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In This Issue

The Polanyi Society

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Preface

The significance of Michael Polanyi's work certainly does not depend upon the regularity of the publication of this periodical. In spite of our delays, the Centennial Celebrations have developed. The Kent State Conference, which will be reported in a later edition, was a major international forum. Celebrations are taking place in Hungary, Great Britain, and across the United States. So far dependent upon a very low budget and voluntary labor, The Polanyi Society and *Tradition & Discovery* have struggled, but they are continuing. Conditions are now occurring that will facilitate a schedule of regular publication and even improvement of our process. At the Kent State meeting, The Polanyi Society members there voted to double our dues beginning with the issue following this one, Fall of 1991. Phil Mullins will be the general editor of *TAD* and Walter Gulick is taking over as editor of book reviews. In the meantime, we appreciate your faith and patience.

Richard Gelwick, General Coordinator
May, 1991

With this issue, *TAD* is entering a new phase. In the last two years, there have been many complications that have hampered production; we owe the survival of the journal to the tenacity of Richard Gelwick. I trust that such difficult times are now past.

We have taken the bold step of turning over much of the production of *TAD* to Kash Literary Enterprises who can consolidate, with desktop publishing software, much of the work of putting together an issue. This move should regularize the emergence of *TAD* (we are shooting for two and perhaps three issues a year).

Rather than play the game of issuing numbers with back dates, we are updating the numbering scheme. This is Volume XVII, Numbers 1 and 2, 1990-1991 which is the immediate successor of Volume XVI, Number 2, 1988-89. As you can already see, the appearance of the journal is much improved with computerization. Contributors now need to submit electronic copy (see "Submission for Publication" note in this issue); we are willing to work with persons on whom this imposes a special hardship. In upcoming issues, we will be taking further steps to professionalize *TAD*. We hope to have *TAD* indexed in several Humanities indices; we are getting a Library of Congress identification number.

In this issue is a Polanyi Society membership form. Since there were difficulties issuing *TAD*, no effort has been made in two years to collect renewals, although some folk have generously paid up. As noted above, at the April 1991 Kent State University conference on Polanyi, The Polanyi Society held a meeting; those present voted to increase the annual dues from $10/year to $20/year. Although this is a 100% increase, there has been no increase in dues in ten years. The $20 rate should allow the improvements in *TAD* described above.

Membership dues should be paid every September. Please support the effort to make The Polanyi Society more visible by encouraging others interested in Polanyi's thought to become Society members.

NEWS AND NOTES

The Kent State Centennial Celebration "From Polanyi to the 21st Century" was an outstanding success. Over 130 persons attended as full participants. The program of eight plenary addresses and 67 refereed papers produced an "indwelling" rare in our life time. To **Raymond Wilkin**, his faculty colleagues, and his graduate students, go our highest regards and deep thanks for an event that will have a long range impact. The proceedings of the meeting will be summarized in the next issue of *TAD*. Editing of papers is now beginning for publication of the proceedings of the meeting.

The Michael Polanyi Liberal Philosophical Association in Budapest, Hungary invites you to participate in the **Centennial Memorial Meeting On Michael Polanyi** to be held on August 24-25, 1991. The official language of the conference is in English. The Polanyi Centennial Meeting will be held at the Friedrich Naumann Foundation, Budapest VI. Gorkij fasor 45. The registration fee is $190.00 (includes accomodation, reception, and Book of Abstracts). In order to reserve accomodations, acceptances are needed immediately. Proposals are to be submitted in quadruplicate with the cover sheet identifying the author, address, and institutional affiliation. The deadline is passed, but they have accepted late applications this May. It's worth the try. Proposals are to be sent to: Michael Polanyi Liberal Philosophical Association, 1111 Muegyetemi rkp.3.K.I. 59 Hungary (Dr. Eva Gabor or Gabriella Ujlaki). Telephone: (361) 1665 981. Telefax: (361) 1665 981. (When you FAX, you have to call them and tell them you want to send a FAX, then they turn on their machine.)

The Center for Ethics and Social Policy, The Center For Theology and the Natural Sciences, The Center for Arts, Religion and Education, and the Marjorie Casebier McCoy Fund For Religion and Art (all of The Graduate Theological Union and the Pacific School of Religion in Berkeley, California) with the encouragement of the Polanyi Society sponsored a Centennial Conference on "The Thought of Michael Polanyi" March 15 16, 1991. **Melvin Calvin**, Nobel Laureate and post-doctoral student of Polanyi, spoke at the banquet on "Memories of Polanyi at Manchester." **Phil Mullins**, Missouri Western State College, spoke on "Polanyi and Art," **Charles S. McCoy**, GTU and PSR, on "Post-Critical Reflections for Ethics," **Robert John Russell**, GTU, on "Polanyi's Contributions to Theology and Science," and **Benjamin A. Reist**, San Francisco Theological Seminary, on "Polanyi and Hermeneutics." Persons interested in these presentations should contact Prof. Charles S. McCoy, PSR, 1798 Scenic Ave, Berkeley, CA 94709. Telephone: 415/ 848-0528.

The Gospel And Our Culture, a newsletter published in response to a concern of the British Council of Churches, is a new forum dealing with the problems of faith and ethics in a "post-Enlightenment culture." Inspired by Bishop Lesslie Newbigin'a book, *The Other Side Of 1984: Questions For The Churches*, the newsletter often employs a Polanyian analysis and prescription for our age. Bishop Newbigin wrote to the Polanyi Society: "I hope you will find this of interest. The whole programe owes a great deal to Polanyi." Having read several issues, I concur and recommend subscription to it.

Write to: *The Gospel And Our Culture*, Rev. Dr. H.D. Beeby, c/o The Selly Oak Colleges, Bristol Rd., Birmingham B29 6LQ. The cost is five pounds sterling. Send in sterling money order or add the equivalent of 4.50 sterling to cover bank charges.

Andy F. Sanders' *Michael Polanyi's Post-critical Epistemology* has a very favorable

review by **Walter Gulick** in *Canadian Philosophical Reviews* IX:8 (August, 1989), pp. 330-333. Sanders work is seen as very important in interpreting Polanyi's work to contemporary analytical philosophers.

David W. Rutledge, Polanyi Society member who did his dissertation on Polanyi at Rice and is Pofessor of Religion at Furman University, gave the 1990 Rockwell Lectures at Rice University on "Humans and Planet Earth: Networks of Mutuality."

Phil Mullins continues to organize excellent sessions for The Polanyi Society meetings at the annual American Academy of Religion. Meeting in New Orleans, Nov. 17, 1990, **Vincent Colapietro**, Fordham University, presented "Lonergan and Polanyi: The Critical Appropriation of Intellectual Traditions." Colapietro examined the "delicate" way that Polanyi and Lonergan treat "the precarious authority of any particular tradition" as it plays its role in critical human inquiry. Colapietro evoked a lively discussion as he explored the problem of critical openness in "the dialectic of fidelity and truth." **John Apczynski**, St. Bonaventure University, responded. **Ira Peak, Jr.**, University of Nevada, Las Vegas, presented "Dworkin and Hart on `The Law': A Polanyian Reconsideration." **Bruce Haddox,** Simpson College, responded. Peak argued for a way to reconcile the difference between "the rules approach" of Hart and "the legal principles approach" of Dworkin by using Polanyi's model of universal intent which allows for decision making that is both "contextual" and "objective."

The next meetings of The Polanyi Society at the AAR will be in Kansas City, Missouri, Nov. 22, 1991, Friday afternoon and evening, and Nov. 23, Saturday morning. Because this year is a special centennial year, two gatherings in addition to the regular opening day AAR pre-session meeting have been arranged. Richard Gelwick has organized a joint meeting on Friday afternoon at 2:00 p.m. with the Paul Tillich Society; the location (for all three meetings) will be published in the AAR Annual Meeting Program. The topic of the Tillich Society-Polanyi Society meeting is: "The Polanyi-Tillich Dialogue of 1962" discussing the meeting and correspondence of Polanyi and Tillich in Berkeley. **Richard Gelwick**, **Charles McCoy**, and **Durwood Foster**, who were involved in the dialogue, will present papers. On Friday evening, November 22, 1991, there will a Polanyi Centennial Banquet tentatively scheduled for the Allis Plaza Hotel in Turner B. A panel discussion is being arranged for the banquet on the theme "the tacit victory and the unfinished agenda." The regular Saturday morning AAR Polanyi meeting (9 a.m. to 12 noon, November 23, 1991, tentatively scheduled for McShann A in the Allis Plaza) will include two papers ("Critical and Post-Critical Objectivity" by **Ron Hall** and "Immanental Principle and Personal Transcendence: Polanyi's Teleology of Progress" by **Phil Rolnick**) available by late October from Phil Mullins for $5. An additional mailing providing further details about the AAR Polanyi meetings will go out in early Fall; if you are not on the AAR-Polanyi Society mailing list and wish to be, contact Phil Mullins (MWSC, St. Joseph, MO 64507).

Will Kyselka has written *An Ocean In Mind*, the story of his adventure in retracing an ancient sailing route in the south Pacific ocean. He claims in the introduction that one of the motives that inspired him was the thought of Michael Polanyi and his understanding of tacit knowing in the process of discovery. The book is published by Pacific Books, 124 Forest Ridge Way, Honolulu, Hawaii 96822.

Allen Dyer and **Richard Gelwick** are collaborating to hold a centennial celebration of Polanyi's work in New England. They are trying to arrange an early November meeting. Annoucements will be sent as soon as time and place are definite.

Robin Hodgkin, R. T. Allen, and other members of the Convivium Group in Great Britain are also planning to announce a centennial observance during the centennial year, March 11, 1991 - 1992.

Walter Thorson, University of Alberta, on April 19, 1991, gave a lecture on Michael Polanyi's centennial at The Center For Theological Inquiry at Princeton Theological Seminary.

R. T. Allen's new book, *Thinkers Of Our Time: Michael Polanyi*, was recently published by The Claridge Press in London and is also available from The Claridge Press, Box 420, Lexington, GA 30648. In eighty pages, Allen gives a substantial overview of Polanyi's thought. This concise yet solid introduction will be useful to all who teach or wish to inform others about Polanyi's ideas.

Richard Gelwick
General Coordinator

Polanyian Perspectives on the Teaching of Literature and Composition

(Transcript of an MLA Special Session, New Orleans, December 1988)

Introduction:

M. Elizabeth Wallace

We may not have Polanyi's blessing on what we are up to here today. One of our panelists, Sam Watson, told a story yesterday about Polanyi's complaint when visiting an American university: "You are all discussing my thoughts and my books-- that's wrong; you should be looking at, talking about, *other things*, focusing on *other things* you want to explore."

While I understand Polanyi's complaint--in a sense, the greatest compliment we can pay his work is to return with new energy and commitment to our individual explorations, our callings--often I am struck with how much my students need to confront Polanyi's ideas before they are even able to truly *look at* or *talk about* or *focus on* other things.

Their confused ideas about what knowledge is and how they know things--and why they know things--prevent their seeing and knowing, result in paralysis or fruitless, directionless activity. For instance, my own reading of Polanyi helped me to see clearly for the first time essential contrasts between Thomas Hardy and D. H. Lawrence, the authors I focused on in my doctoral dissertation. Hardy, who was both impressed and depressed by Darwin's findings and by the dictates of positivist theories of knowledge in the late 19th century, created a character in *Jude the Obscure* whose life's ambition was to attend Oxford University and whose life's tragedy was his inability to get in. In an attempt to convince us that Jude's tragedy was a loss for all humanity as well, Hardy has Jude lament near the end of the book that there was only one thing he would have been able to do well in his life-- "I could accumulate ideas and impart them to others" (Part VI--Ch. 10, 317).

Lawrence, in a sense rewriting *Jude*, allows the heroine of *The Rainbow*, Ursula, to attend university, eager to hear "the echo of learning pulsing back to the source of the mystery" (Ch. XV, 404). But eventually disillusioned with academia, finding only mechanistic views of life and thought from her professors, Ursula Brangwen leaves the university and sets out to "create a new knowledge of Eternity in the flux of Time" (Ch. XVI, 456).

The contrast between Hardy and Lawrence's theories of knowledge-- how knowledge is discovered and/or created and transmitted--became essential to my understanding of the differences between these two writers, as well as their profound affinities. And I could never have seen that aspect of their work without Polanyi's achievement behind me.

How could a scientist, first a medical doctor in his native Hungary, then professor of physical chemistry at University of Manchester in England, finally a philosopher of science, help me see the work of Thomas Hardy and D. H. Lawrence

as if for the first time? By constructing an alternative ideal of knowledge, arguing that science would long ago have destroyed itself if it indeed proceeded by the strict, detached, objective, impersonal, explicit rules we assumed it proceeded by. His goal in *Personal Knowledge* (reference hereafter abbreviated as *PK*), his major work (first published in 1958), was to examine closely how scientists actually worked and to show that

> into every act of knowing there enters a passionate contribution of the person knowing what is being known, and that this coefficient is no mere imperfection but a vital component of his knowledge. (*PK* xiv)

Without it, *all* knowledge would be impossible.

His painstaking and compelling examination of the bodily roots of all knowing, of apprenticeship and temporary submission to a master (or mistress), of all knowing as a skill, of the necessity of indwelling and passion and commitment, of the tacit knowing that underlies and supports all explicit knowledge, of the relations between thought and speech, tradition and discovery, doubt and belief, the sciences and the humanities--all *strengthen*, rather than shake, our confidence in the ablity of scientists--indeed, scholars in *any* discipline--to competently test and verify their insights, to state them precisely, and to persuade their colleagues of the truth of those insights and their bearing on reality.

Yet, in saying that, I realize that my reading of Polanyi has redefined all these words--words like "test," "verify," "precision," "colleagues," "truth," "reality." For instance, in Polanyi's world, a mind is more real than a stone because it is capable of revealing itself in more surprising and unpredictable ways.

I suspect that our four panelists today will shortly be convincing proof of that Polanyian insight as they contemplate the ways Polanyi's thought has influenced their teaching, influences Polanyi himself would not have been able to predict.

Peter Elbow

It's a treat to talk about Polanyi. I read Polanyi a long time ago, in the early seventies. I knew then that it made a big dent on me, but I let it fade. Looking back on it recently, I'm indeed embarrassed at how deeply I had internalized and perhaps not credited his thinking.

I want to look at several quotations, three important themes in Polanyi, and talk about how they relate to some of my practices in teaching.

(1) On page 71 of *Personal Knowledge* Polanyi writes:

> If everywhere it is the inarticulate which has the last word, unspoken and yet decisive, then a corresponding abridgement of the status of spoken truth itself is inevitable. The ideal of an impersonally detached truth would have to be reinterpreted, to allow for the inherently personal character of the act by which truth is declared.

I'm focusing here on the word "inarticulate." The famous word in Polanyi's work, of course, is "tacit" (cf. *The Tacit Dimension*), but I love it that he also insists on the word "inarticulate." I feel often inarticulate, and Polanyi is getting at the fact that what we can say rests on a foundation of what we can't say. He talks at length in Chapters 4 and 5 of *Personal Knowledge* about the paradox that what humans achieve through language actually rests on a *root* ability that we share with animals and infants--the root ability to simply match a sign or symbol with an experience. Polanyi's thought here connects with what Eugene Gendlin and Sondra Perl talk about in exploring "felt sense." They point out that if I say something and then you ask me, "Is that what you really meant to say?" (or if I ask myself that question after writing a passage), the interesting fact is that I can give an answer. I can sense whether these words match something. This obvious experience has profound implications. What is the source of that answer? How is it that I can know whether these words are right?

As teachers of writing, we often run into students who say, "I know what I want to say but I just can't find the words." We often reply, "If you can't say it, you don't know it." It's a handy thing to say to students. But I'm more and more interested in that naughty sentence--"I know what I want to say but I can't find the words." Polanyi is inviting us to take it seriously. Perhaps it's used in a naughty way sometimes, but it's important to remember the Polanyi dictum that we know more than we can say. Once I start taking that seriously, a lot of things follow.

To be personal, I found that I couldn't function well, especially in an academic world, to the extent that I took seriously the first dictum: "If you can't say it, if you can't put it into words, you don't know it." That dictum simply knocked me out as a functioning person in the academy. As I've gradually begun to function better, I've realized that it comes from being willing to dignify and take seriously the fecundity of the inarticulate, to trust that my grunting and my fishing around are in fact getting at something. Only when I do that, both for myself and for my students, do I sense I'm getting progress.

Polanyi wants us to honor and develop and dignify the inarticulate. Gendlin and Perl have developed a teaching practice that trains people when they put out words to stop for a minute and say, "Wait, is that what I wanted to say?" Eugene Gendlin's work, focusing on the bodily dimensions of that question (which of course fits Polanyi too), suggests for writers a reflective routine like the following: "Pause for a moment. You just said or wrote something. What's your felt sense of what you're trying to get at? Do these words match it or not match it? And where in your body do you experience this felt sense?" This practice helps us move closer to what we want to say. And we can learn to be better at it. One of the characteristics of people who write badly is that they sail along writing without ever stopping to ask, "Wait a minute, what am I really trying to get at?" Such writers never practice articulating the felt sense.

A related teaching practice is freewriting, writing out of inarticulateness, writing when you don't yet know what you want to say and trusting it--plunging into the unknown. The practice of freewriting follows from this Polanyian insight about the priority and fecundity of the inarticulate.

Reading out loud--whether it's a text we've written or something we're studying--has become another important part of my teaching. I want to call reading out loud "a raid on the inarticulate." It's an enormous source of wisdom. I often say, "Let's stop talking about the text for a while, let's just read it out loud." New insight and wisdom come from the indwelling in the text. In short, we know more than we can say. Going with that insight carries me a long way.

(2) Another theme. On page 59 of *Personal Knowledge*, Polanyi writes:

> We pour ourselves out into [our tools] and assimilate them as parts of our own existence. We accept them existentially by dwelling in them. . . . . Our subsidiary awareness of tools and probes can be regarded now as the act of making them form a part of our own body. The way we use a hammer or a blind man uses his stick, shows in fact that in both cases we shift outwards the points at which we make contact with the things that we observe as objects outside ourselves.

