

Polanyians on Realism: an Introduction

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ABSTRACT Key Words: Polanyi's realism; scope of realism; traditions of inquiry; uses of "real"; values and meaning

This introduction to a special Tradition and Discovery issue on Polanyi's realism summarizes, and comments on the views of Jha, Gulick, Mullins, Cannon, Puddefoot, Meek and Sanders. All agree that Polanyi advocated a scientific realism hanging on the theses that reality is independent of human conceptualizations and that it is partially and fallibly knowable. Major differences concern its scope. All agree that it is comprehensive, pertaining not only to common sense and science but to intrinsic and ultimate values, and perhaps the divine realities as well. Whereas Jha and Gulick argue a more limited scope, others defend a Polanyian position by drawing in various ways on the personal (Cannon) and social (Mullins, Sanders, Puddefoot) coefficients of the practice of inquiry. The debates show clearly that the relationship between Polanyi's epistemology, axiology and hermeneutics deserve further scrutiny.

1. Introduction

The present issue of *Tradition and Discovery* on Polanyi's realism contains the papers that were written for the 1999 Annual Meeting of the Polanyi Society held in Boston, in conjunction with the AAR, on November 18-19. With the exception of Dale Cannon and John Puddefoot who had commitments elsewhere, the other contributors participated in the panel discussions. Afterwards, all papers were revised with the exception of that of Walt Gulick, which even to his own surprise appeared in *Polanyiana* (1999) soon after the annual meeting. Fortunately, Gulick graciously offered to write a new essay that would not only summarize and develop the main points of his earlier paper but also reply to his critics. As most of the authors have written on the subject before, the reader may expect to find here the intermediate results of an ongoing exploration and discussion by Polanyians.

The question "What is realism?" has many answers. It is not disputed, I take it, that it is a metaphysical thesis which says at least that reality exists independently of our conceptions of it. According to John Searle, for example, realism is an ontological thesis that says that there exists a reality totally independent of our representations. And whereas Michael Devitt distinguishes two dimensions, a claim as to what entities exist and a claim about their independent nature, Crispin Wright rightly points out that there is an epistemological side to realism as well: "we are, by and large, and in favorable circumstances, capable of acquiring knowledge of the world and of understanding it."¹ But this is where apparent simplicity comes to an end. For realism is not only contested by idealism and skepticism, it comes itself in many guises. Not only one may find weak, modest and naive, robust or sophisticated versions but, as we'll see, it may vary across domains of inquiry as well. For example, it would not be inconsistent to uphold scientific and common sense realism but to reject realism in mathematics or in the humanities. Similarly, advocating theological realism or ethical realism (objectivism) while being an anti-realist vis-à-vis the unobservable entities of science is as such not inconsistent - though such a position would obviously be quite difficult to uphold in current Western culture. Again, someone might be a common-sense realist regarding objects like rocks, trees and trains, but an anti-realist as regards subatomic particles, values or God. Such a person might hold that material objects exist independently of our knowledge or awareness of them but that muons, photons, and the like are mere

instruments for calculation and prediction. That person might also hold that aesthetic, moral or religious values lack any independent, objective existence but are mere human constructions.

As to Polanyi's realism, it is undisputed that he advocates the independence thesis: reality "is largely hidden to us, and *existing therefore independently of our knowing it*" (PK 311). It is also undisputed that he maintains that human beings are able to come to know and understand the world, albeit always partially and aspectually. But, as the essays will show, controversy crops up as soon as we start to ask for the details. According to the theory of personal knowledge, tacit knowing has not only functional, phenomenological and semantic features, but an ontological aspect as well. But how precisely are the ontological and epistemological aspects of Polanyi's realism related, especially when we take the "ontological equation," the claim that knowing and being are structurally analogous, into account? What to think of his ontology of hierarchical levels of knowing and being and of the claim that the differences between the humanities and the natural sciences is one of degree and not of a kind? How to take the meaning and scope of Polanyi's novel conception of reality and what is its relation to the concepts of knowledge and truth? Should we understand it as a pan-realism that extends from common sense and the natural sciences all the way to axiology and theology? Or is this picture an earlier development, one that was abandoned somewhere in the late sixties in favor of a general hermeneutics of sense reading and sense giving? In what way do Polanyi's political, social and moral ideas shape his realism and how is he able to eschew both absolutism and relativism?

