I. Introduction: A puzzling connection

Those who have carefully read Michael Polanyi’s *Personal Knowledge* know that about a third of the way into the final chapter (PK 388) of the book, Polanyi introduces Teilhard de Chardin and a couple of Chardin’s terms, noogenesis and noosphere. Polanyi found some of Chardin’s ideas and terminology useful to characterize what he dubs ‘the second major rebellion against meaningless inanimate being’ (PK 389), the rise of human knowledge understood as a fabric creating a context for life that transcends the individual. Introducing Chardin only at the end of Part IV of his magnum opus in the chapter titled ‘The Rise of Man’ seems to have been part of Polanyi’s rhetorical strategy: I suspect that he found Chardin’s terms perfect for his own staged discussion of anthropogenesis, and he wanted to ally his discussion with that of Chardin. However, he did not want his readers to make too much of such an alliance. Polanyi wanted to be regarded only as a distant relation of Teilhard de Chardin. My reasons for this reading will become clearer in the discussion below. The late injection in *Personal Knowledge*’s final chapter of a small dose of Chardin made me curious about Polanyi’s more general interest in and use of Chardin. In what follows, I will say a bit more about the use in *Personal Knowledge*, but I also will comment upon ways in which Chardin is mentioned in several other Polanyi publications and public lectures. In fact, Polanyi wrote a review of *The Phenomenon of Man* that was published in 1960 in the popular American magazine, *Saturday Review.* Chardin also is discussed in some of Polanyi’s correspondence. There is, in sum, an interesting story here, a story perhaps more historical than philosophical, but nevertheless worth telling because it helps clarify some of Polanyi’s ideas about evolutionary emergence. Although my discussion will analyze several references to Chardin in Polanyi’s writing, I take a chronological approach, casting my examination as an unfolding narrative.

2 J. H. Oldham and Polanyi: The early discussion of Chardin and *Personal Knowledge*

In his 1960 review of *The Phenomenon of Man,* Polanyi notes that he first read the book in 1956 when it came out in France; he says that he ‘was profoundly moved by it.’ Because he very frequently made reading suggestions to Polanyi in his letters, I originally suspected that Polanyi’s friend, the Christian activist and intellectual J. H. Oldham might have advised Polanyi to read Chardin. Oldham often suggested theologians and philosophers that he thought might interest Polanyi, and Oldham’s discussion groups and the work of preparing for them often influenced what Polanyi read. By 1956, Polanyi had been participating in Oldham’s occasional discussion group meetings for over a decade. However, Polanyi did not come to Chardin through Oldham. In fact, in a Sept. 26, 1956 letter, Oldham notes that Polanyi has sent to him a copy of *The Phenomenon of Man,* which he promised to read. The fall of 1956 is an important period in which Polanyi was finishing up *Personal Knowledge.* Polanyi apparently read Chardin not long before this period, since the French text was published in 1955. Oldham’s letter mentions that he is looking forward to reading the revised text of the Gifford Lectures. Oldham indicates he had already read a draft, but this may only be typescripts of the original lecture material that he received several years earlier and prepared his own summaries of; these summaries may have been used as a focus in one of his earlier discussion group meetings.

Twenty days after Oldham’s first letter mentioning Chardin, Oldham noted in another letter that he was reading *The Phenomenon of Man,* which he found difficult; at the time, he was also reading Neofinalisme, a book by Raymond Ruyer, a French philosopher of science, that Oldham describes as ‘in the main a review of the position reached by contemporary biological science.’ Oldham suggested to Polanyi that perhaps Chardin and Ruyer seem ‘like yourself, to be pointing towards a new picture of the world.’ About a week later, Oldham wrote to Polanyi again, reporting that he had read Chardin a second time, and expressing great appreciation to Polanyi for recommending him. He indicates that Polanyi had shown interest in Ruyer and included some further comparisons between Polanyi’s ideas and those of Ruyer and Chardin. Ruyer’s book, Oldham proclaims, ‘like that of Teilhard, as well as your own, seems to me one more evidence of a turning of the tide.’ Although Oldham seems quickly to have become enthusiastic about Chardin, there is no correspondence that provides insight about Polanyi’s reactions. That he recommended Chardin to Oldham, however, certainly implies that Polanyi was interested in Chardin’s book. Apparently, winding up the draft of *Personal Knowledge* was more difficult for Polanyi than he anticipated. In early February of 1957, Polanyi wrote Oldham saying he was coming for a visit and would bring along, or perhaps send in advance the bulk of the manuscript of ‘Personal Knowledge’. Unfortunately I still have not been able to make up my mind about the
concluding section, so there are about 10 or 20 pages missing at the end.10

