

Tradition & Discovery

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PREFACE

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One of the justifications for the Polanyi Society and *Convivium* (the Polanyi circle in Great Britain) is simply the intrinsic merit of exploring the implications of Michael Polanyi's thought. Each publication of *Tradition & Discovery* and *Convivium* is a glimpse of the waves of influence that are radiating from the power of Polanyi's profound and fecund ideas. In this issue we see a first with Martha Crunkleton's relating Polanyi to epistemology in feminist thought. Polanyi has so much to offer in this area that it is alarming that so little has been made of it. This neglect is even more interesting since Polanyi came from a family with several distinguished women intellectuals and Polanyi's mother, Cecilia Wohl, was a leader in Hungary for the improvement of the education of women. This background explains in part why Michael Polanyi in 1974 readily affirmed to Beverly Prosser Gelwick, then a faculty member at the University of Reading in the Graduate Program in Counseling and Guidance, his sympathy with the feminist movement and its criticism of the body and mind dichotomy. Another area too neglected is Polanyi's potential in literature. Articles in *Convivium* by David Holbrook and others have explored Polanyi and literature, but *IAD* again breaks ground with the articles by Elizabeth Wallace and Pamela Rooks. Finally, we have contributions to a perennial problem, understanding Polanyi's distinctive way of talking about truth. The replies to Dorothy Emmet's earlier article (*IAD*, Fall, '86-'87) are helpful and remind us of Poteat's contention that Polanyi is using language and ideas not in the usual Cartesian mode of our age but in his own post-critical way.

Richard Gelwick

SUBMISSIONS FOR PUBLICATION

News and articles are welcome. If you send news items, be sure they are complete - date, author, source, etc. Articles should be within ten pages, single spaced, 3/4 inch side margins and 1 inch top and bottom margins, put author's name under the title, and enclose a letter giving the way the author is to be identified. The article should be camera ready so it does not have to be retyped.

Contributors To This Issue

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NEWS and NOTES

INCREASED TRANS-ATLANTIC COOPERATION between *TRADITION & DISCOVERY* and *CONVIVIUM* is currently being explored that could lead to consolidation of the two separate publications and improved presentation. Both Polanyi groups function on very small income and budgets, and it may be that one publication could both save costs and upgrade the quality of our publications. The Polanyi Society in North America is very concerned to encourage in whatever way it can the continuing life of the *Convivium* group in Great Britain, which has produced very keen articles as every issue of *IAD*, which shares *Convivium* articles, shows. It is desired that even with consolidated publication there would still be an editorial, program, and network center continuing in Great Britain. Presently, we are corresponding and talking by telephone. A plan will develop within the next year.

THE CENTENNIAL YEAR OF MICHAEL POLANYI'S BIRTH WILL BEGIN IN MARCH OF 1991. Sara Leopold has urged us several years ago to plan for this event. One way we can commemorate Polanyi's life and contributions is to hold symposia at the various annual societies such as the American Academy of Religion, American Philosophical Association, The Modern Language Association, The American Association For The Advancement of Science, etc. Individuals who are members should organize them through the organization's program process. Please consider these public forums where such events could take place under yours and other's initiative and let me know. I will try to coordinate and to announce all efforts for this purpose. We will also hope to organize a major Polanyi conference for our members. At this stage, we are interested in invitations and suggestions.

WILLIAM T. SCOTT reports that he has hopes of having a completed biography of Polanyi by the summer of 1990. We truly wish him speedy progress and the satisfaction of seeing his work contribute to Polanyi's centennial. He also recently had a letter to the editor in *The Times Literary Supplement* suggesting to another physicist his need for "a strong dose of Michael Polanyi" to correct the physicist's reductionism.

THE NEW HUNGARIAN QUARTERLY, Winter, 1987 has three articles on Karl Polanyi, brother of Michael Polanyi. One of the articles is a survey of the significant background and achievements of the Polanyi family over a period of a century. In this article on the Polanyi family, which has a section on Michael Polanyi, there is the important news that PERSONAL KNOWLEDGE WAS PUBLISHED IN RUSSIAN IN 1985. The three articles are very rich in information not generally known in the Polanyi Society. Addresses for distributors are: United States; Center of Hungarian Literature, 4418 16th Avenue, Brooklyn, NY 11204. Great Britain; Hungarian Book Agency, 87 Sewardstone Rd., London E2, 9HN. Canada; Fannonia Books, P.O. Box 1017 Postal Station "B", Toronto, Ont. M5T2T8.

STEPHEN COHEN of the Department of Politics at Princeton University responded to an inquiry from me concerning Bukharin's views on the philosophy of scientific planning. According to Cohen, Bukharin did advocate centralized planning of science, but it was a combination of "centralized guidelines with decentralized autonomy; it was to be based on 'flexibility and elasticity,' allowing for the incalculable and providing 'reserve time' for fulfillment. Bukharin was a critic of 'the Gothamite, bureaucratic, bungling method of planning'" and Stalin's first five year plan. (see Stephen F. Cohen, *Bukharin and the Bolshevik Revolution*, Oxford University Press, 1980, p. 353.) This information deepens the significance of Polanyi's reaction to Bukharin by showing, it seems, Polanyi's opposition to even moderate forms of centralized scientific planning. We will through W. T. Scott and others need to learn more about this part of Polanyi's life.

COMING POLANYI MEETINGS. Phil Mullins has organized a three hour program for Chicago in conjunction with THE AMERICAN ACADEMY OF RELIGION, Nov. 19-22. Aaron Milavec will do a Polanyian critique of Kuhn's views of the structure of scientific revolutions and related Polanyian scholarship (T. F. Torrance, J. Brennen, and M. Grene). Nancey Murphy of The Center For Theology and the Natural Sciences will respond. Ronald Hall will discuss "E. M. Adams and Polanyi on the Irreducibility of Mind." The respondent is James Stines.... Elizabeth Wallace who organized last year's special session at the MODERN LANGUAGE ASSOCIATION has proposed another for the meeting in New Orleans December 27-30. This program will be on "Polanyian Perspectives on the Teaching of Literature and Composition." See the AAR and MLA programs for specific information or contact Phil Mullins (address on p. 2) and Elizabeth Wallace, 1880 Whitcomb Court NW, Salem, OR 97304; (503) 581-1555.

David Rutledge, Department of Religion, Furman University, Greenville, SC 29613, is working on a JOURNAL LENGTH ISSUE of *The Personalist Forum* devoted to UNDERSTANDING THE PERSONAL AND THE PERSON from a Polanyian perspective. He is interested in hearing from writers or suggestions for contributors. All submissions, of course, are subject to refereed process.

RECENT PUBLICATIONS BY POLANYI SOCIETY MEMBERS. *The World & I*, August, 1987 had a special section on Michael Polanyi with three articles: Lee Congdon on Polanyi's intellectual background in Hungary and the treason of the intellectuals, William T. Scott on Polanyi as scientist and his theory of knowledge, and myself on Polanyi as a philosopher for our time. *Teaching-Learning Issues*, no. 62, Spring, 1988, published by the Learning Research Center, The University of Tennessee, Knoxville, TN 37996-0631 is a publication of "Cognitive Development In The Introductory Course: The Pedagogue's Typological Imagination" by Phil Mullins.

Jere Moorman, our contributing cartoon humorist, reports several POLANYI REFERENCES IN RECENT READING. Marmaine Koestler in *Living With Koestler 1945-51*, St. Martins Press, 1985 remarks about Polanyi's visits to the Koestler home. While teaching a college business course, Moorman also noticed references to Polanyi in C. Jackson Grayson's *A Two Minute Warning*, The Free Press and in Alan M. Kantrow's *The Constraints of Corporate Tradition*, Harper and Row.

WILLIAM H. POTEAT'S POLANYIAN MEDITATIONS was a focus again of an American Academy of Religion meeting in the Central States Region. William Breytspraak, Phil Mullins, and myself did a panel on "Muscles Make Assumptions, Grasping The Post-Critical Picture." Breytspraak presented an overview of Poteat's work from the vantage point of having been a student of Poteat. I presented a discussion of implications for theology using Poteat's "mindbodily" outlook. Mullins presented both critical and constructive concerns.

RB

POLANYI, FEMINIST ISSUES AND EPISTEMOLOGY

Martha A. Crunkleton

These remarks were given at the annual meeting of the Polanyi Society, December 5, 1987, in Boston, Massachusetts.

Some recent work in feminist psychology is evocative of Polanyi's thought. This body of work is important philosophically; examining it with a view to its assumptions, premises, tensions and contradictions is a useful case of the piecemeal work necessary for putting Polanyi's heuristic philosophy into practice. This heuristic enterprise, the going forth and coming back of discovery, seems peculiarly alive now in thinking about women's cognitive and moral development.

This paper rests on other people's work. In addition to the work of Polanyi, there are a number of other books, listed at the end, I have relied on here in implicit ways. There is one text, however, I want to focus on explicitly because it seems so useful for showing associations with Polanyi's thought. That book, *Women's Ways of Knowing: The Development of Self, Voice, and Mind*, enjoys a current vogue in intellectual feminism. Not since Carol Gilligan's *In A Different Voice*, has a book been more widely read and discussed among thinkers trying to understand what we might call women's epistemology. Four authors, Belenky, Clinchy, Goldberger, and Tarule, provide an account of ways of knowing that women cultivate and value. These ways of knowing, which I will discuss in some detail, are undervalued, neglected, and denigrated by the received intellectual tradition of the modern West according to the authors. One of these ways of knowing, identified in this book as being an epistemic form principally accredited by women, resembles in remarkable ways "tacit knowing". While Michael Polanyi was no feminist, his philosophical viewpoint bears striking analogies to the feminist viewpoint presented by Belenky et. al.

The authors describe five different ways of knowing, five differing perspectives from which women consider, interpret and make reality. The authors take for granted what all of us as philosophers depend upon--namely, that our basic assumptions about truth, reality and the origins of knowledge shape the ways we see the world and the ways we are in it. They relied on this assumption throughout their actual study of 135 women, whom they interviewed over a five-year span. These 135 women, came from a variety of institutions, classes, and living situations.

The study of these women lead the authors to decide that women have five different ways of knowing, that these ways have a progressive relation, and that at different times in their lives, women may be at different stages. Although the five ways involve varying degrees of

complexity and sophistication, there is no guarantee that each woman will attain the most complex way. The authors found all five ways related to the metaphor of voice. Unlike the dominant received tradition which emphasizes the visual, this description of women's ways of knowing emphasizes the oral and the aural. The culturally regnant metaphor of the mind's eye gives way here; the embodied, connected, ordinary, conversational voice becomes the predominant metaphor for this understanding of how we know.

Briefly, the five ways are:

1. silence
2. received knowledge
3. subjective knowledge
4. procedural knowledge
5. constructed knowledge.

Each way was exemplified by the some of the women studied; two of the women, for example, indwelled the silent way when they were interviewed, but more than that were able to identify an earlier time in their lives, before the time of the study, when their way of knowing was that of voicelessness. The silent way is characterized by voicelessness, by the feeling of being deaf and dumb, by the inability to use words to represent thought and to understand words as communication. These women may find themselves abused by spouses or completely lost in school. They tend to have no way to represent themselves as selves. The way of knowing characterized by silence is the simplest way, the anchor of the epistemological scheme the authors present.

Unlike the silent who think of themselves as deaf and dumb, who do not understand the power of words for transmitting knowledge, those women who rely on received knowledge think of words as central to knowing. These women know principally by listening. They tend not to speak, having very little confidence in their own voices. What these women know, they feel they know from the words of authorities. What they deem learning is hearing, retaining and then returning the words of authorities. Receivers do not understand that these authorities are constructing knowledge. Rather, they believe that authorities are capable of getting and hanging onto the "right" information. Because they are receivers of knowledge, these women become confused when "authorities", typically teachers, ask them for original thinking. In these cases, the professor is seen to have all the right answers but is refusing to pass them along to the student. To receivers, there is almost always a right answer and a wrong answer to a question. Ambiguity, grayness, ambivalence, paradox--none of these conditions hold for receivers. Receivers are literalists and they rely on authority for "the truth". These women are confident in their ability to listen and believe that if they listen well and work hard enough they will be able to do the right thing. They believe that knowledge is outside the self and struggle to listen to others convinced that "they" have all the right answers. This style is dualistic in its approach to truth and to knowing. Matters are clear-cut, authorities are right, the knower is passive, the self is static, and truth is absolute and outside the knower.

