

# POLANYI ON RELIGION

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## I. *The Nature of Religion*

Polanyi's appreciation for religion derives in part from his critique of doubt as an epistemological method. He equates such doubt with positivism and considers both to be ultimately unintelligible. According to the positivistic ideal, doubt and knowledge are antithetical; Polanyi's position is that knowledge can never exclude the possibility of doubt. There are no plain, simple 'facts' knowable apart from beliefs; knowledge is based upon personal judgments (beliefs) accepted by the individual as universally valid (true), not upon infallible heuristic processes.<sup>1</sup>

Within this context, Polanyi regards religious knowledge as the recognition of complex wholes:

God cannot be observed, any more than truth or beauty can be observed. He exists in the sense that He is to be worshipped and obeyed, but not otherwise; not as a fact—any more than truth, beauty or justice exist as facts. All these, like God, are things which can be apprehended only in serving them.<sup>2</sup>

Religious knowledge is in this respect essentially similar to other human knowledge and thus, at least in principle, subject to influence by other knowledge.

Nevertheless, religious knowledge is farther removed from 'factuality' than are other complex wholes.<sup>3</sup> Polanyi's meaning here can be seen as an extension of his distinction between statements about persons and statements about inanimate sense objects. The former require for their recognition a greater degree of personal participation and in this sense are farther removed from 'factuality' than are the latter.<sup>4</sup> Thus recognition of God requires an even greater degree of personal participation than do statements about persons.

Polanyi seems to contradict the above view when he states that religious worship, Christian theology and the Bible can say "nothing that is true or false."<sup>5</sup> But this cannot be since a major conclusion of his epistemology is that complex wholes have greater reality than more tangible entities.<sup>6</sup> Consequently, the greater intangibility of complex wholes does not mean that they are neither true nor false. Religious complex wholes cannot be an exception to the rule without involving Polanyi in self-contradiction. If, on the contrary, he means merely that any determination



of the truth or falsity of religious knowledge necessitates passing beyond the bounds of other forms of knowledge in the same sense that knowledge of persons requires greater personal participation and therefore passes beyond the bounds of knowledge of inanimate sense objects, then there exists no question of contradiction. We interpret him to intend this latter meaning.

Our interpretation is supported by Polanyi's likening of the relation between religion and sense experience to the relation between a "heuristic vision" and "factual experience." Knowledge of "factual experience" is not possible apart from knowledge of a "heuristic vision": the two types of knowledge represent the opposite ends of a continuum and are therefore never entirely separable. Religion can be viewed as comprising those "heuristic visions" farthest removed from factual experience. Hence the relation of religion to factual experience is essentially similar to the relation of any other heuristic vision to factual experience.<sup>7</sup>

As intimated in our discussion of the relation between "heuristic vision" and "factual experience," Polanyi regards all forms of human knowledge as existing on a single continuum. On this point, he disagrees with Paul Tillich, who contrasts science (method of absolute detachment) with philosophy and religion (method of participation). However, Polanyi agrees with Tillich that there are different dimensions of reality which, by their nature, cannot contradict one another.<sup>8</sup> For Polanyi, these different dimensions refer to hierarchically ordered types of knowledge, which are related in the following manner. A lower, less general level of knowledge is necessary but not sufficient to account for the existence of a higher level of knowledge. Since the higher level is never specifiable in terms of the lower, the lower level cannot be sufficient grounds for determining the truth or falsity of the higher level, except when the higher level violates the structure of a lower level. For example, a perpetual motion machine would violate the laws of physics and chemistry. Where such a violation occurs, the structure of the higher level and/or lower level may be faulty. In the absence of this exception, higher and lower levels may be said to be related normally and as follows: (1) a lower level cannot contradict a higher level because the higher level is never specifiable in terms of the lower level; and (2) a higher level cannot contradict a lower level because the higher level incorporates the lower level.

