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ABBREVIATIONS

Collected Works of Bernard Lonergan (Toronto: U of Toronto Press)

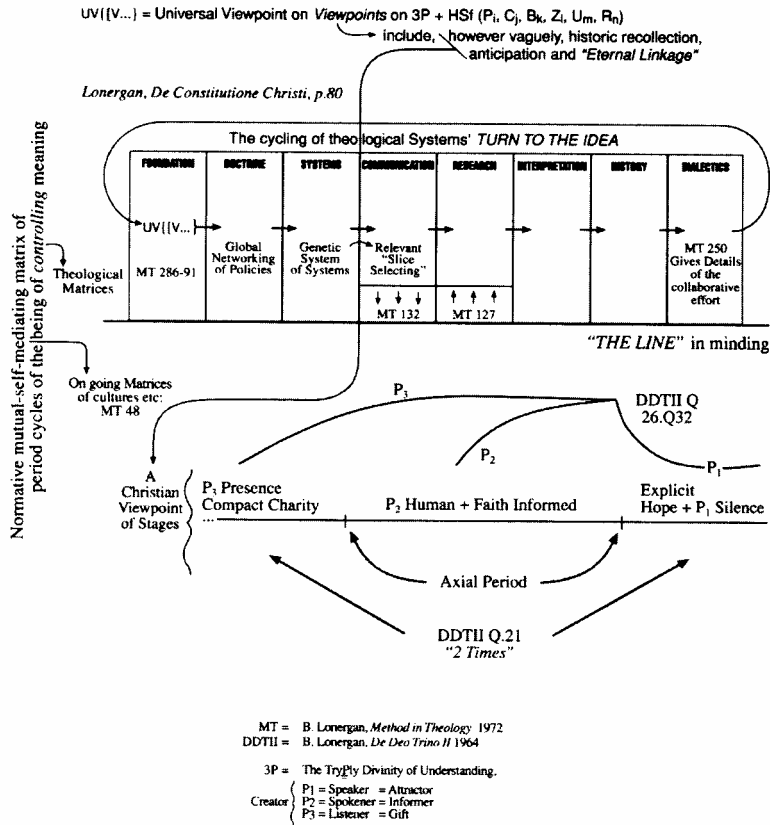
General Editors: Frederick E. Crowe and Robert M. Doran

- CWL 1* *Grace and Freedom: Operative Grace in the Thought of St Thomas Aquinas*. Ed. Crowe and Doran, 2000.
- CWL 2* *Verbum: Word and Idea in Aquinas*. Ed. Crowe and Doran, 1997.
- CWL 3* *Insight: A Study of Human Understanding*. Ed. Crowe and Doran, 1992.
- CWL 4* *Collection*. Ed. Crowe and Doran, 1988.
- CWL 5* *Understanding and Being*. Ed. Elizabeth A. Morelli and Mark D. Morelli, augmented by Crowe, Morelli, Morelli, Doran, and Thomas V. Daly, 1990.
- CWL 6* *Philosophical and Theological Papers 1958-1964*. Ed. Robert C. Croken, Crowe, and Doran, 1996.
- CWL 7* *The Ontological and Psychological Constitution of Christ*. Ed. Michael G. Shields, Crowe, and Doran, 2002.
- CWL 10* *Topics in Education*. Ed. Doran and Crowe, revising and augmenting the text prepared by James Quinn and John Quinn, 1993.
- CWL 15* *Macroeconomic Dynamics: An Essay in Circulation Analysis*. Ed. Frederick G. Lawrence, Patrick H. Byrne, and Charles Hefling, Jr., 1999.
- CWL 18* *Phenomenology and Logic: The Boston College Lectures on Mathematical Logic and Existentialism*. Ed. Philip J. McShane, 2001.
- CWL 21* *For a New Political Economy*. Ed. Philip J. McShane, 1998.