With subjective knowing, the inner voice of the self begins to emerge. Although subjective knowers still make dualistic assumptions, their source of truth has moved. Now no longer outside, the fountain of truth is within. For women, subjectivism is a revolutionary step. The identification of truth and knowing as outside the self slips away and is replaced with a new conception of truth as personal, private, and subjectively intuited or known. The move to subjectivism is frequently a move from a static self to a self that is becoming, from silence and endless listening to a perhaps small, protesting inner voice. One of the subjects in the study, discussing how she knew, referred to her infallible

gut. Almost half of the women studied in the project were predominantly subjectivist in their thinking. These women no longer see truth as coming from above or outside the way receivers do. Where male subjectivists might be inclined to say "I have a right to my opinion!", these women are inclined to say "It's just my opinion." Women subjectivists are in the process of redefining authority as internal and see truth as an intuitive reaction, something that one experiences but does not think out, something one feels, but does not construct.

The subjectivist does not feel that rational procedures play a part in the search for truth. For these women truth may come from within the self and ideas may come from without. Each woman has her own unique body of knowledge that has been given her by her experience in life. Logic, analysis, abstraction, perhaps even language itself, are regarded by these women as belonging to men. In some ways, the inward turn for answers seems to lead women to deny those strategies for knowing they perceive as belonging to the masculine world. If intuition is safer and more fruitful, it is no wonder that these women may dogmatically reject science or display other antirationalist biases, concluding that "rationality" is the work of men.

Unlike the men Perry defined as "multiplists" in their subjectivism, these women remain concerned about their relations with others. They try even as they turn inward not to reject others or hurt their feelings. Unlike their male counterparts, they are not likely to be confrontative. If you are teaching one of these women, she may hold you in supreme disgust ("Experts don't know what they are talking about. They just like to hear themselves talk!"), but you are unlikely to find this out. During the subjectivism period, these women obtain knowledge by observing themselves and others, and by analyzing their present and past connections with others. Beginning to attend to a small, inner voice, these women rely on listening and talking as they begin to sense that the self is not static, and as they assert that their experience is the way they know the world and themselves.

Procedural knowers have moved beyond subjectivism and rely on the voice of reason. They do not ground the truth in their "infallible gut", but in analysis, in getting and using techniques and procedures, in taking perspective and in being objective. In some ways the voice that emerged during subjectivism now becomes muted. That inner voice becomes more critical, starts asking whether something is reasonable, how is it that I know this, what are my grounds for this claim, and so forth. The voice of reason is considerably quieter than the voice of subjectivism. Procedural knowers have learned that their inner voice can be wrong, can lead them astray. They are inclined to want to reason everything out, to engage in thorough doubt, and to want to pay attention to other voices. Procedural knowers have come to understand that all interpretations are not equally valid, that good interpretation of something must be firmly grounded in that something, and that bad interpretation attends more to the interpreter than to the object of interpretation. Proceduralists understand that persons have differing perspectives and they are interested in learning those. But they are also interested in how other people got those perspectives. Such women develop ways for understanding where others are "coming from" and for how they can communicate with them. Truth for these women resides neither solely in the self nor in outsiders.

Belenky et. al. argue that procedural knowledge takes two predominant forms, separate and connected. Separate knowing might be best seen as knowing (wissen) and connected knowing might be best seen as understanding (kennen). Separate knowing involves distance from a subject and mastery over it. Connected knowing involves acceptance of the subject and intimacy with it. Connected knowing is relational where separate knowing is not. The epistemology of separate knowing emphasizes impersonal procedures for determining the truth where that of connected knowing emphasizes caring.

The pleasure of intimacy with an idea resembles the pleasure we find in close relationships. Separate knowers are good at doubting, listening to reason, being objective, and speaking dispassionately. Connected knowers want to know the other's experience in the other's terms and so they become skilled at believing, conversing, sharing small truths, refusing to judge, collaborating, and using personal knowledge.

Both separate and connected proceduralists are objective; they are oriented not towards the self but toward whatever or whomever is the object of knowledge. Proceduralists in this way are selfless in their knowing and they may over time come to experience knowing as alienating. Proceduralists, especially separate knowers, may come to feel no personal involvement in the pursuit of knowledge or they may come to feel fraudulent. The public, rational, analytic voice they have worked so hard to develop may not be the voice they seek.

At the juncture of the "public" world of reason and the "private" world of feeling and unaccountable insight is the possibility of integration of voice. This way of knowing, the most complex of the five ways, is constructed knowledge. Women who know this way exemplify Piaget's dictum that to understand is to invent. Constructed knowers seek to reclaim the self through integrating knowledge they personally hold important with knowledge they have learned from others. Where proceduralists extricate the self from knowing, constructivists use themselves in developing new ways of thinking. The self is permitted to return to the process of knowing. Knowing involves confronting pieces of the self that may seem fragmented and contradictory. Constructivists understand that truth changes, that all knowledge is constructed and that the knower is an intimate part of the known.

Once these women assume the general relativity of knowledge, they understand that their frame of reference matters, that they can construct, reconstruct and deconstruct frames of reference, they feel responsible. They feel responsible for examining and analysing the systems they will use for constructing knowledge. They feel responsible for evaluating experts and authority. Real experts must accredit the complexity of knowledge and show their humility about what they know. Constructivists do not find having truth to be as exhilarating as exploring for it. Since truth is constructed and the knower participates in that construction, the result may be passionate. "We observed a passion for knowing the self in the subjectivists and an excitement over the power of reason among procedural knowers, but we found that the opening of the mind and the heart to embrace the world was characteristic only of the women at the position of constructed knowledge." (p. 141). This claim is evocative of Hannah Arendt's definition of education as that point at which we love the world enough to assume responsibility for it. The constructivist has the capacity to attend to another person and to feel related to that person in spite of their differences. This attentiveness is important in understanding people, texts, ideas, concepts. Constructivists use intimate language to describe the relations between knower and known.

It is not especially surprising then that constructivist women were more concerned than any other group in the study with moral reasoning and commitment. They hold that ideas and values are held in context and must be nurtured if they are to grow. Not inclined to use concepts like "blind justice" or "inalienable rights" in describing moral choices, these women talk instead about the lives they seek rather than a single choice. The importance of context shows itself in their concern for relationship with the self, with others and with the world. The process of shaping and acting on moral commitments is not clear-cut. Typically these women do not want to compartmentalize their lives or their choices but to describe how they are interrelated.

This, then, is the taxonomy of how women know. Subtly different from

Perry's work on male cognitive development, *Women's Ways of Knowing* suggests a process that at its most complex, that is, constructed knowing, resembles Polanyi's post-critical philosophy. What Polanyi saw as a structural analogy between knowledge and skill shows itself in a similar relation between induction and indwelt experience. Following that path, we can intuit that the social relations of human beings will affect their knowing and so at least provisionally understand that the cognitive development of men and women may sometimes differ. Although the book I have discussed here takes some pains to point out that there are men who exemplify these ways of knowing as well, the general argument is that these five ways are women's, not men's. Men learn to think and reason the way Perry described; women learn to think and reason the way Belenky and her co-authors describe here, generally--this is the very general bedrock contrast in this book.

I want to pursue this point a little further because it is related to some other matters about this approach which may be useful for us to discuss. Differences that correlate with gender difference can be conceptualized as gender difference but they need not be. If it is true that women in our culture prefer an ethic of care rather than one of rights, is that preference intrinsically or essentially feminine? Sandra Harding has pointed out that a significant number of men in African cultures also have an ethic of care. While it is not entirely true of present feminist thinking that it is preoccupied with differentiating women's ways from men's ways (indeed, one can plausibly argue that such differentiation is a step forward from what the intellectual tradition of the last three hundred years has presented), we may be, in such schemes, overinterpreting differences that correlate with gender. It is ironic that at a time when some gender differences are receding in our culture we are attracted to accounts which may emphasize gender difference. And the appearance of correlation is not usually sufficient for explanatory satisfaction.

A related question has to do with the privileging of what is described as women's experience. Is it better than men's? In what ways? Does difference ineluctably mean one form of discourse and knowing must be privilege and another discredited? It seems clear that personal knowledge is a happier epistemological account than the scientific objectivism we all loosely ingested as we were growing up and that, in some ways, personal knowledge has a universal intent if not a universally true content.

Yet, if we take subsidiary awareness and focal awareness seriously, it is possible to believe the case that women's knowing might differ from men's. The fundamental importance of our social relations to how we think and know is frequently overlooked. I believe Polanyi accredited this significance in his understanding of nihilism and in his account of the relations between science and communist states. The state, of course, is not our only social relation. When there is as much history of family life as there is of the nation-state, it is likely that our understanding of epistemology will be enriched.

Similarly, the notion of women's knowing may offend us because it suggests to us that knowledge is power. One of our inconsistencies as intellectuals is our willy-nilly use of this very cliché. The accounts of the great philosophers of modernity may all be read as attempts to rationalize power, most obviously, the power of scientific thought. If those attempts also rationalize the power of a dominant group, it is disturbing to all of us (although not in the same ways for all of us) that the accounts of knowing they present might not be universal. Such lack of universality undermines those philosophies since their systematization depended on their accounts being universal. Whatever Kant and Descartes thought they were doing, they did not think focally they were writing a philosophy of masculinity. Post-critical thinking permits us to understand that we can have a universal intent without a corollary requirement of

universals. Seen in this light, applied philosophy about how women know is philosophically sound and occasional. Such an account keeps the conversation going, to use Richard Rorty's metaphor, among all the conversants without also holding that conversation to be timeless and universal in its applicability.

Whichever contrast-schemes we choose to use when doing philosophy, we need to consider the effects of those choices. If we choose to emphasize the difference in how men and women are gendered (that is, how men and women are made, not born), what very general things are we overlooking? If I write a book, for example, in which all my examples are of an individual, separated self rather than a social self, what am I leaving aside? Am I implicitly discrediting my explicitly post-critical philosophy? The Polanyian project, so far as I understand it, then permits us to attend to the social dimensions of knowing in ways Polanyi himself did not. Since to hit on a problem is the first step to discovery, the problem of how women know and how we differ from men in knowing, is an exciting problem even if it should not prove a lasting one. Because our culture uses gender in a totemic way, our awareness of unspecified things in discussions of men and women is quite intense.

Polanyi argued that the obligation to search for the truth through one's own intimations of reality came with the knowledge that there was no strict rule by which one's conclusions could be justified, yet our reference to reality legitimated our acts of unspecified knowing. Personal knowing then would seem to involve attending to differences between women and men. How much we choose to elevate these differences is our decision as is how much we choose to deny them. Because most of us were raised to deny them, we have trouble getting our bearings now about how to elevate them. We know, for example, that we need to surface them to get a more comprehensive relation to "reality"—our philosophical pride is at stake in the process of decolonizing our minds. Yet, as post-critical thinkers, we also contend that there is no way we can enjoy a comprehensive relation to reality. This rejection of totalization seems in tension with our attempts to expand our knowledge—indeed, this seems peculiarly post-modern.