It is in terms of this normal relation of hierarchical orders that we understand Polanyi's belief that the Christian faith, concerned with "the supernatural aspect of anterior experience" (higher level) and scientific knowledge (lower level), "bypass each other." Similarly, Polanyi believes that miracles would no longer be miracles if they could be verified experimentally. He goes so far as to declare that "evidence that a fact has not occurred" (lower level) may leave its religious meaning (higher level) intact. For example, the book of Genesis and the frescoes of Michelangelo represent the origin of the universe better than does an explanation of its origin in terms of a random collection of atoms.<sup>9</sup>

Polanyi must not be understood as implying, however, that religion lies outside the bounds of the knowledge continuum stretching from “factual experience” to “heuristic vision.” The account in the book of Genesis and the frescoes of Michelangelo are metaphors and, as such, are akin to the matter that they embody<sup>10</sup>—i.e., the “nature and origin of the universe.” Thus, although the facts they relate have not actually occurred, their kinship with their subject matter conveys certain truths which, as all truths, are part of the continuum. We understand him to mean that, because religion reflects the actual nature of epistemology—i.e., the grounding of all knowledge upon beliefs—and of the universe, it should not be rejected *in toto* even though claims of ‘factual’ knowledge regarding creation and claims of supernatural authority confirming traditional religious doctrines should be rejected. In other words, religion reflects accurately the universally valid ideals and ordering principles which Polanyi sees as relating the hierarchical orders. Therefore, he appears to hope for a renewal of religion as the means for recognizing and nurturing these ideals and principles.<sup>11</sup>

On occasion, Polanyi unwittingly compromises his position by drawing sharp distinctions between science and traditional religion on the basis of the natural versus the supernatural and the observational versus the mystical; his 1962 article, “Science and Faith,” is one example. Here these sharp distinctions compromise the basic motif of the article, which is that religion is part of the continuum as described above.<sup>12</sup> The validity of such sharp distinctions has been questioned by numerous authors including, as we have argued, Polanyi himself.

## II. *Religious Knowing*

In *Personal Knowledge*, Polanyi notes that articulate frameworks, whether scientific, artistic or religious, are used by the individual through the process of indwelling. These articulate frameworks are grounded upon inarticulate frameworks which are also apprehended through indwelling. Both men and animals need the tension that derives from breaking out of one framework and entering into another—i.e., they crave “mental dissatisfaction.” But men possess this need to a greater degree than animals.<sup>13</sup>

The indwelling which exhibits the most radical urge to break out manifests itself in ecstatic vision, an extreme form of religious mysticism. When functioning as observers and manipulators of experience, “we are guided by” and “pass through” experience without “experiencing it *in itself*.” However, contemplation causes this “screen” between ourselves and experience to disappear and “pours us straight into experience; we cease to handle things and become immersed in them.” The loss of self experienced during intense contemplation derives from the “complete participation of the individual in that which he contemplates.” For these reasons, mystical vision, generally known as the *via negativa*, does not see things focally and

constitutes, in this respect, a “radical anti-intellectualism.” Within this context, it is understandable why proximity to God cannot be observed. Mystical vision is closer to “sensual abandon” (“overwhelms and pervades”) than to observation (sees things focally).<sup>14</sup>

The indwellings characteristic of Christianity are like other indwellings in that they are characterized by a built-in restlessness similar to the heuristic tension evidenced by a person’s sense of his approach to the solution of a problem. However, they are peculiar in their degree of intensity, in the degree of perfection sought and in their unresolvedness.<sup>15</sup> Consequently, the means employed by the Christian for attaining access to the presence of God, although similar to artistic creation and scientific discovery, is closer to the former in its considerable reliance upon pre-conceptual—i.e., non-focal—capacities. Hence its kinship with the mystical *via negativa*.

Polanyi’s characterization of mysticism and Christianity largely in terms of the *via negativa* seems to rely upon the sharp distinction between science and traditional religion on the basis of the observational versus the mystical. He denies explicitly making such a sharp distinction: the difference between “verification” (proof by comparison with sensory experience) and “validation” (proof by rational argument) is one of degree, not of kind; both consist of some belief, though greater personal participation is involved in validation.<sup>16</sup> However, the tendency to characterize mysticism and Christianity as a *via negativa* has the practical effect of sharply distinguishing between the two and thus of denying the continuum constituted by all forms of human knowing.

### III. Myth

Polanyi approaches the subject of myth through inquiry into the celebration of festivities and solemnities. He finds these to be metaphorical actions which lie at an intermediate position on the continuum between art and myth. A metaphor differs from other symbols in possessing a significance of its own which resembles the subject matter it embodies; it is like other symbols in that it stands for an interesting object.<sup>17</sup> Symbolic standing for is structurally the opposite of designation or indication: “to designate the United States is to integrate a name to a country, while to symbolize the United States by a flag is to integrate a country to a flag.”<sup>18</sup> What Polanyi appears to have in mind is something similar to Tillich’s familiar contrast of the arbitrariness of designations (e.g., use of a red light to signify stop) to the organic relatedness of symbols (e.g., use of the American flag to symbolize the United States is an outgrowth of its history). Celebration of solemnities and festivities is symbolic in that actions without interest in themselves are performed for the sake of embodying (i.e., standing for) actions of essential importance to the life of the community. This performance is facilitated if there is a metaphorical re-

semblance between the symbolic actions and the actions embodied in them.