We put our focus outward to the end of the cane or the end of the hammer. Polanyi continues:

> While we rely on a tool or a probe, these are not handled as external objects. We may test the tool for its effectiveness or the probe for its suitability, e.g. in discovering the hidden details of a cavity, but the tool and the probe can never lie in the field of these operations; they remain necessarily on our side of it, forming part of ourselves, the operating persons.

Then he makes one more turn into the next paragraph: "Hammers and probes can be replaced by intellectual tools." That is, we use words and language as tools in the same way. I take the hammer, I take the cane, and in a sense I pour my body out into the end of the thing so I don't feel like I'm touching the hammer or the cane but rather the nail or the street. I do the same self-pouring into language. This seems a potent, pregnant theme in Polanyi; I'm struck in retrospect with how much I got from it and how it informs what I do. Again the same simple teaching practices grow from it.

•Reading out loud: pouring yourself into the text, pausing for a while before talking, not putting so much emphasis on analysis, but making the text part of yourself.
•Freewriting: pouring yourself into the act of writing, indwelling in the tool.
•Invisible writing: turning off the computer screen and writing when you can't even see your words.

Polanyi observes that if we think too much about the words while we're reading, we lose the meaning. Similarly, if I think about writing as I'm writing, I can no longer focus on the meaning. Freewriting is an exercise in not focusing on the writing act itself. Invisible writing, which Sheridan Blau recommends, *forces* you to put your attention on your meaning and not on the writing.

I've had a sense in the last year, as I moved out of an administrative job into a full-time teaching job, of pouring myself more into my teaching. Somehow I just wanted and needed to take it more seriously. As I've done that and tried to figure out what it is I've been doing, I have a sense that I've been putting myself into it more, being in the classroom more, being more present there. It's a little scary; and it's made me realize why I hadn't been doing that so much before. I'm talking metaphorically here, necessarily, but it does feel like some kind of pouring of one's self into the activity.

(3) Very quickly, let me just call attention to a third theme.

> A child could never learn to speak if it assumed that the words which are used in its hearing are meaningless; or even if it assumed that five out of ten words so used are meaningless. And similarly

> no one can become a scientist unless he presumes that the scientific doctrine and method are fundamentally sound and that their ultimate premises can be unquestioningly accepted. We have here an instance of the process described epigrammatically by the Christian Church Fathers in the words: *fides quaerens intellectum,* faith in search of understanding. I believe in order that I may understand. (*Science, Faith and Society* 45)

The Polanyian phrase is "fiduciary transaction," which suggests the act of belief that's necessary, that underlies any act of knowing. I *cite* Polanyi in my "Doubting and Believing" essay (*Embracing Contraries* 253-300), but I see now that merely citing him doesn't do justice to the degree to which I had simply internalized his point and was essentially borrowing it. And the "fiduciary transaction" is central to my teaching. When I write and when I try to help my students write, the necessary thing is the act of trusting it, the act of believing it. Freewriting is an act of believing that meaning will come.

Further, a form of feedback that's useful is to ask readers to believe what you've written. We think of feedback as criticism, but often when I put out a text I want to say to somebody (and I encourage my students to do this too), "Don't give me any criticism yet, pretend that everything I've written is true here and be my ally, see it better, give me more evidence, help me out." And of course, reading out loud is an act of believing the text. How can I read this text (this question is especially useful in reading a hard text) in such a way that it makes sense? Simply trying to get different students in a classroom to read the text so it makes sense is an act of having to indwell or believe in the text and take it seriously.

Louise Wetherbee Phelps

This is my battered copy of *Personal Knowledge,* and when I was asked to speak here I really had to think very hard about how Polanyi has influenced my teaching because his thought has completely disappeared into my tacit knowledge. I don't think very much about it analytically--I just use it. I looked in the book and found that the date I had written in it when I got it was 1976, which I think means that it was Sam Watson who introduced me to it at the seminar where I first met Sam. I'm not a Polanyi scholar, but Polanyi is part of my personal tacit tradition of seminal thinkers. I was fortunate enough to construct recently in my basement some library stacks, and one of those shelves is reserved for the people that I go to the most often. They're not put in any content category. They're just people whose work I need, often when I'm writing, usually to recover something so deeply internalized that I'm not sure where I read it. That's where my copy of *Personal Knowledge* is. I think Polanyi would approve.

I'm not presently teaching undergraduates and haven't been for a couple of years because I've been trying to create a writing program at Syracuse. I've been doing curriculum development, working with others to design a four-year sequence of writing courses, and teaching the teachers of the writing program, who went through an abrupt and difficult transition from what had been to a new program. This fall I've been teaching a class of new teaching assistants and trying to help teachers in the program build a sense of intellectual community.
I looked at our curriculum documents, my own writings about the program, the things we've been doing in what we call the "writing studios," even the things we're arguing about, and I found I could trace Polanyi's ideas and, even more deeply, his ethics. Even though Polanyi was not directly cited in most of these documents and papers, I often found that I had cited people who drew on his work. Let me give some examples of how he turned up in three of the things we've been doing:

(1) teaching writing as a skill to undergraduates,
(2) teaching teaching as a skill to graduate students,
(3) building intellectual community in a writing program.

I don't want to sentimentalize his influence--a real danger in talking about the influences of profound thinkers on a field as eclectic as ours--so I will try to point out how using Polanyi's ideas in each of these areas entails problems. Polanyi does not offer pat answers to these problems, although in some cases they are conflicts or tensions that his own work deals with thematically.

(1) The first example is the notion of skill. The writing studios are organized around the idea of writing as a tool. We think of ourselves as teaching an activity, as in an art studio. We ***need*** a concept of skill; but each time you use the word, everyone objects because they associate it with the debased idea of a skill as mechanics and rules. I've been arguing that we need to reclaim the notion of skill for writing, and I just finished writing a paper called "When 'Basic Skills' Are Really Basic and Really Skilled." (In that paper I cited someone else, but when I went back and looked, in fact that person--Jerome Bruner--had cited Polanyi.) I decided to take head-on the political pressure at many universities to teach basic skills and say, "Sure, we teach basic skills and here's what that means and it doesn't mean something reductive." I drew on Bruner's Polanyian concept of skill, which connects to the idea of tools that extend the mind. I related language as a personal skill to a set of practices or classroom activities by which it is taught and learned in use.

One of my concerns in the essay was how to talk to new teachers about what we're doing; we're trying to get them to teach inventively and critically from the day they walk in the door. Many are teaching assistants in masters programs and are only there a year or two; we're asking a lot when we have them start by inventing a syllabus as they come in. What could I tell them that would help them? I named ten basic "skills," by which I meant kinds of instrumental knowledge that we teach, ways of doing things with your mind and with language. For each, to make it concrete and teachable, I listed specific studio practices--activities we engage students in that represent the objective correlate of the skill and that are therefore ways of learning intellectual skills by doing them. From this perspective, reading and writing and talk all became skills because they were instrumental to other intellectual and social purposes.

But here are some of the problems we discovered in thinking this way. First, since we also thematize in our studios the idea of critical thought (we call it "reflection"), there's a tension between the tacit skill--grammar, for instance--that you use as an instrument for some other purpose and the emphasis on reflection, trying to make what is normally tacit focal, trying to become self-conscious about what is highly unspecifiable, in order to gain better control over it. We are concerned about destructive analysis. When does it become right to move into formal statements about skills that are strongest when they're left tacit? When is it right to stay with the intuitive? And how do you get back once you've gone out there and made the informal formal, the inarticulate articulate? How do you get back to using language like an instrument?

Another problem is the whole issue of critical thinking, which is interpreted by most students and teachers as the exercise of doubt. But Polanyi says that the tacit is a-critical and that learning a skill requires submission to authority (*PK* 264,53). How compatible is this with teaching critical thinking? There is a conflict in the teachers between their desire to teach in a Freirean mode of empowerment, encouraging a critical attitude toward authority, and their recognition of students' need for the authoritative tradition that makes tacit learning possible. Polanyi writes,

"The society which wants to preserve a fund of personal knowledge must submit to tradition" (*PK* 53), and in essence a writing program is a society that is trying to communicate a teaching tradition.

Even when you do redefine "skill," another problem is that skills or ways of ***doing*** things are devalued in the academy in favor of explicit formalized knowledge. And teachers, especially graduate students, constantly lean toward teaching writing as an object, as content. Each one of the writing studios has a topic or topics of inquiry, but the point is not the topic but the process of inquiry as skilled activity. There is constant slippage from teaching inquiry as a skill, an activity, to teaching the content being studied as formal knowledge. There is ongoing debate in the writing program about what's studio-like and what's not, and somehow it circles around this conflict in values.

Skills are subject to critique because they don't have intrinsic values, but can be put to any use. This is the same critique made by Plato of ancient rhetoric--that because it's instrumental by its very nature, rhetoric doesn't have content and doesn't have values. E. D. Hirsch makes the same criticism of composition for teaching skills, or process, independent of a cultural heritage, a moral content. Another form of the critique flips the first one around and says that the problem is that writing skills ***are*** imbued with values. This is the cultural critique that says skills as we teach them are ideological and we are naive or dishonest in treating them as instruments for students' freely chosen purposes. Again, there are no easy answers, although Polanyi's thought certainly refutes the claim that instrumental kinds of knowledge (like rhetoric or skills) are necessarily amoral.

(2) The second major area of my work that Polanyi has influenced is teaching new teachers to teach. The theme of the whole writing program--for teachers as well as students--is "reflective practice," a phrase taken from Donald Schön's *Educating the Reflective Practitioner*. When I'm teaching the teachers to teach, all the problems I just mentioned that occur with the students occur again at the level of the teachers. Schön calls that the "hall of mirrors," a wonderful image for that constant repetition or replication of problems that the teachers have in the problems that the students have and vice versa.

Schön draws on Polanyi when he describes teaching as an unspecifiable art best understood by reflection in action and by dialogue between students and teachers. In my class of new TA's, I encountered strong resistance to the idea that teaching is an unspecifiable art. Like their students, they wanted specification, formalization, rules, syllabus, structure, and answers. Paradoxically, sometimes the strongest resistance comes from the same people who object to talking and reflecting about *writing* because they fear it will destroy their own or the students' ability to write. (Many of these TA's are creative writers.) So there's a paradox there in their own thinking.

They also resist the idea that belief or apprenticeship or submission to authority are necessary to learn how to teach. They say that this relationship to a tradition puts them in an uncritical position. They don't want to take up new ideas and try them out, including the broad concepts or tradition of the program they are asked to teach within, because they are being taught in their graduate classes that doubt is the highest intellectual value. I again have no answers, but I do want to mention that in desperation I resorted to Peter Elbow's essay on systematic doubting and believing in *Embracing Contraries* when they didn't understand or "believe" the Polanyi I gave them to read. That did help some. I also wrote a "correspondence" to them saying, "Please read Donald Schön's book as if you were putting on a diving suit. You're in the water, and you have to have a diving suit on. You can't go in without a diving suit, although you can change diving suits later if you want to; but you've got to put a diving suit on. Please just put this one on for a little while." And that helped a little, too.

(3)Polanyi has influenced a third major area of my work: The creation of intellectual community. We're trying to create intellectual community among our teachers so that they can create intellectual community among students. But a community has turned out to be a very difficult thing to forge among disparate people with different goals and different reasons for being there. Teaching the studios has to be learned by participating and systematically believing in a particular teaching, learning, inquiring community. It requires radical change, the creation of a new social architecture: you have to build a tradition together since the old one is bankrupt and no one is ready to accept a new framework at face value. You have to inspire commitment.

In this process I found myself often relying on Polanyi's concept of conviviality (see *PK* 217). He used it primarily to describe the international scientific community and its continuous network of scientists mutually relying on one another for feedback and appraisal, but we are certainly trying to create the same sense of collegial interdependence locally in our writing program. We want to build a network in which we can depend on both the criticism and the support of our colleagues, depend on a combination of belief and doubt. Some ways we're doing it include team teaching, collaborative learning, shared projects of inquiry, an in-house journal, frequent letters or "correspondences" to one another, working papers on curriculum, and coordinating groups where teachers meet to create their own agendas and talk about teaching.

Finally, I want to stress that as crucial as Polanyi's concepts have been to my teaching, his ethics have been even more important. Personal knowledge as he defines it *does* have a moral dimension our discipline needs, an acknowledgment of the claim of truth on us as inquirers, affirming reality on the one hand and taking responsibility for action on the other.

Sam Watson

Long ago I realized two things as a teacher of composition. One, I realized that some of the attitudes that students exhibit and that I found most frustrating came from me. I want them to be inventive, I want them to think reflectively, and wouldn't it be nice if I didn't have to? The attitudes that are most problematic are ones that they pick up from us and from the structures within which we and they work. And indeed when the structure or the ***way*** things are said contradict ***what*** is said, students go with the tacit message rather than the explicit one. That's powerfully true and it's the way we operate in the world and we would have all been killed off long ago if we didn't do that. But that was a turning point, an important insight for me.
Another was realizing that as a teacher of writing, one of the things I wanted to do was survive. And that it was quite possible to teach writing in such a way that one would not survive. So I quite brashly and from that moment on set up my courses so that I learned things. I tell students at the outset, "I'm here to learn some stuff. And if you learn things too, that's all right with me. But I'm here to learn." Frankly, I don't think it hurts students to see a teacher trying to learn something.

Some activities absorb tremendous energies and some create energies. Polanyi said this about intellectual positions: some destroy energies and some create them. He saw us embroiled in a philosophical world view that sapped energies, and he articulated an alternate vision which would enable us to create energies.

Since finishing my dissertation ("Michael Polanyi and the Recovery of Rhetoric") in 1973, I haven't been able to get away from Polanyi. Many of my teaching practices are colored by Polanyi's vision. Underlying all my teaching

is the desire to help people establish access to the tacit, to what's beneath, to the subsidiary, to our embodied sense and knowledge, to our sense of ourselves as persons and as knowing agents. Such access enables insight, discovery, and growth--both institutionally and personally--and my desire to help establish such access to the tacit plays itself out in my experience in three contexts.

One is writing projects. The National Writing Project may well be our nation's most successful program for the professional development of teachers. It's an embodiment of Polanyi's ideas although not intentionally founded on them. I hear Jim Gray, NWP founder and director, saying time and again, "Teachers know things! Teachers KNOW things!" The writing project is not a deficit model; it does not assume teachers are empty vessels to be filled or that they are misinformed beings to be "fixed." It is a bottom-up model: it brings teachers together to tap the often unarticulated knowledge that they bring from their classrooms and their own writing. Teachers generate tremendous energy by accrediting themselves and each other as knowers, tapping into wells of tacit knowledge.

In the fall of 1987, I brought together 71 teachers from the Southeast for two days of professional writing. Out of that writing project weekend came a book--*Writing in Trust: A Tapestry of Teachers' Voices* (Southeastern Educational Improvement Laboratory, 1989)--to which 60 of those teachers contributed. The book tells stories of educational transformations in themselves, their students, their schools, and their communities. Something about both the informality and the intentionality of the setting enabled them to write, even though they kept asking me, "Sam, what do you want us to write? How do you want us to write it?" Sound familiar? I kept saying to them, "We have met our audience, and it is us." We discovered we had things to *write* when we heard ourselves *speak* with each other; we were able to articulate to ourselves and make accessible to others insights and questions we hadn't known we had. Real strength and energy is given in that kind of informal, yet intentional and intensive collaboration. I can understand what I'm saying when I talk with someone I trust. I come to hear it sometimes for the first time.

The second context in which I try to foster a Polanyian appreciation of the tacit is the university, the place where I work, UNC Charlotte. Is the university a safe place for writing? Is mine? Is yours? For the writing of our colleagues, for ourselves, for our students? Too often students and faculty are afraid to write, and little wonder. Writing is grist for evaluation rather than response; abstracted critical standards are imagined which perhaps no text measures up to in the end and which, more importantly, thwart promising beginnings. One of our UNC Charlotte philosophers sums up the shift in orientation we're working for: "we are giving ourselves permission to begin before we are finished." I want to see the university become a place that's safe for writing. And I think that'll mean a place that's safe for learning, too.

Four years ago, our university began requiring two "writing-intensive" courses for graduation; providing these courses is now a formally articulated goal for UNCC. But whether, and how, this goal is reached will be determined largely by the kinds of *in*formal talk among faculty that goes on behind closed office doors, in lounges, and over beer. We're trying to help our university become a place where informal talk and contact feeds into, rather than contradicts, achievement of the formalized, publicly articulated goals of the institution.

To that end we've held ten 3-day faculty writing retreats so far from which some faculty have returned saying, "This has changed my life and I've begun to write for the first time ever." We've had occasional faculty seminars by guest consultants such as Nancy Martin, Paul Ricoeur, Louise Phelps, Janet Emig, and Peter Elbow. We've had semester-length faculty writing groups. In 1989 we began a student writing contest, offering an award for the best essay about a student's writing experiences. We will publish this set of essays annually for distribution to faculty so they can learn from students'experiences with writing. We have also published *What's Happening with Writing at UNC*

Charlotte?, a booklet in which professors describe how they incorporate writing into their courses. All of these deliberately unobtrusive efforts aim, first, to shift the climate of institutional opinion about student writing and the role it can play in instruction and, second, to enable professors to seek each other out as resources, tapping a knowledge we too seldom realize we have.

And finally, what kinds of influence does Polanyi have on me in the third context I want to talk about--my writing courses? I've already confessed that I want to survive those courses and I've set them up so I can learn within them. Two things I trace back to Polanyi are my concern with writing-to-learn and my practice of exchanging personal letters with students about each submitted paper.

