Torrance on Polanyi and Polanyi on God: Comments on Weightman's Criticisms--A Review Essay

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ABSTRACT Key Words: Polanyi, Torrance, reality of God, philosophy of science, natural theology, science and religion, Barth

This review discusses Weightman's interpretation of Torrance's appropriation of Polanyi's theory of science; Weightman shows how Torrance develops a contemporary “natural” theology, moving beyond Barthian roots, but he argues Torrance misconstrues Polanyi's understanding of “religion” and God. I support Weightman's account, acknowledging much of his argument regarding the nature of religion, but I question whether his constructivist view of God can support the role it must play in Polanyi's thought.


One of the most respected exponents of Michael Polanyi’s thought, Thomas Torrance is a Reformed theologian who established a strong personal relationship with Polanyi toward the end of his life and who became his literary executor at his death. In this fascinating study, Colin Weightman presents a detailed analysis of the way in which Torrance develops Polanyi’s epistemology and hierarchical view of the world by making it a constitutive feature of his theology. This allows Torrance to formulate a kind of “natural theology” that moves him beyond his Barthian starting point. In this process, however, Weightman contends that Torrance misconstrues Polanyi’s understanding of religion and places a burden on Polanyi’s scientific view of the world which it cannot legitimately bear. Weightman bases this critique on a well-crafted introductory argument that defends an underlying consistency for Polanyi’s understanding of religion expressed in his writings all the way through the publication of Meaning. Except for the linchpin of his argument, which interprets Polanyi’s understanding of God along the lines of Don Cupitt’s (a-)theological position, Weightman defends, in my estimation, successfully and insightfully his basic claims.

In the larger, second part of his book, Weightman explains how the Barthian starting point of Torrance, that theology, as is the case with all sciences, must operate in terms of a faithfulness to its object, remains constant in all his subsequent developments. Unlike Barth, however, Torrance does not limit this understanding of theology to expressing the meaning of God’s revelation of God’s self through Christ in Scripture. For Torrance, there is an urgent need to express this revelation of God in terms of the cultural assumptions of the modern world. To achieve this, while remaining faithful to the revelation of God, Torrance must find some sort of “hook” in the contemporary understanding of reality that is “objectively” capable of allowing a meaningful expression of the divine reality. Here is where Polanyi’s hierarchical understanding of the universe developed in terms of fields of overlapping marginal control functions as a crucial component of Torrance’s theological position. Weightman argues that Torrance extends Polanyi’s scientific vision of reality into a sort of “natural theology” bridging the revelation of God with a contemporary understanding of the world.

While this move beyond Barth provides Torrance with the tools for an impressive theological outlook, it does not come without its costs. In order to maintain the Barthian understanding of the objectivity of theological science,
Torrance must construe Polanyi’s hierarchical field vision of the world to be an inherently accurate portrayal of the deep structures of nature, harkening back to an earlier Christian, non-dual understanding of reality. While I had never noticed this before, Weightman has persuaded me that such a strong metaphysical claim is indeed required by Torrance’s theological position. And to the extent that it is, it places on Polanyi’s understanding of nature a burden which Polanyi himself would not accept. For Polanyi was ready to acknowledge that even this fundamental conviction, while certainly revealing an aspect of reality, was subject to revision.

Furthermore, this hierarchical vision requires Torrance to capitalize on an ambiguity in Polanyi’s epistemology in order to extrapolate to an understanding of God operating at the level of the marginal control for the universe as a whole. But this is unsatisfactory in several respects. For example, a consistent application of this approach would negate the transcendence of God, something Torrance is unwilling to do. Weightman exposes such an inconsistency by pointing out how Torrance expects theology to operate as the higher level of meaning controlling the boundary conditions of all lower levels of meaning, but without being subject to any of the constraints that these lower levels of meaning might place on it. The source of his reservation, of course, is Torrance’s theological conviction of the objective reality of God. This conviction, according to Weightman, is the fatal flaw in Torrance’s understanding of Polanyi’s epistemology.

