

**Lonergan's Standard Model**

**of**

**Effective Global Inquiry**

**Philip McShane**

**Frontispieces:**

“The aim of discursive reason is to understand and it arrives at understanding not only by grasping how each conclusion follows from premises, but also by comprehending in a unified whole all the conclusions intelligibly contained in those very premises. Now this comprehension of everything in a unified whole can be either formal or virtual. It is virtual when one is habitually able to answer readily and without difficulty, or at least ‘without tears,’ a whole series of questions right up to the last ‘why?’ Formal comprehension, however, cannot take place without a turning to phantasm; but in larger and more complex questions it is impossible to have a suitable phantasm unless the imagination is aided by 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.”

[B.Lonergan, *The Ontological and Psychological Constitution of Christ*,  
University of Toronto Press, 2002, 151]

“So it comes about that the extroverted subject visualizing extensions and experiencing duration gives place to the subject oriented to the objective of the unrestricted desire to know and affirming beings differentiated by certain conjugate potencies, forms, and acts grounding certain laws and frequencies.”

[B.Lonergan, *Insight. A Study of Human Understanding*, University of Toronto Press,  
1992, 537]

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## Foreword

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A foreword, preface and introduction to a book may appear to be overkill, but it seems to me now to be necessary. By *now* I mean the time of placing the book on the website, and the necessity is one of contextualization.

**Now** is June of 2007. The book was finished early this year, at a time when I was awaiting the verdict of University of Toronto regarding the previous work, *Molecules Minding Meaning*, which will appear from that Press a year after this, its sequel. In the interim I was preoccupied with preparing and giving lectures on education, economics and spirituality in both Korea and Australia, and contributing to the Los Angeles and the Melbourne Lonergan Conferences. The series *Eldorede* and the essay *Prehumous I*, “Grade Twelve Economics: A Common Quest Manifesto”, give some impression of those lectures. Only some: the learning lift for me of those two months was startling, but it will not be added to what is the completed incompleteness of the present book.<sup>1</sup>

The book, then, goes out as it stood those months ago. It does so even without the further editing that would eliminate various repetitions, even perhaps slips in my references. One might, after all, consider these are part of the incompleteness!<sup>2</sup>

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<sup>1</sup>I cannot however resist a comment on the lift in my educational perspective that came from my five weeks as visiting scholar to St. Ignatius College, Riverview, Sydney, Australia. A clue to my leaps of precision regarding my Childout Principle is, perhaps, the slogan I threatened to whitewash over a wall-image of Ignatius during the night before my departure, “What goes on in this school”: no question mark! In various classes - I had never taught young boys before - I drew attention to the missing map of/in the school and of/in the world: the map which is given by the diagrams of Appendix A of Lonergan, *Phenomenology and Logic*. The boy’s and staff’s reaching for the map was invited by considerations of expectations and performance in both dating and in sports: the what-poise of a date-eager young lady, of an awaiting but unlively young man, of a talented tennis-serve receiver or of an astute penalty taker.

<sup>2</sup>I have encouraged my assiduous web-editor, Tim Hosterman - to whom much thanks is due - towards a like negligence. We have other things to do, and besides, you have the joy of

The book goes out, too, in an increased realism about the incompleteness of the various types of searchings of Lonergan's work. This increase was related to experiences of university communities both in Korea and in Australia. It is something that I intend to say more about in *Prehumous 2*, "Lonergan Studies: A Road Not Taken". But already there is present in this book and in other places a stand against what I consider the foundational incompleteness of various Lonergan experts. As I have remarked regularly, such a critical stand is quite familiar in physics, but it causes discomfort in Lonergan communities. I recall a rejection of one of my articles because it seemed - and was - critical of Fr. Frederick Crowe's work; I recall being brought to task for a critical attitude towards Fr. David Tracy. And so on.<sup>3</sup> My most recent horror came from brooding, as I traveled in April the twelve-hour flight to Australia from LA, over the old-style lone-ranger stuff expressed by Fr. Robert Doran's paper at the conference I had just left.<sup>4</sup> Should one stay silent in the presence of what is discerned as massive misdirecting of the next generation, of history? But I had best leave further reflection on this to *Prehumous 2*, the website essay of September 1<sup>st</sup> 2007.

Further, you may well ask, Why rush onto the website the sequel to a book which will not appear for another year?

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puzzling out whether misspells are really such or are they mcshane creations. Also there is the fun of finding what the real referent of a cross-referent is!

<sup>3</sup>In "The Core Psychological Present of the Contemporary Theologian", *Trinification of the World, a Festschrift in honour of Frederick Crowe*, edited by T.A. Dunne and Jean-Marc Laporte, 1978, I wrote crisply of Tracy's missing of "the position" on being. My differences with him reach back to the mid-1960s, as they do with Crowe.

<sup>4</sup>I quote a passage to illustrate the sweep of Doran's pre-functional reaching: "Included in the unified field structure will be a set of derived special terms and relations, and these will be constituted by a position on the constituents of what the New Testament calls the reign of God. Necessarily included in this first volume will be a section that embraces the work I have found most helpful from a methodological point of view regarding the public ministry, death, and resurrection of Jesus as these are narrated in the New Testament: the work in particular of Ben Meyer, N.T. Wright and Raymund Schwager. Also included will be a position on the significance of the mimetic theory of Rene Girard for understanding precisely what is meant by the reign of God and what is meant by its opposite." (Robert M. Doran, "Envisioning a Systematic Theology", a paper delivered at the Fallon-Lonergan Conference, 2007). This is work in an old ineffective mode that drove Lonergan's towards the efficiency and beauty of global functional collaboration.

The answer is pretty obvious. Not only is my normal pilgrim time running out, but also it seems to me that probable disorientations of the human search need to be tackled urgently, openly, honestly.<sup>5</sup> Besides, a lift towards the larger pointings of Lonergan seems an appropriate business during the fiftieth anniversary of *Insight*'s publication. Furthermore, I have inherited the challenge of moving from the Rice Collection of Lonergania to a book, to appear initially in English and French, *Bernard Lonergan: His Life and Leading Ideas*.<sup>6</sup> That certainly should not be delayed.

