

**ON MCSHANE'S INVITATION TO THE ACADEMY
AND THE ECONOMY**

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1. Introduction

I wrote an early draft of this paper as preparation for a presentation that I gave at the 47th Boston Lonergan Workshop, in June of 2021. The 2021 workshop was dedicated to honor Fr. Robert Doran (1939–2021). Fred Lawrence also invited contributions and tributes regarding the work and legacy of Philip McShane (1932–2020), hence the title and purpose of my paper.

To speak about McShane's work is a challenging task. He was incredibly prolific. His writings span more than 50 years of accelerating growth. And he climbed well beyond contemporary achievement in the academy.

McShane directed much of his scholarly work to growing in understanding of, and initiating implementation of, "Lonergan's leading ideas."¹ He made fundamental progress in foundations in science, philosophy, and theology. Two of McShane's focuses were Lonergan's 1965 breakthrough to the functional specialties;² and Lonergan's (earlier)

¹ Pierrot Lambert and Philip McShane, *Bernard Lonergan. His Life and Leading Ideas*, 1st ed. (Vancouver: Axial Publishing, 2010).

² Bernard Lonergan, "Functional Specialties in Theology," *Gregorianum* 50/3 (1969): 485-505. McShane recalled that in February of 1965, "Lonergan had broken through the problem posed to him by the mess of theology and religious studies. ...[part of] Lonergan's search for the *X* called cosmopolis, some collaborative structuring of human loneliness that would make effective the drive towards authentic global happiness. ... [In the summer of 1966], Lonergan pointed me to his solution as we sat in his room, poised opposite one another as I asked the central question. He immediately swung his two hands towards each other, trembling fingers inches apart, and remarked laconically, 'well it's easy: you just double the structure.' He gave me a ten-minute lecture on the new heuristic of inquiry, a lecture that has kept me poised now for forty-seven years." (Philip McShane, *Randomness, Statistics, and Emergence*, eds. James Duffy and Terrance Quinn, 2nd ed. (Vancouver: Axial Publishing, 2021) liv). This is from the Preface to the second edition of *Randomness, Statistics and Emergence*. The new Preface written in October 2012. (See McShane, *Randomness*, 2021, liii).

discovery of the science of economics³.⁴ McShane’s personal website is a convenient source for his many writings.⁵ A handy “map” of sorts is provided by his Curriculum Vitae which is at the bottom of the Biography page of the website.⁶

For readers familiar with McShane’s works, you may have noticed that the title of my paper is similar to the title of a book McShane wrote about Lonergan, namely, *Lonergan’s Challenge to the University and the Economy*.⁷ The similarity is deliberate, of course. It points to both a unity and complementarity of purpose in the works of Lonergan and McShane. The complementarity is hinted at by differences in the two titles: I replace ‘challenge’ with the more personal ‘invitation,’ and ‘university’ by the more general ‘academy.’ The preposition ‘On’ is for the fact that this article is brief and introductory.

2. My purpose in this paper

It would be folly to attempt summary or simplification of any of McShane’s works. Summary can be helpful if one already understands, but otherwise leads to contraction of meaning. What I will do, instead, is first talk about one word (or more precisely, a “meta-word”) that McShane invented and eventually named **W1**. I hope that it will become

McShane continued to grow in that poise until he took leave, in July 2020. Hereafter, the book *Randomness* will be referred to as *RSE—RSE* (2021) or *RSE* (1970), as needed.

³ Michael Shute, *Lonergan’s Discovery of the Science of Economics*, 1st ed. (Toronto: University of Toronto Press, 2010).

⁴ As expressed by McShane, a main goal of his was to make Lonergan’s discoveries in economics widely available. Although, to be sure, he expanded on and added helpful detail to Lonergan’s foundational works. See, e.g., Philip McShane, *Economics for Everyone. Das Jus Kapital*, 3rd ed. (Vancouver: Axial Publishing, 2017) and Philip McShane, Editor’s Introduction, in Bernard Lonergan, *For a New Political Economy*, Vol. 21, Collected Works of Bernard Lonergan (Toronto: University of Toronto Press, 1998), xv–xxxii.

⁵ Philip McShane, “Philip McShane,” <http://www.philipmcschane.org/> (accessed July 11, 2021).

⁶ Philip McShane, “Biography,” <http://www.philipmcschane.org/biography-philip-mcschane/> (accessed May 12, 2021).

⁷ Philip McShane, *Lonergan’s Challenge to the University and the Economy*, 1st ed. (Washington, D.C.: University Press of American, 1980).

evident, or at least plausible, that **W1** will be crucial for modern heuristics in all areas.

In traditional philosophical and theological contexts, a symbol such as **W1** might seem odd or, as McShane admitted, “weird.”⁸ Except for various specialized zones in philosophy regarding, for instance, logic and symbolic logic, modern philosophy makes little use of symbolizations and lacks a shared heuristics. But **W1** is part of McShane’s answer to Lonergan’s call for the development of appropriate symbolizations in biological sciences, human sciences, philosophy, and theology.⁹ In fact, **W1** is merely the first in a series of eight such “metagrams” invented by McShane, namely, **W1 – W7, W0**.¹⁰ Note, however, that “[t]he list is neither complete nor fixed: think of the manner in which the periodic table diagram is supplemented, e.g., in an organic chemistry text.”¹¹

My article is intended as “positive haute vulgarization.” It is not erudite. It is not an attempt to teach science, philosophy of science, or theology. But I do mention results in science, philosophy of science and theology. I hope that that does not put off contemporary students and

⁸ Philip McShane, “Prehumous 2. Metagrams and Metaphysics,” http://www.philipmshane.org/wp-content/themes/philip/online_publications/series/prehumous/prehumous-02.pdf, 1.

⁹ “[I]n larger and more complex questions it is impossible to have a suitable phantasm unless the imagination is aided by turning to some sort of diagram. Thus, if we want to have a comprehensive grasp of everything in a unified whole, we shall have to construct a diagram in which are symbolically represented all the various elements of the question along with all the connections between them.” (Bernard Lonergan, *The Ontological and Psychological Constitution of Christ*, Vol. 7 (Toronto: University of Toronto Press, 2002) 151.

¹⁰ Placing **W0** at the end of the list is McShane’s ordering in McShane, “Metagrams and Metaphysics,” 11–14.

¹¹ McShane, “Metagrams and Metaphysics,” 12. A symbolism for human wording is **W2** (McShane, “Metagrams and Metaphysics”, 4). The need for this metagram lurks throughout my short article. However, discussion of its genesis would go well beyond the introductory and popularizing nature of the discussion. In any event, winning through to beginnings in **W1** is transformative and sufficiently challenging. McShane suggests that a candidate for **W7** is the fundamental diagram of economics as he presented it in (McShane, *Economics for Everyone*, 63).

scholars in philosophy and theology.¹² Alas, progress in modern science was part of both Lonergan's and McShane's heuristics and joint invitation.¹³ My paper is an invitation to an invitation. And that to which we are invited includes progress in philosophy and theology in modern contexts and applications. In particular, then, I also draw attention to the usefulness of **W1** in, for example, the human sciences and Christology. However, before turning to such advanced topics, I will begin by talking about the genesis of **W1**, in the lower sciences. In section 5, I include a "heuristic calendar" for human history, based on pointings provided by both Lonergan and McShane. In section 6, I touch on possibilities for closing existential gaps. I end the paper by re-extending one of McShane's invitations from his last years, namely, to make beginnings in an Exercise identified by both Lonergan and McShane as being crucial for progress.

3. Interpreting *Ranunculus*

One way to begin is with a story based on an example from chapter 5 of McShane's book, *Randomness, Statistics and Emergence*.¹⁴ The discussion there draws on experimental results about three species of buttercup, *Ranunculus bulbosus*, *Ranunculus acris* and *Ranunculus repens* growing in Port Meadow and Pixey Mead, Oxford.¹⁵ The experiments discussed

¹² Modern foundations in philosophy and theology will be developed gradually, both in individuals and in community. See section 6.

