For example, "plausibility" in mathematics will have different shades of meaning than in, say, sociology, while "artistic beauty" in art will be different than "intellectual beauty" in mathematics.

This, I think, effectively deals with the falsity objection. So let us now turn to Gulick's second objection, "the illusion objection." It runs as follows. Given Polanyi's reality criterion (the IFM Effect), it becomes virtually impossible to specify "the grounds on which we claim anything is not real." So Gulick asks: "how is one to tell whether the meanings created are contacts with reality, illusions, playful explorations, or mere day-dreaming?" (1999, 18f.). Examples are adduced to illustrate that things may be meaningful but not real, like cartoon characters of Walt Disney, paintings of Picasso, prose of Proust and cantatas of Bach (p.18). Worse even, Polanyi's definition of "real" would allow Santa Claus, Azande witches and Mickey Mouse all to be real. Mickey Mouse is not real in any referential sense but "has an objective presence as a cultural form of meaning that has the capacity ... of evoking ongoing rich experiences of meaning" (p.17).

Obviously, the illusion objection is directly opposed to Polanyi's IFM criterion of reality. Though "cultural forms of meaning" are as near as one could get to what Polanyi would call "real" in the cultural

domain, Gulick maintains they are meanings, cultural constructions, but not real. His position implies that, for example, God may be more richly meaningful than Santa Claus, but both would still be less real than a stone. In fact, both would not be real at all.

Ignoring the strong whiff of positivism detectable here, what sort of a reply could be given by a comprehensive realist? To begin with, she would object that Gulick is employing an empiricist definition of reality indiscriminately across cultural practices and that this makes his examples misleading. On her construal, Polanyi's definition of the real pertains to differing contexts of inquiry and meaning comes into the picture as what is significant to the community of inquirers in question. Whether and why Mickey Mouse is an enjoyable character is a matter to be decided by the relevant culture studies. But as Gulick explicitly "leaves aside ... the ontological status produced by studies of cultural forms of meaning" (p.17), he doesn't even begin to address the issue.

He cannot do so because he has carved up the world in things that are empirically and scientifically real (realities) and cultural forms of meaning which are not (meanings). Where this leaves cultural realities like money, marriage, elections, democracy, rights, duties, values and so on, remains unclear. All these things are meaningful but surely that is neither to say that they are (identical to) meanings nor that they are only real as far as their material manifestations go. On the contrary, when a marriage or a democracy is seen to be real only in this sense, we normally start wondering whether it is a real marriage or real democracy.

Furthermore, on Gulick's construal meanings can be rich, worthless or even toxic (p.20). By what criteria are we to distinguish between them? Surely, somewhere along the line an appeal to values is unavoidable and this leads us back to the question of the (ontological) status of values. But Gulick leaves the question whether values constitute a higher level of reality than consciousness open as well (*ibid.*). Given his empiricist definition of the real, however, it is hard to see how that question could have a positive answer. Rather than risking the reopening of the fact-value dichotomy, he is in fact reopening it. For on his construal there is no way of envisaging a stratum of ultimate and ideal values which are supremely significant and thus most real (to those who are committed to them). If these values are *both* real *and* significant, the illusion objection is discarded with.

Of course there is no proof in this matter. Most of us are culturally and academically conditioned to consider the upholding of values either as a private or as a political affair. Polanyi's value realism may be seen as a proposal to take values seriously. One way to do so would be to acknowledge that without taking account of the relevant values, no good sense can be made of reality, science or the humanities to begin with. Another way would be to start to trace how values shape our inquiries. In doing so we might be confronted with the question which values we are ourselves upholding. As we saw, there can be no question that veracious inquirers uphold a series of ultimate and intrinsic values which are most real to them. In contrast to Gulick who asserts that the question "what are the visions and values you are willing to live - and perhaps die - by?" is not settled by an appeal to what is, but rather "a matter of what carries us away, of what ought to be (what is most meaningful)" (p.25; this issue section VI), comprehensive realists settle this question by an appeal to what is real. Precisely because they expect the morally (aesthetically, cognitively and spiritually) good to be capable of an inexhaustive range of surprising future manifestations, they believe it to be most real and, indeed, most meaningful to them.

### 6. The Real in Religion

Some comprehensive realists may want to posit, beyond the level of ultimate values, an even higher one, that of the Divine Being as the source and custodian of these values or as the ultimate ground of all being. Theology, in the guise of metaphysical theism, would then be at the highest level of the hierarchy of the sciences. However, this picture presupposes, rather than answers, the problem of the existence of God. In any case, Polanyi himself seemed reluctant to identify the highest, all-encompassing level of being or "ultimate reality" with God. Certainly, in the fourth part of his Gifford Lectures (*PK*), he may be read as outlining an argument from design that culminates in an "orderly operating innovative principle" underlying the process of emergent evolution, an "external creative agency" operating with "continuous intensification" throughout the evolutionary process. Positing "a prime cause emergent in time [which] has directed itself at aims that are timeless," Polanyi suggested that the Divine Being is responsible for calling forth "a life of the mind which claims to be guided by universal standards" (*PK* 405). A strong claim is also made in "Science and Religion" where we read that "evolution shows man arisen by a creative power inherent in the universe" (1963, 13). But the closing statements of the third Terry Lecture (*TD*) merely indicate a possibility: "[p]erhaps" the problem of our constant dissatisfaction "with our manifest moral shortcomings and with a society which has such shortcomings fatally involved in its workings" is insoluble on secular grounds alone (*TD* 92).

