# "The Unformalizable, Irreducible Primacy of the Person in the Digital Age"[1]

Esther Lightcap Meek

*Paper for "Tacit Engagement in the Digital Age," CRASSH Conference at University of Cambridge, Jun 26-28, 2019*[2]

*Readers: In the text here I have used font size to distinguish portions I will present in the conference (11 point: the main body of my argument), from portions I will skip (9 point: extended synopsis of and quotation from Gill's work, and also from Polanyi's; as well as brief summaries of other voices which I feel bear on the conversation and support the thesis). Feel free to scan or skip the smaller type as time and interest permit.*

## Introduction

We live as humans in a digital age. This is a matter of concern worth exploring, as this conference and its participants are endeavoring to do. In this paper I would like to contribute to the enterprise a Polanyi-attuned philosophical reflection especially on the intriguing work of Satinder Gill, our host.

Dr. Gill in her research has identified concrete expressions of the personal and interpersonal in what she terms the tacit engagement of humans.[3] Her larger agenda is to do this in order to develop technology to be able to support the "wider bandwidth" of personal engagement. To identify concrete dimensions of the personal, she has drawn on the thought of Michael Polanyi, specifically, his account of the bodily rooted functional aspect of tacit knowing. (Gill, 28)[4] Exploring this fascinating arena, she has identified bodied, interpersonal dynamics that are rhythmical as is music and dance. She and others are exploring art for the humanness missing in technology and science.[5]

Especially since my own work foregrounds the person and the interpersoned, as well as dancelike rhythm and conversation, in my Polanyi-based epistemology, I find it confirming that Gill reads Polanyi in this way, and then identifies bodied rhythms of knowing together.[6] Gill's work rightly foregrounds the bodied personal, and rightly exposes the modernist non-person centered epistemology which has fueled

---

[1] I've removed "Unmediated" from the title. I believe that I could specify a sense in which irreducible personhood is unmediated, but I also heartily concur with Gill's understanding of personhood as mediated, and of personhood as essentially both irreducible and mediated in polar relation, as will be seen in the essay.

[2] This essay will be published in a forthcoming Festschrift for Dr. John White, President Emeritus of Geneva College (Falls City Press, 2019).

[3] Satinder Gill, *Tacit Engagement: Beyond Interaction* (Springer, 2015). Additionally, Ms. Gill presented via Skype at a recent Polanyi Conference (June 2018): "Rhythm and Tacit Knowing in Embodied Performance."

[4] Gill works with Polanyi's *Tacit Dimension.* She notes also the phenomenal aspect of tacit knowing. And she quotes more than once a passage on p. 49 regarding persons as comprehensive entities. (Gill, 31, and elsewhere)

[5] . I've also been interested to explore the work of Gill's colleague, Caroline Nevejan, who has identified matters of I You witness, presence and trust in interpersonal engagement. C. Nevajan, *Witnessing You: On Trust and Truth in a Networked World, Participatory Systems Initiative* (Delft: Delft University of Technology, 2012). Cited in Gill, *Tacit Engagement,* 33.

[6] Esther Lightcap Meek, *Loving to Know: Introducing Covenant Epistemology* (Eugene, OR: Cascade, 2011).

technological development. (Gill, 39-43) Her discoveries advance the cause of a person-centered and inter-person-attuned epistemology. (Gill, 47-58)

However, I would like to wonder aloud, in this paper, whether her project nevertheless leaves [7]ensconced a deep-seated commitment to fundamental modernist philosophical presumptions, presumptions which Polanyi wrote to challenge as wrongheaded and culturally destructive.

The reader may detect a lingering reductionism: the point of Gill's endeavor may be to reduce personhood to formalizable components for which technological substitutes may be developed. Also in play is the implicit relegation of science, language, and technology to the domain of exhaustively impersonal, transferable information and communication—over against which art is cast as essentially different, and human.

My thesis is hesitant, first because technology and technological language is in no way my bailiwick, in contrast to Gill. Secondly, she explicitly argues for the personal, as I have already said. But it is hesitant, further, because of the intrinsic complexity of the matter of reductionism. Reductionist claims could only succeed by trading on the very realities they deny. If the digital age and its claims incline to the elimination or the reduction of the person to impersonal, formalizable elements, it is obviously persons who alone are doing this—as a look around this room and campus evidences. It may prove ultimately impossible to succeed at reductionism even if one is set on accomplishing it. And what is more to the point of Gill's fascinating work, it may be that one's work is intended to be nonreductionist, to be person-centered, while implicitly remaining misdirected. Such an unnoticed "mistake," we can admit humbly, accompanies all our efforts as humans. I would say that even the mistake is irreducibly personal. But finally, there is the sobering concern that, if all this is the case, whether or not our philosophy is reductionist or personal in the end really doesn't matter. I would resist this assessment, as I'm sure Gill would; but the warrant for our resistance to it may well be fiduciary—the unwavering commitment to the irreducible person which is in question.

However, it appears that our digital age, as expressed even in the work of Gill and others, sustains a kind of embarrassment about the person—as if the notion of irreducible personhood must be rejected as anthropocentric—somehow a product of the very non-person centered approach modernism has spawned. This is actually something with which Polanyians to their chagrin are well-acquainted—the presumptuous rejection of the personal—and of Polanyi's work as a consequence. But there is no way forward on this urgent matter if it is not to challenge it directly, as Polanyi does, commending its alternative; to find ways to protect the commitment as irreducible, and to develop a more sophisticated ontology of the person. This essay I hope will contribute to this effort.