¹³ Some readers may be familiar with the C_{ij} matrix symbolism invented by McShane and found in many of his works. In that heuristics, my paper is loosely in the mode of C_{59} . See, Philip McShane, *Interpretation A to Z*, 1st ed. (Vancouver: Axial Publishing, 2020) and Philip McShane, *A Brief History of Tongue, from Big Bang to Coloured Wholes*, 1st ed. (Vancouver (prev. Halifax): Axial Publishing (prev. Axial Press), 1998) 108. The matrix C_{ij} probably needs to be added to the list $W_i, i = 0, 1, 2, \dots$, the first eight of which are metagrams "that dominate in the book *Method in Theology: Revisions and Implementations*." Philip McShane, *Method in Theology; Revisions and Implementations* (Vancouver: Philip McShane, 2007) (McShane, "Metagrams and Metaphysics," 1). But I leave that question for now, to be sorted out later in collaborations.

¹⁴ McShane, *RSE*.

¹⁵ J. L. Harper and G. R. Sager, "Some Aspects of the Ecology of Buttercups in Permanent Grassland," *Proceedings of the British Weed Control Conference I* (1953).

“[had] to do with distribution, survival and more precise definitions of buttercups.”¹⁶

To help keep our focus concrete, here is a photograph of *Ranunculus acris*:



Figure 1 Meadow buttercup, *Ranunculus acris*, England.¹⁷

For me, the flowers are beautiful and wonderful. I am reminded of beginnings in my wondering and inquiring about living things. For instance, one winter (1969–70) in Toronto, Canada, when I was a child, my mother gave me a packet of flower seeds. In April, I planted them in a flat box of soil that I placed in my bedroom near the window (a room shared with one of my brothers). Within a couple of weeks, or so, some of the seeds were swelling and cracking open. Within a few days, the box was burgeoning with seedlings leaning toward the light from the window, roots visibly growing downward into the soil. Each day, coming home from school, I would look forward to seeing ways in which the seedlings had changed. Within a few weeks, the weather warmed enough for me to transplant the growing plants to an outside garden where they flourished and, by midsummer, to my delight, became giant marigolds reaching to half my height.

About three years later, at elementary school, we learned to observe and draw plants in considerable detail. We examined and described seeds, parts, stages of growth and also learned to distinguish species, by observing subtle but visible differences at various stages of development, from seed to seedling, through juvenile to mature adult plant.

¹⁶ McShane, *RSE* (2021) 57.

¹⁷ Staff, “Meadow Buttercup, *Ranunculus Acris*,” The Wildlife Trusts, <https://www.wildlifetrusts.org/wildlife-explorer/wildflowers/meadow-buttercup>.

To give you an impression of the kinds of detail involved, here's an artist's sketch of "five stages" in the life cycle of *Ranunculus acris*:

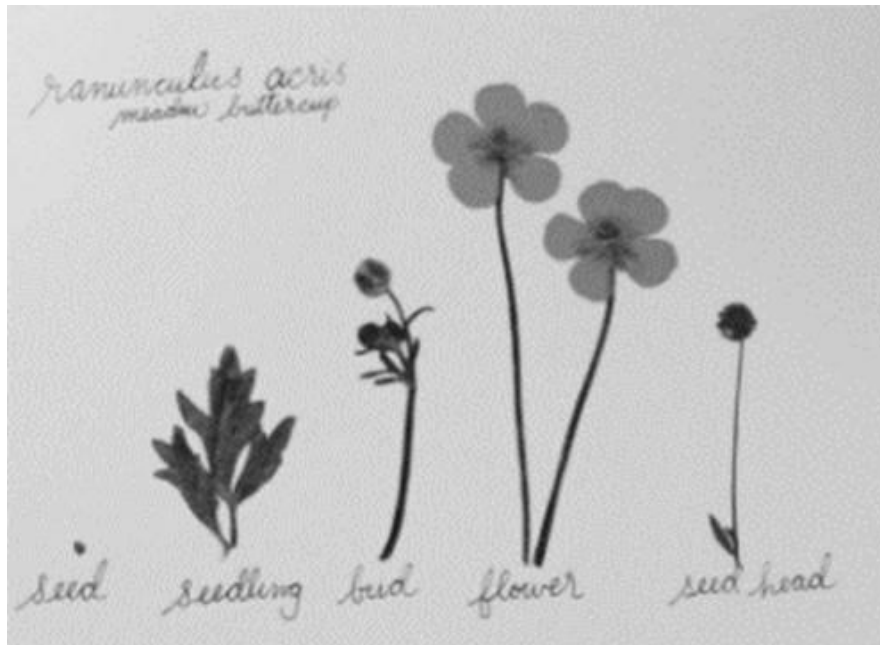


Figure 2 *Ranunculus acris*, meadow butter cup, five stages of lifecycle.¹⁸

Note that, in Figure 2, the "five stages" are descriptive¹⁹ and preliminary. If one goes on to study modern botany, descriptions of stages in the life cycle of *Ranunculus* become very much more sophisticated.²⁰ For in fact,

¹⁸ Karly Murphy, "The Lifecycle Collection: Buttercup, Print Reproduction Artwork of Pressed Flowers, 100% Cotton Rag Paper, Scientific Art," <https://www.kmpressed.com/listing/733537885/the-lifecycle-collection-buttercup-print> (accessed May 8, 2021).

¹⁹ What is *description*? Progress in explanatory understanding of emergent genera and species of description is a distant probability, the possibility of which is compactly but brilliantly anticipated in *CWL3*, 609-10.

²⁰ See, Paula J. Rudall, *Anatomy of Flowering Plant: An Introduction to Plant Structure and Development*, 4th ed. (Cambridge: Cambridge University Press, 2020).

Ranunculus has many more than “five stages” in its lifecycle. Indeed, there is an ongoing shifting at all levels, including in its biophysics and biochemistry. Living in an environment,²¹ *Ranunculus* is an astonishingly sophisticated adaptive “work in progress.” And modern botany continues to make progress in understanding the lifecycle of *Ranunculus* and other angiosperms.

I am deliberately not going into detail. I am just trying to communicate a sense of the fact that an up-to-date understanding of *Ranunculus* is concrete, is provisional, is nuanced, includes complex sequencings of anatomical structurings and, de facto, is fundamentally informed by ongoing progress in modern biophysics and biochemistry.

What does this have to do with my invited interest in symbolism? A first clue is that modern understanding of *Ranunculus* includes vast nestings and layerings of symbolisms. There are, for instance, intricacies of symbolisms for the biophysics of *Ranunculus*. There are also amazing “networks” of symbolisms needed for understanding the flower’s biochemistry. The symbolisms are neither pre-scribed nor merely speculative but emerge in scientific discovery.

Is the observation “trivial”? Contemporary biologists take such symbolism for granted and might wonder what the fuss is about. But how far might we go with the observation and (self-) observation that symbolism is needed in modern biology. With an astonishing control of meaning, in a single dense paragraph on page 489 of *Insight*,²² Lonergan uptakes centuries of searchings and progress in biology and philosophy of biology. He provides a concretely verifiable heuristics for understanding plants and animals. In particular, regarding symbolisms, Lonergan weighs in as follows:

[t]here have to be invented appropriate symbolic images of the relevant chemical and physical processes; in these images there have to be grasped by insight the laws of the higher system that account for its regularities beyond

²¹ There is “the problem of the environment, to be solved by a phylogenetic sequence of different organisms such that each earlier member both can survive in a less developed and can contribute to a more developed environment” (Bernard Lonergan, *Insight: A Study of Human Understanding*, Vol. 3, eds. Frederick E. Crowe and Robert Doran, 5th ed. *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1992) 480. Hereafter the book will be referred to as *CWL3*.

