# Functional Collaboration as the Implementation of Lonergan's Method, Part 2: "How Might We Implement Functional Collaboration?"

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In the first part of this paper, I discussed the problem for which functional specialization is a solution.<sup>1</sup> As we discovered, the 'problem' involves a complex set of axial issues. For Lonergan, it was most evident in the need to revitalize the out-of-date theological method he encountered as a professor of theology in Canada and Rome. Over the last couple of centuries developments in the sciences, their methodology, and practical applications-in mathematics, in historical methods, in existential philosophy, in depth psychology, and so forth-had all significantly challenged the classical traditions. The choice, however, is not between preserving traditions and embracing innovations. As Lonergan expressed it: "What will count is a perhaps not numerous center, big enough to be at home in both the old and new, painstaking enough to work out one by one the transitions to be made, strong enough to refuse half measures and insist on complete solutions even though it has to wait."<sup>2</sup> The 'not numerous center' will be the effective zone of functional collaboration. The challenge is to figure out together how we might effectively implement theoretical, scientific developments, including advances in our understanding of human interiority, to

<sup>&</sup>lt;sup>1</sup> This essay was originally published in print-form in *Divyadaan: Indian Journal of Philosophy and Education*, vol. 24, no. 2 (2013), 159–190. I would like to thank Ivo Coelho, the editor of that journal for permission to re-publish the essay electronically. I would also like to thank Bruce Anderson, James Duffy, Terrance Quinn, and Philip McShane whose comments on an earlier draft of this paper have improved this paper. Final responsibility for the views expressed is mine.

<sup>&</sup>lt;sup>2</sup> Bernard Lonergan, "Dimensions of Meaning," in *Collection: Papers by Bernard Lonergan*, ed. Frederick E. Crowe and Robert M. Doran, vol. 4, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1988), 245 (hereafter *CWL* 4).

preserve what is worthwhile and yet creatively direct the future. The functional specialist division of labour provides the master key for meeting this challenge.

We also need to be mindful of the full timeframe Lonergan had in mind. Lonergan initially conceived the crisis in the context of the longer cycle of decline in Western Christian civilization. He grasped that the issue of reversing decline applied to all civilizations. The full context was pantôn anakephalaiôsis, the restoration of all things in the fullness of time, in which, as McShane writes, "[t]he love of God, the third stage of meaning, and the second million years are on our side."<sup>3</sup> Stuart Brand in The Clock of the Long Now: Time and Responsibility introduces a series of temporal contexts helpful for envisaging the pace of the implementation of functional collaboration.<sup>4</sup> The time frame on CNN is the 24-hour news cycle, though some 'crises' last a little longer. Stock markets revolve around a 24-hour cycle. Fashion changes each season. For business, long-term thinking often means meeting quarterly or annual report targets. The political cycle in my home country of Canada is typically four years. At present, our government is applying a policy to achieve a balanced budget in 2015, the year of the next election. Generational shifts are now calculated in ten-year spans, a remarkable acceleration. Since I began teaching I have taught Generation X, Generation Y, and am now teaching Millennials. Generation X visited me in my office; Generation Y emailed me, Millennials text. Cultures may last much longer and civilizations even longer still, yet in the timeframe of evolution we are a very young species and all of human history is a thin slice of the latest projected age of the universe at 13.772  $\pm$  0.059 billion years.<sup>5</sup> It is generally thought that *Homo sapiens sapiens* emerged about 200,000 years ago in Africa. This means in the whole process of evolution to date our species has been present for approximately 0.000014522219% of that time. To put this in perspective, if we were to walk around the equator, the human species would emerge about 1/3 of the way through the last step we would take to complete the journey. And then there is the timeframe of the eschaton, where we are "at the still point of the turning world."<sup>6</sup> Lonergan was

<sup>&</sup>lt;sup>3</sup> Philip McShane, *A Brief History of Tongue: From Big Bang to Coloured Wholes* (Halifax: Axial Press, 1999).

<sup>&</sup>lt;sup>4</sup> Stuart Brand, *The Clock of the Long Now: Time and Responsibility* (New York: Basic Books, 1999).

<sup>&</sup>lt;sup>5</sup> C. L. Bennett, D. Larson, J. L. Weiland, N. Jarosik, G. Hinshaw, N. Odegard, K. M. Smith, R. S. Hill, B. Gold, M. Halpern, E. Komatsu, M. R. Nolta, L. Page, D. N. Spergel, E. Wollack, J. Dunkley, A. Kogut, M. Limon, S. S. Meyer, G. S. Tucker, E. L. Wright, "Nine-Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Final Maps and Results," submitted 20 December 2012. Http://arxiv.org/abs/1212.5225.

<sup>&</sup>lt;sup>6</sup> T.S. Eliot, "Burnt Norton," *Collected Poems, 1909–1962* (London, Faber & Faber, 2009).

well aware that the implementation of functional collaboration would be measured in centuries, rather than decades. McShane, for his part, speaks of "the second million years."<sup>7</sup> It is worth, then, patiently recalling that it took Christianity some 300 years to come to a minimal agreement on the consubstantiality of the Father and the Son, a judgment that finally established the impossibility of putting the new wine in old wineskins.<sup>8</sup>

While the collaboration Lonergan envisaged is in the context of pantôn anakephalaiôsis, it is vitally relevant to contemporary practical concerns.<sup>9</sup> It aims to fundamentally transform how we organize ourselves. In Grace and Freedom, Lonergan provided an example from the history of theology of the impact that a new framework can have for understanding old problems. For St. Albert and St. Thomas, the notion of the supernatural made possible a resolution to the longstanding problem of how to reconcile grace and free will. Lonergan writes: "Everyone is familiar with the common notion of going faster. Few understand what you mean when you explain that an acceleration is the second derivative of a continuous function of distance and time. To apprehend going faster one has only to drop from a sufficient height. To apprehend acceleration one has to master the somewhat difficult notions underlying the differential calculus. Both going faster and acceleration apprehend the same fact, but the former merely apprehends, while the latter adds to apprehension acts of analysis and generalization, of deduction and systematic correlation. For *acceleration* is *going faster*, but analyzed as  $d^{2}s/dt^{2}$ , generalized to include going slower, enriched with all the

"At the still point of the turning world. Neither flesh nor fleshless,

Neither from nor towards, at the still point, there the dance is, But neither arrest nor movement. And do not call it fixity, Where past and future are gathered. Neither movement from nor towards, Neither ascent nor decline. Except for the point, the still point,

There would be no dance, and there is only the dance. I can only say, *there* we have been: but I cannot say where. And I cannot say, how long, for that is to place it in time."

<sup>7</sup> Philip McShane, "An Improbable Christian Vision and the Economic Rhythms of the Second Million Years," in *Lonergan's Challenge to the University and the Economy* (Lanham, MD: University Press of America, 1980), 92–111.

<sup>8</sup> Lonergan explores the development of Trinitarian Doctrine in *The Triune God: Doctrines*, ed. Robert Doran and H. Daniel Monsour, trans. Michael Shields, vol. 11, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2009).