This list of questions is by no means exhaustive but it brings out clearly that many core elements of Polanyi's philosophical concerns are at stake. It should therefore not be surprising that the answers will sometimes differ as widely as the philosophical interests and agendas of the authors and that some are more strongly critical of Polanyi than others. The reader should therefore expect to find ample controversy and lively debate. As a taste of what's in store, I'll briefly summarize what seem to me the salient points of the contributions and then go on to add some comments on issues which are raised by more than one author and thus seem to offer interesting prospects for further discussion.

2. A Plethora of Views

The Architectonic and Its Coherence

Stephania Jha's essay "Polanyi's Problematic 'Man in Thought'" focuses on the coherence of the overall structure, the architectonic, of Polanyi's work as it can be distilled from *The Tacit Dimension*. Jha's ancestry is Hungarian and as she belongs to the very few people who try to further Polanyi studies in the harshly critical and skeptical world of academic philosophy, she is well aware of the controversial nature of Polanyi's ideas vis-à-vis contemporary philosophy. Her central point is what she calls "the ontological equation," the thesis that there is a structural equivalence between knowing and being. By and large accepting the innovative epistemology of tacit knowing, Jha argues that Polanyi's ontology lacks "a simple coherence" and that it is "fragile, unscientific and philosophically troublesome" (cf. section 3a). Especially the ontology of living things is highly controversial because it not only challenges the standard scientific notion of evolution as a chance mechanism but also intentionally keeps open the possibility of an intelligent first mover.

Regarding Polanyi's realism, Jha points out that he not only took the abstract and natural objects of the exact and natural sciences as real, but also objects of mental life. But as this "general realism" or "modified rational realism" is not reductionist, her conclusion is that it "cannot be a mature realist-empiricist position" (section 3b).

Beyond Realism: the Problem of Meaning

This brings me to Gulick, who rejects Polanyi's realism of mental objects, not because it is not reductionist, but rather because it leads to a conflation of what is real and what is meaningful. Gulick's argues that the later Polanyi found a middle road between objectivism and relativism by transforming the theory of tacit knowing into a hermeneutics of sense reading and sense giving, of which scientific inquiry is but one version, as the center of his thought. Gulick rejects as inadequately discriminative two notions of reality which he thinks Polanyi employs: the "honorific" (real is what is valuable) and the notion related to IFM criterion (real is what produces indeterminate future manifestations). Also rejecting meaning/realism holism (real is what is meaningful), he holds that only what exists independently of human knowing deserves to be called "real." After an illuminating historical excursus (section 3) into the conceptions of reality employed by a number of great thinkers ranging from Plato to Derrida, Gulick then goes on to address the issue of "how to understand the ontological status of cultural forms of meaning." They may be called real, he concludes, "insofar as they manifest an empirical component that is determinative of what they are" (section 4). Thus, for example, the term "God" may be richly meaningful but God is no more real than beauty, truth or goodness. Still, values or ideals are assigned a special status in that they could be affirmed simultaneously (a) as universal and real and (b) as transnatural integrations bringing our experiences into ideal order (cf. *ibid.*). Finally, Gulick rejoins his critical conversations with Mullins (on sensation as ensuring access to reality), Cannon (on his use of the notion of "intrinsic meaning") and me (on relativizing the meaning of real to traditions of inquiry and my use of an "honorific" notion of the real).