²² *CWL3*.

the range of physical and chemical explanation; from these laws there has to be constructed the flexible circle of schemes of recurrence in which the organism functions; finally, this flexible circle of schemes must be coincident with the related set of capacities-for-performance that previously was grasped in sensibly presented organs.²³

The paragraph on page 489 of *Insight* is dense, in the extreme. Like much of the book, it is an invitation that mainly is in the mode of *advanced doctrinal* graduate level statements for which, so far, we are lacking a much-needed series of undergraduate sources and preparatory development. Now, McShane's book *RSE*²⁴ also is advanced. Like the book *Insight*, *RSE* also needs readers to have some background in the modern sciences. But instead of moving doctrinally,

- (1) extensive scientific details are provided; and
- (2) descriptions and (self-) descriptions of relevant experiences are given.

And so it is that if one enters into examples discussed by McShane in *RSE*, *in the manner explicitly intended by him* (that is, by understanding and by self-attention to details in one's experience), one will be helped toward being able to (self-) observe²⁵ for oneself (in one's experience) that

instead of operating with the sensibly-presented [buttercup],²⁶ the scientist operates in the context of symbolic images of the chemical and physical processes. ... In cognitional terms, the symbolically-presented biochemical level is to biological understanding as matter is to form.²⁷

This result is the fruit of advanced self-attention in advanced contexts. It is a key toward resolving fundamental problems that otherwise remain unsolved in contemporary science, philosophy of science and theology. To be sure, it is generally acknowledged that biological things have what somehow are "hierarchical-like" properties (physical, chemical, ...). In what way, however, do the "hierarchical layerings" work together in an

²³ *CWL3*, 489.

²⁴ McShane, *RSE*.

²⁵ I am referring to techniques normal to generalized empirical method.

²⁶ The original text referred to "amoeba" (*RSE* (2021), 207).

²⁷ *RSE* (2021), 207.

organism? The efforts of Bertalanffy and his contemporary followers notwithstanding, neither contemporary science nor philosophy of science have yet homed in on²⁸ the concretely verifiable solution to the problem that was communicated by Lonergan in doctrinal density and that was later spelled out in inviting detail by McShane in *RSE*.

Not long after writing *RSE*, McShane wrote a short, challenging, and pedagogical book called *Wealth of Self and Wealth of Nations, Self-axis of the Great Ascent*.²⁹ In the book's Epilogue, he provided what to my knowledge is the first instance on record of "meta-symbolisms" that emerge in generalized empirical method³⁰ and that are needed in modern contexts. As alluded to in the Introduction to this article, decades later McShane introduced the name *metagrams*.³¹ In *Wealth of Self*, in the earlier version of the "meta-symbolism," "layerings" of physics, chemistry, and so on, were "separated" by commas. Eventually, however, McShane made a subtle but important change: he replaced the commas by semi-colons. And so, for example, with that newer symbolism, a heuristics for *Ranunculus* is given in Figure 3.

²⁸ "In systems biology, and in contemporary philosophy of biology, a regular emphasis is on: imaginable spatial representations; analogies with computers and machines; and logical structures and conceptual constructs that cannot be verified in living organisms, even when they are one-celled organisms. Evidently, something more is needed." Terrance J. Quinn, *Invitation to Generalized Empirical method in Philosophy and Science* (Singapore: World Scientific, 2017) 55.

²⁹ Philip McShane, *Wealth of Self and Wealth of Nations. Self-Axis of the Great Ascent*, 2nd ed. (Vancouver, Canada: Axial Publishing, 2021).

³⁰ "Generalized empirical method operates on a combination of both the data of sense and the data of consciousness: it does not treat of objects without taking into account the corresponding operations of the subject; it does not treat of the subject's operations without taking into account the corresponding objects" Bernard Lonergan, *A Third Collection*, Vol. 16, 1st ed., *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2017) 136. Hereafter, the book will be called *CWL16*.

³¹ McShane, "Metagrams and Metaphysics."



(*Ranunculus*)($p_i; c_j; b_k$)

Figure 3 A metagram for the generic form of *Ranunculus*. Vast layerings of symbolisms and subscripts are implicit, as discovered and to be discovered by botany.

But of course, there are countless genera and species of plants, animals, and things in the world and the universe. And so, **W1** emerges, a flowering in its own right, a concretely verifiable heuristics for all things, *including human things*:

$$f(p_i; c_j; b_k; z_l; u_m; q_n) .$$

The symbols ***p, c, b, z, u, q*** refer to physics, chemistry, botany, zoology, understanding and “quest.” The subscripts refer heuristically to all that is being gradually filled in by progress in the sciences, including, e.g., field equations in modern physics, chemical schemes, ..., neuroscience, cognitional theory, and so on. Being fully heuristic, **W1** allows for whatever has been and will be discovered, including “middle things” like COVID-19 and other viruses.³²

³² The six main layerings do not imply rigid subdivisions. Heuristics are informed by ongoing inquiry. There are, for instance, “middle things” such as viruses. Viruses are what might be called “relatively alive” (or, more precisely, *relatively autonomic*), only replicating when within a cell of a suitable host. Discussion of

Immediately, an illustration of the relevance of **W1** to biological development can be provided. With details needed from modern botany, explanatory heuristics for five stages of growth of *Ranunculus* (Figure 2) could be diagrammed somewhat as follows:

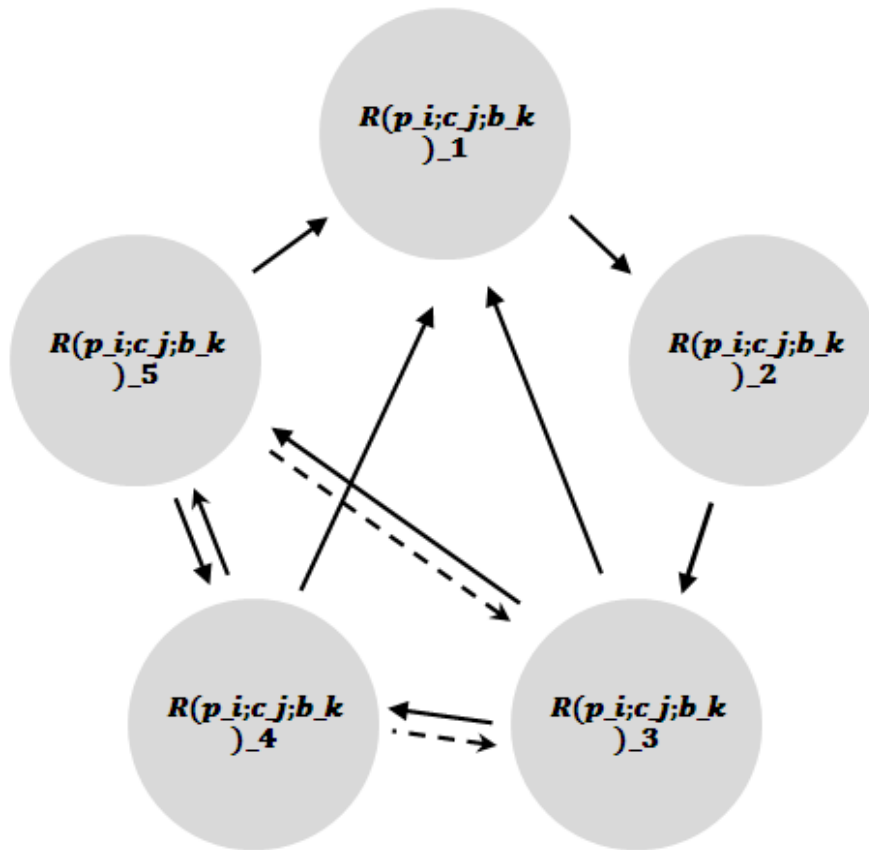


Figure 4 *Ranunculus*, five stages of its lifecycle, aggreformic heuristics for Figure 2.

such issues goes beyond the context of this paper. For more details, see, Quinn, *Invitation*, 132–133 and Philip McShane, *The Shaping of the Foundations: Being at Home in the Transcendental Method* (Washington, D.C.: University Press of America, 1976) 33-34 (some of which will need to be updated in view of advances in modern virology).