<sup>9</sup> See the discovery page for functional specialization. Lonergan writes at the bottom of the page "vital, intelligent, reasonable, responsible, <u>mine</u> + <u>catholic</u>." The page can be accessed at the Bernard Lonergan Archive. http://www.bernardlonergan.com/index.php 47200D0E060 / A472 V\7\1 - Functional specialties: Breakthrough page. implications of the second derivative of a function, and given a significant place in systematic thought on quantitative motion."<sup>10</sup> Understanding grace as supernatural provides the pivot for handling the apparent contradiction between the reality of grace and our experience of free will. Likewise, the emergence of functional specialization does not change the facts, but the facts are massively re-contextualized making possible a way forward with what were seemingly intractable problems.

It took Lonergan thirty years to discover the new context. As he writes: "The basic issue is between a static and a dynamic viewpoint. ... What is not possible from a static viewpoint may very well be possible from a dynamic viewpoint."<sup>11</sup> He identified the underlying core in the dynamics of human cognition, which he discovered were implicit in Aquinas' thought, and revealed the tacit dynamism in his metaphysics. Lonergan argues that differences in metaphysical positions boil down to differences in the cognitional positions. He writes: "The scandal still continues that men [and women], while they tend to agree on scientific questions, tend to disagree in the most outrageous fashion on basic philosophical issues. So they disagree about the activities named knowing, about the relation of those activities to reality, and about reality itself. However, differences on the third, reality, can be reduced to differences about the first and second, knowledge and objectivity. Differences on the second, objectivity, can be reduced to differences on the first, cognitional theory. Finally, differences in cognitional theory can be resolved by bringing to light the contradiction between a mistaken cognitional theory and the actual performance of the mistaken theorist. To take the simplest instance, Hume thought the human mind to be a matter of impressions linked together by custom. But Hume's own mind was quite original. Therefore, Hume's own mind was not what Hume considered the human mind to be."<sup>12</sup>

From a base in an accurate account of the dynamics of human cognition, Lonergan derives generalized empirical method. Generalized empirical method transforms the static Aristotelian systematics; ongoing discovery and probability schedules replace the criteria of certainty and necessity; and the exploration of interiority sublates the ambitions and context of both the theoretician and the pragmatist. The 'renaissance man' and the 'philosopher-king' are subsumed into collaborative teams of human specialists working towards a commonly held goal. Galileo discovered the law of falling bodies on his own, and that discovery

<sup>10</sup> Bernard Lonergan, *Grace and Freedom: Operative Grace in the Thought of St Thomas Aquinas*, ed. Frederick Crowe and Robert Doran, vol. 1, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2000), 15.

<sup>&</sup>lt;sup>11</sup> Bernard Lonergan, *Philosophical and Theological Papers 1965–1980*, ed. Robert Croken and Robert Doran, vol. 17, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2004), 199–200.

 $<sup>1^{\</sup>overline{2}}$  Method in Theology, 20–21.

helped spawn modern empirical science, which was, in turn, the beginning of a long wave of technological advance starting with the industrial revolution. The search for the Higgs Boson particle involves a global collaboration organized at CERN of over a thousand researchers and engineers.<sup>13</sup> What wave of advance might we anticipate with the implementation of functionally collaborative science?

#### **1. Functional Collaboration and Adequately Differentiated Consciousness**

The second part of this paper attempts to point to elements of the task of future functional collaboration, at which time appropriating the *operations* of consciousness and advancing toward adequately differentiated consciousness will constitute the standard procedure in the education of collaborators. As Lonergan writes in *Method in Theology*: "In its third stage, then, meaning not merely differentiates into the realms of common sense, theory, and interiority, but also acquires the universal immediacy of the mass media and the moulding power of universal education. Never has adequately differentiated consciousness been more difficult to achieve. Never has the need to speak effectively to undifferentiated consciousness been greater."<sup>14</sup>

Moments of great discovery, like Watson's discovery of the structure of DNA in a dream,<sup>15</sup> often come suddenly and with great surprise, but such breakthroughs do not arrive fully formed, out of nowhere. They emerge, as Thomas Aquinas writes, over time through a

<sup>15</sup> See James D. Watson, *The Double Helix: A Personal Account of the Discovery of the Structure of DNA* (New York: Simon and Schuster, 1968).

<sup>&</sup>lt;sup>13</sup>As of December 31 2011, as reported on the CERN webpage, the CERN laboratory had 2,424 full-time employees. Of these 77 were research physicists, 969 were engineers and other scientists. There were also 848 technicians, 388 administrators and office staff, and 142 crafts persons. There were also 21 apprentices, 288 students, 477 fellows and 306 paid associates involved in the year 2011. http://press.web.cern.ch/facts-and-figures/factsheet-2012.

<sup>&</sup>lt;sup>14</sup> Method in Theology, 99. See also Bernard Lonergan, Topics in Education: The Cincinnati Lectures of 1959 on the Philosophy of Education, ed. Frederick Crowe and Robert Doran, vol. 10, Collected Works of Bernard Lonergan (Toronto: University of Toronto Press, 1988) (hereafter CWL 10), where Lonergan provided a practical pedagogical example: "Insofar as you are teaching people geometry, for example, you are using an implement that is magnificently adapted to habituating people to the intellectual pattern of experience. ... Moreover, from the fact that they have been through the experience, there results a shift in the center of gravity in their experiencing. That shift in the center of gravity, that habituation to a differentiated consciousness, is a fruit of education, but an indirect fruit. It is only by doing particular subjects that that fruit results." Ibid., 116.

series of incomplete acts.<sup>16</sup> And, they are firmly located in biography and history. Ideas have dates and a personal origin, even if they occur in a collaborative context, as was the case in the discovery of DNA. Mendeleev discovered the periodical table in 1869, and Lonergan discovered functional specialization in 1965. Considering the possible trajectories and stages of human development, there is a complementarity between the stages of human collaboration discussed in Part 1 and our personal development or autobiography.<sup>17</sup> Once basic motor and sensory skills are acquired and language subsequently emerges, we live in a world of commonsense meaning and our development primarily advances by way of practical intelligence. Beyond the practical, we can acquire various differentiations and specializations of human meaning. Beyond the horizon of the undifferentiated world of commonsense meaning, there is the possibility of artistic, scholarly, scientific or theoretical, philosophical, and religious differentiations of consciousness.<sup>18</sup> There is, then, the possibility of compound, threefold, fourfold, or even fivefold differentiations of consciousness in a single person. The emergence and stabilization of various differentiations takes time and, in the process of reaching the required integration, can generate confusion and conflict, just as occurred with the emergence of second stage theory. Plato and Aristotle argued with the Sophists; the Vatican condemned Galileo; James Jovce and D.H. Lawrence ran afoul of English courts; and recently Thomas Nagel ran into major critical resistance for questioning neo-Darwinian

<sup>&</sup>lt;sup>16</sup> Aquinas writes: "We must consider that our intellect proceeds from a state of potentiality to a state of actuality; and every power thus proceeding from potentiality to actuality comes first to an incomplete act, which is the medium between potentiality and actuality, before accomplishing the perfect act. The perfect act of the intellect is complete knowledge, when the object is distinctly and determinately known; whereas the incomplete act is imperfect knowledge, when the object is known indistinctly, and as it were confusedly." *Summa Theologiae*, 1a., q. 85, a.3, c. This view resonates neatly with the modern empirical scientific attitude, which understands knowledge as the result of an ongoing method that aims for the best available approximation of the relevant reality. This section from the *Summa* was important to Lonergan, and he used it for the frontispiece of the seminal 1935 essay "*Pantôn Anakephalaiôsis* (The Restoration of All Things)" *METHOD: Journal of Lonergan Studies* 9/2 (1991).

