# Tradition & Discovery

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## PREFACE

The relation of Michael Polanyi to theology and to religion is one of the persistent topics of discussion in our association. The issue will undoubtedly remain alive for some time to come. Polanyi's thought, like any great philosophical outlook, cannot be isolated from the concerns of theology or religion. In this first combined issue of the Polanyi Society in America and CONVIVIUM in the United Kingdom, we focus first on theological interpretations of Polanyi. Without prejudice or any partisan implications, we turn next to a proposal for rethinking the value of our seemingly non-rational mental processes. Finally, we close with a strong argument for getting beyond Polanyian scholasticism and with a note about Polanyi's use of the medical terms "proximal" and "distal." The most of the content for this issue is from the CONVIVIUM editorial leadership and is meant to represent our firm commitment to a truly joint enterprise. Our content, in our opinion, is excellent. We look forward now to the improvements in our format and appearance as our combined forces makes this possible.

Richard Gelwick

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## NEWS AND NOTES

THIS ISSUE OF TRADITION & DISCOVERY IS ONE OF THE MOST IMPORTANT TO BE PUBLISHED IN ITS SHORT HISTORY. WHILE THE APPEARANCE LOOKS THE SAME, THIS ISSUE WILL SERVE THE PEOPLE WHO HAVE SUBSCRIBED TO CONVIVIUM AND TO IAD. THE UNITED KINGDOM EDITORIAL COMMITTEE VERY MUCH WANTED A MORE PROFESSIONAL PRINTING, BUT THE TIME AND RESOURCES NEEDED FOR THAT WERE TOO EXPENSIVE. WITH THE PATIENCE OF THE READERSHIP TOWARDS ME. WE ARE AIMING BY THIS TIME NEXT YEAR TO PUBLISH THROUGH "DESK-TOP" COMPUTER PROCESS, WHICH WILL GIVE US MORE UNIFORM AND READABLE TYPE. WHAT DESK-TOP PUBLISHING DOES IS TO FORMAT THE ENTIRE PUBLICATION ON ONE COMPUTER PROGRAM. PRESENTLY IT IS A CUT - AND -PASTE PROCESS THAT I ASSEMBLE AFTER RECEIVING CAMERA-READY MATERIAL FROM THE CONTRIBUTORS OF PAPERS. THIS METHOD, COMBINED WITH ALL LABOR IN ORGANIZING, ASSEMBLING, PRINTING, AND CIRCULATING DONATED BY ME AND STEPHENS COLLEGE HAS MADE OUR COSTS MAINLY PAPER AND POSTAGE.

TO MAKE THIS TRANSITION TO DESK-TOP PUBLISHING, WE NEED TO ASK OUR PAPER CONTRIBUTORS TO FIND OUT HOW TO SUBMIT THEIR WORK ON COMPUTER DISKS THAT ARE IBM COMPATIBLE OR CAN COMMUNICATE BY DISK IN "ASCII," WHICH IS A STANDARD INTERNATIONAL FORMAT THAT CAN BE RECEIVED AND CONVERTED INTO OUR SYSTEM. FURTHER, TO SAVE THE COST OF MAILING A DISK OR A PAPER WE COULD RECEIVE A PAPER THROUGH "BITNET" WHICH IS A FORM OF ELECTRONIC MAIL BY USE OF COMPUTER. MOST MAJOR RESEARCH UNIVERSITIES ARE CONNECTED INTO THIS SYSTEM AND COMMUNICATE ON AN INTERNATIONAL BASIS THROUGH IT. IF YOU ARE NOT IN BITNET, YOU MAY WANT TO FIND A COLLEAGUE WHO IS.

FOR OUR NEXT ISSUE, SPRING, 1988-89, WE WILL CONTINUE OUR PRESENT PROCESS. WE WILL WELCOME SUBMISSION OF COMPUTER DISK PAPERS IN ORDER TO TRY OUT OUR PLANS, BUT WE ALSO WILL WELCOME THE CONVENTIONAL MANUSCRIPT. OUR BASIC GUIDELINES ARE 1" TOP AND BOTTOM MARGINS, 3/4" SIDE MARGINS; NAME UNDER TITLE OF THE PAPER, AND LENGTH OF 10 PAGES SINGLE SPACED. IF YOU SEND A DISK, ALSO SEND A PRINTED COPY OF YOUR PAPER IN CASE WE CANNOT TRANSLATE IT FROM YOUR DISK ON THE COMPUTER.

YOUR PATIENCE AND ENCOURAGEMENT WILL BE VERY MUCH APPRECIATED AS WE TRY TO MAKE THESE CHANGES.

Richard Gelwick

# POLANYI AS THEOLOGIAN

Robert T. Osborn

## Introduction. "Religion" and Theology

"Religion" is, of course, the big word in the American Academy of Religion, where we pursue "religious" studies--namely, study religion religiously. Here, in the Academy, this word religion allegedly designates what we have in common--that universal essence, what we might call Religion an sich, that is common to the many and varied religions we study, that constitutes them "religion" and that would give to our discipline its legitimacy and integrity. In many typical instances Polanyi also uses the word "religion" in this apparently general, essentialist fashion.[1] However, what is most significant and seldom noticed, is that when Polanyi actually discusses "religion" in any depth it is almost always "Christianity" that he considers.[2] What he really means by the word "religion" is "Christianity." Most readers of Polanyi will recognize this to be the case, but not find it especially interesting or noteworthy.[3] I want to suggest, to the contrary, that this usage is an important clue to religious and theological implications of Polanyi's philosophy. It means that as a philosopher Polanyi appears to know nothing about or be able to speak about religion in general, religion as "something universal arising within the depths of individuals"[4], what Troeltsch called the "religious a priori," and what, because of its universality, Polanyi, as a philosopher, could be expected to talk about. It means instead that he knows "religion" only as Christianity, and insofar as he writes as a philosopher without the direct benefit of the Christian experience, he cannot know or write about "religion." Only as a Christian believer and worshipper is he in a position to talk about God and religion. I cannot imagine he would have been very much at home in an "Academy of Religion."[5] He would be

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[1]See for example Personal Knowledge (New York: Harper and Row, 1958), pp. 133, 142, 152 etc..

[2]See for example his discussion of "Religious Doubt," Ibid., pp. 279-286.

[3]See for example Donald William Musser, Theological Language and the Epistemology of Michael Polanyi (Chicago: U. of Chicago Dissertation, 1981), p. 153.

[4]George A. Lindbeck, The Nature of Doctrine (Philadelphia: The Westminster Press, 1984), p.40

[5]See for instance, Wolfhart Pannenberg, Basic Questions in Theology, tr. George H. Kehm (Philadelphia: Westminster Press, 1983), pp. 65-118. Also, by Pannenberg, Theology and the Philosophy of Science, tr. Francis McDonagh (Philadelphia: The Westminster Press, 1976), pp.301-325, 358-370.

more at home with "theologians," insofar as they are those who talk not about religion in general but about and from within a particular religion, the only "religion" they know about.

This situation further suggests that he is unable to abstract a universal religious principle or feeling from Christianity, as if having begun as a Christian within the particular tradition of Christianity he could then move beyond it in order to be able to speak philosophically about "religion as such," as that "universal arising within the depths of individuals." He could not take what George Lindbeck calls the "experiential-expressive" route, wherein "religion" designates "inner feelings, attitudes, or existential orientations," a "common core of experience" (Lonergan) that finds "diverse expressions or objectifications" in different religions.[6] On the other hand, Polanyi's does follow, it seems to me, the "cultural-linguistic alternative" advocated by Lindbeck, in which religion is understood as "a kind of cultural and/or linguistic framework or medium that shapes the entirety of life and thought."[7] In this view religion is inseparable from the tradition that embodies it. In Polanyi's case that tradition is the Christian, so that religion means Christianity. Insofar as he would then talk about "religion" he would be talking like a Christian theologian. But for this reason, when on the other hand he writes as a philosopher and probes the ontic implications or presuppositions of human knowledge he should not expect to arrive at any kind of theological or religious presupposition, as in the case of many modern thinkers since Schleiermacher who go the "experiential-expressive" route.[8] Instead he arrives finally at the human person. The ultimate category in Polanyi's philosophic epistemology is the knower herself, the human person, not the eternal divine spirit knowing itself and the world through the human knower, as Hegel might have it, or that ultimate upon which humans feel absolutely dependent, as Schleiermacher put it. In sum, Polanyi's use of the word "religion" indicates that there is no direct or explicit religious or theological dimensions to his philosophy. He knows of no "natural" religion or corresponding natural theology. He is philosopher and not a theologian, natural or otherwise.