So in this essay I suggest that Gill's project to show that it retains key underlying presumptions of the non-person-centered epistemology which by contrast Polanyi himself successfully identified and challenged. I pose that a few claims of his, beyond the ones Gill has appropriated, would enhance her project by setting it in a fundamentally reoriented epistemological and metaphysical key. With a hat tip to Gill's fine story of the meterologists' inner weather picture, recounted below, we may call this an inner philosophical picture. I believe that the unformalizable, irreducible primacy of the person must be affirmed in the digital age. It must be affirmed with the very personal mediation and witness that is being studied—but not in the manner in which it is being studied. Instead it must instead be borne

[7]

witness to—an irreducibly personal act—by persons. Irreducible personhood must somehow be protected by covenant-like (irreducibly personal) commitments—perhaps something like the Bill of Rights. Apart from this, all knowing self-destructs, as Polanyi understood, and paradoxically manages to destroy persons in the process—until someone wakes up.

Redrawing these underlying presumptions is especially urgent. All who work with technology (which is all of us) must ensconce and protect the irreducible primacy of the person in continued resistance to a skewed, and addictive, exaltation of the digital, a resistance which I believe Polanyi's claims model.

But on the positive side of the ledger, protecting the irreducibly, unformalizably personal actually rejuvenates the very technology we produce and use. As Robert Pirsig so memorably taught us in his famous 1974 reflection on his beloved motorcycle, the problem isn't the technology; it's the technological mindset of depersonalized persons.[8]

Also as Pirsig showed, in this age or any age, personhood is fragile and must be accredited and protected. Even if it isn't the machines' fault, a defective philosophy that misconstrues them can and does occasion our mindless addictive surrender of our personhood.[9] That is why this discussion is so urgent. Personhood is irreducible; it is however also fragile.

In what follows I will present a selective synopsis of Gill's claims, and then show wherein I believe they display implicit philosophical presumptions which Polanyi wrote to expose and challenge. I will then present some of his claims and show how they bear on this matter. Finally, I will very briefly identify the claims of other thinkers which I believe are profoundly germane to this discussion.

## Satinder Gill's Tacit Engagement

First, what Gill brings to her study is remarkable. The book's Preface, an intellectual autobiography, reveals that this is for her a joyous lifelong and worldwide pursuit. (Gill, v-xiii) It is one which began with and continues that of her father's: Karamjit S. Gill was founder and editor of the journal, *Technology and Society.* Dr. Gill has pursued her research in many countries. This wide experience underscores for her the critical importance of global communication which respects the dignity of all participants across cultures.

Near the end of the book, Satinder Gill summarizes what has been her task: "This book explores whether the concept of the *interface* can be located in *dialogue, performance,* and the *tacit dimension of knowledge* within the human system, and thereby expand possibilities for what it could then mean as technology. For this to be possible, I ask what would we need for an interface to support how we relate to each other, in particular, what Polanyi (1966) called our *personal act of knowing.*" (Gill, 127)[10] She explains that, in society's current reflection on technology, in contrast to the emphasis hitherto on the non-person centered—data, efficiency, utility, and automation, which have permeated the idea of interface, she and others want to ask "how to support our relations with each other and share and enable us to impart knowledge and skills when we are distributed

[8] Robert M. Pirsig, *Zen and the Art of Motorcycle Maintenance: An Inquiry Into Values* (orig. pub. 1974).
[9] Sherry Turkle offers extensive evidence for this in *Reclaiming Conversation: The Power of Talk in a Digital Age* (New York: Penguin, 2015). Gill notes this, citing Turkle's work. (Gill, 14) In a later section of the paper, I briefly present some of her claims.
[10] Regarding Gill's repeated allusion to p. 49 of Polanyi, *Tacit Dimension:* I wonder whether she interprets this passage as speaking collectively: a comprehensive entity is the entire phenomenon of persons in interpersonal conversation. I believe that the text should be read distributively: Polanyi is listing some examples of comprehensive entities. This perhaps supports Gill's puzzling (to me) emphasis that mediation is collective. (See n. 11 below.) I wonder whether as a result she deems knowing personal and relational only when it involves persons conversationally, rather than all knowing being personal and relational. This would be in contrast I believe to Polanyi's work, and in contrast to my own epistemic account.

in space." In her own inquiry she has asked, "Yet what does it mean to mediate? What is the difference in the process of mediation when we are engaged in embodied co-present interaction, and when we are communicating via digital means? What then is the relation between mediation and interface?"

Referencing the Polanyi-Rogers dialogue and the idea of part-whole Gestalt relationship, Gill restates her findings in the arts: "In this newly established self where the parts have become whole, trust and truth are established between dancers and with the audience. In art, authenticity creates trust between performer/artist and the performer and the audience/viewer. Truth lies in a personal act of knowing which is relational. This is distinct from truth acquired through data and logic." (Gill, 128) Also she has shown that: "The paradigm of data (of parts) and utility gives primacy to transactional information over that which is relational. …Music is necessarily relational (rhythm, pitch, melodic) and language is primarily transactional (semantics and grammar)."[11]

Gill's conclusion: What is clear is that we can better understand what makes for success if we consider how knowledge is performed in our daily lives with others, i.e., knowledge as skilled embodied performance. It is proposed that the key to success is the process of mediation which is a collective act between the participants engaged in it…. Mediation is not of an individual's body movement and voice but lies within a collective act, whereby the expert recognizes the apprentice's idea as he moves with it, evident in his response of accepting it. …In the collective moment of mediation, we express our 'know how', that we 'know that', and critically, that we 'know when', simultaneously. (Gill, 130)[12]