Finally, does this book depend on the forthcoming book, *Molecules, Minding, Meaning*? The fundamental issue is the gradual emergence of serious foundational people. The two books help in different ways. The present book reaches forward, in chapters 1 and 14 and the Epilogue, towards larger challenges than the book *Molecules, Minding Meaning*. But the other chapters are short suggestive pointers to present needs, posed in a shabby dialectic manner. The book to follow from University of Toronto Press has its dialectic rambles, but it begins with a fairly coherent presentation of the road being taken by history, a road sketched by Lonergan, a road possible and slimy probable at present. I would hope that the two appendices, A and B, of *Molecules, Minding, Meaning*, would provide an operational link between the two books, now and later. The first brings together my set of metagrams of metaphysics. The second gathers pedagogical suggestions. So, I will place these two on the Website in the Autumn of 2007, as soon as they are finished, under the titles Prehumous 3 and Prehumous 4.

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<sup>5</sup>I would note the brutality of the mutual self-exposure that is programmed in the second half of that great page 250 of *Method in Theology*. My shots, in comparison, are gentle pre-emptive strikes.

<sup>6</sup>Professor Val Rice, of Trinity College Dublin, began interviewing and collecting towards a biography of Lonergan in the late 1970s. I was to help him with the intellectual side of Lonergan's life. He was discouraged by William Mathews' later decision to do a biography and abandoned the project for the time being. When Mathews' biography appeared in 2006 (William A. Mathews, *Lonergan's Quest. A Study of Desire in the Authoring of *Insight**, University of Toronto Press, 2005) I encouraged Val to move forwards but he died suddenly in Boston in Autumn of 2007. Mathews' biography ends with the publication of *Insight*. Pierrrot Lambert and I are moving towards a biography to be available in the two languages mentioned. The biography is to include Val Rice's collection of photos.

Preface

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### 1. The Standard Model

Four years ago, probably in February, as it is now, I began a major work of a million words, the *Cantowers*. There were to be 117 of them, simply because Ezra Pound wrote 117 Cantos. I halted at Cantower 41, after 400,000 words: the basic reason was the need for and possibility of collaboration. The primary moving collaboration, one that aimed at getting to grips with page 250 of *Method in Theology*, did not in fact shape up successfully, though it generated on my side of the effort a couple of hundred pages of typescript on that great Lonergan page.<sup>7</sup> Nor did various other attempts to get the show on the road. Still, there were and are a few who take seriously the needs for and possibilities of Lonergan's functional division of labour.

Those Cantowers began with a bow to Eric Voegelin who began his last short work with a sentence about beginning. "Where does the Beginning Begin? As I am putting down these words on an empty page I have begun to write a sentence that, when it is finished, will be the beginning of a chapter on certain problems of beginning."<sup>8</sup> Since then I have made other beginnings, efforts, as I like to say, to get the show on the roll. The most recent, *Method in Theology and Botany*, now renamed *Molecules, Minding, Meaning*, and in process of publication by University of Toronto Press, was completed five weeks ago, in early January. It grew out of, and led on to, a richer concrete fantasy regarding the future system of global collaboration. Yet the five weeks since ending it have blossomed into a still fuller view, and a joyful realization a week ago that the next book conjured up by my imagination some weeks before this was a giant task that could be avoided by a little strategic shuffling.

So now I find myself, on my 74<sup>th</sup> birthday, at another beginning. Not the beginning of the

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<sup>7</sup>See, on website [www.philipmcshane.ca](http://www.philipmcshane.ca), the 8 SOFDAWARES and the first 12 *Quodlibets*.

<sup>8</sup>Eric Voegelin, *In Search of Order*, Vol. 5, Louisiana State University Press, Baton Rouge, 1987, 13.

book of which I have already put together the table of contents and written four sections of the first chapter. But the beginning of that new shuffling which would save me tackling 14 very long chapters that might very well have ended up to be the length of the missing Cantowers.

The new shuffling, of course, comes with a new perspective of an adult foundational growth reaching darkly forward in what I hope is the last millennium of the axial period. How is such a perspective shared? Only by a communal sharing of the effort to thus grow, and with the success of that effort there is to be generated a culture of common sense that solves “the problem of general history, which is the real catch.”<sup>9</sup> Such a common culture would support the efforts of a dedicated minority to push on into the world of serious understanding in a manner inherited from an established scientific tradition. I am talking here about a culture of methodology or theology, but I prefer to give a nudge towards a broader vision by using the word *hodics* rather than either *methodology* or *theology*. Let us not, however, get hung up on words. The main reach should be for analogies that would make my pointing plausible.

The analogy that makes most sense for me is the one caught by the title of the book and of this section: *The Standard Model*. The name is a common pointer in contemporary advanced physics for the most accepted present view of what I might call *the particle zoo*. But I would have you think rather of the road to sharing that advanced view, and here is where you should seek other illustrations than my favorite one, which comes from my teaching experience of mathematical physics. Among my various graduate and undergraduate classes in that teaching there was my favorite group, struggling with a first year university course in the area. The struggle was in a cultural context that took for granted that, even with over-average talent, this was going to be tough work and the tough work would not lighten up during the rest of the journey to an honours degree. Were one of those students to stray into my graduate class of that year, 1959-60, on differential equations or Einstein’s relativity equations, they would have been quite bewildered: and they knew this. Do you have some parallel illustrations for this growth, this bewilderment?

Where am I going with all this? I am going to my new beginning, a beginning which puts

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<sup>9</sup>Lonergan, *Topics in Education*, 236. This is a large problem, not dealt with in that chapter on “History”.



The Standard Model centre-stage. But now the standard model is not the currently accepted model of most of the physics community working in chromodynamics. The Standard Model at issue here is the eightfold functional division of the global labour of inquiry of which Lonergan is the foster-father and history is the mother. A key to getting to grips with the issue is to note a single difference. The Standard Model in physics, like the standard model of chemistry one hundred years earlier, was picked up fairly swiftly by a community competent in the area. So there is need for both radical contrafactual history and fantasy in the effort to envisage what might have been, what might yet be, in the case of our standard model of hodies.