Philosophers are not the only ones stretched and enlivened by this tension. The authors of Women's Ways of Knowing are criticizing a system of psychology which excluded women's experience yet claimed universal validity. They criticize that system, say that its narrative is false because it depends on the domination of one group by another, and hold that the narratives of the oppressed can give us a more comprehensive story. Yet the reminder implicitly holds that there cannot be one true story, that social relations lead to fragmentation rather than any unified narrative. Feminists are not alone among post-modernists in having trouble showing that a "mere", "partial" account is for all that piecemeal yet a true account. All of us are still close enough to modernism to find ourselves from time to time believing in the power of "one true story", philosophy's answer to a unified field theory. Perhaps nowhere is this pull, however anachronistic, more apparent than in our philosophizing about knowing.

This tension may be precisely what is involved in accepting our responsibility in a heuristic field. Certainly, studying applied feminist philosophy may strike some as being far afield indeed from Polanyi's work. I would argue that it is a closely allied task. The epistemic tradition in the West has a majority and a minority within it. Polanyi's work is in the minority tradition, a tradition that also includes Anselm, Pascal, Kierkegaard, Nietzsche, and Wittgenstein. That tradition, if you will, has consistently tried to represent human being and knowing in less reductionistic ways than the majoritarian tradition. Feminist thought depends upon the minority tradition and now has the potential of strengthening it. The cultural crisis Polanyi so acutely identified

animates feminist applied philosophy, namely, the alienation of the knower from the known and the results of this for our common life and future. Like Polanyi, feminist thinkers are trying to move beyond dualistic thinking in their attempts to describe how we know. In so far as we interpret gender differences by correlation we weaken our case. Yet in so far as we expand the number of cases we are willing to include, I hope we strengthen the case and so contribute to the minority tradition.

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Literature as Knowledge:
Polanyi's Influence on F. R. Leavis and Wayne Booth

Presented at the Modern Language Association National Convention
Special Session on "Michael Polanyi and English as a Discipline of Thought"
San Francisco, December 28, 1987

M. Elizabeth Wallace

On the planet Mercury, one day is twice as long as its year.

You might wonder why a paper on Polanyi and literature should start with such a peculiar sentence. But in pondering the importance of Polanyi's work for my own and for that of F. R. Leavis, Wayne Booth, Peter Elbow, Frank Kermode, Janet Emig, James Britton, and other scholars of language, I kept returning to Polanyi's insights on science. What we have here is a distinguished and productive physical chemist who simply became exasperated reading philosophers' misleading accounts of how scientists work. He is impressive for us not because science must be seen as the paradigm for all believable and reliable knowledge, but because he gives a trustworthy account from experience of a world about which many of us in the humanities still have too many stereotypes and unexamined assumptions (crassly stated, that scientific knowledge relies on dispassionate fact--verifiable, objective, and the result of a rigorous willingness to doubt and test just about anything).

As we explore with Polanyi the structure of scientific discovery and dump some of our preconceived notions about it, we begin to understand our own work differently. The shift of focus blurs some distinctions we previously thought crucial and brings others into view for the first time. It also relieves us of two unrealistic desires, two wrongheaded attempts to gain more dignity for our own work with language: either to make literary criticism more "scientific," striving for kinds of order and precision not appropriate to it, or irresponsibly to declare it so distinct from science, from any form of objective knowledge, that sustained inquiry, the responsibilities of consensus, and forms of precision necessary and appropriate to the study of literature and language are abandoned.

Polanyi has built an epistemology that reveals science as a belief system, constructed by earthbound human beings who inescapably see the universe from a center within themselves. For instance, they base their most essential measure in astronomy--the speed of light--on how many hours it takes their planet to spin on its axis and how many days it takes the same planet to circle their sun. Consider how inaccurate the measurements and mathematics of ten-fingered Earth-creatures might seem to three-fingered creatures on Mercury. What would a light-year or light-second or light-day mean to them? Two plus two does not equal four in base three. And if such creatures didn't even have fingers and toes, how much more abstract and conceptual might their mathematics be than ours?

If our mathematics and our science are humanly built and therefore limited, how can we talk about truth? Polanyi won't rely solely on the coherence theory of truth (because even the systems of psychopaths can be internally consistent) or solely on the correspondence theory of truth (because any assumption that our statements correspond to actual facts ignores the problem that all we have are accredited facts, facts upheld and agreed upon by human beings). Instead, he redefines truth as fruitfulness: a concept is true if we sense that it opens up further significant ways to explore reality, explorations that will most likely extend, challenge, and change the original concept that we are at this very moment declaring to be true.

A strange definition of truth, a kind of planned obsolescence for discoveries. And why should it lead Wayne Booth, a major American literary critic, to refer to Polanyi in 1974 as "one of the greatest of the philosophers of science" whose Personal Knowledge challenged "the dogmas of modernism more thoroughly than any other modern work I know"? (Modern Dogma and the Rhetoric of Assent, 19, xvii). Why should it lead the great British critic F. R. Leavis to insist in 1975 on the other side of the Atlantic that Polanyi has still "to get due recognition as the great potential liberating and impelling force he is"? (The Living Principle: English as a Discipline of Thought, 236)

Leavis has had in the 80's astonishingly little impact on literary criticism, considering the strength of his last three books -- Nor Shall My Sword (1972), The Living Principle: English as a Discipline of Thought (1975), and Thought, Words and Creativity: Art and Thought in Lawrence (1976). These were all written after his discovery of Marjorie Grene's The Knower and the Known (1966) and her edition of Polanyi's essays, Knowing and Being (1969). But then the book in which Wayne Booth explores and uses Polanyi's ideas most fully, Modern Dogma and the Rhetoric of Assent (1974), has not yet had the wide reading it deserves either. The timing of these works may partially explain the neglect: literary criticism had turned its attention elsewhere in the early 70's and was busy assimilating the surprising and original findings of structuralism and deconstruction.

Now may be the time, with the increasing emphasis on context and the new historicism--the cultural, political, and historical embeddedness of all literary works--to rediscover not only Polanyi's continuing importance for the study of literature, but the strength of Leavis and Booth's appropriations of Polanyi as well.

Both critics turned to Polanyi almost in the same year for almost the same reason. Booth wanted "to earn the right to call even one act of subjective literary interpretation knowledge" and thus break "irremediably, the hard division between the subjective, personal world of feeling and value and the objective, impersonal world of knowledge and truth or reality." (Dogma 120). Leavis tended to use the word "thought" instead of "knowledge", but the impetus was the same: "What we have to get essential recognition for is that major creative writers are concerned with a necessary kind of thought" (Principle 20).

Since Polanyi's achievement was a kind of deconstruction of Western epistemology from Descartes to Russell, showing how the very language of philosophy worked to undercut any pronouncements of allegiance to universal doubt, reversing the hierarchy of objective over subjective knowledge (by redefining objective knowledge as personal knowledge claiming universal validity), it became possible to see not C. P. Snow's two distinct cultures, but all humanly created and upheld knowledge existing in a continuum from mathematics and physics to history, literature, and the arts. Polanyi's discussion of scientific value (in Personal Knowledge 134-9, hereafter referred to as PK) reinforces this image of a continuum without denying or ignoring significant differences in emphasis from field to field. He outlines three factors that make an affirmation acceptable as part of science and valuable to it: 1) precision or accuracy 2) systematic relevance and 3) intrinsic interest. Deficiency in one area is compensated for by excellence in the others. As Polanyi suggests, there are many boring things about which science can be very precise. But that does not therefore make them more scientific:

The scientific value of biology is maintained at the same level as that of physics by the greater intrinsic interest of the living things studied, though the treatment is much less exact and coherent. (PK 139)

Polanyi extends the application of these three inter-related factors to

psychology, political science, history, and the arts, acknowledging the kinds of precision appropriate and necessary to each discipline. He thus lends support to Leavis's portrait of William Blake and Polanyi as fellow creators/discoverers of truth: "The efforts of both the scientist and the poet aim at establishing as valid an apprehension of the real, but there can be no achievement of certainty, completeness, or finality." (Principle 234).

I won't be able to manage here anything like a full or fair analysis of Booth and Leavis's reliance on Polanyi. But let me suggest briefly three related tenets of Polanyi's thought which have clearly been useful to both literary critics: 1) a child's immersion in language and thus in a social reality from birth; 2) belief as a more powerful tool for the mind than doubt; and 3) the creativity of all perception.

I. Language

Leavis felt that Polanyi was one of the few philosophers, apart from Marjorie Grene, who had anything intelligent to say about language. He regularly recommended Polanyi's essays "The Logic of Tacit Inference" and "Sense-Giving and Sense-Reading" (both in Knowing and Being) to his students as being more helpful on language than anything in Wittgenstein (Principle 57, 101). Leavis never did have much use for linguistic philosophers, criticizing them for preserving the illusion of their being above or apart from language rather than immersed in it and shaped by it. He also insisted one couldn't begin to understand language by focusing on and trying to fix the meaning of its smallest units; intelligence about language would necessarily involve closeness with its fullest and most subtle use in great literature (Principle 13). He found confirmation in Polanyi's repeated example of machines whose operations could never be explained even by a complete understanding of their parts; the parts were essential to the proper working of the machine, but not in and of themselves sufficient.

Booth's statements on language are remarkably similar to Leavis's: "we are essentially creatures made in symbolic exchange" and language is "the medium in which selves grow, the social invention through which we make each other and the structures that are our world, the shared product of our efforts to cope with experience." (Dogma, pp. 134-5; compare Principle, pp. 44, 49, 66). Both critics value Polanyi's long chapter on articulation in Personal Knowledge for its analysis of the necessary imprecision of language (otherwise it could never be applied to new experience) and of our inability ever to get outside it. As contemporary critics have pointed out from other vantage points, language writes us. Polanyi puts it this way: every word is a theory about the nature of reality. We are born into and raised in this framework of theories, much in the same way that young scientists are trained in a scientific framework of words, theories, and beliefs, most of which they accept with a similar kind of unquestioning trust. We can challenge parts of the structure of language but never the whole structure all at once--because we have to dwell acritically inside it, make it an extension of our bodies, in order to remove, repair, replace or destroy any small part of it.

Booth and Leavis both extend this idea in the same way: if we are created by language, we are inescapably social creatures, limited by our position in history and a specific community. We can influence some choices of further communities--colleges or graduate schools to attend, disciplines to study, colleagues to work with--and these communities will both limit and strengthen our powers. Polanyi uses the word "calling," but the word "position" or "location" would do as well--one's restrictions are at the same time one's capabilities. The convivial nature of knowledge involves overlapping networks of mutual control that exist within and between disciplines (literary critic Frank Kermode has referred repeatedly to this particular aspect of Polanyi's thought, applying it to the way literary theory grows and is tested by

consensus in interpretative communities, see The Art of Telling, 1983, 157-61 and 168-84; see also Dogma on MLA's consensus about Jane Austen, 120). We are embedded in an intellectual community, imperfect though it may be, just as we are in language and just as we are embodied in weak flesh that simultaneously is the only thing that makes knowledge and creativity possible.

Nevertheless, Polanyi argues, individuals do frequently challenge and succeed in changing the communities in which they were nourished. Tradition needs "to teach its current ideas as stages leading on to unknown truths which, when discovered, might dissent from the very teaching which engendered them." (The Tacit Dimension 82). Hence, Leavis's insistence that we need a language for "creative quarreling" (Sword 205) and that what he most respects in a fellow critic is "the challenge to disagree that helps me with my own problem of critical presentment and, in the course of doing that, gives edge to my judgment and strengthens my critical grasp." (Principle 253). While Booth's Critical Understanding (1979) can be seen as one particularly thorough attempt to produce a framework for creative quarrelling among literary critics (see particularly his delightful "Hippocratic Oath for the Pluralist" 351-2), his Modern Dogma takes on a much larger task by suggesting a rhetoric for creative quarrelling between students and faculty, mathematicians and artists, police and protestors: all men and women whose minds need to meet and grow and test themselves in symbolic exchange. The difference between Leavis and Booth is perhaps best captured in the fact that Booth calls this not a language for creative quarreling, but a "rhetoric of assent." Which you prefer may depend on your personality and upbringing; I find myself appreciating the clash of opposites more and more as I grow older. As my memory fades with age, I sometimes need the sharpening edge and energy of combat to help me recall and articulate, extend and discover, what I know.