By the end of March, Oldham had still not received a draft of the manuscript, but Polanyi wrote saying that he had finally finished writing ten days earlier and Oldham would have a copy by about April 10. He asked Oldham to point out inconsistencies in the manuscript.11 As I have discussed elsewhere,12 Oldham carefully scrutinised the manuscript for a month and wrote what appears to have been a very influential six and a half-page critique in his letter of May 11, 1957 to Polanyi.13 Polanyi apparently remained unhappy with the conclusion of his March draft, for he wrote Oldham even before receiving the May 11th letter that he was going to make (or perhaps had already begun) some changes ‘at the very end of the book’ since ‘its closing pages are limp and not definitively formulated.’14 Oldham’s lengthy letter of criticism covered several topics, but the most pointed remarks concern ‘The Rise of Man.’ Oldham thought this final chapter was poorly written and poorly conceived: it will disappoint readers and, Oldham at least implies, Polanyi is not himself quite sure what he intends to do at the end of his book. Oldham recommended that Polanyi needed a better integrated conclusion that makes clear ‘how the facts of evolution look in the light of the fiduciary philosophy’:

The kind of final chapter I should like to see, summarising the essential ingredients of a fiduciary philosophy, might quite properly fulfil this task by relating the argument to evolution, and a critique of natural selection would be quite in place. But the treatment of these subjects would then be an integral part of a philosophical conclusion and not appear so much as a rather isolated addendum and after-thought.15

This general criticism lead Oldham to a more concrete criticism of Polanyi’s use of Chardin in the draft of his last chapter:

Pp. 9-13 are obviously inspired in part, as you indicate, by de Chardin’s book. But the only reason for bringing into this final chapter what is said about man’s earlier lineage is that it serves as an introduction to the conception of noogenesis and the noosphere. Having read de Chardin I understand what is meant and appreciate its far-reaching significance. But hardly one reader of your book in a hundred will have read de Chardin, and I doubt whether any one who encounters (sic) the idea for the first time, as most readers will, is at all likely to obtain from only two paragraphs any sense or understanding of its real importance. If you introduce it all (sic), I believe that you must devote at least two or three pages to bringing home to the reader in your own way, as de Chardin does in his, the immense range and depth of the conception.

I rather hope that you may do this. The idea of the noosphere has a close kinship with what you say in the deeply moving concluding pages of the preceding chapter on ‘Knowing Life’, and with what you say about originality in the present chapter (pp. 24-5). I have a certain caution and reserve in regard to de Chardin’s enthusiastic exposition—there are many profound problems to be faced. But I do not see how one can talk about evolution at all—especially in the light of your fiduciary philosophy—without looking very closely at the issues he raises.16

These comments are somewhat ambiguous; since the original draft of Polanyi’s final chapter was not preserved, it is impossible to address some of the puzzling elements. Nevertheless, a few conclusions seem clear in Oldham’s remarks: (1) The original draft of the chapter included several pages ‘inspired in part’ by Chardin; these pages apparently referenced Chardin’s book. (2) Oldham did not think Polanyi’s readers would be familiar with Chardin. (3) He believed that pages linked to Chardin were not sufficient to convey the richness of Chardin or of Polanyi’s ideas that are akin to those of Chardin; the draft merely introduces the conceptions of noogenesis and noosphere. (4) Oldham saw connections between Chardin and material discussed in Polanyi’s next to last chapter as well as what Polanyi said about originality in the draft of the final chapter. But Oldham does seem to warn Polanyi to be wary about Chardin since Chardin’s text includes ‘profound problems.’ (5) Oldham recommended that if Chardin is introduced at all, then Polanyi should expand his discussion of noogenesis and the noosphere. On the balance, Oldham does seem to be encouraging Polanyi to expand and clarify what he has done and that will include, if not drawing more on Chardin, at least addressing issues Chardin raises.17