My students come to me almost never having used their writing (or never having been aware that they are using their writing) to extend their understanding. There is no way I can preach them into that orientation. Believe me, I've tried. Didn't work. But I wanted them to experience that, so one thing I do, beginning at the middle of term, is ask them to shift the nature of their daily journal so that from then on they're doing a few minutes of writing every day to extend their understanding of the materials in some other course. Frequently they are surprised by what comes out of that writing-to- learn, surprised in ways that I can't predict and that I can never insist on ahead of time. But realizing how writing can help them think, remember, and understand, how writing can lead to discovery, how writing can be useful to the *writer*, always contributes to their growth as writers.

Since I believe they need to reflect on the writing they're doing, all responses in my classes take the form of correspondence between the student and me. A paper is always accompanied by a "Dear Sam letter"--Dear Sam, here's how I went about writing it, here's what I see going on in it. The student isn't expected to be self-critical but to pose questions and suggest what the heart of the paper is and especially to remark on any surprises that came in the writing. My response is a "Dear Jane letter," a letter back to that student. At the very least it gives the advantage, which seems to me a necessary thing for writing, of writing *to* somebody, of having a real audience out there.

Sometimes it's hard to convince students that I am that, that I want to be a real audience and these are real letters. But I started doing it from utterly selfish motives, just because it's so deadly to write comments on student papers and it's so much more fun to write letters. My aim is that we will carry on a semester-length conversation, in writing, centered on that student's writing.

Our letter exchanges model some easily forgotten truths about writing--that it exists in a social context and that it is addressed *to* someone(s). In the letters, we are attending from what's beneath, articulating some of the contexts, constraints, processes, and potentials that never get completely articulated in a final text. Thus one freshman writes me:

> I really don't plan what I'm going to say. Somehow my stories are better when I do this. Do you understand what I mean? It's sort of like freewriting a paper. Do you think this is an acceptable method?

Without this student's letter, the fine question she poses would not be accessible to me or perhaps even to her. And Polanyi helps me say to her that she is onto something important about writing: the spontaneity and discovery she describes are necessary dynamics for *any* writing which might make a difference.

An older student, Perri Sherrill, wrote the following as part of an end-of-course reflection on her work:

> Just four months ago I thought there was one way to write: the right way. I used a formula, got good grades, and didn't get much of anything out of the writing I did for school assignments. In the past three months that has all changed. I've been trying to figure out at exactly what point this great change in my attitude took place. It was starting to emerge at midterm. I can see that when I reread my coursebook letter to you. Think of that--I can see something in retrospect. . . .
>
> I really think that the assignment of revising a paper is what opened my eyes to what can happen with an idea or one piece or product. I said before that I'd never revised a finished paper in my entire life. I always did my revisions within the paragraph. I would not go on to the next until each one was perfect in my eyes. The form and the words may have been "right," but I was always frustrated with the formality of my writing, and I am sure that the content showed how narrow my focus always was. I would never change direction from the three points I had mentioned in my introductory paragraph. In the first letter I wrote to you, I said that I didn't feel like I could ever really freewrite. I am still practicing that skill, but I see what you were talking about when you replied that ideally writing has to be a combination of structure and free- writing. If I start with freewriting about my ideas in general, then I have an abundance of material to choose from when I start writing the actual piece.
>
> [In my writing for this semester] I find glimpses of my personality, learning styles, and philosophies laid out in an amazing amount of order. I use the word "amazing" because I was genuinely amazed at how organized this disjointed series of thoughts and writing samples appears in my journal entries and in the writing assignments with the accompanying letters. What pulls it together for me are the composing observations and letters. [In an education course,] I just finished writing a unit plan, and I wrote my way into understanding what *I* wanted the unit to do. When I think about it, I wouldn't have considered a unit plan "real" writing before now. What's even more amazing is the fact this unit is one of the best pieces of work I've ever turned in. (No, I haven't gotten the professor's response yet, but I'm sure he must feel the same way--we students know these things.)

I don't know that Michael Polanyi's name was ever mentioned in Perri's class. But her reflection stands as an accurate gloss on his thought. In retrospect she sees order which was not apparent at the time; what reveals and indeed constitutes that order are her reflections, the actions of her own mind at work, matters which usually lie, properly, beneath focal attention.

Polanyi helped me learn the importance of attending from what's beneath. In writing projects, I see that kind of attending energizing teachers and transforming classrooms. In my own university, I see it crucially complementing the institution's visible structures and announced goals. And in my writing classes, Polanyi's thought encourages me to become a learner with my students while they articulate some of what lies beneath their finished texts and begin to use writing to extend their understanding and make discoveries of their own.

Janet Emig

> Into every act of knowing there enters a passionate contribution of the person knowing what is being known. (*PK* xiv)

What is this nonsense? A person? personal? passion? commitment? I mean, do we really want this? We want commitment to what? Do we want commitment to learning, generically? Do we want commitment to the assignment? To us as an instructor? To the curriculum? To the department? To a theory? I mean, is it possible we might even want commitment to the student's own mind?

Here's Polanyi talking about belief:

> I believe that the function of philosophic reflection consists in bringing to light, and affirming as my own, the beliefs implied in such of my thoughts and practices as I believe to be valid; that I must aim at discovering what I truly believe in and at formulating the convictions which I find myself holding; that I must conquer my self-doubt, so as to retain a firm hold on this programme of self-identification. (*PK* 267)

Well, how do we find that as a program, perhaps as a directive, to ourselves as teachers of reading and writing? Do we believe it for ourselves? Is it possible that we even believe it for our students? Their *own* program? Divorced from our agenda? Divorced from our directives? Divorced from our assignments?

What an unfashionable figure Polanyi is in this assemblage, an MLA Convention. What an unchic group we are, those of us in this room. And all of us in such a problematic field. And such reactionary concepts. What draws us? What draws all these anachronisms together? What does Polanyi believe?

He believes in belief. He believes in the intellectual necessity of belief. As others have pointed out, he believes that we know more than we can tell. He believes in connoisseurship. He believes that passion is a necessity for learning, that we can't learn unless we're passionate. He espouses conviviality and argues that knowing is social, friendly, not confrontational. He's comfortable with paradox, with tension, that neither moves into simple-mindedness nor into some kind of fascism.

Connoisseurship is one of the major concepts in Chapters 4 and 5 of *Personal Knowledge*. What is it, first of all, as Polanyi talks about it?--a profound, unspecifiable expertise gained by long experience and intelligent striving while immersed in a particular discipline. I hope we like to think of ourselves as actual or potential connoisseurs, but are we comfortable with thinking about ourselves as possible models? That means that we as teachers are not only givers of assignments, we are writers. And what do we do in colleges and universities where we receive thirty-page memos telling us that writing does not exist? And what do we do when those of us in writing research say, as Lucy Calkins has been saying lately, that teachers of writing to young children do not need to write? I'm making some kind of equation here between being a connoisseur and being a model. Writing teachers who don't write themselves perhaps contribute to the fact that much teaching of writing is almost a systematic reversal of what, in Polanyi's terms, should be *focal* and what should be *subsidiary*. We focus on the hammer, considering its weight and heft, and don't notice all these students who are smashing their thumbs.

Polanyi makes another point I find enchanting--to have a problem is to have made a discovery. Not just to *solve* a problem, to *have* a problem.

> To see a problem is a definite addition to knowledge, as much as it is to see a tree, or to see a mathematical proof--or a joke. It is a surmise which can be true or false, depending on whether the hidden possibilities of which it assumes the existence do actually exist or not. To recognise a problem which can be solved and is worth solving is in fact a discovery in its own right. (*PK* 120)

In some of the recent work on developmental psychology among adolescents, there's a stage above problem solving--the stage of problem creation. It's more interesting, it's more complex, it's probably far more sophisticated. Finally, Polanyi happens to believe in the ethical dimensions of what we do--of reading and writing, of dealing with students, of attempting to create communities. With Teilhard de Chardin, he believes in the existence of a noosphere:

> Here is the point at which the theory of evolution finally bursts through the bounds of natural science and becomes entirely an affirmation of man's ultimate aims. For the emergent noosphere is wholly determined as that which we believe to be true and right; it is the external pole of our commitments, the service of which is our freedom. (*PK* 404)

I love uttering these old-fashioned words. Polanyi goes on to define a free society as "a fellowship fostering truth and respecting the right." And then he ends with this sentence, which should give us all comfort: "It comprises everything in which we may be totally mistaken" (*PK* 404).

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Those Missing "Objects"

Harry Prosch

I was quite puzzled when I read Maben W. Poirier's "Harry Prosch"s Modernism" in *Tradition & Discovery*, XVI (1988-89) pp. 32-39. As Socrates said when he heard the charges brought against him at his trial, they almost made me forget who I was. I began to wonder if it was I he was talking about. I finally concluded that either I am not very good at writing or Poirier is not very good at reading--or we are both somewhat deficient. For he seems to think that I think that which I know I do not think.

1. I do *not* think that Polanyi attributed no reality to the "objects" of "the arts, religion, and the humanities." Why Poirier did not also include the "objects" of mathematics in his list I do not know, since Polanyi did include them also with those of the arts and religion (as non-empirical realities) in his *Personal Knowledge*. However, I must admit that we might find it difficult to say just what the term "objects" means in these articulate frameworks of thought which Polanyi included among the many he found inhabiting our noosphere. But whatever we were to locate in these areas (say, for example, the Pythagorean theorem or God) I think Polanyi certainly would have claimed they were real, in accordance, of course, with what he expressly said he meant by "reality."

2. I do *not* think that Polanyi developed his new epistemology primarily to handle the problem of induction. He did show, of course, that it can deal with this problem more ably than the others have been able to do--as it should be able to, if it is an adequate epistemology. However I must also add in this connection that his tacit inference *was* understood by him to be logical, not merely psychological. He wrote specifically about the "*logic* of tacit inference," and I heard him once reject a compliment made by an admirer of this thought, a psychologist, to the effect that his work on the tacit dimension was a very good way to show the psychological components of our knowledge. Polanyi explicitly denied this on that occasion, insisting he was not explaining our acquisition of knowledge psychologically, but *logically*.

3. I do *not* think that Polanyi thought his personal knowledge was situated midway between subjectivity and objectivity. To say that it bridges the gap between the two is merely to say that it includes both of them in itself and gives them both more adequate meaning, not that it is a new separate thing "situated" in between them. His thought is dialectical, not serialistic.

I do indeed think that Polanyi held there is no *purely* objective knowledge (i.e., knowledge unconnected to a particular person, and thus wholly lacking any tacit dimensions whatever). But this is not to say I think he held that there is no such thing as objective knowledge. What he understands to be objective knowledge is the personal knowledge we obtain with universal intent--and so it must include our best works in ethics, art, religion, and mathematics.

4. Thus I do *not* simply equate explicit knowledge with objectivity. Polanyi thought he was battling those who did so. He thought it was a misunderstanding to think that objective knowledge would have to be purely explicit knowledge, i.e., knowledge not grounded in tacitly held clues--which is knowledge impossible to have. Thus he rejected the notion that objective knowledge would have to be that which existed "extra-personally." That to which we strive to make our personal knowledge adequate in empirical experience (and so in our empirical sciences) *does* exist extra-personally, i.e., it has its own existence aside from our thought of it. He claimed that this was a necessary metaphysical position in science. But our *knowledge* of it never could exist extra-personally, since he steadfastly maintained it must include the tacit knowledge in which we can only *dwell*, not know explicitly. Our knowledge, he thus held, *may* be wrong at some particular point, i.e., it may not be adequate to the being of the external reality which it strives to know. *Empirical* verification is therefore required of all our knowledge in science, although what counts for verification is also a personal judgement--with universal intent.

5. I do *not* think that Polanyi made the "humanities realities" contingent upon something else, say, a human mind. But for him to have supposed the "objects" of art, religion, ethics, and mathematics existed independently of us before we discovered them, in the same way the empirical realities did, he would have had to have supposed them all to be simply some other empirical things among empirical things, and then all of the various frameworks of thought would have had to collapse into those of the empirical sciences. His opposition to such a reductionism of all our articulate frameworks of thought is well known. A sort of reality different from the empirical would be required to bring off assigning these "objects" an existence prior to our discovery of them. He was obviously intellectually acute enough to see this when he wrote *Personal Knowledge*.

All of this leads me to think that perhaps everyone would be happier with my views about Polanyi's thought, if I said that I think something may be missing in Polanyi's thought that might possibly be supplied by Plato's philosophy--or perhaps Hegel's.

Michael Polanyi did admit once to being a Platonist "of a sort;" but one who rejected the Platonic Ideas. I think, however, he might actually *need* these Ideas--or Hegel's *Begriff*--as the "objects" able to serve as sort of control poles for our thought, *viz.*, as that to which the "humanities" are striving to be adequate, much as the empirical realities are those to which the sciences are striving to be adequate.

Maybe I should have included a recognition of such a need among my criticisms of his views. I was, however, rightly or wrongly, intent on trying to find a way of understanding all his statements, if possible without any additions or subtractions. But I must confess that I always found it hard to make sense of his notion of the "progress" he claimed had occurred historically in ethics, law, art, religion, and mathematics, if there were nothing (at least nothing even dimly seen, like Plato's Ideas) by which to assess whether the changes taking place in them were improvements or not. It seemed to me, perhaps from a few cryptic remarks he made, that he may have thought that, buried deeply within these activities, there was a sort of "core" which, so to speak, guided them in the minds of their most serious and responsible inquirers (or creative participants or servants) and which led these devotees to ever greater and richer creations, that seemed to appear to them mostly as "discoveries," much as in Plato we discover more and more the meaning of the Idea through our continual dialogue concerning it.

But, at any rate, it seems rather clear that he thought of these non-empirical "cores" (if indeed he thought of them as "cores" at all) as showing more and more of themselves *only* in the further developments of them which became

established in history by those who were participants in (or servants of) them (perhaps therefore he could also be called an Hegelian--without Hegel's *Begriff*). So he restrained himself from providing them with some "place" to be, prior to their concrete developments. Moreover he appeared to think that philosophy was not equal to the task of telling us what these "cores" were, before those who served them showed us more and more of their natures as time went on.

So I left the problem as open-ended as it seemed to me he had.

Polanyi did remark several times that he had learned some things from Heidegger, though, as far as I know, he never spelled out just what they were. Was he really prepared to accept as the true "objects" of the humanities (and mathematics) *whatever* established itself existentially in time (i.e., whatever disclosed being) by becoming more ascendant and powerful in the minds of the members of these various communities of "experts"? Somehow I doubted that he was wholly prepared to do so, for he had not done so in his own science, chemistry.

I was afraid, when it came to the "objects" of religion, that someone in the religious framework would accuse me of being among those who have "taken away my Lord and I do not know where they have laid Him." And of such I have been accused, in effect. But the truth is **I** don't know for sure just where *Polanyi* has laid Him--if indeed he could be said to have laid Him anywhere. So I did not try to say. I left it as he left it, as far as I could tell where he had left it.

But this surely does not mean that I think Polanyi thought God was not real. It is true in *Personal Knowledge* he said that God existed "in the sense that He is to be worshipped and obeyed, but not otherwise; not as a fact--any more than truth, beauty or justice exist as facts. All these, like God, are things which can be appreciated only in serving them" (279).

What did he mean by this? From the ways in which he had dealt with these kinds of "objects" throughout his works it seemed to me he could not have meant they were only projections of our subjective psychological needs, with their real roots only in our minds. But the words themselves clearly also could not mean that God is an empirical reality--a "fact." Besides, if he really meant to affirm He was a fact (somehow in spite of the clear words he used) he would have been making God out to be a mere thing among things, and he would have had to understand himself to be an idolator.

What is left is, it seems to me, the very Polanyian position that the reality of God is an item of personal knowledge (with universal intent and thus with objectivity) established by our creative imagination *in* the religious framework of thought--that is, *from* the wealth of subsidiary clues provided by the history, myths, worship, doctrine, rites, etc. of our religion, *in* which He exists "to be worshipped and obeyed." God is not established in the frameworks of science, art, ethics, or mathematics. They each have their own "core," or trajectory of meaning. And none of the frameworks of thought provide us with merely "second-rate" knowledge. Nor are any of their own realities second-rate. The reality of God, as founded uniquely in religion, could only be denigrated as a second-rate reality by those whose attitude of mind makes them regard *empirical* realities as the only "real" ones, the truly first-rate ones. Neither Polanyi nor I (nor Plato), I submit, ever thought such a thing. If we thought there *were* any "lower-place" realities, I'm sure the three of us would think that this "honor" belonged rather to the empirical sort. I invite Poirier to join us--and anyone else who accepts this open door which Polanyi has shown us swings in all the directions in which our thought with universal intent may lead.

Plato has suggested that all the eternal realities, among which would surely be included the non-empirical realities of ethics, religion, art and mathematics, are best called Ideas, which have a being of their own and which most resemble, but *are not* simply, the ideas we have in our heads. For were these Ideas only the ideas we have in our own minds, they could not be used as the touchstones of the truth or adequacy of the ideas which *are* in our own minds (see his *Parmenides* and his *Seventh Epistle*). He proposed they thus must have an extra-personal existence of a vital and real sort--as Hegel also provided for us in his *Begriff*--although even for these philosophers these "existences," these realities, do *not* exist as things alongside other things. They, as universals, have *concrete* existence only as given in their supposed embodiment (or "imitations") in concrete things and actions in our world.

Hegel obviously thought this. He specifically maintained that only the *concrete universal* existed, not the abstract universal (even though it was real); and the existing concrete universal, he held, always fell short of all that was "in" the universal *Begriff*. This position is not always recognized as also true for Plato. However, Plato explicitly rejected, in his *Sophist*, the notion that the Ideas or Forms could exist in awful, frozen inactivity, excluded from life and soul. Their necessary togetherness with the world of becoming and soul is also expressed mythically in his *Timaeus*.

So--if I suppose that Polanyi did not assign a separate thing-like existence to these "objects," as simply things beside other things in our empirical world, our cosmos, I am supposing him to be in good philosophic company. Nor can I think he "changed his mind" about these matters later in life. In my book I have carefully shown this view to have been in his *Personal Knowledge*.

