Cartesian Habits And The 'Radical Line' Of Inquiry

David Kettle

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Cartesian habits of the imagination, thought to be abandoned when Michael Polanyi's theory of knowledge is embraced, may persist unrecognised and distort interpretation of this theory. These habits are challenged by a 'radical' reading of Polanyi which consistently finds a paradigm for knowledge in lively research. It is argued that this is rooted in an intention which is at once and irreducibly receptive and critical, and which gives rise to the' radical line' of inquiry. In this setting, Cartesian dualism arises when quieter knowledge, falsely represented to itself, becomes instead a paradigm for knowledge.

It is a familiar claim that Michael Polanyi's theory of knowledge offers a persuasive alternative to Cartesian epistemology. This claim seems straightforward at first sight. However, Cartesian habits of the imagination - by which I mean habits which are taken to have origins in Descartes, although they cannot necessarily be identified with him - are closely woven into the fabric of our thinking where they may often be active in unacknowledged ways. It may therefore happen that when we describe the contrast between Polanyi's account of knowledge and the Cartesian account, we do so unwittingly in terms which rely still upon Cartesian habits of the imagination. To another who recognises this, we shall appear not yet to have grasped the radical challenge Polanyi presents to Cartesianism. Famously, Marjorie Grene questioned whether Polanyi himself grasped this. In this paper, I wish to probe residual Cartesian habits of the imagination and to challenge them with the radical meaning of Polanyi's work.

I shall begin by describing Cartesian habits of the imagination, and then note how Polanyi's account of knowing challenges these habits with the primacy of indwelling. I shall then demonstrate how Polanyi may nevertheless come to be read in terms still governed by Cartesian habits of the imagination. Finally, I shall pursue some arguments and imaginative strategies which address this situation in the hope of evincing more surely, disclosure and embrace of a radical Polanyian stance.

The Cartesian Imagination

In Cartesian thinking, a particular spatial image rules our imagination. This is the image of ourselves as *looking on at the knowing subject as in every instance a determinate reality set among the realities of the world.* This image offers a picture of the act of knowing, of the knowing subject, and of what is known, as such. Our habitual reliance on this image lies at the heart of Cartesian thinking.

When this image rules our imagination we habitually conceive the act of knowing in a particular way. We picture an individual knowing subject before us on the one hand, and something (or someone) real known on the other hand, and the act of knowing as putting the former in touch with the latter.

There is also a suppressed, tacit dimension to this picture: within it, we place ourselves apart from the knowing subject and what is known alike so as to look at one and then at the other, side by side before us. In so doing, tacitly we place ourselves, on the one hand, apart from the knowing subject before us, in our act of viewing this subject themselves; while in the act of viewing what is known, we place ourselves, on the other hand, apart from the act in which it is known by the knowing subject before us. Expressed in an alternative way, on the one hand, we step back from participation with the subject in his or her viewing; and, on the other hand we allow ourselves direct observation of what is known apart from his or her act of knowing it. In addition, as we place ourselves apart both from the knowing subject and from the act of knowing, we place ourselves tacitly in a wider space outside both of the knowing subject and of what is known, each of these being separate within this space from the other and from ourselves. This tacit view is, we might note, fundamental to the primacy of doubt in a Cartesian outlook.

Now this tacit view is problematic. For should we advert consciously to ourselves as we tacitly place ourselves here, we shall now be guided by our ruling Cartesian image tacitly to place ourselves a 'second step back'. In this development, whereas we had tacitly placed ourselves apart from the knowing subject, we now see ourselves precisely as having been ourselves a knowing subject; and whereas we had, in the act of viewing what is known, tacitly placed ourselves apart from the act in which it is known by a knowing subject, and viewed it apart from this act, now we see that we have viewed it precisely in the act of ourselves knowing it. This reveals a self-referential inconsistency in the ruling Cartesian image. This inconsistency will generate an infinite regress if we attempt repeatedly to 'step back' and advert to our new tacit self-placement.