## 2. The Fantasy Field of Foundations

Fantasy Field? Fantasy Land? We are already in trouble here with our problem of beginnings. “The field is the universe, but my horizon defines my universe.”<sup>10</sup> Fantasy is a neuromolecular stretching, like Dave Brubeck’s efforts towards *Take Five* or Nadia Boulanger’s tuning into and encouragement of Quincy Jones’ potential, “go mine the ore you already have.”<sup>11</sup> Lonergan plays *Take Eight* in a short article of 1969, tuned into the potential of history. Dave Brubeck prevailed after a few years, and Quincey Jones moved from the rat-eating of his childhood to his unique enrichment of music. But what of Lonergan’s effort to give new tone and rhythm to “The Music of the Spheres”<sup>12</sup>? Theology still remains on board the sinking ship of its fourteenth century childhood, and a less colourful image comes back to my mind, of “big frogs in little ponds.”<sup>13</sup>

Still, I risk another shot at a beginning. In teaching mathematical physics I used the strategy of pushing each day for detailed work and homework, but throwing in here and there the vision of larger achievement. I have done the same in my writings on Lonergan in the past forty

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<sup>10</sup>Lonergan, *Phenomenology and Logic*, 199.

<sup>11</sup>Quincy Jones, *Q: The Autobiography of Quincey Jones*, Doubleday, New York, 2001, 133, quoting Nadia Boulanger’s advice to him.

<sup>12</sup>Shakespeare, *Pericles*, V.ii.231.

<sup>13</sup>That is how Lonergan put it to me during his stay in Dublin, Easter 1961.

five years. But, in contrast to physics or indeed to any respectably developed scientific or aesthetic zone, the vision is not supported by a cultural ethos. Present theology and philosophy, at their best, are dominated by a subtle and sophisticated commonsense bias.

This is a bluntness, indeed an offensiveness, that goes with my fresh shot at beginning. It was promised in the early pages of *Lack in the Beingstalk* but now its powerful direction has become clearer to me by the very effort of tackling this new book. The shot, then, is dominated by fantasy regarding a future community that would have as common vision The Standard Model. This future community and its functional behavior, of course, has been the centre of my attention and intending, especially since I began the *Cantowers*. In more recent works I wrote of the Ovalteam, conjuring up an image of a relay team focused on moving effectively round the usual oval in baton-exchange from Research to Communications.<sup>14</sup> And in the past year I have pushed, or been pushed, to re-conceive those two specialties in a way that reveals the dominance, in their proper functioning, of the vision or the Standard Model. But it was only after I outlined the present book, listed its chapters as they are given in the table of contents, and pushed half way through chapter 1, that I glimpsed a definite direction of foundational achievement and fantasy.

What is that direction? Best first to state it briefly. Then, in section 3 of this Preface, I shall talk more leisurely about the emergence and direction of the book.

The key is the fantasy of a global community already operating within the Standard Model. This, clearly, is not what I have been writing about in recent years in my effort to get the show on the road: I move the focus of attention to the need for a minimalism that is bred from history's reaching.<sup>15</sup> But it is not in conflict, no more than a ramble forward into the general geometrization of particle physics would be for a class on Newtonian physics. The question is, Can you come with me in this fantasy, or at least encourage the fantasy in those of the next generation if my fantasy makes seeding sense to you? So, I come back to where I began this

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<sup>14</sup>See chapter 5 of *ChrISt in History*, "Communications in General".

<sup>15</sup>The broad minimalism is discussed both in chapter 1 of *Method in Theology and Botany* and in chapter 3 of *Pastkeynes Pastmodern Economics: A Fresh Pragmatism*.

Preface, recalling Voegelin, recalling my previous hopefilled effort of the Cantowers.<sup>16</sup> And I quote that previous beginning of a young man of 70, four years later. As *The Sound of Music* has it, “Let’s start from the very beginning / A very good place to start.”

*“Cantower I*

**Function and History**

Easter Monday, April 1<sup>st</sup>, 2002.

**1. Remembering the Future**

I make a fresh pragmatic beginning at seventy.

There is a sense in which I echo Voegelin’s last puzzling. Where does the beginning begin?<sup>17</sup> But I have been lucky in life to beyond his fundamental puzzling about the type of organism that he and I are.<sup>18</sup> Or at least I have got beyond it in core but not yet in cor, not yet

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<sup>16</sup>The *Cantowers*, supposed to run to number 117, are left incomplete at 41. The title that emerged for the ten volumes, reduced now to 4, is *Roun Doll, Home James*, a title that emerged from my interest in chapter 14 of Joyce’s *Ulysses*, “Oxen of the Sun” which begins with the words “Deshil Holles Eamus.” *Deshil* means turn right. Holles, referring to the maternity hospital on the street of that name in Dublin, has also the German reference to **all**. James? I had been reading those words for decades before I **saw James** in “*Holles Eamus*” (*Eamus* is the Latin for “let us go”). I presume my drawing attention to its Gaelic presence is sufficient clue for you?!

<sup>17</sup>“Where does the beginning begin? As I am putting down these words on an empty page I have begun a sentence that, when it is finished, will be the beginning of a chapter on certain problems of beginning.”(Eric Voegelin, *In Search of Order*, Vol. 5, Louisiana State University Press, Baton Rouge, 1987, 13).

<sup>18</sup>For the advanced Lonergan student an immediate context might be the incarnate merging of four contexts: the bottom of the first page of chapter fourteen of *Insight*; the page there beginning “study of the organism begins ...”( *Insight*, 464[489]); the page stating “the position” (*Insight*, 388[413]); the statement of the problem of the memory of startling strangeness (*Insight*, xxviii[22]). The remote goal is a **poise** that would carry one psychically beyond the problem of the end of that first page of chapter 14 to a pilgrim’s being-at-home in skinned molecular intelligence’s universe as habitat. Such would be the mature positional character, sublating the oriental poise of enlightenment. This note, however, represents another beginning. Its doctrinal brevity here will be expanded into foundational conversation in *Cantower IX* under the title, “Position, Poisition, Protopossession”.

heartheld, heartHeld, Hearthheld.<sup>19</sup> To become heartHeld is to become enlightened in the fulsome sense pointed to in note 2{xx here} or in *Cantower IX*: the Position becomes a harmonious Poosition and one merges Zen and Ken in a new Then busheling enlightenment.

This has already toned into the obscurity of a Then Master, sublating both Dogen and his contemporary Thomas Aquinas, so I must turn round to another beginning.