<sup>&</sup>lt;sup>17</sup> See Michael Shute, "Functional Collaboration As the Implementation of Lonergan's Method Part 1: 'For What Problem Is Functional Collaboration the Solution?'" in this volume. I explore the link between biography and history in the SGEME seminar presentation, "Reading *For a New Political Economy* in the Light of Functional History." Http://www.sgeme.org/BlogEngine/post /2011/10/01/ FuSe-14D-Reading-For-a-New-Political-Economy-in-Light-of-Functional-History-by-Michael-Shute.aspx.

<sup>&</sup>lt;sup>18</sup> See, for instance, Bernard Lonergan, "Unity and Plurality: The Coherence of Christian Truth," in *A Third Collection* (New York: Paulist Press, 1985), 239–250, especially 239–243.

orthodoxy in his book, Mind & Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False.<sup>19</sup> However, when differentiations are fully realized, one can move with relative ease different realms of meaning. Eddington's among 'troubled consciousness' was not a problem for Lonergan. He writes: "Interiorly differentiated consciousness operates in the realms of common sense and of interiority. While theoretically differentiated consciousness seeks to determine its basic terms and relations by beginning from sense experience, interiorly differentiated consciousness, though it must begin from sense, eventually deserts this beginning to determine its basic terms and relations by adverting to our conscious operations and to the dynamic structure that relates them to one another. It is on such a basis that the present method is erected."<sup>20</sup> The emergence and integration of a second stage of meaning-which is the theoretic differentiation of consciousness—is especially relevant, and as Lonergan indicated in his account of 'troubled consciousness,' it is characteristic of the second axial shift. The issue of integrating theory and practice (system and history), is a key to implementing the shift to the third stage of meaning where functional collaboration is the standard method in the academy.

As academics, we can learn symbolisms and techniques, without personally encountering, in a vital way, theory or science. Lonergan speaks of this outcome as the problem of *haute vulgarization*, an issue to which McShane has repeatedly paid attention, especially in the context of Lonergan's own students.<sup>21</sup> However, for some, there actually occurs the shift to scientific meaning. Lonergan was himself fully immersed in modern empirical science. At Heythrop College, he considered physics as a possible choice of career and from 1930 to 1944 he worked on economic theory and, indeed, discovered the significant variables for (as Vico might say), 'a new science' of economics. Lonergan grasped the importance of the scientific revolution for the evolution of the human species. For him, theology was not opposed to modern science, just as, to invoke Vatican I, faith was not opposed to reason. The first five chapters of *Insight* deal with developments in mathematics and empirical science, and in those chapters we find significant contributions to the theory of evolution and to the method of theoretical physics. In his essay on the "Isomorphism of Thomist and Scientific Thought," he identifies the common ground informing both methods.<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> Thomas Nagel, *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False* (Oxford: Oxford University Press, 2012).

<sup>&</sup>lt;sup>20</sup> Method in Theology, 274. See also pages 84 and 258.

<sup>&</sup>lt;sup>21</sup> McShane's recent writings are replete with efforts to confront the issue of *haute vulgarization*. For a recent example, see Philip McShane, "What-To-Do?': The Heart of Lonergan's Ethics," *Journal of Macrodynamic Analysis* 7 (2012), 69–93. I refer to the issue in Part 1 of this paper.

<sup>&</sup>lt;sup>22</sup> Bernard Lonergan, "Isomorphism of Thomist and Scientific Thought," *CWL* 4, 133–141.

Lonergan's first encounter with theological system, however, was the Thomism of his Roman Catholic education. He found the conceptualist approach then taught to be inadequate and to be an inaccurate rendering of Thomas' meaning. From Newman, he discovered an alternative starting point in a criterion of the mind "far higher, wider, more certain, subtle, than logical inference."23 Soon after, Christopher Dawson's The Age of the Gods introduced Lonergan to "the anthropological notion of culture," and as he later commented regarding his early reading of Dawson, "so began the correction of my hitherto normative or classical notion."<sup>24</sup> Science and history become twin operators in his development. Lonergan searched for adequate foundations for understanding dynamic theoretical systems. He initially met the challenge by working out a dialectic theory of history, and he later applied it successfully in his macroeconomic dynamics. He firmly established the basis for both with generalized empirical method. Finally, there emerges the form or order for integrating that dynamic system with the practical control of human history that is functional specialization.

Intellectual growth and advance of the kind or level or caliber of Lonergan's is quite exceptional and exceedingly rare; perhaps it occurs once or twice a millennium. My own case is much more common and perhaps resonates with your own experience. I, too, was educated in the classical world of Roman Catholic system. In my teens, I encountered Mendel's paper "Experiments in Plant Hybridization" and Darwin's Origins of Species, and so was introduced to the world of scientific experiment.<sup>25</sup> I had plans to be a plant ecologist, but in an effort to come to grips with the rupture to my traditional Catholicism caused by this introduction to the sciences, I changed programs from the sciences to philosophy. Philosophy immersed me in the history of thought. I became aware of the importance of connecting philosophy, science, and the study of history with all the practical concerns of economy, politics, and environment. I did not, however, discover a way forward. I struggled with this on my own for a decade. Then, at 30, I read Method in Theology and realized that Lonergan had already got there. His communication of functional specialization opened up the possibility of a new form of collaboration for me with others, a reality that was not present for Lonergan himself.

<sup>&</sup>lt;sup>23</sup> Bernard Lonergan, "True Judgment and Science," *Shorter Papers*, ed. Frederick E. Crowe and Robert M. Doran, vol. 20, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2007), 41.

<sup>&</sup>lt;sup>24</sup> Bernard Lonergan "*Insight* Revisited" in *A Second Collection* (Philadelphia, PA: The Westminster Press, 1974), 264.

<sup>&</sup>lt;sup>25</sup> Gregor Mendel, "Versuche über Pflanzen-Hybriden," in *Verhandlungen des naturforschenden Vereins Brünn*, (1866) and Charles Darwin, *The Origin of Species* (Edison, New Jersey: Castle Press, 2004) (reprint of 1859 edition).

