Reality Crisscrossed



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ABSTRACT

It some important ways, Meek's Contact with Reality (2017a) starts where Dreyfus and Taylor's (2015) Retrieving Realism ends. What is at stake for Polanyians is the status of evolving metaphysical views anchored in Polanyi's epistemic concerns. I sketch three metaphysical pictures, then focus on dialectically engaging with Meek in hopes of widening the dialogical space for differing Polanyian projects.

Where's Polanyi?

Esther Meek's wonderful work, *Contact with Reality* (hereafter *CR*), can be read as a sorely needed Polanyian correction to Hubert Dreyfus and Charles Taylor's *Retrieving Realism* (hereafter *RR*). Although Polanyi resides in the shadows in *RR* (e.g., their critical notion of absorbed coping makes explicit reference to two of Polanyi's examples; see *RR*, 80), Polanyi has a significant and broader role to play. From an inclusive point of view, there are crucial horizons that Dreyfus and Taylor (hereafter DT) overlook, discussion of which will help set the scene for engagement with Meek concerning the profoundest levels of being.

There is plausible speculation as to why DT seem to act largely by omission (see Apczynski 2017; Meek 2017b; Rutledge 2017; Lowney 2017). A further reason might be discerned in their characterization of the predominant "mediational" picture of reality they aim to reveal (and correct):

The strands [of this picture] were (1) the "only through" structure, (2) the explicitness of content, (3) which one can't get beyond/behind, and (4) the dualist sorting, of the mental and the physical, the space of reasons and the space of causes. Now both Rorty and Davidson vigorously reject (1); while Rorty, and less unambiguously Davidson, subscribe to (4). But where the tradition can really be seen as operative is in their acceptance of (2) and (3). The contents of our grasp on the world are to be understood as explicit beliefs (2), and there is no going behind or beyond these in the space of reasons (3): only beliefs justify beliefs (*RR*, 64).

As this applies to Polanyi's marginalization, (1) could be read as fitting Polanyi's from-to structure regarding how epistemology grounds ontology. On this flat reading, Polanyi would be interpreted as claiming that reality is gleaned "only through" tacit knowing's workings; however, while true in a sense, this doesn't hold concerning just how DT characterize (1). (2) is similarly beside the point for Polanyi, so it doesn't shed light on his marginalization. (4) is ambiguous in an interesting way for Polanyi, and he can be partially accused of this, but not in the manner that DT target. This leaves (3), where they might read Polanyi as either subscribing to a version of (3) (but not the "space of reasons" version), or as being too easily caricaturized for holding this view. Concerning the latter, perhaps this offers a reason for Polanyi's conspicuous absence, by and large. As for the former interpretation, it doesn't appear very plausible given DT's sophistication and sensitivity as readers and philosophers.

Let's suppose for argument's sake that (3) is the major stumbling block bearing on Polanyi's marginalization. In place of (explicit) content that one cannot get behind, we would have the revised version (3): content of whatever sort is grounded in tacit knowing, which we cannot get behind. First, from (3) DT cannot infer that tacit knowing doesn't make contact with reality, for this clearly doesn't square with Polanyi's writings. They also cannot infer that his account is "mediational" in its portrait of realism, as the particular mediational picture they contest is untrue of Polanyi, and the correctives they offer for that picture (embodiment and the like) strongly resonate with Polanyi's views. The only remaining plausible reason would be that tacit knowing grounds ontology, which is the reverse of DT's contact theory. Generally speaking, Polanyi's realism places emphasis on the move from epistemology to ontology (as I discuss below), but DT's realism emphasizes primordial contact with the world over epistemology.

If this is the reason for Polanyi's marginalization, it is still founded on a poor reading, as Polanyi's views encompass DT's version of primordial contact. Such skillful modes of coping are *already presupposed* in tacit knowing's workings, which then fund the real question for Polanyi about how knowledge in general operates as contextualized by various domains of inquiry. We might then ask: whose realism is really being

retrieved? A preconceptual, prelinguistic contact with the world (or a "coproduced" realism between agent and world) still leaves DT with a glaring hole in their account—namely, the realisms produced by science and not just their captivation by a vapid picture of correspondence, true reality, and so forth (see endnote 1). These realisms cover phenomena like the strangeness of the quantum realm (and its multiple interpretations), the quest for a grand unified theory, the important ways in which biology is a differing kind of science from physics, and so forth—realisms that better fit with Polanyi's pluralistic heterarchical hierarchies of inquiry, whose coproduced contact offers a richer view of knowing and its workings in science. For as robust as DT's socialized realism is, it barely scratches the surface of a Polanyian realism that not only accommodates their realism, but also countenances the added layers of depth and richness that come with the consequential aspects of inquiry.¹