## Marginality and Religion and Theology

Polanyi's principle of marginality explains why Polanyi's philoso-

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[6]George A. Lindbeck, The Nature of Doctrine (Philadelphia: The Westminster Press, 1984), pp. 16, 31

[7]Lindbeck, p.33

[8]See Wolfhart Pannenberg, Langdon Gilkey, David Tracy, John Cobb etc., as well as the tradition, past and present, of Roman Catholic "fundamental theology."

phy is and must be non-religious and thus non-theological. According to this principle an entity cannot transcend its margins to comprehend the more comprehensive unity by which it itself is comprehended and its margins set. Assuming for the moment that "God" could be conceived as that higher entity that comprehends the human as its creator and redeemer, that God is the "person" by whom and in whose image human persons are created, then it would be beyond the margin of human possibility for persons to know or understand the divine. No universals or transcendentals of the human understanding, including a so-called "religious a priori," if indeed it were to exist, could enable us to comprehend "God." If we are to comprehend God, it can only be as we are first comprehended by God, and are given to understand ourselves as such; it would be a gift of grace, such as Polanyi finds in Jesus Christ. Thus the comprehension of God is an ecstasy, a standing out of and beyond ourselves. Because God transcends human limits as the one who sets them, the Christian Polanyi cannot as a philosopher speak religiously or theologically. Rather, it is only in a context of worship, as a convert, within the context of worship and in an ecstatic transcending of one's own limits that one "knows" God.[9] We can conclude that Polanyi's use of the word "religion" is faithful to his principle of marginality.

Personal knowledge and Indirect Theology

I would like now to accentuate the positive. So far I have argued that because Polanyi is a Christian, when he writes as a philosopher he cannot talk about God. His philosophy is non-religious or secular, and thus also non-theological. Now I want to call attention to the positive other side of the coin and point out that because Polanyi is Christian he can and must talk about the human person, and that to this extent his philosophy is indirectly Christian and theological.[10] Christianity is Polanyi's premise, and more important than its negative consequence is the positive, namely, that just because he attends from the God who is incarnate in the person of Jesus, he can and must attend philosophically above all to human persons and to personal knowledge. Daniel Hardy is on target when he states that "the content of the `premise' which arises in worship is no abstract principle, not even one which is symbolically concrete in the world, but the life of the

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[9]See Personal Knowledge, pp. 283f.

[10]I should note that here as well as throughout the article I am making explicit what is more often implicit in Polanyi; in other words, I am offering an interpretation of Polanyi. I agree with Daniel Hardy when he states that "Polanyi is correct in emphasizing that fundamental religious premisses (e.g. `God exists') arise in worship, but perhaps not fully enough aware of what arises there." ("Christian Affirmation and the Structure of Personal Life," in Torrance, p. 89.) I want to say that "what arises there" is the very foundation of Polanyi's philosophy.

Trinity made present in the life, sufferings, death and resurrection of Jesus. That is what sustains us in fully personal focal awareness and the relationship which follows from it."[11] I am also reminded here of Nicholas Berdyaev, who claimed that all philosophy is anthropology and that all anthropology is finally christology, and for whom all knowledge is therefore "personal."[12] Polanyi is theological, but but often times only indirectly, insofar as he does not talk about God and does talk about persons, insofar as his philosophy is both secular and humanistic.

Because Polanyi is only indirectly a theologian he does not explicate in signifcant depth the move he makes from the person of Jesus Christ to the human person, or from Christology to epistemology (personal knowledge). Rather, presupposing that move, his focus is on the human person and the personal nature of human knowledge, particularly religious and ethical knowledge. If Polanyi is thus the philosopher of personal knowledge, Berdyaev, on the other hand, may well be thought of as the "theologian" of personal knowledge, or perhaps as the theologian-philosopher of personal knowledge, since he was not interested in theology per se, but rather in theology as the foundation of philosophy, which for him meant anthropology and therefore ethics. His focus on the person of Christ and the triune nature of God was primarily in the interest of the human person--namely, personal freedom and personal knowledge. As stated above, for him all philosophy is anthropology, and insofar as he moves toward the anthropos, the human person, he moves to philosophy. Insofar as he moves from and within christology and trinitarian theology, he is a theologian.

As we have seen, for Polanyi the ultimate ontological principle is the human person. Humans are the highest or most fundamental level in the hierarchy of being. Berdyaev says the same, in a variety of ways. One of the most notable is his insistence that freedom (the essence of persons) is "meontic," not grounded in being, and thus prior to and in this sense above being, above all that is.[13] Being is known in terms of persons, not persons in terms of being. Similarly, in the place of Kant's transcendental reason he places what he calls the

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[11] Ibid., pp. 89f.

[12] Nicholas Berdyaev, The Destiny of Man (New York: Harper and Row, 1960), pp. 11f., 31-35.

[13] E.g., Nicolas Berdyaev, The Destiny of Man, p.25. See also The Beginning and the End (New York: Harper and Row, 1952), pp. 91-117.

"transcendental God-man."[14] The fundamental presupposition of knowing, the basic category of understanding, is not reason but persons-- free, creative persons. This transcendental person is the God-man, the person who is not rooted in being but in God, in the God who became a person and in whom persons may become as God, exalted above being itself. To say it again, all philosophy is anthropology and all anthropology is Christology. In light of Berdyaev we can recognize that Polanyi's radical humanism (personalism) and secularism are indirect testimony, for those who have eyes to see, of its Christian, that is christological, presuppositions. This implicit truth is quite explicit in the theological anthropology of Nicholas Berdyaev.

In summary of our discussion to this point, let me call attention to the correlation between Polanyi's christological religion and his personalistic (religionless) philosophy. Because God is revealed in the historical event of Jesus Christ and is therefore not to be discovered as the fundamental dimension of human existence or as the ontological depth of reality, there is nothing in the realm of being that is higher or more ultimate than the human person. Persons are left, as it were, with the last word in God's creation. A non-religious world means a human world. Marx and the existentialists, reflecting a forgotten biblical faith, understood this, together with the corollary, that religion is inimical to persons, to their freedom and responsibility. But more important is the positive aspect of the corollary-- namely that because God has revealed himself to human persons in the person Jesus Christ, persons are identified as the epitome of God's creation, so that, as Polanyi understands, knowledge must be first and finally "personal knowledge." Humankind is the creation of the sixth day, the telos and the meaning of creation, second only to God, whose day is the seventh. "In the image of God created he them...." This means that in the world we cannot focus on God directly, but only indirectly, in so far as we focus on human persons; only they are in the image of God and may speak of God, tacitly and indirectly. The consequence of a Christian theological foundation is, at least in the case of Polanyi, an anthropological, or better, a personalistic philosophy, which only indirectly is theological.[15]

Mis-theologizing of Polanyi

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[14]Nicolas Berdyaev, tr. R. M. French, Truth and Revelation (New York: Collier Books, 1953), pp. 108ff.

[15]Belief in Science and in Christian Life, ed. Thomas F. Torrance (Edinburgh: The Handsel Press, 1980), p. xvi.. That is to say, it seems to me, that the personalism of Polanyi has its historical roots in the incarnation.

The indirect and implicit theology of Polanyi's philosophy (discernible only by theologians who have eyes to see or ears to hear) can lead to false efforts to make it explicit. Richard Gelwick cites Richard Niebuhr, who suggests that the faith evidenced in the scientist's pursuit of discovery is the same faith "we express in our religion ...."[16] However, from a Polanyian perspective, it is difficult to see that it can be the same faith, for it does not have God as its direct object or presupposition. The scientist seeks to discover a higher entity within the realm of nature in terms of which to understand and comprehend puzzling aspects of nature; and in pursuit of this discovery he presupposes above all his personal human existence--his body, his mind and imagination, and the human community of fellow explorers. Scientific faith also presupposes the reality of that higher natural entity as it has manifested itself to the vision of the scientist, which in faith he or she seeks to discover and understand. In a word, scientific faith is bound to the world, to the creation, and cannot speak of the creator. So, says Polanyi, "any scientifically convincing observation of God would turn religious worship into an idolatrous adoration of a mere object, or a natural person."[17] The Christian, and the theologian, on the other hand, have faith in God as that highest entity that comprehends and gives meaning to persons themselves and to their relationship to the world, and whose reality and truth is graciously made known to them as the outcome of their faith. Such faith presupposes, however, not the human person as such, but the human person as first comprehended by the higher comprehensive entity that is God. We must recognize that in the case of scientific faith and knowledge, the scientist is seeking to understand a lower level of reality that does not transcend but rather invokes the human person and his or her knowing. On the other hand, the knowledge of God is the knowledge of that which transcends the human and sets its limits; it is by definition that which is beyond human or personal knowledge as such. Therefore, says Polanyi, "Theological accounts of God must, of course, appear meaningless and often blatantly self-contradictory if taken to claim validity within the universe of observable experience."[18] Faith in God and meaningful talk about God presupposes the gratuitous event of God's revelation and the new person who is claimed by that revelation. In Polanyi's more characteristic language, it presupposes "worship"[19]--not the human person, but the

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[16]H. Richard Niebuhr, Radical Monotheism and Western Culture (New York: Harper and Brothers, 1960), p. 11. Cited by Richard Gelwick, Credere Aude (Ann Arbor: University Microfilms, 1965), p. 268.

[17]Personal Knowledge, p. 284.

[18]Ibid., p. 282.