That Torrance’s unwillingness to allow for an immanence to his doctrine of God does indeed lead to such unsatisfactory dilemmas Weightman is quite correct in arguing. But that this is due to Torrance’s mistaken understanding of the role of God in Polanyi’s epistemology has not been persuasively justified for me. The proper way of construing “God” in Polanyi’s thought is, of course, a hotly contested issue. Polanyi’s position holds, according to Weightman, that there is no ontological referent to the word “God.” Rather, the term refers to the “meaningfulness” that religious people experience in worship.

Weightman’s defense of this interpretation is developed in the first part of his book, where he attempts to show how Polanyi’s understanding of the way religion functions has remained fairly constant throughout Polanyi’s published writings. I believe he is correct in this appraisal of Polanyi’s thought. Polanyi appears to have understood religion (by which he normally meant a liberal style of Christianity) as a form of indwelling through which a believer was able to break out (in *Personal Knowledge*) or to be transported (in *Meaning*) toward some sort of ultimate meaning which could bring together otherwise incompatible meanings of our ordinary existence. The contested issue concerns the status of this experience of “ultimate meaningfulness.” Is it an imaginative construction that remains completely within the form of religious life or does it open the believer to a divine reality that grounds this meaningfulness? For Weightman, the former is the only consistent way to understand the Polanyian literary corpus.

The crux of Weightman’s argument on this point, as I understand it, is found in Polanyi’s insistence that the reality of God is discovered in worship and, as such, Christianity can say nothing that is true or false. Furthermore, Polanyi’s emphasis on the “apophatic” character of mystical experience emphasizes that “God” cannot be comprehended through concepts. Finally, his later use of Eliade’s views on myth and ritual transporting participants into the sacred realm suggests the necessity of participation in the religious tradition to experience its meaning. Polanyi unquestionably upholds all of these views. From them Weightman concludes that religious meaning has no ultimate reference point but is found solely by dwelling within it.

In the course of his defense of this conclusion, Weightman repeatedly declares that Polanyi’s position does not allow the reality of God to be external to the religious form of indwelling in the way a scientific reality is external
to the community of scientific beliefs (e.g., 45, 56). This is, without a doubt, true. But when Polanyi insisted that the meaning of God is known in the first instance performatively in worship or ritual and that this meaning thus known cannot be comprehended conceptually as mystics have insisted, I think he was groping for a way of expressing the reality of God as the basis for the fundamental meaning that he believed he experienced for the universe as a whole. And precisely because this reality was the ground of meaning for the universe as a whole, it could not be an external reality in the manner of an empirical object, for that could not bear such a meaning. I do not think Polanyi ever found a way of expressing this conviction to his own satisfaction, and this failure is what accounts for the apparent ambiguity of Polanyi’s position on this point. But in exploiting this ambiguity in the direction of the wholly internal meaning of God, I believe that Weightman has failed to show how Polanyi could consistently affirm his own conviction in the ultimate significance of the universe (125).
Polanyi and Mathematics, Torrance and Philosophy of Science: A Response to Apczynski’s Review

Colin Weightman

ABSTRACT Key Words: Michael Polanyi, Thomas Torrance, John Apczynski, mathematical realities, religious realities, phenomenology, natural theology, philosophy of science

The question of how Michael Polanyi understood religious realities has often been debated. I suggest, in this response to a review of my book on Polanyi and theologian Thomas Torrance, that Polanyi's treatment of mathematical realities can throw light on his understanding of religious realities (like “God”) especially since he clearly links or groups these in a number of places. In addition, I point out that Torrance develops and moves beyond the Barthian theological tradition in his adoptin of a Polanyian natural theology.