They could respond by saying that nothing in their account discounts these consequential dimensions, but that is just the point—their omission of the arc of tacit knowing and its heterarchical hierarchies of inquiry leaves untouched perhaps the most significant features of a robust realism worth having. Non-exclusionary realism is no substitute for an inclusionary one. Again, whose realism is being retrieved? For more than just retrieving realism, we should also be asking: what *unknown* realisms might inquiry coproductively enact-and-discover? In a similar consequentialist vein, Meek writes: "In my personal gradual growth to realism, I have not ever left behind the Polanyian statement of reality as that which manifests itself indeterminately in the future" (Meek 2017c). She also opens a significant space for the unknown via the indeterminate dimension of Polanyi's realism.

A further qualification I would add to Meek's IFMs (indeterminate future manifestations) is that Polanyi's consequential realism isn't just indeterminate in tacit knowing's workings (as related to inquiry's heterarchical hierarchies)—it is crucially indefinite. These related notions are not identical, since an indeterminate space of inquiry draws attention to a horizon of mystery that fundamentally cannot be fully broached—a leap of faith is required.² While I think the Polanyi-Gelwick insight that all acts of knowing contain a structural element of faith is correct, the nuance of "indefinite" adds the Peircean insight that inquiry is potentially infinite in its consequential dimensions, and that growth, while funded by faith, is more than just indeterminate—it continues on indefinitely and fallibly in generating tacit knowing's pluralistic heterarchical hierarchies.

Three Approaches

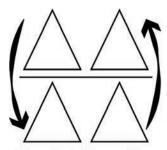
I will use DT's pluralistic robust realism as a springboard for considering three differing approaches to Polanyi (in particular, approaches which circumambulate how universal intent can be read regarding ethics, values, etc., and the sort of robust

pluralism Polanyi would endorse).³ DT's pluralistic robust realism makes four claims (*RR* 154):

there may be (1) multiple ways of interrogating reality (that's the "plural" part), which nevertheless (2) reveal truths independent of us, that is, truths that require us to revise and adjust our thinking to grasp them (and that's the robust realist part), and where (3) all attempts fail to bring the different ways of interrogating reality into a single mode of questioning that yields a unified picture or theory (so they stay plural).

Concerning (1), I suspect that Meek's IFMs strike a middle ground between Charles Lowney's (2017) emergence-with-risk version of realism and DT's realism. Concerning (2), I don't think Meek holds that truths are independent *as such*, since Polanyi's consequential realism has dynamic orders of growth that are enmeshed with tacit knowing and contain more than we can tell—even in the process of making contact, inquiry is a never-ending (indefinite) process of revealing that which manifests itself indeterminately in the future.

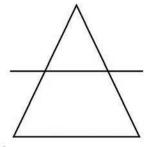
As for (3), this marks a departure point for Polanyians, who in general would either reject (3) or seriously revise it, opting for a convergent pluralism (see endnote 7) that ranges from the "liberal" (depending on how one reads Polanyi's dynamic orders of inquiry's heterarchical hierarchies) to the "conservative" (Lowney's emergence-withrisk). I hypothesize Meek strikes a middle ground stemming from her reading of D.C. Schindler's idea that "Being" opens itself from above and is not primarily emergent from below. This isn't inquiry that enables and is enabled by various kinds of robust pluralisms at different levels (what I describe herein as semiotic-heterarchical-hierarchies); and this isn't a Platonic convergence to a consequential realism concerning values, morals, theories, and so forth (Lowney's emergence-with-risk). Rather it might be said that it moves away from "bad infinity" and towards good, fruitful infinity (the "liberal" reading by contrast countenances *multiple* good infinities). Here are three images to signify the differing approaches:



Pluralistic hierarchies



Ecstatic IFMs



Convergent emergence

As details are added to these sketches, further contrasts among metaphysical projections compatible with Polanyi's realism will emerge.