[19]"The Christian enquiry is worship...[it is] a dwelling place of the passionate search for God." Personal Knowledge, p. 281.

human person who is with God and in God, who has thus been comprehended by the grace and love of God as manifest in Jesus Christ.[20] We can conclude that the formal structure of faith in both cases, scientific and Christian is similar, but substantively they are wholly other, with different objects and with different presuppositions (or subjects).

Polanyi cites few theologians, but one of them is Paul Tillich. In my judgment this allusion to Tillich is unfortunate and misleading. I refer to his observation that Tillich confirms his views when he (Tillich) states that "Knowledge of revelation, although it is mediated primarily through historical events, does not imply factual assertion...."[21] That it does indeed imply such assertions is indicated by Polanyi when just before his reference to Tillich he observes that historical criticism was "bound to shake a faith implemented by such teachings [as could be affected by such criticism--viz., statements of historical fact]."[22] The point is that for Polanyi faith and religion (as discussed earlier) are indeed bound to the historical particulars of the Christian tradition, above all to Jesus Christ, so that God can be spoken of only in the context of Christian worship. Tillich on the other hand sees faith as a universal anthropological category whose object is the ground of being which transcends and indeed is free of all facts, including the Jesus fact. Tillich can ask the God question and give a preliminary answer at least, without the benefit of Christian worship. The clues that impress Tillich and lead him to ask the question of God are provided by the very structure of being itself, whereas for Polanyi it is "Christian religious service" that offers the "framework of clues" that must impress the child or the unbeliever if they are to know God.[23] Polanyi is impressed by a story and a worshipful participation in it; Tillich is ultimately concerned about being and the conditions of human existence as such. Accordingly, the faith with which Tillich pursues understanding of the world is the same as that with which he seeks God. For Polanyi they are different, as we have noted. Tillich seeks God within the margins of the human; Polanyi seeks God as the one who transcends and sets the margins of the human. The consequence is that Tillich`s ontological faith finally loses sight of the personal, whereas Polanyi's Christian faith brings it into focus.

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[20]Thus, says Polanyi, "Only a Christian who stands in the service of his faith can understand Christian theology and only he can enter into the religious meaning of the Bible." Ibid.

[21]Systematic Theology (London, 1953) I, 144, cited by Polanyi in Personal Knowledge, p. 283.

[22]Ibid., p. 282.

[23]Ibid., p. 282.

There is a condition, however, wherein that personal faith with which we pursue discoveries in the world may become the faith with which we pursue the knowledge of God. We must remember that when we ask about the knowledge of God that we have in faith, and about the utility of Polanyi's philosophy for understanding that process of knowing, we are also asking how personal knowledge and its understanding can be extended beyond their limits and margins to take in that higher, most comprehensive entity who sets those limits. Following Polanyi we have come already to realize that such knowledge can only occur as that higher, more comprehensive reality called God, actually comprehends the knower and takes him or her up into the higher reality of God's own life. As St. Paul might suggest, we can know Christ because we have the mind of Christ, because, as he says elsewhere, we are "in Christ." The personal faith with which the discoverer pursues her discovery may become the faith with which she seeks and discovers God, when by the grace of God she finds herself "in Christ" and known of God. In this situation of grace there is a real analogy (what Karl Barth called an analogy of faith or grace) between the faith of the scientific discover and the faith of the Christian and the theologian, so that Polanyi's theory of personal knowledge can also become a theory of the personal knowledge of God.

Most encounters of theologians with Polanyi have recognized this, that Polanyi's philosophy presupposes the Christian vision so that when it is claimed by a theology that presupposes its gracious comprehension in the event of Christian worship it proves uniquely suitable for the explication of Christian faith and the knowledge of God. I for one have turned to Polanyi to address lacunae I find in the methodology of liberation theology, or to bring into focus aspects of Karl Barth's theological method. I have found it very suggestive for an understanding of St. Paul, and of his experience of knowing Christ and being known by Christ.

Theology for Polanyi

However, as a final section of this paper, I do not want to extend this kind of use of Polanyi, though there is certainly room for it; rather, I would like to reverse the direction and ask about a service that theology might render Polanyi.

First, let it be said that Polanyi's philosophy does not need theology; God is not necessary for Polanyi's epistemology. The only necessity, the presupposition of all knowledge, is the person of the knower. We have seen that his thinking implies Christian faith as its premise, but that in itself it is non-religious, at least in any direct or explicit way. This means that, contrary to Paul Tillich's philosophical method which raises the God question and for which God becomes necessary, Polanyi's thought does not point to God, and he would have wanted to agree with Eberhard Jüngel who insists that "God is not necessary" (though Jüngel goes on to say that God is "more than

necessary" an idea to which we will want to return).[24] As a philosopher Polanyi can no more say that God is necessary than can one speaking from within a problematic situation speak of a necessary solution, since were a puzzle so to reveal its only and therefore necessary solution it would, of course, no longer be a puzzle. From within or in terms of a problem boundaries cannot be transcended in the direction of a solution. Apart from some tacit perception of the solution itself, the aspects of the problem offer no clue to it.

I am suggesting that personal knowledge as Polanyi understands it, is in fact radically puzzling, and that the puzzle can only be resolved by "God." But, of course, since the puzzle itself does not disclose its solution, God cannot be said to be necessary from within the puzzling situation. The puzzle I refer to is the human person as such. Persons are, as we have seen, highest in the hierarchy of being; in the language of Berdyaev, they are "meontic," above being itself and as such the transcendental a priori presupposed in every event of knowing. Furthermore, they are moral, ethical beings, who are responsible for what ought to be and to that extent is not. These are two aspects of the fundamental truth and reality of personhood--namely, that persons, as the ground of all that is are themselves groundless. They are not rooted in anything that is, and their destiny lies in that which ought to be an thus is not. They are above and beyond being. Yet, they attempt to comprehend themselves, their freedom and creative responsibility, in terms of being or some aspect of it, in terms of that lower level of reality whose margins they as free and responsible persons both set and transcend. The paradigmatic case of this, to which Polanyi so painfully points, is what he calls ethical inversion.[25] In an effort to comprehend themselves and their own ground, humans become guilty of the inversion; they seek to base the self, its ground and goal, in the self's own world, as in the case of Marx, for example, who sought to comprehend human existence in terms of a scientifically understood dialectic of human history. As the existentialists might say, anxious under the burden of freedom, we surrender our freedom and responsibility for what ought to be for the necessity and determination of what allegedly is, such as the dialectic of history. We turn history, the expression and objectification of our own freedom, into the very foundation and measure of that responsibility and freedom. This is the moral inversion. Marxism is only one form of it. The problem is that free, creative human persons, who in a heuristic vision can transcend the world that is for the world that is yet to be discovered, and who in their moral freedom can transcend themselves for the persons they ought to be, cannot comprehend, understand or ground themselves in anything that is and whose limits they so transcend. The

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[24]Eberhard Jüngel, God as the Mystery of the World, tr. Darrell L. Guder (Grand Rapids: Eerdmans Publishing Company, 1983), p. 33.

[25]See Personal Knowledge, pp. 231-235.

human puzzle is that humans are groundless--they are, but they are without ground or reason; as necessary as they are to the world, they are themselves without necessity, it would seem. In practical terms, the human puzzle is how to overcome the inevitability of moral inversion.

The religious, theological reader will be thinking that this non-necessity of human existence certainly makes God necessary. But, as we have seen, this cannot be said, without violating human limits and thus also the limits of Polanyi's philosophy. However, when the human situation is indeed comprehended by the divine, when it is envisioned within the context of worship, then that puzzling phenomenon of the human becomes a clue to God who could then be said to be necessary, or, as Jüngel says, "more than necessary," since God's relationship to the human in which he becomes necessary as the solution to a problem, is neither a "necessary" implication of the problem nor a necessity of God's own being; it is more than necessary inasmuch as it is altogether a gift of grace.

When comprehended in the gracious act of God, the human, the personal, finds its ground and promise in God and thus the justification of the ethical; and the inversion which falsely finds the basis of the ethical in the world, in the realm that owes its being to the human persons, is recognized for what it really is--the idolatrous objectification of human sin and separation from God.

I have been asking about Polanyi's theology, which is to say, about theological presuppositions of his philosophy. We have seen that it presupposes theology, but is itself not theological, or at best, only indirectly so. This is I suspect not really news to readers of Polanyi, but I hope my interpretation advances a bit our understanding of how it is so. Perhaps the most evident way in which this is recognized by the theologians among the society of Polanyian explorers, is that while they do not seek theology in Polanyi they seek Polanyi for theology. They have found and continue to find him especially useful. Karl Barth once respon-ded to critics who found evidences of Kant in Barth's theology that this should not be surprising since there were already strong evidences of Christianity in Kant, or words to that effect. It should not be surprising at all that theology should similarly find Polanyi even more useful, for as I have suggested, Polanyi's philosophy is in a very strict way a Christian philosophy. Polanyi therefore attracts Christian theologians to his philosophy; he is not likely on the other hand to point non-Christian philosophers to his theology, except indirectly.

# POLANYI AS THEOLOGIAN: RESPONSE TO ROBERT T. OSBORN

Joseph W. Kroger
Polanyi Society Meeting
December 5, 1987 / Boston, MA.