This tacit dimension of our self-placement is however systematically suppressed in Cartesian dualism: we simply look on at the knowing subject and at what is known, side by side over against each other within an assumed wider space. In particular we suppress the question of this our 'looking on at' as itself a knowing, and of ourselves as knowing subjects. This suppression is central to Cartesian habits of the imagination.

The Polanyian Challenge

Polanyi claims that all knowing is personal. It is attained through an act of indwelling in which our attention is directed from largely unspecifiable clues in our subsidiary awareness, towards a focus which embodies and integrates these in a coherent meaning. This is the structure of knowledge both in the case of symbolic representation and in the exercise of a skill (*PK*, *Chapter 4*). It also opens up a way of understanding the shared context of knowledge and skill within a particular, historical community of learning (*PK*, *Chapter 7*).

In Polanyi's account of knowing, the Cartesian habit of thought in which we imagine to step back and view the knowing subject, on the one hand, and what is known, on the other, from a wider space is challenged in the following ways:

- (1) We can no longer view ourselves as knowing subjects. Our awareness of ourselves as subjects cannot be focal, but rather remains always subsidiary; we know ourselves in our indwelling.
- (2) We cannot view *that which is known* apart from the act in which it is known personally, for it is hidden apart from this act. It emerges from hiddenness precisely within personal knowledge, in the hints and clues which

spur personal inquiry towards such knowledge and which find unexpected confirmations.

(3) We cannot step back from the knowing subject and that which is known *into a wider space* from which to view them. Rather our self-placement is one of immersion in experience through which hidden meaning invites us in 'exciting intimations', engrossing and beguiling us, and evincing from us a passionate effort responsibly to understand. Within this experience-filled 'space' and through responsiveness, we come to knowledge through indwelling. Such knowledge cannot be viewed from a wider space; rather such knowledge itself represents the space which we indwell and fill. Indeed, Polanyi suggests that our personal being itself may be thought in such terms: our knowing and being, he says, are co-extensive.³

In these ways, Polanyi's account of knowing confronts and challenges Cartesian habits of the imagination with the primacy of indwelling.

A Cartesian Reading of Polanyi

Nonetheless, Cartesian habits of imagination may persist in our thinking and secretly shape the way we interpret Polanyi's account of knowledge. This can happen quite unacknowledged because, as we have seen, the tacit dimension of self-placement, which is challenged by Polanyi's account, is systematically suppressed in the Cartesian imagination, and may remain so even now as we interpret him.

How will such a 'Cartesian' reading of Polanyi look? Characteristically, it will involve taking Polanyi's two categories of what we *rely on* (as clues in our subsidiary awareness) and what we *attend to* (in our focal awareness) and conceiving these by analogy respectively with *the knowing subject* and with *what is known* - as these are viewed in the Cartesian imagination. That is to say, we place ourselves apart from both what the knowing subject *relies upon* and what he/she *attends to*, looking at one and then the other, side by side before us, and viewing the act of knowing as linking the two. Thus, on the one hand, we place ourselves apart from the particulars which lie in the subsidiary awareness of the knowing subject, in the act of viewing these particular themselves. On the other hand, in the act of viewing that which is known by the knowing subject, we place ourselves apart from the act of knowing in which these subsidiaries are integrated by the knowing subject into that which lies in his/her focal awareness.

Such an interpretation of Polanyi begins in Cartesian fashion by picturing the subsidiary clues to a focal meaning as, in every instance of such meaning, a determinate reality set among the realities of the world. Now this might seem quite insupportable given Polanyi's description of such clues as 'often largely unspecifiable'. But, on the other hand, there are cases of knowledge where it is possible readily to specify those clues which find their integration in a focal meaning. It is these cases which lend plausibility to a Cartesian reading of Polanyi. Take, for example, our recognition of a written word through an integration of the letters of which it is made up. In such cases as this, it seems only too plausible for us to view the concrete act of understanding as an instance of attending *from one thing* (in this case, letters) *to another* (in this case, a word) in which what a person attends *from* and what he or she attends *to* are familiar to us conceptually apart from the concrete act of knowing in which these (in this case as an alphabet and a vocabulary) are combined. In this way, the concrete act of understanding gets interpreted by reference to a prior conceptual framework (such as alphabet and vocabulary).