Thus, in espousing dialectical views similar to those of Plato and Hegel, in order to try to make sense of all of Polanyi's statements, I think I have clearly exhibited how far my views are from anything that could be called "modernism." No "modernist" would claim me, I'm sure.

A Theory Of Personal Language And Implications For *Logos* Theology

Joan Crewdson

In this article, I explore the Christian doctrine of the *Logos* in relation to Polanyi's theory of language, which has implications both for the status of words and for their role *vis a vis* the speaker.[1] Polanyi argues that all knowledge is *personal* knowledge and, by the same logic, that the language in which we express our knowledge is *personal* language, since there is an element of personal judgement in our choice and use of words, which reflect in themselves something of the character of the knower as well as something of the reality of the known. Though language is public and has a social character, words are living and relational and help to bridge the gap between subjectivity and objectivity.

Language can be thought of in different ways. The Hebrews thought of the word as something with a life of its own, but remaining part of its author and able to perform the author's intentions. This thought lies behind the Hebrew doctrine of the Word of God and of creation. When God says, "Let there be!" (Genesis 1), his Word is thought of as going forth into the world to accomplish his will. (Isaiah 55:11) In Christian tradition, God and his Word are inseparable. God's Word is eternally generated by him, and when the Word becomes incarnate, it remains what God is antecedently in his eternal Being. This unitary view is undermined by dualistic thinking, which tends to separate reality from its rational content and to treat thought and reality, sign and thing signified, as related indirectly, even arbitrarily.[2] Even the Western Church has tended to think of God, not as communicating himself in his own intelligible internal relations, but indirectly and externally.

Dualistic thinking tends to polarize the subjective and objective elements in knowing and this has affected Christian thought in two ways. One stream identifies the Word of God with his indwelling Spirit, the Spirit of truth that illuminates the soul, like the inner light of the Quakers. The problem with such a view is that the "inner light" is indistinguishable from the subjective structures of the self-conscious self. The other stream, which equates truth with a fixed, objective corpus of "revealed" propositions, intellectualizes religious faith and encourages a fundamentalist outlook.

In order to avoid these consequences of dualistic thinking, revelation has to be set within the framework of a personalist metaphysic and understood in terms of a dynamic such as Polanyi proposes in his theory of personal knowledge. "Revelation" can then be seen to result from the fruitful interaction of subject and object. Subjectively, we interpret God's speaking to us integratively and creatively through the exercise of our own tacit powers. But objectively, God's Word confronts us and calls us to interpret our experience in the light of the *Logos* principle, that structures all reality.[2] Even "natural" knowledge of God is, for the Christian, set within the framework of the Christian revelation and interpreted in the light of the "rationality" provided by the "Word made flesh" (Jn 1:14).

This understanding of the structure of revelation corresponds to Polanyi's analysis of the structure of knowing, which functions on two logical levels. Polanyi sees all knowing as taking place within a framework of

commitment, which involves working with a rational scheme appropriate to subject matter. He draws attention to the fact that presuppositions are a matter of personal judgment for which we, in the end, take responsibility by deciding whether the rational scheme we adopt is appropriate to our experience. Traditionally, Christianity holds that the *Logos* principle provides the only appropriate rational scheme for interpreting a personal universe. In an ultimate sense, our understanding of nature and history comes from working within this fiduciary framework provided by the *Logos* of God, which itself derives ultimately from the rationality that structures God in his own internal relations.

This idea seems alien and perhaps naive to many people, largely due to the influence of science. Science's main concern is to explain the particular in terms of the general and scientists hope eventually to arrive at a theoretical view of the universe, by reducing it to a set of ultimate symbols and relations at the highest possible level of logical unity. Such a formulation will, it is thought, establish the relations that obtain between all the forces and elements that structure the physical universe. But it will radically simplify basic concepts and relations and reduce them to terms of mathematics. Theology is interested in another kind of unitary thinking, concerned, not with formulating the basic structures of physical reality, but with understanding the inner meaning of existence as a whole. Einstein's famous $E=mc^2$ is about the real world, but it tells us nothing about the world of persons or the meaning of life. For this, a different kind of rationality has to be invoked. To borrow a phrase from T.F. Torrance, we need *Logos* rationality rather than "number" rationality to understand the meaning of existence. We need an interpretive framework which is apposite to the total story of creation, and for Christians, the incarnate "Word" of God provides the conceptual model to shape their thoughts and provide the logic needed to make sense of experience.

It is central to Polanyi's theory of knowledge that our critical faculty needs to operate within a framework of beliefs that can provide a model or a standard against which to judge experience. Language itself is a kind of framework within which we do our thinking. Even a single word can function as a model and influence thought. For example, the word "machine" provided Newton with a conceptual model and a set of basic presuppositions that governed the way he thought about the universe. In Polanyian terms, his mind was "at home" in this model. In the same way, the Christian mind is "at home" in, and allows its thinking to be governed by, the model provided by "the Word made flesh." Even a metaphor or a story can function as an "extended word," in the sense that it constitutes a unitary experience which can provide a model or world view. The essence of a story is achieved by reading it whole, dwelling in it and letting it speak. Concepts can be quite complex patterns of meaning. The unit of linguistic meaning is not the word but the message it conveys and the art of reading sense into words is to recognize that they have both particular application and universal significance.

For Christians, the pattern of meaning that constitutes the Christ event provides an interpretative key to the cosmos. As God's "Word," Christ has strict historical particularity, but his life, death and resurrection also have universal meaning and provide an interpretative framework within which to think about all experience. Generality without particularity would compress all meaning into a single formula and deprive it of content. Particularity without generality would deprive the particular of any meaningful application beyond itself. Personal names function in this way. But the divine *Logos* is understood to be a *coincidentia oppositorum*, a coincidence of particularity and universality, a *particular* embodiment of reality that also functions as a principle of rationality that makes sense of all experience. *Logos* rationality fully affirms both form and content. It is the kind of *personal* rationality that unites the world of the "many" and reveals, in an ultimate sense, its unitary meaning. Its universality in no way diminishes its particularity, nor does its particularity limit its universal application. Because of this, Christians are able to speak of the incarnate "Word" both as the universal, *cosmic* Christ and as the particular, historical Jesus. The latter is thought of as united with God incarnate in an inner "I-Thou" relation, sharing the same "personal space." Only a philosophy

that relates opposites across levels in polar complementarity can make sense of such a claim, which is of the essence of the doctrine of incarnation.

In learning to speak, we commit ourselves to a particular view of the world. But this does not prevent us from exercising our power to judge whether the words we use are apposite to the reality we seek to express. Polanyi argues that we need to acknowledge the competence of our own faculties to control the range of meaning that can be given to a term and be ready to revise our conclusions in the light of new evidence. A proper use of language is part of the commitment we have to our vision of reality, which is evidenced, Polanyi suggests, by our sense of fitness to judge that our words express the reality of which we wish to speak (*Personal Knowledge* 113 [hereafter *PK*]). When language is apposite, it is an aid to conceptual organization and helps us in our quest for deeper insights. Words are universals and every word we use is a theory about the nature of reality. As symbols, words are principles which regulate the formation of our concepts, but they also take on meaning from the conceptions we form in the course of our contact with reality. Conceptual decisions involve the recognition of alternative part-whole relations. Choice of language is controlled in a primary sense by our experience of the subject matter, but we may also see the subject matter in ways suggested by the terms we are given. There is always an element of dialectic in our use, or creation of, language.

On Polanyi's view, words have not only referential or denotative power; they also have anticipatory powers which give them heuristic value. Language puts us in touch with its subject matter and aids us in making new discoveries as well as in contemplating and understanding particular realities. That to which language points is the real world, which we believe will yet reveal itself in unexpected ways. According to Polanyi, it is enduring meaning (significant pattern) that brings us into contact with reality. Our power to recognize things as real depends on a combination of form and content, of definition and substance. Polanyi's conception of reality is of something essentially indeterminate, whose continued presence is rich in unexpected possibilities for the future. He writes,

> When we believe that we have truly designated something real, we expect that it may yet manifest its effectiveness in an indefinite and perhaps wholly unexpected manner. This intention comprises a range of properties which only future discoveries may reveal--confirming thereby the rightness of the conception conveyed by our term (*PK* 116).

Such a view of reality suggests that persons are the most real beings in the created order and that God, our uncreated Source and Goal, is that ultimate personal "Reality", whose meaning is inexhaustibly reflected in and through his "Word." In the rest of this article I consider whether Polanyi's theory of language may illuminate in some way the nature of the relationship between "the Word of God" and those who dwell within it and seek to use it as an interpretative key.

According to Polanyi, the self, the reality of which it speaks and its means of self-expression form an irreducible triad in which meaning is shaped by the mind as reality actively discloses itself. The beholder then articulates his experience in words. Perceptual, conceptual and imaginative elements are at work in this threefold process of perceiving, understanding and communicating. A word or symbol can function as a kind of "map" which helps us find our way about by reorganizing our conception of the area it represents (*PK* 117). The use of different words can illuminate our conception of a particular state of affairs and allow different or new inferences to be drawn.

We use words to communicate what we want to say, but meaning does not inhere in the word, but in the reality designated. Words viewed as objects are meaningless sounds, which become meaningful only when we look through them to the reality or state of affairs they denote. Knowledge starts as an unaccountable apprehension of a meaningful pattern in reality. Meaning is inseparable from its embodiment. For example, a play or a symphony *is* its own meaning in virtue of its expression. It can be viewed, in a sense, as an elaborate "word"--a means of saying something that cannot be taken apart. One cannot say what is the meaning of a Shakespeare sonnet or a Bach Cantata, except by *dwelling* in it and reciting or performing it. The meaning requires for its expression the whole work of art. In the same way, a person indivisibly embodies his or her own meaning.

Language functions tacitly and instrumentally like spectacles and provides a particular perspective on the world. Words are conceptual representatives of reality, but their relation to reality is indirect rather than an exact model. Their meaning is "read" by the joint operation of sense, reason and imagination and they function, sometimes more as models, sometimes more as metaphors, depending on the nature of the reality to be described. We can be helped or hindered by the terms which language offers us. Language arises as we grope for words in the process of making conceptual decisions about the nature of things and how to act towards them. We entrust the life and guidance of our thoughts to our conceptions because we believe they derive their rationality from contact with some aspect of reality. We even allow our actions to be guided by them, though we believe we too have direct contact with reality (*PK* 106).

Many modern writers regard words as conventions. This idea originated in the tradition of nominalism which teaches that general terms are merely names designating certain similar collections of objects.[3] This theory treats language as an arbitrary human creation, using words as conventions whose meanings derive from the persons who invent them rather than from the reality to which they refer (see note 2). Nominalism severs the bond between thought and its subject matter, between meaning and reality, between subjectivity and objectivity. It establishes a merely external relationship between words and that to which they refer.[4] Such a theory cannot, as Polanyi points out, account adequately for the power exercised by words over our thought or for the way the same term can mean something different in different contexts. The fact that words change their meaning does not justify treating them merely as conventions. Such logic is comparable to the idea that scientific theories are merely convenient ways of viewing the data, but tell us nothing about real relations. The tendency to treat the theoretical dimension as purely subjective and not derivable from empirical data goes with distrust of metaphysics and reluctance to accredit the term "reality" with meaning. Words change their meaning, not because they are empty conventions, but because we make fresh discoveries about the real world through our contact with it.

Concepts constitute the subjective pole of the meaning-reality relation, and the reality itself is the objective pole. Language sharpens our awareness of reality and helps to formalize experience, but each step towards stricter formalization involves a progressive sacrifice of content and a decrease in the power of language to evoke experience of reality. This is why Polanyi insists that a certain degree of imprecision in language is essential, otherwise we would have no means of speaking about what is new. On his view, language has an open-textured quality which enables us to apply it to new experience. But the greater the imprecision, the greater the demand on our powers of imagination and inarticulate judgement (*PK* 87ff).

The ideal of analytic philosophy is complete lucidity and precision for language. Polanyi's theory shows that words, like the realities to which they refer, do not have such exactness. Words are ambiguous and their use as linguistic tools

is a skill that involves an element of personal judgement for which no handbook of formal rules is adequate. Words refer both to the real world *and to our experience of it.* They do not have sharply delimited meanings. To grasp the truth of a statement requires a tacit awareness of its context, and an ability to respond to it as a total person by integrating the words and the experience.[5] There is no strict coincidence between language and what it denotes. To embody an apprehension in words and sentences is not just a matter of processing data, it is an art, demanding skill and sensitivity. No two historical knowers have identical apprehensions. The meaning that forms in the mind is affected by past experience and by what we expect to see. Even variations in our linguistic resources can affect the way we apprehend an event or an object. Although we know more than we can tell, our speaking helps to clarify what we know. Experience is a complex interaction of language and event, of imagination and intention. Every apprehension is influenced by the way we articulate what we apprehend. Meaning is shaped by the simultaneous operation of imaginative insight and articulation. We do not first apprehend a matter and then look for words in which to embody the apprehension. The process is informalizable and almost instantaneous.

A word is a formal symbol, but its meaning lies in the mind's awareness of the pattern of relations it evokes. Words trail different threads of meaning for different people. Some minds are furnished with richer experience, for whom words carry richer overtones and produce more echoes. "It is," says Polanyi, " our personal participation that governs the richness of concrete experience to which our speech can refer" (*PK* 87). Words themselves also vary in the richness of their meaning, because the sum of properties implied in a term varies. Polanyi calls the implied attributes of a term its "intention" and identifies three successively deeper strata of "intentions"(*PK* 114-116).

First, there are readily specifiable properties which a class of things are known to share. Secondly, there are known but not readily specifiable properties. For example, we need to reflect on words like justice, truth or courage, if we are to come to a deeper understanding of the reality designated. To undertake an inquiry into the meaning of such words is justified only if we are confident that we can identify *empirically* what is just, true or courageous. Polanyi is here arguing that the study of linguistic rules is no substitute for the study of things referred to in its terms. He calls this practice "pseudo-substitution" (*PK* 113-114). We should not, for example, express disagreement on the nature of things as disagreement about the use of words. Language stands in relation to experience as scientific generalizations stand to empirical data. Words are generalizing symbolic creations of the mind that articulate *tacit* human experience of recurring features of reality. Through the centuries, writes Polanyi, "Words of great human significance accumulate...an unfathomable fund of subsidiarily known connotations, which we can bring partly into focus by reflecting on the use of such words" (*PK* 155). There is, thirdly, a deep level of intentions, formed by the indefinable range of anticipations we express when we designate something real, but whose subject matter remains largely hidden. "God" and his "Word" belong to this deepest of all strata of intentions.

To understand a descriptive term depends on the ability to grasp tacitly a pattern of relations or potential acts. The process involved in understanding a concept like justice, or the chain of reasoning in a mathematical theorem, is the same as for a simple concept like bread, only more elaborate. Each concept evokes an imaginative representation in consciousness, but concepts which draw on a wide range of associations form a slightly different picture for each hearer.

Most language has reference to the real world, but the symbols of pure mathematics and formal logic do not refer to any particular realities. Their significance lies chiefly in the use that can be made of them according to known rules (PK 85ff). To define the meaning of a word is to formalize its meaning by reducing its informal elements. Such

formalization can be highly fruitful, but is necessarily incomplete. Terms that have reference to a subject matter can only be defined up to a point and words with a highly inclusive application are virtually impossible to define.

Polanyi's theory of language seems to me to be of significance for theology, and particularly for the *Logos* doctrine, for several reasons. In the first place, his philosophy is a personalist metaphysic which never allows meaning and reality, the general and the particular, to fall apart. Only such a metaphysic provides the needed philosophical tools for thinking in a unitary and personalist way about the God-world relation--the relation between "the One" and "the many." His theory represents language as related directly to the reality it denotes. It accredits the bond between what a thing is in its inner being (ontology) and what it is in its external relations (epistemology). This is in sharp contrast to the positivist view which regards words (or theories) as related only *indirectly* to that to which they refer. Polanyi opposes linguistic and conceptual dualism by showing that knowing is a mode of being and recognizing this as the foundation of unitary thinking. Theologically, this validates the Christian claim that being is transformed through knowing and that revelation can be redemptive (*PK* 105). The gospel of God's self-revelation in Christ is held to be "Good News" largely because to hear and receive the message of his love and forgiveness is understood by Christians to be a receiving of God himself. God *is* his message . There is an inner relation between revelation and reconciliation, between knowing and being. The test of true knowing is a change in being--a "new creation." Reconciliation means God and man coming together in mutual "indwelling" or participation--an idea that is developed in Chapter 14 of St. John's Gospel.

Positivism in a variety of guises still ignores the participatory relation between epistemology and ontology, which is a central feature of Polanyi's epistemology. The theological counterpart of this is found in the relation between revelation and reconciliation. Polanyi's theory of language illuminates the doctrine of the incarnation because it is true to the structures of a personal order of reality. In the Incarnation, so Christians believe, God expressed himself directly through his living "Word." Theologically, the ground of unitary thinking lies in the nature of God, in whom is the coincidence of opposites referred to above. God is *one* in Being and Agency, one in Person, Word and Act. When God acts in self-revelation, he is himself his own self-revealing "Word." He and his Word are indivisible. In the Incarnation, he reveals himself, not through the words of a prophet, but in a particular Presence and life-style--a pattern of self-giving and forgiving that brings life out of death--a pattern that is both uniquely particular and universally significant, in which God and man share the same "personal space" through mutual indwelling, though they do not exist on the same *logical* level. In this union, the particular, historical Jesus (the "first-born of many brethren") represents the individual pole and the "Word incarnate" (the "only-begotten Son") represents the universal pole of a prototypical "I-Thou" relation.