Bob Osborn's paper focuses our attention on Polanyi as "theologian". I'm reminded that exactly 25 years ago, when I was an undergraduate student of theology, one of my professors gave me a book by Michael Polanyi called Personal Knowledge and said with the excitement and enthusiasm of one who has just made an important discovery: "you've got to read this--it's the most important book of the decade, perhaps of the century." I took his advise and have never regretted it. A quarter century later I remain convinced it is one of the most important books of our time, particularly for those of us who are theologians. Moreover, one of the additional rewards this Polanyian turn has meant for me personally has been these Polanyi Society meetings. The papers are always interesting and thought provoking, and this is certainly the case with the thesis just put forward by Bob Osborn.

If I had to sum up in one sentence wherein lies Polanyi's genius, his major contribution to Western religious thought, I would say: it is his discovery and account of the from-to structure of tacit knowing, which (he claims) underlies all knowing (whether naturalistic or humanistic) and renders all our knowledge "personal knowledge". The from-to structure of tacit knowing describes how one always attends from a subsidiary knowledge (or tacit framework of awareness), in order to attend to a focal object (or that which we wish to make explicit). One of Polanyi's arguments is that one can never fully explicate the subsidiary framework of awareness within which they dwell.

When Bob Osborn says that throughout his article he wants to make explicit that which is implicit in Polanyi, I take it to mean he wants to bring to focal awareness an aspect (specifically the theological aspect) of the tacit dimension (or subsidiary awareness) of Polanyi's own thought. And, I agree that, as he points out, this is what "interpretation" is all about. While Osborn seeks to interpret Polanyi, my task is to interpret Bob Osborn's paper. In other words, in order to understand the argument in his paper, I think it is necessary to make more explicit some of the assumptions and presuppositions which remain implicit in Osborn's own thought as he explicates Polanyi. For if one grants Osborn's presuppositions, I think his argument regarding this tacit theological dimension of Polanyi's thought probably holds together pretty well.

The issue, then, is what are Osborn's presuppositions, and why should we grant them? This is a very difficult task to accomplish in the time alotted, so I hope you will forgive the crudeness of my formulation and focus on the substance of it, which I hope will provide a basis for discussion. Basically, Osborn presupposes what I would call a "Barthian" understanding of the meaning of such fundamental concepts as "faith", "religion", "theology", and "God".

Osborn begins by arguing that because Polanyi is a Christian believer, he is only able to talk about religion or God as a Christian believer (not as a philosopher). He claims that it follows, that as a philosopher Polanyi neither knows nor writes anything about "religion in general" or God in general. The only God or religion Polanyi is able to talk about is the Christian God and religion, and he can only talk about them as a Christian. Thus, Osborn says, whenever Polanyi uses the word "religion" he really means "Christianity". This argument is only plausible, it seems to me if one assumes, with Barth, that there is no point of contact between God and human reason and therefore, no such thing as a Christian natural theology. And more importantly, for Osborn's argument, one must further assume that Polanyi himself has personally appropriated this Barthian viewpoint as his own. But what is the evidence for assuming this?

Polanyi's principle of marginality is offered as evidence for Osborn's contention that Polanyi understands his own philosophy to be non-religious and non-theological in this "Barthian" sense (despite Polanyi's own explicit acknowledgement that his understanding of the scope and method of theology is "confirmed" by Paul Tillich's writings). The principle of marginality is an argument against reductionism (against the attempt to provide an exhaustive explanation of a higher reality in terms of principles applicable to a lower reality: i.e. one cannot explain living reality mechanisitically; a personal reality biologically; or ultimate reality humanistically). Osborn says it means a Christian cannot speak philosophically about God. But the principle of marginality, (and just about everything else in Polanyi, it seems to me), argues precisely against the kind of radical dichotomy between Christian faith and philosophical reason which Osborn presupposes and claims to discover in Polanyi's subsidiary consciousness. The principle of marginality involves an account of the hierarchy of being and the "stratified structure of comprehensive entities" (Knowing & Being, p. 217), of lower realities participating in higher realities, not a dichotomizing of realities, nor a dichotomizing of faith and reason as two distinct approaches to reality.

I think I know where Osborn gets this dichotomous view of faith and reason, this radical distinction between theology

and philosophy, and it is not from Polanyi' subsidiary consciousness. Polanyi himself is quite explicit, calling the traditional division between faith and reason "erroneous". ("Faith and Reason" The Journal of Religion, October 1961, p. 244.) According to Polanyi, once we understand the structure of tacit knowing, "the contrast between faith and reason dissolves". (Ibid.) Thus rather than juxtaposing knowing by faith and knowing by reason, Polanyi argues that although "religious" knowledge seems to be different than "natural" knowledge, "once the dynamics of knowing are recognized . . . the difference appears only as one of degree." (Ibid.) Finally, in perhaps one of his clearest and strongest repudiations of the division between faith and reason, Polanyi links his critique of reductionism (positivism and behaviorism) to his conception of the hierarchical structure of being (from the lowest level of material reality to the highest level of divine reality). In his own words: "the kind of knowledge which I am vindicating here casts aside these absurdities" [of dichotomizing faith and reason, and of reductionism]. "In doing so," Polanyi says, it establishes a continuous ascent from our less personal knowing of inanimate matter to our convivial knowing of living beings and beyond this to the knowledge of our responsible fellow men. Such I believe is the the transition from natural science to humanities and also from our knowing the laws of nature to our knowing the person of God." (Ibid. p. 45)

Polanyi's Personal Knowledge ends in a vision of the "rise of man", of the human mind striving for every greater comprehension of reality. It is an open-ended vision of knowing and being, of ascending levels of existence and the human capacity for transcendence. It seems to me that as Osborn presents him, Polanyi has a vision of human knowing and being closed in upon itself, unable to transcend the boundaries in which we are enclosed (that is, unless you are one of those special human beings who have faith in Jesus Christ, or as Osborn says more than once, unless you are one of "those who have the eyes to see and the ears to hear").

To sum up, then, Polanyi's philosophy, according to Osborn, presupposes a theology while not being in itself explictly theological. But as he points out this is generally recognized by the theologians in the Polanyi Society. What is distinctive about Osborn's thesis, in other words, is not the claim that one can find a theology (or implications for a theology) in Polanyi, but the claim that the kind of theology one will find in Polanyi is the kind of theology Osborn suggests. My point has been--made somewhat polemically for the sake of our discussion--that the theology Osborn finds in Polanyi is today perhaps best described as "Barthian theology" (remarkable similar, I suspect to Osborn's own theology), and whether he reads this out of Polanyi or into Polanyi is the central question as far as the validity of his own interpretation is concerned. In my judgment he does the latter.

# THE AFFIRMATION OF OTHER-CENTRED REASON

TERENCE KENNEDY, C.SS.R.

JOHN C. PUDDEFOOT
LOGIC AND AFFIRMATION - PERSPECTIVES IN MATHEMATICS AND THEOLOGY
Scottish Academic Press,
Edinburgh 1987, 212 PP., £ 12.50.

John C. Puddefoot's Logic and Affirmation is both remarkable and challenging. It is remarkable because it brings together and weds as it were the post-critical philosophy of Michael Polanyi with Karl Barth's assertion of the sovereignty of God as the utterly Other. In doing so Puddefoot extends the horizons of Polanyi's thought and throws new light on the meaning and way of doing theology. It is challenging because as he says in the Prologue "no more vital question can be conceived than what we should affirm (p.xv)." The title of the book throws down the gauntlet on the question of how we relate our affirmations about God, man and the Universe to the world of logical, systematic thought. The author's chosen field of study is mathematics which is the most outstanding example of formalized clear thought there is. As part of the series "Theology and Science at the Frontiers of Knowledge" he sets out to demonstrate the similarities and contrasts between mathematics and theology. What can we affirm about being and knowing in these two disciplines ? He says that he is writing for the non-specialist. While he certainly does not perform any complicated mathematical calculations, the content of his writing is always profound and his reasoning succinct and precise. This is a book that demands great attention of the serious reader. But it yields a reward of a new understanding of mathematics and theology in striking contrast with the critical spirit that characterises our age.

Critical Philosophy deriving from Descartes sought truth beyond doubt and fear of error. Truth, in this vision, must have full self-evident foundations, axioms so clear that all other truths can be derived from them by deduction. This has been the ideal of science utilizing the mathematical method

over recent centuries. All else, faith, tradition, theology and the accumulated wisdom of our society was rated as mere opinion or credulity.

"I have attempted," says the author, "to alter the reader's understanding of mathematics from an emphasis upon proof to one upon insight from confirmation of hypotheses, to their invention." (p.200). Theology and the Church's proclamation are transformed in this new perspective from self-directed religious satisfaction in one's salvation to a vision of other-directed mission.

"The function of Christian doctrine ceases to be to supply the formal statements of belief necessary if people are to be saved, and becomes the means whereby we are led to a deeper vision of the Truth.....Christian doctrine based not on our need to convert, but on our mission to proclaim." (p.204).