Functional collaboration, then, opens up the possibility of a more efficient education in the future. By way of analogy, the development of the calculus started with the first hints of integrals in Archimedes' Method of Mechanical Theorems in the 3<sup>rd</sup> century B.C.E., and reached a first successful peak with Leibniz and Newton in the 18<sup>th</sup> Century C.E. We can now teach the basic techniques of calculus to high school students and first year university students.<sup>26</sup> Likewise, functional specialization opens up the possibility of a much more efficient operation in the academy that should impact all fields of inquiry. I will not spend more time recapitulating these developments in Lonergan or in myself, but I think it is a good exercise to spend time appropriating our own development, and I believe it is a core exercise in preparing for implementing functional collaboration. "One has not only to read Insight but also to discover oneself in oneself."<sup>27</sup> Empirical method and its ethos are highly relevant to the process of self-appropriation, whether we are speaking of human cognition or more broadly of human interiority, for as Lonergan wrote: "It is quite legitimate to seek in the efficient cause of the science, that is, in the scientist, the reason why a science forms a unified whole."28 In Lonergan generalized understanding of empirical data includes the data of sense and the data of consciousness, and the inclusion of the data of consciousness falls within the methodological canon of selection for empirical method, as Lonergan argues convincingly in Insight.<sup>29</sup> It follows, then, that Lonergan's account of cognitional structure, with its 13 elements and 4 levels, is empirical and scientific. We can verify the elements and their structure by adverting to the data and operations of human consciousness. It is clear, then, that a fully luminous immersion in functional collaboration requires a personal shift to theory and interiorly differentiated consciousness. With the emergence of modern empirical science and historical studies and evolutionary and genetic biology, the shortcomings of static systems such as logic, scholasticism, and partial and general equilibrium

<sup>&</sup>lt;sup>26</sup> As pointed out by Terrance J. Quinn in "The Calculus Campaign," *Journal of Macrodynamic Analysis* 2 (2002), 8–36, there is a problem in the usual textbook approach to teaching calculus that fails to get at the underlying insights into the derivative and the integral. Quinn writes: "What I am speaking of, frankly, is a lack of basic understanding in Calculus." *Ibid.*, at 8. Lonergan had the same complaint about the conventional Thomist understanding of Thomas. In a 1935 letter to Fr. Keane Lonergan writes: "The current interpretation of St. Thomas is a consistent misinterpretation." The letter is available at the Lonergan Research Institute Archives at Regis College, Toronto.

<sup>&</sup>lt;sup>27</sup> Method in Theology, 260.

<sup>&</sup>lt;sup>28</sup> *CWL* 10, 160.

<sup>&</sup>lt;sup>29</sup> Bernard Lonergan, *Insight: A Study of Human Understanding*, ed. Frederick Crowe and Robert Doran, vol. 3, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1992), 72–73 (hereafter CWL 3).

approaches in macroeconomics become obvious. To fully appreciate the discovery of functional specialization, it helps immeasurably to have a notion of the climb involved in doing science, trying out the task of self-appropriating one's conscious intentionality, and connecting the two together. This effort is essential to the future implementation of generalized empirical method and, by extension, it is essential to the implementation of functional collaboration.

#### 2. Functional Specialization

And what is the solution? As Lonergan put it to Philip McShane in 1966, "It's simple: you just double the structure." The 'structure' he was talking about is the four-leveled account of human intentionality, which Lonergan introduced in chapter one of Method in Theology. In this account of human intentionality Lonergan identifies four distinct yet related levels: experience, understanding, judgment, decision. Each level has elements, all of which are related to each other, as found in Figure 1 in the Appendix.<sup>30</sup> As Lonergan speaks of four levels in Method in Theology, there is no doubt that it is this four-leveled configuration that is the backbone for his eightfold functional division of labour. The genesis of the configuration is of some interest with respect to counting levels. In Insight, Lonergan presents cognitional structure as a threeleveled structure of experience, understanding and judgment, what is diagramed under knowing in Figure 1 in the Appendix. In chapter 18, "The Possibility of Ethics," Lonergan treats deliberation in terms of a similar three-fold structure. In his account of cognitional structure, whether he is dealing with knowledge of fact or knowledge of value, Lonergan still uses the language of faculty psychology, even though on the evidence of accomplishment of the book itself, he had clearly moved beyond faculty psychology. In the period between writing *Insight* and his discovery of the structure of functional specialization. Lonergan shifts to the language of intentionality and makes explicit the process of decision as a distinct fourth level that includes the activities of deliberation, evaluation, decision, and action and that sublates the levels of experience, understanding, and judgment. It was in doubling this structure, that Lonergan grasped the eightfold order of functional specialization.<sup>31</sup>

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<sup>&</sup>lt;sup>30</sup> The diagram is scanned from McShane's *Wealth of Self and Wealth of Nations* and is derived from diagrams Lonergan himself used during lectures in Dublin in 1961. See *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*, ed. Philip McShane, vol. 18, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 2001), 322–23.

<sup>&</sup>lt;sup>31</sup> In shifting from the three levels emphasized in *Insight* to the fourleveled account of *Method in Theology* there has been a marked tendency among scholars to neglect the important elements related to planning, or the what-to-do question in ethics. For Lonergan, as is clear from his account of

The 'doubling' occurs by reflecting on our experience of time in the context of levels of conscious intentionality.<sup>32</sup> With respect to time, while recognizing that our experience is always in the present, nonetheless we shift attention to remembering or recovering the past (what happened?), or we can anticipate of the future (what is to be done?). In Method in Theology, then, Lonergan speaks of two phases of theological method. Phase one is theology in oratione obligua, that is, so to speak, 'listening to the Word.' The listening is an 'encounter with the past.<sup>33</sup> Phase two is theology *in oratione recta*, that is, a 'speaking of the Word' so that "the theologian, enlightened by the past, confronts the problems of his [or her] own day."<sup>34</sup> With respect to the levels of consciousness, "each level has its own proper achievement and end."<sup>35</sup> If we identify the method, achievement, and end of each level in terms of its temporal intentionality we can conceive of four specialties engaged in the recovery of the past, i.e., listening to the Word, and four specialties anticipating the future, i.e., speaking the Word. The result is eight linked specialties. All the specialties are progress-orientated, that is, directed towards the making of history.<sup>36</sup> The past and the future are linked and in functional collaboration there is no history for history's sake. As McShane puts it, we need to ask, what is worth recycling from the past? The four specialties engaged in the recovery of the past are: research (a specialty of experience), interpretation (a specialty of understanding), history (a specialty of judgment), and dialectic (a specialty of evaluation). The four specialties engaged in anticipating the future or speaking the word, are foundations (a specialty of decision), doctrines (a specialty of judgment), systematics (a specialty of understanding) and

deliberation in chapter 18 in *Insight*, there are *five* levels of intentional consciousness: experience, understanding, judgment of fact, planning and value-judgment. What is included in the fourth level, decision, includes both deliberation or planning *and* value judgement, levels that parallel the functions of understanding and judgment knowing in the process of decision-making. Lonergan was quite clear on the difference between deliberation (what follows from what-to-do question) and decision (what follows from the is-it-to-be-done question) and he taught it that way. See footnote 30 above. His approach follows Aquinas' use of the five causes in *Summa Theologica* I-I Q 3 and the account of deliberation in *Summa Theologica* I-II QQ 6–17. This question is discussed at length in Philip McShane's essay, ""What-To-Do?": The Heart of Lonergan's Ethics." I situate the issue in the context of Lonergan's (Toronto: University of Toronto Press, 2010), 224–232.