Epistemologically, the tendency to think in terms of external, symbolic relations destroys the relation between reality and its intrinsic meaning, so that knowing cannot be a recognition of meaning inhering in the object, but is an external structure contributed by the mind. On this Kantian-type view, knowing has no inherent connection with being, nor can such a view justify the link between revelation and reconciliation. Polanyi's analysis of the structure of knowing affirms the identity of internal and external relations so that language is seen to share with knowing and being the same triadic and polar structure that we need to affirm of the knower-known relation. Polanyi shows that language functions in such a way that words have both a theoretical (subjective) and an empirical (objective) component and can equally be indwelt as a framework and explored as a meaning to be discovered. This "both-and" situation sets up an inevitable dialectic, which, on Polanyi's own showing, is triadic in structure.[6]

Polanyi not only stresses the inner relation that binds the speaker, his meaning and his words. He makes of the "word" a kind of sacrament of being and thus illuminates the doctrine of revelation by his use of the distinction between tacit and explicit knowledge. Before the coming of Christ, knowledge of God--so it seems to Christians--was a tacit, non-articulate kind of knowledge lacking the clarity and concreteness of definition in personal terms provided by the Incarnation. In the past, God spoke to mankind in many ways and through many media. But in the Incarnation, the relation between God and his "Word", between the tacit, inner relation and the explicit, self-revealing outer relation, came to be understood as coinciding in a way that cannot be claimed for human speech. When God became incarnate in Christ, it was as if a new language was born and people could articulate their tacit knowledge of God more clearly in the language of personhood, love and community. This "explicit" knowledge of God articulates the message through the power of transformed lives. Christianity's central claim is that the coming of the "Word" brings with it an inner freedom and power to express the gospel, not in word only, since words alone do not transform, but in act and in being, through participation in the life of God in the Spirit. In my view, the message of Christianity defies comprehension, unless it is interpreted in terms of a personalist metaphysic or model, such as Polanyi's theory of personal knowledge (which is also a personalist ontology) provides.

ENDNOTES

1. *Logos* is Greek for "word." In the Prologue of St. John's Gospel (John 1:14), Jesus is spoken of the Word of God who "became flesh."

2. A sign is denotative, but is only meaningful by convention and has no built-in resemblance with that which it signifies. In one respect, sign-language is no different from ordinary language in the sense that each word is a "sign" for a particular object, idea, person or action and has to be learned. Like symbols, signs are a social phenomenon, arising out of the life and work of a society. But generally speaking, words are more appropriately thought of as "symbols" than as "signs", since there is in words almost always some vital connection between the words used and that to which they refer.

3. See *PK* 113. On Polanyi's view, positivism does for science what nominalism does for language; it sets a great divide between theory and substance, between thought and matter, between meaning and reality, between subjectivity and objectivity. Having done this, it identifies reality and objectivity with the material world and consigns such features of experience as thought, theory, and meaning to the realm of subjectivity. On this view, language, like all interpretative symbolism, is necessarily reduced to conventional status.

4. T. F. Torrance suggests that the fourth century Christian heresy called "Arianism" is the equivalent of nominalism in the philosophy of language. In drawing this parallel, he argues that the relation between persons and the language they use is, in the first place, an internal, ontological relation. According to Arianism, the "Son" (or *Logos*) differs from the "Father" in being. Their only relation is a moral one established contractually. Orthodox Christianity has always repudiated this idea, holding Jesus Christ to be the pre-existent Logos of God, who eternally shares his uncreated being and is of the same nature (Greek: *homoousion*, meaning "of one substance"). The Arian Christ reveals the Father, but stands in an external relation to him and is wholly on the created side of the divide. But according to main line Christianity, the Son reveals the Father because he *is* God, and because Father and Son are indivisibly one in being and agency. Without this understanding, the Son can only reveal the Father symbolically. In fact, the Western Church has tended to understand the relation in this way--severing the bond between reality and *Logos*, between being

and knowing, between what a thing is in its inner being and what it is in its external relations. This subtle form of epistemological and anthropological dualism turns the relation between God and his "Word" into an external relation which depends on arbitrary and transactional considerations. To think of God and Christ in this way is the theological counterpart of linguistic and conceptual dualism. On this view, God is one thing and Christ is another. This undermines the doctrine of God incarnate (the view that God manifested himself in his inner relations as "Word made flesh"), and also encourages a juridical view of the atonement. Unitary thinking requires acceptance of the *homoousion* doctrine, which sees the Father-Son (*Logos*) relation as inhering eternally within the one Being of God.

5. See J. H. Gill, *The Possibility of Religious Knowledge* (Grand Rapids: Eerdmans, 1971), 117.

6. Polanyi calls communication "a triad of triads" (*KB* 185). There are the partners in dialogue, whose speech functions as the "go-between"; there is the speaker, the reality to be communicated and the words that denote it; and there is the self, its conceptions and the language used to convey these.

The Critical Appropriation Of Our Intellectual Tradition: Toward A Dialogue Between Polanyi and Lonergan

Vincent M. Colapietro

It is especially appropriate to address in this publication questions concerning the complex relationship between religious traditions and intellectual life. Too often such traditions are still viewed as providing fixed and final answers to questions whose force and meaning do not depend on these traditions. This overvalues traditions in one respect and undervalues them in another. As a set of answers, religious traditions by themselves do not stand on their own; their deficiencies, lacunae, and errors call out for revision, development, and correction. As a set of definitive answers, religious traditions tend to be overvalued by their defenders. But as claims whose function is not to quell intellectual curiosity but to issue existential challenges,[1] it would be difficult--if not impossible--to value too highly these claims. Even so, as the conditions for radical questioning, these traditions tend to be undervalued by their detractors and even by many of their defenders.

Among the dominant images in our Enlightenment inheritance are those associated with religious persecution (e.g., Galileo brought before the Inquisition and the Massacre of St. Bartholomew). The figure and words of Voltaire epitomize the cumulative (and continuing) influence of these powerful images. When Voltaire states that "The man who says to me, `Believe as I do, or God will damn you,' will presently say, `Believe as I do, or I will assasinate you,'" we all feel the force of his words. In addition, his question is our own, "By what right could a being created free force another to think like himself?" And when he observes that "A fanaticism composed of superstition and ignorance has been the sickness of all the centuries" (quotations from Durant 1952, 237) we cannot but help feel his deep antipathy toward all forms of fanaticism, including religious fanaticism. Frequently religion is identified *tout court* with such fanaticism. The safeguard against fanaticism is, for Voltaire, the deliberate cultivation of a skeptical outlook. By their questions--their willingness to call themselves and their own traditions into question--ye shall know them; that is, ye shall be able to distinguish the humane from the intolerant.

In a recent issue of *Cross Currents* (Volume 40, Number 2 [Summer 1990]), Robert Wuthnow and Edith Wyschogrod point out, in very different ways, the *interrogative* dimension of living religiously. In "Living the Question--Evangelical Christianity and Critical Thought," Wuthnow borrows "the much-used phrase `living the question' because it seems to me that Christianity does not so much supply the learned person with answers as it does raise questions .... [Christianity] leaves people with a set of questions they cannot escape, especially when these questions face them from their earliest years" (1990, 167). Later in this article he notes that: "Lived as a question rather than a set of absolute answers, Christianity can stimulate critical thought. And in doing so, it is likely to continue bearing the burden of misunderstanding and prejudice. But that response should only galvanize its courage to tell a different story" (1990, 175). In "Works that 'Faith': The Grammar of Ethics in Judaism," Wyschogrod states that: "The contemporary situation of sacred language can be described as a change in grammatical mood (attitude indicating verb forms) from a seamless unity of the imperative and the indicative moods at the heart of action and prayer in normative Judaism, to the interrogative mood of postmodernity" (1990, 189). In the interrogative mood, our religious utterances regain their vitality and authenticity; or, they assume the form in which they are most likely to be alive and genuine

for us at this juncture in history.

I

Before reading these articles, I was already engaged in the task of trying to find my way home,[2] of forging a path back to ingenuous participation in religious practice; after encountering them, I am encouraged to continue my search. My steps have been guided by, among other authors, Bernard Lonergan and Michael Polanyi. With their help, I, too, feel not only the need but also the power to tell a story different from that of modernity, a story in which unqualified rebellion and unmoored rationality (cf. Wyschogrod 1990, 183) are themselves exposed to a hermeneutic of suspicion (Ricoeur 1970). This story concerns a crucial function our religious traditions have actually played and can still serve in our intellectual life.

At the heart of this story is the suggestion that it would be better to conceive of religious traditions in terms of questions than of answers. They make certain ways of questioning ourselves not only possible but necessary. It is legitimate to see religion as an existential answer (a response to the "mystery" of our existence). Moreover, it is also valid to see life itself as a religious question (an abyss opening in the ground beneath our feet). Indeed, only by seeing human existence as a religious question can traditional religion have the character of an existential answer. But, too often, this answer is considered exclusively as the closure of questioning. My suggestion (paralleling, it turns out, the suggestions of Wyschogrod and Wuthnow) is that my own religious tradition is best understood as a commitment or set of commitments whose value resides above all else in generating questions, not resolving them. To bind ourselves to, say, Judaism or Christianity is to commit ourselves to taking virtually everything as questionable, including the authenticity of our commitments and the adequacy of their formulation. It is to live our concrete, historical lives as inescapably problematic ventures in which the questioner and the question are one.

With respect to *both* Lonergan and Polanyi, I am not an expert but an amateur (an untutored lover or admirer). Even though I have not formally studied either of these thinkers under the direction of a teacher, I discovered both of them rather early in my intellectual career. In addition, I have been reading them, off and on, for almost two decades now. Lonergan and Polanyi are thinkers to whom I turn, again and again, in my own struggle to make sense out of my experience of our world. In other words, they are for me not so much objects of study as resources for inquiry. Of course, this distinction cannot be drawn too sharply: in order to be resources for investigation, writings or authors must be, to some extent, objects of investigation.

The point of these remarks is not to beg indulgence for misunderstanding or misusing the positions of these thinkers. It is simply to help my readers frame expectations appropriate to the discourse before them. This discourse is not so much an essay *on* Lonergan and Polanyi as it is an exploration with them. But, as you will see, their guidance is solicited almost at every turn. Indeed, the very way in which the issue is framed owes much to both authors.

II

In *The Crisis of Philosophy*, Michael McCarthy poses the question to which the remainder of this paper is devoted. As we shall see momentarily, this question finds its counterpart in Polanyi's *Personal Knowledge*. McCarthy accepts Hans-Georg Gadamer's insight that "belonging is a constitutive feature of human existence" (1990, 332). As a result, he sees that "[t]he real question is not *whether* we shall belong to a tradition but in *what manner* we shall belong." This leads him to ask: "Can we achieve a dialectic of belonging and distance, which preserves the richness of tradition but keeps us sensitive to its limits?" In a section of *Personal Knowledge* entitled "Acceptance of Calling", Polanyi calls attention to the fact that

> we are creatures of circumstance. Every mental process by which man surpasses the animals is rooted in the early apprenticeship by which the child acquires the idiom of its native community and eventually absorbs the whole cultural heritage to which it succeeds. Great pioneers may modify this idiom by their own efforts, but even their outlook will remain predominantly determined by the time and place of their origin" (1958, 322).

This requires us to acknowledge that: "Our believing is conditioned at its source by our belonging." Since the society to which we belong "allocates powers and profits," those of us who are adherents of the intellectual *status quo* are, thereby, supporters of the way powers and profits are being allocated. It should be no surprise, then, that: "Respect for tradition inevitably shields also some iniquitous social relations." The awareness of this inevitability prompts us to ask, "How can we claim to arrive at a responsible judgment with universal intent, if the conceptual framework in which we operate is borrowed from a local culture and our motives are mixed up with the forces holding on to social privilege?" One context in which such awareness is likely to generate this form of question is the academy; curricular reforms are haunted by doubts regarding local prejudices (e.g., Western or patriarchal biases) concealing themselves under universalistic rhetoric. (321-324)

One way of framing this issue is in terms of immanence and transcendence. To acknowledge that we are creatures of circumstance and also that our believing is conditioned by our belonging is to underscore our immanence in history: we are caught up in a flux over which we have only very limited control. But the very circumstances into which we have been thrown--the very communities into which we have been born--have themselves bequeathed to us an array of "transcendental precepts" (Lonergan 1985, 8) or universal principles from which it seems difficult, if not impossible, to sever allegiance. These precepts or principles are precisely what empower us to see our culture as local and some of our practices as iniquitous. In other words, they are the means by which we can transcend the contingencies of our time and place. Some thinkers stress our immanence in history to such a degree as to undermine the possibility of transcendence; other thinkers so emphasize our capacity for transcendence that they render negligible our immanence in history. In contrast to both of these types, Lonergan and Polanyi strive to give due recognition to *both* immanence and transcendence.

Closely connected with this, both desired to bring into sharp focus (in the words of the former) "the ongoing interplay in human history of tradition and innovation" (Lonergan 1985, 35). "We owe our mental existence predominantly to works of art, morality, religous worship, scientific theory, and other articulate systems [including language] which we accept as our dwelling place and the soil of our mental development" (Polanyi 1958, 286). These articulate systems are *inherited* matrices in which novel discoveries are made and novel inventions crafted. The innovative is dependent, both conceptually and existentially, on the established. The innovative is recognizable and,

indeed, possible only when measured against the established. Apart from tradition, innovation makes no sense: it is conceptually part of a contrast. Without established or traditional frameworks in which skills can be acquired and refined, no person would have the resources to be innovative.

In addition, both Lonergan and Polanyi were interested in showing that our *religious* traditions have been and must continue to be indispensable resources for intellectual innovation. They approached this task, however, in very different ways. Lonergan approached this task, first and foremost, as a member of a strongly traditional religion, while Polanyi did so as an emigre from a totalitarian country dedicated to the elimination of traditional religion. This resulted in a difference in focus: Lonergan labored strenuously to show the inadequacies of our classical inheritance, while Polanyi concentrated primarily on showing the dangers inherent in certain central features of our distinctively modern heritage. Put alternatively, Lonergan was most interested in the transition to modernity, whereas Polanyi's deepest concern in this connection was to exhibit the nihilistic tendencies inherent in a militantly secular worldview.

As a Roman Catholic priest responding to Pope John XXIII's call for *aggiornamento* within his church, Lonergan was especially concerned to convince his fellow Catholics of the necessity to make the transition from a classicist world-view to contemporary historical-mindedness (see, e.g., 1967, chapter 15 and also 1974 1-9). Specifically in reference to Thomism, he suggests that this necessary transition will involve at least five "transpositions," namely: "A Thomism for tomorrow has to move from logic to method; from science as conceived in the *Posterior Analytics* to science as it is conceived today; from the metaphysics of the soul to the self-appropriation of the subject; from an apprehension of man in terms of human nature to an apprehension of man through human history; and from first principles to transcendental method" (1975, 50). He is sensitive to the fact that "Catholic philosophy and Catholic theology are matters, not merely of revelation and faith, but also of culture. Both have been fully and deeply involved in classical culture. The breakdown of classical culture and, at least in our day, the manifest comprehensiveness and exclusiveness of modern culture confront Catholic philosophy and Catholic theology with the gravest problems, impose upon them mountainous tasks, invite them to Herculean labors" (1967, 266). He was convinced that: "Classical culture cannot be jettisoned without being replaced; and what replaces it, cannot but run counter to classical expectations." He was also convinced that: "There is bound to be formed a solid right that is determined to live in a world that no longer exists. There is [also] bound to be formed a scattered left, captivated by now this, now that new development ..." (1967, 266-7). In response to this anticipated and, indeed, encountered polarization, Lonergan advocated what might be called a centrist approach; for he believed strongly that "what will count is a perhaps not numerous center, big enough to be at home in both the old and the new, painstaking enough to work out one by one the transitions to be made, strong enough to refuse half measures and insist on complete solutions even though it has to wait" (1967, 267).

While Lonergan pointed the way beyond classicism, Polanyi sought a way beyond nihilism (see, e.g., 1969, chapter 1). For the latter, "modern nihilism is a moral excess from which we are suffering today ..." (1969, 3). He even admitted the possibility that "our passion for nihilistic self-doubt may be incurable, and it may come to and end only when it has finally destroyed our civilization." It was, indeed, this possibility that prompted him to articulate a multifaceted critique of modern nihilism.

Despite his insistence upon making the transition from classicism to modernity, Lonergan expected that there would be "a rather notable continuity" between the past and the present--in particular, between the thought of Thomas Aquinas and that of contemporary Catholics (1985, 51). As part of his critique of nihilism, Polanyi insisted that

anti-traditionalism must be shown for what it is--another tradition whose original emancipatory power has largely dissipated and, in fact, whose continuing dominance tends more and more to undermine the possibility of effective freedom. Accordingly, Lonergan's plea for the cultivation of historical-mindedness is the plea of a traditionalist, i.e., of one deeply committed to establishing a continuity between the past and the present. And Polanyi's rejection of nihilism and his recovery of tradition are the opposite sides of the same coin.

Lonergan and Polanyi were, of course, acutely aware that tradition could stifle innovation and, in turn, that innovation could discredit tradition. They were also aware that not only could the representatives of any particular historical tradition betray its own definitive norms but also that traditions themselves could violate "the immanent norms of the human spirit" (McCarthy 1990, 334; Lonergan 1967, 246). Historical consciousness brings with it the painful awareness that our religious traditions have been instruments of injustice and obstacles to truth. Moral discernment allows us to see that what has been true of the past is also true of the present: our religious traditions are, to some degree and in some ways (however subtle), inauthentic. Hence, it becomes imperative to adopt a critical stance toward the inherited framework in which we customarily dwell. But (and here the issue becomes more complex than we ordinarily suppose) the possibility of adopting such a stance depends, in part, upon the vitality of the very tradition or framework about which judgments of authenticity are being made. Put another way, we are never completely outside of the framework whose authenticity we are trying to determine. Thus, our breaking out of an inherited framework is never as thoroughgoing as is our dwelling in this framework (Polanyi 1958, 195ff). We are always still committed, in a fashion, to what we reject, no matter how vociferous and extreme is our rejection. Indeed, the more vociferous and extreme the reaction, the more we are inclined to say, "Methinks, s/he doth protest too much." What needs to be ascertained, above all else, is whether our rejection amounts to a conversion or an inversion, i.e., an espousal of norms and ideals thrusting us toward self-transcendence and self-transformation or an espousal condemning us to self-insulation and self-disfigurement (cf. Grant 1974).