By appeal to cases such as these where clues are specifiable, the Cartesian reading of Polanyi assumes that clues are always determinate and in principle specifiable. In other words, it assumes that (on the one hand) the particulars which serve as clues in a person's subsidiary awareness can always in principle be conceived apart from this function, even though as such they do not have the meaning which they have when functioning concretely as clues. And it assumes (on the other hand) that what is known in a person's focal awareness can be conceived apart from his or her concrete knowledge of it. In this way, the act of knowing which integrates clues into a focal meaning is seen as achieving a contingent relation between two distinct conceivable entities or sets of entities, each belonging to a prior conceptual framework which the onlooker brings to the viewing of this act.

Expressed formally, this understanding of focal and subsidiary begins from the recognition that in certain given cases, that which lies in our subsidiary awareness and is constitutive of meaning can be specified as a set of particulars X and attended to focally. Thus there are particulars X which can be in our attention either in a focal or a subsidiary way: we can either look at X or through X. When we look through X, our focal attention is upon something else, Y. Or again, we can pay focal attention either to X or to Y.

When Cartesian habits of imagination produce this dualistic understanding of focal and subsidiary, then Polanyi's statement that all knowing is by indwelling gets understood by reference to this, resulting in the appearance of the familiar regress which haunts Cartesianism. For it now appears that given any X in our focal attention, there is another X1 which we attend through in this moment. Similarly when we advert to X1 itself, there is another X2 which we attend to in this moment, and so on in infinite regress. This regress is generated by a false reading of Polanyi's account of knowledge which is grounded in the very Cartesian habits of imagination which his account challenges. In a broad sense, we may say that Polanyi's account is read here by indwelling/relying on the Cartesian account, and therefore reproduces the self-referential inconsistency inherent in the Cartesian account, whereas Polanyi's account should be read by indwelling Polanyi's account itself, in self-referential consistency. The question now arises, how can we break this hold of the Cartesian imagination even upon how we interpret Polanyi? What arguments can we use? What appeals can we make to the imagination?

Knowing 'From Inside": A Parable by C. S. Lewis

We are given a lead, I suggest, in a short paper by C. S. Lewis titled 'Meditation in a Tool-shed'. In this Lewis recounts his experience of standing in a dark tool-shed into which there shines a sunbeam, bright with specks of dust floating in it. He moves so that the beam falls on his eyes. Now he no longer sees the dark shed, or the beam itself: he sees the sun, framed by the leaves of a tree and by the crack above the door through which the beam strikes.

Lewis contrasts the experience of looking *at* the beam and looking *along* it. He finds here an analogy for two ways of knowing something. In modern thinking, he says, knowledge is understood exclusively in the former terms. The only authentic knowledge of something is that which we have from outside, not from within. And yet, he points out, there is a self-referential inconsistency here: in any given instance, we can step aside from the act of looking 'at' something and analyse this act itself as an act of looking 'along' - so that it becomes itself an act which we now look 'at', with the effect of suspending its status as knowledge for us. What is needed, says Lewis, is that in any given instance we should be open to both kinds of knowledge.

The theme of Lewis' discussion here is the sunbeam and its character as something which yields distinctive knowledge when it is known 'from inside', that is, by looking along it. There is an evident parallel here with what Polanyi calls knowing by 'indwelling' and with the directional character of our attention from subsidiary to focal, from proximal to distal. My interest in recounting Lewis's meditation, however, is rather to draw attention to the peculiar character of that which Lewis sees by looking along the sunbeam, and of the viewpoint from which he sees this. With respect to the former: that which he sees through the beam - that is, the sun framed by tree leaves - can be seen only by looking along the beam. There is no possibility of looking at it by standing apart from the beam and looking at it from elsewhere in the shed. With respect to the latter: the viewpoint from which Lewis sees the sun in no way accounts itself for how it appears to him. It is not, for example, a viewpoint chosen beforehand which brings its own perspective; in itself, it tells us nothing about what is to be seen by looking along it. Rather, that which is seen through the beam accounts entirely for the beam and the meaning it has as that within which this can be viewed.