<sup>32</sup> A good ear might detect here a hint of Lonergan's appropriation of Augustine's treatment of time in chapter 11 of *Confessions*.

<sup>&</sup>lt;sup>33</sup> Method in Theology, 133.

<sup>&</sup>lt;sup>34</sup> *Ibid*.

<sup>&</sup>lt;sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> See Terrance Quinn, "Community Climbing: Toward Functional Collaboration," in this volume.

communications (a specialty of experience). In ordering the specialties Lonergan placed the forward-leaning specialties in reverse order to the specialties of recovery, as presented in Figure 2 in the Appendix.

And what minimally is the task of each specialty? It would be best at this point just to list them.

(1) Research – Collecting and selecting the relevant data, written or otherwise.

(2) Interpretation – Establishing the meaning of the data.

(3) History – Figuring out what is actually going forward.

(4) Dialectic – Sorting through the various interpretations and histories with the aim of coming up with the best story or explanation.

(5) Foundations – Expressing the best directions forward in a way that is not tied to particular places, ages, and times.

(6) Doctrines (Policy) – Reaching relevant pragmatic truths within a foundational context.

(7) Systematics (Planning) – Drawing on past strategies and discoveries while envisaging future concrete possibilities and their probabilities.

(8) Communications – Collaborative reflection on the local level that selects creatively from the range of possibilities developed in the prior seven specialties.

The specialties are all linked together as part of a total process from data (Research) to results (Communications). They produce an ongoing, coordinated stream of ideas that enters into history and so becomes data for further research. In this way the whole process constitutes a continual feedback system. Just as knowing is a self-correcting process, so functional collaboration is also a self-correcting process directed to steering human communities of meaning, and ultimately all of history, towards a better place and time.<sup>37</sup> One advantage of functional specialization will be found in its *just* efficiency. No one specialty exercises totalitarian control as all specialties are part of the greater process of functional cycling. Each specialty has the autonomy to work out its special methods and techniques. Results from one specialty become data for the next one. In this way groups can tackle particular problems by dividing up the labor broadly into eight different functional zones. Lonergan writes: "If these eight ends exist, then there are eight different tasks ... the distinction and division are needed to curb onesided totalitarian ambitions."38 McShane has written that history's yearning for efficiency is independent of the grounds of the division: "Lonergan did not make a mistake, nor did he invent a filing system. Indeed, one can see his achievement as one that makes him foster-father

<sup>&</sup>lt;sup>37</sup> See footnote 55 below.

<sup>&</sup>lt;sup>38</sup> Method in Theology, 137.

to something that history is at present mothering. Moreover, the mothering is axiomatically independent of the 'Grounds of the Division' (*Method* 5.3)."<sup>39</sup>

Finally, as I indicated above, the method of functional specialization is relevant to all sciences and disciples. Because of its general character, functional divisions cut across disciplinary boundaries, while respecting the distinct nature of different scientific genera. Lonergan certainly acknowledge this fuller range for functional collaboration-and if you think about it, how else can theology really be integrative?--but he barely elaborated on the manner in which this interdisciplinary integration might be structured. Certainly he made clear that the general categories are operative in all the special categories. Even as the activities and character of, say, the researcher or foundational person differ, nonetheless, the functional researcher operates out of the same foundations as the foundations person because the basic cognitional elements are relevant to the operation of each and every specialty. All specialists in all the specialties ask questions, understand, judge, deliberate, and decide. Further, elements of the integration are embedded in *Insight* and in particular in Lonergan's account of the world order of emergent probability and his account of the sixfold genera of science: physics, chemistry, botany, zoology, understanding, and religion, which McShane treats in his metaphysical Words 1 and 2. (W1 & W2).<sup>40</sup> To that end, McShane developed a diagram in Process, which you can find in Figure 3 in the Appendix, and it is quite helpful for visualizing the potential for integration.

#### **3. Preparing for Functional Collaboration**

Mendeleev would be quite amazed at the advances in modern chemistry that followed the discovery of the periodic table. I doubt he would recognize most of what he might find in a contemporary chemistry periodical. Likewise, we are at some disadvantage in imagining how functional collaboration will actually work.<sup>41</sup> What will happen will depend on the efforts of those who try to collaborate functionally, and no doubt advances will be uneven. What Mendeleev would, for the most part, recognize is the standard diagram found in the inside cover of any high school or university Chemistry textbook. The periodic table provides a minimal introduction to fundamental terms and relations of

<sup>&</sup>lt;sup>39</sup> Http://www.sgeme.org/BlogEngine/post/2011/03/17/THE-SEMINAR-Q-A-Sessions-March-17th-by-Philip-McShane.aspx.

<sup>&</sup>lt;sup>40</sup> See Philip McShane, *Prehumous 2*, "Metagrams and Metaphysics." Http://www: philipmcshane.org.

<sup>&</sup>lt;sup>41</sup> For a narrative account of how we might imagine functional collaboration, I recommend James Duffy, "Ethics as Functional Collaboration," *Journal of Macrodynamic Analysis* 7 (2012), 123–150.

the science of chemistry. Minimally, then, we can begin the implementation of functional collaboration by naming and diagramming the specialties as in Figures 2 and 3 in the Appendix. Why minimalist? Functional collaboration as a serious method does not exist, so there is no functionally cycled data to interpret.<sup>42</sup> Yet, the fundamental division of labor is not hard to grasp as a possibility,<sup>43</sup> and specialists in the various sciences who recognize its obvious advantages for dealing with methodological problems in their own collaborative work might start to exploit its implications. The key point is a shift of focus to a consideration of operations rather than content or subject. It would make sense at this point to communicate the division of labor and its advantages and let specialists work out for themselves the implications. Likewise in the arena of interdisciplinary cooperation, especially as it contributes to complex practical issues, naming the specialties and indicating their relationship to the genera of the sciences, as in Figure 2 in the Appendix below, would be quite helpful.

Such a minimal shift to implementing functional collaboration depends on skillful communication of the division of labor to a receptive audience. How, then, do we acquire these skills? It occurs to me that we have to honestly recognize that we are, for the time being, all students of the method and so we need to learn. Certainly, we need to make the personal effort towards either acquiring an adequately differentiated consciousness or frankly admitting that this is not our field. You do not have to be Fisher or Spasky to have an appreciation of grandmasters at work in any field. What *is* relevant is the development of a public *ethos* that respects the range of competencies and roles of functional collaborators, the cosmopolitan elders.<sup>44</sup> The point of a division of labor

<sup>44</sup> The reference is to Lonergan's notion of cosmopolis. See *CWL* 3, 263– 369. The functional collaborator would be seen as a cosmopolitan elder. See for instance, *Posthumous 18*: "Beyond 'Bolder Spirits' in the 'Difficult and Laborious,'" available at http://www.philipmcshane.org/wpcontent/themes/philip/ online\_publications/series/posthumous/posthumous-18.pdf. The theme occurs in the *Redress of Poise* (1996), http://www. philipmcshane.org/wp-content/themes/philip/online\_publications/series/

<sup>&</sup>lt;sup>42</sup> See McShane, *Method in Theology: Revisions and Implementations*, chapter 10, http://www.philipmcshane.org/method-in-theology-revisions-and-implementations.