"In conclusion," Gill writes, "it is arguable that any interface that seeks to engage with our personal act of knowing needs to be able to afford us our relational dimension in balance with transaction." (Gill, 130) Gill applauds the slow but growing shift to the relational: in computers: a shift from cognition to action; in music: a convergence of arts with digital technology, artists and scientists and technologists joining hands to find alternative ways to investigate the relation between human and the digital and the mediated human, beyond the dominant concepts of technology as a transactional conduit. This is a shift in paradigm towards what I will term the *relational interface.*" (Gill, 130)

Gill's final restatement in the book: "Tacit engagement involves a structure of mediation, which is a collective moment that involves being consciously aware of the other from the other's perspective and recognizing oneself in that situation simultaneously in a personal act of knowing. Polanyi said that all knowing is the same as that of seeing a problem in a personal act of knowing. For an interface to mediate, it needs to afford this process of tacit engagement." (158)

Key to Gill's argument are a handful of significant real-life examples. A couple of them tell against technology and showcase her agenda; and a couple showcase her proposed solution. First, she is struck by her experience of a Japanese colleague proficient in communication, whose effectiveness breaks down when using Skype. (Gill, 10-12) This is the technological gap which Gill hopes to reduce. Second, she tells a wonderful story of weather forecasters in the wake of highly digitized meteorological data only continue to succeed at effective forecasting by skillfully building an "inner picture" of the weather. (Gill, 83) The data prove perhaps more certain but certainly more useless. Also, as she says elsewhere, digitized data has the effect of stripping experts of their confident, artful, expertise, binding them to the data as "the one best way." (Gill, 129)

Two more examples are positive and telling for Gill. One is her observation (and video) of a conversation between a senior and a junior design architect. (Gill, 105ff) It is at the moment when their body movements synchronize, in the "parallel coordinated move," that a mutuality of understanding has been achieved. It is an "Oh I see *you*!" moment, an "Oh we see together!" moment. The other example features a group, which contains an expert, exploring a problem. (Gill, 84-87) There comes a point when someone in the group becomes "a mediator": he/she expresses the problem in such a way that the expert is able to recognize what is to be done, and the group collectively comes to understanding. These two examples epitomize what Gill notices and finds significant; she defines her central notion of "mediation" as the collective moment of integrative insight which

[11] In a footnote here she distinguishes her use of "relational" from the relationships between people. As far as I can tell, this is the only mention of this distinction. It leaves me unsure of what she means by relational—and I do not recall that she has defined the term in the text. I wonder if this too suggests an embarrassment regarding the person (see below).

[12] I have struggled to grasp with confidence a single meaning of "mediation" in Gill's usage. At first it seemed that she was using it to reference Polanyi's subsidiary indwelling of clues. (Gill, 29) Of course this includes knowing together in ensemble. But here and elsewhere it appears that she restricts the use of the term to the ensemble setting, to the collective aha moment in the ensemble.

they both display—see her definition in the quotes above. This is also how she conceives of a personal act of knowing, of knowing as relational, and of truth as this interpersoned event. This is the tacit engagement beyond interaction for which technology must develop "bandwidth" in order to support human communication.

Now to my concerns. I sense that the terms of Gill's project remain set by a latent defective epistemology and metaphysic. "Technology is here to stay," she comments. (Gill, 158) Her question is how we can develop it more so that it will support human communication. Her solution—to draw on the resources of art and even to explore the liminal space between the two realms—appears to honor a dichotomy between the non-human realm of technology and the human realm of art. She suggests that there are two kinds of truth, non-personal and personal, transactional and relational. She implies that science, knowledge and truth of one kind, and language, are non-person-centered. Knowing and truth are personal only when knowing occurs between persons. And if these two realms are distinct, it appears that in some sense the transactional retains superiority as real knowledge—we remain concerned to communicate information. This epistemic posture comes through in the quotations above.

Second, I feel that her agenda, even with her wonderful examples, is to uncover components of human interaction that are focally formalizable and thus capable of being technologically reproduced. I wonder if the reasoning masks some slippage in her understanding of the term, mediation, when attributed to humans in direct contact, in which it is Polanyi's integrative aha moment, in contrast to, in technology, its designating a technological interface. The ultimate goal remains to evolve computers to be more compatible with "the human system." [13] In connection with both of these matters, I find it telling that her overall project appears to make little progress from beginning to end: her conclusion restates her original inquiry. While it is right and good to acknowledge the personal in knowing, it is only possible for her to say that a technological interface needs to be developed to support it. Implicitly a question is being begged, and prohibiting real advance.

Third, it appears that Gill harbors an ambivalence about the person. The following features of her argument indicate this to me. Technology, science, language (including semantics) is personless for her; art is personed and interpersoned. This is in contrast to taking all human endeavors, including technology, to be personed. Further, she finds significant the addition of the epistemic category of knowing *when* (to the common ones, knowing *that* and knowing how); yet she fails to add knowing *who* and knowing *with whom*—even though her evidence compellingly suggests it. Additionally, she betrays a concern to restrict the personal even in her own solution. Gill affirms that we must "shift the position of the human from the center of a picture of progress to being part of nature and being material, where cosmological qualities of *energy* and *matter* become salient." (Gill, 131) Elsewhere she says: "However, the problem of intersubjectivity is that we assume and judge others according to our own 'self', so what if the problem of a difference of opinion or a misunderstanding lies with our assumption and not with the other? How can we realize our cultural assumptions in a distributed setting?" (Gill, 158) These passages suggest that she allies the idea of person with modern Western domination, and thus