What the follow-up correspondence with Oldham reflects is that, after receiving Oldham’s critique, Polanyi quickly wrote to Oldham, profusely thanking him and advising him that he had enlisted Irving Kristol18 to sharpen the writing in his draft. About the draft of the last chapter, Polanyi says ‘I shall rewrite the last chapter altogether in the sense that you suggest. I hope to show you the new version by the middle of June.’19 In a letter to Oldham of July 15, 1957, Polanyi does report finishing the revision of the manuscript and that the last chapter has been completely re-written, and I hope it is now more satisfactory.’ He adds later in the letter ‘I am writing only to thank you once more for your advice which has proved of decisive value to me. As soon as I have a copy of the last chapter available, I should like to send it to you so that you may see to what extent I have benefited from your criticism.20

The correspondence with J. H. Oldham certainly makes it appear that Oldham decisively influenced Polanyi’s reshaping of the concluding chapter of Personal Knowledge. Looking at the final version of the chapter itself in light of the correspondence, however, reveals no definitive clues about Polanyi’s
3 Polanyi’s review of The Phenomenon of Man

Polanyi’s 1960 review of The Phenomenon of Man sheds a much more definitive light on Polanyi’s reaction to Chardin’s ideas and this, in turn, perhaps illuminates the circumspect use of Chardin in the last chapter of Personal Knowledge. To put it in a few words, Polanyi suggests in his review that Chardin is a wonderful poet, but he does not address the hard questions about the reductionism of the new synthesis of genetics and Darwinism.21 The review does offer both praise and concrete criticism of Chardin’s book, but it spends as much time reflecting on the meaning of the popular success of The Phenomenon of Man as upon the book itself. Polanyi points out that the wide acclaim the book has received is ironic, given that the general perspective of the book is in sharp tension with the praise for genetic determinism that emerged in ‘pronouncements made on the Darwin centenary.’ Polanyi sharply attacks Sir Julian Huxley, who, Polanyi asserts, provides a self-serving introduction to the English translation. Polanyi points out (with quotations) that in other writing Huxley supports a view in which natural selection is coupled with genetic mechanism and such views are quite unlike those of Chardin. Near the end of the review, Polanyi suggests that ‘Teilhard’s poetry’ likely would not have received such broad interest and ‘warm response’ fifty years ago:

No, its contemporary success is a portent. There is a tide of dissatisfaction mounting up against scientific obscurantism. Book after book comes out aiming against the scientific denaturation of some human subject. Teilhard owes his present success to this movement. But, unfortunately, this has made his success a little too easy. I do not believe that the origin and destiny of man can be defined in such vague terms.

Polanyi focuses attention on what he regards as the vague wording of many passages of The Phenomenon of Man. He suggests that Chardin glosses over the difficult issues and is not forthcoming about his allies:

Teilhard’s way of shrugging aside any question concerning the mechanism of heredity also casts a veil of obscurity on the foundation of his position. And this is how he avoids an explicit attack on genetical selectionism and also feels entitled to use, without more than the most cursory acknowledgment, the ideas of Samuel Butler, Bergson, and others who have previously interpreted evolution in his way.

In a very succinct statement, Polanyi manages to summarise what he takes to be the main theme of The Phenomenon of Man.

This active striving towards ever higher, more vividly conscious forms of existence, which eventually achieves responsible human personhood and establishes through man a realm of impersonal thought, is the dominant theme of ‘The Phenomenon of Man.’

Polanyi is appreciative of Chardin’s book, but emphasizes that this is poetic vision and Chardin’s science largely serves this vision:

He is a naturalist and a poet, endowed with contemplative genius. He refuses to look upon evolution like a detached observer who reduces experience to the exemplification of a theory. Instead he stages a dramatic action of which man is both a product and a responsible participant. His purpose is to rewrite the Book of Genesis in terms of evolution. . . . Teilhard uses scientific knowledge merely as a factual imagery in which to expound his vision. His work is an epic poem that keeps closely to the facts.

The review’s final sentence leaves the reader with the distinct impression that Polanyi simply cannot shake his sense that Chardin’s book in part misses the mark: ‘Having avoided so many decisive issues, it can serve only as a new and powerful pointer towards problems that it leaves as unsolved as before.’ It is, of course, Part Four of Personal Knowledge that straightforwardly takes on the problems Polanyi alludes to.