My thanks are due to John Apczynski for his generous but probing review of my book on Thomas Torrance and Michael Polanyi, Theology in a Polanyian Universe. Apczynski makes some comments on my treatment of Torrance’s use of Polanyi (which was my major focus), but then centers his critical comments on my understanding of Polanyi’s understanding of “God.” This is natural enough in a review for a journal devoted to the thought of Michael Polanyi, but I am quite happy to share why I think that my reading of Polanyi is the correct one. I will add however what some of my larger agendas were in the writing of the book since this may also be of interest to some readers.

But even as I say these things, I am conscious myself of the need for caution since all commentators on Polanyi are agreed (I think) that Polanyi is the opposite of open and clear about his own religious commitments. Even those who confidently venture an assessment should at the very least admit that his “view” on “God” needs to be carefully teased out or perhaps extrapolated from clues in the text since it is definitely not “up front.” Indeed, though I do have a point of view, I also readily admit to my own fallibility and do not consider that I have all things right, especially in matters Polanyian.

Perhaps Apczynski’s comment that Polanyi was “groping for a way of expressing the reality of God as the basis for the fundamental meaning that he believed he experienced for the universe as a whole” is a good starting point for discussion. However I would prefer to express it as a groping after a religious perspective and not necessarily as a groping after “God.” In my reading of Polanyi, I would certainly affirm that such a “religious groping” is evident in his work. I make reference to it myself at various points. But if his groping continued to the end of his life, then it is difficult for us who would commentate on and hope to learn from him to do much more than reflect that groping ourselves. For this reason, I do not expect that this debate will ever conclude unless some discovery of lost Polanyi material adds to our information on the matter.

I agree with Apczynski that for Polanyi the affirmation of a meaningful universe was fundamental. I also want to stress this most strongly with regard to Polanyi. All his life, from his reading of Dostoevsky onwards, he stood against a purely mechanistic conception of humanity. But how to anchor a vision of a meaningful world in some divine “ground of being” is the problem to which Polanyi never came to a satisfactory answer. The simplest answer from my perspective (since this is what I personally believe) is that the world has been created by God and this imbues it with meaning from
the very beginning. Now this is not to underestimate the difficulty of the questions that can arise even from this seemingly straightforward statement but at least it grounds the meaningfulness of things in something deeper and more fundamental. For this reason I do not consider that I have “created Polanyi in my own image” since my perspective is one that I looked for but did not (alas) find in his writings.

The problem with God creating the world for Polanyi is that he finds the very concept extremely difficult to grasp and in Meaning he wonders whether it is conceivable at all (p.125). His reluctance to conceptualize God in either Tillichian or in any other theological terms gives us nothing concrete from him in which to “ground” the meaningfulness of the universe. For this reason, I do not think that anyone at all has shown how Polanyi can consistently affirm his conviction in the ultimate significance of the universe. I don’t think it is possible for anyone to show this and so I did not attempt it myself. This is certainly frustrating, but unfortunately, the way it is. It appears then that this is a missing link in Polanyi’s thought and in my estimation no one has demonstrated clearly that they have uncovered it. Of course, each one of us may have our own way of showing how Polanyi should have grounded his conviction in the ultimate significance of the universe. It may even be that we do so in a Polanyian-like fashion, but this is not the same thing as setting out Polanyi’s own justification for his assertion of the ultimate meaningfulness of things.

Apczynski is right in noting my statements that Polanyi does not allow the reality of God to be external to the religious form of indwelling in the way a scientific reality is external to the community of scientific beliefs. However, this comparison was less central to my argument which flows rather from Polanyi’s comments on religion and mathematics and the sense in which Polanyi himself considers that “realities” may be “external.”

