

Science, Religion and Polanyi's Comprehensive Realism

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In this essay, I argue that Polanyi developed a realism which ranges over the sciences and the humanities as well as over values. I argue that his comprehensive realism had best be understood as relative to veracious inquirers participating in communal traditions of inquiry and that this leads to a theological realism according to which the divine realities are interpreted contextually, i.e., in terms of a particular religious form of life, rather than in terms of the grand metaphysics of classical theism.

1. Introduction

In what follows, I will take up again the issue of the two cultures where it was left in the *Zygon* discussion on Polanyi's realism nearly two decades ago. The question then was whether, and to what extent, Polanyi's post-critical philosophy supports theological realism. Phil Mullins put the problem as follows "How did Polanyi understand the distinction between science and religion with respect to their bearing on reality? What is the ontological status of religious meaning within a Polyanian paradigm?"¹ Some Polanyi interpreters hold that the ontology of hierarchical levels leads to a theological realism according to which the reality of God is not just another way of imaginative and meaningful world-making but an ultimate reality independent of our conceptualizations and knowledge. Others reject this claim and, since both parties appeal to Polanyi's work, re-opening the discussion seems all the more interesting.

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

2. The Definition of "Real"

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

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

(R₁) Real is that which *is expected* to reveal itself indeterminately in the future. Hence an explicit statement can bear on reality only by virtue of the tacit component associated with it. This conception of reality and of tacit knowing of reality underlies all my writings (*SFS* 10, my italics, AFS).²

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

(R₂) If anything *is believed* to be capable of a largely indeterminate range of future manifestations, it *is thus believed* to be real. A statement about nature *is believed* to be true if it *is believed* to disclose an aspect of something real in nature. (*SR* 191, my italics, AFS)

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

From (R₁) and (R₂), a general and quite remarkable definition of “real” can be distilled:

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

Whether a comprehensive entity has this “veridical quality” is intimated at a tacit level. When making contact with some aspect of reality in trying to solve a problem (discovery), an inquirer may become aware of this in virtue of the presence of intimations of future manifestations of that aspect. Meek has aptly called the experience of these intimations “the IFM Effect,” that is, “the feeling that the resulting conclusion will go on being confirmed in as yet inconceivable and *surprising* ways.”³ In particular, experiences of intellectual beauty, harmony and coherence are indicative of contact with reality.

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

An obvious objection to ⑧ is, as we will see shortly, that it appears to conflate what is real and what is meaningful and thus to allow almost anything to be called real. Many things are meaningful but not real and so confusion results. Though the point of this objection is clear and distinct, it does seem to me to gloss over Polanyi's claim that the sciences and the humanities differ only in degree, not in kind, as well as his attempt to dissolve the fact-value dichotomy and his realism of values.

3. From Knowing to Being

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

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

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

some set of specifiable rules.

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

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

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

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

4. Intrinsic Interest and Value

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

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

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

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

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

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

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

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

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

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

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

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

5. Realism and Meaning

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

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

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

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

position. In accordance with his definitions of “real” (R_1 and R_2), we have to introduce intensional (modal) terms, for example by reformulating (3) into: (3') if something is expected to reveal itself ..., this indicates that it is true. If we take this into account, it is immediately clear that (4) does not contradict (3'). Believing something as true while acknowledging that it may turn out to be false is not contradictory but precisely the risky predicament of any veracious inquirer.

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

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

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

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

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

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

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

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

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

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

6. The Real in Religion

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

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

Where does this leave us as regards theological realism? As I see it, there are two main options: either to develop his ontology into a full-blown version of theism or to stay more in touch with his epistemology. The first option is a viable one in the sense that Polanyi’s work simply leaves it open, especially to those who are committed to the metaphysics of (neo-)classical theism.⁸ In our current postmodern predicament, my sympathies are with the second one. Let us just ask whether the definition of “real” is applicable to theology. Recall R_2 , quoted from *SR* 191, and let us substitute, *mutatis mutandis*, “theology” for “science.” The result would be something like this:

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

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

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

Endnotes

¹ P. Mullins, "The Spectrum of Meaning - Polanyian Perspectives on Science and Religion," *Zygon* 17 (1982), 7

² PK already has a more impersonal phrasing of the same idea: "truth lies in the achievement of a contact with reality - a contact destined to reveal itself further by an indefinite range of yet unforeseen consequences" (147)

³ E.L. Meek, *Contact With Reality. An Examination of Realism in the Work of Michael Polanyi*, Ph.D. Temple University, 1983 (Universities Microfilm International, Ann Arbor, MI., 1985, 85-09387), 101 (my italics).

⁴ Cf. A.F. Sanders, *Michael Polanyi's Post-Critical Epistemology*, Amsterdam 1988, 232ff.

⁵ Cf. J.R. Searle, *Mind, Language and Society. Philosophy in the Real World*, New York 1998, 39-65.

⁶ Cf. W. Gulick, "The Meaningful *and* the Real in Polanyian Perspective," *Polanyiana* 8 (1999), 7-26; for a summary and his reply to this critique see his contribution to this *T&D*-issue.

⁷ It comes as no surprise therefore that many theologians have been influenced by Polanyi's ideas (for example, T.F. Torrance, L. Newbigin, C. Gunton). Some have applied them to the problem of the relation between faith and reason, like Basil Mitchell; others have elaborated his thesis about the irreducibility of consciousness and his idea of a hierarchy of the sciences, in particular Arthur Peacocke.

⁸ For a recent attempt in that direction see J.F. Haught and D.M. Yeager, "Polanyi's Finalism," *Zygon* 32 (1997), 543-566. But see also Wentzel van Huyssteen's critical comments in the same issue, p.577-580.

Notes on the Contributors

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

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