<sup>&</sup>lt;sup>43</sup> *Experto crede.* We can distinguish between grasping as (1) believing in order to understand the object 'X' where 'X' is figures 2 and 3 in the Appendix, and, grasping as (2) understanding 'X' as a fully working global praxis, which is going to take a good while. Lonergan's account of cosmopolis in is an example of this strategy. He writes: "Still, what is cosmopolis? Like every other object of human intelligence, it is in the first instance an X, what is to be known when one understands. Like every other X, it possesses some known properties and aspects that lead to its fuller determination. For the present, we must be content to indicate a few of these aspects and to leave until later the task of reaching conclusions." *CWL* 3, 263.

is its efficiency; everyone has their proper role and function. The functional collaborator operates at a higher level of theoretical control.

Still, to become effective, functional specialists' solutions eventually require the cooperation of those operating in the world of common sense. The work of the laboratory is communicated to the engineer who designs things that construction workers build. Participants in the economic seminar communicate results to local experts who advise communities on financial matters. Perhaps surprisingly, then, art and aesthetics are relevant. As I wrote recently, "there is, then, an aesthetic preparation of human experience and expression relevant to the emergence of stages of meaning in history, and so Lonergan writes in Method: 'With Giambattista Vico, then, we hold for the priority of poetry.' As Homer, Sappho, Hesiod, and the Greek dramatists developed a sophistication of symbol and expression that made possible that remarkable turn to mind in Socrates, Plato, and Aristotle, so too the art of the last two centuries, in its exploratory and innovative expressions, intimates an emergence of the hoped-for third stage of meaning resplendent in the fruits of self-appropriated creativity and a matching linguistic feed-back."<sup>45</sup> McShane's style of presentation exploits these aesthetics advances, and as a result he is frequently misunderstood. "We tend to view language from the limited perspective of the synchronic slice we happen to be born into rather than from the sweeping diachronic perspective revealed by the whole history of human speaking and writing."46

Like axial thinkers before him such as Plato, the reach of Lonergan's breakthrough goes beyond his own expression of it. For example, it is possible to identify intimations of research, dialectic, foundations, etc., throughout his *Collected Works*, but a line-by-line functional control of words was beyond him. Lonergan's Latin theology, for example, is by and large a very brilliant example of *haute vulgarization*. McShane has stretched the horizon, and his choice of words reflects this stretching, yet he too regularly admits to dabbling in random dialectics and what he calls C<sub>9</sub> expression.<sup>47</sup> Nonetheless, it is clear to me that functional collaboration will involve sophisticated advances in linguistic expression comparable to the now-standard

http://www.philipmcshane.org/wp-

posthumous/posthumous-18.pdf. And the theme has been a frequent visitor in McShane's writing ever since. More recently, he talks of the Tower community. See *Field Nocturne 38*: "At the Threshold of the Halfway House."

content/themes/philip/online publications

<sup>/</sup>series/field nocturnes/Field%20Nocturne-38.pdf

<sup>&</sup>lt;sup>45</sup> Michael Shute, "Introduction: Art and the Third Stage of Meaning," *Journal of Macrodynamic Analysis*, 6 (2011), 3–4

<sup>&</sup>lt;sup>46</sup> *Ibid.*, 5. I would like to thank Patrick Brown for contributing this sentence to a draft of my "Introduction" to the aesthetics volume of *JMDA*.

<sup>&</sup>lt;sup>47</sup> See footnote 68 below.

mathematical expression of theoretical physics. Still, aesthetic developments will likely have a much broader appeal, and insofar as they permeate mass media and universal education, they will provide a more welcoming audience for the communication of the results of functional collaboration. What Lonergan says about the implementation of macroeconomic dynamics is relevant here: "It will retire the brain trust but it will make the practical economist as familiar a professional figure as the doctor, the lawyer, or the engineer."<sup>48</sup> Likewise, we can imagine the development of a range of practical functional communicators.

Furthermore, those who aspire to be functional collaborators need to be able to *think scientifically* and to do this we need to learn a science. Quite frankly, without the 'bloody' entrance into the theoretical world of empirical science, it is virtually impossible to appreciate why there is such a pressing need for functional collaboration.<sup>49</sup> For me this became apparent in efforts to teach social justice ethics. Many of my students were keenly aware of the injustices in our economic system and wanted to change the *status quo*, especially in the economic system. They wanted action but lacked an understanding of how the current dysfunctional economic system works, nor did they have a grasp on how it really ought to work. They just knew something is terribly wrong.

Contemporary ethics debates suffer from similar defects. Just as a bioethicist needs to have a working understanding of biology and medicine, and an environmental ethicist needs a working understanding of ecology and other related sciences, so concrete concern for social justice requires some knowledge of economics and other related fields. Without the sciences you cannot communicate meaningfully about the problems of these fields nor can you appreciate relevant advances. The implementation of functional collaboration will require a working grasp of scientific method and of relevant sciences. Otherwise, we find out the hard way that the road to hell is paved with good intentions.

Thinking scientifically, then, means working towards—and eventually affirming—a *standard model*.<sup>50</sup> Functional specialization provides a standard model for the general method of all fields, and its division of labor will significantly improve the efficiency of workflows

<sup>&</sup>lt;sup>48</sup> Bernard Lonergan, *For a New Political Economy*, ed. Philip J. McShane, vol. 21, *Collected Works of Bernard Lonergan* (Toronto: University of Toronto Press, 1998), 37.

<sup>&</sup>lt;sup>49</sup> According to Lonergan, "knowledge makes a slow, if not a bloody entrance. To learn thoroughly is a vast undertaking that calls for relentless perseverance." *CWL* 3, 210.

<sup>&</sup>lt;sup>50</sup> See Philip McShane, *Lonergan's Standard Model of Effective Global Enquiry*, http://www.philipmcshane.org/lonergans-standard-model-of-effective-global-enquiry. More concisely see *FuSe 6*: "Working towards a Standard Model." http://www.philipmcshane.org/wp-content/themes/philip/online\_publications/series/fuse/fuse-06.pdf.

within the sciences. The common contemporary division between theoretical and experimental physicists is an example of a relatively efficient division, although not yet functional as such. The implementation of functional specialization would further contextualize and improve the division.<sup>51</sup> Certainly there will have to emerge standard models for special fields, for without a standard model it is difficult to move forward. Such developments as Newton's generalization of mechanics, Mendeleev's discovery of the periodic table, Einstein's theory of relativity, Mendel's discovery of the gene, and Crick and Watson's discovery of DNA have significantly accelerated progress in these fields and led to a series of remarkable technological advances. These discoveries provided a common ground for moving forward, even as they remain open to significant advance.