To show what I mean, we need to go to Polanyi’s concluding comments in his chapter on “Intellectual Passions” in Personal Knowledge (p.202). Here he talks about the verification and validation of articulate systems. Though the distinction might be somewhat fuzzy at the margins, Polanyi uses the word “verification” to refer to the testing and acceptance of the empirical sciences and the word “validation” to refer to the testing and acceptance of other articulate systems, and he gives the examples here (and in this order) of mathematics, religion and the various arts. His penultimate sentence is then: “But both verification and validation are everywhere an acknowledgment of a commitment: they claim the presence of something real and external to the speaker.” A key question here is what does Polanyi mean by “external to the speaker” in relation to validation?

It is highly significant (I believe) that both here and in numerous places Polanyi links or groups mathematics and religion together. This occurs at fundamental places in his argument and the significance of this needs to be more carefully examined. Firstly, for Polanyi, mathematical realities are realities in his distinctive and unique sense of “that which is expected to reveal itself indeterminably in the future” (SFS, p.10 and cf. also PK, pp. viii,5,43,64,117,130,147,189) Yet mathematical realities may be totally nonempirical. Some mathematical terms like aleph-three, explains Polanyi, “do not refer to particular things at all, and may be altogether empty categories, well-defined, but applying to nothing” (PK, p.86). Therefore (and like religion also?) mathematics looks for an indeterminate range of future manifestations within mathematics itself.

It seems to me that the claim of validation that something real exists external to the speaker is not a claim by Polanyi that the “realities” in question are, like empirical objects, necessarily external to the corresponding system, but rather is a claim that realities exist which are real in his distinctive sense of having a life of their own, even though they themselves might be internal to their respective systems. It is in this sense of having a life of their own and not simply
being dependent on the one who names or speaks them that they are primarily to be considered “external” (cf. *M*, p.66).

To conclude this particular discussion then, Polanyi leaves quite open the possibility that religious realities (for example “God”) are analogous to mathematical realities and might be entirely contained within the articulate system of the Christian religion. In my view, his numerous comparisons of religion with mathematics make this the most likely impression that he wishes his reader to take away with them. It was certainly the impression he left in my mind. Here again, this is not my personal perspective on the reality of God, but I believe that on the evidence of the text that it is Polanyi’s. This comparison of religion and mathematics and their respective “realities” is the core of my argument then, and not any comparison of religion and science. But please note that this argument is not cast in the form of a knock-down proof since while I think the thrust of his writing is compelling enough on this, he has never given us that final unambiguously clear confirmation of his view. And we all need to acknowledge this lacuna together.

My larger concern has been the interaction of various theologians with various philosophies of science. Another major thesis focussed on Wolfhart Pannenberg and Karl Popper, for example. So my concern in this book was to take a close look at what Torrance is doing when he interacts with the thought of Michael Polanyi. As will be apparent already to those who know something of Torrance’s writings, I do not interpret Polanyi in the same way that Torrance does. Indeed, though I have some theological kinship with Torrance, I was quite critical of the way in which Torrance tried to relate his theology to the contemporary scientific worldview and contemporary philosophy of science (both of which he interprets primarily through Polanyi’s eyes). Therefore, though I have also learned things from Torrance, I take in my book a much needed critical look at Torrance’s whole attempt to relate theology and science. More than enough has been written by supporters of Torrance and I felt that a more probing assessment needed to be undertaken. This I have done, though I hasten to add at this point that the onus is now on me to produce my own constructive contribution to the debate and if life-circumstances permit me I intend to do just that. Then of course others will do the same for me as I have done in my more critical writings! I might add, however, that in an epilogue to the book I have begun to examine the relationship of theology and science.

What was my conclusion about what is happening theologically in Torrance’s interaction with Polanyi? Very briefly, it is that Torrance’s development of the Barthian tradition has resulted in a Polanyian natural theology which serves as the epistemological substructure of all the sciences including theology, which, as some will know, Torrance considers a science in a quite specific sense. Though Torrance will without doubt contest this strongly, my assessment is that in adopting a Polanyian natural theology Torrance is in his own way creatively relating theology and philosophy in a manner not unlike Rudolf Bultmann or Thomas Aquinas and in so doing has decisively moved beyond his Barthian roots. I recognize that these few brief sentences (and Apczynski’s own brief summary) leave much to be desired since they stand rather naked without the full argumentation. To decide between my conclusion and Torrance’s position, the reader will, of course, have to read my book, and some of Torrance’s if they have not done so already.