The overriding consideration throughout this book is his concern that the Church should be genuinely and truly the Church proclaiming Jesus Christ to the world. His contention is that liberalism has undermined the proclamation of the Church, denatured its message, and falsified our conception of Christ and the true essence of the history of salvation. He believes that the root cause of this malaise is the fact that so many Churchmen and theologians have acceded to this critical philosophy, succumbing to the liberal values of our society. This philosophy, he believes, is not only ruinous for genuine Christianity. It also diminishes man, robbing him of his dignity, depriving him of his destiny. "We do not know what it is to be fully human." (p.7).

Once a thinker assents to the Cartesian project of establishing all certain knowledge on self-evident and irrefutable foundations, the only truth left beyond all doubt and fear of error is the thinking self. All other authority is nullified and the way back to faith is blocked forever. The rationalist is like the character in Aesop's fable who grasps an apple in a jam-jar but cannot remove his hand through the neck. He can neither remove his hand nor give up the apple.

He remains condemned in his scepticism forever. Polanyi was insistent that our perfectionism like his grasping the apple leads to an inversion of our intellectual capacities, a self-destructive turning back on ourselves from which we cannot escape. His powers of thought, passion and emotion whereby he could transcend his condition are left homeless and find a warped expression in fanaticism and irrationality. As Puddefoot asserts, "Man lost the courage to be a spiritual being and began to think of himself as a technician." (p.xviii).

Radical doubt renders any intellectual project whatsoever impossible. "One cannot simultaneously question the instruments of theology and do theology." (p.xix).

Puddefoot has set himself the task of re-affirming our relationship to God, man and the Universe by means of 'the suspension of doubt'. This allows rational authorities to re-emerge providing the necessary premises and presuppositions for our affirmations. "By drawing upon the contrasts and similarities between mathematics and theology as indications of the assumptions of our age, I intend to argue for a replacement centre which is authoritative without being authoritarian, biblical without being fundamentalist, sacramental without being sacramentalist ...". (p.xviii). As an antidote to the depersonalisation and renunciation of responsibility for our knowing inherent in the Cartesian suspension of belief, Puddefoot espouses a vision based on what we do believe, a position at once positive and reasonable that restores our confidence in our capacities to know and to be genuinely human. We cannot understand unless we trust our capabilities of knowing - as St. Augustine said so strikingly. This approach is balanced, giving belief and reason each its proper place, redefining what we mean by argument, proof, reason and understanding. Its greatest glory is that it is a liberation from the self-imprisonment of doubt so that man can approach life at other than scientific levels.

Puddefoot has placed himself in a middle-position in the spectrum of epistemological doctrines. He notes that every system is circular i.e. that internally it has a

consistent logic of its own and therefore one who adheres to it cannot easily be convinced to abandon his accepted world-view. A conversion is needed, a change in his vision of the whole. This only comes through a new perception of the meaning of what is real. When reality so impinges upon our minds that our logical schemas are called into question, then the real becomes the criterion of truth and intellectual progress is possible. This is a process in which the knower is personally involved and responsible for his advance in understanding. Puddefoot thus avoids the philosophical extremes of scepticism on one hand and absolutism on the other, as well as the religious extremes of liberalism and of authoritarianism. The search for truth is no simple deductive process of impersonal mechanical reason. It is a task of dedication and commitment to personal knowing.

The project to find a "replacement centre" for our thought has been elaborated by Puddefoot in a five-stage process. Each stage forms a section of his book, being a type of meditation wherein the author highlights an issue, explores its ramifications till he reaches the truth which becomes the centre for his contemplation. His style, while intuitive, inspirational and occasionally homely in its illustrations, is full of intellectual rigour. At times he seems to switch focus abruptly from subject to subject, from theology to science, to mathematics. This, however, well serves his purpose of emphasising a central truth by contrast or similarity. In a sense, his own work is the best advertisement for his message that what we need is a vision of reality that can guide our logical endeavours. Though the style at times may seem impressionistic it does communicate a vision which is the fountain head of understanding.

"Inheriting Doubt" faces squarely the whole problem of scepticism. This is an occupational hazard for the scientist and for a culture that assumes the presuppositions of science. "The deficiency of our culture is that it prevents us becoming persons." (p.4). Neither can we, lacking our humanity, be God's sons and daughters. Scientism is individualistic, seeking to create all knowledge, value, and

worth from scratch. It overlooks the convivial nature of knowledge, our interdependence as persons forming a community in pursuit of understanding. Mathematics seems to fit the ideal of scepticism for it is a-temporal and founded on self-evident axioms. This has become the ideal of a culture of doubt, the basis of a sceptical tradition passed on silently from generation to generation. In religion dogmas are often seen in the same way as a-temporal, self-evident assertions. This is a mistake for axioms in mathematics and dogmas in religion both have a history. Puddefoot maintains they should be conceived of not so much as foundations but "as distillations of a corporate act of enquiry." This leads on to his objections to formalism which replaces living reality with its formal expression. What we need is a supervening vision to guide our reasoning. Otherwise knowledge becomes impersonal and technology more powerful than the wisdom that should control it. Entrapped in the Cartesian dilemma we begin "asking questions self-evidently divorced from real conditions", (p.21) and commence living in two irreconcilable worlds, that of science and that of every day experience. Morality then lacks a rational justification and sinks to "emotivism" wherein every view must be tolerated without regard to whether it is true or false (the democratic fallacy). The end result of this inversion of our knowledge is a "distorted perception of the nature of the world." (p.23). There is no way out of scepticism short of setting it aside completely. It is a black hole that sucks all our knowledge and powers of knowing into its void, leaving nothing behind. The greatest loss has been that of a sense of purpose, of a teleology which allows us to see ourselves as children of God with a divine destiny. Without this affirmative vision man is a purposeless wanderer lacking a real explanation of his state.

"Reconsidering Proof" considers the problem of proving God's existence along mathematical lines. There are so many proofs which have failed because people object to their presuppositions. In their concern to avoid irrational beliefs it has been supposed that everything of importance can be proved according to the principles of mathematical reason. Religion, too, has been eclipsed by science because it could not experimentally verify its claims. There popular impressions of what proof is are mistaken. We believe proof necessarily

generates certain results that are true. Yet, of the myriad conclusions that can be drawn from premises by deduction why settle for this particular one ? Why do we follow this direction and not so many other possible lines of reasoning ? Mathematics is much more like art which helps us participate in a vision than it is with a closed logical system. A proof does not so much convince us a conclusion is true as it "confirms it as part of a valid system." Proof is not just a matter of manipulating formulae : it helps us to explore and understand a system : it expands the range of our conceptions thus extending the extent and depth of our understanding. Truth is not contingent on proof, but proof is the servant of truth. Axioms, like dogmas, serve to make hidden truths evident, to formalize what we have found after a long search, to regulate our reasoning, and to preserve the truths of our presuppositions in our conclusion.

The teaching of mathematics and religion often suffers from the "sin of retrospective refinement" by reducing a history of effort and searching to a few lines of elegantly reasoned logic that the student never succeeds in mastering. What the student needs to know is not so much the result of our reasoning as how to do it, the direction to take and the clues that put him on the right path. What the student needs to know is the heuristics of discovery - how the formal is transparent and can put us in contact with a whole world of tacit understanding. To explore this world Puddefoot involves the principle of dual control which Polanyi took from Einstein showing how language as the formal element and understanding as the non-formal are mutually necessary to establish the value of proof. A post-critical philosophy is opposed both to relativism (there is no truth) and to absolutism (the system is not circular because it has universal, unshakeable foundations from which all certitude derives. - see p.69.f.). The author notes how there is an implicit epistemological atomism in the search for absolutely certain foundations. (see p.173). We see understanding at work when we speak a language without paying explicit attention to the grammar, when we play a musical instrument without effort, and in mathematics, "We have only understood a theorem and its proof when we can dispense with the proof." (p.77). We cannot reduce meaning to language. The purpose of language as of all formal systems is to be open or transparent

to meaning. In this way science cannot restrict the questions we can ask because it is governed and guided by an understanding of the real.

The section on "Reintegrating Reason" is crucial to the argument put forward by Puddefoot : it is the hinge or turning-point in his case.

If God's existence could be demonstrated in a mathematical proof then our rationality would be self-sufficient. But God cannot be determined by own reasoning, "God's being - for - us demands that we abandon that centre which is within ourselves (both as regards reason and being) and find instead that true centre which is in the Other." (p.88). Theology stands in contradiction with self-sufficient reason and demands a new concept of reason.