We can contrast the advance in physics and chemistry in the last 100 years with the history of economics to get an idea of how significant it is to have a working standard model. In economics we have a situation in which there is as yet no agreed-upon approach, but rather competing schools of analysis. Consequently, we have been subjected to 200 vears of bad ideas "that have done not a little to make human life unlivable."<sup>52</sup> Economic theory, especially as it influences economic practice, is a prime instance of ineffective academic fragmentation. The lack of any effective standard models sheds light on the importance of working towards articulating our basic positions. This has been a central theme of McShane's effort for over forty years. Initially he stressed the importance of taking a personal stand on the basic positions on knowing, objectivity, and being in Insight.<sup>53</sup> He has communicated frequently on Lonergan's achievement of fundamental variables for the science of economics.54 In recent years he has identified the importance of Lonergan's account of the structure of functional dialectic, in particularly focusing on the sequence of operations found on pages 250 of Method in Theology.<sup>55</sup>

<sup>&</sup>lt;sup>51</sup> McShane has explored the need for functional specialization in physics in "Elevating *Insight*: Space-Time as Paradigm Problem," *METHOD: Journal of Lonergan Studies* 19/2 (Autumn 2001), 203–229.

<sup>&</sup>lt;sup>52</sup> *CWL* 10, 232.

<sup>&</sup>lt;sup>53</sup> See, for example, *Lonergan's Challenge to the University and the Economy*.

<sup>&</sup>lt;sup>54</sup> See Philip McShane, *Economics for Everyone* (Halifax, NS: Axial Press, 1998) and *Pastkeynes Pastmodern Economics: A Fresh Pragmatism* (Halifax, NS: Axial Press, 2002).

<sup>&</sup>lt;sup>55</sup> The McShane series *Posthumous* focuses on the task of communicating the scientific importance of this section of *Method in Theology*. I draw your attention in particular to the essay *Posthumous* 7: "Lonergan's 1833 Overture." http://www.philipmcshane.org/wp-

content/themes/philip/online\_publications /series/posthumous/posthumous-07.pdf.

I indicated above that a central issue for functional collaboration is integrating system and history. From this follows two relevant preparatory tasks. The first is to appreciate that human beings develop and that any adequate metaphysics fully integrates system and development. There is much to be discovered in chapter 15 of *Insight*.<sup>56</sup> The second task is to take history seriously, in both its genetic (developmental) and its dialectical features. As functional specialization is an advance in the method of human operation, so resistance to its advance is a dialectical counterforce. It is just as important to come to terms with both the forces advancing in the right direction and the forces of resistance. Functional collaboration is designed to deal with both creative collaborative advance and resistance to advance, whether from individuals or groups. The specialty of dialectic provides a zone for sorting out differences and conflict where "each investigator proceeds to distinguish between positions, which are compatible with intellectual, moral, and religious conversion and, on the other hand, counterpositions, which are incompatible either with intellectual, or with moral, or with religious conversion."57

### 4. Beginning Functional Collaboration

As to the question of how to begin, I am reminded of Henry Miller's advice for overcoming writer's block: Write! What do you write about? Write about writer's block! How do we begin functional collaboration? We collaborate! What do we collaborate on? That is a something we need to figure out, and it will require a keen ear for the significant problem, local or global, and a keen eye on the pertinent opening.<sup>58</sup> However, without some commitment to taking these initial steps we are left with a world in which "the system that is needed for our collective survival does not exist."<sup>59</sup>

But then there is Lonergan's own assessment of his discovery: "Is my proposal utopian? It asks merely for creativity, for an interdisciplinary theory that at first will be denounced as absurd, then will be admitted to be true but obvious and insignificant, and perhaps finally be regarded as so important that its adversaries will claim that they themselves discovered it."<sup>60</sup> Let me suppose, then, that the Lonergan community itself begins to take up the challenge of seeding the shift towards functional collaboration seriously and pragmatically.

<sup>&</sup>lt;sup>56</sup> Philip McShane devotes *Field Nocturnes* to exploring chapter 15 of *Insight*: http://www.philipmcshane.org/field-nocturnes/.

<sup>&</sup>lt;sup>57</sup> Method in Theology, 250.

<sup>&</sup>lt;sup>58</sup> For some suggestions see Philip McShane, *FuSe 18*: "Ways to Get into Functional Collaboration." http://www.philipmcshane.org/wp-

content/themes/philip/online\_publications/series/fuse/fuse-18.pdf.

 <sup>&</sup>lt;sup>59</sup> "Healing and Creating in History," in *A Third Collection*, 108.
<sup>60</sup> *Ibid*.

How might that happen? This is McShane's primary concern, and it was Father Coehlo's request of me to elaborate on this concern. Obviously, what follows can only be one road, perhaps among many, that might start the full global movement to functional collaboration, and it is necessarily expressed in a more technical language. It is McShane's conviction, however, that the road he has in mind opens up to us most brightly if we take an optimistic view of the plethora of comparative studies— Lonergan and X—that have emerged in the past fifty years. First, I recall the large-scale comparative studies that I pointed to in the previous article: parallel efforts in law, economics, ecology, musicology, etc.<sup>61</sup> But here I want to think about the possibility of in-house collaboration, and to that end I pick up on the suggestion in McShane's most recent book Method in Theology 101 AD 9011: The Road to *Religious Reality*<sup>62</sup> that we take more seriously the notion of *Comparison* and to do so in line with Lonergan's general appeal for selfappropriation.<sup>63</sup> The issue, then, becomes the basis of comparison in the full inner subject and in the full outer object. Generally comparison of Lonergan and X is about their views on some topic, A, and that topic is a relational bundle with reference to what McShane calls the full outer object.<sup>64</sup> The challenge immediately brings to mind Lonergan's first requirement in *Method in Theology* with respect to interpretation: "understanding the object" connected with his fourth, "understanding oneself."65 But what is the full object about which there is topic A? We are back to what was said previously: it would, in Lonergan's secular view, be history, or in his fullest Christian view, it is the concrete Trinitarian weave of Christ in history. What, then, of the subject

<sup>&</sup>lt;sup>61</sup> Michael Shute, "Functional Collaboration as the Implementation of Lonergan's Method, Part 1: 'For What Problem Is Functional Collaboration the Solution?'" (see footnote 8 above). See also the efforts of the SGEME Functional Research Seminar http://www.sgeme.org/. Some of the results will appear in future volumes 9 and 10 of the *Journal of Macrodynamic Analysis*.

<sup>&</sup>lt;sup>62</sup> See Philip McShane, *Method in Theology 101 AD 9011: The Road to Religious Reality* (Vancouver: Axial Publishing, 2012), especially the Preface and Introduction.

<sup>&</sup>lt;sup>63</sup> "Comparison examines the completed assembly to seek out affinities and oppositions." *Method in Theology*, 250.