Other Works of Bernard Lonergan

- Method* *Method in Theology*. London: Darton, Longman, and Todd, 1972. Latest reprint: Toronto: U of Toronto P, 1990.
- 2 Coll* *A Second Collection*. Ed. William F.J. Ryan and Bernard J. Tyrell. London: Darton, Longman and Todd, 1974. Latest reprint: Toronto: U of Toronto P, 1996.
- 3 Coll* *A Third Collection*. Ed. Frederick E. Crowe. Mahwah: Paulist Press, 1985.
- MJLS* *Method: The Journal of Lonergan Studies*
- JMDA* *Journal of Macrodynamic Analysis*

A FESTSCHRIFT FOR PHILIP
MC SHANE, ON THE
OCCASION OF HIS SEVENTY-
FIRST BIRTHDAY



The "W3" diagram as it appears in Philip McShane, *A Brief History of Tongue: From Big Bang to Coloured Wholes* (Halifax: Axial Press, 1998), 124.



Philip McShane (right)

INTRODUCTION

MICHAEL SHUTE

Our third issue of *Journal of Macrodynamical Analysis* is a *Festschrift* in honour of Dr. Philip McShane. The decision bubbled forth last year at the 2002 West Dublin Conference. Phil was already seventy, so we were a year late to plan for that landmark. We had already missed the occasion of his early retirement from Mount Saint Vincent University at age sixty and his official Canadian retirement (when the old age pension comes in) at sixty-five. And Phil continues to refuse to retire in any meaningful sense. He started the most ambitious project of his life – the Cantowers – on April Fool’s day of last year. He has completed twenty-three, which are available at www.philipmcsane.com/cantowers.html. When the job is done there will be one hundred and seventeen Cantowers. If we wait for him to slow down, there will not be a *Festschrift* at all. So we drew a line in the sand and decided to mark his seventy-first. It is odd, it is advanced, and it is prime: somehow, this is appropriate.

There is no real need to justify a *Festschrift*. Both contributors and readers understand that a *Festschrift* celebrates a life’s work and honours a thinker’s achievement. I am deeply grateful to all who were willing to devote the time required to contribute. I was impressed by the number of people who agreed to do so, and I am very happy with the diversity and quality of the contributions. I thank Ian Brodie for his steady and consistent excellence as an editor, and I thank Janna Rosales for graciously helping us out with the editing.

In organising the *Festschrift* we departed somewhat from the standard approach. I asked Phil to contribute an article on

functional specialization to which contributors would respond. I expected a variety of different responses, and that is what happened. Some responded directly to the article and others adapted work they were currently doing to the task. The variety of responses is really a tribute to the range of McShane's own work. I asked Phil to supply his own response to the *Festschrift* contributions. The result is in classic McShane style: suggestive, twisting, and biographical. He is critical – would you expect anything else? But he is also appreciative, encouraging, and sympathetic. And there is the touch of a poet in his prose, a feature of his writing I have always admired. It remains for me to add my own appreciation of McShane, which affords me the opportunity to reminisce, a rare indulgence for an editor.

I first met Phil over twenty years ago in Halifax. One day, out of the blue, I received a telephone call from a fellow theology student asking that I go see a Dr. McShane at his home at 2 p.m. the next Wednesday. I had written a paper on Lonergan and Jung which had been brought to his attention. To what court was I being summoned? I arrived at the door to be greeted by a cordial Irishman who ushered me into a sparsely furnished living room. We sat facing each other, a few feet apart, and began to talk. The conversation moved around a range of topics: poetry, theology, biology, philosophy, music, the problematic aspects of school life. We both expressed admiration for Flaubert. Phil eventually and gently pointed out the deficiencies of my paper. Then we moved on to the topic of speech and he said something that really struck me – “a word starts in the larynx.” I had started out in biology and had been finding my philosophy and theology classes strangely disembodied. The sentence was a revelation to me. I knew, then, that I was in the presence of a real teacher. I had met sparse few of these in my school life – a high school history teacher comes to mind. We talked for a couple of hours without break. I eventually called a halt to the conversation because I was simply overwhelmed. It was an experience I have had the joy of repeating many times since; I am sure there are many who could tell of similar conversations with Phil.