Knowing is a "dynamic conversation between man and his environment in which we are both affirmed and called into question." (p.88). Knowing is personal because it is a relationship of faithfulness whereby we can assert responsibly our understanding of reality with universal intent. This is other-centred reason which is open to revision by the claims made on it by the other, whether God, man or the Universe. Self-centred reason is dominated by the fear of error, and although it may use the term 'God' it is immunised from His reality because it lacks the trust to make contact with Him. We must always ask whether any particular case of religious faith is based on self or on the other, whether it is a craving for self-fulfillment or a free response to the self-disclosure of God. In the one case the individuality and autonomy of man become the excuse to remain forever the same : in the other humility before God is the motive for conversion to the real living God. The same fundamental problem of self-centred reason is found in all disciplines. Hume showed that methodological doubt destroyed all scientific induction because there is no logic which demonstrates that an experiment can have universal results. If however we overrule our scepticism we choose an interpretation of the results of an experiment which lay bare the possibilities of the reality being investigated. Even in science all reason

cannot be reduced to measurement and cybernetization. "The primacy of the centre outside oneself always retains the power to over-rule the requirements of logic and science by presenting us with some intimation which reveals possibilities more important than mere avoidance of error or danger." (p.101). The self-disclosure of the other is the motive for discovery by setting up a heuristic field that beckons us to the heart of the real. It is by following these lines of force to their origin that we utilize and integrate all our powers of reason, feeling and emotion. It is by immersing ourselves in a community dedicated to science, mathematics or religion, that we develop and become scientists, mathematicians and religious persons. The community furnishes the possibility for testing new hypotheses - much as a child learns by the controlled adventure of play - and acts as a safeguard against subjectivism in the form of arbitrary opinions. Conflicts among scientists, mathematicians and theologians are only settled by conversions in self-understanding and in world view. This is always a possibility as long as we recognize that "The open texture of language means that we can never have comprehensive knowledge of the referents of a sign." (p.114). Language therefore may have many levels reflecting the make-up of reality. Knowledge is a dialogue in which the deepest levels of the person inter-penetrate with the deepest levels of reality. To be reasonable is to overcome our individualism with all its prejudices. Reason penetrates beyond mechanism (mechanical learning) to understanding. Here reason transcends the contradictions and absurdities that perplex us so that we can participate in reality itself and ultimately in the divine Wisdom. The resolution of the conflict of differing world-views and incompatible systems of thought is ultimately a theological question.

"Realizing Truth" is a study of what we can affirm as real and true. How do we know what truth is, and how to enquire after it, and what is a valid answer to our questioning ?

In mathematics we encounter internal truth i.e. consistency, coherence and the use of theorems. But Gödel has demonstrated we cannot prove the consistency of rich formal systems. Then how do we decide between coherent but different

sets of axioms ? For many usefulness has replaced truth as a criterion of value. Now mathematical models have to be adjusted to achieve approximation to real conditions. This venture has been highly successful, especially in the modern triumphs of technology. But here a more serious problem arises : how is man to understand himself and his place in the universe ? Quantitatively, according to a scientific description of the chance irruption of man on this planet, or qualitatively, as the fulfillment of divine purpose in creation which is to nurture sons and daughters of God ? In this later vision truth is ultimate and binding : it is impossible to begin at the bottom and work up to this vision. Mathematicians too understand their systems not reductively (i.e. by reduction to its simplest elements or parts) but as a whole which has an "intrinsic worth" they seek to explore. (see p.127-9). In language truth cannot be reduced to the truth of sentences or words - but to its faithfulness to the speaker's mental conception. We must consider how a sentence signifies according to its purpose (as Anselm said). Again there is a phenomenon of dual control or interdependence of the expressive medium and the conceptual world of the knower. By following an ascending order Puddefoot arrives at a five fold classification of truth:-

1. syntactic - when a sentence conforms to the rules of language,
2. semantic - when a sentence signifies the meaning intended,
3. referential - when the meaning of a sentence corresponds with the meaning referred to by that sentence,
4. moral - when the meaning referred to by the sentence is as it ought to be by its participation in the Supreme Truth,
5. the truth of being - when the sentence is as it ought to be in its own right and intrinsic worth.

This classification can be applied to artistic performances and moral actions, each in its own way showing how we are shaped by the truth when we immerse ourselves in it and live by it.

What is true ? What are we faithful to when we affirm

a sentence that is true in the above five ways ? Firstly to God(uncreated reality), then to what we can discover (created things which are found or discovered by us) and lastly to what we can make or invent (creations of created things), There is an inclusive relationship between all three which we affirm when we recognise the truth. It should be obvious that falsehood is only possible within a hierarchy of value. If there are no higher levels of reality there is no criterion for true and false - only the fact of being different as asserted by reductionism.

It is only a stimulus from the real world that can dislodge the hold of any system on our minds. This stimulus from the outside world challenges us, addresses us, calling forth a response from us personally. It is by our spontaneously perceiving the truth beyond ourselves and our categories that we break out of our complacency, and break the closed circuit of self-centred reason. In religion, sceptical theology "questions the texts (of Scripture) without being questioned by them." It is scandalized by the accounts of the Virgin Birth and the Resurrection, never adknowledging that these can be historical events even while we lack scientific evidence for their existence. Christian tradition and proclamation have handed them on to us as truths : proof, in the end is the servant and not the master of truth.

The last section of "Living Understanding" is the most comprehensive in the whole book. It faces the question of a vision of life, or a system of values by which we can and should live. How are we able to recognise the truth ? Truth can only be discerned within a system of understanding. Which system of understanding is true ? Why choose Christianity above all the other religions we could possibly choose ? We don't make our choice on utilitarian grounds because it is impossible to foresee and check out all possibilities in the future. We do not make our choice on the basis of what might have been but on the basis of what is. We face the reality of tragedy and failure squarely, recognising that we do not live in an a - temporal ideal mathematical world where life is an experiment that can be endlessly repeated till we get it right. We live in a world of history where time is

irreversible and our being is shaped into the future by our decisions in the present. We begin by attuning our mind to reality and choose the possibilities that we perceive will lead us deeper into the meaning of the universe. "When we assess an idea, in addition to its internal coherence and external correspondence, we ask questions about its potency, plausibility and potential." (p.167). It is by discovering an idea pregnant with meaning that we orient ourselves towards what we believe to be true and commit ourselves to a vision we wish to realise in our lives. And it is only by discovering the appropriate formal system that we can specify the problems that vex us and obtain a better perspective on what is involved. Our confident choice of Christianity above astrology or any other form of religion is based not on a comparison of evidence because that is impossible the systems being incommensurable and irreconcilable. Our commitment arises from a "sense of the fruitfulness and potency of that system of ideas as a means of understanding the world and my place within it which all arise: from a supervening vision of the Truth." (p.173). This vision is communicated by the Church through its proclamation down the centuries. Puddefoot complains that the confusion about basic Christian dogmas e.g. Church's formal system of belief so that it no longer gives clear expression to its vision of the saving action of God in Jesus Christ. The Church, he says, like any community of searchers for truth, must put limits to what it believes are tolerable expressions of dissent. Where everything is tolerated nothing is believable any longer.

When we understand or commit ourselves to belief, what before was scattered fragments suddenly 'click' together and we see the whole picture. All the old difficulties disappear and we forget how they once worried us. When this occurs and we understand a mathematical theorem or grasp what is intended in a Christian dogma, justifications become unnecessary. This is something which belongs to the non-formal world which cannot be put into words. It is just this understanding that intimates the fruitfulness of a self-authenticating vision. By faith we participate in divine rationality by relating to the Word in person. He is "the realisation of the Truth in the midst of the world." (p.183). By commitment to Him, we indwell His

thought, and attitude and life, thus putting on "the mind of Christ". The Eucharist is real participation in the life of Christ : "to eat Christ's flesh and drink His blood is to feed ourselves with the Way, the Truth and the Life." (p.184). In Him we have the answer to what is worth pursuing, for in Him, the formal and the non-formal, logic and understanding, body and mind act in perfect unison communicating to and for us the fullness of life. Christ is the model of other-centred reason for He broke out of the imprisonment of self-centred reason which measured all worth by the criterion of the self when He laid down His life for the life of the world. It is by imitating Him that we can attain to a right orientation toward God, man and the Universe.

At some times John C. Puddefoot's Logic and Affirmation seems to pass before our mind as a radical work in philosophy extending Polanyi's insights further into the fields of mathematics and theology. Students of Polanyi will be fascinated and enlightened by his personal insights into how perfectionism leads to inversion in knowledge, of how the logical world of formal systems relates to the non-formal world of understanding of how the value systems we internalise and indwell, fashion by a process of 'feedforward' the shape of our lives and the future. (see p.102f). All of these are admirable philosophical achievements. Yet as we read his text we somehow find the urbanity and intellectual tolerance of Polanyi strangely missing. Our author is much more succinct, definite black and white in his opinions. He does not seem to be testing hypotheses and searching for meaning in the same way as Polanyi. He knows very well where he is going and how to get there.

I believe there is solid and good reason for his attitude. It is not that he does not have to struggle with the same questions as Polanyi, nor any less vigorously. His advantage is in the conviction of his faith, in the theological vision that has become the standard and guide for his philosophical understanding. In the last analysis this is a work of theology that re-examines the philosophical roots of our thought in order both to restore the possibilities of our becoming fully human and our being able to believe again. However that seems to be an inversion of things for belief

in Puddefoot's thought in no sense depends on reason but on God. Such dependence could only be another case of self-centred reason. It is to Karl Barth that he attributes, "this Copernican revolution in theology" for it was Barth "who reaffirmed the centrality of the 'wholly other' rather than the self." Puddefoot's understanding of Polanyi's post-critical philosophy has been determined by this Barthian question which is really at the heart of his whole vision. "Where is the centre of all things, the Truth which embraces all things and makes them whole, is it in the self or in the other ?" (p.204).