II. Belief

The "rhetoric of assent" captures perfectly, however, the next aspect of Polanyi's thought that Leavis and Booth find so valuable--the acceptance of belief as a powerful intellectual tool, more powerful and more essential to our thinking than doubt. While they don't want to lose what skepticism has gained for us, they see danger in distancing techniques that increasingly allow us never to fully explore new territory that might challenge our favorite ideas.

The emphasis is felt in Booth's choice of title--the "modern dogma" he speaks of is the notion that we should always "doubt pending proof." Since that dogma itself has never been proved, he suggests playing by different rules, that we should "assent pending disproof." Such assent enables him to list seven things that we can agree we know about ourselves and six things that we come to know through art that we would never know otherwise (see Dogma 111-25 and 168-80). He cautions that these lists are not exhaustive: they contain only what at the moment he feels, in all honesty, no one can seriously doubt (the rules of this game, he says, allow you "to doubt only what you cannot not doubt" Dogma, 111). I find these lists impressive and heartening and suggest their use as a starting or ending point or as a curricular principle for any introductory class in writing or reading.

Using the game imagery even more openly than Booth does, Peter Elbow (another student of language with openly acknowledged debts to Polanyi) recommends what I will call the rhythm method--alternating the doubting game and the believing game over time to stimulate exploratory thinking (see Embracing Contraries, 1986). Elbow acknowledges our fears of being raped, invaded, consumed, or eaten if we believe too many things (in contrast to Booth's metaphor for understanding--eating, incorporation, and growth, CU 262-7 and Dogma 166)--but Elbow counters with another metaphor: "A belief is a lens and one of the best ways to test it is to look through it." (EC 283)

An unsettling course could be built around Polanyi's chapter in PK on "The Critique of Doubt," Elbow's final chapter in Embracing Contraries--Methodological Doubting and Believing: Contraries in Inquiry," Booth's deconstruction of Bertrand Russell's writings in the second chapter of Dogma, and finally Leavis's stunning deconstruction of Eliot's Four Quartets in chapter 3 of The Living Principle. Leavis's strength has always been in delicate, close readings that respond to every intonation of the human voice and that themselves embody his own living in and through the work; and in the process of using Eliot's own language against him, showing that Eliot's poem never realizes for us the affirmation that Eliot so desperately needs to make, he simultaneously reveals Eliot's strength and true importance. In Booth's terms (from CU, Ch. 6), Leavis's "overstanding" of Eliot comes only after, or perhaps more accurately because of, his attentive indwelling or "understanding." In Critical Understanding, Booth argues we have underestimated the difficulty of indwelling and need once again to cultivate the strenuous art of "surrendering to other minds" (CU 260).

For Polanyi, indwelling is a useful term to describe how scientists and mathematicians dwell in the particulars of a problem in order to discover / create the whole solution that might possibly contain and explain them. He quotes the mathematician Polya's advice to students perplexed by difficult problems: "Look at the unknown. Look at the conclusion." Polanyi finds this to be not an impossible mystical exhortation, but a practical heuristic device for shifting one's focus. What the admonition really means is "look at the known data, but not in themselves, rather as clues to the unknown; as pointers to it and parts of it." (PK 127-8). It is something we do all the time when we "see" things, dwelling in the two separate and possibly conflicting images we receive on our retinas and tacitly integrating them in order to focus on and create the one whole image that we believe to be the most fruitful representation of the object in front of us.

III. Shaping Reality

This habit we have of recognizing or creating wholes out of disparate particulars is one we can't seem to get rid of, and it leads us into the third area of Polanyi's importance for Booth and Leavis--his accepting of the findings of Gestalt psychology that all perception is creative. We can perhaps best understand how completely we take this creativity for granted when we lose it or it appears in aberrational forms (see, for instance, the neurological-disorder cases in Oliver Sacks' The Man Who Mistook His Wife for a Hat, 1985). Polanyi is certainly not the first or the only 20th century thinker to have emphasized the impossibility of Locke's idea of our passively receiving images on a blank-slate mind. However, by acknowledging and accepting this tendency of ours to recognize and create order, he has systematically altered our understanding of how science is done and how scientific discoveries are made. Leavis and Booth are right, I think, to sense that a similar acknowledgement and acceptance of our unavoidable shaping tendencies could change the way we approach the study of language and literature.

Polanyi points out that one of the tacit skills on which all of science depends is our ability to recognize order and distinguish it from randomness. Probability theory, for instance, would have no use or meaning in a world where we didn't recognize, say, a striking pattern if several million pebbles spelled out "Welcome to New York" by the runway when a jet touched down at Kennedy International. The probability of those millions of pebbles being in any other random configuration on the same plot of ground is exactly the same, unless we insist that certain configurations are meaningfully ordered and therefore much less likely to have occurred by chance. The point is, our determination of order comes first and makes the calculations of probability theory possible and useful (see PK 33-40). The same could be said of taxonomy--the recognition of discrete organisms for study in biology--or of

crystallography, where actual crystals are often judged imperfect by theories of orderly crystal formation.

I'll leave alone for now the perplexing question of whether our patterns ever correspond to reality, partly because I think it can never be proved. It will always depend on our belief, our commitment. Of course, if one redefines reality, as Polanyi does (and since we've already redefined truth and knowledge, I suppose we might as well), so that people are more real than cobblestones because they can reveal themselves in unpredictable ways in the future and can never be exhausted by our conception of any one aspect of them (if tangibility becomes a less important criteria for reality than significance, TD 32-3), then our pattern-making and pattern-discovering habits may be more real than most things in the universe!

More to the point here, science would not exist and neither would any other discipline we dignify with the name of knowledge if we did not acknowledge and accredit our ability to create patterns and recognize meaningful patterns created by others. Leavis makes particularly interesting use of this aspect of Polanyi's thought when he discusses the negative valence Eliot gives to the word "pattern" in "East Coker" in relation to the positive, life-giving valence Polanyi gives it as an avenue toward and a builder of truth (Principle, 201, 223-6). Of course, this particular skill, like any other Polanyi discusses, is not infallible and is open to abuses. Frank Kermode, in Sense of an Ending (1967), suggests how unsatisfying literary works are if we feel the pattern has been achieved too easily, without an honest enough recognition of the divisions and chaotic elements in experience and without any sense of precarious stretching at the boundaries, of the whole shape of the work being threatened at every point by the contradictory and irreducible life enacted within it. However, Kermode is equally good at revealing the impossibility of avoiding structure and patterns of meaning--even if authors deliver their novels on cards to be shuffled randomly, the reader will create some sort of order and manufacture a beginning and an ending for him or herself.

Without abandoning the insights of reader-response theory and without embracing overly naive notions of the organic unity of a work of art, we can nevertheless affirm those urgent shaping powers of the artist that Leavis suggests start "with an elusive sense of some coherence or pattern to be found in experience" (Sword 25). For Leavis, the creativity of all perception is continuous with the creativity of great writers. Poets and novelists, however, are both more open than most of us about their role in shaping their thought and simultaneously more adept at inventing methods to subvert and challenge their shaping tendencies.

One of these methods, Peter Elbow suggests, is the embracing of conflict and contraries: as he says of Chaucer, he "arranges the dilemma so that we can only be satisfied by taking a larger view" (EC 240). The larger view may itself be unstatable in any other way, but Leavis contends that "what is inexpressible in terms of logic and clarity, the unstatable, must not be excluded from thought" (Principle 43). Booth suggests another way in which artists push against easy resolutions or too early closure: they subject all concepts to the elaborate testing of "artistic proof," trying to see if an attitude can be "danced well" (Dogma 173).

Metaphor works in a similar way to complicate linear thinking and create new and more disturbing concepts, yoking unlike things together in unpredictable ways to suggest a relation between them (see EC 22-30, 250 and Principle 108). Leavis is careful to distinguish this kind of metaphor from paraphrasable tidy analogies that serve as decoration only, functioning as similes with the "like" or the "as" left out (Principle 135, 151-4). Or as Booth says (CU 266), "where literalness ends and metaphor begins is impossible to determine, but the borderline is not a line between truth and falsehood."

Thus, the very choosing of methods that work to subvert and challenge cliché or simple pattern may express the most basic intention of any writer to whom we give prolonged attention. These choices need not be based on explicit reasoning or on sophisticated understanding of theory. We can assume that even Bunyan and DeFoe had enough tacit understanding of the open-endedness, ambiguity, indirection, and sensual life of narrative from their experience of it in family and community discourse, particularly through Biblical narrative, to decide to pour themselves into its methods and accept simultaneously the limitations and the considerable powers of those methods. The deepest intention was to take that particular tool in hand to explore reality.

Clearly, the twentieth century novelists that strike us as extending and transforming a long tradition of narrative make their intentions even more unmistakable by the forms they choose, forms that make single interpretations impossible. They sense that the forms they set before the world are finally the only possible shape or equivalent for their thought--the only adequate embodiment, testing, and extending of what they were trying to say. Thus all our examinings of a narrative's play of meanings, complexities of shape, richness of imagery, movement, and voice, even of the ways language works against itself to challenge surface meanings, are continually helping such writers to realize their profoundest intentions. Further, the necessity for our collaboration, our constructive activity as readers, generates the very intensity of interest the writer most desires. Writers want our indwelling more than anything else, want to draw us in to puzzle over these details of color, shape, form, sound, taste, sensation, idea, character, and event, with them to help build and complete the whole that will contain all the tensions the artist felt and tried to include in one work.

Polanyi's discussion of parts and wholes is not a simple one. He is not interested in arbitrary constructs that merely console or entertain and never allows us to see any significantly ordered whole as closed to challenge from the future. Instead, he insists it can only be considered true if we sense that it contains in itself hints to how it might one day be meaningfully challenged and transformed. More striking still, he claims that a whole, while not reducible to its constituent parts, is also not separable from them. We sense the whole only by dwelling fully in the often contradictory particulars and focusing intently on whatever tenuous, shifting relation might possibly contain or explain them without reduction. His formulation here helps us understand why contemporary novels can often seem so disjointed: one hundred years from now, the loving attention of readers may have helped the whole shape to emerge by their dwelling in the particulars and sensing their possible relations to each other. To say that the novelist knew exactly what this whole meaning was to be would be as wrongheaded as to say that she did not sustain her work with intimations of it and passionate intellectual focus upon it. And perhaps if we can begin to accredit the tacit powers of writers, allowing that their primary intelligent intention is to use these tacit powers, we can begin to accredit our own tacit skills as readers as well.

Conclusion

A conclusion would seem impertinent when I feel I've only made the faintest beginning on issues much larger and richer than I am. But I need to end this somehow. Let me do so by attempting a redefinition of two important words, fact and fiction.

Both Booth and Leavis agree that our great writers are concerned with a necessary kind of thought about human life, not the least of which is thought about language, its power to shape or limit us, and our need to preserve and extend it as the medium in which we live, "the source of our being" (*Dogma* 142). Polanyi's discussions of language and articulation reinforce Leavis's contention that our important words are incapable of fixed and definitive

definition, and as we have seen, Polanyi has proposed several major redefinitions of knowledge, truth, and reality. His work emboldens me to suggest a further challenge to the accretions of centuries that have equated fact with truth and fiction with falsity. The root words, *facere* and *ingere*, have always been much closer than that. My old Cassell's Latin dictionary finds, as one might expect, *ingere* (from which *factum* comes) to be associated with "fashioning, forming, moulding, imagining, conceiving, arranging, ordering." But it also links *facere* with "writing down, producing, composing, and valuing." The closest link, of course, is "making." And once we have begun to see fact and fiction both as something made, we have begun to see what Polanyi's epistemology and its importance for language studies is all about. Certainly, if the whole body of modern science can grow in such a ground of unspecified skills and constructed fact, the study of literature and language need not fear to do the same.