There are many good reasons for *Festschriften*, but I think

honouring a great teacher is the best reason of all. The articles in this issue will provide evidence of his written achievements in an impressive range of fields. It is substantial and unique. I would like to dwell for a bit on his contribution to the art of teaching.

McShane has often referred both in print and conversation to his experience of teaching mathematical physics in Dublin. It seems to have substantially shaped his ideas about pedagogy and to have given him a basis for criticism of teaching in other areas, especially, philosophy and theology. The expectations were higher in mathematical physics: students knew they did not know, and they knew they had to work hard. In turn, teachers had to know their stuff: they had to be inventive at providing good examples and helpful images. All traits McShane excelled in.

It is not without some irony that McShane's longest teaching assignment – twenty years – was in philosophy to undergraduates at Mount St. Vincent University in Halifax. I taught for a while at Mount St. Vincent and I can say that, while the students were certainly enjoyable to teach, they were not, with rare exception, driven by great academic ambition. Most aimed to survive the process so they could get on with life. One might think that teaching there was a waste of McShane's talent – somewhat like driving a Porsche or Ferrari in rush hour Boston traffic. I think, however, that it might have been a greater challenge to him as a teacher. It is one thing to teach the highly motivated; it is another to convince those who happen into your course in need of an elective that they should pay any real attention to what you are saying. What McShane was asking his students to do was to pay attention to themselves. He taught students that they were worthwhile. The best evidence of McShane's greatness as a teacher is really in what he accomplished with undergraduates for twenty years at the Mount.

Teaching is one of the performing arts, something Phil knows and does well. His classroom style is both discomfortably challenging and comfortably homely and relaxed. You can expect humour, including bad jokes, good stories, and great illustrations. And you have to think, which means you

will be seriously perplexed but you will also have insights. At one point he taught a course which was televised very early in the morning on a local TV channel. The Mount's televised courses are a well-regarded cure for insomnia among Nova Scotians. However, even in the two-dimensional cool medium of television, with just a blackboard and chalk for tools, Phil had his audience's attention. And it wasn't just the wild print shirts and sandals.

It was during these his twenty years at Mount St. Vincent that McShane worked out how to teach generalized empirical method. His theme was meaning: his examples were 'common.' What do you do on a Friday night when your date arrives, is three beers down, and you are dressed to the nines hoping for a good time? How do you plan a good meal? What do you do about the yearly summer trip to the cottage? He shifted his students' focus away from the page and towards themselves. He somehow managed to create a proper pace for learning, one that respected a student's struggle with meaning. He saved many students long trips up blind alleys. That is efficient teaching. His very oddness was an island of sanity in the 'emphatic normality' of academic life at the Mount. It is an oddness one normally finds in the creative.

Those who attended Phil's workshops at the Lonergan workshops in the 1980s and early 1990s, or his seminars in New York or Mexico City, experienced in a day or a week what his students at the Mount tasted two or three times a week for a semester. It is the same leisurely yet intense pace of his teaching that has guided the yearly West Dublin Conferences out of which this journal developed. His lectures at the conference have been teaching master classes. Attending these lectures for the past four years I have to appreciate that Phil is a brilliant improviser, like a great jazz musician who can sustain a simple theme in an interesting way for an hour. Phil does this for ten hours over five days. At age 71 he still teaches, and not just for the conference. Last year I called him and he asked that I call back later – he was helping a neighbour with his calculus. A few years previous I came to visit him in New Brunswick where his wife Sally had her first pastoral charge. No sooner had I arrived than Phil, with obvious glee,

was showing me a scheme he had worked out to demonstrate to the choir how to breath correctly. It was really a systematics of breath.

I take this opportunity to thank Phil for the bits of teaching wisdom he passed on to me when I first started teaching. He saved me much grief. Here are a couple.