[13] I had similar concerns with Nevejan's claims. I take "witness" and "trust," and even being present, to be covenantal actions which persons and only persons *enact*. However, it appears that Nevejan reduces witness to observation, and presence to sharing of space, therein eliminating the personed act. I find it both intriguing and of concern that she develops a complex quantifiable scale on which to measure witness and trust. (Nevejan, 17)

paradoxically with the non-person-centered side of the dichotomy. Then instead she finds a more befitting "modesty," paradoxically, in a more non-personal cosmology.[14]

So I'd like respectfully to suggest that Gill's appropriation of Polanyi is incomplete and therefore skewed. I wonder whether, although she explores the subsidiary, she fails to retain the idea of it *as* subsidiary. But keeping the subsidiary subsidiary would be utterly critical to understanding Polanyi, and the key to his healing critique and reorientation of epistemology. It is key to truly uniting the divorced and thereby debilitated "non-personed" and "personed." Her work may be a kind of destructive analysis—valuable only as one returns it eventually to the subsidiary, but involving a risk that the knowing event as a whole may be irretrievably destroyed. It could be said that this is the cause of the entire dichotomy between technology and humanness: by means of a kind of permanent destructive analysis, the paradigm of all knowledge becomes the focal and specifiable. For Polanyi, knowledge is unformalizably, bodily, subsidiarily rooted and personed, through and through—both for technology and science and for art. So Gill's "personal" doesn't quite accord with his understanding either.

## Michael Polanyi's Unformalizability of the Personal

I find it tremendously meaningful to have traveled to a conference so close to the place Polanyi lived and worked, and to engage a subject which he too engaged, around 1950, in Manchester, in response to the appropriately famous proposals of Alan Turing. In fact, the two staged a conference around that time to consider the matter. It's great to bring these specific insights of his into this conversation.

In a short piece called, "The Hypothesis of Cybernetics," Polanyi demonstrates that the idea that there could ever be an exhaustively formalized system of deductive inference (as Turing and others were proposing) is logically flawed. Instead, any such system requires unformalizable supplements. These consist of positive, substantial, essentially and irreducibly personed acts of knowing, understanding and acknowledging. These may be considered "psychological," but they are also logically undeniable and fundamentally operative, if the system is to be one of semantic (true) inference.[15] Consider the following quotations:

"Thus, I maintain that a formal system of symbols and operations functions as a deductive system only by virtue of unformalized supplements. We must know the meaning of undefined terms, understand what is stated in our axioms and believe it to be true, and acknowledge an implication in the handling of symbols by formal proof. These acts of knowing, understanding and acknowledging are not formalized: they may be jointly designated as the 'semantic operations' of the formalized system." (Polanyi, "Cybernetics," 313)

"Formalisation can be extended to hitherto unformalized semantic operations, but only if the resulting formal system can in its turn rely on yet unformalized semantic operations. The elimination of 'psychological elements' by formalization remains necessarily incomplete. The purpose of formalization lies in the reduction of informal functions to what we believe to be more limited and obvious operations; but it must not aim at their elimination." (Polanyi, "Cybernetics," 313)

"The semantic operations attached to a formal system are functions of the mind which understands and correctly operates the system… Since a formal system will always require supplementation by unformalized operations, it follows that none can ever function without a **person** who performs these operations. A formalized deductive system is an *instrument* which requires for its logical completion a mind." (Polanyi, "Cybernetics," 313-14)

[14] This is similar to D.C. Schindler's criticism of modernist epistemology. See below.

[15] Michael Polanyi, "The Hypothesis of Cybernetics*." British Journal for the Philosophy of Science* (2[5/8] (1951: May-1952: Feb), 312-15.

*Personal Knowledge*, Chapter 8, "The Logic of Affirmation," contains a closely related discussion.[16] Here Polanyi speaks of the tacit coefficient, calling us to the very personed act of accrediting it. (*PK,* 249)[17] The tacit coefficient is both personal and unspecifiable (unformalizable). (*PK,* 250) It alone makes a tool a tool; and this applies not merely to computers, but to a language or to a scientific theory. It is a hazardous, confident, commitment, from start to finish. (*PK,* 250-51). The personal is essentially and consistently what makes truth and meaning. (*PK,* 253) It alone is what spawns the logical leap involved in new discoveries. (*PK,* 257)

In this passage, in justification Polanyi draws on Kurt Godel's incompleteness proof, and also the work of Alfred Tarski regarding truth. "Tarski has shown that any formal system in which we could assert a sentence and also reflect on the truth of its assertion must be self-contradictory. Thus, in particular, the assertion that any theorem of a given formal language is true can be made only by a sentence that is meaningless within that language. Such an assertion forms part of a richer language than that which comprises the sentences whose truth it asserts." (*PK,* 260)

Polanyi herein draws attention the logical distinction between persons and machines. "The necessary relatedness of machines to persons does essentially restrict the independence of a machine and reduce the status of automata in general below that of thinking persons. For a machine is a machine only for someone who relies on it (actually or hypothetically) for some purpose, that he believes to be attainable by what he considers to be the proper functioning of the machine: it is the instrument of a person who relies on it. This is the difference between machine and mind. A man's mind can carry out feats of intelligence by aid of a machine and also without such aid, while a machine can function only as the extension of a person's body under the control of his mind… The machine can be said to function intelligently only by aid of unspecifiable personal coefficients supplied by the user's mind. (*PK,* 261f)