The Real As Meaningful

Phil Mullins's essay is a rejoinder to earlier conversations between himself, Gulick and Puddefoot. Tracing the history of Polanyi's use of the term "reality" (section 1), Mullins argues that it gained special importance in his philosophy of science in the late fifties and sixties mainly as part of his critique of positivism. "Reality," as Mullins shows, is for Polanyi not some firm ground underlying all appearances, but rather something largely hidden and thus known only vaguely though with an unlimited range of unspecifiable expectations attached to it. Next, he summarizes the main points made in an earlier article (1997) on what he calls Polanyi's "participative realism." Pointing out that it is not some sophisticated ontological thesis, Mullins argues that it had best be understood in the context of his aim "to develop a panoramic vision of responsible humanity at home in the universe." He also emphasizes that "Polanyi's focus is upon persons as members of interpretative communities using our unspecifiable powers to indwell and discover new meaning that transforms us" (section 2). He then criticizes Gulick (1999) not only for making the distinction between the real and the meaningful unduly severe but also for trying to found the latter on an alleged direct access between uninterpreted sensation and reality. The distinction, Mullins maintains, "severs what Polanyi has worked so hard to show is one seamless piece," and the access cannot be direct but must be mediated because access "comes to us as we integrate that in which we dwell" (section 3). Considering the attempt to secure direct access to reality by appeal to sensation, a philosophical "cul de sac," his main objection is that Gulick is transforming Polanyi's realism into an ontological scheme for "clarifying the parameters of primitive causality."

Realism and Commitment

In his contribution, Dale Cannon concentrates on differences between Polanyi's realism and more traditional conceptions of it. Regarding the problem of its scope, Cannon emphasizes that, on Polanyi's construal, reality is itself a commitment target and that no contact with it is possible "except by way of passionate personal commitment." This raises "the paradox of transcendent reference," i.e., "how [it is]

possible to refer committally ... to a reality that transcends subjective grasp” (cf. section 2). The paradox can be solved by distinguishing between the subjective and the personal, the latter being in the nature of a first person accreditation as responsible judgment in virtue of one’s participation in what genuinely transcends one’s subjectivity and thus establishes relational rapport with reality. On this construal, Cannon maintains, Polanyi’s realism is both coherent and comprehensive because such transcendence can also be achieved in the humanities. Next, Cannon deals with the status of values like reality, truth, beauty and justice as “sacred impassioning ideals,” the self-transcending pursuit of which makes human life most worthwhile. Against the widespread hermeneutics of suspicion, self-transcending commitment to these values may restore their reality, authority and power over us (cf. section 3). Moreover, in transcending mere subjectivity, contact with and discovery of intrinsic or objective meaningfulness can be achieved, in human creations as well as in natural entities. In this connection, Cannon criticizes Gulick (1999) for defining meaning as necessarily extrinsic (cf. section 4). Finally, Cannon compares Polanyi’s post-critical realism with Kant’s critical idealism, arguing that the former allows us to achieve tacitly a relational contact with noumenal reality. Our representations of reality constitute a map of it and thus truth may be retained as correspondence, not between the map and noumenal indeterminate reality, but between the map and our tacit and fallible acquaintance as “lived rapport” with that reality. This, Cannon claims, goes not only for science, but also for common sense and the artistic, humanistic and religious aspects of reality as well.

Trust, Resonance and Worthwhileness

John Puddefoot characterizes Polanyi as primarily a political philosopher and the aim of his essay “The Trust Relationship” is to show that the traditional notions of reality, truth and knowledge had better be replaced by those of trust, resonance and the worthwhile. Unlike the former, the latter denote our inherently cultural accreditations not as absolutes to be forced upon, or to exclude others. An echo of this “imperialism” might still be heard in Polanyi’s saying “that our vision must conquer or die” (PK 150). Interesting and novel is his suggestion that trust must be central to Polanyi’s thought because it defines a person as a participant in cultural traditions. Provocatively calling them “tribes,” Puddefoot argues that these traditions shape our knowledge and values and thus also our view of reality. Taking metaphysical realism, including a critical notion of truth as correspondence, as his paradigm example of an absolutist position, he sets out to deconstruct it in order to replace the rhetoric of universal truth (by our light) with a more human view of truth “as only the best we can do right now from our very narrow perspective on the world” (section 1). The obvious charge of relativism is eschewed by an appeal to the paradox of self-set standards, which allows members of traditions, that “maintain superior trust-structures to achieve superior understanding of what to affirm and deny” (section 2). Referring to his earlier essay on “Resonance Realism,” Puddefoot expresses agreement with Jha on her misgivings about Polanyi’s transfer of teleology into his ontology. Criticizing Cannon for his overemphasizing commitment to truth and reality as “sacred impassioning ideals,” he concludes that Polanyi’s supreme achievement lay in merging his epistemology and ontology into the personal and above all into the convivial or political. Finally, he argues that because there is no “view of nowhere,” that is, an unattainable God’s eyes point of view, what we hold to be true is what we live by.