Festivities and works of art are similar in that the artificial circumstances of both isolate the imagination from ordinary everyday affairs and thus set it free. However, the break with ordinary circumstances is more direct in festivities than in art.

Solemnities also both differ from and are similar to art. Solemnities are unoriginal, whereas art is original. A society uses solemnities to celebrate the abiding truth which resides in its communal existence. Tradition is the vehicle; it represents the enduring framework of a given society. Just as art consists of timeless moments, moments which are artificial in that they are withdrawn from ordinary everyday affairs, so also solemnities have a timeless quality. Modern dislike of all that is traditional breaks down this framework, tending to render our lives devoid of meaning.

Metaphorical actions are even more prominent in archaic myths than in festivities and solemnities. These myths represent an expansion of the human mind allowing archaic man to view the world as a unified whole. Following the lead of Mircea Eliade, Polanyi accepts three fundamental theses concerning archaic myths. (1) A sharp distinction must be made between myth and other, everyday, functionings of the archaic mind. (2) The distinctive aspect of myth is that it presumes to be an account of creation. As such, mythical time differs from everyday time and is paradigmatic for all aspects of life. (3) Ritual is a reiteration, not a commemoration, of mythical time which permits persons participating in the ritual to become contemporary with creation.<sup>19</sup>

By its artificial circumstances, myth is detached from other, everyday functionings of the archaic mind in the same fashion as art is isolated from ordinary everyday affairs. The artificial circumstances of myth consist in its concern for the whole world; daily affairs introduce us only to parts of the world. This inclusiveness of myth results from the integration of incompatibles and, as such, is possible only through an act of the imagination. However, religious conceptions employing mythical wholeness must be labeled "mystical" as distinct other acts of the imagination because such conceptions originate in and refer to "boundless perspectives." Here, as in the instances which we discussed previously, Polanyi speaks of mysticism as constituting a "radical antiintellectualism" and hence a "*via negativa*."

However, his characterization of myth is not entirely negative. For Polanyi, as for Eliade, myths are not irresponsible creations of the human psyche; their fundamental thrust is that the world is full of meaning. In such a world, man does not feel confined to a solitary mode of existence unrelated to the larger whole.<sup>20</sup> Mythical and empirical thinking utilize the same integrative powers. Thus they do not differ in kind. Rather, the distinction is that archaic peoples regard few occurrences as accidental, whereas modern peoples, schooled in science, regard many occurrences as accidental. This mythical view of the world is the result of the "*pars pro*

*toto*” doctrine (the part constitutes the whole); it attempts to inject mythical wholeness into daily life. The archaic mind exaggerates the relation of subsidiaries to their focus. Such exaggeration is most intense when the focal object is living, particularly a human being. Yet Polanyi believes that the archaic mind, more than the modern mind, recognizes correctly that subsidiaries are a part of their focus and thus that indwelling is a necessary part of the knowing process. What Polanyi has in mind is his familiar view that modern mechanistic interpretations of the universe and of the knowing process are aberrations.

As in our discussion of Christianity and mysticism, we consider Polanyi’s characterization of myth to be predominantly a *via negativa*. He does attribute a greater appreciation of the nature of the knowing process to the archaic mind than to the modern mind. However, this attribution does little to ameliorate his negative characterization of myth since in this instance greater epistemological insight does not impute substantive truth to mythical world views. Hence we are led again to conclude that Polanyi’s characterization of myth has the practical effect of denying the continuum constituted by all forms of human knowing and thus of compromising his basic view of religion.

Having sketched Polanyi’s view of religion, we shall investigate some additional problematic aspects. Polanyi believes that he has successfully delineated the cognitive content of a metaphor, whereas Max Black has not.<sup>21</sup> Polanyi summarizes his position in the following diagrams and commentary:

Since both the tenor and the vehicle in a metaphor have intrinsic interest—both are significant ideas or expressions in themselves—we can diagram a metaphor thus:



The tenor bears on the vehicle, but, as in the case of a symbol, the vehicle (the focal object) returns back to the tenor (the subsidiary element) and enhances its meaning, so that the tenor, in addition to bearing on, also becomes embodied in the vehicle.