Again, I'm not going into detail. I am pointing to future possibilities of an implemented "generalized empirical method."³³ As abundantly illustrated in *RSE* (with "constant recourse to the wealth of contemporary³⁴ scientific endeavour,"³⁵ generalized empirical method is challenging, precise and scientific. "[T]he empirical attended to is not just the empirical of common sense or science but the empirical which is actual scientific practice in the process of discovery."³⁶ But

the really important and difficult part of the symbolism is the semi-colon that separates the layers. It points to a difficulty of coming to grips with aggreformisms, a massively difficult struggle quite beyond the beginner^{37, 38}.

For my part, I certainly have found this to be true. My education brought me into modern scientific contexts. It was a further challenge to start getting a hold of aggreformism. My masters and doctoral work were in *operator theory*, an area of mathematics that emerged from quantum mechanics. Modern operator theory draws from and contributes to various areas including, for instance, field theory, geometry, algebra, analysis, and topology. In the course of my career, I have also made serious excursions into various areas of applied science. This was partly following my own bent. I also enjoyed collaborative work when opportunities arose. But my ranging into different areas also was part of a personal strategy. I was working at acquiring data (experience) that would help prepare me to read Lonergan's chapter 8 of *Insight* along with its major upgrade in chapter 15.

And so, for instance, over a three-year period (2007–2010), I was lucky enough to be part of an interdisciplinary research group (members of which were in mathematics, computational science, biochemistry, and biology). It was challenging and interesting. In the first months of meeting together, we worked at learning something about our respective areas of expertise and made initial progress in reaching a somewhat shared heuristics, with respect to the problem that we had decided to work on together. In the end, we obtained new results for the biochemistry of

³³ See note 30.

³⁴ The examples in *RSE* remain fundamental in contemporary contexts.

³⁵ *RSE* (2021), 3.

³⁶ *RSE* (2021), 3.

³⁷ McShane, "Metagrams and Metaphysics."

³⁸ An early use of the term 'aggreformism' is in McShane, *The Shaping of the Foundations*, 113 (and note 120).

proteins involved in locomotion (*chemotaxis*) of *E. coli*.³⁹ In “parallel,” as it were (my colleagues were not doing philosophy of science), it was by self-attention to what we and I were doing, in detail, that I first reached an initial precision in luminously (self-) identifying that *E. coli* s “not merely chemical.” I was long familiar with the expression. But now I had my own experience and understanding to go by. One need only observe *E. coli* with an electron microscope to see that it quite obviously is “alive.” The scientific challenge of generalized empirical method, however, is non-trivial. It includes identifying the “not merely chemical” precisely, in terms of layerings of scientific data which includes symbolisms, and one’s key insights.

By that time, then, I had made beginnings in verifiable modern heuristics. But I wanted to make further progress, for higher organisms. To that end, I then devoted a year-long sabbatical to learn as much as I could about avian growth and development and, of course, to do so self-attentively—that is, to make elementary progress in generalized empirical method in avian science. My goal was not to become an expert in avian science. Nor did I expect to make what McShane called “creative progress” in foundations. (In creative progress one advances beyond the *acquis*.⁴⁰ Lonergan and McShane had already been mapping frontlines that remain well beyond my reach.) What I did, rather, was a prolonged exercise in what McShane called “creative learning.”

I spent a happy year and more (the calendar year 2012 and much of 2013) studying and increasingly in awe of *Columbidae* (the family name for doves and pigeons of the world). I learned about the bird’s amazingly

³⁹ See, A. Farone, M. Farone, P. Kline, Z. Sinkala and T. Quinn, “A practical approach for computing the active site of the *ribonucleoside hydrolase* of *E. coli* encoded by *rihC*,” *Advances in Experimental Medicine and Biology*, 1st ed., in series *Advances in Computational Biology* (New York: Springer, 2010) 437–443.

⁴⁰ “You can have teamwork insofar, first of all, as the fact of reciprocal dependence is understood and appreciated. Not only is that understanding required; one has to be familiar with what is called the *acquis*, what has been settled, what no one has any doubt of in the present time. You’re doing a big thing when you can upset that, but you have to know where things stand at the present time, what has already been achieved, to be able to see what is new in its novelty as a consequence” Bernard Lonergan, *Early Works on Theological Method I*, Vol. 22, *Collected Works of Bernard Lonergan*, eds. Robert M. Doran and Robert C. Croken, 1st ed. (Toronto: University of Toronto Press, 2010). (See p. 462, from a 1968 essay.)

complex anatomy at numerous levels (cellular, fluids, organs, and more), its biophysics, biochemistry, metabolic systems, and psychology, in sequences of growth and development, from embryonic stages through to mature “air-master.” Providentially, pigeons were nesting near my apartment (in Toronto) where I spent my sabbatical year. And so, I was able to observe generations of the “tumblers and divers” in situ.

Guided by both Lonergan’s pointings and McShane’s detailed invitation,⁴¹ informed by key examples from modern avian science, I made further progress in coming to grips with aggreformism that is otherwise only densely described in chapter 15 of *Insight* but is heuristically anticipated by **W1**.⁴² I have since gone on and have been reaching new precisions. But my main point here is that, for me, to make beginnings in aggreformism was a challenging climb that took time and needed experience in a range of sciences. And all along, having McShane’s symbolism **W1** to lean on was a great help.

4. The controlling power of **W1**

I would like to give some sense of the reaching usefulness of the metagram **W1**, by looking to a few examples.

4.1 *Ranunculus*

Let’s begin with the buttercup. The metagram **W1** draws attention to various key and core aspects of defining *Ranunculus*:

- (1) Understanding the biophysics and biochemistry of *Ranunculus* is an essential part of understanding the buttercup (at the level of the times).

⁴¹ Two sources that I found to be helpful are: McShane, *The Shaping of the Foundations*, 20–45, and Bernard Lonergan, *Verbum: Word and Idea in Aquinas*, Vol. 2, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1997) 121-23.

⁴² Contemporary biological sciences have not yet reached explanatory terms and relations for higher biological forms. But “[the dynamic character of serially analytic principles] contains an invitation to mathematicians to explore the possibility of setting up the series of deductive expansions that would do as much for other empirical sciences as has been done for physics” (*CWL3*, 339). Progress will be within a heuristics of aggreformism. See notes 32 and 38.

- (2) Without understanding its “lower forms” (physical and chemical), understanding the botany of *Ranunculus* remains descriptive and initial.
- (3) In order to get beyond elementary and botanical description, in order to make progress in understanding *Ranunculus* explanatorily, one needs layerings and sequencings of layerings (for botanical development) of symbolisms.⁴³
- (4) In order to make progress in provisionally identifying the metaphysics of *Ranunculus*,⁴⁴ one needs (3) with its layerings and sequencings of symbolisms. By the same token, discussions of botanical “potency,” “form” and “act” in general terms (such as is common in contemporary philosophy and theology, that is, in terms that do not emerge from one's experience in modern science) is misleading and is mainly literary.⁴⁵

4.2 *W1* in the human sciences

4.2.1 Consciousness

The words ‘consciousness’ and ‘phantasm’ are part of the philosophical and theological canons. But to what do they refer? For animals, consciousness, and imagination are aggregative achievements, and are objects of ongoing investigation in modern zoology. What of human consciousness and imagination? In recent decades (although “self-screened” and lacking control of meaning), modern neuroscience and psychology have been making significant advances.

The control [of *W1*] alerts one, beginner or expert,
to the reality referred to as zoological:
a layered reality of physics and chemistry and botany.
Without being thus alerted one could be stuck
with a dangerous initial descriptive meaning,
and with that meaning there is little chance
of a broadened base of dialogue with modern searching.