Polanyi directly dissents from Turing's conclusion that a machine that deceives us into thinking that it thinks is actually thinking: "According to these definitions of 'mind' and 'person', neither a machine nor a neurological model, nor an equivalent robot, can be said to think, feel, imagine, desire, mean, believe or judge something. They may conceivably simulate these propensities to such an extent as to deceive us altogether. But a deception, however compelling, does not qualify thereby as truth: no amount of subsequent experience can justify us in accepting as identical two things known from the start to be different in their nature." (*PK,* 263)

Polanyi concludes that we must accredit that person and his/her essentially personed acts of understanding, judging, and so on; and he concludes that this calls for an ontology: "Our theory of knowledge is now seen to imply an ontology of the mind. Objectivism requires a specifiably functioning mindless knower. To accept the indeterminacy of knowledge requires, on the contrary, that we accredit a person entitled to shape his knowing according to his own judgment, unspecifiably." (*PK,* 264)

I draw one final quotation from the Polanyi-Rogers dialogue.[18] Rogers laments that science appears to be leaving out the person. Polanyi responds first by citing the Hungarian Revolution, in which Communist citizens awoke to the fact that Communism is essentially not true—and then society's subsequent denial that the revolution had been about truth. For Polanyi this glaringly displays the moral inversion involved in Communism. For the reader it is telling that Polanyi closely associates the totalitarianism ravaging his life and culture with "the mechanistic view of man," about which he says the following: "For the unsatisfactory nature of the same mechanistic conception of man eliminates the responsibility of man, doesn't know the place for it, and has no place for the autonomous intrinsic powers of thought in general — not only responsibility but also the whole of our actions as having meaning. Individuals have no place in the scope of mechanistic interpretation. As to science, I again think that we must first of all have a pretty good and new idea about knowledge in general, and then we can come to science and put it right. But in the first place, I think we must have a clear mechanism, and that is, at any rate, what I was trying to establish. A mechanism which, without obscurity and without forcing the issue or the conclusions, brings us a way of seeing — a

---

[16] Michael Polanyi, *Personal Knowledge*: Towards a Post-Critical Philosophy. (Chicago: University of Chicago Press, corrected ed. 1962), 249-64.

[17] To the point of Gill's concern about Western anthropocentrism, Polanyi at the outset calls us to accredit far wider cognitive powers than objectivist conception (which also reduces the independence of human judgment) (*PK,* 249).

[18] "A Dialogue: Carl Rogers and Michael Polanyi." Recorded at KPBS television, San Diego, California, March 5, 1966 [transcribed from pp. 193-201, Coulson and Rogers (eds.), Man and the Science of Man, 1968] http://www.polanyisociety.org/Polanyi-Rogers%20Dialog-pdf.pdf. Gill also notes and quotes from this dialogue. (Gill, 130, 157) However, I as yet am unable to link her source of it with the one which I accessed.

necessary and adequate way of seeing — which does not reduce man to an aggregate of atoms or even to a mechanism but gives us, straight away, an access to him as a person; and when we have that, we can, I think, move on a fairly large scale from man to other things, and also to history." And finally Polanyi proceeds to challenge the prevailing unhelpful misuse of the term "science"—such that "when we bring in 'science,' we usually don't even bring in science, but we bring in the misdescription of science itself."

Now to reflect on some insights which these passages contain, which are germane to Gill's work. In the Rogers-Polanyi passage we glimpse the philosopher's sweeping agenda: to reshape our "inner philosophical picture." It is clear that there is a problem with both mechanization and science as currently understood. Polanyi's solution, in contrast to what I take Gill's to be, is not additive but rather transformative. It involves, not tacking on research from art (presumed to be distinctively human, exterior to (a presumed nonpersonal) science and technology) and a (consequently presumed) space between art and science. Instead it requires a philosophical—epistemological and metaphysical overhaul—to both science and art. His agenda refuses to concede a personless science or technology, but rather seeks to reclaim and rehabilitate them as fully personal, to be what they are and are meant to be. To say it in a different way, Polanyi refuses to relegate technology, science, and language to Martin Buber's I it, and then go in search of I You. For Polanyi knowledge is I You throughout, technology and science included. In contrast to Gill, Polanyi begins, not by accepting technology as impersonal, but by refusing to accept it as impersonal.

It's going to take epistemological and metaphysical work that challenges and redraws modernity's assumptions at the most fundamental level. Epistemologically, this will include distinctively and logically the affirmation of the exclusively personal acts of affirmation, appraisal, and understanding as a tacit and unformalizable, robustly personed component of all knowledge of any sort, including technology itself. To this end Polanyi offers two things. First, he shows the logical defect of overlooking the essential component of irreducible sophisticatedly personal acts in science and technology. Second, throughout his work, he offers a creative alternative epistemology which is pretty hard to deny in day-to-day life. Both will hold a metaphysical implication of the person as an ontologically irreducible reality. Finally, we may infer from Polanyi's concern with Turing's proposals and the overall outlook regarding science, that despite the obviousness of all this, defending the irreducibly personal in this age is an ongoing challenge which must never be allowed to wain—not only in defense of persons, but in defense of science.

Technology and science have been exalted as focal, objective and neutral.[19] They should instead be seen to be tools—intrinsically personal through and through *as* tools in the employ of persons—just as are coordinated body movement and artistry. Rather than reductivistically formalizing and simulating interpersonal dynamics in supposedly impersonal technology, we may do something even better, and arguably more natural: we may catch up the very technology *subsidiarily* as a tool in service to irreducibly personal and interpersonal reality. Technology is itself rendered personal, as paper and pen are, when it subsidiarily supports a logically prior interpersonal communion and when the interpersonal communion is not reduced to it. One wonderful thing about subsidiaries is that the defining goal is irreducible to it, beyond it, and thus in a freeing way not entirely impeded by its subsidiaries' gaps or failures. So long as the upper-level goal is operative as logically prior and definitive of the activity, even

[19] Since the Enlightenment humans have even aspired to themselves be automata, as Gill notes. (Gill, 35-36) Perhaps this has been in part to minimize a personhood mistakenly taken to be anthropocentric.

slightly defective subsidiaries—such as technology short of a relational interface—can be indwelt and "forgiven" in the process.