In my previous papers for *Tradition & Discovery* (Takaki 2010, 2011, 2013a, 2013b, 2014), there is an arc exploring Polanyi's realism moving from embodiment to enactive pluralism, and along the way arguing for a crisscrossed, complex semiotic realism. A key difference between this semiotic accounting of Polanyi's pluralistic hierarchies and the other two pictures concerns their claim that we can make contact with reality (semi) "independently" of our knowing it. For the rightmost image, the idea is that we make full emergent contact at (or near) the ascending "cone" of inquiry, giving us a structural correspondence between what we know and the (semi-independent) structure of reality—a kind of Platonic revealing of the essential Being of things. The middle image also contains a Platonic trace, the major difference being that inquiry already makes partial (ecstatic) contact with reality from above *and* below (cf. Meek 2017b).

I suggest that both views are problematic for two reasons. First, Polanyi already starts his project from the recognition there is a reality commonsensically "independent" of us and that science generally aims to discover the real (stemming from his experience in the Naturwissenschaften, leaving open explorations of the Geisteswissenshaften), but is troubled by the seductive Cartesianisms this pretheoretic picture intimates. Second, to make contact with reality semi-independently of our knowing it downplays the heart of the Polanyian project, which grounds ontological and metaphysical claims in epistemic concerns. Let us put aside DT's infelicitous uses of boundary conditions, natural kinds, universal causal laws, and the like in arguing for their retrieved realism (see endnote 1). Polanyi's sophisticated realism, grounded in scientific practice and reflective experience, raises a significant problem about what sort of metaphysical picture we should project regarding dynamic orders of being and "the real." Are we to smuggle in Cartesian elements to preserve intuitions about correspondence, truth, or independence (raising the issue of whose tradition), but now bejeweled with emergence or exuberance (raising the concomitant issue of whose discovery)? Are we to disavow the seductions of the Cartesian picture only to, as with DT, opt for an unacknowledged "Cartesianism 2.0" (or perhaps 1.5)?

Several brief examples illustrate the problem. Consider one of the major interpretations of quantum mechanics, the Copenhagen interpretation. Since observation is intimately related to what collapses the wave function, on this view there is no reality as such that occurs independently of some form of measurement (or construed in a wider sense, by some system of interaction—still rendering the notion of independence problematic at best).⁴ And even bypassing the quagmires of interpretation, quantum entanglement is an experimental fact that intimates not independence, but a far more complex, knotted picture of reality as crisscrossed. Another less exotic example that

significantly entangles ourselves as "system variables" is climate change. We are integral parts of this phenomenon (and our related enactivation of the Anthropocene), for which we cannot simply talk about a global system that is independently real as such. The situation becomes similarly ensnared when considering more social forms of science, such as medicine, psychological categories (as with the DSMs), and economics (rife with egregious examples). The more entwined things get, the more problematic it becomes to project well-worn notions like independence, correspondence, or truth.

In place of independence is reality as crisscrossed, within which semiotic inquiry takes place—reality becomes a working hypothesis for exploration with universal intent. In place of correspondence are our projected, embodied tools of discovery (e.g., scientific models, experimental techniques, and so forth) that enact coproduced stabilities. And in place of truth are regulative ideals like the pursuits of wisdom and truth, where fallibilistic faith guides our epistemic ontologies.⁵ At this level questions regarding morality, spirituality, metaphysics, and the like become salient, where further contrasts between the three Polanyian pictures come into view (even if still remaining within the same general field of Polanyian play).⁶ The remainder of the paper focuses on dialectically engaging with Meek's exuberant metaphysics and how our pictures of Polanyi's realism have consequences at the highest levels of being.

Comparative Contrasts

I shall proceed by contrast in hopes of widening the dialogical space for differing Polanyian projects. To begin, the pluralistic hierarchies I argue for holds that the realms of values (which I use here to generically stand for morality, spirituality, metaphysics, and so forth) are neither merely emergent (with risk) nor ecstatic IFMs with regard to the deepest levels of existence—especially concerning contemplative, soteriological being. While the other two pictures can approximate this profundity, neither offers a comprehensive view that accounts for comparative insights across traditions, as neither a supersession-via-fusion-of-horizons (Lowney) nor an exuberant-indeterminate-infinity (Meek) suffices. In brief, what pluralistic heterarchical hierarchies enact are worldviews (of which values form a part) with their concomitant traditions and discoveries. And in keeping with Polanyi, such hierarchies are also tools of understanding by which to structurally disclose worldviews with their epistemic-ontic projections. The temptation of Meek's semi-independent view of reality and its Platonic traces is the reification of metaphysics and inquiry (even if both are fallibly construed). By contrast, the risk of pluralistic heterarchical hierarchies isn't relativism (a non-starter for Polanyian inquiry properly construed and accredited), but rather inquiry not given a wide enough berth nor sufficient time and resources to begin to emerge into robust being.