In light of the above, it seems especially appropriate to take this occasion to explore, in light of Lonergan and Polanyi, the topic of tradition. In particular, I want to look at what might be called "the dialectic of fidelity and truth." By this expression, I mean the fateful way in which the acknowledgment of truth (especially novel truth) and the fidelity to tradition (especially a hoary one) are actually dependent on each other and, at the same time, potentially destructive of each other. At the heart of any dialectic is an *agon*, a potentially destructive conflict between mutually dependent factors or forces (cf. Lonergan 1957, 217). While conflict is inevitable, destruction is not. Thus, the point in speaking about a dialectic is to bring into view not the inevitablity of defeat or collapse but the inescapability of conflict and struggle. It is also to highlight the mutual dependence of inevitable antagonists.

III

It would be difficult to overestimate the role tradition plays in the acquisition of knowledge. In certain respects, virtually no one truly doubts or even could reasonably doubt this role. Who could, for example, deny that human reason, as it actually functions in a particular domain of scientific investigation, depends upon the effective transmission of what previous scientists have securely established substantively and methodologically? And what is tradition but the effective transmission from one generation to another of what has proven to be secure or reliable?

Yet the systematic disregard of an authoritative tradition is a prominent feature of *critical* philosophy in most of its influential forms. By "critical" philosophy, I mean what Michael Polanyi meant--a program beginning in universal doubt and aiming at absolute certitude and, moreover, a program in which the elimination of the personal agency of the knower is the price to be paid for the attainment of objective knowledge. In the *Advancement of Learning* (1605, Book I), Francis Bacon asserted that: "If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he will end in certainties." The willingness to begin with doubt--to call into question what others take for granted--claims to make possible the elimination of any trace of "subjective" (i.e., personal) presence. In other words, such willingness is, from this perspective, the means by which the distorting influence of human subjectivity is removed and a dispassionate view of an objective reality is secured.

It is helpful to recall that the subtitle of *Personal Knowledge* is "Towards a Post-Critical Philosophy." If the critical turn advocated by Francis Bacon, Rene Descartes, et al. began by espousing programmatic (or methodic) doubt, the first steps toward a post-critical philosophy are those by which the obstacles to accepting a fiduciary programme (Polanyi 1958, 264) are removed. While philosophy transformed itself into a *critical* enterprise by its critique of tradition, it can transcend the nihilistic implications of this transformation only by (among other things) a critique of doubt (Polanyi 1958, chapter 9; cf. Peirce 1868). In the opening paragraph to the concluding chapter of *Personal Knowledge*, Polanyi declares that the aim of this book is to re-equip persons with the faculties which centuries of critical thought have taught them to distrust (1958, 381). One of these faculties is our capacity to entrust ourselves to the authority of masters, ones who embody in an exemplary way skills of doing and knowing. In our time, not explicit doubt but tacit beliefs, not radical criticism but acritical trust, need to be accredited as the principal sources of human knowledge (see, e.g., Polanyi 1958, 266).

The shift from a critical to a post-critical philosophy can be construed as a transition from a modern to a postmodern outlook. This becomes clear when we recall that, for Polanyi,

> The critical movement, which seems to be nearing the end of its course today, was perhaps the most fruitful effort ever sustained by the human mind. The past four or five centuries, which have gradually destroyed or overshadowed the whole medieval cosmos, have enriched us mentally and morally to an extent unrivalled by any period of similar duration. But its incandescence had fed on the combustion of the Christian heritage in the oxygen of Greek rationalism, and when this fuel was exhausted the critical framework itself burnt away (1958, 265-6).

The "critical movement" is, in effect, identified with the modern period in Western culture; and the movement beyond this movement can, accordingly, be called postmodern as well as post-critical. There may be good reasons for hesitating to use "post-modern" in reference to Polanyi.

We noted earlier that it would be difficult to overestimate the role of tradition in the acquisition of knowledge. Even so, most theories of knowledge, especially modern ones, have not only underestimated this role; they have been hostile to the very idea of tradition, to the allegedly obscurantist tendency to grant authority to merely received positions. Very early in the modern (i.e., post-medieval) epoch of Western culture, both the rationalist conception of reason and the empiricist conception of experience were articulated in opposition to what was being handed down in the name of knowledge. Thus, in the writings of Da Vinci, Bacon, Galileo, Descartes, and numerous others, we encounter not only attacks on particular intellectual traditions (e.g., Aristotelianism and scholasticism) but also a

general critical assault on the very notion of an authoritative intellectual tradition (i.e., a tradition as a locus of authority). To be sure, some of these authors conceived their task to include inaugurating a tradition of their own, one in which the claims of reason or experience would take precedence over those of traditions. For example, Descartes in the *Discourse on Method* (1637, Part VI) wrote that two obstacles confronting persons who devote themselves to science are the shortness of life and the lack of experiments. He judged that "there was no better remedy against these two obstacles than faithfully to communicate to the public all the little I had found, and to urge good minds to try to go beyond this in contributing, each according to his inclination and his capacity, to the experiments which must be made, and communicating also to the public everything they learned; so that, the last beginning where their predecessors had left off, and thereby linking the lives and labours of many, we might all together go much further than each man could individually." Two points need to be stressed in connection with this defense of tradition. First, the process is to begin with Descartes, with methodic doubt and the dramatic defeat of such doubt by a disembodied, solitary theoretical consciousness who knows with absolute certainty both "I exist" and "God exists." Second, it is not clear, however, how either the rationalist conception of reason or (for that matter) the empiricist notion of experience can forge such an alliance with tradition. Does not the formation of this alliance entail a violation of the integrity of either reason, rationalistically conceived, or experience, empiricistically conceived? Is such an alliance not rather like a sexual relationship established by an erstwhile virgin? Once the relationship is established, one *is* no longer what one was.

Lonergan and Polanyi explicitly acknowledge the role of tradition in the context of inquiry. In addition, they stress the critical appropriation of an intellectual tradition as an unavoidable task confronting any responsible inquirer. By the "critical appropriation of an intellectual tradition," I mean a process of critical evaluation by which responsible subjects make their own the resources of a tradition to which they are committed and, at the same time, by which they are confused or troubled. However, such appropriation is, as both of these thinkers realize, delicate and even problematic. While the very criteria for a *critical* appropriation are often found within an intellectual tradition itself, this is not necessarily the case. Moreover, at least some intellectual traditions are defined by their openness to other intellectual traditions, however imperfectly this openness is realized in practice. Such considerations make it easy or, at least, possible to see why efforts at critical appropriation, honestly and rigorously undertaken, contain within themselves the likelihood of deracinated consciousness: the likelihood of alienation from, rather than appropriation of, one's own tradition might be the outcome of such efforts. Lonergan and Polanyi are helpful precisely because their recognition of tradition's ineliminable role in human inquiry prompts them to investigate some of the most important ways tradition operates within the context of inquiry. They are also helpful because they thematize, or make explicit, the problem of how a particular religious inheritance might be evaluated as an authoritative intellectual tradition.

Any intellectual inquiry is, at once, irreducibly personal and essentially communal. That I, as a unique, historical, embodied agent, must assume responsibility for my utterances makes inquiry irreducibly personal. That I must address these utterances to other persons--that I must appeal to others not only to assist me in verifying the truth of my claims but also to clarify the very meaning of my utterances--suggests that the inquirer is essentially a person-in-relation-to-others. To be an inquirer is to participate personally (and this means, among other things, responsibly) in a community of inquiry. Objectivism fails to do justice to the irreducibly personal dimension of human knowledge, while subjectivism overlooks the essentially communal character of human investigation. Contra objectivism, to acknowledge the ubiquitous presence of the knowing subject in any act of knowing does not entail subjectivism. Contra subjectivism, to insist upon the self's responsibility to address others and even to submit to the authority of masters does not reduce the subject to an object.

What should be controlling in any inquiry is a question or set of questions, not a text or body of writings. Of course, a text often is an exemplary case of just such an inquiry and, accordingly, an explication of the text is a re-enactment of the drama of inquiry. Polanyi's *Personal Knowledge* and Lonergan's *Insight* are themselves compelling examples of this. The question animating this investigation concerns the authority of tradition: What authority, if any, can we claim for tradition in the field of knowledge? My thesis is that, at the heart of any truly authoritative tradition, there is the power to authorize questions of an ever more comprehensive and radical cast, even questions erroneously but persuasively deemed to be foolish or nonsensical. Such a tradition is a set of largely dumb certitudes, or tacit beliefs, allowing for the possibility of articulate doubts. The sort of authority with which I am concerned is intellectual authority; and, according to my thesis, the essence of such authority resides in the heuristic power of historical traditions (those intergenerational forms from which human action and even experience, for the most part, acquire their purposes no less than their structure). There is something unquestionable about the truly authoritative traditions. But what is unquestionable about them is so only because it allows us to pose questions of progessively wider scope and deeper significance. To insist upon the unquestionable authority of an intellectual tradition is not a plea for obscurantism, though it must certainly seem so to most people today (cf. Polanyi 1958, 268). It is, in fact, just the opposite--an attempt to undercut the obscurantism destined to result from the hegemony of skepticism. In this connection, one has only to think of the concluding lines of David Hume's *Enquiry Concerning Human Understanding* (1777): "When we run over libraries, persuaded of these principles, what havoc must we make? If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames; for it can contain nothing but sophistry and illusion."

It is not incidental that the *loss* of faith in truth eventually resulted from the discrediting of the truths of faith. Nor is it incidental that the recovery of a fidelity to truth cannot ultimately be separated from a willingness to open questions of an essentially religious character (cf. Polanyi 1958, 298). In opposition to David Hume's religious skepticism, we need to pit Michael Polanyi's fideism. In opposition to Rene Descartes' methodic skepticism, we need to endorse the doubts of Lonergan as well as Polanyi about the method of doubt. For the author of *Insight*, "[u]niversal doubt leads the philosopher to reject what he is not equipped to restore. But philosophers that do not practise universal doubt are not in that predicament ..." (1957, 411). For the author of *Personal Knowledge*, "the programme of comprehensive doubt collapses and reveals by its failure the fiduciary rootedness of all rationality" (1958, 297).

IV: Language As The Paradigm Of Tradition

There is perhaps no better way of illuminating our topic, the critical appropriation of intellectual traditions, than by taking language as our paradigm of tradition (Pieper 1954). Reflection upon this paradigm allows us to see what, in general, is involved in the appropriation of a tradition, i.e., in the process by which human beings make their *own* what is initially and, to some extent, enduringly *other than* themselves (cf. Lonergan). More fundamentally, it also helps us to see what tradition is. From these general considerations, we can turn to exploring what specifically is involved in the *critical* appropriation of an *intellectual* tradition. (The term "critical" is ambiguous: it might be used to designate someting rather specific--namely, the skeptical sensibility of Enlightenment rationality--or something more general, a healthy but disciplined willingness to call into question aspects of one's inheritance.) While it might

be more precise to speak of post-critical in this connection, it might also be worthwhile to reclaim the term "critical." "Critical" need not mean what it has come to mean in the modern experiment of universal doubt, namely, a comprehensive critique of all inherited beliefs. It can signify a sensibility at once more modest and more radical, the sensibility of those who fully realize their inability to call into question the whole of their inheritance and, nonetheless, who unflinchingly accept their responsibility to question, under the actual stimulus of a specific doubt as opposed to a wholesale skepticism, *any* part of this inheritance.

I am not unmindful that treating language as our paradigm of tradition might conceal and even misrepresent the unique character of other traditions (e.g., religion). In particular, our dwelling in our native tongue does not appear to allow for as complete a breaking out of the conceptual framework provided by this linguistic inheritance as does our dwelling in our native religion (i.e., the religion into which we were born and brought up). In other words, we may be able to dissociate ourselves more thoroughly from some traditions than from others; and, since language is one from which it is ordinarily impossible to dissociate ourselves, it appears that the choice of language as a paradigm of tradition is unjustified.

In terms of what is involved in the transmission of language or speechcraft from one generation to the next, we can do no better than recall the words of Polanyi. Indeed, in the texts to be quoted, he himself clearly takes language as the paradigm of tradition. "All arts [and thus the art of speech] are learned by intelligently imitating the way they are practised by other persons in whom the learner places his confidence. To know a language is an art, carried on by tacit judgments [including unspoken trust] and the practice of unspecifiable skills" (1958, 206). "The combined action of authority and trust which underlies both the learning of language and its use of carrying messages, is a simplified instance of a process which enters the whole transmission of culture to succeeding generations" (1959, 207). "This assimiliation of great systems of articulate lore by novices of various grades is made possible only by a previous act of affiliation, by which the novice accepts apprenticeship to a community which cultivates this lore, appreciates its values and strives to act by its standards" (1958, 207). "The learner [of language or of anything else], like the discoverer, must believe before he can know" (1958, 208). Learners have no choice but to place their trust in others. "Such granting of one's personal allegiance is ... a passionate pouring of oneself into untried forms of existence. The continued transmission of articulate systems ... depends throughout on these acts of submission" (1958, 208). The person to whom such systems are transmitted is transformed in a largely irreversible way. Insofar as this process of self-transformation is informal and irreversible, it is a-critical (ibid.).

V: Two Oversimplifications

It is, however, important to warn against two oversimplifications concerning the critical appropriation of an intellectual tradition. One involves too restrictive a view of what is meant by "critical appropriation," the other too abstract a view of "intellectual tradition."

First, we should not draw too sharp or absolute a distinction between the earlier and later phases of appropriation: the appropriation of any tradition is a continuum in which there are rudimentary forms of challenge evident very early in the process of appropriation and in which there is a massive amount of unchallenged assumptions present even during those moments of the most intense, explicit critique.

Second, most traditions are complex. They are not simply nor solely *intellectual* traditions. In a rough, provisional way, we can define "intellectual" as that which is concerned with the cultivation of intelligence and, as central to this concern, is devoted to the acquisition, maintenance, and refinement of the skills needed both to "hear" again what was "spoken" earlier (cf. Gadamer) and to discover what was never known before (Lonergan). Accordingly, a tradition is "intellectual" insofar as it is concerned with the cultivation of intelligence, i.e., devoted to (among other matters) imparting, conserving, and developing skills of interpretation and inquiry.

Some traditions are not only centrally but also narrowly concerned with this task or some part of this task; others subordinate this task to other forms of practice. A particular group of scientific inquirers would be an example of the former, while a historical community of religious worshippers would be an illustration of the latter. While the subordination of this task has historically resulted in the suppression and disfigurement of intelligence, it is arguable--indeed, both Lonergan and Polanyi, in effect, argue--that such subordination can also result in the liberation and transfiguration of intelligence.

As we have already suggested, the *critical* appropriation of an intellectual tradition is evident in a rudimentary and sporadic form very early in the process of appropriation. This means that the refined and deliberate critique of such a tradition is not absolutely novel. One needs only to think of the countless and spontaneous questions asked by children as they are being initiated into a tradition. It is, consequently, a gross oversimplification to see the later phases of explicit critique as discontinuous with earlier phases. In particular, the transition should not be described as a movement from blind, uncritical acceptance to enlightened, critical assessment. To describe this transition as such a movement is a gross oversimplification.

The *intellectual* dimension of a historical tradition is, ordinarily, just that--a single (though itself inherently complex) dimension of a complex inheritance: it is not only one aspect among others but also one frequently subordinated to some other form of practice (e.g., worship in the case of certain religious communities, rights in the case of certain political traditions, civility and character in the case of certain familial traditions). In addition, those traditions which *are* predominantly intellectual--which are more or less exclusively focused on the cultivation of intelligence--are always concerned with only certain forms of intelligence and not the full array of intellectual skills needed to make sense out of our experience of the world. A possible exception to this is the traditional university. In any event, what needs to be stressed here is that the majority of our most basic traditions incorporate within themselves an intellectual dimension, but this is only a single facet of their multifaceted reality; what also needs to be emphasized is that even those traditions whose focus is predominantly "intellectual" are, with one possible exception, not *comprehensively* intellectual. It is, hence, a fundamental distortion to see all intellectual traditions (more precisely, all traditions having a significant bearing upon the cultivation of intelligence) as separable entities rather than as distinguishable aspects; moreover, it is also a basic mistake to see any particular intellectual tradition as providing a comprehensive training of human intelligence.

VI: Two Forms Of Critique

Critical appropriation is a virtually inevitable phase in one's ongoing participation in an intellectual tradition. In saying this, it is important not to fall into the very error we warned against just a moment ago--namely, conceiving the appropriation of a tradition as a movement from an uncritical, blind allegiance to a critical, enlightened assessment. There is potentially something misleading in using the expression "critical appropriation" to designate a distinctive phase or series of phases; for this use tends to underwrite the oversimplification just noted. In one sense, "critique"--the asking of questions and posing of challenges--is part and parcel of the very process of appropriation, at virtually each and every phase in this process. In another sense, it is a distinctive phase in this process. There are moments in the life of inheritors when they adopt, self-consciously and deliberately, a critical stance toward their intellectual inheritance. At such moments, persons formally and explicitly commit themselves to *either* realizing more fully the deepest imperatives of their inheritance *or* rejecting the authoritative hold of these imperatives. Persons *conscientiously* decide to continue or to resist defining themselves in accord with their upbringing.

Part and parcel of any such tradition is not only specific judgments about the world but also general criteria defining the ways specific judgments may themselves be judged in terms of meaningfulness, truth, reliability, etc. In other words, intellectual traditions provide the resources for framing reflexive judgments, judgments about judgments in one or more respects. This provision can and often does empower the adherents of a tradition to call into question the foundational truths of their particular tradition. In addition, it helps to develop in these adherents a critical sensibility open to appropriating, from other traditions, standards and ideals of judgment different from the ones these adherents inherited from their own tradition. On the one hand, then, there are criteria *within* any intellectual tradition by which the proponents can judge aspects of their own tradition. On the other, there are criteria from intellectual traditions other than one's own to which one is, nonetheless, drawn--and drawn as a result of the critical sensibility fostered by one's own actual inheritance. In either case, there is inherent in any intellectual tradition a trajectory beyond its present form.