But if redefining fact and fiction in this way brings the spectre of total relativism too close, I've done something wrong. Perhaps I can only make amends by writing another essay, this time emphasizing much more fiercely Polanyi's discussion of the personal and universal poles of all knowledge, the ways in which all our knowledge is both made and discovered. Trained in arduous apprenticeships in the arts or academic disciplines, we build/discover our knowledge not whimsically, arbitrarily, just as we please, but as we feel we must. An understanding of the structure of tacit knowing as Polanyi describes it and of the communal, convivial controls on our knowledge and discoveries can only serve to underline the inescapable, existential nature of our commitments to what we know.

Twenty years from now, I believe we will look back to the 70's and 80's as a period of great upheaval in literary criticism that gave us some of our most eloquent insights into the nature of language and the powers and limits of literature. But I also think we will have a more realistic understanding of the limits of literary theory. As Polanyi put it, "an unbridled lucidity can destroy our understanding of complex matters." It is not by detached scrutiny of the particulars of a work of art, "but by dwelling in them, that we understand their joint meaning." (TD 18). Any sentence or paragraph, let alone an entire work, can completely deconstruct if we stare at its parts long enough; it can then either mean ninety different things or nothing. "All particulars become meaningless if we lose sight of the pattern which they jointly constitute." (PK 57)

Yes, readers construct the meaning of a text as they read. Yes, final certainty is not a reasonable goal for the interpretation of texts. But once we've said these things (which can also, we now see, be said of scientific work), we haven't even begun the task of literary criticism; nor, obviously, have we said all that needs to be said about its theoretical underpinnings. I got into this line of work because I love stories and the ways in which they generate/ discover meaning, meaning that cannot be stated in any other way; and now I increasingly find that biblical scholars, theologians, philosophers, even physicians and psychologists are reading stories in richer and more real ways than I am. Leavis and Booth, drawing on Polanyi's insights, have given us literary critics ways to return with clearer understanding--and without theoretical naiveté or playful irrelevance--to work most of us have valued and performed tacitly all our professional lives, the work of exploring the kind of knowledge only literature can discover and create.

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D. H. Lawrence and Michael Polanyi:
Redefining Subjectivity and Objectivity

Pamela A. Rooks

It can be argued, philosophically and practically, that we human beings are not only the creators of, but also the creations of, language. Certainly, the language that we inherit and inhabit powerfully shapes the ways in which we think and talk about ourselves and our world. We students of literature may be more influenced than we realize by the label that we commonly affix to our discipline--literary criticism--and our roles within it--literary critics. The root meaning of "judge", and the common association of these words with censuring and finding fault, reinforce our conscious and subconscious affiliation with the dominant mode of inquiry in Western thought--the mode which recommends doubting, dissecting, and disagreeing as the only sane and certain routes to or signs of knowledge, and which denigrates believing, synthesizing, and striving for consensus as tools of discovery. Polanyi challenges this dominant assumption, and that challenge can inform our activities as students of literature. I should like to suggest how our responses to a particular author--D. H. Lawrence--can be enriched through a Polanyian perspective.

Polanyi's work can be useful to the scholar interested in Lawrence as a serious and provocative thinker, because there are certain striking consonances between Polanyi's epistemology and Lawrence's

"pollyanalytics", particularly in their revision of the concepts of subjectivity and objectivity, and their emphasis on the vital interchange between the individual knowing person and the surrounding knowable world. These resemblances do not prove that Lawrence even attempted to formulate a rigidly consistent system of thought. But they can reveal that many of Lawrence's criticisms of the inadequacies of the dominant scientific, philosophical, and psychological models of his day, and his passionate attempts to propose, recognize, or envision, both in his fiction and his essays, alternative routes to and kinds of knowledge, were dismissed by the intelligentsia of his (and, perhaps, of our) day not because they were primitive and anti-intellectual, but because they spoke out of, and to, a kind of thinking about thinking (and about perceiving and doing and discovering) that was in many ways ahead of, rather than behind, its time.

Polanyi and Lawrence independently recognize that our limited and unrealistic definitions of "subjective" and "objective" result in false notions of what knowledge is, what relation we have to each other and the world around us, and what contributions the different disciplines can make to a fuller understanding of these relations. Certainly, the distinction between science and art cannot be made on the grounds that one is objective, the other subjective, since no form of creation and discovery is purely one or the other. Both men tackle this process of redefinition as a fundamental cornerstone of their epistemologies.

The tendency of Polanyi's Personal Knowledge is to seek the common human wellspring and structure of all inquiry, scientific or otherwise. Polanyi's philosophical position is remarkable for its balance. He denies that knowledge exists somehow apart from its meaning to individuals in all their irreducible complexity; and at the same time, he is equally committed to the belief "in the presence of an external reality with which we can establish contact", which "is gradually accessible to knowing", and "which, being real may yet reveal itself to our deepened understanding in an indefinite range of unexpected manifestations" ("Knowing" 133). Because of the dual emphasis on "indwelling" ("we endow a thing with meaning by interiorizing it and destroy its meaning by alienating it" Personal 146) and "universal intent", Polanyi's account of man as what Lawrence calls a "thought-adventurer" ("On Being A Man" 616) seems closer to lived experience than many epistemologies. Polanyi is refreshing in his insistence that belief is more creative (and less blind) than doubt. Even the power to criticize must spring from and return to what can only be called faith. To admit the possibility of being wrong, without being a relativist, yet to endorse the search for recognizable truths and values, is paradoxical. The necessary creative tension is maintained because Polanyi conceives of knowledge neither as private, nor as referring to an independent structure of reductive facts devoid of personal and cultural significance. Explicit knowledge rests always on a nexus of tacit belief. This is akin to Lawrence's contention that: "The continuum which is alive can handle the dead tissue. That is, the individual who still retains his individuality, his basic aliveness or innocence or naivete, can deal with the material world successfully. He can be analytical or critical upon necessity. But at the core, he is always naive and at one." ("Individual" 763)

Even more emphatically than Polanyi, Lawrence insists that the material cosmos itself depends, not only for its meaning but for its very existence, upon living creatures. Polanyi's argument that if the conventional scientific ideal of wholly explicit, depersonalized knowledge were obtainable in practice, it would result in an "absurd and hostile" universe (Personal 199) echoes Lawrence's rejection of abstract knowledge untempered by "togetherness":

The world of reason and science, the moon, a dead lump of earth, the sun, so much gas with spots: this is the dry and sterile little world that the abstracted mind inhabits. The

world of our little consciousness, which we know in our pettyfogging apartness....There are many ways of knowing.... But the two ways of knowing, for man, are knowing in terms of apartness, which is mental, rational, scientific, and knowing in terms of togetherness, which is religious and poetic. ("A Propos" 511-12)

Polanyi's concept of knowledge as neither impersonal nor a priori but interactive, depending on the existence of a real external world independent of the subject as well as on the subject's individual interest and involvement in this world, can be connected with Lawrence's concept of the individual (as distinct from the social) consciousness, which "is not split into subjective and objective", but is "the primal or pristine or basic consciousness..., the state of 'innocence' " ("Individual" 761-2). This Innocence, or individuality, is the condition of wholeness which makes it possible to create, discover, and relate without manipulating. Thus, Polanyi's "personal" finds its nearest equivalent in Lawrence's "individual".

According to Polanyi, "subjective" and "objective", as they are commonly used, are severely limited terms which, although not meaningless, are inadequate as descriptions of human knowledge, understanding, or discovery. He introduces the concept of "Personal Knowledge" in order to bridge the gap between the inaccessible privacy of subjective feelings and the detached public domain of objective facts. Polanyi claims that the knower's "personal participation...in all acts of understanding...does not make our understanding subjective. Comprehension is neither...arbitrary nor...passive..., but a responsible act claiming universal validity. Such knowing is indeed objective in the sense of establishing contact with a hidden reality". He describes "this fusion of the personal and the objective as Personal Knowledge" (Personal xiii-xiv). Although it is necessary for the individual to "commit" himself passionately to the knowledge which he believes to be valid, this commitment is "personal, which is neither subjective nor objective." The personal is not a purely subjective state because it "submits to requirements acknowledged by itself as independent of itself", but because "it is an action guided by individual passions, it is not objective either. It transcends the distinction between subjective and objective" (Personal 300).

Purely subjective feelings are, according to Polanyi, "in the nature of a condition to which the person in question is subject" (Personal 302). They do not have to do with anything outside the subject, although they may be caused by external factors, since Polanyi includes in this category raw sensations such as pain or cold, if these sensations are so intense as to block out all other awareness. The very insularity of pure subjectivity negates relationship or connection between the subject and anything else; it is a short-circuit which traps and blinds him. As such it is a profoundly uncreative and indeed self-destructive condition. It is also passive, insofar as it is "merely suffered or enjoyed" rather than "actively entered upon. . . tend[ing] towards an achievement" (Personal 312-13).

Lawrence's genuine individual, in a state of Innocence, is part of the living continuum of the universe. Lawrence's individual knowledge, like Polanyi's personal knowledge, means not being split into a mental dichotomy of subjective and objective consciousness:

The moment any individual creature becomes aware of its own individual isolation, it becomes instantaneously aware of that which is outside itself, and forms its limitation...the psyche splits into two, into subjective and objective reality...[and] the primal integral I, which is for the most part a living continuum of all the rest of living things, collapses, and we get the I which is staring out the window at the reality which is not itself. And this is the condition of the modern consciousness, from early childhood. ("Individual" 761)

This is man the passive spectator, the classical scientist, gazing through the window of mathematics at a "reality" more "real" than his own body, at a world which is only his insofar as he can manipulate it and comprehend it in abstract terms. Lawrence believes that the way, for modern man, is to move forward to his own unique renewed relationship with the world and himself, which must grow out of combined conscious and unconscious knowledge. One of the most persistent themes running through Lawrence's works is the struggle of modern men and women to achieve a relationship with themselves, each other, and the circumambient universe which denies neither their dark blood nor their conscious minds. The accumulation of knowledge that so complicates modern man's experience cannot simply be suppressed or eliminated or reversed; it must be assimilated in a new synthesis: "we must know, if only in order to learn how not to know" (Fantasia 76).

The way is fraught with apparent contradictions. For example, Lawrence detests what he calls "merging", yet he insists that all living things are part of a "continuum, as if all were connected by a living membrane." Polanyian terminology may help to resolve this apparent contradiction: Lawrence suggests that individuality (with its concomitant separateness) must remain tacit; if our individuality, our isolation, becomes the explicit focus of our attention, it will cease to form the secure underpinning which makes our active creative lives possible, and will become locked in as a jamming frequency which will effectively block out both external and internal stimuli. The individual consciousness is aware of "you" or "it" not "as something...limiting 'me'" but as "a continuum of 'me'--different but not separate...." ("Individual" 761-2).

"Different" but not "separate" is an important qualifying distinction in seeing what Lawrence is saying. He does not suggest that all things are the same, or that they should merge into oneness, but that all things have a living connection.

Exploration of the nature of that connection leads Lawrence to redefine subjectivity and objectivity. But he does not reject the mind, or the consciousness, nor even the terms "subjective" and "objective". Rather he seeks to realign them with the reality of the body and the unconscious, the root and the wellspring. He most explicitly attempts this realignment in Psychoanalysis and the Unconscious and Fantasia of the Unconscious.

Psychoanalysis originated as a reaction against the Freudian unconscious, which seems to Lawrence "the cellar in which the mind keeps its own bastard spawn" (Psychoanalysis 207). The true unconscious, he feels certain:

. . . is not a shadow cast from the mind. It is the spontaneous life-motive in every organism. . . .Where the individual begins, life begins. The two are inseparable, life and individuality. And also, where the individual begins, the unconscious, which is the specific life-motive, also begins.