⁴³ *RSE* (2021), 207.

⁴⁴ *CWL3*, 457.

⁴⁵ The metaphysical elements are “to be known in fully explanatory knowledge by an intellectually patterned experience of the empirical residue” (*CWL3*, 457). See also note 27.

‘From such a broadened base one can go on to a developed account of the human good.’⁴⁶ Without that shift, one remains more than ‘a little breathless[ly] and a little late.’^{47 48}

Keeping to elementary pointers, I cannot pass up drawing attention to much needed progress in foundations in modern Christology. Descriptive talk of, say, “the historical Jesus,” “the consciousness of Christ” or of “beatific vision” simply do not rise to contemporary needs and standards.⁴⁹ “The elementary science of space and time would be nowhere without the symbolism of n -dimensional differential geometry and the tensor calculus. Much less can one hold the man Christ in explanatory heuristic perspective without heuristic expression, *non sine artificio*, an expression for instance, manifesting his manhood in aggreformic hierarchy.”⁵⁰ In McShane’s book, the accompanying footnote reads as follows: “The reader would probably find it a useful expansion of heuristics to read here *Insight*, [489], “study of [an] organism...”, replacing “organism” by “Manhood of Christ”, then continuing through the chapter with this perspective.”⁵¹ And with **W1** now providing a convenient “foothold and wonderhold,” what emerges for modern Christology is the need of progress in explanatory heuristics of the form *‘the man Christ’*($p_i; c_j; b_k; z_l; u_m; q_n$).

⁴⁶ *Method*, 287 [CWL14, 269].

⁴⁷ CWL3, 755. “[G]eneralized empirical method has to be able to deal, at least comprehensively, not only with the data within a single consciousness but also with relations between different conscious subjects, between conscious subjects and their milieu or environment, and between consciousness and its neural basis” (CWL3, 268).

⁴⁸ Philip McShane, “The Importance of Rescuing *Insight*,” in *The Importance of Insight. Essays in Honour of Michael Vertin*, eds. John J. Liptay Jr and David S. Liptay (Toronto: University of Toronto Press, 2007) 199-225, 202.

⁴⁹ I am referring here to front-line theology. There is no such requirement for homilies and other communications **C89** to “the plane of common meaning.” See note 13.

⁵⁰ McShane, *The Shaping of the Foundations*, 116.

⁵¹ McShane, *The Shaping of the Foundations*, 116, note 136 (p. 192).

4.2.2. Understanding the object

To illustrate something of the challenge, we can begin by looking to scholarship where the problem is, in a sense, rather evident. There is literature that focuses on interpreting Einstein's results on space-and-time. In this context, it is taken for granted that, minimally, one needs to understand what Einstein was talking about. There are, for instance, hypotheses of special and general relativity, sets of defining equations, key experimental results, and significant applications. And, of course, to have reached that level of understanding means, minimally, that the interpreter has at least climbed into 20th century physics.

More generally—that is, whatever one's area of interest—an interpreter needs to “understand the object.”⁵² Conveniently, the upper layerings of **W1** alert one to that aspect of interpretation.⁵³

In particular, then—and again, whether beginner or expert—control of **W1** helps reveal the remoteness of the possibility of luminously interpreting the meaning of the genius Bernard Lonergan who, in chapter 5 of *Insight*,⁵⁴ wrote densely, precisely, and luminously about discoveries made by the genius Albert Einstein who spoke *non-luminously and mistakenly* about his nonetheless remarkable advances in understanding space-time. And there is, then, the further remoteness of the possibility of luminously interpreting Lonergan treating of more sophisticated objects in later chapters of *Insight* that, by his own account, were developed cumulatively, from chapters 1 through 4; into and across the “bridge”⁵⁵ chapter 5; and onwards and upwards.⁵⁶

These observations lead nicely to the next illustration of the usefulness of **W1** heuristics.

⁵² *CWL14*, ch. 7, 148–150.

⁵³ Much more is needed.

⁵⁴ *CWL3*, 263–267.

⁵⁵ The contents of chapter of *Insight* “form a natural bridge over which we may advance from our examination of science to an examination of common sense” (*CWL3*, 163).

⁵⁶ *Insight* is written “from ... but also... about a moving viewpoint” (*CWL3*, 17–20).

4.2.3. Understanding an author who is growing in understanding

For this section, I could as easily focus on words used by Lonergan in different parts of *Insight*, a book written from a moving viewpoint. But let's look to a broader context. Lonergan used the word 'progress' (for "human progress in history") throughout his opera omnia. What did he mean by it? Consider five main clusterings of Lonergan's usage of the word.

TEXTUAL SOURCE	WORDING, AGGREGFORMIC EVENT
Philosophy of History	'progress'(1)($p_i; c_j; b_k; z_l; u_m; q_n$)(1934)
<i>Insight</i>	'progress'(2)($p_i; c_j; b_k; z_l; u_m; q_n$)(1956)
Functional specialties	'progress'(3)($p_i; c_j; b_k; z_l; u_m; q_n$)(1965)
<i>Method in Theology</i>	'progress'(4)($p_i; c_j; b_k; z_l; u_m; q_n$)(1971)
Ongoing Genesis of Methods	'progress'(5)($p_i; c_j; b_k; z_l; u_m; q_n$)(1976)

Table 1 Five stages of Lonergan's use of the word 'progress'.⁵⁷

As in the previous illustration (4.2.2), minimally, an interpreter needs to have some understanding of "the object." Now, one of the objects in question is human progress. To understand progress—at the level of the times—calls for major development that will, among other things, include up-to-date heuristics of the pre-emergence of omnidisciplinary functional collaboration (discovered by Lonergan, and in its implications increasingly present in his mind from 1965 onward).⁵⁸

But **W1** also alerts us to another fundamental challenge of interpretation. To see that, it may help to pause, to briefly recall the lifecycle of *Ranunculus*. Leaves are produced by the juvenile plant. But

⁵⁷ In chronological order, sources indicated in the left column of the table are: Michael Shute, *Lonergan's Early Economic Research: Texts and Commentary*, ed. Michael Shute, 1st ed. (Toronto: University of Toronto Press, 2010) 15–50; Bernard Lonergan, *Shorter Papers*, eds. Robert C. Croken, Robert M. Doran and H. Daniel Monsour, Vol. 20 (Toronto: University of Toronto Press, 2007) chs. 5–8, 80–153; *CWL3*, 263–267; Lonergan, "Functional Specialties in Theology," *Gregorianum* 50/3 (1969), 485–505; *CWL14*, 8, 9, 17, 22, 123, 345, 346; and *CWL16*, "The Ongoing Genesis of Methods," 140–159.

⁵⁸ See note 2.

Ranunculus is an aggregative entity, a “unity, identity, whole”⁵⁹ that is “on the move.” Leaves in the flowering adult may appear to be similar to those in the juvenile. But in the adult, they contribute to and participate in a broader range of botanical functions than present in the juvenile plant, let alone the seedling.

In the case of Lonergan's use of the word ‘progress,’ do we not have an analogous but far more challenging problem? His expressions are, as it were, “leaves” produced by the human organism *Bernardus Lonerganus*. For the task of interpretation, important changes are “not merely zoological” but are in Lonergan's understanding and meaning. As hinted at in Table 1, Lonergan's growth in meaning was “exponential.” This does not mean that at any stage he rejected his earlier meanings of the word ‘progress.’ But the biographical reality was that he was making progress; and his meanings were changing. Whatever else will be involved, then, to interpret Lonergan's meaning for the word ‘progress’ will require analysis of genetic sequences of his meanings, through his lifetime.⁶⁰

You might note that this example also helps reveal that one of Lonergan's observations about interpretation applies to the challenge of interpreting his own work. That is, “the relevance of logic as technique is extremely limited.”⁶¹

4.2.4 Contemporary scholarship

Familiar in contemporary philosophy and theology are articles with titles such as “Dialogue between Lonergan and Rahner,” “Rahner versus Balthasar,” “A Lonerganian approach to...,” “Applying Lonergan's generalized empirical method,” “A theory of ... based on the philosophy of Bernard Lonergan,” and so on. To be sure, positive contributions have been made and good work has been done. However, to what end and with what contributions to human progress? As it happens, there are various

⁵⁹ *CWL3*, 271, 461.