Not only is this trajectory inherent in such traditions, but it enters in an explicit and prominent way into the consciousness and commitments of those traditions we most likely admire and advocate. We are inclined to think that the authenticity of a tradition is secured, above all else, by its openness to innovation (cf. Lonergan) and its willingness to call itself into question in ever more radical ways (i.e., to pose questions striking ever more deeply at the very roots of the tradition itself). This inclination is praiseworthy. But it does not enable us to see adequately wherein the authenticity of a tradition resides. For the willingness and, indeed, the capacity to pose questions of an ever wider scope and deeper significance depends on an unquestionable fidelity to the ideals animating or inspiring our traditional practices. It is imperative to distinguish between an unquestionable and an unquestioning allegiance. On the one hand, I might not question what is or ought to be considered questionable (e.g., the results of a scientific experiment or the statements of an elected official). On the other, I might try to question what is, in some way, beyond question, i.e., in principle beyond the possibility of being called into question. If one asserts that nothing is, in reality, beyond the possibility of being called into question, then one is, in effect, taking the very act of questioning to be unquestionable. The (unquestioned?) primacy of the interrogative mood is, as Edith Wyschogrod suggests, the characteristic mood of our postmodern day. But underlying our questions is the *imperative* to question. Just as we frequently need (as Wittgenstein recommended) to question the question, so too we often need to question the questioner (including the motives of the questioner). The hermeneutics of suspicion simply cannot stop short of self-interrogration. For this reason, the stories through which I am forced to recognize my fallibility, finitude, and fallenness are indispensable

elements in any adequate hermeneutics of suspicion.

But what are the conditions for the possibility of questioning and, more narrowly, of questioning which refuses to limit arbitrarily the scope of its field? Here it is instructive to consider the form of skepticism espoused by so many students today. They have so few questions; beyond this, they have little desire in being aroused from their skeptical slumber, from their abiding doubts about the worthwhileness of Socratic cross-examination and, more generally, rigorous questioning. In the passivity and inertness of so many of our students, we are confronted with the massive failure of our dominant intellectual traditions. The crushing of dogmatism and the cultivation of skepticism are the "truths" that were supposed to set us free to question.

The sense in which I am using the term "unquestionable" is this: we are unable to call certain things into question without thereby undermining our very capacity or willingness to pose questions. I believe in order not only that I may know but also that I might question; and I question that I might believe in the manner which does the least violence to the rational integrity of myself and others. Moreover, I question in order that I might become more fully present to and responsible for myself. While beliefs make questions possible, questions make beliefs humane. Underlying the capacity to question is the unlimited desire to know; fostering the willingness to question are the Socratic challenges of others.

VII: Conclusion

In my own life, the challenges of Michael Polanyi and Bernard Lonergan have forced me to re-open questions concerning the *arche* and *telos* of my own ability to pose questions, my own capacity to call into question the theoretical validity of inherited "truths" or moral authenticity of inherited "values." As McCarthy observes, we need to adopt both a hermeneutics of recollection and a hermeneutics of suspicion, "for every tradition contains elements worthy of retrieval and others unfit for transmission" (1990, 334). But it is crucial "to be critical about the posture of criticism itself. Hermeneutic suspicion is an ambiguous interpretive outlook, even though it has become a dominant [and perhaps even an unquestioned] stance in our intellectual culture" (ibid.). We must question where the questioner stands; we must question where we ourselves as questioners stand in our attempts to launch ever more radical critiques of our intellectual traditions. We must not be content to remind ourselves about the possibility of being allied to a tradition that is inauthentic or even iniquitous; we must also consider with genuine humility the possibility that we ourselves, in our very role as critics and questioners, are alienated from what is genuine and true (ibid.).

We need to recognize that we as questioners are always already members of a community of questions and also that this community is always in the position of allowing the fertile soil of its own critical sensibility to be ravaged by the winds of fashion and the scorching sun of uncharitable criticism. We need to recognize that our very commitment to truth--or, more precisely, the particular form this commitment has characteristically assumed during the modern period--threatens to destroy the vitality of our faith, our faith in ourselves and also in one another. "Uprootedness is," as Simone Weil has pointed out, "by far the most dangerous malady to which human societies are exposed, for it is a self-propagating one. For people who are really uprooted there remains only two possible sorts of behavior: either to fall into a spiritual lethargy resembling death ... or to hurl themselves into some form of activity necessarily designed to uproot, often by the most violent methods, those who are not yet uprooted, or only partly so"

(1952, 47). It is legitimate to ask how often *radical* critics of their own intellectual traditions are doing what Weil describes here--hurling themselves into some form of activity necessarily designed to uproot others.

When one turns from these radical critics to such critical traditionalists as Polanyi and Lonergan, one senses one is in the presence of authentic radicals. For these critical traditionalists are thinkers unwilling to restrict arbitrarily the scope of inquiry. They are willing to go to the fiduciary root of their critical sensibility.

ENDNOTES

1 In "Dogma and the Universe," C. S. Lewis asserts that: "Christians themselves ... have a bad habit of talking as if revelation existed to gratify curiosity by illuminating all creation so that it becomes self-explanatory and all questions are answered. But revelation appears to me to be purely practical, to be addressed to the particular animal, Fallen Man, for the relief of his urgent necessities--not to the spirit of inquiry in man for his gratification of his liberal curiosity" (1970, 43).

2 For this way of putting the matter, I am indebted to E. F. Schumacher's *Small Is Beautiful: Economics As If People Really Mattered* (New York: Harper & Row, 1973). See, e.g., pp. 156-7 of this book. Beyond this, I am indebted to this author for my initial doubts about the Enlightenment project and its uncritical celebration of deracinated reason.

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Book Reviews

Practical Knowledge: Outlines of a Theory of Traditions and Skills. Edited by J.C. Nyiri and B. Smith. London: Croom Helm, 1987. Pp.224 ISBN 0-7099-4477-2.

Practical Knowledge is based on papers read at a conference in Austria in 1985 on "Kuntsgefuhl, Sprachgefuhl, Rechtsgefuhl: Zum Problem des praktischen Wissens." Its concerns obviously overlap with those of Polanyi, as the first two papers acknowledge. Several of the papers present materials, comparisons and references of interest to readers of this journal. But, I suggest, the distinctiveness and primacy of a practical knowledge, irreducible to articulate theory, and its implications regarding tradition and sensitivity (or feeling for), could have been more clearly and fully established by more attention in some of the papers to Polanyi's work. I shall focus on those papers which come nearest to Polanyi's themes.

In the first paper, "Knowing How vs. Knowing That", Barry Smith (Manchester) draws attention to those thinkers who have accorded primacy to the practical, such as Gestalt psychology, especially its founder Christian von Ehrenfels, and in relation to conduct as well as perception, Merleau-Ponty and the Gestalt-character of behavior, and Polanyi and the tacit element in natural science. He starts with Ryle's distinction, taken as his title, and points to aspects which Ryle neglected: the role of feeling (or sensitivity) and the social nature of disciplines which are transmitted by traditions. He draws attention to the importance of learning by doing and to the forms of practical knowing which the specifiable procedures of computers cannot attain. Smith's argument would have been even stronger had he used, as well as Polanyi's "surface" examples, the "deep" structure of tacit integration, attending *from* in order to attend *to*, which means that all knowing is controlled by the tacit, personal and therefore practical powers of the knower.

The same applies to the concentrated and wide-ranging paper, "Tradition and Practical Knowledge", by J. Nyiri (Budapest). Nyiri considers tradition as a non-discursive means of transmitting practical knowledge. He points out that some technical skills, such as riding a bicycle, do not necessarily need apprenticeship, whereas social skills do. And, he argues, the existence of computer programs for medical diagnosis takes away some of the magic of the argument, found in Kant, Hayek, Polanyi, Ryle and the later Wittgenstein, that one cannot have rules for applying rules (one could object that *someone* still has to recognize the symptoms in the patient in the first place before they can be fed into the program). He distinguishes two positions regarding practical knowledge: the weaker, that it is a *practical abbreviation* within the flow of knowledge and thus that acknowledgment of it requires no transformation of epistemology; and the stronger, that there is either a layer of it irreducible to propositions or, even stronger, that such a layer is the foundation of all knowledge. Similarly, he finds two theories of tradition: the "weaker"' that all traditions are really "secondary" ones whose contents can be discursively transmitted; and the "stronger" that are "primary" traditions whose contents cannot be reduced to discursive terms, and, even stronger, that reason itself is grounded in traditions. In respect of the last, he refers to Oakeshott and to Maurice Halbwachs (*Les cadres sociaux de la memoire*, 1925), who regarded reason as raising oneself to wider and more inclusive traditions. He then quickly surveys some associated terms such as "custom", "authority" and "prejudice", and effectively quotes Ernst Mach, as well as Burke, on the necessity of prejudice. Finally, despite his initial reservations, he defends the thesis of "strong" traditionalism by reference to studies of language, Thomas Kuhn and science, art (Arnold Hauser, Robert Musil), law and politics and social life (Carl Menger, Burke, Hayek, Gadamer, Hart, and the later Wittgenstein).

"Meaning and Rules" by Eva Picardi (Bologna), addresses three questions in relation to statements of fact: (1) What type of theoretical knowledge, if any, does the understanding of sentence meaning consist in? (2) How is understanding of meaning related to people's abilities to suit linguistic force to words and words to the world? (3) How far does knowledge of a sentence's meaning and ability to use rest on tacit knowledge of rules governing its words?

In answer to (1), she takes Quine's and Davidson's theories, both of which state that unravelling some of the entailments of a sentence is needed for a grasp of its meaning, and points out that this involves tacit skills. As for (2), she concludes, partly following the later Wittgenstein, that knowledge of meaning, in factual assertions, is not only a matter of knowing the rules for applying words but also of being able to recognize similarities on the implicit basis of a structure of comparatives ("If this and that are chairs, then so is that over there"). And these two conclusions together constitute her answer to (3).

Rudolph Haller's (Graz) "On the Feeling for Language and Its Epistemic Value" discusses the role of that feeling for language which is supposed to enable us to decide which expression is appropriate when we have no explicit rule to guide us. He draws attention to cases where one immediately feels that something is wrong in what has been written or said but cannot yet say just what it is and why it is wrong. "We sense in (an) unnoticed manner that which is worthy of being noticed." This feeling drives and constrains our articulate thought, and the articulation of our thought, without our noticing how it does so. As our surety in familiar forms of language in familiar situations, it does not accompany speaking and hearing but acts like a watchman who sits up and takes notice when required. We notice, by feeling, not what is familiar but changes in what is familiar. Feeling declines with mastery. Its cognitive value lies in registering alterations. Therefore it is not required for, and does not explain, the knowing and following of rules, which we do blindly.

Roger Scruton (London) provides a substantial paper on "Rechtsgefuhl and the Rule of Law." He argues that a properly constituted legal procedure (with, *inter alia*, judicial independence, publicly known laws, corporations treated as persons, and concrete and not abstract laws) itself will embody "natural law", "principles" or "rights" in its process of adjudication. Genuine law and natural law, he suggests, are as inseparable as a man and his shadow. And someone who places himself as an impartial judge in the setting of conflicts will generate for himself the legal procedures outlined and thus *Rechtsgefuhl* or a sense of justice.

Barry Smith, in "Practices of Art," offers an ontology of works of art, developed from Marx's analysis of work, which is designed to incorporate both the origins of works of art in the artist and their recognition by the public, plus also the artistic practices and training which artist and audience require. The theory accounts for creativity in terms of the incalculable fusion of disparate practices (but does that fit Shakespeare's superiority over his contemporaries?).

The remaining papers are: Roderick Chisholm, "Theory and Practice: the Point of Contact"; Joachim Schulte, "Remarks on Sprachgefuhl"; and Johan Wrede, "Poetry and Nationalism".

R.T. Allen

A Brief History of Time: From the Big Bang to Black Holes. By Stephen Hawking. New York: Bantam Press, 1988. Pp. 240. ISBN 0-553-05340-X.

This book has been a best seller. I read a rave review on it in 1989 and bought it because of the title, having long been fascinated by the mystery of time, and hoping for some illumination about it.

This book isn't a history of time at all. It is an account of what physicists have believed and now believe about the physical universe. Stephen Hawking is, according to the blurb on the cover, "widely regarded as the most brilliant theoretical physicist since Einstein," and I accept that, for I certainly cannot dispute it. He has written the book, we are told, for the non-mathematical layman, and I suppose it gives non-mathematical laymen as good an illusion of understanding as we can get. In that sense it is well written.

The book is purely a physicist's account of the universe. Of course there is nothing wrong with writing a purely physical account of the physical universe, as long as it is clear that this account is an abstraction, and not the whole truth about the subject in its setting. Abstractions are most necessary and useful. But the abstraction needs to be consistent and abide by its chosen rules, or it cannot tell truth--like style in a painting. And this is where I think it is legitimate for non-mathematical laymen to criticize. We cannot criticize the physicist's account of the universe; we just have to swallow black holes, an expanding universe, the uncertainty principle and string theories; and we just have to hope that a little glimmer of understanding will be digested into our minds. But we can protest when we see that the abstraction which is physics is being used as if it were not an abstraction but the whole truth, and that undigested pieces of other subjects, from areas quite outside the author's competence, are being tacked on and thus given the authority of "Science."

There is almost nothing in the book about life, mind or thought. The few remarks that are on these subjects show that they are considered as unimportant parts of physics, not worth any special attention in the vast scope of the physicist's study of the universe (e.g. 137: "Each history (in the sum of histories) will describe not only the space-time but everything in it as well, including any complicated organisms like human beings who can observe the history of the universe"). The message that comes through all the references to human beings is that they are completely unimportant. And it is quite unjustifiable that this message should be given this authority: physics can have nothing to say about what is important and what is not.

Stephen Hawking does see a paradox in the search for a unified theory that will describe everything in the universe, for he says:

> The ideas about scientific theories outlined above assume we are rational beings who are free to observe the universe as we want and draw logical deductions from what we see. In such a scheme it is reasonable to suppose that we might progress ever closer to the laws which govern our universe. Yet if there really is a complete unified theory, it would also presumably determine our actions. And so the theory itself would determine the outcome of our search for it! And why should it determine that we should come to the right conclusion from the evidence? Might it not equally determine that we draw the wrong conclusions? Or no conclusion at all (12)?

The solution to this difficulty he finds in the Darwinian idea of the survival of the fittest, which could make it unlikely that those individuals who are able to get the right answers are the most fitted to survive, and so right answers are likely to be found. But nothing produced by purely physical processes can be said to do anything right or wrong: the whole idea of right and wrong belongs to life and mind.

And life and mind, as well as God, are entities not determined by physical processes and so are outside the scope of this book. He deforms them in putting them in, and then cheats by using them as if he had not deformed them. For instance, in the argument cited above, he sees that in order to be part of his unified theory, rational beings would have to be physically determined and so not rational. But he thinks that the purely physical processes of chance and natural selection could nevertheless cause these beings to arrive at "right" solutions to problems. Here he cheats in assuming some of super mind, such as could not exist in his unified theory, which could say which theories were right and which were wrong.

Stephen Hawking explains that when we thought the universe to have a beginning we could suppose it had a creator, but if the universe is completely self-contained "it would have no beginning or end, it would simply be. What place then for a creator?" His idea of God is one of the simplistic irrelevances tacked on to the physics, almost an "old man in the sky" idea; and if the old man is not needed to start the system working or push the whole process along, there is nothing left for him to do, and he might as well retire gracefully.

So, no place for God in the universe of modern science, a conclusion that has often been drawn. But not only is there no place for God, there is no place here for life, or mind, or thought as an independent reality--and determined thought is no thought at all. If no thought, no science; if no persons, no scientific instruments and so no curiosity to invent and use them.

At the very end of his book, Professor Hawking touches on God again. If we do discover a complete theory, he says, it should be understandable in broad principle by everyone, not just a few scientists.

> Then we shall all...be able to take part in the discussion of the question of why it is that we and the universe exist. If we find the answer to that, it would be the ultimate triumph of human reason--for then we would know the mind of God.

How could he expect to know the mind of God, whom he has not seen, when he has not looked at the mind of his brother whom he has seen? How could he expect physics to give any answer to the "why" question? This sort of statement is what I mean by Professor Hawking's naivety outside his subject--or, if he had thought about these other subjects as deeply as about physics, the book would have had a validity which it lacks. But it would not have sold so well, since people seem to like to read about "science" rubbishing God and man: it lets us off the hook of conscience.

Michael Polanyi says many things about such "scientific" double-think. I shall quote only one, from the very beginning of *Personal Knowledge,* about the meaning of objectivity:

> In the Ptolemaic system, as in the cosmogony of the Bible, man was assigned a central position in the universe, from which he was ousted by Copernicus. Ever since, writers eager to drive the lesson home have urged us, resolutely and repeatedly, to see ourselves objectively in the true perspective of time and space. What precisely does this mean? In a full "main feature" film, recapitulating faithfully the complete history of the universe, the rise of human beings from the first beginning of man to the achievements of the twentieth century would flash by in a single second. Alternatively, if we decided to examine the universe objectively in the sense of paying equal attention to portions of equal mass, this would result in a life-long preoccupation with inter-stellar dust, relived only at brief intervals by a survey of incandescent masses of hydrogen. Not in a thousand million lifetimes would the

> turn come to give man even a second's notice. It goes without saying that no one--scientists included--looks at the universe this way, whatever lip-service is given to "objectivity". Nor should this surprise us. For, as human beings, we must inevitably see the universe from a center lying within ourselves and speak about it in terms of a human language.... Any attempt rigorously to eliminate our human perspective from our picture of the world must lead to absurdity (*PK* 3).

The true lesson of the Copernican revolution, then, is not the unimportance of man but the marvelous power of man to escape from his sensory experience and see the universe through theory. This is the kind of thought which Professor Hawking has not considered.