With these general remarks, I now delve into the two prominent differences between the picture I offer and Meek's view. The first concerns the status of the independence of

reality. In CR, she cites a number of places in which Polanyi speaks of the independence of reality, which appears to be coextensive with the "external world." I earlier suggested that Meek's picture doesn't hold to independence as such, but rather a semi-independence, as we are entwined coproductively with reality. However, at times Meek seems to suggest a full-blooded metaphysical independence, with subsequent interaction between knowers and the known (perhaps perichoretically construed; see Meek 2011, esp. 215-480). While Polanyi can be accused of a partial Cartesianism, I am proposing a "Polanyi 2.0" that pushes beyond dualistic acceptance of the independence of reality as such. More specifically, in chapters four and five of CR, Meek appears to conflate Polanyi's realist assumption with metaphysical realism (and its imported baggage of independence); she interprets Polanyi's comprehensive entities with this slippage in the background (her approach to the reality-statement-as-definition highlights its metaphysical element and downplays its simultaneous status as hypothetical). As alluded to previously, in place of the problematic notion of independence, I opt for a "semioverse" where reality is (differentially) crisscrossed, and where reality-as-a-working-hypothesis highlights the fallibilistic nature of inquiry. One reason this difference matters is that Polanyi's contact with reality might be better understood as a kind of enmeshed entanglement with aspects of reality, where given this crisscrossed nexus of relationality, we can make sense of Polanyi's claim that certain things can be more real than others (for if reality were independent as such—akin to *natura naturans*—it becomes problematic to hold that realities can be more or less real).

This relates to the second and perhaps biggest difference between our two pictures. She suspects that for Polanyi, "ontology ultimately precedes epistemology" (*CR*, 74), where the assumption that the order of the real is rational "yet inexhaustibly rich" (*CR*, 74) highlights the independence of reality. I argue for the reversal of this order, and also suspect that the real isn't merely rational—in more nuanced and dynamic fashion, our understanding of the real suggests that what we take as real/rational are islands of stability afforded by a vast enabling ocean of inexhaustible chaotic and complex richness (an a-rational order, at very best). From this vantage point, the question arises: what aspect of Polanyi do we highlight as "tradition" in moving forward to new Polanyian worldviews (of discovery)? Metaphysics or epistemology? In short, the benefits of the former are laid out in Meek's works; the risk is various ossifications steeped in tradition. The benefits of the latter issue from fallibilistic semiotic inquiry; the price is a precarious faith.

A further advantage of emphasizing epistemics over ontology is that throughout *CR*, the statements Meek makes in support of the independence of reality can also be read as reality-as-a-working-hypothesis. To cite a key example, she writes:

The independence of reality for Polanyi, therefore, ultimately stands or falls with his particular analysis of perceptual experience along with his innovative, philosophical tradition and problem-challenging epistemology of subsidiary-focal integration. This latter is in turn proposed on the basis of, and substantiated by, perceptual and scientific experience. Thus, the Polanyian defense of reality is inductive, as Alan Goldman said a defense of realism must be (*CR*, 235).

Firstly, this "particular analysis" and "his innovative, philosophical tradition and... epistemology" better accords with the claim that the core of Polanyi's worldview grounds ontology (and metaphysics) in epistemics. Secondly, this inductive defense of reality almost by definition treats reality as a working hypothesis, whose metaphysical status depends on past experience with stabilities that can be projected to future coproductions. These coproduced "realities" are determinate as stabilities, but indeterminate (and indefinite) in terms of their grade of significance—stones become lesser realities than other richer forms of discovery for a community of inquirers invested in such significance.

Meek rightfully notes there is no grasping of aspects of reality without responsible inquiry, or without a fiduciary framework (*CR*, 248). Most importantly for Meek, there is no grasping of these patterns that are not "pregnant with unforeseeable implications" (*CR*, 248). While the former fiduciary responsibility favors epistemology over ontology, Meek reads the latter IFM element as favoring metaphysics over epistemology. This is a bit puzzling since it not only can be read simultaneously as inductively supporting reality-as-a-working-hypothesis (compare *CR*, 258), but it also presupposes a community of inquirers for whom such pregnancy can be brought into being. To reemphasize, if reality were independent as such (*natura naturans*), there is in principle no difference between stones and pregnant achievements; but this isn't Polanyi's view. While we can hew closely to the letter of Polanyi's works, we can also push forth to form worldviews that may better cohere with the spirit of tradition-and-discovery.