In view of this, I conclude that Polanyi didn't develop a mature natural theology. This is no criticism for it wasn't a new argument from design that he was aiming at to begin with. Rather, his goal was to discard the reductionist vision of the universe propounded by logical positivists, materialists, physicalist and their consorts and to make room again for artistic, moral and spiritual achievements as culturally acceptable ways of re-enchanting the world.<sup>7</sup>

Where does this leave us as regards theological realism? As I see it, there are two main options: either to develop his ontology into a full-blown version of theism or to stay more in touch with his epistemology. The first option is a viable one in the sense that Polanyi's work simply leaves it open, especially to those who are committed to the metaphysics of (neo-)classical theism.<sup>8</sup> In our current postmodern predicament, my sympathies are with the second one. Let us just ask whether the definition of "real" is applicable to theology. Recall R<sub>2</sub>, quoted from *SR* 191, and let us substitute, *mutatis mutandis*, "theology" for "science." The result would be something like this:

A theological statement about God is believed to be true if it is believed to disclose an aspect of the divine reality. A true theological theory is therefore believed to ... represent an aspect of the divine reality which may yet manifest itself inexhaustibly in the future.

I don't see why this could not count as a perfectly viable statement of theological realism. Notice that the substitution shows once more that what counts as "real" is relative to a particular tradition of inquiry. What "real" predicated of God means in a religious tradition cannot be specified in advance. It may be understood as "feeling close to," "being in the presence of," "enlightened by," "loved by" and the like. Expressions like these stem from experiences that have been recorded in stories and narratives which speak about the collective experiences of religious communities in terms of grace, forgiveness, consolation, salvation, love and the like. Note though that we don't have here a metaphysical understanding of the real but one that is more in line with Wittgenstein's notion of a form of life. The latter enables us to say that in the appropriate circumstances experiences of God's presence or absence, of God's hiddenness, or of "moving away from God," involve an awareness of something real to the believer in question.

In sum, theological realism, as well as value realism, are part and parcel of Polanyi's comprehensive realism *provided* a contextual interpretation of "real" is given, that is, an interpretation in terms of the sense(s) of "real" in the religious or spiritual tradition of inquiry in question.

### **Endnotes**

- P. Mullins, "The Spectrum of Meaning Polanyian Perspectives on Science and Religion," Zygon 17 (1982), 7
- <sup>2</sup> PK already has a more impersonal phrasing of the same idea: "truth lies in the achievement of a contact with reality a contact destined to reveal itself further by an indefinite range of yet unforeseen consequences" (147)
- <sup>3</sup> E.L. Meek, *Contact With Reality. An Examination of Realism in the Work of Michael Polanyi*, Ph.D. Temple University, 1983 (Universities Microfilm International, Ann Arbor, MI., 1985, 85-09387), 101 (my italics).
- <sup>4</sup> Cf. A.F. Sanders, *Michael Polanyi's Post-Critical Epistemology*, Amsterdam 1988, 232ff.
- <sup>5</sup> Cf. J.R. Searle, Mind, Language and Society. Philosophy in the Real World, New York 1998, 39-65.
- <sup>6</sup> Cf. W. Gulick, "The Meaningful *and* the Real in Polanyian Perspective," *Polanyiana* 8 (1999), 7-26; for a summary and his reply to this critique see his contribution to this *T&D*-issue.
- <sup>7</sup> It comes as no surprise therefore that many theologians have been influenced by Polanyi's ideas (for example, T.F. Torrance, L. Newbigin, C. Gunton). Some have applied them to the problem of the relation between faith and reason, like Basil Mitchell; others have elaborated his thesis about the irreducibility of consciousness and his idea of a hierarchy of the sciences, in particular Arthur Peacocke.
- <sup>8</sup> For a recent attempt in that direction see J.F. Haught and D.M. Yeager, "Polanyi's Finalism," *Zygon* 32 (1997), 543-566. But see also Wentzel van Huyssteen's critical comments in the same issue, p.577-580.

# **Notes on the Contributors**

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Theory of Meaning," *Polanyiana* 2 (1993) nr.4 and 3 (1994) nr. 1; "The Meaningful *and* the Real in Polanyian Perspective," *Polanyiana* 8 (1999), nr.1-2. E-mail: wgulick@msu-b.edu

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