Looking along the sunbeam, then, models a situation where not only *the act of knowing* but also that *from* which we attend and that *to* which we attend in this act can be known *only within this act*. Moreover, what is known here is not to be thought of as located within but hidden from the 'wider' world represented by the tool-shed; rather *it belongs to a larger sphere than can be known from elsewhere in the 'tool-shed' world*. By analogy, there may be personal knowledge which cannot be viewed by 'stepping aside' in Cartesian fashion because it opens on to a world larger than that into which we imagine here to step back, and which is hidden from the latter. Here we find renewed, Polanyi's radical challenge to our Cartesian habits of the imagination which persist in how we interpret Polanyi himself.

How can we understand more fully the Cartesian imagination as actually inhabiting a smaller world than that which Polanyi presents to us? How does this smaller world come to present itself to us, in Cartesian habits of the imagination, as the larger world? How can we understand the activity which Cartesianism counts as 'knowing from outside' as at root a special case of a more general 'knowing from within'? To answer this, we must return to the situation where Polanyi finds a radical paradigm for all knowing.

Knowing 'From Outside' As A Particular Case Of Knowing 'From Within'

Polanyi finds a paradigm for all knowing in our knowledge of a good problem. He writes:

the efforts of perception are evoked by scattered features of raw experience suggesting the presence of a hidden pattern which will make sense of the experience. Such a suggestion, if it is true, is itself knowledge, the kind of foreknowledge we call a good problem. Problems are the goad and guide of all intellectual effort, which harass and beguile us into the search for an ever deeper understanding of things. The knowledge of a true problem is indeed a paradigm of all knowing. For all knowing is always a tension alerted by largely unspecifiable clues and directed by them towards a focus at which we sense the presence of a thing - a thing that, like a problem, embodies the clues on which we rely for attending to it.⁵

Comparing such lively research with knowledge in general, Polanyi writes 'Research is an intensely dynamic inquiring, while knowledge is a more quiet research. Both are ever on the move, according to similar principles, towards a deeper understanding of what is already known.' And again, 'While the integration of clues to

perceptions may be virtually effortless, the integration of clues to discoveries may require sustained efforts guided by exceptional gifts. But the difference is one of range and degree: the transition from perception to discovery is unbroken.'

Polanyi makes a somewhat comparable distinction between knowledge which entails deep or less deep indwelling. He traces in these terms the difference between knowledge of a work of art or of a person, and observation as practiced in the natural sciences. Both involve indwelling, he says; the difference is only a matter of degree: 'indwelling is less deep when observing a star than when understanding men or works of art' Polanyi also says that indwelling is less deep when formulae are used in a routine manner than when, during their use, the theory to which they belong is contemplated and enjoyed. 9

With regard to a Cartesian interpretation of Polanyi, the key issue arising here is the relation between attending *from* and attending *to*. We may begin by noting that, on the one hand, in Polanyi's account of lively inquiry we do not start with particulars which we rely upon in advance in order then to conduct inquiry. Inquiry does not depend upon our indwelling or relying beforehand on certain given clues. Rather, we might say that inquiry *is* an act of indwelling, within which clues first come to light. This paradigmatic act of indwelling can therefore be understood as rooted in and inseparable from an intention of receptivity towards indeterminate reality and towards whatever there is here to be indwelt as a clue in the first place. On the other hand, inquiry is not directed in the first instance at focally *identifying* clues, which then become for us the occasion of an act of indwelling for the first time. Rather, inquiry always *already involves indwelling*, and it is within this that clues arise for us, precisely through their operation *as* clues.