(Psychoanalysis 212-13)

Characteristically Lawrence, who feels that "a true thought . . . comes as much from the heart and the genitals as from the head" ("Privately" 279), locates the primal centers of the unconscious not in the head, but throughout the body. The psychological-physiological structure which Lawrence develops in Psychoanalysis and elaborates in Fantasia describes four primal centers of the bodily unconscious: two lower centers, described as "subjective", and two upper centers, described as "objective". But, says Lawrence, "let us realize that the subjective and objective of the unconscious are not the same as the subjective and objective of the mind" (Psychoanalysis 228). The mind is not yet awake, and the individual has as yet no ideal conception of self or other.

It is essential to note that, even at this primal level of the unconscious, Lawrence defines "subjectivity" and "objectivity" in terms

of relationship: not only between the four centers within the individual, but between one individual and another. Even pristine subjectivity cannot exist in isolation. The potential of the individual to grow and develop in "correspondance" with "the external universe" (which universe Lawrence, like Polanyi, insists is--in some sense--a knowable reality rather than a fiction, projection, or illusion) depends, for Lawrence, on his not severing these deeply subjective bonds between the body and the world: "There must be a circuit of which the complementary pole is external to the individual" (*Psychoanalysis* 244). The bond, the relationship between an adult man and woman, which is so vitally important to Lawrence, depends on remaining in touch with the living subjective and objective unconscious, rather than reacting according to the dictates of an abstract ideal, and succumbing to the temptation to construct a model rather than recognizing another individual.

To complete a model of anyone or anything is to make an idea of it, to abstract it from its context, to "fix" it, to make it "a mental objective, endlessly appreciated, criticized, scrutinized, exhausted" (*Psychoanalysis* 229). One ceases to attend fully to the phenomenon itself, and focuses only on the idea one has of it. This is how, Lawrence would claim, classical science observes the universe, to the exclusion of all other sorts of awareness. It may, equally, be how we all too often regard a work of literature. It is the exclusivity of this sort of attention that Lawrence objects to. It is not that he dismisses the importance "of real, eager curiosity, of the delightful desire to pick things to pieces, and the desire to put them together again, the desire to 'find out', and the desire to invent" as incompatible with individuality, for these urges too spring from the unconscious (*Fantasia* 40). But objective knowledge is "based on ... difference, a knowledge...of the gulf that lies between...two beings" (*Psychoanalysis* 237). This knowing "in apartness" is vital and valuable only insofar as it does not supplant knowing "in togetherness".

Objective reasoning, or at least reasoning that functions according to an ideal objectivity (an ideal that Polanyi denies makes any real sense, even to a practicing scientist), usually works on the assumption that, basically, the world consists of organized (or at least organizable) units, whose nature can be comprehended in terms of a single definable system. Mathematics as a tool of discovery is effective because it proceeds by abstracting from the individual nature of things. The picture of the universe that it presents is general rather than specific. Even the new physics, although it takes into account the unpredictability of each unit, establishes broad statistical laws that make a high degree of accuracy about the system possible. Many political and educational theories are based on the idea that individual members of a society are more or less identical units, with identical needs, desires, and potentials. Behaviorist psychology assumes that one stimulus equals, in any organism, one predictable response. All of these systems reduce the individual to a "norm". But, as Lawrence asserts, "there is no such thing as an actual norm, a living norm. A norm is merely an abstraction, not a reality" (*Fantasia* 47). To regard not only the world but oneself as a finalized abstraction is the kiss of death:

This consciousness collapses, and the real individual lapses out leaving only the social individual, a creature of subjective and objective consciousness. The innocent or radical individual consciousness alone is unanalysable and mysterious; it is the queer nuclear spark in the protoplasm, which is life itself, in its individual manifestation. The moment you split into subjective and objective consciousness, then the whole thing becomes analysable, and, in the last issue, dead. ("Individual" 762)

For Lawrence, as for Polanyi, genuine living knowledge is possible only when based in what Lawrence would call the individual and Polanyi

the personal. Both agree that the conventional definitions of "subjective" and "objective" are inadequate to account for the kind of knowing and discovering they value. Both accept that this kind of knowledge and discovery is based on what Polanyi calls "faith"--that is, the framework of belief inaccessible to merely explicit scrutiny. Neither the artist nor the scientist regards this apparent limitation as restrictive--on the contrary, it is what makes creativity possible. While the two men approach these similar convictions from different disciplines, with different terminology and different emphases, I suspect that Polanyi would salute Lawrence's poetic definition: "Thought is a man in his wholeness wholly attending."

Lawrence's novels are even more provocatively sustained "thought adventures" than his polyanalytics. It is becoming increasingly clear to many critics that reading, or experiencing, a text with fuller understanding requires immersion or indwelling (knowing "in togetherness") at least as much as standing back and analyzing (knowing "in apartness"). Although it most certainly has a crucial ludic element (would any of us do this if we didn't find it fun?), literary criticism is not a game in the sense of being something not to be taken seriously, even passionately. It is an activity which involves commitment, and commitment, as Polanyi makes abundantly clear, means taking a stand and thus a personal risk. When we critics talk about literature, we talk also about ourselves. Lawrence writes:

Literary criticism can be no more than a reasoned account of the feeling produced upon the critic by the book he is criticizing. Criticism can never be a science: it is...much too personal, and...is concerned with values that science ignores....A critic must be able to feel the impact of a work of art in all its complexity and its force. To do so, he must be a man of force and complexity himself, which few critics are. ("Galsworthy" 539)

As Booth argues, when we read we must be capable of "surrendering to other minds" (260). The novelist, too, surrenders to other minds; the minds of the various characters, who are simultaneously aspects of and significantly separate from their creator. It seems to me that it isn't possible to read Lawrence's novels without becoming increasingly aware that one is being immersed in intensely contradictory experiences ("points of view" isn't strong enough) as the narrative lives through first one character, then another. This phenomenon is especially central in *The Rainbow* and *Women in Love*. If, as Elbow puts it, "A belief is a lens and one of the best ways to test it is to look through it" (283), then perhaps what Lawrence is doing as a writer, and what we must do as engaged readers, is to "look through" the various and contradictory "lenses" that he grinds for us. The focus which emerges will not be a fixed or final one; the richness of Lawrence's best work is that it resists, as he felt life must, closure. In his thought, his work, and his life, he was an adventurer, an explorer, and an experimenter. Certainly, not all of the directions he took were equally fruitful. As readers, we can usefully borrow one of Polanyi's criteria for truth to help us sense the difference between Lawrence's dead ends and promising paths. Polanyi maintains that the educated, sensitive, and engaged yet open-minded scientist senses when she has "established" contact with a hidden reality...[which] is defined as the condition for anticipating an indeterminate range of yet unknown (and perhaps inconceivable) true implications" (*Personal* xiii-xiv). Might we not, as literary critics, take the Polyanian risk of establishing fruitfulness as one of our central criteria for recognizing value in the works we make ourselves part of and part of ourselves?

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LETTER TO THE EDITOR

Developing the Rules to Personal Knowledge

Angeles Fear: Towards an Epistemology of the Sacred by Gregory Bateson and Mary Catherine Bateson.

I would like to recommend the recently published book above to the members of the Polanyi Society. Bateson's book is both an extension to Polanyi's Personal Knowledge and a view of the nature of mind and intelligence from a much wider and more abstract viewpoint. Bateson includes within his scope of thought all of nature and all of mind. Indeed, at the level at which he is trying to reach, there is no formal difference. A complementary difference between Bateson and Polanyi is that Polanyi studies the mind and its epistemology from within its phenomena, while Bateson is looking for the most fundamental--and necessarily more abstract--principles which govern the entire universe of thought and life. To use a metaphor, Polanyi is studying chess from within the game, while Bateson is trying to find out the rules that govern the game of chess from a position outside the game. Some of Polanyi's conclusions are the fundamental starting points for Bateson's way of thinking.

To illustrate some of the ways the ideas of Bateson and Polanyi interact, I would like to discuss a few of the points made by D. Scott from Convivium (Winter 87-88, in order of appearance). Polanyi considers

vision to be purposeful and, thus, I would say, machine-like. However, Bateson devotes a whole chapter to the idea that mind is neither mechanical nor supernatural. In addition, in Bateson's world, there are processes which are not purposeful (in the usual sense) but are not machine-like either. In fact, this third (or perhaps more than three) way is absolutely essential to create a mind which is neither a machine or nor supernatural (as is in the popular "New Age" rage.)

Next, Scott discusses "the value of the inexact", of which the tacit is an example. Polanyi points out how the objective (actually another type of aesthetic; see Pirsig, Zen and the Art of Motorcycle Maintenance for another good way of looking at this idea.) rests on judgments which cannot be proven. Bateson treats this idea at length in the chapter "Defenses of Faith". Bateson, Pirsig, and Polanyi all draw together a synthesis of art, science, and religion.

Another paragraph or so farther, Scott looks through Polanyi's eyes into the paradox of whether a tree falling in a forest makes any sound if no one is there to hear it--whether something exists if it is not yet discovered. Bateson has something different to contribute to this paradox as he looks at the structure of mathematical systems. In these systems, all theorems are immanent in the postulates, axioms, and definitions which make up the given logical system. Here the whole system is created "at once", even the theorems which have not yet been proven or discovered. Polanyi asks whether truth and beauty existed before we discovered them. In Bateson's system, truth and beauty clearly existed before humans discovered them: they have been known by Nature for ages and seem essential for the functioning of evolution. And humans are an experiment and necessarily an extension of Nature.

Bateson also attempts to study important ideas found in the Bible. See especially the chapter entitled "The Unacknowledged God", where the law of karma is investigated. (i. e. you shall reap what you sow.) Bateson concludes that God can be violated but cannot be mocked. (See Galatians 6:7)

Scott goes on to discuss many other aspects of Polanyi's work which have interesting relationships to Bateson's system. As we read through Scott's article, more analogies can be drawn. This task, should you find it worthy dear reader, remains to you.

Gregory R. Markowski

From Convivium

Truth in the Fiduciary Mode: A Reply to Professor Emmet

In her paper (CONVIVIAM, 23, Oct. 1986, 4-8) on Polanyi's attempt to redefine the notion of truth, Professor Emmet rightly points out a number of serious difficulties in its results. Though I wholly agree with her on the nature of these difficulties, I think that it is possible to reconstruct Polanyi's much too brief and unsystematic remarks on truth, such that (i) her criticisms are met and (ii) the reconstruction is in accordance with Polanyi's overall position. In this paper I will briefly argue that his views of truth had best be interpreted as being primarily concerned with what in philosophical circles is commonly called utterer's sentence meaning (H. P. Grice) or intended meaning (J. Searle) of utterances of the form ". . . is true". Next, I will briefly suggest that Polanyi's account of utterer's meaning of truth may be understood as a rather special version of the so-called Performative Theory of Truth. Contrary to Emmet, however, I think that this by no means entails that Polanyi rejects "the old fashioned notion of truth as accordance with reality".

Utterer's meaning of ". . . is true"

In assessing Polanyi's account it seems good policy to begin by asking what questions it is supposed to answer. It is evident that the main aim of *Personal Knowledge* (PK) in this respect is "to allow for the inherently personal character of the act by which truth is declared" (PK p. 71). Objectivist theories are inadequate because they all depersonalize the notions of knowledge and truth. In order to repair this defect Polanyi's concern in PK is to bring in the personal coefficient. His "redefinition" of truth is primarily to be understood as an answer to the question: "How can we take this coefficient into account in our conception of the truth?" Obviously, Polanyi thinks that this question boils down to a further one, namely: "What do we mean by saying that a factual statement is true?" (PK p. 254).