That other beginning is, of course, you. And I have to presume that you are not totally a beginner. How much can I presume? How much have you to bring? Where and how are you being invited to climb?”<sup>20</sup>

### 3. The Direction of This Book.

You may not be invited to climb in a fully serious sense. That remains to be discovered by you as you venture forward. The important thing will be that you recognize the invitation of the book, of history. The recognition, in centuries to come, is to be a cultural ethos, like the acceptance of subways and skyways: how else would we move round and on?<sup>21</sup> And perhaps you can see that this brings the direction of the book into line with my advocacy of minimalism, a beginning of a broader recognition of the global significance of the functional division of labour. Very possibly you have met this notion before in some part of my writings, for instance in my Introduction to *For a New Political Economy*. It is a matter of moving Adam Smith from the pin to the pen, from the mine to the minding. “The division of labour, so far as it can be introduced, occasions, in every art, a proportionable increase in the productive power of labour .”<sup>22</sup>

That moving requires, of course, the minimalist turn to the division that I have described previously in various places. But here I focus on a single specialist requirement: it requires the

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<sup>19</sup>*Q. The Autobiography of Quincey Jones*, Doubleday, New York, 2001, 123. Tucker is the writer of this chapter.

<sup>20</sup>*Ibid.*, 124.

<sup>21</sup>*Insight*, 417[442]

<sup>22</sup>I quote from the first chapter of Adam Smith’s *Wealth of Nations*.

emergence of foundational characters<sup>23</sup> within The Standard Model. And in saying this I express now not a direction of the book but a re-direction. What might I mean by that odd claim? The beginnings of an answer will certainly require you to ramble between this Preface and the table of contents and to circle back here from musing on the Introduction. And what of the oddness of the titles of the three parts of the book?

The re-direction bubbled out of my decision, half way through chapter 1, to avail of two volumes of Roger Penrose in my attempt to deal with and present an answer to a question that Lonergan posed to me in his last years, about the meaning of Goedel's Theorem. It seemed that I owed his community of followers an answer.

But what of the giving of an answer? This is a problem that has been with me for over forty years. It is a problem, as I have often mentioned, that disturbed Lonergan as he faced, in the late sixties, his consciousness of owing an answer about functional specialization to his community and to history. Where does one begin? "I can't put all of *Insight* into the first chapter". Over the past forty five years I have spoken and written introductions, some with twists that suggested there was something missing in them, something else needed. We shall see that especially when we pause later, in chapter 11, over the sixth chapter of *Process. Introducing Themselves to Young Christian Minders*.

The re-direction of this book is that it switches from introduction to a type of doctrinal glimpsing forward. The movement forward is, of course, quite unrealistic. We shall see this better as we both struggle forwards through these pages. The Standard Model that I write of is not at all a communal possession of the followers of Lonergan, not a foundation, then, for the massive collaborative effort which he sought.

His seeking, of course, was tragically solitary, and his expression of his battered achievements was haunted by the spirit of *haute vulgarization*.<sup>24</sup> A pause here, however, over my own struggle with the meaning of the book *Insight* is useful in our preliminary ramble. For almost twenty years now I have characterized *Insight* as a graduate text by comparing it to another book

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<sup>23</sup>See note 13 of chapter one, below.

<sup>24</sup>On *Haute Vulgarization*, see Lonergan, *Collected Works*, vol. 6, 121, 155.

of my late 1950s, Joos' *Theoretical Physics*.<sup>25</sup> The difference was that Joos work leaned on a plethora of undergraduate texts with their abundant climbing exercises. The point, I think, was valid: but it needs sophistication. Suppose the equivalent undergraduate texts came to be written in the next century: Where, then, would *Insight* stand? Would it perhaps stand like Feynman's *QED: The Strange Theory of Light and Matter*, that magnificent popularization of quantum electrodynamics that yet made no bones about the real difficulties of the topic.<sup>26</sup> But this paragraph, you may notice - especially with the help of the previous footnote - is bubbling with further difficulties

Back to Penrose, then, and to the re-direction. Suppose that there were a community that shared Lonergan's Standard Model? Then I would pick up his question about Goedel, pushing for a foundational refinement. I would be, perhaps, like Hermann Weyl, stumbling forward from Einstein towards the messy seeding of a fuller new physics.<sup>27</sup> I would take for granted that I was writing to a community that was used to serious thinking about the relevant data. And here we are at the heart of the matter, indeed the prime matter. Penrose tackles the question Lonergan posed to me with patient serious thinking about the relevant data. He eventually turns out two large volumes on the significance of the Goedelian achievement. And the turning out is very powerfully and committedly, though weakly, foundational. Indeed, it is magnificent in its foundational pedagogy, with an approach that would turn *Insight* into a twenty-volume work.

With an approach that would turn this book of mine into a fourteen-volume work. So: I arrive at my problem of re-direction. There I was, well into chapter one, with a nudge towards a shift that would turn the chapter into a book. What I had already written - I leave it thus - was an evident mix of doctrinal and pedagogical writing. So, for instance, I went to greater lengths than Lonergan to give an idea of what Goedel did in his successful effort to cunningly number the statements in the metamathematics, but it falls quite short of, say, the efforts of Nagel and

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<sup>25</sup>Blackie and Son, London and Glasgow, 1951.

<sup>26</sup> Princeton University Press, Princeton, 1985.

<sup>27</sup>The place of Hermann Weyl's work in the emergence of contemporary physics is detailed in Lochlainn O'Raiheartaigh, *The Dawning of Gauge Theory*, Princeton University Press, 1997.

Newman.<sup>28</sup> I doubt if many readers would follow up my hints, get beyond *haute vulgarization*. How many readers of Lonergan have gone beyond the few lines about Archimedes on the first page of *Insight* to something that parallels my dealings with Archimedes' work in Cantower 27? What, then, might I do? I recalled *Wealth of Self and Wealth of Nations*, chapter 3, where I first dealt with Cantor's diagonal method of displaying the non-denumerability of the decimals between zero and one, a bit of pedagogy that is built here into the first chapter. Could I do that sort of thing right along? We are back at the image of a big book or two, like Penrose's 2 volumes. Or more particularly, where I left off in chapter one, with the possibility of many pages inviting the reader to climb slowly, grimly, to some decent understanding of Turing machines.

Now, within that very chapter 3 of *Wealth of Self* there was the hint of a solution: a rather crude type of linguistic feedback.<sup>29</sup> It was thrown in after my effort to get the reader to struggle towards an understanding - not a refined methodological one, but only a break beyond technique - of the process of getting square roots.<sup>30</sup> Did you take a break to read the footnote, to tackle the problem? "You may well at this stage read on, thus showing that, like so many others, you have suffered the standard failure to learn how to read."<sup>31</sup> How is this going to help here? Two more clues nudged me, and I hope nudge you, along. First, in the case of Turing machines, Penrose provides magnificent details, even though the full technical treatment is not there. Why not point

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<sup>28</sup>Ernest Nagel and James R. Newman, *Goedel's Proof*, first published 1958, reprinted 1998, Routledge, pb, London.