Contact With Reality

With her contribution, Esther Meek returns to the field of Polanyi studies after an absence of almost fifteen years. Affirming that the concept of discovery implies something there to be discovered, she suggests that Polanyi provides a *tertium quid* between modernism and postmodernism. The summary of the main findings of her dissertation on Polanyi’s realism (sections 3-8) provides a clear exposition of the nature and criteria of “contact” with independent reality. The experiential intimation of indeterminate

future manifestations that reality is going to reveal (the IFM Effect), and the criteria of contact are explicated in a way that lends further substance to Polanyi's definition of reality. After comparing Polanyi's ideas on the progress of knowledge and on truth with that of philosophers of science and analytical philosophers who were his contemporaries (e.g., Popper, Lakatos and Kuhn), Meek suggests that the notion of "correspondence with reality" may be retained in discovery in that we do not match what we know with the world "out there," but with what we have come to know tacitly. She criticizes John Puddefoot's proposal to replace "truth" by tribally determined effectiveness, arguing that his view is not the only alternative to metaphysical realism, not Polanyian and open to similar criticism as metaphysical realism (cf. section 9). She concludes the article by pointing out that theorists of personal knowledge cannot do without sometimes even 'destructive' analysis - provided that they reintegrate their findings into the larger context of their striving for the reality and truth in which they are immersed.

Reality in Context

In my own contribution, I try to clarify the main ingredients of the comprehensive realism that I believe Polanyi was trying to develop. I start my exploration of the scope of his realism with his view of a hierarchy of the various levels of scientific and scholarly inquiry. After exploring the role and status of epistemic (truth), moral (goodness), aesthetic (beauty) and spiritual (charity) values, I try to explicate the way in which these intrinsic and final values shape the life of communities of inquiry and its participants. I suggest that implicit in Polanyi's realism is an axiology which has it that intrinsic values like truth, beauty, justice and love, are objective and thus real to those who are dedicated to their always partial realization. Contra Gulick, I argue that his proposal to restrict the scope of the concept of reality to what is empirically ascertainable leaves no room at all for the reality of such values. As ideal standards, I take them to be embedded in, and partly constitutive of, the exploratory practices in which varying communities of explorers are engaged. Though not denying the possibility of elaborating Polanyi's realism in a panentheist direction, I suggest a neo-Wittgensteinian solution to the problem of theological realism: what counts as "real" within a given context depends on, and should be interpreted in terms of, what the community of inquirers in question mean by it. This solution resists the unwarranted transfer of alien standards of reality to the humanities, eschews the grand metaphysics of theism but still gives room to the existential import and the experiential significance of artistic, moral and religious values.

So where do we stand on the matter of Polanyi's realism? Though we have a plethora of partly conflicting, partly consensual views, there is clearly also an awareness of what the core issues are. For reasons of space, I cannot do equal justice to all authors so in the remainder of this introduction I will briefly comment on what seem to me the more salient issues.

3. Realism, the Social Coefficient and Relativism

Gulick's misgivings about relativising "real" to traditioned communities of inquiry and about overemphasizing the social coefficient, clearly applies to the positions of Puddefoot, Mullins and myself. Puddefoot is well aware that his "tribalism" may be charged with relativism and he therefore appeals to Polanyi's solution of the "paradox of self-set standards." Though his argument seems to me entirely successful, Gulick does not seem convinced. In order further to support the primacy of the social coefficient and my own emphasis on contextualizing "real" to traditions of inquiry, let me invoke a substantial notion of such traditions that may commend itself both to Puddefoot and Gulick. Obviously, it is not just any old community or group, but one defined by its practices and the values inherent in them. In Alasdair MacIntyre's words, it is:

[A]ny coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realized in the course of trying to achieve those standards of excellence which are appropriate to, and partially definitive of, that form of activity, with the result that human powers to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended (*After Virtue*, 1981, 175)