Referring to Grice's (1968) distinction between (i) utterer's meaning, (ii) sentence meaning and (iii) word meaning, it is obvious that Polanyi is primarily concerned with (i). Briefly, his account of utterer's meaning of sentences of the form ". . . is true" or "It is true that . . ." is interesting and nicely ties up with another part of his anti-objectivist program, namely to revalue the notion of belief. Two central theses of his account of ". . . is true" or "that . . . is true" can be formulated as follows. Apart from differences in emphasis:

(1) to assert that p and to say that p is true are equivalent, and
 (2) to say that p is true and the say "I believe p " are equivalent. Notice that the equivalence in thesis (1) is also a logical one. In the guise of the so-called Logical Superfluity or Redundancy Theory of Truth, (1) has been upheld by logical positivists like early Wittgenstein, F. P. Ramsey and A. J. Ayer. They considered the problem of truth as something of a linguistic muddle. Thesis (1) also figures in the so-called Non-Descriptive Theory or Performative Theory which was propounded by Strawson in the late forties. According to this theory, the phrase "is true" is not descriptive. For example, to say that it is true that snow is white, is not to say something about a property or quality of the sentence "snow is white". To say that a statement is true is not to say something further about its content, it is *to do* something additional to just making that statement (cf. Strawson, 1949, p. 84).

Polanyi substantially agrees with this by rejecting the view that "true" designates a quality of a sentence (cf. PK p. 305). By taking up Black's suggestion to regard "is true" "as a linguistic device for converting an unasserted into an asserted sentence", it is obvious that Polanyi also agrees with the idea that "is true" (like Frege's assertion sign " \vdash ") is an assertive device (cf. M. Black, 1948, p. 61). Apart from its function as a device for indicating assertive force, however, "is true" is also a performative. What one does in uttering "it is true that p " is not only to assert that p , it is in addition confirming, agreeing, endorsing, admitting, underwriting, affirming that p . In Polanyi's words: "to say that p is true is to underwrite a commitment or to sign an acceptance" (PK p. 254).

Though even critics of the Performative Theory admit that it gives an important insight into a function of the use of "true", they normally point out that it cannot be the whole nature of truth (cf. A. R. White, 1970, p. 100). Emmet also agrees that to say that p is true is to vouch for one's belief that p . Taking "is true" as an assertive device, however, ultimately boils down to the simple insight that in using this phrase one is merely making a truth claim. "But", she asks, "is this all that is meant by its being true?"

Though Polanyi adheres to the main theses of the Performative Theory, it is evident that he does not want to leave matters at that. He emphatically wants "to accredit the use of 'truth' as part of an a-critical act of affirmation" (PK p. 255, n. 1). How should we understand this? That is, how should we conceive of these "acts of affirmation" and how can the linguistic use of "true" ever be part of such acts?

It seems to me that the Polyanian act of affirmation is a kind of internal, mental act of judgment which is completely *sui generis*. Likewise, the act of assertion is an act of tacit comprehension "which relies altogether on the self-satisfaction of the person who performs it" (PK p. 254). As I see it, what Polanyi wants to say is simply that persons may or may not succeed in grasping some truth in (the act of) judging within a particular situation at a certain time. The performance of such an internal act is *eo ipso* to come to believe or to form a belief. In other words, belief as true finds its origin in judging rightly. This, I take it, is the sense of Polanyi's dictum that "truth becomes the rightness of an action" and of his equating truth "with the rightness of mental acceptance" (PK pp. 320f.).

What about the problem of how these mental acts become public? In Polanyi's view this seems to be simply a matter of expressing their contents. For instance, for any speaker S at a time t , to utter "that p is true" expresses S 's judgment that p . However, one may very well judge, affirm or assert for oneself that p and not say that p , judge that p and say that one merely thinks that p , or even say that non- p . Clearly, then, S 's judgment is expressed if and only if (at least) the following requirements are met: (a) S must be sincere and (b) S 's judgment should have been made "with care and competence" or responsibly.

In passing, I would like to point out that Polanyi's internalist account may be strengthened considerably by drawing on Searle's theory of intentionality. According to this theory, the performance of an assertive speech act "is necessarily an expression of the corresponding intentional state" (Searle, 1983, p. 9). In addition, "intentional states represent objects and states of affairs in exactly the same sense that speech acts represent objects and states of affairs" (ibid. pp. 17ff.). The idea is simple: just as in a speech act a propositional content is expressed with a particular illocutionary force, so in an intentional state a particular representative or intentional content is contained in a specific psychological mode. Much more could be said about this (particularly in respect to the intentional states of feelings, emotion and intention which play such an important rôle in the doctrine of the tacit

component). However, for reasons of space I will confine myself to merely suggesting a structural analogy between assertive speech acts and Polanyi's mental acts of judging, *provided* the speaker is sincere.

Obviously, a possible critic might follow Emmet in suggesting that if the use of "truth" is part of an a-critical act of affirmation there is no criterion outside the commitment situation where this act is performed. If this act depends completely on the self-satisfaction of the person who performs it, his predicating true (or false) of statements or sentences then seems to become completely arbitrary, no matter the sincerity or the responsibility with which such predications are accompanied. This impression is further strengthened by Polanyi's thesis (2), which says that to say "that *p* is true" is equivalent to saying "I believe *p*". The idea is that the (incomplete) expressions "I believe", ". . . is true" and the assertion sign "┆" all function as performative operators, i.e. devices for indicating assertive force.

Given the fact, however, that our beliefs and commitments may be wrong and changeable, this seems to imply that "the truth and falsehood of *p* will change with them" (Emmet, p. 5). I completely agree with Emmet that if this were really Polanyi's position, it not only violates the age old philosophical insight that what is true is always and everywhere true, it would also imply an irredeemable subjectivism and relativism. For if truth is wholly dependent on one's convictions, any distinction between what is true and what I (or you) think or believe is true, no matter how responsibly and sincerely, becomes senseless.

However, there are good reasons to suppose that Emmet's reading of Polanyi is incorrect. Polanyi neither rejects the intuitive idea of truth as accordance with reality, nor defines truth in the alleged sense of "that which I personally and sincerely assert" (Emmet, p. 6).

The definition of "true"

According to Polanyi the expression "*p* is true" expresses an act of assertion. That is, in uttering it the speaker expresses his or her belief as true that *p*. Tarski's recursive definition "*s* is true if *p*" is criticized for equating a sentence with an action. Accordingly, he proposes to redefine the Tarskian T-convention as follows:

(3) I shall say "snow is white" is true if and only if I believe that snow is white (cf. PK p. 255).

This is rather puzzling, for (3) can hardly be called a definition. In fact, it is a kind of personal declaration, perhaps even a promise, on the part of Polanyi himself. It simply states under what condition Polanyi will use the phrase ". . . is true", that is, it cannot be taken as a revision of Tarski's definition. It has nothing to do with the meaning of "true", but everything with the meaning of telling the truth. However, I think we may transform (3) into a clause which has both sufficient generality and is at the same time in accordance with Polanyi's intentions. We quantify over speakers (*S*) and seriously uttered sentences in which truth is predicated (*U_t*) at a particular

place and time (*t*). In this way the speech act is linked with its asserter.

Assuming that *S* is sincere, we might rephrase (3) into:

(4) (*S*, *U_t*) (*U_t* if and only if *S* believes that *p* at *t*).

Since there is a moral element in the background here, we might perhaps also give (3) a model (deontic) form:

(4') It is obligatory to perform *U_t* if you believe that *p* at *t*.

Whatever the correct reading, however, we surely are allowed to apply one of Polanyi's own principles to (3), namely that he wrote it down with universal intent. That is, though (3) seems only to apply to Polanyi's use of "true", it should also apply to all veracious enquirers who refuse to make truth redundant by constantly suspending judgment and assertion.

Now if someone were to utter ". . . is true", expressing his or her judgment or belief that so-and-so, it certainly makes sense to ask whether this utterance is itself true. This seems to me in accordance with Polanyi's view that truth is not a property of mere (unasserted) sentences. Taking up a suggestion of Davidson (1984, p. 134) that truth attaches (or fails to attach) to utterances, the step from telling the truth (4) to a general schema which is "closely akin" to Tarski's becomes vanishing small. For we get:

(5) (*S*, *U_t*) (*U_t* is true if *p* at *t*).

One might object that Polanyi in advocating the suspension of disbelief is nowhere saying anything remotely similar to (5). To support my claim that it is in accordance with Polanyi's overall position, it is not all that difficult to adduce some textual evidence from both PK and later publications. For instance, Polanyi admonishes us quite emphatically to uphold the regulative standard or ideal of truth: "though every person may believe something different to be true, there is only one truth" (PK p. 315). Elsewhere he tells us that "truth lies in the achievement of a contact with reality" (PK p. 147). A few years later we find: "the truth of a proposition lies in its bearing on reality" (KB p. 172). Finally, we have "A statement about nature is believed to be true if it is believed to disclose an aspect of something real in nature" (SR p. 191). I fail to see how this could ever amount to a rejection of "any view of truth as independent of our convictions" (Emmet, p. 5). What is more, I doubt whether Polanyi did reject the old fashioned notion of truth as accordance with reality.

Truth as accordance with reality

I agree with Emmet that his concern to attack the ubiquitous suspension of belief led Polanyi to over-emphasize the element of commitment, particularly in PK. At least from *The Tacit Dimension* onwards, "commitment" becomes less important (cf. TD, x). It is true that Polanyi is critical of Russell's version of the correspondence theory. It is important here to distinguish between three completely different kinds of problem: the definition of the meaning of, or the nature of, truth, accounting for utterer's meaning of truth and the criteria for truth. As Professor Emmet points out, Polanyi finds the correspondence theory (at least in Russell's version) an inadequate answer to the first kind of

problem. In his view it is impossible to say *how* subjective belief and actual fact could ever coincide (cf. PK p. 304). The point is well made, because it is notoriously difficult to explain the precise nature of the relation of correspondence between (the content of) a belief (statement or theory) and the "actual" facts. In Polanyi's view a confrontation between the "actual" facts and beliefs, whether our own or those of others, has ultimately to be resolved by personal judgment. Unless one wants to follow the sceptic and the instrumentalist in suspending judgment, belief or assertion for ever, in practice decisions are called for (if only in the application of relevant rules of verification or falsification). Because even the veracious explorer may be mistaken and direct access to reality is lacking, we have to rely on a vast amount of largely unspecifiable background knowledge, embedded in, and transmitted by, shared cultural practices.

If I am correct, then Polanyi more or less implicitly offers his own version of the correspondence theory in his proposal that we may assume a "correspondence between the structure of comprehension [tacit knowing] and the structure of the comprehensive entity which is its object" (TD pp 33f.). Polanyi is rather vague on the matter and some commentators (e.g. Innis [1973, pp. 88f.], Bennett [1978, p. 41] have interpreted this relation as a one-one correspondence (isomorphism). I think they are mistaken for a number of reasons, the main one being that the whole idea is unintelligible because of the unspecifiability of the subsidiaries (cf. also Meek, 1985, pp. 109ff.). Moreover, contrary to Polanyi's professed fallibilism and his emphatic admission that tacit knowing can always be wrong, the assumption of an isomorphism would imply that instances of this kind of intuition are infallible. For reasons of space I will not work this out, but I think that at most a weaker correspondence-as-correlation (homomorphy) can be defended.

It has to be admitted, however, that Polanyi's ideas do not amount to a complete "theory" of truth. Partly, no doubt, because one of his main concerns is to defend the thesis we have good reasons to believe that science (conceived as a cultural system) gives us on the whole a true picture of nature. Contrary to Emmet, I think that Polanyi neither rejects our intuitive idea of truth as accordance with reality, nor defines truth as that which I personally and sincerely assert, nor makes (objective) truth dependent on what we now happen to (come to) believe.