<sup>&</sup>lt;sup>64</sup> The reach for what Lonergan calls the Field (see *CWL* 18, index) is the topic of McShane's *Posthumous* Essays, especially the last six, 14–21, where the full object is talked of in terms of  $G_{ijk}$  and the focus is on the full heuristic W3 enlarged on by those essays.  $G_{ijk}$  emphasizes the parallel between the Christoffel symbolism and a needed advanced symbolism of the Divine Object. The realization of cyclic advances in W3 is through a contemplative Tower effort, the heart of which is the prayer "Double You Three in me, in all, Clasping, Cherishing, Calling, Craving, Christing," and the five Cs refer to finite participations in the Divine Personalities, the so-called Divine notional acts.

<sup>&</sup>lt;sup>65</sup> Method in Theology, 156, 161.

interpreting and comparing? We can ask ourselves: what is our task in history? "All we know is somehow with us ..."<sup>66</sup> In every word and deed we implicitly self-interpret the 13.7 billion year-old cosmos. In *Insight* the challenge is expressed in terms of the personal achievement of the move from latent, through problematic, to explicit metaphysics.<sup>67</sup> Functional collaboration conveniently divides up the work to allow every little light to shine ever so humbly, not unlike factory workers putting a few bolts on the hub of a wheel and then passing it along. The bolts, however, are the advances of meaning in history. Then, understanding oneself would seem to require understanding that self as viewing history, in whatever slim heuristic fashion. Indeed, the first three parts of this essay are an indication of that slim heuristic, held together perhaps by Figure 3 in the Appendix here.

The problem for members of the community would be to identify their ongoing work, within the context of that slim heuristic, as having meaning from one of 9 meanings of comparison.<sup>68</sup> We can neatly intimate this sequence of meanings by considering physics as it operates within the Standard Model, although it requires a fuller meaning to that standard model in that the question, What is physics?, as it now has to take into its fullest answer the standard model as it leads to progress in experimentation, in teaching, in invention, in living. But let us, as Lonergan does, simply consider that "the functional specialties of research, interpretation, and history can be applied to the data of any sphere of scholarly human inquiry."<sup>69</sup> Then one can think of the functional researchers in physics picking significant tracks and traces. The picking is through **comparison**<sub>1</sub>. These researchers hand on the baton to the theoretical physicists, who each try in their own way to lift the standard model by **comparison**<sub>2</sub>, where that points to their own slow struggle to create modifications or paradigm shifts. Comparison<sub>3</sub> turns the task, through baton-exchange, to history: modifications that find their way into history and life, be it in the science narrowly conceived or in the full reach for progress. Comparison<sub>3</sub> focuses on actual ongoing meanings.

This flow through to fresh meanings in actual contexts would take us into new territories, but it seems wise to halt at the innovative

<sup>69</sup> Method in Theology, 364.

<sup>&</sup>lt;sup>66</sup> *CWL* 3, 303.

<sup>&</sup>lt;sup>67</sup> CWL 3, 416–17.

<sup>&</sup>lt;sup>68</sup> Each meaning of comparison links to a functional specialty, from research all the way through to communication, plus the additional task of communication to those outside of the collaborative tower, a function McShane identifies as C<sub>9</sub>. Useful here is the essay by McShane, "Systematics, Communications, Actual Contexts," published in various places in the 1980s, but now available as chapter 7 of the McShane Website book (2008), *ChrISt in History*. The beginnings of interest in 9 meanings, e.g., of Jesus, is in chapter 5 of the McShane Website book (1990), *Process: Introducing Themselves to Young (Christian) Minders*.

meaning of comparison in **comparison**<sub>4</sub>. That meaning, as McShane suggests, gives a full fresh creative meaning to the word and activity of *Comparison* that Lonergan writes of as a step in Dialectic.<sup>70</sup> And what do we compare this fresh ongoing meaning sifted out by the *Assembly* of the dialectician?<sup>71</sup> It is compared to the genetic sequencing of the series of standard models as it carries forwards that sequence towards suggestions for policies (doctrines), plannings (systematics), and executive reflections (communications), as well as local operative choices.<sup>72</sup> But in the full view of Christian history, the sequencing that is the basis of **comparison**<sub>4</sub> is a solution to Lonergan's problem in *Insight* of the treatise on the Mystical Body.<sup>73</sup> That genetic sequencing would lift reflection on the mystical body from being a footnote in a treatise on the Church to being the heart of the full cycle of the Christian effort to ensure 'cumulative and progressive results' in history.

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<sup>&</sup>lt;sup>70</sup> *Method in Theology*, 249. See also footnote 48 above.

<sup>&</sup>lt;sup>71</sup> "Assembly includes the researches performed, the interpretations

proposed, the histories written, and the events, statements, movements to which they refer." *Method in Theology*, 249–50.

<sup>&</sup>lt;sup>72</sup> This route is sketched out in *Method in Theology 101 AD 9011: The Road to Religious Reality*, 26–51.

<sup>&</sup>lt;sup>73</sup> *CWL* 3, 742.

### Appendix

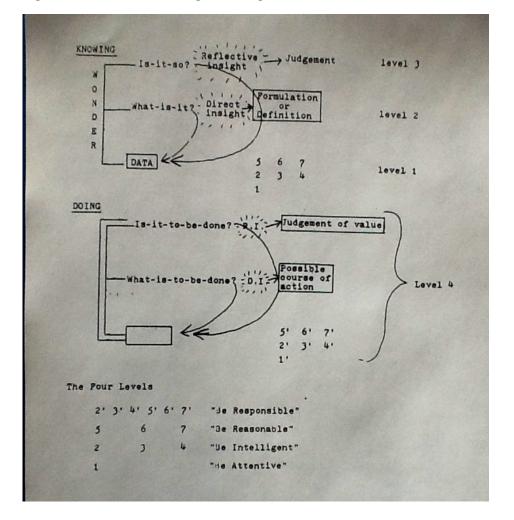


Figure 1. Structure of Knowing and Doing

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Figure 2. Functional Specialties and Levels of Conscious Intentionality

<b>Recovery of the Past</b>	LEVELS Anticip	ating the Future
ת	<b>→</b> →	R
Dialectic	DECISION	Foundations
History	JUDGING	Doctrines
Interpretation	UNDERSTANDING	Systematics
Research	EXPERIENCE	Communications
7		K



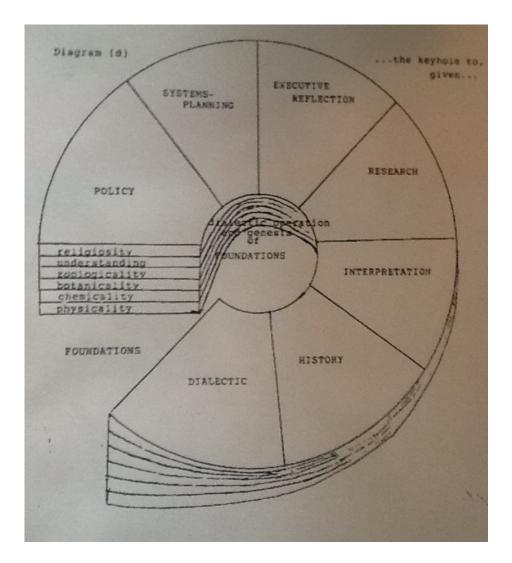


Figure 3. Functional Specialties and the Genera of Sciences