In the light of this definition, a number of examples that Gulick adduces to back up his misgivings about a communal or contextual interpretation of reality simply seem to be out of place. Of course, he may disagree with the definition, but, as he himself points out, “involvement in the church, at work, at home, in leisure activities, etc.” are not properly called communities of inquiry (section 5). On my construal, participation in the church may count as such because religion can be seen as a cultural practice, whereas involvement at home or watching video movies cannot. Of course, they may be richly meaningful, just as having nightmares, telling or listening to fairy tales, playing video games and seeking stimulants. But how to distinguish between the richly meaningful and the altogether meaningless, or, what governs the meaningful? It appears that Gulick is now himself faced with the problem of relativism for it remains unclear how he is able to discriminate between degrees of meaningfulness without invoking values and all that comes in their wake. Moreover, as objects of inquiry of a host of social and cultural studies, the activities he mentions need not be “among the most real things there are” to the scholars who are investigating them.

Generally, the Polanyian-MacIntyrean notion of a tradition of inquiry can easily deal with the threat of radical relativism. Take Gulick’s own example, belief in witchcraft (section 4). In a different culture than ours, it may be perfectly rational to act, think or evaluate things in terms of occult powers. Still, from our point of view, they are mistaken. Does this imply that their belief in the efficacy of the occult is equally well, let alone better, justified than our denial of it? Of course not. For in the light of what we, to the best of our abilities, have come to know about the workings of nature it is much more probable than not that we are right and occultists wrong. The latter may disagree, but that doesn’t mean there is no fact about the matter. It may not be easy to settle the matter if that means that we have to reach a consensus. But why should we? We may lack the resources required for launching a joint investigation or we may prefer not to have conversations with occultists in the first place. Where is the relativism?

In other words, I think it is a mistake to think that from the crumbling of the Enlightenment’s ideal of attaining a universal God’s eye point of view, it follows that we now can have no view at all. Jettisoning absolutism, dogmatism and foundationalism does not saddle us with radical versions of relativism or skepticism as the only alternatives. It is precisely Polanyi’s innovative proposal to reintroduce a traditionalism that combines the personal (Cannon) and the social coefficient (Puddefoot, Mullins) and offers a way between the horns of this alleged dilemma.

4. Reality, Values and Meaning

In reply to Gulick’s challenge that we have to consider the way in which values “function in language” (section 5), I would like to point out a use of “real” which leads us away from lofty metaphysics to the world of daily language and the values embedded in it. Consider utterances like “That is a real democracy” or “That is real love.” The meaning of “real” in these cases is virtually equivalent to that of attributive uses of “true.” Just as love may fall (more or less) short of real or true love, an act of justice may not yet wholly be a case of real or true justice. What we take to be real justice doesn’t have to exist in reality as such (or as yet). Thus to say “That is real justice” is to say that a certain action instantiates to some degree a particular conception

of ideal justice. But is it outdated Platonism or Kantianism to analyze phrases like this in terms of “trueness to some ideal X” or “satisfying certain standards of excellence which are constitutive of a cultural practice X”? Of course, we may be mistaken in identifying something as the real X for it may be that X turns out to be not the real or true X after all. Of course, Gulick is right in claiming that, although what is real (to us) may often be meaningful (to us), “real” is not strictly equivalent to “meaningful.” To say “He is a real dictator” or “That’s a real villain” is not to say that there is anything about the dictator or the villain that is (positively and existentially) meaningful.

Realism may well be a relatively minor issue in the hermeneutics of understanding and meaning creation. I have no quarrel at all with Gulick’s important project of developing such a hermeneutics. My worry is only that on his account, perfectly normal and intelligible talk about real problems, real beauty, real justice, real love, real peace, etc. becomes merely “honorific.” Does that mean that talk about, say, real justice or the reality of God is just honorific talk about ideal justice and the ideality of God? I don’t think so. For when religious believers speak about the reality of God, they may be talking about God’s presence and nearness to them or God’s absence and distance from them, and not at all about God as an empirically ascertainable entity or being “out there.” Surely it would be misconstruing what they mean, if they are to be understood as saying that the term “God” or God’s “presence” is richly meaningful to them? Hence, to drop talk of “real” in favor of “meaningful” seems to me to make a virtue out of necessity and to gloss over not the sense of “real” as opposed to “illusory” or “fictitious,” but the sense of “real” as “what matters (most)” to us.