These considerations can be restated by reference to what we attend *to*. On the one hand, our act of attending *to* does not depend upon our indwelling or relying beforehand on certain clues, and arise for the first time only once such indwelling is in place. Rather it is *as* we attend, that clues to what we are attending *to* come to light for us; and they are guided and corrected as clues by this continuing attention. This paradigmatic act of attending *to* can therefore be understood as rooted in and inseparable from an intention of critical appraisal of indeterminate reality and of whatever is here inviting our attention. On the other hand, our reliance upon clues does not wait upon an act of attention *to* these, in which we identify them as clues. Rather, attention *to* is always already *through* these.

It is in this way, as we pay attention - in the very full, personal manner of lively research - that there form together, the clues which we attend *from* and that which we attend *to*, in essential relation to each other. The contents of our subsidiary and focal awareness can be described as mutually inter-animating or even as mutually constitutive. It is this setting which gives 'attending *from*' and 'attending *to*' their most lively, paradigmatic meanings, together, and between them defines a '*from-to*' direction which we might call *the* '*radical line*' of inquiry.

The label 'radical' here signifies that this 'from-to' line is not to be understood merely as one line among others within some already known space - despite the Cartesian habit of conceiving all lines in this way. Rather this is the line arising as the from-to 'direction' of inquiry is generated in the first place; it is the line which opens up in the first place a space known in the depth of 'from-to' engagement as we give ourselves in the primary intention of radical enquiry.

It is important to stress the integrity of that primary intention in which this is rooted. As a stance of openness or responsiveness to (indeterminate) reality, ¹¹ this primary intention is at once receptive and critical. We cannot reduce this to an alternation between two kinds of intention. Rather, the two ways of attending represented by 'relying on' and 'attending to' arise out of this intention, as reality is engaged. To describe this intention as irreducible is not to deny that both in discovery and in the progressive deepening of understanding of a comprehensive entity, there is typically what Polanyi calls 'a see-saw of analysis and integration'. ¹² It is rather to insist that each of these is guided by its immediate relation to the other, which is to say, by the whole represented by these two taken together.

It is necessary to emphasise this point because we tend habitually to think of receptive 'relying on' and critical appraisal or analysis as two strictly alternative stances. And, of course, in many instances, in obvious ways they are. On the other hand, there are instances where these two can by no means be separated out. Rather, criticism is pursued precisely from within an action, and 'relying on' is precisely the means of attentive, conscious exploration. Take, for example, when we test a tool: we *test* (critically) *whether* it is a good tool by *trying* (receptively) *to* use it to good effect. The lively research which Polanyi identifies as paradigmatic for knowledge is among such instances where trusting and testing are inseparable, and rooted in an irreducible primary intention at once of receptivity and critical appraisal. And it is here, as I have said, that trusting and testing, receptivity and critical appraisal find their most lively, paradigmatic meaning.

We might note here that it is not always clear that Polanyi himself follows consistently his own designation as paradigmatic for indwelling, the cases of lively research and of deepest indwelling. For example, in his discussion of 'dwelling in and breaking out' (PK, p.195ff), he seems to draw a *contrast* between indwelling and lively research. In relation to the former, he speaks of indwelt conceptual frameworks as 'screens' between ourselves and things which we observe and manipulate through them. In relation to the latter, he says that as we 'break out' of such indwelt frameworks in 'phases of self-destruction', we have 'direct experience' of contents in an 'intense if transient moment of heuristic vision'. This is hardly to present indwelling as paradigmatic for research or knowledge. 13