4 Some later comments on Chardin

Although Polanyi seems to have been critical of much of the work of Teilhard de Chardin, it appears that his friend J. H. Oldham whom he introduced to The Phenomenon of Man, was more enthusiastic. Chardin’s ideas probably came up again in the discussion of one of Oldham’s discussion group sessions held March 25-28, 1960, just two months after publication of

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Polanyi's review. In this period, Oldham had apparently been reading Hengstenberg's *Philosophische Anthropologie*, and he was working to reconcile Hengstenberg's ideas with the views Polanyi develops in the final sections of *Personal Knowledge* and the ideas of Chardin. Although he was eighty-five years old, Oldham himself wrote a paper titled 'The Person' that was circulated to those attending the discussion session on March 25-28, 1960. On March 16, Oldham sent to Polanyi a lengthy letter that includes a set of questions and comments on Chardin, Polanyi and Hengstenberg. Unfortunately, the correspondence record does not include a reply from Polanyi. The long weekend meeting of St. Julian's Group (Oldham's name, taken from the location of the meeting) was slated to spend some time discussing part of Oldham's paper 'The Person,' but at least two sessions seem to have been organized to focus on Polanyi's ideas in *Personal Knowledge*. In his March 16 letter, Oldham recommends that Polanyi 'devote your time to the question of the Person or Self, which is the subject of the Saturday morning session.' The discussion on Sunday was to be 'for considering your philosophy of commitment.'

The continuing discussion with Oldham and others of links between Polanyi and Chardin apparently did not significantly alter Polanyi's response to Chardin. At least there is little evidence of any change in later writing. The following discussion briefly treats three later comments on Chardin that seem to me representative. All are concise and fit into the orbit circumscribed by Polanyi's 1960 review.

There are two references to Chardin in the 1962 Terry Lectures. In one of these, Polanyi mentions Chardin along with Bergson and Samuel Butler, as a figure who posits a creative agency at work in the process of evolution. Polanyi acknowledges that his view of emergence, applied both to biological evolution and human comprehension, is more akin to the ideas of Bergson, Butler and Chardin than to Kohler's dynamic equilibration. In the other reference in the second Terry Lecture, Polanyi notes that the mechanical explanation of life does contain much truth, and this makes an altogether mechanical conception of life plausible. But a mechanical explanation fails to account for the most remarkable feature of life, which is its capacity to achieve consciousness and responsible personhood. Teilhard de Chardin's merit is to have, by his poetic imagination, forced this problem into the centre of attention. The problem of understanding the rise of consciousness may not be ripe for scientific enquiry, but that is no reason to accept, or even to tolerate, a perspective which would reduce this aspect of life to the rank of a minor unsettled detail.

As in his 1960 review of *The Phenomenon of Man*, Polanyi praises Chardin as a poet who draws attention to an issue covered over in contemporary scientific discussions and treated as only a loose end rather than a matter of significance. Apparently, the material in the Terry Lectures went through several revisions before its 1966 publication in *The Tacit Dimension*. This comment about Chardin is eliminated in the revised version of the second chapter (titled 'Emergence'), although there remains a reference (TD 46) to Chardin, along with Bergson and Butler as figures who postulate a creative agency in evolution.

In Polanyi's 1963 essay 'Science and Religion: Separate Dimensions or Common Ground?' Chardin again comes up in the discussion of protests against dominant views that are a 'denaturing of evolution': the protesters such as Chardin maintain 'the central feature and problem of evolution lies in its sustained tendency to produce higher levels of existence' (12). Polanyi complains that protesters have been silenced. As an example, he cites a recent publication of the distinguished biologist P. W. Medawar who 'brushes aside Teilhard de Chardin's plea for the recognition of this central fact of evolution: “... the idea that evolution has a main track or privileged axis is unsupported by scientific evidence”' (13). Polanyi criticizes Medawar in a way that links up with Polanyi's larger set of philosophical themes:

Such statements confirm my view that as long as science accepts the false ideal of strict detachment, it cannot but deny reality to the most significant features of the universe. The new theory of knowledge combined with the logical distinction between levels of existence, should cure us of the blindness, by providing a conceptual framework which recognizes the emergence of ever higher levels of reality by evolution (13).