<sup>29</sup>See *Method in Theology* 88, note 34. I do not push for this in any seriousness in this book. My little push here is mostly that mentioned in the text above, coupled with the affliction of the linguistic feedback of metagrams.

<sup>30</sup>Two anecdotes to console an embarrassed reader. First, I recall Fred Crowe, in one of our chats in the late 1990s, smilingly and humbly admitting, as he showed me an effort Lonergan made to lead him to the point here, that he didn't get it. It is, then, not that easy to getting an understanding control of the process. Secondly, Lonergan made this precise point in what I think was his final effort at lecturing at Boston College. He moved shakily from his high stool to give a usual illustration (e.g. *Phenomenology and Logic*, 10) and urged this as an entry point. Might you take him seriously here, or in that first paragraph of chapter one of *Insight*? How about that for blunt linguistic feedback? Now back to the text!

<sup>31</sup>McShane, *Wealth of Self and Wealth of Nations*, chapter 3.

people in that direction? Secondly, an amusing memory about Lonergan telling me over a lunch together that, instead of writing a further essay on “The Foundations of Mathematics,” as someone requested, I could present the previous essay again.<sup>32</sup> Thirdly, there was a clue from the book which brought the problem into focus in the first place: *Phenomenology and Logic*. Part two, is quite clearly a map rather than a journey: doctrinal, then. These three clues lead me to a strategy that partially solves the problem of lengthy pedagogic treatment. By using references to such as Penrose, Goedel, Wiles, and being blunt about the need for such detours, I avoid extending chapter 1 into a large volume. But secondly, a semi-satisfactory strategy emerged for the following chapters 2 to 13, which I then began to consider as Part Two of my book. What of chapter 14? That becomes Part Three: which of course, leads to an identification of chapter 1 as Part One.

There emerges thus a neat parallel between *Phenomenology and Logic* and this book which I only hint at here: there is more about that parallel in the Introduction.. Part One points towards a much larger rewrite and rethink of Lonergan’s Logic lectures. Part Three raises the issue of an existentialism that would be a lift out of commonsense *anxt* into effective *praxis*. Part Two is simply a set of notes towards that lift, notes that refer readers to previous essays regarding the lift, the climb, and to complementing efforts required if we are to make the Standard Model a presence in a hundred years or so.<sup>33</sup>

My venture, of course, cannot be satisfactory, since the present foundational situation is a mess, and functional specialization only a dream. Were the show genuinely on the road, then the community of the Ovalteam would answer Lonergan’s question cyclically about the significance of Goedel’s Work. In this work I do not even attempt to anticipate that though hints emerge as we move through the specialties in the eight chapters that touch on them. Were The Standard Model a reality of a Tower Community, this work would be a single contribution, perhaps on refinements

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<sup>32</sup>I returned to the memory as I began chapter 14 below. You will notice the result there.

<sup>33</sup>The phrase “in a hundred years or so” is borrowed from, and echos, Patrick Kavanagh’s song, *If ever you go the Dublin Town*: “If ever you go to Dublin Town in a hundred years or so”. I picked a fairly random date: 2111, the centennial of the conclusion of the unfinished *Cantowers!*



of incompleteness theorems of metascience, entering in by way of research, to an eventual spiral upwards of The Standard Model. It would be a refinement of the community's perspective on the empirical residue, on the layers of cosmic energy, on the dynamics and finality of that feeble core of human reaching that is called discursive reasoning. But "we are not there yet,"<sup>34</sup> nor was Lonergan when he raised the question of Goedel with me in his late seventies, or when he gave his own brief pointer in the context of the work of Church, Curry, Skolem, Henkin and Hao Wang. "In other words, the human mind, as St. Thomas says, has a natural desire for the beatific vision; it is infinitely open. That openness is something that upsets this effort, the initial logical ideal of starting out from whole set of axioms from which you deduce everything that is to be known."<sup>35</sup> It was a legitimate answer, the best he could supply at the time, with a focus on what I call "the upper ground of loneliness."<sup>36</sup> But there is also an answer to be had by focusing on "the lower ground of loneliness". It is for later generations of Tower People to plumb the significance of that answer and to bring the resonances of that loneliness into the highways and buyways of humanity's grey but graceful pilgrimage.

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<sup>34</sup>Lonergan, *For A New Political Economy*, 20.

<sup>35</sup>**PL**, 66.

<sup>36</sup>I introduced the notions of upper ground of loneliness and lower ground of loneliness at the beginning of the Epilogue of *The Shaping of the Foundations*, University Press of America, 1976; available on the website.

## Introduction

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Eight months after writing the Preface I come to revise, indeed, rewrite, an Introduction. The book nears completion: notes need to be added to contextualize the effort. But this adding, and the need for it, and the insufficiency of it, dominate my present reaching, and the tone of that reaching is important as an aspect of introducing you to your venture of reading.

Perhaps I might capture, generate in you, the right mood, by saying that as the chapters beyond the first shaped up, the whole effort began to reveal itself to me as an Incompleteness Theorem. In the Preface the focus of my attention was on that late question of Lonergan to me regarding Goedel's incompleteness theorem but I see now more clearly that the full question that Lonergan put to me, "biography to biography in history,"<sup>37</sup> is the question of incompleteness in its totality, and of theorems of such incompleteness.

Immediately I find myself noticing here pointers to an unwritten book, "not some appendage to the present work, but the inception of a far larger one,"<sup>38</sup> but unlike Lonergan at fifty, I, nearing 75, have an agenda that cuts off the terrible labour: or rather invites undertakings of later generators of the cycles of The Standard Model. Further, I cannot afford to enlarge on this strange topic of incompleteness here. Better to direct you to those few pages at the end of chapter 14 where the sections and their footnotes are reasonably explicit.<sup>39</sup>

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<sup>37</sup>I am recalling the middle footnote of the strange middle chapter of my book, *The Redress of Poise*, available on the website.

<sup>38</sup>*Insight*, the beginning of the Epilogue.