However, I would like to conclude this response to John Apczynski’s review where it begins in the title, in the question of the significance of mathematics in Polanyi’s thinking. I am sure that my background in pure mathematics led me to ask this question more readily than those trained in (say) art history. I had a natural tendency to read with care any sentence with the word “mathematics” in it. However, it does seem to me to be more significant than most commentators on Polanyi have realized. This is all the more so if I am right in suggesting that religious realities in Polanyi are analogous to mathematical realities. This would mean then that information on Polanyi’s understanding of mathematical realities could well throw some light on his view of “God.”
Leaving Polanyi’s views aside for a moment, the question of the nature of mathematical reality is a fascinating one in itself. The key question here is: “Is mathematics a human creation or does it exist in some kind of non-physical, eternal and necessary realm (a doctrine sometimes called mathematical Platonism)?” More briefly again, is it created or discovered? The answer is by no means easy and it is significant that in his own struggle with this kind of question Edmund Husserl (who trained first as a mathematician) developed what we call phenomenology. Though I cannot go into it here, it was in his struggle to understand mathematical reality that this way of thinking was developed. (On this see Granville Henry, Logos: Mathematics and Christian Theology (1976) pp.163-70).

But, unfortunately again, Polanyi does not enter this discussion himself. He supports Husserl’s attempt to safeguard the contents of experience against reductive analysis and phenomenology’s affirmation of higher, less tangible levels of experience since these are things he wishes to emphasize himself, though he is critical of phenomenology’s lack of any notion of tacit knowing or levels of reality (KB, pp.221,236). Mathematical and religious realities, of course, would be considered by Polanyi to be intangible realities, if not the most intangible of realities. But here, I think, we draw near again to the limits of what may be known with any certainty about Polanyi’s views on these matters. For example, we might wish to ask whether Polanyi saw mathematical and religious realities as on the same level, or as one above the other (and note that there are two possibilities here). Polanyi does not, to my knowledge, give us any information on this. If he did, this would provide us with some significant clues about his views on religious realities. Perhaps all that I can suggest at this juncture is that a close examination needs to be conducted of all his comments on mathematics to see if anything relevant on this may be gleaned from them. Perhaps I may--if I have any time among the demands of my present existence as a parish minister--take up this task since it is a question that I have not previously taken to the text myself, at least not in quite this form.

**Submissions for Publication**

Articles, meeting notices and notes likely to be of interest to persons interested in the thought of Michael Polanyi are welcomed. Review suggestions and book reviews should be sent to Walter Gulick (see addresses listed below). Manuscripts, notices and notes should be sent to Phil Mullins. Manuscripts should be doublespaced type with notes at the end; writers are encouraged to employ simple citations within the text when possible. Use MLA or APA style. Abbreviate frequently cited book titles, particularly books by Polanyi (e.g., *Personal Knowledge* becomes *PK*). Shorter articles (10-15 pages) are preferred, although longer manuscripts (20-24 pages) will be considered.

Manuscripts should include the author’s name on a separate page since submissions normally will be sent out for blind review. In addition to the typescript of a manuscript to be reviewed, authors are expected to provide an electronic copy (on either a disk or via e-mail) of accepted articles; it is helpful if original submissions are accompanied by an electronic copy. For disks, ASCII text as well as most popular IBM and MAC word processors are acceptable. Be sure that electronic materials include all relevant information which may help converting files. Persons with questions or problems associated with producing an electronic copy of manuscripts should phone or write Phil Mullins (816-271-4386). Insofar as possible, *TAD* is willing to work with authors who have special problems producing electronic materials.

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