I suspect that an improper implicit concession of technology to I it is at least a factor in the way that technology is widely seen now to be threatening our very personhood, rendering us ourselves as robotic. Highly personed resistance is called for. Consistently with Polanyi's all-out lifetime efforts, Sherry Turkle and Thomas Friedman call us to remember and fight for our personhood and interpersonhood across our lives, including technology—as will be seen below.

In this way, Polanyi's inner philosophical picture proves more fundamentally germane and helpful to Gill's project than perhaps Gill herself has so far mined it. And his picture not only honors the bodily subsidiary, and that as personal; it also requires commitment to the person as ontologically irreducible and to uniquely personed acts of knowing as fundamentally unformalizable, including the necessary personal accreditation of technology, science and language.

## Other voices

### *Thomas Friedman*

I would like to introduce briefly a few other bodies of work, with which I am also preoccupied, and which I believe are germane to this important study. First is the cultural reflection of Pulitzer Prize-winning New York Times foreign affairs columnist, Thomas Friedman, specifically his most recent book, *Thank You for Being Late: An Optimist's Guide to Thriving in an Age of Accelerations.*[20] Friedman thoroughly documents the acceleration of technological innovation (along with other accelerations in globalization and climate change) since 2007. He accepts it and finds it exciting. But I find it profoundly significant that he counsels that in order to thrive in this age, humans must foreground irreducibly human things.

The following is my abbreviated catalog of Friedman's proposed solutions to the problem, culled from later chapters of the book: We should work as humans with technology and acceleration: we must learn faster and govern smarter (36); maintain dynamic stability (213); pursue innovation everywhere, including "moral innovation" (213); turn AI into IA, "intelligent assistance (217); make learning lifelong(ch 8); and cultivate Mother Nature's "killer apps": adaptability, diversity, entrepreneurship, ownership, sustainability, bankruptcy, federalism, patience, and topsoil (335). More fundamentally, we should anchor in community and cultivate trust. We must understand that we only upload values, not download them. (415) We must anchor in sustainable community values, belonging, mutual respect, culture, character. We must human again; study the liberal arts; scale the Golden Rule. (371-87, 486) We should seek to build a platform of trust. (263, 391, 444, 484) We should develop "stempathy"—only one-to-one between humans. (490) We should forge communities as "complex adaptive coalitions," (394) and foster bonding. (412) We should gather small collaborative groups around a dining table. (482, 488) And as Americans, we should defend national values of pluralism and democracy. (323) To my way of thinking, Friedman's counsel accurately gives expression to the primacy of the person in a way that affirms because it does not idolize technology.

Second, I note way too briefly the work of Sherry Turkle, which Gill also marks with affirmation. In her *Reclaiming Conversation: The Power of Talk in a Digital Age*, Turkle documents extensively the phenomenon of depersonalization that technology appears to be producing. She writes: "This new mediated life has gotten us in trouble. Face-to-face conversation is the most human—and humanizing—thing we do. Fully present to one another, we learn to listen. It's where we develop the capacity for empathy." (Turkle, 3) Turkle also affirms: "It is when we see each other's face and hear each other's voices that we become most human to each other." (Turkle, 23) And, "eye contact is the most powerful path to human connection." (Turkle, 36)

Our society's overuse especially of smart phones "all adds up to a flight from conversation…technology is implicated in an assault on empathy." (Turkle, 4) "It means lost practice in the empathic arts—learning to make eye contact, to listen, and to attend to others. Conversation is on the path toward the experience of intimacy, community, and communion. Reclaiming

[20] Thomas L. Friedman, *Thank You for Being Late: An Optimist's Guide to Thriving in an Age of Accelerations* (Version 2.0; New York: Picador, 2017) I am interested in his work especially because of my task as coordinator of a core interdisciplinary humanities course at my college.

conversation is a step toward reclaiming our most fundamental human values. (Turkle, 7) Her repeated mantra: Technology enchants; conversation cures. "My argument is not anti-technology. It's pro-conversation." (Turkle, 25)

Turkle offers copious examples to document the adverse impact of our devices on human conversation, and the adverse impact of that especially on children, but throughout our lives and society. She shows our growing preference to settle for connection rather than conversation, and even our growing preference for it. She is ultimately especially concerned with our current desire to talk, not through technology, but to technology, as if it were a person. One may think that Polanyi had no idea of such a world. Yet it is Alan Turing's "imitation game" which Turkle explicitly cites. (Turkle, 349) Turkle sees this as a turning point—an opportunity to reaffirm what makes us most human.

Turkle's work confirms that personhood is irreducible but also fragile. It can be defaced (a telling word!), in this case by a very personal decision to accede to technology in an addictive way. Persons may—and sadly often do—give away their personhood—and not just to technology. And it's going to take an exclusively personed acts—reclaiming, and reclaiming conversation in particular—to protect the irreducibly personal.