As probably no hermeneutics is able to tell us “what matters most” (to whom?) and “what should matter most” (why?) in a way that is acceptable to everybody, the only way to proceed, as I see it, is to proceed from where we are - and this leads us back again to the personal and the social coefficient, to where we belong, to where we live by and to what we aim for.

Finally, in spite of Gulick’s concession to allow ultimate values a special status as both “real” (as universally human) and “ideal” (as transnatural integrations), I still think his attempt to separate the real as what is empirically ascertainable from the meaningful, is too severe. If his equivocal account of values is meant to reflect the use of “real” in ordinary usage, we may have a beginning of agreement. Rather than trying to revive the axiology of premodern times, a viable way to approach the question of the reality of values seems to me to look and see what people mean by “real” in the contexts in which they use it.

5. Cobblestones and Degrees of Realness

What keeps coming up in accounts of Polanyi’s realism is puzzlement about his notorious remark on the tangibility of a cobblestone. In some way, it suggests an equivalence between “tangibility” and “insignificance.” If it was meant as a general ontological thesis, surely Gulick is right in objecting to it. Here is another objection: in some contexts cobblestones may be extremely meaningful, as, for example, the story of David and Goliath bears out. Given sufficient imagination, virtually anything could be called meaningful in some context or other. So what are we to make of the tangibility of cobblestones in contrast to the significance of minds, persons, problems and theories?

Perhaps there is no a deep ontological thesis about the real and the meaningful at all. In addition, and not as an amendment, to Cannon’s remarks about “intrinsic meaning” and my own about “intrinsic interest,” I would suggest that at least part of what is behind the notorious cobblestone example is the metaphoricity of “hiddenness” and “profundity” or “depth” of reality. What is tangible and thus directly perceivable is what is

superficial in contrast to what is intangible, not directly perceivable and profound or “deep.” The contrast is one of degree - the more profound, the more of reality is encompassed - and is meant to convey that as far as reality is concerned, it is to be found on the side of the latter. The more profound a problem or theory, a quality hard to assess and articulate empirically, the more significance it has for science because the more of reality it may be expected to tell us.² Of course, science has no privileged access to reality, as Cannon rightly points out (section 5), but it does seem to be Polanyi’s paradigmatic example of reliable problem solving and discovery. And this would suggest that the hermeneutics of science as developed already in *PK*, was still very much in the background of his subsequent attempts to construct a hermeneutics of meaning for the humanities.

6. The Architectonic and its Coherence

It is clear from their contributions that both Jha and Gulick agree that the overall structure of Polanyi’s thought is perhaps not logically inconsistent but at least insufficiently coherent. Gulick rightly points out that this is just what is to be expected if, in the last ten years of his life, Polanyi was working his way towards a general hermeneutics of meaning. This is also the direction in which Gulick is himself working. Jha’s critique of Polanyi’s Architectonic seems to me especially important because she confronts us with criticism of Polanyi in the light of contemporary philosophical perspectives. Her critique of the ontological equation, especially the transfer of the teleological element in knowing to the realm of being, is shared by Meek, Puddefoot and me. By making the teleological issue explicit, a whole range of interesting questions is raised: the nature, status and role of aesthetic, moral and spiritual values both in science and other modes of inquiry, including not only the humanities but religious and nonreligious life view traditions as well. As Jha suggests, it leads us to the question of the meaning of life and of the Polanyian “good life.”

Still, there is a sense in which Polanyians might be worried by the way in which Jha treats Polanyi’s intentional dissent from the canons of modern philosophy. In the large and flourishing field of “religion and science,” to give but one example, issues of naturalism, reductionism, top-down causation, chaos and complexity theory etc. are hotly debated by scientists and theologian alike. To many philosophers, this may all seem slightly exotic, but perhaps this tells more about their prejudices than about those debates. Whatever a “mature rationalist-empiricist position” is, not even academic philosophers do seem to have one. What about, for example, John Searle’s naturalist argument for the ontological irreducibility of human consciousness and subjectivity?