On lecture notes: “If you can’t teach without notes then you can’t teach.” I think this is true. When I first started teaching I was roundly and frequently criticised for not reading lectures and for not providing good notes for students. Phil’s advice, however, bolstered my resolve to develop my own conversational style of teaching.

On being (over) prepared: “You have been preparing all your life for this assignment.” This was great advice and calmed me considerably. It is another way of saying, “Trust what you do know.”

On humour in lecturing: “If you tell a joke, then students will get at least one insight in your class.” A side effect of this is that I discovered that I like corny jokes. Also it encourages student participation. It seems everyone likes to share a joke.

There is much more of course. Phil insistence that the diagram is essential to good teaching. I plan my courses around a couple of good diagrams. Working them out is a great test of what you do know. And then there is his respect for the student. He embodies the notion that you teach people as they are, not as you wish they were.

Thinking of Brendan Behan’s play, I had thought of titling this introduction “The Quare Fellow.” The *Oxford English Dictionary* gives the meaning of ‘quare’ as, among other things, “strange, odd, eccentric.” Some who have met McShane might find this meaning apt. And there is something odd at work, certainly in terms of the normal academic expectations. I recall a late night conversation with Phil in which he said to me; “Either I am mad or right.” A tough call? After knowing Phil for over twenty years I am myself

confident that his ‘quare nature’ is a matter of character in the sense that Aristotle meant the term in his ethics. It is something that Phil himself has stressed both in lectures and in the Cantowers. We might all be so ‘quare’ if we had the courage to let it happen. In his book *Wealth of Self and Wealth of Nations*, McShane quotes Patrick Kavanagh: “He had the knack of making men seem small as they are / which is as big as God made them.” Kavanagh could have been writing that about Philip McShane.

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Comments on this article can be sent to
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IMPLEMENTATION: THE ONGOING CRISIS OF METHOD

PHILIP MCSHANE

I thought I saw the fallen flower
Returning to its branch
Only to find it was a butterfly¹

1. Context and Divisions

The editor has raised what for me is the central present problem of Lonergan studies. His invitation to me is that I provide an etching of the problem, a brief basis for discussion. Immediately I think of Fr. Fred Crowe's old question, What functional speciality are you working in?, and my reply has to be an honest "none." This seems to me to be an important but simple aspect of the present problem. If one takes Lonergan's methodological doctrine, as described in *Method in Theology*, seriously, then one has to attempt some contribution to its implementation. Initially, such contributions are bound to be shabby. So, for example, history according to the von Ranke norm, sentence by sentence, proposition by proposition, is not easily accomplished. In present practice, in all fields, historical writing tends to mesh with what will eventually be identified as interpretational efforts. It can reach further, into research on the one hand, into evaluative writing on the other. Indeed, even when the writer struggles to be Rankian, the history tends towards being general, undifferentiated both in the functional

¹ "Rakka eda ni / Kaeru to mireba / Kocho Kana." The *haiku* is quoted from L. Van der Post, *A Portrait of Japan* (New York: William Morrow and Co, 1968), 107.

sense and in the sense of audience-directedness.²

Already, here, I am slipping into a specialised issue, one indeed that could be a topic of an entire volume of contributions. But my slip, or this initial direction of interest, is relevant. My basis of discussion must begin with history, the history of views of *The Perfectibility of Man*.³ I would emphasise the generalist sketchiness of my remarks. I would hope that they would provoke corrections, criticisms, enlargements, practical suggestions, ongoing collaboration. My hope goes deeper: as will appear below, especially in section 10, my hope relates to an optimism that regards humanity's butterfly history as being at present in a grey but golden chrysalis stage. Further, section 15 will help identify this essay as being in a ninth genus of implementation, a descriptive communication outside the zone of specialised implementations.