Polanyi's brief mention of Chardin thus really is only a lead into his own more general philosophical conclusions. A mechanistic account of evolution has 'no place for directed evolutionary emergence; nor can it account for the rise of consciousness, let alone the progress of human thought' (13)—maters treated in Part IV of *Personal Knowledge* and elsewhere in Polanyi's writing. The failures of mechanism are ultimately grounded in acceptance of the false ideal of objectivity and in failure to make proper logical distinctions between levels of existence, matters Polanyi also had treated.

Finally, in Polanyi's 1968 essay 'The Body-Mind Relation,' Chardin comes up again at the very end of the essay in a discussion of the relation between imagination and creative acts. Polanyi acknowledges that imagination is a 'motive force of invention' and this force has 'no counterpart in the process of organic evolution' (102). But he contends this disparity is reduced because a careful account points out that 'the imagination alone does not achieve inventions or discoveries, but merely evokes a spontaneous, integrative event which brings about the discovery' (102). For Polanyi, 'discovery or invention are, as it were, processes of spontaneous growth induced by the
labours of the questing imagination. Originality is deliberate growth’ (102). But this claim leads Polanyi to a careful delineation of his own position vis-à-vis that of Chardin:

The way my conclusions bear on Teilhard de Chardin’s book *Le phénomène Humaine* is fairly clear. I agree with his vision of evolution as a continuous sequence of creative acts. I do not think that he has done much towards meeting the difficulties arising when we try to spell out this vision in terms of biological detail. I would think that a precise conception of creativity and the proof of its being equally present in human originality, individual ontogenesis, and phylogenetic evolution will remedy this deficiency up to a point. But I think that this involves an idea of the body-mind relation that is very different from the dualism accepted and elaborated by Teilhard de Chardin and all his predecessors (102).

The criticism regarding lack of biological detail is reminiscent of Polanyi’s remarks in his review of *The Phenomenon of Man*. The ‘remedy’ Polanyi recommends is the argument that he makes in Part IV of *Personal Knowledge* as well as in other discussions after *Personal Knowledge*. That is, Polanyi does develop a ‘precise conception of creativity’ that he claims is found in responsible human thought and in individual ontogenesis and phylogenetic evolution. 29 What is new here is the claim that Chardin’s work must overcome a more traditional body-mind dualism in order to provide a more ‘precise conception of creativity.’ What Polanyi sees very clearly is that Cartesian substance dualism subverts even richer accounts of evolution, such as that of Chardin; ultimately, such dualism undermines the portrait of Chardin’s topic, *The Phenomenon of Man*:

The problem of the body-mind relation is thus resolved by being shown to represent but an instance of these two alternative ways of knowing the subsidiaries of a coherent entity.

The hierarchy of levels I am postulating cannot be represented in a Cartesian dualism. I believe that this hierarchy gives a truer picture of *The Phenomenon of Man* (102).

5 Conclusion

Discussions above have made clear that Teilhard de Chardin was a thinker that Michael Polanyi regarded as raising important questions about evolution, the same questions in fact that Polanyi insisted biology and philosophy of biology needed to address, and that he did address in Part IV of *Personal Knowledge* and some other writing after *Personal Knowledge*. But Polanyi was very careful and selective in his praise for Chardin. While Polanyi borrowed and built upon some of Chardin’s terminology, Polanyi was clear that Chardin failed to adequately address the important questions that he raised. On the balance, Polanyi seems to have appreciated Teilhard as a visionary poet but thought his philosophical acumen was limited.