References

Abbreviations have been used for Polanyi's works:

- KB: *Knowing and Being*, M. Grene (ed.), London 1969
- PK: *Personal Knowledge*, London 1958
- SR: "Science and Reality", *Brit. J. Philos. Sc.* 18 (1967), 177-196
- TD: *The Tacit Dimension*, New York 1967

Other references are to:

- J. B. Bennett (1978), "The Tacit in Experience: Polanyi and Whitehead", *Thomist* 42: 28-49
- M. Black (1948), "The Semantic Definition of Truth", *Analysis* 8: 49-63
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From *Convivium*

A Reply to Dorothy Emmet on Michael Polanyi's Idea of Truth

In a recent issue of CONVIVIUM two substantial attacks have been made on important elements of Polanyi's thought. One came from Professor Emmet in an article in CONVIVIUM of October 1986. The other was made by S. Palmquist in the CONVIVIUM of March 1987. Both deserve a reply and, although I hope this will come from others better qualified than I, I feel roused to make a contribution to the first attack, since I do not know enough about Kant to involve myself in the other one.

Professor Emmet knew Polanyi well; she was Professor of Philosophy in Manchester while he was a professor there, and she often discussed his work with him. I have therefore always been puzzled about her unwillingness to talk about him; and when she finally did explain to me the general line of her disagreement with him, I persuaded her to write the piece which appeared in CONVIVIUM. I thought it important that these objections should be known and faced, because if true they would seriously undermine Polanyi's whole philosophy.

In this article her criticism is directed chiefly at Polanyi's chapters on "The Logic of Affirmation" and "Commitment" in *Personal Knowledge*. In particular she looks at the section called "Varieties of Commitment" and quotes sentences from pp. 305, 315 and 320, which are all part of Polanyi's argument for acknowledging the place of personal commitment in the search for truth. They make sense when taken as part of that argument. Professor Emmet, taking them in isolation, asks what happens to *truth* if I change my commitment, having come to see that it was mistaken? Was the statement p

to which I committed myself, true at the moment of commitment, and did it become false when I no longer believed it?

It seems to me there is quite a simple error in this criticism. Polanyi is right in stating that to say "I believe p" is equivalent to saying "p is true"; only the first way of saying it puts more emphasis on the personal pole of the commitment, the second puts it on the external pole. But as it is clearly impossible to believe something and yet not to believe it is true, how can one deny that the two assertions are equivalent? The error comes in assuming that because I believe it, and assert it, it *is* true. It is this error that Professor Emmet attributes to Polanyi, but it is not his error; he never says that. He always insists that our commitments may be entirely mistaken. But when we come to see that we were mistaken we do not say "p has now ceased to be true", but "I now realize that p was not true".

The notion of commitment has its difficulties, but it is perfectly clear from the whole of Polanyi's writing that he was sure that truth relates us to a reality existing independent of us. Even in the preface to *Personal Knowledge*, where he is concerned to spell out his main aims as concisely as possible, he says of the personal participation of the knower in all acts of understanding - "But this does not make our understanding subjective. Comprehension is neither an arbitrary act nor a passive experience, but a responsible act claiming universal validity. Such knowledge is indeed objective in the sense of establishing contact with a hidden reality; a contact that is defined as the condition for anticipating an indeterminate range of yet unknown (and perhaps yet inconceivable) true implications".

I think that in some way Professor Emmet has not taken the idea of tacit knowing seriously. She says that she has great admiration for Polanyi's view of tacit knowledge; she agrees with his attack on the notion that "thinking and indeed its testing, can be reduced to something purely objective, formal or specifiable". She accepts that "there is always the personal involvement of the thinker, judging, probing, following clues in the penumbra of unspecified tacit awareness which surrounds anything we are concentrating on".

This brief statement of the case for Polanyi as she sees it makes one uneasy. Clues, in the theory of tacit knowing, are things to dwell on, to attend from, rather than to follow as in a treasure hunt. And the idea of tacit knowing as worked out especially in the essays collected in *Knowing and Being*, is much more precise and incisive than a penumbra. For instance, in discovery the particulars may be clear and distinct, the focal centre may be empty, until by an act of intuition we let the particulars lose their separate clarity and fuse into a meaning on which we focus. The particulars will then have a different appearance from what they had separately. Professor Emmet does not seem to pay attention to the ideas of attending from separate particulars to their joint meaning, nor to the idea of logical levels; very important parts of the theory of tacit knowing.

Polanyi realized as clearly as anyone that the admission of the skilled act of knowing faces us with the question how such knowing can be relied on as

objective. In *Personal Knowledge* he writes of an ultimate aim of his enquiry which he sets out as follows:

If, as would seem, the meaning of all our utterances is determined to an important extent by a skilful act of our own - the act of knowing - then the acceptance of any of our own utterances as true involves our approval of our own skill. To affirm anything implies, then, to this extent an appraisal of our own art of knowing, and the establishment of truth becomes decisively dependent on a set of personal criteria of our own which cannot be formally defined. 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. The hope of achieving an acceptable balance of mind in this respect will guide the subsequent enquiry. (p. 70)

So it was with a clear sense of the difficulties involved that Polanyi rejected the correspondence theory of truth, which Professor Emmet defends. I find Polanyi's arguments against the correspondence theory of truth (e.g. PK pp. 304, 305) quite satisfying. As he says, we cannot compare someone else's knowledge of the truth with the truth itself, but only with our own knowledge of it. Polanyi's view - "truth lies in the achievement of a *contact* with reality, a contact destined to reveal itself further by an indefinite range of unforeseen consequences" - does not incur this objection, for we know when we achieve this contact because of our sense of this richness of unforeseeable consequences which we expect to flow from our discovery of an aspect of reality. He defines reality as "that which attracts our attention by clues which harass and beguile our minds . . . and that, since it owes its attractive power to its independent existence, can always manifest itself in still unexpected ways . . . if we have grasped a true and deep-seated aspect of reality, then its future manifestations will be unexpected confirmation of our present knowledge of it".

To this kind of reality, the reality which was being gradually understood by the leading scientists Polanyi knew, a correspondence theory is quite inadequate. There is no way of, as it were, picking up a statement and laying it 'beside "reality" or "the facts" to see if it corresponds; there are no *Facts* which can then be labelled "TRUE" and pigeon-holed. There are, instead, the infinite enticing depths of reality to explore.

I am not aware of any passage in which Polanyi defines truth as "that which I personally and sincerely assert". "Commitment does not constitute truth", as Professor Emmet rightly says; and Polanyi, I am certain, never said it did. Professor Emmet wrote to me that she was sad about *Personal Knowledge* because of the sort of wrongheadedness of which she accuses Polanyi. I am sad that Professor Emmet should so misunderstand Polanyi, when I would have expected her to understand him well.

She accuses me of not knowing enough about other contemporary philosophers' work, and this is perfectly true. I found her setting of Polanyi's work in a wider philosophical scene very interesting and I must read some more philosophy.

Dru Scott

From Convivium

BOOK REVIEWS

Robin A. Hodgkin, Playing and Exploring. Education through the discovery of order (London and New York: Methuen, 1985), xii + 226, Bibliography and index.

It goes without saying that Robin Hodgkin's work on education has been influenced by the insights of Michael Polanyi. This book is, however, an expressly practical application of those insights. It is designed to be read by young teachers and students at teacher-training college and to provide them with a working model by which to understand the process of learning. It also gives a detailed prospect of what the curriculum should look like by the year 2000.

Hodgkin starts with the question: Why, when the first years of life are so full of adventure and discovery, are the middle-teens distinguished by uninspiring teaching and unmotivated learning? Part of the answer, he argues, is the system of competitive examinations. The student should not be seen as a blank slate to be inscribed or a jug to be filled but as a Robinson Crusoe washed ashore, shaping and being shaped by his environment.

If we can free ourselves from the tendency to think of children instrumentally, as controllable extensions of ourselves or as passive victims of the system, and think instead that they are, in essence, autonomous, self-motivating explorers, makers and co-operators, then we begin to free them and us for education. (p 63)

It is here that Hodgkin introduces Polanyi's ideas of the tacit, of apprenticeship and of competence: in addition to explicit instruction, the infant or pupil will pick up from its mother or teacher or environment, during play, tacit knowledge. Armed thus with a store of implicit 'tradition', the learner can then progress to new challenges, to 'frontier' experiences. (The concept of the individual's and society's 'frontier' is Hodgkin's own contribution - compare his Reconnaissance on an Educational Frontier (1970) - and bears some resemblance to Jasper's Grenzsituationen to which he refers the reader, but in his opinion it is a faithful extension of Polanyi's thought.) Another highly-charged Polanyian term he employs is 'competence'. This describes the use made of tacit knowledge in order to make sense of the challenge and to push back the frontier.

A teacher and a learner are, together, trying to discover and create order out of various contrived and unexpected elements which might otherwise be disordered. (p. 85)

Following and slightly modifying the educationalist Bruner, Hodgkin believes that such discovery and creation of order take place on five levels, the interpersonal, the enactive, the iconic (or pictorial), the musical and the 'language-like' (notational and linguistic). He proposes an educational system which will encourage a basic competence in all five modes and the experience of 'success' for all children up to the age of 13 in at least one of them. This can only be achieved by reversing the present educational prejudice which favours those operations controlled by the brain's left hemisphere - language and precision skills - above the right - pictorial, tactile, musical and social skills. For young people aged between 13 and 18 he replaces school with a varied menu: six months' orientation for the modern world in a residential college, two years in some service capacity such as the armed forces, health or welfare, and some years in a specially created 'junior job'. Training would be on a day release/evening class basis and of a technical nature. University entry would thus be delayed until one's 'twenties, dependent on having earned enough educational coupons and on the student's paying a quarter of the fees to impress on him the value of what he will acquire.

Hodgkin is an educational moderate. He steers a middle course between progressive and teacher-centred approaches, between the claims of nature and those of nurture, between brain and hand (and, for that matter, between left and right brain!), and between an order immanent in the universe and an order brought to the universe by the rationality of man. This does not, however, mean that he lacks passion. On several occasions he blasts the examination system for having destroyed the lives of so many. Of television he pleads,

We need to cut through the common cant which defers TV as essentially an ally, as a 'most promising educational aid', etc., and to recognize it for what it generally is - a kind of technological valium with addictive tendencies. (p 174)

Although his concrete proposals for 'Education 2000' differ in subject matter from the preceding chapters of psychology, physiology and anthropology, it would be a mistake to dismiss them as the theory's optional extra. The theory, Hodgkin reminds us, largely arose out of the practical suggestions. He himself describes them as 'controversial', and one could argue against them, for example, the resistance of the workforce to the introduction of what is essentially cheap labour, the real possibility of exploitation of the young by employers, parental resistance, the economic impracticality of job creation on such a scale and the scheme's apparent neglect of the problem of unemployment, now a fact of life for the technically developed countries for which the proposals are designed. But some of these dif-

ficulties could not have been foreseen when the basis for this chapter was laid in 1977, and in any case nit-picking misses the point. Here we have an attempt to put the adolescent in the role of the castaway, in a position where his frontiers will be stretched both physically and existentially; to remove from him the necessity of being force-fed testable facts, and to give him instead a sense of purpose in working for others.

While Hodgkin identifies a major problem of current middle-teen education as lack of motivation, he does not acknowledge the possibility that an adolescent's rebellion against authority could simply be a way of finding his feet in an adult world, and would therefore manifest itself against Hodgkin's new junior jobs and colleges as it has against not only the present school system but even such schemes as YOP and YTS. Like an infant, the adolescent is questioning and questing: he is committed because he is seeking something worth his commitment. Hodgkin himself says of infants, 'I do not know a better word than "belief" for that initial, energized attitude of commitment and curiosity in children' (p. 5). This attitude of commitment in fact characterises one's whole life. But few will admit it. Education along Polanyian lines will bring home to all the point that, even when adults, they should not be ashamed of having the 'faith' of infants and adolescents.

This remarkable book is full of commonsense and most teachers will find something in it which rings true to their experience. It is also impressively argued and intentionally provocative. It deserves to achieve its aim of opening up a new way of thinking about education.

D.V.N. Bagchi

MORE MOORMAN HUMOR



...even the most completely formalized logical operations must include an unformalized tacit coefficient. (PK, 257)

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