So, it seems convenient to give my suggestions regarding the problem of implementation in succinct descriptive points. I do not propose to make the pointings logically expansive and sequential, like the magnificent 26 or 31 places in *Insight*. Such a treatment should be the result of our collaboration, not the fruit of an initial foray. First, therefore, I venture some comments on the history of philosophy or method that carry me to the topic as it sits in the middle of Lonergan's definition

² Lonergan raises problems of general and critical history both in *Method* and in the final chapter of *CWL 10*. Handling such problems, however, requires refined functional specialist differentiations of hermeneutics (see, e.g., *Method*, 153). One arrives then at considering written history as a topic of all specialities. At this early stage I wish to note a further deep problem that is quite beyond a short article, but intimated by the addition of the word *ethics* to the problems raised: general history of ethics, critical history of ethics. Immediately there rises the problem of distinctions, refinements, specialisations. More about this in notes 8 and 10.

³ I refer here to an old classic by John Passmore (London: Duckworth, 1970). Feminists should find his few comments on women sadly entertaining. My other old book from the seventies on perfectibility is Elaine Morgan, *The Descent of Woman* (New York: Bantam, 1973). It gave a refreshing shift of perspective. I am sliding here over the complex issue of the relation of Lonergan's work to feminism, but I would note that the post-axial emergence of the third stage of meaning (see section 10 below) may well pivot on integrative feminine intuition.

of metaphysics. In the following, third, section, I shall sweep through the book *Insight* as presenting and representing the problem of implementation. The fourth section homes in on the presentation and representation of *Method in Theology*. A fifth section turns to the general cultural dynamic that was not Lonergan's focus in that book. Section six is a brief and provocative comment on Lonergan's achievement. The seventh section touches on the popular topic of feelings and values. Section eight moves to identify what I consider the central tone of Lonergan's life. Intellectual conversion, a central focus of his life's work, is considered, mainly from the pedagogical perspective, in the next section, and section ten seeks to put our human struggle in a fuller historical perspective. Sections eleven and twelve make a few points regarding the Latin works and the Roman seminars. Sections thirteen and fourteen note evident problems of the eighth speciality and the special categories. Finally, section fifteen seeks to throw some light on the differentiations of implementations. My concluding remarks, in section sixteen, bring us back and forward to our initial context.

2 Implementation of Wisdom in History

Certainly one can say that implementation was a mood of undifferentiated pre-Socratic and global wisdom, even in cases where the implementation was a strategy of oriental detachment, whether solitary or communal. Perhaps I might take the works of Eric Voegelin as a shared context here. Then, for instance, volume three of *Order and History* can be seen as describing the failed reaching of Plato and Aristotle for a humane city. I leap past the magnificence of the Christian surge and the Patristic reachings for the city of God only to note that Aquinas displayed an astonishing and naïve detachment as he moved, in his forties, to the perspective of his *Summa Theologica*, a perspective that was reduced in subsequent centuries to the convenience of its second part as a confessors' backup.⁴ Unlike Plato, Aquinas was not focused on the local city, nor could I fault him on this. But I would note

⁴ My source here is work by Leonard Boyle O.P. on the fate of the *Summa* unavailable to me in my remote retirement home.

that an absence of focus on the local city in its possibilities and probabilities persists as a central weakness of the reach for a Christian theoretic.⁵ There is the gap between the enrichment of the scriptural writings and the enrichment of streetlife.

3 The Problem of *Insight*

So I turn to the astonishing naïve detachment of Lonergan's great work. It is a naïve doctrinal work, and in the intervening forty-five years it has generated a large body of post-systematic literature. The systematic meaning, of course, was private to the forty-year old Lonergan, clear about the Butterfield shift of perspective,⁶ rich in remote possibilities.⁷ There is, I think, work to be done towards understanding Lonergan as being primarily of the temperament of *oratio obliqua*.⁸ But his concern was nonetheless practical, as he would say himself, interested in making all things new in Christ, interested in sublating Marx.⁹ So, he adds our troublesome word to the definition of metaphysics, "... and

⁵ In *Pastkeynes Pastmodern Economics: A Fresh Pragmatism* (Halifax: Axial Press, 2002), I bring out a parallel lack in contemporary economic theories and texts. The two lacks merge to guarantee the irrelevance of Christian economic morality in global politics. In later notes I shall simply refer to this book as *Pastkeynes*.