Worldviews and Traditions

This brings us to a key consideration: is a Polanyian metaphysics best developed in view of certain lines of inquiry in the Judeo-Christian tradition (compare *CR*, 240-243)? As with DT, the question then arises: whose tradition and whose discovery supports whose realism? The earlier image of Meek's project suggests a non-plural cone of inquiry, with weak convergence amidst pregnant IFMs and increasing mystery—all bound in dialectical tension.⁷ But what if other traditions and discoveries not only broadly accord with the trajectory of Polanyi's thought, but also suggest avenues for developing metaphysical views with hybrid (i.e., "cross-fertilized" comparative) vigor?

It should first be noted that towards the end of *CR*, Meek expands on this cone of inquiry (bound in dialectical tension) by viewing Polanyi's epistemology as being both "from above" and "from below" (*CR*, 281-283) while placing emphasis on its

being from above (as I read it, the privileging of metaphysics over epistemology). The ecstasis of reason and reality issue in an abundant surplus of mystery-as-truth (*CR*, 288), where knowing—at the deepest levels of being—becomes an act of communion with this surplus. Such contact/communion does not take place merely in the phenomenal realm, but also in the noumenal, as it were, where transcendental ideals like truth, goodness, and beauty (in Kantian terms, *regulative* ideas that outline the conditions for the possibility of their pursuit) get transfigured into *transcendent* realities (*CR*, 290-291). It is here where the contrast between our two pictures emerges most starkly, as Meek's picture invests faith in a reified metaphysics that then redounds to epistemic concerns, whereas the semiotic picture I offer grounds faith's projections in pluralistically evolving, dynamic heterarchical hierarchies.

This contrast comes into view from the standpoint of "gestalted wholes." In addition, the picture I offer accommodates a number of Meek's "subsidiary details" when adopting the stance of reality-as-a-working-hypothesis. Firstly, an enactive realism acknowledges an abundant surplus of information, viewed semiotically (in Peircean terms, the use of sign, representation, interpretant, etc. are all various gradations and levels of mediation—signs are mediums that mediate mediations, at whatever level of infinite semiosis). Secondly, semiosis accommodates knowing as from above and below (as expanding hermeneutic circles of inquiry) but isn't funded by Meek's ecstatic duality. And lastly, the *mystery* of inquiry is also present, as inquiry is irretrievably crisscrossed with reality, making knowing's encounters not a transcendent matter, but more subtly one that is consequential, fallible, as well as imminent. While this picture doesn't appear to convey the same ecstatic faith that a metaphysics from above can confer, it does possess its own sort of ecstasis in the form of creative surplus—a surplus semiotically entwined with complex knot upon knot of projected epistemic understandings that are embedded in emergent layers upon layers of pluralistic (heterarchical) hierarchies, intimating a picture of inquiry that is fallible yet fueled by faith in, and hope for, enacting discoveries.

All this suggests that Meek's reified metaphysics presents but one path within an expanded Polanyian field of play, creating thereby a space for comparative exploration of other metaphysical developments perhaps not transcendently conceived, yet nonetheless real, beautiful, ecstatic, and abundant. Other traditions and worldviews, rich in depth and scope, deserve no less consideration in articulating a robust pluralism worthy of the name. Yet such a pluralism, insofar as it can be accommodated within an expanding Polanyian vantage point, is also thereby united-via-difference, as these explorations not only participate in the project of infinite semiosis, but also exhibit similar commitments to ideals like truth, beauty, and goodness. For often what is revealed from a comparative viewpoint is that core soteriological ideals ground metaphysical worldviews, whose traditions are developed accordingly (see Takaki 2016).