<sup>39</sup>More precisely, the reference is to those last four deliberately-short sections 14.10, 14.11, 14.12, 14.13 of the chapter. One might also get something of the mood of incompleteness from chapter 4 of *Lack in the Beingstalk*, where I use Husserl's work under Weirstrass to point forward to distant possibilities of the Calculus of Variation that is theology, but now I have more refined aspects of theological incompleteness in mind. There are to emerge theorems of

Let me get back then to a more introductory track. In the Preface the emphasis was on Goedel, and on two books by Roger Penrose. But of course there are the other two books that nudged forward this venture, two books by Robert Doran.<sup>40</sup> And of course you have now two books from me now if you connect this effort with *Molecules, Minding, Meaning*. Does this lead you to some “compare and contrast” task? I would hope not: the six books are grist for the mill of a later mature realization of page 250 of *Method in Theology*. Will they be equal grist in 2011? These final two books of mine are just the tip of the evolving iceberg of my fifty solitary years of reaching into Lonergan’s *Insight*: they represent a reach towards a third stage of meaning and towards hodic method that is certainly not dominant in the other two authors. In 2111 there will be an ice-tower, a science beyond named positions. But the important point now is that I would claim that venturing into Doran and Penrose is not a prerequisite for your present effort of reading this or my previous book. Still, it would be good if you tackled with me two chapters in each author: Penrose’s first two chapters of *The Emperor’s New Mind* and chapters 7 and 8 of Doran’s *What is Systematic Theology?* The first chapter here is obviously focused on Penrose’s two chapters. The second and third parts of *Molecules, Minding, Meaning* attend to Doran’s two chapters. But this present book is a broad push towards coping with the defects of the culture of each author, and I might symbolize that push here by pointing you towards chapter 5 of the book, “*Insight and the General Character of Logic*”. Neither Doran nor Penrose measure up to what I would consider, normatively, as General Characters of the future. But we are here dipping our toes in the deep

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incompleteness that would carry forward both what Lonergan wrote of elementarily in *Insight* when he described “The Position” and what he wrote to Fr. Crowe of his view of theology after the completion of *Insight* (see his remarks, quoted at note 276 of chapter 14). But these developments belong to the unwritten future. Finally, I would refer you to section 2 of the Epilogue, where I list, perhaps quaintly, eight topics that make more concrete and explicit an incompleteness both in my own work and in general - there’s that key word, *general* again. I do so here, at the end of a note, to bring to your attention that the Epilogue was unintended right to the end of the book: yet it bubbled out with a delightful inevitability.

<sup>40</sup>I am referring to his most recent work, *What is Systematic Theology?*, University of Toronto Press, 2005 and to his previous work, *Theology and the Dialectic of History*, University of Toronto Press, 1986.

water of the first paragraph of the Aristotelian reach, *Magna Moralia*:<sup>41</sup> time to turn our feet towards dryer details.

My table of contents has 14 chapters, the same number as the book *Method in Theology*. Is there some connection? But of course! Consider the final eight chapters to parallel the eight specialties. Chapters 11 and 14 are fairly obvious: the others, in their titles, provide interesting puzzles, parallels to be identified. But now turn your attention to the first six chapters. You might begin by associating the 6<sup>th</sup> chapter with that little chapter on Research the shortness of which Lonergan later regretted. So: keeping the numbers straight, we have now two chapters on Research instead of two chapters on History as occurs in *Method in Theology*. What of the remaining 5 first chapters? Another puzzle, but this time not major: there are five chapters on logic in *Phenomenology and Logic*. Can you make a match?

The clue is in the title of chapter 5, already mentioned. That title is a cousin to the title of the first chapter of *Phenomenology and Logic*: so it invites you parallel the first four chapters of this book with chapters 2-5 of *Phenomenology and Logic*. But how do they match? The question is easier to answer than the previous puzzle about the correspondence between those final eight chapters in this book and *Method*. Both chapter 1 here and chapter 2 of *Phenomenology and Logic* are on the development and limits of logic. But what of the next pair of chapters?

The issue in chapter 3 of *Phenomenology and Logic* is truth. Chapter two of the present book brings us back to that powerful early essay of Lonergan, “The Form of Inference”. Its topic is truth. Chapter three here moves us forward in Lonergan’s work to another early and difficult essay, “A Note on Geometrical Possibilities,”<sup>42</sup> and it is less easy to see how that chapter parallels the fourth chapter in *Phenomenology and Logic* on “The Foundations of Logic”. The paralleling requires a struggle through our chapter three, though some familiarity with problems regarding Euclidean axioms can make the connection more immediately plausible. But a struggle with chapter three can bring new depth to that plausibility. It points, indeed, to hidden depths in the

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<sup>41</sup>See note 13 of chapter one, below.

<sup>42</sup>*Collection*, University of Toronto Press, 1988, 92-107. To be referred to in this book as **Geometrical Possibility**.

book *Insight* that we reach for in the following two chapters. The paralleling of the fourth chapter here, “Logic, Scholasticism and *Insight*” with “Mathematical Logic and Scholasticism” is evident from the title but in fact there is a surprising shift to that new depth of meaning in the creative mixing of topics and texts. And to that surprise is added the re-placing of the topic of the first lecture Lonergan gave in 1957 on Logic, titled “The General Character of Mathematical Logic”. The issue here is the new hodic context both for *Insight* and Mathematical Logic, and that issue is associated with a novel meaning to both *general* and *character* as they occur in the title of my fifth chapter. That fresh meaning is somewhat elusive, relating both to the meaning of *general* history as it is posed problematically in *Topics in Education*, and to the meaning of *character* as it is associated with a future ontology of meaning. Chapter five seeks to open up that freshness, in continuity with a previous effort to identify **The System**<sup>43</sup> in theology as an omnidisciplinary cyclic collaboration of characters attuned, with a thorough symbolic underpinning,<sup>44</sup> to a common genetic systematics of meaning.

That last sentence, with its notes, is surely a discomfoting complex statement for some readers and raises the question of accessibility. What readership am I envisaging? What previous competence and reading do I presuppose? Obviously, my first intended population of readers are those somewhat familiar with, and sympathetic to, the challenge of Lonergan. I expect a wider audience to be a later achievement, predominantly mediated by that initial audience. But what of the initial audience? I wish to reach, and must presume that I am writing to and for, a group with very diverse backgrounds. But I am aiming at the genesis of the characters named by two texts of Lonergan that I used as frontispiece of the book, one of which I quote fully here, and indeed

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<sup>43</sup>The problem of The System that might be considered to be systematic theology was faced in chapter 6 of *Molecules, Minding, Meaning*. The answer reached there is complex, as this sentence intimates. Perhaps the easiest way to get an initial grip on that complexity is to view the metagram W6 given in chapter 13 below.