We must be thankful that John C. Puddefoot has been able to muster his vast knowledge of mathematics and of Polanyi's thought under the magnificent vision of the Lordship of Christ Jesus.

## The Human Potential in Inherent Physical and Mental Non-rationality as a Counter Product of Extreme Rationality.

Marion Ruth Dillon M.A. (Hons)

For those who despise their own non-rational thought processes, even when a logical error proves fruitful in the course of discovery, there is little sense in breaking out of their "mythos", - a "mythos" outside of which everything lacks logic and meaning.

However, for those who are willing to recognise the value of non-rational thinking, particularly prior to conducting regularised and methodical experiments, there is a new horizon of potential in human thinking to explore.

The first pre-requisite to the exploration of this new horizon of the mind is, to be willing to explore different approaches to a problem and also to be willing to reflect on mental operations in the process.

In terms of "observation of one's own mental processes", it may seem that no objective observation in this context is possible, i.e. the subjective psychological posture cannot be separated from the act of observing. But as there is no objective knowledge of the workings of the mind simultaneous to "thinking out" ideas, there can be no other access to active thought processes. Behaviourism in being an objective account of thought, can only be so retrospectively i.e. after both 'thought' and 'behaviour' have occurred for observation. Direct and privileged access to the mind therefore can only be realised by the subject while "experiencing thought".

To illustrate this subject-observer-subject position, it must be acknowledged that the will to recognise an experienced thought must be superimposed on the thinking to achieve observation. The dual aspect of thinking and observing is, at the peak of the most intense thought, probably impossible. Therefore I would suggest that even in the subject-observer-subject position there is still a retrospective element, particularly if pure thought is to occur without observational intervention.

As Michael Polanyi in his article Genius in Science has asserted concerning the operations of mind in relation to scientific discovery:

> Once it is recognised that all scientific discoveries ultimately rest on the scientist's personal judgement, the path seems open for unifying the whole sequence of personal decisions, beginning with sighting a problem and then pursuing the problem throughout an enquiry all the way to the discovery of a new fact of nature. 1/
>
> .....our imagination, thrusting towards a desired result induces in us an integration of parts over which we have no direct control. We do not perform this integration: WE CAUSE IT TO HAPPEN. The effort of our imagination evokes its own implementation.

1/ Article Genius in Science by Michael Polanyi, pub. Boston Studies in Philosophy of Science XIV

And he further states concerning this non-rationalistic, non-prescribed route to discovery which seems reflective of the non-rational aspects of post-classical micro-physical phenomenon:-

> A potential discovery may be thought to attract the mind which will reveal it - inflaming the scientist with creative desire and imparting to him intimations that guide him from clue to clue and from surmise to surmise. 2/

In these above examples from Polanyi's observation of his own mind there are elements of pseudo-magnetism wherein a "potential discovery" ATTRACTS the mind and, almost like an electric charge, "inflames" the mind of the scientist with "creative desire". The parallel of physical substructures in the brain being triggered off like charged particles and the fact that electric stimulii can cause "sensations" of music etc. in the brain, must be of obvious importance here.

In opening the horizons of subject-observer-subject potential regarding the operations of the mind during exploration of ideas towards discovery, we may be opening other horizons towards understanding human nature in so far as human nature is a product of human thought.

Some thinkers who have reflected on how the process of thought towards the discovery of a new idea occurs, have tried to determine characteristics of such thought.

No matter Edward de Bono's academic standing, he has usefully attempted to characterise the stages which may occur irrespective of the ordering, in active non-rational thinking, viz:

1. Recognition of dominant polarizing ideas.
2. The search for different ways of looking at things.
3. A relaxation of the rigid control of vertical thinking.
4. The use of chance. 3/

Further to a 'recognition of stages', de Bono asserts that, 'from the whole situation parts were deliberately extracted and then fitted together by means of fixed relationships to 're-create the whole'. 4/

2/ Science, Faith and Society, Michael Polányi.

3/ Edward de Bono, The Use of Lateral Thinking, pub. Pelican p.68

4/ ibid p.69

One example of looking consciously for a non-logical approach to a problem is to look outside the logical framework within which it is presented. This simple "stepping out of predetermined norms of thought" can radically alter the results. One example is found in Edward Jenner's attention on the problem of finding a cure for smallpox being switched from the patients who had smallpox to dairy-maids who never contracted it. This lead to the result that he discovered, as de Bono cites, 'harmless cowpox gave protection against deadly smallpox vaccination and the end of smallpox as a scourge in the Western World' was thereupon realised.

The need for a pre-given framework of thought to move away from, may however be a necessary element of thought in the process of discovery, even while such a framework does not participate in the actual discovery. This may be exemplified by the surprised reaction by logical thinkers to the manner of the discovery of the DNA molecule. James Watson, was at Cambridge unofficially with time on his hands, while Francis Crick was meant to be working for his higher degree. The initial reaction by Crick's professor to his exploration of the possible structure of DNA, was 'Tell Crick to get on with his studies and stop rocking the boat'. But by using time set aside for logical studies, the discovery of the structure of DNA was achieved without traditional scientific intellectual support, in a pre-fabricated hut.

Following the discovery of DNA, Professor Bernal, who first applied crystallography to organic material, declared:-

> Life is beginning to cease to be a mystery and becoming practically a cryptogram, a puzzle, a code that can be broken, a working model that sooner or later could be made.

When we reflect on de Bono's principles for lateral thought, the parallel to this observation of physical explanation surely carries remarkable reverbations.

To date the discoveries of those who have gone against modes of rational thought have had to be disclosed with a degree of the discoverer's personal integrity. The will to succeed has had to override intellectually accepted and respected norms.

One outstanding example of a discoverer of integrity going against norms, which of themselves may have been useful from a stance from which to move off, was in Kepler. Kepler, the astronomer, when he announced his great law of planetary motion was received with indifference. For seventeen years he had laboured incessantly to demonstrate an important truth, only to have his work rejected and suppressed. But his example of the integrity required to be free to pursue the orderings of his own mind, outside the given intellectual framework was outstanding when he responded:-

> The book is written to be read, either now or by posterity - I care not which. It may well wait a century for a reader, as God has waited six thousand years for an observer.

The will to engage at what society would regard as unrewarding, must reflect a spiritual force in human thought.

In 1964 Yehudi Menuhin disclosed his view of what comprised the human search for something "beyond the known":-

> Today, he said, we have lost a dimension. The first music was in terms of a power greater than and beyond man. We have gone to the other extreme and replaced this "lost dimension" - the 4th. dimension of the spirit, the dimension beyond us; something towards which we are going. Einstein discovered the 4th. dimension - as a dimension in science; time in astronomy. People go from extreme to extreme, but the 4th. dimension is an "element of direction" which must be discovered; something human - a vision tempts us to create. We must not lose what is already known. 5/

5/ A Friendly Talk by Yehudi Menuhin, delivered before an audience of the Young Friends of the Scottish National Orchestra 1964 at St. Mark's Unitarian Church, Castle Terrace, Edinburgh.

# BEYOND POLANYI

John C. Puddefoot

Looking back over the ten years or so during which I have read and contributed to **Convivium**, I am reminded that I have always been uneasy about the attitude we have had towards Michael Polanyi, and I suspect that the self-conscious determination of the prime movers in its publication to avoid to avoid allowing **Convivium** to become the newsletter of a Polanyi Society reflects a similar unease on their parts. I am very much a second-generation disciple: most of them knew Polanyi and his wife Magda personally, whereas I did not; most of them could remember the publication of **Personal Knowledge**, and some may have known Polanyi before then, whereas I was about four years old. I regret not having known him, for I have never heard anyone who did know him say anything that could be construed as negative, which makes him a rare human being indeed; nevertheless, there are differences between first- and second-generation disciples which offer some compensations to the latter for their lack of personal memories. To hear those who knew him speak of his ideas is to be granted a small share in what are obviously relationships of the very greatest value, and to be persuaded that for them at least his authority stems as much from what he was as from what he wrote. Yet by being distanced from his as a person and denied such fond memories one is perhaps less tempted to revere him or to regard the sanctity of his memory as deserving protection and preservation. My unease arises from the feeling that we have not always pressed forward sufficiently, from the feeling that there have been hints from time to time of a sense of completeness about Polanyi's work, and since I owe Polanyi an incalculable debt but feel constrained by no personal ties, that unease may perhaps now find voice as both an attempt to diagnose what has happened to **Convivium**, and as an analysis of the peculiar relationships that obtain between a master and his apprentices which can if the apprentices fail to grow out of their mentor's shadow, prevent them from extending his work.