To note this, only spurs us as we now identify how primary intention gives rise in certain situations to one particular experience of knowing among others which may then capture and distort our imagination and in so doing generate the false Cartesian paradigm for knowledge. Let us begin by recalling what Polanyi designates 'quieter' research, and 'less deep' indwelling. These arise when, active in lively primary intention, we find that the vital inter-animation between subsidiary and focal subsides, and the former settles into an established meaning which is not significantly developed in the course of further attention. Now, whereas this meaning has arisen in the first place in intrinsic relation to what is focal and so to the whole, it appears in practice to subsist independently of these. It can now be employed as an acquired habit of understanding or skill. Such habitual or uncritical reliance upon meaning may occur in our reliance upon a familiar conceptual framework, category, or research methodology. It may be found when we use these to probe something critically, without allowing the practical possibility that our encounter may open this meaning itself to new developments. In this case, what we attend from and to lose their primary character as that which we attend through from one to the other in primary attentiveness. Now, what we attend from functions as a presupposed meaning, a screen or grid coming between us and reality, 14 or a horizon which hides from us its own original setting within an act of lively inquiry. And what we attend to becomes merely the critical question of the instantiation or otherwise of a concept. Taken together with other such questions, this generates the logical spaces 15 within which we conceive distinct objects or properties within the horizons of presupposed meaning.

The Cartesian development now arises when this experience of routine knowledge, *as this is understood within such knowledge itself*, is taken as a paradigm for all knowledge - including for our knowledge of ourselves. That is to say, knowledge is understood in terms which unreflectively presuppose, and remain within the horizons of, established meaning. The knowing subject is now seen alongside what is known, and these two are seen together supposedly within a wider space. The act of knowing is now pictured as connecting the knowing subject and what is known - a line, as it were, between them. However, this entire picture - the referents which constitute the knowing subject and what is known, and our tacit self-placement over against them - presupposes established meaning; and at the level of meaning, we have by no means stepped aside from the act of knowing; rather, we remain within it, we lapse into it as we lapse into habit. Nor can we step out of this by adverting to this presupposed meaning; for in the attempt to do so, we shall continue to rely precisely upon such meaning. We shall therefore merely replicate the existing dichotomy between the subject we imagine to view and the meaning from which we view it, thus setting up the familiar self-referential Cartesian regress.

The truth hidden from this Cartesian viewpoint is that its world is actually smaller than the world which is engaged within lively inquiry and knowledge. It is smaller because it has arisen within and is limited by established meaning, and has no access to the larger world in which such meaning itself remains alive to enlargement through deep indwelling. In order for such a larger world to be recovered, presupposed meaning must be restored to its original setting within the primary intention of knowing, where tacit knowing may come alive again in the inter-animation between what we attend *from* and attend *to*. And this requires abandoning the Cartesian stance of detached 'looking on', and entering anew *into* the act of vital knowledge. It requires that we give ourselves to looking 'along the beam' (to recall C.S. Lewis's parable) of inquiry and knowledge at its most lively - to indwelling the 'radical line' of inquiry.

Indwelling and the Primacy of 'Direction'

The challenge which this account offers to Cartesian habits of the imagination is also embodied by what we might now call the primacy of direction in knowledge. Expressed briefly, all specifications of what we attend from or attend to are relative to each other within our primary responsiveness to reality, in which we explore what most fully constitutes the 'radical line' of inquiry or fundamental 'from-to' direction which is constitutive for all knowledge and inquiry.

This relativity is reflected in the multiplicity of accounts which can be given, with regard to any given conversation in which we are engaged, of the *from-to* direction of our attention. We could be described as attending from the sounds of the other's speech to the meaning which these sounds embody; or as attending, as we listen, from questions in our mind to their possible answers. In more technical philosophical terms, we could be described (employing Wittgenstein's language) as attending from or relying upon the 'grammar' of our speech to its empirical content; or perhaps (employing J. L. Austin's language) as attending from the performative force of speech-acts to their content. All of these descriptions may suggest themselves at once with regard to a single conversation, even one of the briefest kind.

For a 'Cartesian' reading of Polanyi, this multiplicity of accounts is problematic. Any one account of what we attend *from* and what we attend *to* must exclude other accounts, just as we can only stand in one place, and look at one point, at a given moment. We can then in principle step aside and look on at what the knowing subject attends *from* and attends *to*. However, seen in a 'radical' Polanyian context, any particular account of

what we attend *from* and *to* is itself an act of specification which takes place *within* the setting of our primary intention and is relative to this. Alternative accounts are therefore not mutually exclusive but rather describe possible alternations *within* that primary intention.