Most generally speaking, rather than a Western captivation by metaphysics, what is being suggested here is a shift to worldviews, whose ingredients are manifold—soteriological, axiological, epistemological, metaphysical, and so forth. If reality (as working hypothesis) is a crisscrossed, creative surplus, then it needs a wide berth that the expansive schema of worldviews affords. It is from this standpoint that a comparative approach makes the most sense and can be especially conducive to exploring hermeneutical notions like the fusion of horizons, which must countenance traditions and discoveries. While Polanyi emphasized discovery, his vision does not privilege tradition over discovery, nor discovery over tradition, but rather discovery-enacted-via-tradition. I submit that a Polanyi 2.0 should embrace and foster traditions and discoveries, while remaining grounded in the indefinite and indeterminate future enactivations of inquiry. Lastly, if these speculative forays are on the right track, they intimate the partial correctness of these Polanyian pictures—and thereby their partial incorrectness in the guise of incompleteness. This is as it should be, as future versions of Polanyi are a matter of horizons unexplored, indefinite and indeterminate in their hopeful future embodiments.

ENDNOTES

¹There are four general shortcomings to DT's key claim that they "want to argue *both* for our embodied direct access to the things of the everyday world as they appear to us and a realist view of science as describing the things in the universe as they are in themselves, independent of their relation to our bodily capacities and our coping practices" (RR, 132). 1) Their appeal to "independence" lacks proper consideration of inquiry's consequential dimension. 2) Such independence reintroduces a backdoor dualism in the form of correspondence (RR, 135). 3) The contrast class for their robust realism is Rorty's deflationary realism, both of which essentially miss the thickness of extra-linguistic scientific exploration (e.g., the key roles of intuition and connoisseurship; the power of technological probes; the structural significance of material practices; and so forth). One slippage occurs when they write: "our background understanding not only takes for granted that we are in contact with boundary conditions independent of us and our mode of making things intelligible; it also takes for granted that there is more to the objects of everyday experience than we will ever be able to make explicit" (RR, 138). The affinity with, if not appropriation of, Polanyi is clear. However, what contextualizes their claim is the appeal to "our most basic, primordial way of being in the world" (RR, 138), which misses the nuanced deployments of boundary conditions in mathematics and the sciences—skillful deployments, often artificially imposed to induce systems-thinking in hopes to grasp "what is out there" (cf. Takaki 2013b, 2014). 4) Their dubious appeals to natural kinds and universal causal laws reveal their spectator's distance from scientific practice (natural kinds have been disputed in evolutionary biology and have questionable value in understanding complex changes at the level of chemistry; and the notion of universal causal laws plays little role in how physicists understand laws—they tend to think in terms of mathematical symmetries and structures). In brief, DT subtly but fundamentally miss the mark in their rather scientistic realism. A fusion of horizons including Polanyi is needed to expand and correct this conversation which is largely taking place within mainstream Anglo-Eurocentric confines.

²But perhaps not mystical; see Dale Cannon, "Longing to Know If Our Knowing Really Is Knowing'—Reflections on Esther Meek's *Longing to Know: The Philosophy of Knowledge for Ordinary People*," in *Tradition & Discovery* 31, no. 3 (2005), 6-20. See also Meek's response, "*Longing to Know* and the Complexities of Knowing," op. cit., 29-43.

³It should be noted DT appropriate Gadamer's fusion of horizons as a key element of their pluralistic robust realism. They write: "Gadamer makes central the paradigm of a 'conversation,' in his understanding of human science, rather than that of an inquiring subject studying an object" (RR, 125), perhaps indicating a difference from Polanyi's emphasis on epistemic inquiry. However, a significant shortcoming of their appropriation is the failure to recognize comparative philosophy's key use of the fusion of horizons—their examples tend to be anthropological rather than comparative. (For more on a major prejudice of mainstream Western philosophy, see https://aeon.co/essays/why-the-western-philosophical-canon-is-xenophobic-and-racist.) From this comparative perspective, I find Polanyi's framework superior, as well as compatible with conversation as part of the dynamic of inquiry—broadly and charitably construed. A further shortcoming is that their heavy reliance on Heidegger, insofar as it bears on their desire to combat ethnocentrism, is stained by the discovery of his black notebooks.

⁴It could be objected that the interpretation preferred by theorists is the many-worlds interpretation. However, even this reified Platonism can be accommodated by 1) tacit knowing's underpinnings of how such a mathematical metaphysics is generated and projected, for which prethetic "contact" with "reality" becomes seriously problematic on DT's account; and 2) Polanyi's heterarchical hierarchies, as tacit knowing's discovery of these mathematical patterns parallels in Spinozian fashion the structure of these worlds (between which there isn't properly any correspondence, given their lack of interaction).