We can now schematize the way our rapture in a metaphor arises by adding a level involving ourselves, thus:



As in the symbol, so in the metaphor: the subsidiary clues—consisting of all those inchoate experiences in our own lives that are related to the two

parts of a metaphor—are integrated into the meaning of a tenor and a vehicle as they are related to each other in a focal object (a metaphor). The result is that a metaphor, like a symbol, carries us away, embodies us in itself, and moves us deeply as we surrender ourselves to it.<sup>22</sup>

These diagrammatic representations, as well as others for denotation and symbolization, summarize what Polanyi regards as the superiority of his characterization of metaphor over that of Black.

The diagrams constitute a valuable contribution toward the understanding of metaphor; however, it is difficult to discern where Polanyi surpasses Black in detailing the cognitive content of metaphor. Black follows I. A. Richards in accounting for the functioning of metaphor by the likeness and unlikeness of its two parts, the tenor and the vehicle. The cognitive content of a metaphor resides in the connection which the reader makes between the two. Black does not generalize further because he regards this cognitive content as dependent upon the particular reader and context. Although Polanyi enhances the discussion by introducing additional technical terms, such as his familiar distinction between subsidiary elements and focal object, his basic characterization of metaphor is similar to that of Black and Richards. Nor is his delineation of the cognitive content of metaphor dissimilar to that of Black, since for Polanyi the relation of subsidiary elements to focal content is dependent ultimately upon the particular reader and context and, therefore, can never be made fully explicit. Polanyi could have surpassed Black in detailing the cognitive content of metaphor only by abandoning his epistemology.

The preceding discussion requires qualification. We have been dealing with Polanyi's treatment of metaphor as if it were part of a complete system. However, during certain of the lectures later incorporated into *Meaning*, Polanyi was quick to admit that his views on metaphor were offered without the benefit of a fully developed aesthetic. In this light, our critique might be regarded as simply stating the obvious. Nevertheless, it does call attention to a less than comprehensive treatment of metaphor.

To illustrate our point further, consider three characteristics of metaphor which are neglected by Polanyi. Although metaphor is discussed in a chapter of *Meaning* entitled, "From Perception to Metaphor," Polanyi never considers it explicitly in terms of real or imaginary sense images as does Bernard Lonergan.<sup>23</sup> Nor does he consider explicitly the manner in which metaphors mediate between sense images and higher-level abstractions as does Ian Barbour in his discussion of the function of models. Both Polanyi and Barbour rely upon a theory-observation continuum and utilize Richards' and Black's views of metaphor as a point of departure. However, Barbour considers metaphor explicitly within the larger context of the role of models; model and metaphor function similarly. The heuristic or cognitive function resides in the connection between either and that upon which it bears (in

Polanyi's terminology, tenor and vehicle). Barbour concludes that models, like metaphors, should be taken seriously but not literally because the connection involves both likeness and unlikeness.<sup>24</sup> Since models may be used as mediators at any level of the theory-observation continuum, we may regard them as illustrative of the mediation of metaphors between sense images and higher-level abstractions.

Paul Ricoeur's comparison of poetry and prose provides an example of the third characteristic of metaphor which Polanyi neglects. The multivalent, and therefore richly ambiguous, character of poetic metaphor has long been appreciated, according to Ricoeur, but recognition of the equal multivalence of prose sentences and, therefore, of the similarity of prose to poetry is a more recent attainment.<sup>25</sup> Polanyi is aware of this multivalence and speaks about "man's well-nigh unlimited capacity to interpret grammatically formed sentences."<sup>26</sup> However, his definitions of indication (e.g., "to integrate a name to a country") and symbolism (e.g., "to integrate a country to a flag") seem intent upon distinguishing poetry from prose rather than upon pointing to their similarities. Yet the two men cannot disagree ultimately; indication and symbolism must be essentially similar if Polanyi's theory-observation continuum is to hold.

Polanyi's unsystematic treatment of metaphor may elucidate certain aspects of his view of religion. He compromises his basic position—that religion is a part of the continuum constituted by all forms of human knowing—by utilizing at times a natural versus supernatural dichotomy to distinguish science from religion, and by characterizing mysticism, Christianity and myths largely in terms of a *via negativa*. It is these compromises which may be illuminated by relating them to his unsystematic treatment of metaphor.