⁶⁰ Whatever else might be involved? I am touching on major existential gaps in contemporary hermeneutics. See *CWL3*, 585–617, and Philip McShane, *Interpretation A to Z*.

⁶¹ *CWL3*, 614.

foundational errors in the current tradition that cry out for progress-oriented resolution.⁶²

To get a sense of the problem note that, of course, Lonergan, Rahner and Balthasar each lived and died in the 20th century. Obviously, therefore, the meaning of a title such as “Dialogue between Lonergan and Rahner” is something different than “dialogue,” as such.⁶³

Heuristics of **W1** alerts one to the fact that: words are aggreformic achievements; that their meanings are not merely verbal,⁶⁴ that “authors

⁶² Anomalies will eventually be (reviewed) and, as deemed appropriate, recycled. Functional recycling will be normative in functional collaboration. “The wheel of method not only turns but also rolls along” (*CWL14*, Appendix 1, *The New Context*, 345). “Is this worth recycling?” where this refers to some event, or interpretation, or history, or book or whatever. [This is followed by note 10 in the source text:] The primary reference of the key question is to functional research, but it weaves its way forward into all the specialties. Indeed, the objective of the new philosophic culture is to make the question and the quest a global ethos, whether one is dealing with the cycles of fracking or the re-cycling of Thomas Aquinas” (Philip McShane, “Reviewing Michael McCarthy’s Book and Reviewing Reviewing,” *Lonergan Gatherings 15*, 2015) 2; and page 1, note 4.

⁶³ There are, however, various Q&A sessions on record; as well as correspondences between Lonergan and some of his contemporaries. Three sets of Q&A sessions are available in Lonergan, *Early Works on Theological Method 1*, 263–374, 569–633; Bernard Lonergan, *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, 1st ed, Vol. 18 (Toronto: University of Toronto Press, 2001), Appendix C, 327–365 (hereafter referred to as *CWL18*) and Bernard Lonergan, *Understanding and Being*, ed. Elizabeth A. Morelli and others (Toronto: University of Toronto Press, 1990), 247–394. There are three short articles where Lonergan responds to questions and objections to his work: Lonergan, *Shorter Papers*, eds. Croken, Doran and Monsour, Vol. 20 (Toronto: University of Toronto Press, 2007), Bernard Lonergan Responds (1-3), 263-286. See also the correspondence on Lonergan’s Review of Dietrich von Hildebrand, *Marriage* Bernard Lonergan, *Shorter Papers*, eds. Robert C. Croken, Robert M. Doran and H. Daniel Monsour, Vol. 20 (Toronto: University of Toronto Press, 2007) Appendix, 305-308. I would note, however, that these are not dialogues between peers but rather, are instances of the maestro fielding comments and questions from scholars whose horizons fell far short of his.

⁶⁴ *CWL3*, 578.

speaking for themselves is just a metaphor. ... [and that the] proximate sources of every interpretation are immanent in the interpreter.”⁶⁵

Or again, what might it mean, or in what way might one “take Lonergan’s approach” or “apply Lonergan’s method”? Analogous but in some respects more familiar is the story of chemistry. A few historians of chemistry have referred to Mendeleev’s “method.”⁶⁶ But what emerged (and now dominates) was a new way of doing chemistry. And, certainly, that new way does not belong to Mendeleev.

Not unlike the way in which Mendeleev’s discovery revealed a better way to do chemistry, Lonergan’s discoveries reveal the possibility of a new (or rather, improved) way of doing science (inclusive of human sciences). That new way is not to replace ongoing scientific progress but will, among other things, expand ranges of admissible data.⁶⁷ In its maturity, generalized empirical method is to be “adequate” empirical method *in scientific contexts*. At this time in history, however, illustrations of the method are rare⁶⁸ (see ⁶⁹) and, as a community achievement, the “balanced” empirical method remains a remote future possibility.

⁶⁵ *CWL3*, 606; See also note 53.

⁶⁶ See, Petr A. Druzhinin, “The First Publication of Mendeleev’s Periodic System of Elements: A New Chronology,” *Historical Studies in the Natural Sciences* 50, no. 1-2 (April 2, 2020). doi:10.1525/hsns.2020.50.1-2.129. <https://doi.org/10.1525/hsns.2020.50.1-2.129>, 135, 136 (note 27).

⁶⁷ See note 30.

⁶⁸ Illustrations of the method rise on “intellectual conversion,” a major horizon shift beyond theory. Lonergan observed that “[i]ntellectual conversion, I think, is very rare” Lonergan, *Shorter Papers*, eds. Croken, Doran and Monsour, Vol. 20, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2007) 274. It is, in fact, a name for an open genus of ongoing differentiations. This is in contrast to common usage of the terminology in contemporary Lonergan Studies where ‘intellectual conversion’ mainly is a name for initial and descriptive orderings of acts and operations. And so, for instance, in the 2021 Boston Lonergan workshop, with no scientific contexts, scholars and students referred to “when they were intellectually converted.” See also note 95.

⁶⁹ *RSE* (2021).

5. Existential Gaps: Historical and Personal⁷⁰

In this section, I provide a diagram for “humanity’s timeline.” In the diagram, there are three main rows. The upper row is for “ages” in history. The lower row is for community achievement and the dominant ethos, past, present and future. The middle row includes Lonergan and McShane, pointing to possibilities, to a time when what they both envisaged will have become the dominant ethos of the academy and humanity. Below, I briefly describe each of the main components of the diagram, in some detail.

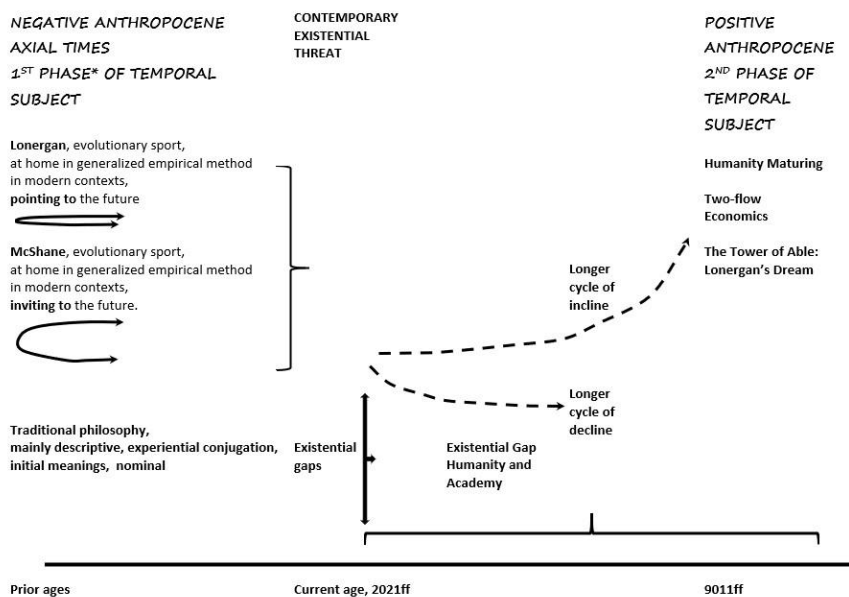


Table 2 Humanity’s timeline. U-shaped double arrows: Lonergan broke through to envision and point to the future; McShane embraced and creatively worked toward understanding and implementation of Lonergan’s leading ideas⁷¹ in his own lifetime and for the future. Vertical brace bracket and two-way vertical arrow: Lonergan and McShane were

⁷⁰ Regarding “existential gaps” see *CWL18*, 298.