<sup>44</sup>There is nothing sacred about these symbols or metagrams. They anticipate a future of symbolic control - a massively transposed fundamental logic quite beyond present work in logic - of explanatory methodology. The seven are distributed strategically throughout this book: Wo and W4k in chapter 2; W1 and W2 in chapter 4; W3, W5 and W6 in chapter 7; W4d in chapter 8.

occasionally elsewhere in the book. That character, what I might call a “come-about” character, carrier of functional meaning, is to be a goal, a self-goal, of all serious Lonergan students, for some a goal of effort, for others a goal of admiration and support.

You might like the image conjured up by my saying that the serious Lonergan students are to be the players on the Wimbledon of Being. Let us pause over Lonergan’s naming of that player, and you may be consoled by my noting that I had been reading *Insight* for forty years before that text found its way into my molecular finality.

“So it comes about that the extroverted subject visualizing extension and experiencing duration give place to the subject orientated to the objective of the unrestricted desire to know and affirming beings differentiated by certain conjugate potencies, forms, and acts grounding certain laws and frequencies.”<sup>45</sup>

There you have the strange goal of this book. But the book is realistic. It may point towards a distant community, but it wishes to reach Tom, Dick and Mary as they are, and they are all the easier to reach if they share a sense of humour about where we stand at present.<sup>46</sup> Think of, fantasize around, *Method in Theology* as a book written about collaboration in 21<sup>st</sup> century war made available to a culture of lone rangers. So, I would wish the distant goal to be in mind, if only as a seed of fantasy, and my invitation to you is to venture, even with some relaxed delight, into small but key steps towards that later world of global care. So, for example, we begin our journey in chapter 1 with that odd little business about uncountability which in fact can tell us both about that dispersedness that is 13.7 billion years old and about the strange infinities of eternal surprise. In chapter two we turn back to the young Lonergan, perhaps thinking that the form of inference is old familiar stuff only to find that we can reach a new enthymemic joy in the form behind, within, our spontaneous nods. The third chapter move us forward, but only by going backwards into that apparently silly world where this X is not that X, elsewhere then and now, yet that silliness can tell us something of what our where is and our when, freshening our moment in

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<sup>45</sup>*Insight*, 514[537].

<sup>46</sup>The context is *Insight* reflections on humour in chapter 18, section 3.3.

the rose garden, our sacrament of the present now, our sight of little flower or dewdrop.<sup>47</sup>

And so on. Those first five chapters, especially, are a patchwork of little steps towards a much later cultural ethos of towering human identification, a global towering of a creative minority sharing a plane, a plain, of a new uncommon common sense, a micro -autonomy and -economy of pilgrim loneliness and leisure. That patchwork may remind some of the first five chapters of *Insight*, quite lacking in little steps. One of the leading Lonergan scholars of those first generations once asked me, Why did Lonergan do this to us? I certainly cannot attempt a lengthy answer here: it will be answered best by history, and by the amusement of grade twelve students in later times. But now I have a way of consolation for those staggering out of present grade twelve, or even those some who are staggering on in Lonergan studies. The consolation is that, if you find the climb through the first five chapters too demanding, at least for the present, then skip them and begin with chapter 8.

I am quite serious about this as concrete possibility and there is a variety aspects of my seriousness. First, there is the minimalism that I have been associating, in these past few years, with the beginnings of functional specialized work. Secondly, that minimalism relates to that old question of Lonergan to me in the mid-1960s, “What am I to do? I can’t put all of *Insight* into the first chapter of *Method*?” This is yet another of my answers, one of course not given then, since I did not have it. Thirdly, my minimalism and my present answer fits in with his tired achievement and the battered strategy of his life. His tired achievement in *Method* has been considered elsewhere, especially in the *Cantowers*: the important point is that he did not rise to a seriously focused consideration of functionality in his presentation of the functional specialties, and only in recent years have I reached some sufficient communicable pointers in that regard. That “Ovalteam” perspective dominates my presentation here, especially in the loose venturing through the specialties of the eight last chapters of the book. But the functional focus fits in with the minimalism.

Both the focus and the minimalism mesh nicely with there being two options in reading this book: if you like, two backgrounds to the foreground that is the treatment of the individual

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<sup>47</sup>Chapter 3 of *Lack in the Beingstalk* provides a context here.

specialties.<sup>48</sup> There are the first five chapters that give an alternative entry to the *Foreground of Method*, echoing both an entry through *Insight's* first five chapters and a way in through those first five chapters of *Phenomenology and Logic*. But there is the entry through the apparently simple door of chapter 8 here which we are musing over now.

I suppose that I could claim that chapter 8 is not just apparently simple: it is honestly simple, simple in its demand in a way that echoes that first paragraph of *Insight*. I wish readers “to direct their efforts to apparently trifling problems.”<sup>49</sup> What are those problems? They are problems that occur most especially when dining out, when we are faced with a menu. Where that leads had best be left to the chapter itself. But I would add three comments. First, the title of that chapter may bring dreaded recollections to some of the twists and turns of modal logic. We are not going there. I use *modal* in a loose meaning that I first introduced in Appendix A of *Phenomenology and Logic*. Secondly, I see this approach to self-understanding as a way in that could be used more in elementary introductions. Thirdly, my effort in that chapter is towards a genuinely elementary focus on the orientation “what am I to do?”<sup>50</sup> I might amuse you in that regard by recalling my illusion in 1958 when I had battled my way, for the first of many times, through *Insight's* first five chapters. I relaxed, ready for a leisured dealing with common sense.

I faced into a gradual accumulating disillusionment. Was Lonergan grinning when he typed the final sentence of chapter 7? “May we note before we conclude that, while common sense relates things to us, our account of common sense relates it to its neural basis and relates aggregates and successions of instances of common sense to one another”. He was writing in his come-about character, nudging us out of our daily descriptive doings. Perhaps I am doing somewhat the same in my chapter 8, but I assure you that my account of common sense is mainly a leisured, perhaps even pleasant, entry into “The Notion of Freedom” that we are - I now place chapter 18 of *Insight* in the context of my illusions of 1958 - as we brood over a menu or two.