Dru Scott

Angels Fear: An Investigation Into the Nature and Meaning of the Sacred. By Gregory Bateson and Mary Catherine Bateson. London: Rider, 1987. New York: Macmillian. Pp. 224. ISBN 0-02-507670-1.

Those who work persistently and critically at the interface of two (or more) intellectual disciplines do not usually get warm thanks from their specialist contemporaries. Nevertheless, they often generate important concepts. Gregory Bateson (1904-1980) was one of these. His father was a famous geneticist at Cambridge and, in his own degree at that university, he combined anthropology and the natural sciences. It was in the former field that he made a name for himself in Southeast Asia. He worked with, and later married, Margaret Mead. His first book, *Naven*, investigated the initiation rites of the Iatmul people of New Guinea. It is still a classic. He was already beginning to develop an anti-reductionist view of human behaviour. This showed in his clear awareness of the fact that all societies need understanding at several different levels and that the "feedback" relation from a higher, contextual, level to a lower "embedded" level is subtle. These, however, were not his own terms. He introduced the Aristotelian words *ethos* and *eidos* to designate, on the one hand, all the feelings and expressive rituals which bind a group together at an unconscious level and, on the other hand, *eidos* for the more explicit level of culture. This *eidos* network of shared consciousness is articulated mainly by language. He applied the analysis also to his understanding of the behaviour of fellow academics at high table in Cambridge ("the port *must* circulate clockwise" and similar rituals). Looking back, one can see that the insight was an important one; but that distinction was drawn too sharp.

Partly because of his interest in the subtleties of biological control systems, Bateson came to work with Norbert Wiener, father of cybernetics, on anti-aircraft target-tracking systems. After the War, he turned his ideas to ecological and psychiatric problems. Here too he innovated. His first book of essays, *Steps to an Ecology of Mind*, shows this rising pitch of interest. Now a posthumous book of essays, expanded and edited by his

daughter, summarizes some of his earlier explorations and carries the argument and the speculation further. The subtitle, "an investigation into the nature and meaning of the sacred", indicates the breadth of his enquiry.

Angels Fear is not an impressive book, at first encounter. The line of thought is far from straightforward and the father-daughter dialogues which link it together are, in my opinion, too jokey and oblique. Nevertheless, it does contain extremely interesting ideas, some of which are not in Bateson's other books. In his last years in California, he seems to have become quite a celebrity. At the same time, he was finding the *ethos* of the counter-culture more congenial than that of the universities. So he lived at the Esalen Institute where he welcomed the warmth and open-mindedness, as well as the "healing" attitude to his own, ultimately incurable, illness:

> My friends here love me and I love them…[Yet] while I disbelieve almost everything that is believed by the counter-culture, I find it more comfortable to live with that disbelief than with the dehumanizing disgust and horror that conventional occidental themes and ways of life inspire in me. They are so successful and their beliefs are so heartless (53).

He rationalizes this preference partly by suggesting that the counter-culture is generating "a buffer of diversity that will protect the human being against obsolescence." But to the reader it also looks like a good example of Bateson's ambivalence as an anthropologist: his head and his heart responding, the one to a scientific *eidos* and the other to a countercultural *ethos.* There is no doubt that he gains strength from the community in which he lives. But he is capable of being fiercely critical of the magical and supernatural words which his New Age friends so readily bandy about. His overriding message is that we all need a new epistemology if we are "to limit the excesses both of the materialists and of those who flirt with the supernatural." And later: "we know enough today to expect that this improved stance will be unitary, and that the conceptual separation between 'mind' and 'matter' will be seen as the byproduct of . . . an insufficient holist."

Michael Polanyi and Gregory Bateson were both reacting against the imperialism and reductionism of contemporary science. But they trod different ground. Polanyi shows some wariness of cybernetics. He noticed the important, newly emerged information theory out of which cybernetics grew *(PK* 36-38). But the sophisticated guidance theories which all developed from it during the War appeared to be part of the pernicious endeavor to reduce knowledge to "strictly impersonal terms" *(PK* 328). That, at least, seems to have been his fear in the nineteen fifties. By the end of the sixties, however, he was grappling with the problem of what happens at the boundary between a lower and a higher system: between living and non-living, for example, when molecules of DNA "tell" the other components of a living cell what to do. He began to explore parallel situations and developed a terminology of "boundary conditions" and of "dual control." In "Life's Irreducible Structures" (in *Knowing and Being*) this is how he sums the matter up:

> A system under dual control relies ... for the operations of its higher principles on the workings of principles of a lower type, such as the laws of physics and chemistry. Irreducible higher principles are *additional* to the laws of physics and chemistry (231).

The problem of what happens at such interfaces and the corresponding problem of what language to use in such "shifting" ground continues to exercise scientists, mathematicians and philosophers. Bateson's approach would have been congenial to Polanyi. His viewpoint is multidisciplinary but the foundation of his thinking is deep and unifying, at the level of information theory. Bateson is more categorical than Polanyi in his rejection of dualism; but, like Polanyi, he shows profound respect for traditional ways of doing and knowing.

In the rest of this note I will list and briefly characterize some of the ideas which Bateson played with and worked with and which gave him hope and pleasure up to the end of his life.

1. The hidden and the tacit: Bateson never uses Polanyi's term, but he helps us to understand why we can never do without tacit knowledge, even when thinking about the simplest organisms. Putting it very baldly, you cannot have a "yes" without a hidden "no." Even the simplest mental and living activity is to do with "difference-registering" responses. At a high level, animal or personal, when many faculties and sensitivities are being integrated in focal awareness, the innumerable subsidiaries must be, at the time of action, the time of most reality, hidden.

2. *Ethos* to *eidos:* my impression is that there is much social-psychological mileage to be gained from Bateson's understanding of the processes whereby the feeling texture and pre-verbal patterns of a community form the "soil" or tacit ground from which the explicit and articulate structures of society emerge (see Polanyi, for example on conviviality and rituals in *KB* 211). Bateson did not use his *eidos* terminology in his later works, possibly because he saw that the Aristotelian term did not match the concept well.

3. A richer, interactive meaning for "ecology": in the nineteen seventies, I often tried to find educational concepts which were less instrumental and mechanical than those which were then (and still are) fashionable. So I recall the shock of recognition and pleasure when I encountered Bateson spelling out the principle that *the environment evolves with the evolving creature:*

> Surely the grassy plains themselves were evolving *pari passu* with the teeth and hooves of the horses and other ungulates. Turf was the evolving response of vegetation to the evolution of the horse (*Steps* 128).

4. Bateson's thinking about *double binds* and their relevance to mental disturbance and to compulsive and addictive behaviors (including the addiction to armaments) runs through much of his writing. The common theme is a person's or a group's failure to respond to a higher context as well as to the lower, more pressing and obvious one (note the link with Polanyi's "dual control", again).

5. Structure and threshold: also in the seventies, I remember trying to sort out the meaning of "structure" after reading Levi Strauss. I could only get as far as seeing structure statically as the kind of abstract relationship between the parts which is immanent in a system: for example, the immaterial and perfect curve which is hidden in the imperfect stones constituting an arch. Bateson takes the whole concept and moves it into the fourth dimension, that of time, so that it applies to the genesis and development, as well as to the sustaining, of a system. He offers the usual simple feedback example and shows us, via cybernetics, that the hidden "yes-no" switching of the thermostat in its relation to the higher system (in this example, the person in the centrally heated room) creates an upper and a lower threshold of relative stability, *warmth*. The thresholds sustain an ecological equilibrium in which life is comfortable. The structure of my static stone arch can now be seen as a special case of once-for-all stability. The fine "yes-no" adjustments all happen at the beginning, in the hands of the designer or mason. Bateson, by following his more dynamic line of explanation, shows how social structures--a behavioral norm would be an example--can be similarly understood in terms of ecological levels and information theory. The systematic exclusion of an arbitrary degree of coldness from the house can, on this line of thought, be an explanatory analogue to the operation of a taboo in society which marks out a large area of danger by a series of arbitrary and apparently trivial prohibitions. *The threshold* (whether thermal or behavioral) *is the structure which persists.* We begin to see how taboos and inhibitions may be generated with unconscious "purpose." But further, and this is not in

Bateson's writing, the norms which are mapped out leave spaces of openness. These "vistas" (which I have written about) or "affordances" (J. J. Gibson's term) are the shapes of perceived opportunity to which human motivation responds. It should be noticed that this approach is not, in principle, reductive because it always assumes a higher, as well as a lower level, of explanation. From it emerges Bateson's analysis of the profane and the sacred, the forbidden and the holy. It is, I believe, a line of thought with great potential.

Bateson's ideas come across compellingly and entertainingly in **Angels Fear**. If you want a good preliminary taste, try reading Chapter VII, "Let not thy left hand know." Here Bateson's presentation of water snakes from "The Ancient Mariner" ("and he blessed them *unawares*"), his paradoxical story of the peyote sacrament, contrasted with the self-conscious kitsch religion of a Californian "prayer breakfast," all make a nesting Chinese box of treasures.

Robin Hodgkin

Seeing Man Whole: A New Model for Psychology. By Edward Moss. Lewes: Book Guild, 1989. Pp. 412. ISBN 0-86332-344-8.

Of this book, Rowan Williams, Lady Margaret Professor of Divinity at Oxford writes: "it achieves what few writers have managed--a theory of human nature and human growth that takes full account of both philosophical and psychological questions about the nature of mind, and also opens the way to a profound theological understanding of the activity of grace in the formation of human selves."

In this wide-ranging project, which links many areas of inquiry, Moss offers us a unified account of the person in terms of his own model of mind and human nature. He uses the term "model" in the way Michael Polanyi uses the phrase "interpretive framework." In fact, he works with a loosely integrated hierarchy of models on different levels that fit into more generalized models at higher levels. To understand human nature, he says, it is necessary to bring a range of disparate phenomena into a coherent set of relationships. We cannot hope to explain them all in terms of a single model.

Moss's purpose in the book as a whole is to identify what he calls "the true self" - and to distinguish the "anticipatory self", that has plans and aspirations, from the role-playing self and the "Here-Now" self. This involves identifying two so-called "cycles", one "predicative" and the other "purposive." Moss works within a broad conceptual framework in which the human organism is assumed to be a self-regulating system with mind as its regulator. It has three main structural elements, a sensory apparatus, an arena of attention (consciousness) and a memory store. Consciousness has its own structure. Moss talks of different kinds of space, dimensions, or relationships. For example, perceptual space differs from the space in which imagination works and this differs from logical space.

Moss begins by examining a series of approaches to the nature of man by different psychologists. Then he

explores the theory of mind and looks at different accounts of the origin and nature of the idea of the "self." The first eight chapters provide a systematic and rigorous exposition of Moss's ideas concerning perception, thought, language, the emotions, consciousness and the unconscious, decision taking, the nature of the self and of the "person" as a purposive being. The style and terminology are appropriate to a fairly sophisticated text book and I would like it to be required reading for students of psychology and philosophy. But these chapters make difficult reading for the non-specialist and I fear that this could discourage the intelligent lay person from reaching the last four very rewarding chapters, which are written in less technical language.

In Chapter 9, Moss turns to the question of the origins of neurotic conflict, the growth of the self and the nature of authenticity. His model of "the own self" to which we can be "true" is discussed in relation to other models used in the world of psychotherapy. For Moss, integration means being able to exclude formerly repressed and buried experiences from this "self." Healing, he suggests, does not entail integrating unacceptable ideas into the continuing self. The goal for coherence of mind is sincerity, integrity and good faith.

In Chapter 10, Moss discusses the concept of mental health and modern therapeutic attempts to restore coherence. He finds these techniques less than satisfactory, not least because they fail to offer any kind of moral judgement. It is impossible, he suggests, to separate altogether the psychiatrist's task of restoring the patient to fitness for the world from the moralist's task of deciding what kind of world ought to be brought about and how individuals should behave. He makes the point that the therapist is generally concerned only to produce well-adjusted people, who fit the collective "norm". But our world extends into the future and includes the potential as well as the actual. A great range of therapeutic techniques is now on offer, but beyond therapy, moral judgement is still needed. Should we not take possible change into account and consider what a person ought to do in order to impose change on the environment to match potential patterns in himself?

In the course of this chapter, Moss has a particularly interesting discussion of Jung's theory of individuation and the integration of "the shadow", in which he admits to being at odds with Jung and with most current schools of humanist psychology and psychotherapy. It is not clear to him, however, whether the disagreement arises at a purely psychological level, or comes from a deeper moral level. The issue is the true nature of wholeness (health). For example, is moral good to be found in a well-balanced integration of benevolence and aggression, of self-transcending and self-assertive tendencies? Or does moral health lie in a purification of the "anticipating self"? Are self-assertive tendencies to be identified with self-transcending tendencies or are the undesirable elements to be eliminated? Moss here explores the possibility of bringing psychological models and the theory of psychotherapy into harmony with the Christian model of human "wholeness". The ideal expressed by Jesus, he suggests, represents a joyful and spontaneous obedience based on love and trust. Only in such terms is Moss prepared to accept Jung's theory of the archetype of the self as simultaneously the archetype of the divine. Members of the human race, he thinks, can only find their true selves in the mutual identification of man with God, both loving and being loved. A *complexio boni et mali* may be the best we can achieve, but it is an accommodation with evil, not an integral expression of love!

In Chapter 11, Moss turns his attention to the value systems by which human choice is guided and identifies four ways of seeking the fullest possible realization of individual human potential. The "social" way is to work for the greatest good of the greatest number, but this runs into the problems of what kind of society is both good, feasible and worth being adjusted to. The logic of this approach is ultimately totalitarian. The "existentialist" way is to justify the absolute freedom of the individual, regardless of the claims of society. The logic of this approach has led certain psychiatrists to see the cause of human madness and badness as lying always in society

and the family, not in the individual, who is their victim. To ask the individual to conform to the expectations of society is, on this view, a betrayal of his true needs. This approach tends to support a whole system of implied values that are permissive in the extreme and develops a world of isolated individuals whose commitments are a matter of temporary convenience. The third way is based on the idea that some people have much greater potential than others, which justifies their self-realization at the expense of others. This "heroic" tradition reached full development in Nietzsche for whom true value is expressed by "superman".

Each of these ways reflects something of the truth about human nature, but none of them can cure the sickness, corruption and evil to which we are prone, or bring us to health, wholeness and true well-being. The fourth paradoxical "way" takes us, Moss suggests, on the road to self-realization, through the fullest possible denial of the self. At this point, Moss relates the Christian account of the self to the model he has built up in this study and presents the Christian life in the form of a psychological theory, which provides a value system for human living, one that demands a "rebirth", that is, a recognition of self as a separate identity, but united with others in "the Body of Christ." Christianity is here understood as a type of humanism growing out of Jesus's saying about losing life in order to find it and self-assertion becomes identified with the participatory and self-transcending powers of true humanness.

At this point, Moss analyzes the characteristics of two kinds of ideal "role", both having a place within the "humanistic" tradition, both with implications for the individual and for society. These are the "hero" and the "saint", though the saint is a special case of the hero. Moss's point is that only when the hero's integrity comes from humility, not pride, can the ideal of the "hero" be safely adopted as the model of man-in-his-wholeness. Only then does the ideal role provide a unifying contour for the idea of the self, defined in terms of integrity, good faith and courage. We need heroes, but only heroes who assert themselves in humility can create the humane society. The way to freedom and reconciliation is through sacrificial love, not aggression.

No summary can do justice to a book of 400+ pages, but I hope I have said enough to suggest that Moss is offering us something radically new and important. In some ways, the last chapter, entitled "The Idea and the Reality", is the most satisfying of all, since it turns from the psychological problem of constructing a model and analyzing the way in which it works to the philosophical and ultimately religious problem of examining its implications for our view of the world. In fact, what Moss does in the last chapter illustrates what he says at the beginning about a complex model being, in effect, a hierarchy of models embedded one within the other. In the last chapter he returns to his original conceptual framework and sets the whole within a wider framework still.

I recommend this book as a work full of intellectual and spiritual nourishment, which challenges many dehumanizing trends in contemporary theory and practice. My one regret is that it may reach relatively few readers for reasons already mentioned. Moss's critique of modern psychological theories is very important and, in fact, the last three chapters would alone make a splendid short paperback, with an introduction summarizing the essential argument of the earlier chapters in the non-technical language.

For readers of *Tradition & Discovery*, I would add that Moss clearly knows Polanyi's writings and is indebted to his views in certain basic respects. For example, he sees the real world as a hierarchy of levels and works with presuppositions that derive from this paradigm. He also refers to Polanyi's distinction between subsidiary and focal "knowledge" (sic), though he appears to interpret it in terms of his own model by equating the distinction between focal and subsidiary awareness with the distinction between determinate and indeterminate knowledge. I suspect that he may be confusing subsidiary and focal awareness with the quite different distinction Polanyi makes between tacit and explicit knowledge. If the book runs to a second edition I hope that this

confusion will be clarified. It would also be useful if the Index could be checked and expanded. Of the very references to Polanyi, the most important on pages 133/135 does not appear. Perhaps my chief regret is that Moss makes virtually no use of Polanyi's philosophical tools in working out his own model of the self and in developing his ideas about the shaping power of grace, which he likens to the "moral equivalent of the force of gravity." It would, for example, have been illuminating to see this idea linked with Polanyi's use of field imagery and gradients of meaning, which lie at the heart of his theory of mind.

Joan Crewdson

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. All materials from U.K. contributors should first be sent to John Puddefoot. Manuscripts should be doublespaced 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 should include the author's name on a separate page since submissions normally will be sent out for blind review. In addition to the typescript of a manuscript to be reviewed, authors are expected to provide an electronic copy (on either a 5.25" or 3.5" disk) of accepted articles; it is helpful if original submissions are accompanied by a disk. ASCII text as well as most popular IBM word processors are acceptable; MAC text can usually be translated to ASCII. Be sure that disks include all relevant information which may help converting files to Word Perfect or ASCII. 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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Scholarly work/publications: Please list below your thesis/dissertation and/or any publications of interest to persons acquainted with Polanyi's thought (be sure to provide complete bibliographic data):