We are helped to picture this by the case when a series of such accounts is ordered by logical priority - that is to say, in the case where we may be described variously as attending from S1 to S2, or from S2 to S3, or from S3 to S4, and so on. One such case is the series *referent, predication, truth*, and *import*, each as the possible object of our attention. Suppose, for example, that a neighbour says to me 'That tile is a bit odd'. I respond by attending 'from' his roughly pointing arm as I identify his *referent* as a particular tile on the roof of my house. At the same time, however, I attend 'from' this referent as I attend to his *statement as a predication*: what does he mean by 'a bit odd?'. Again, I attend 'from' his statement as I attend to its *truth*: is he right? And finally I attend 'from' this truth - namely, the oddness of the tile, to which he draws my attention - as I attend to its *import*: has he done well to point this out, because something needs to be done about it? Each aspect of my act of knowing here is subsidiary for me as I attend focally to the next. However, all are contained in my primary intention which is at once receptive to 'owning' or attending *from* all of these, and critical in evaluating each within the whole. It is as I attend in this way *through them all*, that I either come to appreciate fully what my neighbour says, or else find that one or another aspect of what he says stands out as problematic within the whole, and invites special attention.

Such attention through a series of questions is in some ways analogous to the act of peering through a microscope at a translucent organism and adjusting the focal plane to bring different parts of this to attention within the whole. The analogy is of course a limited one because it places the knowing subject outside of every focal plane, and because there is no integral requirement to view any given focal plane relative to the others. This opens the door again to a Cartesian reading, in which we imagine to step aside and look on at the knowing subject and what is known. By contrast, in the knowledge for which this is an analogy, the knowing subject is embodied precisely in his/her indwelling the 'radical line' of inquiry, within which there arise all the terms of the series, in a world which unfolds not by 'stepping aside' from this but precisely by critical immersion in it.

This picture of paradigmatic inquiry as attending in the *direction* constituted by inquiry and knowledge at their most lively defeats the Cartesian habit of imagining to look *at* that which the knowing subject attends *from* and attends *to*. It represents a radical reading of Polanyi which consistently follows through his identification of lively research as a paradigm for all knowing, and which finds this rooted in a primary intention which is at once receptive and critical.

Notes

¹ My concern in this paper is not with the meaning and intention of Descartes' epistemology understood in its original setting, insofar as this can be ascertained, but with habits of thought or ways of picturing things which have commonly been associated with Descartes and which are widespread and are taken for granted to the point of being almost invisible to us all. The question how far Descartes is to be held responsible for these developments is not a question I shall discuss in this paper. It has been pointed out that in this and other regards my paper echoes themes of William Poteat. I certainly share his concern to challenge a pervasive, regnant Cartesian 'picture' which falsely privileges routine theoretical knowledge (or in Poteat, the formalised, 'atemporal' rationality associated especially with mathematics); and I share his interest in the how this distorts

the relation between that which is logically antecedent and logically consequent. See Poteat, *Polanyian Meditations*, Duke University Press, 1985.

² Marjorie Grene, 'Tacit Knowing: Grounds for a Revolution in Philosophy', *Journal of the British Society for Phenomenology*, Vol.8, No.3, October 1977, pp.164-171, p.169.

³ Michael Polanyi, 'Knowing and Being', in Polanyi, *Knowing and Being: Essays by Michael Polanyi*, ed. Marjorie Grene, Routledge & Kegan Paul, 1969, pp.123-137.

⁴ C. S. Lewis, 'Meditation in a Tool-shed', in Walter Hooper (ed), *God in the Dock: Essays on Theology and Ethics*, Eerdmans, 1970.

⁵ Polanyi, 'The Unaccountable Element in Science', *KB*, p.117.

⁶ Polanyi, 'Knowing and Being', KB, p.132.

⁷ Polanyi, 'The Logic of Tacit Inference', KB, p.139.

⁸ Polanyi, 'Tacit Knowing', KB, p.160.