### *D. C. Schindler*

These last two bodies of work represent what I take to be the kind of metaphysics which needs to happen helpfully around personhood in modernity, and thus as helpful to our reflections on technology and humanness. I have for a few years now been working through the classical Christian metaphysics of philosopher D. C. Schindler. Schindler's proposal in many respects accord with Polanyi's and with my own. [21] In his essay, "Surprised by Truth," Schindler argues that reason is essentially ecstatic.[22] By "reason," he means human knowing, and he is herein offering an epistemic account. He argues that such an account must make sense of being surprised by truth—something which modernist epistemologies fail to provide, much less value—but without which no epistemology would even be coherent. Reason must be essentially beyond itself, out there in and with "the other"—with the thing that it longs to know. Knowing, for Schindler, decidedly is not the transfer of information, but rather the intimate interpersonal communion of personal presence with the irreducible other. And this is not just a description of knowing other persons; it is an account of all knowing of anything. All knowing is "mediation" in Gill's Polanyian sense: an I-see-you encounter. Honoring the person, rather than dominating and belittling the non-personal, actually supports an intrinsic regard for things. Schindler offers his proposals in order to challenge directly what he shows to be the immodest false modesty of modernist efforts to limit human reason. Rather, reason must be affirmed in its "catholicity": we must offer a redrawn account of reason—as ecstatic.[23] For Schindler as for Polanyi, human knowledge has a polar, from-to-and-beyond structure.

Also for Schindler, as for Polanyi, not only are persons irreducible, but as per the classical philosophical tradition, things are irreducible. Being itself—that is, all that there is—is irreducibly ecstatic as well. And as for Polanyi, it is the upper, irreducible "level" which if formative, logically prior to the lower, even though—especially as—mediated through it. Being unfolds generously from top down. And far from this ontology being abstract and complex, it is conveyed concretely by the loving gaze and welcome of the infant's mother, in conversation and encounter throughout one's life in the world. Reality is irreducibly personal.

In his later work, *Love and the Postmodern Predicament,* Schindler directly addresses the technological mindset of our age. Beginning with Aristotle's assertion that all men by nature desire to know, as evidenced by our natural delight in the senses, Schindler asserts that the desire for knowledge is at root a desire for intimacy, encounter, contact with the world, and that this desire is a fundamental part of what makes us human; we are made for this contact with an intrinsically meaningful and delightful world. However, "one of the things that specifies modern culture and distinguishes it from the traditional cultures of the world, is the effort to buffer this encounter. Modern culture is largely a conspiracy to protect us from the real." (Schindler, *Love,* 2) He continues: "We mediate our encounter with the world as far as possible through technology, which is said to 'enhance' it in various ways, but technology in fact always sets the terms for our encounter, and so in subtle but profound ways determines what we can experience….Our experiences are thus largely 'pre-planned' affairs, moderated in a manner that gives us some control over possible consequences." "In short," Schindler says, "the energies of the modern world are largely devoted to keeping reality at bay, monitoring any encounter with what is genuinely other than ourselves, and protecting us from possible consequences, intended or otherwise." (Schindler, *Love,* 3) But this means that this project is radically antihuman as

---

[21] The last chapter in my more recent book was my first attempt at engaging his thought as it resonates with my own covenant epistemology: Esther Lightcap Meek, *Contact With Reality: Michael Polanyi's Realism and Why it Matters* (Eugene, OR: Cascade, 2017).

[22] D. C. Schindler, "Surprised by Truth," chap. 2 in *The Catholicity of Reason* (Grand Rapids: Eerdmans, 2013).

[23] Schindler works extensively as a metaphysician specifically to challenge the philosophical ravages of modernity.

well as anti-reality. Schindler's purpose in this book, "in the face of this project which we are increasingly taking for granted as something altogether normal, is to recall a pre-modern vision of man as ordered to communion with reality." (Schindler, *Love,* 3) His philosophical anthropology taps the positive relational transcendentals, beauty, goodness and truth as marking all reality specifically as related to positively by the human person in apprehending the world. What is at stake in the transcendentals, "in short, is the most basic meaning of things and so man's fundamental relationship with the world, with himself and others, and with God." (Schindler, *Love,* 22) In other words, the urgent problem and its one cure are philosophical. This is an apologia for philosophy, "interpreted here as *an all-encompassing love of the real…*" (Schindler, *Love,* 3)

Although Schindler avers that much, much more could be said, he makes this general assertion about technology: "The more technology dominates our culture, the less philosophical we are capable of being, which is to say the more remote we become from the real." (Schindler, *Love,* 28) In a footnote here he quotes Nicholas Carr: 'The digital technologies of autonomy, rather than inviting us into the world and encouraging us to develop new talents that enlarge our perceptions and expand our possibilities, often has the opposite effect. They're designed to be disinviting. They pull us away from the world."[24] Schindler continues: "The mere 'use' of technology mediates the world we experience, giving it shape, and so, as we will argue further below, changes our relationship in subtle but important ways. It may allow us access to things in a functional sense, but this tends to come with the obscuring of the presence that is part of an encounter with reality. If what we have been saying is true, a *focus* on technology is an implicit denial of the transcendentals" and is antiphilosophical.

In these passages Schindler freights the term, "mediation," with a pejorative meaning in connection with technology. I only note what I cannot explore this adequately at this point. However, I believe that for Schindler mediation implies control and restriction, typical of modernity's self-protective, falsely modest, anti-realism. In no way would he align the mediation of technological interface with Gill's mediation as defined as the integrative event of seeing with you that definitively typifies, as he and I would say, *all* knowing encounters.