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<sup>48</sup>I am recalling the two parts of *Method in Theology*.

<sup>49</sup>*Insight*, chapter one, paragraph 1.

<sup>50</sup>One can associate the quest with the first question of Jesus in John's Gospel: “What do you want? (*John* 1: 38).



It is time to add a further twist to my introductory comments, a twist that relates to what you may already have noticed: the unbalanced lengths of the various chapters. Chapters 1 and 14, indeed, are each approximately the same length as all the other chapters together. This relates to the shift in strategy mentioned in the Preface, and it may help to view the shift now as something of a parallel to my strategy of editing *Phenomenology and Logic* into three parts: the first part on logic, the third part on existentialism, the second part being the notes for the two other parts. The parallel is loose. The first part here is indeed on logic, a chapter primarily concerned with Goedel's theorem. The third part is indeed existential: it is directed to the existential subjects that are bent towards the existential challenge of Lonergan's writings. What of the second part? Certainly that part is a set of notes and pointers, but it is an integral set of notes reaching into, and meshing, the challenges that, in *Phenomenology and Logic*, were conveniently kept separate.

It seems foolish to enter here into details of the curious structure of that second part of the book. Penrose's searchings obviously dominate Part One, but Doran's efforts are a central topic in Part Two, a topic too complex to enter into here. That complexity relates to a curious turn in my creation of this Part Two, worth a final paragraph comment.

A key difficulty in the sketchings of Part Two was the handling of chapters 4, 5, 7 and 13, on scholasticism, logic, research, system. There is, for me, the problem of replacing the foundational characters of cultures and of global control, including the characters of research and the systematizing characters. It is an old problem of the great tradition that spans, but goes beyond that westernness, Plato's ineffective searchings and Lonergan's untried success.<sup>51</sup> Should I repeat

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<sup>51</sup>Should I risk a fantasy pointer at this early stage? Brood over Plato's efforts to figure out structures - even to numbers - of leadership in his various works, and put that figuring in the context of his battered efforts. Now think of Lonergan facing the same problem but now not in a simple city like Athens or in a small island state, but in the vast complexity of global directing. You can - what a tricky word *can!* - share with him the problem of cosmopolis, and climb with him to his beginnings of solution in the division of labour discovered by him in February of 1965 but never fleshed out. Fantasize, then, with me: but slowly slowly - can I help you forward, so that it does not take you the forty years that I have spent on the flight of fancy, since Lonergan sketched for me in 1966 with his fingers the structure of global collaboration? Fantasize a global community of suitably interlocked tower people, with a foundational subgroup that has clout in such global institutions as the U.N. and the World Bank? This is a far cry from the admirable but relatively ineffective goings-on of Bob Geldof and Bono at the time of the G8 conference in

myself on various narrownesses in scholasticism, logic, research, systematizers? Eventually the theme of incompleteness took over, and led me to simply yet subtly recall, re-place, redistribute, my struggle in *Cantower XXIII* with the problem of description: it is a problem of axial times that reaches from zones of elementary research to the heights of contemplative reachings. Against it stands the normative demand for the cultural come-about, the stand of Lonergan on which this book focuses. It is a problem to be faced, especially by internal dialectic honesty, in these next generations: so chapter 13 ends with the beginning of section 5 of *Cantower XXXIII*, whose curious title is “What What What is Description?” We are natively descriptive spirits: the heart of our human struggle for enlightenment needs to turn about, (about)<sup>3</sup>, that fragmented fathering fathering murdering business.<sup>52</sup> It seems as well to end on that obscure note of incompleteness.

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Scotland in early July of 2005. Full effective fantasy requires an effort to be-there, to be (about)<sup>3</sup> the farther business (see the next note here). Ian Rankin’s book, *The Naming of the Dead*, Orion Publishing London, 2006, dedicated “To everyone who was in Edinburgh on 2 July 2005” can lift one forward there, as can my own reflections on “Founders of Manhattan”, in section 3 of *Cantower XIV*. This present book invites you towards a flight of fancy that reaches way beyond present imagination. But you can begin by straining to do “walk-(about)<sup>3</sup>” in your own town. For one of my own efforts at this in the Dublin of Geldof and Bono and Joyce and myself see *Quodlibet 8*: “The Dialectic of my Town, *Ma Vlast*”. Thus do you enter the problem of cosmopolis. Joyce, going beyond his walk with Dante’s *Vita Nuova* in *The Portrait*, “moves on to his own *Divine Comedy*, which was also to have been in three parts: *Ulysses*, as the *Inferno*; *Finnegans Wake* as the *Purgatorio*; and the book Joyce did not live to write, as the *Paradiso*. Why is *Ulysses* the *Inferno*? What is hell? Hell is the state of a soul that is absolutely committed to its earthly experiences, fixed (as it were) in their time-space aspects, without recognizing through these experiences the radiance of the divine. “(Joseph Campbell, *Mythic Worlds, Modern Words. On the Art of James Joyce*, edited by Edmund L. Epstein, Harper Collins, 1993, 19). My interest in this book is not apophatic but kataphatic: it is in inviting you to fly towards the radiance of that part of cosmopolis that is functional specialization. Of the fourth unwritten book, “Joyce is reported to have said that it was going to be lucid, simple, and clear” (*Ibid.*, 21). My final series, *Eldorede*, - I steal the *Eldorado* nudge of Dante and Joyce - seeks to be an Elderspeek that is lucid, simple and clear.

<sup>52</sup>A context here - and indeed right through - is chapter 2 of *ChrISt in History*, which deals with Communications in a full sense that includes specialized communications. The peculiar (about) “cubed” is discussed in section 2 of that chapter. Briefly, the “cubed” refers to a third order of consciousness that is the zone of methodological consciousness reaching thematically through geohistory’s genesis of methods in a way that parallels zoology’s reach in a full study of animals: think of the horse as fully understood phylogenetically. This notion was

**PART ONE**

**LOGICAL INCOMPLETENESS**

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introduced by Lonergan in an unpublished "*Method* chapter 1" of 1965, available in the archives in Batch V.7. It is far from easy to come to grips with, yet it is to be the normative foundational consciousness of the future Standard Model. And the focal parallel with zoology is not eohippus but the ongoing genesis of methods, of methodologists, of Cantowers of the divine radiance.