The problem, as I see it, is that we have not been able to put Polanyi in his proper place, that we have failed to make his work sufficiently subsidiary, and his concerns sufficiently focal. In almost the earliest issue of **Convivium** I have (Number 7, Spring 1979), Robert E. Innis's review of **Meaning** is quoted at the head of the opening page: "It is not by repeating Polanyi's words, but by doing what he did, that the very real power of his work will enter critically into the contemporary community of inquirers." Too often our articles have seemed to make wider issues the servants of Polanyi's thought, rather than Polanyi's thought the means of throwing greater light upon them. Now that I have become focally aware of the trait I can certainly see it in my own essays; who knows, perhaps this is merely a confession, and perhaps others have not been guilty of it. But I draw further evidence from a certain amount of protectiveness that seems to have surrounded Polanyi's ideas, as if we have tended to assume that he was entirely right. Too often we have felt the need to spring to Polanyi's defence, rather than to move forward from foundations which he laid, on occasion correcting his misconceptions. Some readers were offended by Stephen Palmquist's article in the Spring 1987 issue, not so much because it challenged some of our cherished

assumptions about Kant and Critical Philosophy, but because it dared to challenge the authority and accuracy of Polanyi himself. This will not do. There is a great need for criticisms such as we find in Palmquist's article to be analysed, and in due time someone competent in both Kant's thought and Polanyi's will no doubt undertake the task; but there is an even greater need for those who hold Polanyi in high esteem to reintegrate his authority with theirs and to allow him occasionally and appropriately to be wrong. Otherwise our failure to achieve that reintegration will point to our failure to appreciate fully Polanyi's insight into the nature of authority, that it arises ultimately from our selves as we resonate with the truth of all things.

My philosophical awakening was largely occasioned by **Personal Knowledge**, and my life since I first read it has taken quite a different course from which I suspect it might have taken otherwise. But I believe that Polanyi is open to severe criticism in several respects. First, I think that he was guilty of a sin once attributed to the great William Temple, of "thinking he had found a solution when he had only found a phrase:" powerful phrases certainly; conceptually suggestive phrases undoubtedly; but phrases for all that which could, if canonised, become as inhibiting to genuine understanding as Aristotle's animism once was to scientific advance. It is, for example, all very well to speak of the inexpressible connections between meaning and word, but teachers need help to express those connections, and merely pointing to their inexpressibility does not in itself help (indeed, as I have said, it may hinder). Second, he came perilously close to allowing the necessity of circularity to become a virtue, in other words to allowing circularity to become a kind of "catch-all" defence against each and every assailant (and in this respect his disciples have been more guilty than their master, and I speak as a sinner). This prevented him from appreciating fully the force of subjectivist and conventionalist challenges, and left those of us concerned to preserve the integrity of his ideas with an enormous exegetical problem. Third, he did not always show sufficient awareness of parallels in other authors, or distinguish his position clearly from theirs; Kierkegaard and Wittgenstein are noticeable by their absences.

This brings me to the Gelwick/Prosch controversy, and here I have to declare my hand. The question of what Polanyi actually believed about God seems to me to be of merely academic interest in all respects other than those associated with his memory. What I find unacceptable, and indeed completely unfaithful to Polanyi's whole life-work, is the apparent way in which some people seem to need to reinforce or support their own beliefs by reference to his. Of course it is true that we believe and affirm many things largely because others also affirm them, and Polanyi's affirmation (or otherwise) of the existence of God plays a part in that nexus of authority. But if it could be shown (I do not, incidentally, believe for one moment that it can) that Prosch's interpretation is right and that in his last years Polanyi shifted his stance on the question of the objectivity of the existence of God, then my conclusion would simply be that in his last years Polanyi was wrong. In other words I would quite happily (in one, I hope obvious, sense) pit my authority against his because it seems to me to be a fundamental requirement of his position that I should do so whenever and wherever I believe the truth to have

been violated. Yet the fact that this very controversy has raged for years reinforces my feeling that too much time has been spent defending a person rather than exploring the issues to which that person directed us so clearly. As regards Palmquist's paper, it may be the case that "Critical Philosophy" as Polanyi conceived it has never existed as a movement of philosophical thought attributable to any one individual philosopher, Kant or otherwise, but it is certainly true that the fruits of the process (which were of far greater concern to Polanyi than his analysis of their philosophical genealogy), namely reductive, sceptical, instrumental and utilitarian modes of thought and action are commonplace in the common mind, university faculties, and the corridors of power. Therefore it does not matter whether Polanyi's diagnosis of sources was correct or his reading of those sources accurate; it matters only that he identified a potentially lethal disease and prescribed an effective cure. The disease was and is, of course, cancer of the spirit, and the cure was and is a return to the kind of personal commitment and responsibility which is only possible if we exist as individuals in community.

So here, in an nutshell, is the core of my uneasiness: we have spent too long kicking over the traces of Polanyi's ideas, and have neglected to take up the challenge which he set us so clearly and unequivocally, namely the salvation of the human race from utilitarian, reductionist, objectivist modes of thought based upon destructive dissection and spiritual deprivation. I understand that task out of a framework of Christian belief and thought, whereas others will interpret it differently, but the fundamental task remains almost untouched. The "i's" and "t's" of the academic niceties of Polanyi's work will remain to be dotted and crossed in the future, for the truth about the past can now as always be left in the last resort safely to take care of itself. That is not the case with truths about the future, which remain to be realised in their contingency, as Polanyi saw with such overwhelming clarity. There is a place for analysis of the tradition, but there is a more urgent need for us to dream the dreams of discovery as we move forward in **Tradition and Discovery** to a new future. The problem is that if we allow the human spirit to be suffocated, if we allow the flickering flame of light and hope to fade, there may be no future in which to dream.

# PROXIMAL AND DISTAL:

# MEDICAL USAGE EMPHASIZES THE POLANYIAN EPISTEMOLOGY

Richard Gelwick

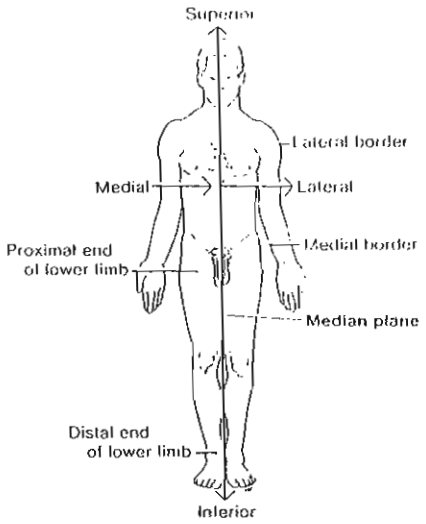


**Figure 7.** Diagram of an anterior view of a man standing in the anatomical position. The term *medial means toward the median plane* and *lateral means away from the median plane* of the body. The terms median and medial are sometimes confused. Median means "*in* the median plane," whereas medial means "*toward* the median plane."

During 1988-89, I am team teaching medical humamnities at the University of New England College of Osteopathic Medicine as well as serving as Research Associate and Adjunct Professor of Religion at Bowdoin College. One of the first courses a medical student takes is "Gross Anatomy," and one of the earliest tasks is to learn how to orient oneself and how to refer to the human body so that scientific discussion and operation can occur. During the first lecture, students learn the way the terms "proximal" and "distal" are used in medicine, and this usage helps to see more clearly Polanyi's conception of tacit knowing.

In the above illustration from Keith L. Moore's Clinically Oriented Anatomy (Williams & Wilkins, pg. 9), the terms proximal and distal are "commonly used directional terms." They provide a way of indicating the location of parts of the body regardless of the body's position. In this context, there are at least three things that stand out with relevance to Polanyi's discussion of tacit knowing: 1) by being directional, they carry a sense of action or what Polanyi called "attending to," 2) their anatomical and medical association reminds us of the bodily outlook deeply inherent in all of Polanyi's thought, and 3) "proximal" and "distal" are fully connected to each other. These three points lead us to considering W. H. Poteat's contention in Polanyian Meditations: Towards A Post-Critical Logic that

there is a way of being in Polanyi's thought that both deliberately and unconsciously expressed an incarnate understanding of knowing. We will have to examine further Polanyi's medical training not just as a stage prior to his physical chemistry and philosophical inquiry but as a significant influence on his later creative philosophical work.

The most important point for me in this anatomy lesson is the way "proximal" and "distal" are inseparably joined. These directional terms are not about points that are disconnected. They are about points on the human body, here the lower limb, that are of one piece. There is a continuum between "proximal" and "distal." This continuity graphically underscores one of Polanyi's most original concepts, the way all of the components of knowing are bodily interrelated. The distal term does not lie across some empty space or detached distance from the proximal term. There is no complete physical disconnection here. The given definitions of proximal and distal speak of them in terms of the "attachment of a limb or a structure," and they orient with reference to this attachment on a direction without interruption. Knowing Polanyi's theory of knowledge, one can see how the proximal terms and clues of the subsidiary awareness are truly a kind of attachment to us, and the distal terms and pattern of our focal awareness is also a kind of location farther from us, yet both terms deal with a structure that is one whole.

MORE MOORMAN HUMOR


A responsible encounter presupposes a common firmament of superior knowledge. (PK, 378)

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