⁷¹ Lambert and McShane, *Bernard Lonergan, His Life and Leading Ideas*.

evolutionary sports; there are major existential gaps between (a) Lonergan and McShane and (b) the current philosophical ethos. Past and present age: humanity is juvenile, confused, dangerous. Future: potentially ongoing longer cycle of decline (lower dashed curve); potential longer cycle of incline (upper dashed curve), emergence of two-flow economics (⁷², ⁷³), progress in control of meaning in modern contexts, benevolence increasingly functional and statistically effective globally. Horizontal brace bracket: existential gap between present age and humanity maturing,⁷⁴ the second phase of the temporal subject;⁷⁵ The Tower of Able: Lonergan's Dream;⁷⁶ and the Positive Anthropocene.⁷⁷

5.1 The past and the future

We are living in an age of deepening global crisis, a prolonged "first phase of a temporal subject,"⁷⁸ the first and second stages of meaning,⁷⁹ what McShane identified to be Axial Times and later identified as the Negative Anthropocene.

5.2 The right-hand column of the diagram

The right-hand column is for the time when humanity will be maturing.⁸⁰ See McShane's "Key Diagram,"⁸¹ a "layered" functional collaboration will

⁷² Bernard Lonergan, *For a New Political Economy*, Volume 21, *Collected Works of Bernard Lonergan*, ed. Philip J. McShane, 1st ed. (Toronto: University of Toronto Press, 1998).

⁷³ McShane, *Economics for Everyone*. See also **W7** in note 11.

⁷⁴ Philip McShane, "Arriving in Cosmopolis," Keynote Address at the First Latin American Workshop, Puebla, Mexico, June 2011. http://www.philipmcshane.org/wp-content/themes/philip/online_publications/articles/archive8.pdf.

⁷⁵ Lonergan, *The Triune God: Systematics*, 403–409.

⁷⁶ Lambert and McShane, *Bernard Lonergan, His Life and Leading Ideas*, 163.

⁷⁷ James Duffy et al., "The Positive Anthropocene. Openers of the Positive Anthropocene," <https://www.anthropositivecene.org/home/> (accessed May 11, 2021).

⁷⁸ Lonergan, *The Triune God: Systematics*, 403–409.

⁷⁹ *CWL*14, 3.10, "Stages of Meaning," 95–104.

⁸⁰ McShane, "Metagrams and Metaphysics."

⁸¹ Philip McShane, *The Allure of the Compelling Genius of History: Teaching Young Humans Humanity and Hope*, 1st ed. (Vancouver: Axial Publishing, 2015) 190.

be increasingly operative as humanity comes of age. This is a distant and yet attainable “second phase” of temporal subjects,⁸² a third stage of meaning,⁸³ the positive Anthropocene⁸⁴. Two-flow economics will be part of the Standard Model.⁸⁵

5.3 The two dashed curves

I used dashes because both curves are for future possibilities. Notice that, starting from 2021, the lower dashed curve has an initial negative slope. That is due to the contemporary global negative momentum. Its continuation represents the possibility of ongoing “cumulative decline” that will result if we do not succeed in pulling out of the “longer cycle of decline.” Notice also that the lower dashed curve may not go as far in time as the upper dashed curve. There is the question of humanity’s survival.

The upper curve is a different possibility. Breakthroughs of Lonergan and McShane aside, we do not yet have a positive momentum. The upper curve, therefore, starts out with an initial slope that is essentially zero. It represents the possible seeding and then gradual emergence of what, in *Insight*, Lonergan provisionally named “cosmopolis.”⁸⁶ The upper dashed curve, then, also is for what McShane called the “longer cycle of incline” that will be evident in a gradually increasing statistics of “cumulative and progress results.”⁸⁷

5.3 Timeline and horizontal brace bracket

There is an existential gap in history between present Axial times and a somewhat remote maturing of the human group. Thinking optimistically, how long might it be for academic communities and global cultures to be dominated by the ethos of a “third stage of meaning”? In his paper “Arriving in Cosmopolis,”⁸⁸ McShane reflected on realistic numbers and timelines. “I would now have you fancy, and indeed that for a couple of

⁸² Lonergan, *The Triune God: Systematics*, 403–405.

⁸³ *CWL14*, 3.10, “Stages of Meaning,” 95–104.

⁸⁴ Duffy et al, “The Positive Anthropocene.”

⁸⁵ See **W7** in note 11.

⁸⁶ *CWL3*, 263–267; See note 2 McShane, “Arriving in Cosmopolis.”

⁸⁷ *CWL14*, 8, 9, 17, 22, 123, 345, 346.

⁸⁸ Philip McShane, “Arriving in Cosmopolis,” 7.

neuro-maturing years, not the micro-time of a century or the macro-time of an eschaton, but the meso-time of the climb to the tenth millennium, to the year 9011.”⁸⁹

5.5 The U-shaped double arrows

There are two U-shaped double-arrows, one for Lonergan and one for McShane. The U-shapes have different widths. For present purposes, those widths are descriptive rather than technical. However, what the widths refer to could be, and eventually will be, developed within (remote future) *explanatory biography*, functional comparison, and more.⁹⁰

Both Lonergan and McShane point to future possibilities. The U-shaped arrow for McShane is wider than the one for Lonergan. This is not to suggest that Lonergan's vision was less reaching than McShane's. Indeed, as McShane often wrote, he was in awe of Lonergan's genius and Lonergan was his mentor. The greater width of the double-arrow for McShane represents the following four aspects of his life's work:

McShane

- (1) made ongoing progress not only in understanding but also in initiating implementation of what Lonergan identified as being needed and possible;
- (2) gave much of his time and effort to extensive communications with colleagues and students, worldwide;
- (3) invited collaboration in efforts to understand and implement Lonergan's leading ideas; and
- (4) solicited beginnings in intervention in history.⁹¹

5.6 The T-shaped triple-arrow

Lonergan and McShane both were at home in “interiority” in science and other modern contexts. The vertical component of the T-shaped triple-arrow refers to existential gaps between (a) Lonergan and McShane and (b) the contemporary ethos in science, philosophy, and theology.

⁸⁹ McShane, “Arriving in Cosmopolis,” 7; See also Philip McShane, *Method in Theology 101 AD 9011. the Road to Religious Reality*, 1st ed. (Vancouver: Axial Publishing, 2012) 12.

⁹⁰ I am referring to tasks and subtasks within future functional collaboration.

⁹¹ *CWL*18, 305–308.

Sciences continue to advance in understanding the world, human beings, other planets, and distant galaxies as well in their roles in modern societies, cultures, and communities. Implicitly, the effort to grow in scientific understanding is a sacred devotion, a being “caught up through him in love of things invisible,”⁹² whether adverted to or not, a mature form of prayer *InWithTo* three Persons. And yet, there is an historically established self-screening that is causing a lot of trouble both in the sciences and in its “applications” in society. Problems will be gradually resolved once scientists and philosophers begin to make progress in self-attention in scientific contexts.

In his last days, McShane observed that two of the most important needs in modern philosophical and theological traditions are to make progress in “understanding the object,”⁹³ and to do so within a luminous heuristics of genetic sequences, as densely indicated by Lonergan in *Insight*.⁹⁴

The future-directed component of the T-shaped triple-arrow is for our future, whatever that may be.

This leads, now, to the final section of this article. With long-term goals in (heuristic-) sight, what preliminary and transitional measures can we implement (sooner rather than later) that might be helpful toward seeding a reversing of the longer cycle of decline and so also would be helpful in transitioning into a “longer cycle of incline” toward the positive Anthropocene?