A second comment here. In contrast to Gill, Polanyi, and Friedman, Schindler is obviously far more pessimistic about technology. Yet his assessment does accord with Turkle's, and his philosophical proposals do accord significantly with Polanyi's. From his point of view, philosophizing around technology is likely to be avoided or underdone. This, I believe, sets in relief once again the remarkable contribution of Michael Polanyi as a premier scientist naturally developing the natural and necessary philosophical implications of his science. However, we should also note that Polanyi was writing well before the technological age in which we now move. And Schindler, writing from within it, harks back to a classical tradition that I believe is latent in Polanyi's intuitive philosophical reflections.

### *Robert Spaemann*

Finally, as a result of the Schindlers'—D.C. and wife Jeanne—translation of his work, I have been studying German philosopher Robert Spaemann's essay, "In Defense of Anthropomorphism." [25] Spaemann's account here directly addresses my personal longstanding skepticism about reality, and it does so by showing the irreducibly interpersonal dynamic at the very root of our being in the world. Also, this piece helpfully addresses Gill's and others' concerns about anthropocentrism.

Spaemann begins by trying to make sense of the question, is this real? He argues that there is no criterion to apply; rather, the affirmation of reality is more like an act of faith. (Spaemann, 78-79) It is what Polanyi calls an unformalizably personal act of appraisal and attestation. The real world is not the world held in common, nor the world of objects (modernist anthropocentrism). We confidently grasp reality on the grounds of anthropomorphism, as follows: I see that you are seeing me and talking about me—that what (who) you are affirming is not my body as object, but my self. I am object as subject. I am the object of another's speech. Even Descartes' famous cogito implicitly affirms this. "My subjectivity is an objective reality—and this is what we mean by "persons": an objective reality that represents a standard by which to measure every true judgment." (Spaemann, 81)

"This distinction between the 'I think' and the 'I a' I any event has meaning only if the sphere of reality extends beyond the sphere of my consciousness. And it does exceed that sphere only if there are other beings for whom it is truth that I have consciousness. If my world were the only one that existed, this proposition could be crossed out." "Persons are real only in plural, that is, as subjectivities that have become objective for one another." (Spaemann, 83) "It is only in the act of recognition

---

[24] Nicholas Carr, *The Glass Cage: How Our Computers are Changing Us* (New York: Norton, 2014), 219.

[25] Robert Spaemann, *A Robert Spaemann Reader: Philosophical Essays on Nature, God, and the Human Person* (ed. and trans. By D. C. Schindler and Jeanne Heffernan Schindler. Oxford: Oxford University Press, 2015), 77-96.

that the person is given as person. But this is true of every experience of reality in a certain sense." (85) Not to do so is a moral mistake. You cannot separate ontology and ethics.

Spaemann directly challenges Hilary Putnam's "internal realism": at this point we must all be metaphysical realists. (Spaemann, 81-82) Unlike Putnam's assessment, Spaemann insists that this experience is not "a special case" to be dismissed, but rather the paradigm for the humans' relatedness to all things, human and nonhuman. "The mode of givenness of other persons is the paradigm for the givenness of reality in general." "We attribute reality to things beyond what the encountered object is for us and what we experience of it." This is essentially anthropomorphism, and it is unavoidable, as Nietzsche and others saw. But Spaemann emphatically distinguishes it from the anthropocentrism endemic to modernity: objectivism is intrinsically anthropocentrism—it reduces things as well as persons to their functional service to me. This is what allows the possibility, we may note, of Turing's reducing thinking to any functional equivalent which deceives me. And indeed resisting anthropomorphism actually leads to the disappearance of the person. (Spaemann, 88)

There is much to explore here. Spaemann displays what may go on in the way of offering an account of personhood which bears on technology, modernity, and everything else. My purpose has been to present enough of Spaemann's and Schindler's thought to show how the battle for our time—for personhood in our digital age--must be carried forward on a fundamental philosophical level.

## In Conclusion

Philosopher and Polanyian Marjorie Grene, in a major epistemological reflection titled, *The Knower and the Known,* makes a point which pertains to Gill's work.[26] Recognitions of persons or of any individuals is an aesthetic judgment—to recognize a coherent form, and a center. (Grene, 212) Reflecting on Tinbergen's "systematically objectivist" study, *Herring Gull's World*, Grene demonstrates that "the magnificent analytical achievements of modern behavior studies do in fact take place within the context of the recognition of persons." (Grene, 213) Tinbergen knows, not so much objectivistic phenomena but seagulls, personally, delightedly, contemplatively. "Watching the birdwatcher watching, we are acknowledging the existence of a person in the fullest sense we know of, a person motivated …by an intellectual passion…for the understanding of other living things." "Here, in short, we meet full, responsible personhood." (Grene, 215-16) Looking and Gill's work must include watching the birdwatcher watching. Gill herself displays full, responsible personhood, in a kind of delighted communion with technology, actually with no additional help from art. And that is majestic.

Our digital age is calling forth good thinking about humanness, and about how technology may support it, of which Satinder Gill's intriguing and telling work is a specimen. At the same time, technology appears to threaten personhood, and personhood proves to be fragile. In this essay I have argued the conversation must go forward on a deeply fundamental epistemological and metaphysical level, as Michael Polanyi recognized and urgently endeavored to carry out. While Gill is to be commended for appropriating some Polanyian insights, it appears that her project would benefit from a more thoroughgoing appropriation of his inner philosophical picture. Gill needs to affirm her work as what it truly is: confirmation of the irreducibility of personhood, and of the tool status of technology.

Technology is here to stay. But what better not be with us to stay is a defective epistemology and metaphysics which retains the personal as irreducible, and that makes technology thoroughly personed tool.

[26] Marjorie Grene, *The Knower and the Known* (Berkeley: University of California Press, 1974), 213-16.