7. Tacit Access to Reality and Truth

Both Meek and Cannon suggest an interesting solution to the problem of how Polanyi may be seen to retain a common sense notion of truth as correspondence with reality: our (articulate) representations do not correspond with reality-in-itself, but with reality as it is (fore-) known tacitly. This solution seems to me ingenuous but it leads quite naturally to the question whether it is not in effect a coherentist account of truth: our representations fit with the vast array of our background knowledge, know how, stances etc. This, however, may leave noumenal reality as inaccessible as ever. If what is tacitly known and can be made explicit will come to consciousness as a representation, propositional or non-propositional, surely it will always be possible to ask what it is a representation of. However, on Cannon’s construal, it cannot be a representation of reality-as-it-is. So then probably it corresponds to other tacit knowledge, which in its turn corresponds to still other tacit knowledge, and so on, *ad infinitum*. Coherentist holism is what we end up with, rather than with correspondence.

A further difficulty seems to me Cannon’s map - territory analogy. When drawing a map of a particular territory, I must have some sort of mental representation of that territory (a faint memory, a picture, a story

or whatever) to begin with. However, on Cannon's construal, this is precisely what we cannot have of noumenal reality. The question on account of what we do the mapping, then, doesn't seem to have a clear answer. Moreover, the map - territory analogy also breaks down in the case of science. To check whether your map of, say, the city of Quito is correct, you might just go there and see for yourself. However, in the case of scientific theories, values and God, we can't do that. Here, I think the metaphor of the "split" between appearance and reality simply collapses and I suggest we consider the real possibility that reality presents itself gracefully in our (partial and aspectual) representations of it. This is not to deny tacit knowing, it is an objection to the use of tacit knowing as an alternative, or a replacement, of the epistemic foundations of modernity.

Perhaps at this point Gulick's proposal to assume direct access between pre-articulate sensation and reality might be invoked. But, like Mullins, I am not convinced by the idea that at some deep level reality is making us aware of things that we cannot ever be aware of. It makes cognition, however broadly defined, not less, but even more mysterious than it already is. Moreover, there seems to be an old skeptical worry behind the proposal that perhaps we might have no hold on, or contact with, reality, that we can't be sure about anything unless we have some anchoring in the world as it really is. In contrast, I would like to suggest we are like the sailors on Neurath's boat somewhere on the high seas: unable to dismantle it in dry-dock, they do their repairs while they sail.

Endnotes

1. Cf. R. Trigg, *Reality at Risk. A Defence of Realism in Philosophy and the Sciences*, 2nd. ed., New York 1989, 3; J.R. Searle, *The Construction of Social Reality*, New York/London 1995, 155; M. Devitt, *Realism and Truth*, Oxford 1991, 2nd. ed., 14; C. Wright, *Realism, Meaning & Truth*, Oxford 1993, 2nd. ed., 1.
2. There are interesting parallels between Polanyi and Popper regarding "the problem of depth", cf. K.R. Popper, *Objective Knowledge*, London 1972, 196-204

Abbreviations of Polanyi's works mentioned or referred to in this issue

<i>KB</i>	<i>Knowing and Being. Essays by Michael Polanyi</i> , (ed.) M. Grene, London 1969
<i>LL</i>	<i>The Logic of Liberty. Reflections and Rejoinders</i> , Chicago 1951
<i>LP</i>	"Logic and Psychology," <i>The American Psychologist</i> 23 (1968), 27-43
<i>M</i>	<i>Meaning</i> (with H. Prosch), Chicago 1975
<i>PK</i>	<i>Personal Knowledge. Towards a Post-Critical Epistemology</i> , London 1956
<i>PP</i>	The Polanyi Papers, Regenstein Library, University of Chicago, Chicago
<i>SEP</i>	<i>Society, Economics and Philosophy: Selected papers by Michael Polanyi</i> , (ed.) R.T. Allen, New Brunswick 1997
<i>SFS</i>	<i>Science, Faith and Society</i> , Chicago, 2nd. ed. 1963 (orig. publ. 1946)
<i>SM</i>	<i>The Study of Man</i> , Chicago 1959
<i>SR</i>	"Science and Reality," <i>The British Journal for the Philosophy of Science</i> 18 (1967), 177-196 (also in <i>SEP</i>)
<i>STSR</i>	<i>Scientific Thought and Social Reality. Essays by Michael Polanyi</i> , (ed.) F. Schwartz, New York 1974
<i>TD</i>	<i>The Tacit Dimension</i> , Garden City, NY., 1966