Notes:
1. I have profited much from e-mail exchanges over the last year with Marty Moleski who shares my interest in Polanyi’s response to Chardin. Moleski pointed me to one of the late Polanyi reference to Chardin treated at the end of this essay; he also read a draft and offered many thoughtful comments that enriched my own perspective on both Chardin and Polanyi.
2. All references to *Personal Knowledge* and other major Polanyi books are simply noted by title abbreviation and page number in parenthesis in the text; all references to *Personal Knowledge* are to the pagination in the 1964 Harper Torchbook edition.
3. Michael Polanyi, ‘An Epic Theory of Evolution,’ *Saturday Review*, XLIII (Jan. 30, 1960): 21. The entire review is printed on one page; quotations from the review that follow are not footnoted since they are identical to the citation above.
5. Oldham letter to Polanyi, Sept. 26, 1956, 1956, Box 15, Folder 5 in The Papers of Michael Polanyi held by the Department of Special Collections of the University of Chicago Library. This and succeeding quotations from The Papers of Michael Polanyi are used with permission of the University of Chicago Library. Citations of archival material will hereafter be shortened to the letter and date, box number, and folder number.
6. For a fuller discussion, see Mullins, *Appraisal* 1:4, p. 185.
7. The book title is provided in Oldham letter to Polanyi, September 25, Box 15, Folder 5. The description of Ruyer’s subject matter is provided in Oldham letter to Polanyi, Oct. 16, 1956, Box 15, Folder 5.
10. Polanyi letter to Oldham, Feb. 8, 57, Box 15, Folder 5.
Phil Mullins


15. Oldham letter to Polanyi, May 11, 1957, Box 15, Folder 5.


17. My earlier comment on Oldham’s ambiguous suggestions regarding use of Chardin (Mullins, Appraisal 1:4, p. 186) I now think somewhat missed the mark: Oldham qualifies and is tentative about using Chardin, but he does seem to favour it rather than discourage it, as I earlier suggested; he emphasizes that a fuller discussion is needed.

18. Polanyi acknowledges Kristol as one of the people who read the whole manuscript in the Acknowledgments of Personal Knowledge (PK xv).


21. This perhaps puts matters too simply, as my comments below clarify, but it certainly is the case that Polanyi would have been happier with Chardin if Chardin had overtly attacked the new synthesis and provided biological detail in his account of evolution. I am indebted to Marty Moleski for pointing out to me that there is apparently some evidence that Chardin finished The Phenomenon of Man in 1940, but was not allowed to publish it. See the chronology at http://noosphere.cc/teilhbiolang.html.

This is not something that Polanyi likely knew, since the book was published posthumously in Paris in 1955. Perhaps Polanyi’s criticisms would have been less harsh had he known that The Phenomenon of Man was written before the new synthesis became as dominant as it later did.

22. There are circular letters for the meeting dated Feb. 14, 1960, March 4, 1960 and March 12, 1960 in Box 15, Folder 5. Parts of Oldham’s paper were apparently attached to all of these circulars to those attending. There also apparently was attached material germane to his paper with Oldham’s personal letter to Polanyi of Mar. 4, 1960, Box 15, Folder 5. What is apparently Oldham’s paper or a draft of at least part of it is also in Box 15, Folder 9.


25. 1962 draft of Terry Lecture 2 (titled ‘Comprehensive Entities’), p. 16, Box 35, Folder 11.

26. 1962 draft of Terry Lecture 2 (titled ‘Comprehensive Entities’), pp. 11-12, Box 35, Folder 11.

27. Philosophy Today VIII Sp 1963: 4-14. Quotations from this essay in this paragraph are simply noted by page in parenthesis following the quotation.

28. ‘The Body-Mind Relation’ is the title of a lecture that Polanyi delivered for what apparently was the first (but not the last) time in a philosophy seminar at Yale on December 10, 1965. The lecture is in Box 37, Folder 14. The published essay of this title is in Man and the Science of Man, (eds.) William R. Coulson and Carl Rogers (Columbus, Ohio: Merrill Publishing Co. 1968): 85-102. The comment about Chardin quoted below appears in both the lecture and the published essay. Quotations from this essay in this paragraph are simply noted by page number in the published version in parenthesis following the quotation.

29. One of the interesting questions is how to construe Polanyi’s case that thoughtful human creativity and phylogenetic evolution are analogues. I read Polanyi as primarily interested in responsible stewardship in the cosmos and for humans that includes accepting our calling to explore the universe. Polanyi thinks that reductionistic accounts of natural selection are finally accounts that fatally dim the human capacity to understand and accept our calling.

Works cited:


Correspondence: J. H. Oldharr and Michael Polanyi. Box 15, Folder 5 in Papers of Michael Polanyi. Department of Special Collections. University of Chicago Library.