While acknowledging religion to be part of the continuum constituted by all forms of human knowing, Polanyi qualified this position during a seminar as follows. Both science and religion produce mysteries. The mysteries on the scientific end of the continuum carry one's imagination in distinct directions, whereas those on the religious end do not. Polanyi confessed that he did not stress the existence of such a continuum because of the danger that this difference between religion and other forms of knowing would be obscured. Thus, although he did not distinguish sharply between science and religion, he was unable to discern a principle of continuity between the two. The most that he was willing to affirm was the presence of a tacit dimension throughout the continuum.<sup>27</sup>

Had he sought complete systematization, Polanyi would have been better advised to distinguish between religion and other disciplines solely on the basis of the continuum constituted by all forms of human knowing—i.e., on the basis of more comprehensive personal participation. Adopting such a position, Ian Barbour argues that religion, like science, must justify its claims ultimately by appeal to human experience—i.e., it must be empirical in some extended sense of the term.<sup>28</sup>

To argue as Polanyi did in the seminar that religion does not carry one's imagination in any distinct direction is equivalent to saying that the religious imagination does not yield knowledge, or at least none that is distinctly religious. Obviously, such a position, if taken literally, would contradict the knowing continuum so central to his epistemology and must be regarded as indicative of an unsystematic treatment.

This lack of systematization is not readily apparent because in Polanyi's thought the "free society" appropriates many functions associated with traditional religion—most notably, guarantor of the viability of a tolerant, open society committed to the fostering of truth. In other words, the free society is fully capable of sustaining the sort of culture deemed most beneficial without the aid of religion. The individual depends upon his community for nurture and inspiration in his search for truth; for Polanyi, the scientific community is paradigmatic. Because he finds truth and morality to be essentially similar (they exist on a continuum), he also considers the scientific community to be paradigmatic for the nurture of morality.<sup>29</sup>

In *Meaning*, Polanyi refines his view of the free society and departs from his earlier position, sketched above, by distinguishing between truth and morality. Truth constitutes the "greatest standard motivation" in science and must be distinguished from "what is right or fair or just in a distributive sense" (i.e., morality) which constitutes the "highest standard of motivation" of political persuasion. Another refinement is his admission of the Kantian nature of his position: once grasped, some ideal ends—such as truth, justice and beauty—demand our adherence. Thus we regard them as possessing "inherent worth" and functioning in a manner similar to Kant's categorical imperative.<sup>30</sup> Both in *Meaning* and in *Personal Knowledge*, Polanyi's conception of hierarchical levels allows him to grant the validity of *realpolitik* on one level while denying it on a higher level (by definition, a higher level is not specifiable in terms of a lower level). He concludes that the moral (higher) level is grounded upon an essentially nonmoral (lower) level which places limitations on the higher level.

Polanyi's view of the free society, while appealing, is not without its difficulties. The discussion in *Personal Knowledge* of the moral-intellectual continuum defines "moral judgments" as choices requiring total self-involvement and "intellectual valuations" as choices requiring use of only part of one's faculties. According to this definition of moral judgments, men are moral to the extent that they make choices utilizing all of their faculties, thereby controlling their "whole selves" rather than just exercising some of their "faculties."<sup>31</sup> Such control makes possible the rise of what Polanyi calls free societies, for which the scientific community is paradigmatic. An existing and enlightened free society establishes "almost automatically," by means of the checks and balances among its members, the most universally valid standards known to it.

This definition of morality is rather straightforward. But Polanyi's discussion of the moral-intellectual continuum as it affects the individual and his relation to society suggests the following question whose answer could result in qualification of the moral-intellectual continuum. Why should not a man strive to pattern his life after truths which are in conflict with what Polanyi regards as universally valid moral-intellectual standards? For example, in spite of total self-involvement, is it not possible that the individual might choose relatively selfish interests for the sake of greater wealth when choice of less egocentric moral standards would result in less wealth—assuming that the particular society in which the choice is made would not effectively hinder the exercise of such choice?

It could be argued, in answer to the preceding question, that Polanyi's view of morality allows some to choose relatively selfish standards because they are lacking in commitment to universal moral standards. The assumption here is that the commitment required by total self-involvement includes acceptance of what Polanyi regards as universally valid moral standards. Acceptance of this assumption would mean that our question has no real bearing upon Polanyi's conception of morality.