⁹ Polanyi, *PK*, p.196.

¹⁰ An example of this process (but one which depends upon the existence of an already used but unfamiliar language) is given by what Polanyi calls a 'dual act of sense-reading': 'An unintelligible text referring to an unintelligible matter presents us with a dual problem. Both halves of such a problem jointly guide our minds towards solving them and will in fact be solved jointly by the understanding of the object referred to and the words referring to it. The naming of the things and of the terms designating them is discovered at the same time' ('Sense-Giving and Sense-Reading', *KB*, p.189). Polanyi's reference to 'both halves of the problem' should not be taken to mean that we are engaged here merely in seeking a correspondence; we may be guided here to 'see' something for the first time as we name it.

¹¹ A 'stance of openness or responsiveness' must bear connotations here both of Polanyi's reference to our innate restless, exploring activity (*PK*, p.132) and his account of heuristic passion (*PK*, p.142-4).

¹² Polanyi, 'Knowing and Being', KB, p.129.

 $^{^{13}}$ It is true that Polanyi goes on to describe this moment of 'breaking out' in terms reminiscent of indwelling: such contemplation, he says, 'pours us straight into experience; we cease to handle things and become immersed in them', which brings 'complete participation of the person in that which he contemplates' (PK, 197). Moreover, he can speak of the 'indwelling of the Christian worshipper' - 'potentially the highest degree of indwelling that is conceivable' - as indwelling despite that fact that he describes this as 'a continued attempt at breaking out' which is 'fulfilled most completely when it increases this effort to the utmost' (PK, 198-199).

When he now describes this as resembling 'the heuristic upsurge which strives to break through the accepted frameworks of thought, guided by the intimations of discoveries still beyond our horizon' (*PK*, 199), we seem to be right back with his description of lively research - except that there guiding intimations lead us precisely to *indwell clues*, rather than to *break out of indwelling*. A 'radical' reading of Polanyi, I suggest, restores the former 'grammar' of indwelling as paradigmatic, so that the 'breaking out' which Polanyi describes is actually a renewal of indwelling at its most vital.

Notes on Contributors

Steven Grosby, Associate Professor, Department of Philosophy and Religion of Clemson University, received his Ph.D., under the direction of Edward Shils, from the Committee on Social Thought of The University of Chicago (sgrosby@CLEMSON.EDU).

James A. Hall is a psychiatrist from Dallas, Texas (dreamdoc@internetdesk.net). His paper "Polanyi and Psychoanalysis," prepared for the 1991 Kent State centennial Polanyi conference, was published in *TAD* 18: 2 (1991-92): 5-9.

David Kettle lives in Cambridge, England. He is an Anglican priest and Coordinator of the Gospel and Our Culture network in Great Britain (www.gospel-culture.org.uk; e-mail: DJK@kettle.force9.co.uk). He has previously published in *TAD* the paper "Michael Polanyi and Human Identity" (21:3 [1994-5]: 5-18).

Phil Mullins has been the editor of *Tradition and Discovery* since 1991. He is Professor of Humanities at Missouri Western State College, St. Joseph, MO 64507(mullins.mwsc.edu).

Lou Swartz was trained in law and sociology and teaches in the School of Law, State University of New York at Buffalo (lswartz@acsu.buffalo.edu).

Electronic Discussion List

The Polanyi Society supports an electronic discussion group exploring implications of the thought of Michael Polanyi. Anyone interested can subscribe; send a query to owner-polanyi@lists.sbu.edu Communications about the electronic discussion group may also be directed to John V. Apczynski, Department of Theology, St. Bonaventure University, St. Bonaventure, NY 14778-0012 E-MAIL: apczynsk@sbu.edu PHONE: (716) 375-2298 FAX: (716) 375-2389.

¹⁴ This corresponds to Polanyi's understanding of indwelling a 'screen' in *PK* p.197. See note 14 above.

¹⁵ I follow Karl Heim's terminology in Karl Heim, *God Transcendent*, (eng) Nisbet, 1935.