6. Strategies for Effective Intervention in 2021 and the Near Future

There are two sets of preliminary measures which (a) would help toward meeting currently pressing issues and (b) can be initiated more or less immediately. Section 6.2 regards what mainly will be on behalf of students but will have long-term implications. Section 6.2 mainly is for contemporary faculty and scholars. In addition to its intrinsic value, resulting growth will provide support needed by students.

⁹² Eucharistic prayer, Preface I, The Nativity of the Lord.

⁹³ Bernard Lonergan, *Method in Theology*, 2nd ed., Vol. 14, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2017) 148-150. The book will hereafter be referred to as *CWL14*.

⁹⁴ *CWL3*, 609–610.

6.1 For students

In order to gradually raise foundations to the level of the times (a moving target, as history proceeds), at both the undergraduate and graduate levels, philosophy and theology students will need to start learning some science. This cannot happen all at once. It will need to be introduced gradually, at both the undergraduate and graduate levels.⁹⁵

Contemporary scholars educated mainly in literary traditions of philosophy and theology may find my suggestion implausible. I am merely asking that we follow up in foundational development called for by **W**₁. The pressures of history are pushing philosophy and theology to get beyond the endless ambiguities of mere description that in the long run also block needed progress. For readers familiar with Lonergan's writings, the development called for will include an ongoing updating of

⁹⁵ The following three books are introductory and can help readers make modest beginnings toward modern heuristics: John Benton and Terrance Quinn, *Journeyism, A Handbook for Future Academics*, 1st ed. (Toronto, Canada: Island House Press, 2022); McShane, *Wealth of Self and Wealth of Nations. Self-Axis of the Great Ascent*; John Benton, Alessandra Drage and Philip McShane, *Introducing Critical Thinking* (Vancouver: Axial Publishing, 2006). Two books that also are introductory are Mark Morelli, *Self-Possession, being at Home in Conscious Performance*, 2nd ed. (Los Angeles: Encanto Editions, 2016); and Terry Tekippe, *What is Lonergan Up to in Insight?: A Primer* (Delaware: Michael Glazier, 1996). Both of those books, however, restrict to commonsense examples. The procedure in Morelli's book is "one-sidedly descriptive of relevant experiences of conscious performance in the interest of enabling the reader to achieve the essential minimum of explanatory understanding—an understanding of the relations of conscious operations to one another and to the notions of meaning, objectivity, knowledge, truth, reality, and value—required to orientate herself in everyday living," xiv-xv. On this use of the name 'explanatory,' see note 68. There is the challenge of getting beyond "the menace of experiential conjugation" (McShane, *The Shaping of the Foundations*, 10), of "going beyond elementary introspective description. ... [J]ust as the non-physicist can identify and distinguish the colours of the rainbow, so the philosopher may identify and distinguish types of understanding. But the identification by the philosopher is no more the generalized empirical method that is generative of scientific metaphysics than descriptive identification of types of flowers is scientific botany" (McShane, *The Shaping of the Foundations*, 11). Progress in explanatory understanding of (acts and) operations is a distant possibility, to be attained within a **W**₁ heuristics. See section 4.2 and *CWL3*, 609–10.

what Lonergan insisted upon: “[I]n a question session at a Boston Workshop in the 1970s, in answer to the question, ‘How much physics should a theologian know?’ Lonergan’s reply was vigorous and spontaneous: ‘Well, [s/]he should be able to read Lindsay and Margenau.’”⁹⁶ Here, it would be worth revisiting section 4. Whatever one’s own background, surely, we should not underestimate the depths of wonder and talent in the young. There is also precedent. Four-year liberal arts colleges (e.g., in the USA) already require that students in the humanities gain background in classical mathematics and various sciences. However, for graduate level philosophy and theology students and scholars of the not-too-distant future, globally, competence in the sciences will need to be gradually raised to levels of modern times, in the mode of generalized empirical method. In other words, a fundamental feature of a new stage in education will be cultivation of self-attention in (modern) scientific contexts.

I am pointing to a major shift in ethos in education in philosophy and theology. And so, I expect that there may be some puzzlement or, in some cases, emphatic opposition to my suggestions for curriculum development. Although, there is the option to remain silent on such matters and to proceed “business as usual.” But the world is burning. Global crises deepen. Certainly, something more than silence and “business as usual” is needed. But whether in basic agreement or disagreement, a uniquely effective way in which to engage in *progress-oriented dialogue* about these matters is described in the set of measures referred to in Section 6.2.

6.2 For scholars

⁹⁶ Lambert and McShane, 192; See also Philip McShane, “‘What-to-do?’ : The Heart of Lonergan’s Ethics,” *Journal of Macrodynamical Analysis* 7 (2012) <https://journals.library.mun.ca/ojs/index.php/jmda/article/view/723>, 82. Lonergan was referring to *Foundations of Physics* by Lindsay and Margenau (1st ed., 1936), the second printing of which is Robert Bruce Lindsay and Henry Margenau, *Foundations of Physics*, 2nd ed. (New York: Dover Publications Inc., 1957). The 1957 edition is available online, through the Internet Archive: <https://archive.org/details/foundationsofphy00lind>.

In what way might we initiate a breaking beyond Axial blocks?⁹⁷ Is there a way forward that can help scholars in diverse contexts; that can help us meet each other as we are; that asks that we be “at pains not to conceal [one’s] tracks but to lay all [one’s] cards on the table;”⁹⁸ that will help us be effective in rooting out our blind spots and in beginnings in evaluating ways forward; that is not private but is progress-oriented, for the human group?

I am touching on merely a few aspects of what would be helpful. Remarkably, the key and core practical method has already been precisely identified by Lonergan in *Method in Theology*. It is a “triple-exercise” in mutual encounter, a component of functional dialectic, but not functional collaboration as such. Indeed, we neither need to, nor can we afford to wait for the eventual emergence of functional collaboration. The triple-exercise is needed and possible now. I am referring to what Lonergan identified as three “objectifications,” needed and possible in all areas of inquiry. In the 1970 edition of *Method in Theology*, page 250, the “three objectifications” are described in lines 18–33. In an effort to call attention to these lines, McShane called them “Lonergan’s 1833 Overture.” For various practical reasons, he later “called these the Duffy Exercises ... and started referring to them by that name in writing.”⁹⁹

I end this paper, then, by re-extending another one of McShane's invitations, namely, to make humble beginnings in an Exercise that both Lonergan and McShane considered to be essential to progress. I would note that whether or not one considers the Exercise important, to address the issue in a way that might contribute to human progress brings one into the demands of that same triple-objectification, with colleagues and collaborators. And so, of course, including myself as an invitee, and turning one of Rumi’s poems to practical purpose, I end with the following invitation of my own:

“[In within] ideas of wrongdoing and rightdoing,
there is a field. I’ll meet you there.”

—Rumi, *A Great Wagon*

⁹⁷ See section 5.

⁹⁸ Lonergan, *CWL14*, 180.

⁹⁹ James Duffy et al., “Effective Dialectical Analysis,” *Journal of Macrodynamic Analysis* 13 (2020) 1, note 3.

ABSTRACT

This paper is an invitation to follow up in Philip McShane's invitation to grow in (conception, affirmation, and implementation of) modern heuristics in education, philosophy, and theology. The pressing need and possibility of such was previously identified in doctrinal density, in *Insight (CWL3)* and in *Method in Theology (CWL14)*. McShane's opera omnia is vast. In this article, special attention is given to the (emergence and) controlling power of a meta-symbolism developed by McShane, thus meeting a need identified by Lonergan in *Insight* and *The Ontological and Psychological Constitution of Christ (CWL7)*. Existential gaps are noted, between present achievement and a maturing of humanity envisioned by both Lonergan and then McShane, and by McShane observed to be within reach within a not-too-distant future. Preliminary transitional measures are indicated, including a crucial Exercise in progress-oriented dialogue. First identified by Lonergan (*CWL14*), engagement in the Exercise was further invited by McShane.