⁵The interrelated roles of faith and fallibilism are key to Polanyi's pluralistic dynamic orders of being, which I suggest also better fits with the view I present. Compare Phil Mullins, "Michael Polanyi's use of Gestalt Psychology," in *Knowing and Being: Perspectives on the Philosophy of Michael Polanyi*, edited by Tihamér Margitay (Newcastle upon Tyne, UK: Cambridge Scholars Publishing, 2010), 10-29; idem, "Michael Polanyi's Early Liberal Vision: Society as a Network of Dynamic Orders Reliant on Public Liberty," in *Perspectives on Political Science* 42, no. 3 (2013), 162-171.

⁶At this level, even DT, outlining the unity of their robust pluralistic realism, claim such metaphysics (of unity and multiplicity/plurality) is ultimately to be decided on empirical grounds, construed broadly (*RR*, 155). If this isn't a nod to the consequential dimension of inquiry, I don't know what is, only reinforcing the need for more explicit inclusion of Polanyi's far more sophisticated realism. Furthermore, the "view from nowhere" they contest is also better corrected from a Polanyian standpoint; cf. Olimpia Lombardi, "Prigogine and the Many Voices of Nature," in *Foundations of Chemistry* 14, no. 3 (2011): 205-219. DT's citing of the convergence of physics and chemistry (*RR*, 157) misses crucial subtleties to which Lombardi alludes; see also Olimpia Lombardi and Martín Labarca, "The Ontological Autonomy of the Chemical World," in *Foundations of Chemistry* 7, no. 2 (2005), 125-148.

⁷This would be "weak" in relation to Meek's discussion of non-convergence as a denial of Putnam's and Goldman's accounts of what might be called in this context "strong" convergence (*CR*, 146-7). I think her denial of strong convergence is encapsulated in her statement that "there can be no *fixed* account, or *complete* picture, which we gradually approximate" (*CR*, 192). However, rather than nonconvergence I would suggest that science contains far too many hit-upon stabilities

that Polanyi recognizes as in some sense "convergent:" perhaps stones, being thus far projected as relatively uninteresting, would qualify as strongly convergent, whereas profound scientific discoveries would be weakly convergent in that discoverers have hit upon a stability—as aspect of reality—that as interestingly rich, intimates IFMs, and calls for further exploration.

⁸While Schindler discusses these ideals that Balthasar appropriates from medieval philosophy, the connection to, and relevance of, Kant is largely sidestepped; see D.C. Schindler, *The Catholicity of Reason* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 2013), 63-64.

REFERENCES

- Apczynski, John. 2017. "A Polanyian Epistemology Manqué: Reflections on *Retrieving Realism*." Tradition & Discovery 43, no. 3: 4-13.
- Dreyfus, Hubert L., and Charles Taylor. 2015. *Retrieving Realism*. Cambridge, MA: Harvard University Press.
- Lowney, Charles. 2017. "Robust Moral Realism: Pluralist or Emergent?" *Tradition & Discovery* 43, no. 3: 39-53.
- Meek, Esther Lightcap. 2011. Loving to Know: Introducing Covenant Epistemology. Eugene, OR: Cascade Books.
- ——. 2017a. Contact with Reality: Michael Polanyi's Realism and Why It Matters. Eugene, OR: Cascade Books.
- ——. 2017b. "Contact with Reality: Comparing Michael Polanyi and Dreyfus and Taylor, Retrieving Realism." Tradition & Discovery 43, no. 3: 14-25.
- ——. 2017c. "Contact With Reality: Reflections Upon Completing a Good Beginning." Paper presented at the annual meeting of the Polanyi Society. Boston, MA: November 18.
- Rutledge, David. 2017. "Dreyfus, Taylor, and Polanyi's Prescience." *Tradition & Discovery* 43, no. 3: 26-38.
- Takaki, Kyle. 2010. "Embodied Knowing: the Tacit Dimension in Johnson and Lakoff, and Merleau-Ponty." *Tradition & Discovery* 36, no. 2: 26-39.
- ——. 2011. "Enactive Realism." *Tradition & Discovery* 38, no. 1: 34-59.
- ——. 2013a. "Margitay on Emergence and Ontological Hierarchy." *Tradition & Discovery* 39, no. 2: 35-41.
- ——. 2013b. "Juarrero, Polanyi and Complexity." Tradition & Discovery 40, no. 1: 5-15.
- ——. 2014. "Polanyi & Juarrero: From Tacit Knowing to Ontic Emergence." *Tradition & Discovery* 40, no. 3: 16-22.