Our reply is that such an assumption is questionable. It requires that total self-involvement tend toward only one general set of universal moral standards, Polanyi's set. We consider this assumption to be unwarranted, because some men have lived and continue to live by other general sets of universal moral standards. For example, the man who, given a choice, chooses selfish interests, is in effect subscribing to the following moral standard which he regards as universally valid: the indulgence of selfish interests is to be desired provided that any gains not be offset by unwanted consequences.

It is not evident to us upon what grounds Polanyi is able to judge that total self-involvement tends toward only one set of universal moral standards and thus that other universal moral standards are mistaken, except by appealing to the nature of truth—i.e., of universally valid standards. However, is not such an appeal misleading in that it seeks to settle a question regarding actual knowledge—i.e., the nature of morality—by appealing to epistemology—i.e., the nature of the knowing process? Indeed, is this not the crucial weakness of Polanyi's view of morality, an unwarranted and unexplained conflation of questions regarding actual knowledge with purely epistemological questions? An egocentric individual such as the one described above could conceivably accept Polanyi's conception of truth while rejecting his conception of morality. Hence for this individual the moral-intellectual continuum upon which Polanyi's view of morality depends would be shattered.

Similar questions can be raised with respect to his discussion of the free society in *Meaning*. Polanyi's comparison of ideal ends to Kant's categorical imperative implies that any alternatives to these ends are lacking in rationality, just as Kant

claims that his categorical imperative is the only rational basis for ethics. This is tantamount to claiming sole legitimacy for the set of values based upon the ideal ends. Within the context of Polanyi's epistemology, which unlike that of Kant stresses the contextual, historical nature of knowledge, such claims must be regarded as mere assertion unless supported by substantive arguments. Since the discussion in *Meaning* does not so much seek to justify as to explicate the nature of the free society, the difficulties noted in regard to the discussion in *Personal Knowledge* have not been resolved.

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#### NOTES

1. Michael Polanyi, *Personal Knowledge* (Chicago: University of Chicago Press, 1958), p. 277.
2. *Ibid.*, p. 279. Polanyi does not use the term "complex whole" within the present context, but it is applicable.
3. *Personal Knowledge*, p. 280.
4. Michael Polanyi, "Tacit Knowing: Its Bearing on Some Problems of Philosophy," *Knowing and Being*, ed. Marjorie Grene (Chicago: University of Chicago Press, 1969), pp. 159-165.
5. *Personal Knowledge*, p. 281.
6. Michael Polanyi, *The Tacit Dimension* (Garden City, New York: Doubleday and Company, Inc., 1966), pp. 29-34.
7. *Personal Knowledge*, p. 283.
8. "Points from a Conversation with Paul Tillich on February 21, 1963." (Mimeographed.)
9. *Personal Knowledge*, pp. 284f.
10. Michael Polanyi and Harry Prosch, *Meaning* (Chicago: University of Chicago Press, 1975), pp. 117ff.
11. This hope is stated most explicitly in *ibid.*, Chapter X, "Acceptance of Religion," pp. 149-160.
12. Michael Polanyi, "Science and Faith," *Question*, V (Winter, 1962), 16-19.
13. *Personal Knowledge*, pp. 195f.
14. *Ibid.*, pp. 198ff.
15. *Ibid.*, pp. 98f.
16. *Ibid.*, pp. 199f.
17. *Meaning*, pp. 117ff.
18. *Ibid.*, p. 74.
19. *Ibid.*, Chapter VIII, "The Structure of Myth," pp. 120-131.
20. *Ibid.*, Chapter IX, "Truth in Myths," pp. 132-148.
21. *Ibid.*, pp. 75f.
22. *Ibid.*, pp. 78f.

23. Bernard Lonergan, *Method in Theology* (New York: Herder and Herder, 1972), pp. 64-67.
24. Ian Barbour, *Myths, Models, and Paradigms* (New York: Harper and Row, 1974), pp. 12ff.
25. Paul Ricoeur, *The Conflict of Interpretations* (Evanston: Northwestern University Press, 1974), p. 72.
26. *Meaning*, p. 77.
27. Taken from personal notes of Polanyi's 1970 lectures and seminars at the University of Chicago.
28. Barbour, Chapter VII, "Paradigms in Religion," pp. 120-146.
29. *Personal Knowledge*, pp. 222ff.
30. *Meaning*, p. 200.
31. *Personal Knowledge*, pp. 214ff.