⁶ Section 8 fills out this remark.

⁷ This golden hoard remains to be exploited, implemented. A key to its eventual implementation is the lifting, in later generations, of the work *Insight* into the spiral of functional specialization. See also note 13.

⁸ This is a large and important topic. For instance, in Lonergan's case, one can detect a poise towards retrieval in his life's work, even though his major achievements (see section 6) were forward-looking. His final years of teaching his forward-looking economics were very much focused on retrieval through Schumpeter's *History of Economic Analysis*. See Lonergan, *CWL 21*, xxviii-ix. In the case of his disciples, and of theology in general, precisions of futurology are sparse: a poise of such sophisticated direct speech needs slow incarnation. This relates also to the problem raised in note 2 above regarding differentiations of interest in ethics. There is a related neglected transcendental grounded in the modally distinct what-to-do question which might be proverbialized as "be adventurous," meshing with a category of fantasy.

⁹ See Michael Shute, *The Origin of Lonergan's Notion of a Dialectic of History* (Lanham, MD: UP of America, 1993); *The Making of a Catholic Marx: Lonergan's Early Writings on Economics* (Toronto: U of Toronto Press, 2004).

implementation...¹⁰ Now certainly the writing of *Insight* was cut short,¹¹ but it seems to me evident that the book “he had in him” at the time would have bogged down on that word. *Cosmopolis* was only a hope, and “the antecedent willingness of hope had to advance from a generic reinforcement of the pure desire to an adapted and specialized auxiliary...”¹² *Insight* was a splendid solitary foundational work, written as a pedagogical moving viewpoint from a viewpoint that lacked the key insight into modern academic culture. It is in need of multiple elevations to shift the probability-schedules of hope.¹³

4 The Problem in *Method in Theology*

I had the opportunity of talking with Lonergan, during those difficult years of the late sixties, about the problem of writing *Method*. I recall one morning conversation in his room in the Bayview Regis College when he summed up his concern, “I can’t put all of *Insight* into the first chapter of *Method*.”¹⁴ I recall, too, Fr. Crowe and I coming out of a

¹⁰ Carry forward the context of notes 2 and 8, and add the problem of the absence of an entry on *implementation* in the index of either *Insight*. Fr. Crowe and I have joked with each other over the years about the gaps in our respective indices of *Insight* and *Method*. Recently, with a grin, he remarked that there was a lot more about feeling in the new *Insight* index. The next index should include *Implementation*. My own randomly-collected references are to [*CWL* 3] pages 254, 259, 261, 263, 415, 516, 530, 545, 547, 707-08, 747. But the problem is deeper, and certainly relates to the moving viewpoint of *Insight*. The conclusion of section 10 also adds a context. One might, for instance, reach a refreshing and disturbing view of business ethics by replacing, in the final sentence of that section, the two words *popular philosophy* with the two words *business ethics*. Serious ethics, within the new differentiations of metaphysics, shall be an operation of the specialties dialectic and foundations.

¹¹ I am relying here on conversations with Fr. Crowe and on a letter to him from Lonergan in 1952.

¹² *Insight*, 747.

¹³ I discuss some of these elevations in “Elevating *Insight*: Spacetime as Paradigm Problem,” *MJLS* (Autumn, 2001). (See also note 7 above.) I did not at the time of its writing advert with precision to what I might call the “ethical elevation” alluded to in notes 2, 8, and 10 above.

¹⁴ It is worthwhile to note that he had already sketched a chapter one, a much more powerful introductory chapter than what emerged in *Method*. See Darlene O’Leary, *Lonergan’s Practical View of History* (Halifax: Axial Press, 2003). But I do not think he looked back at his old files.

lecture of that period, when Lonergan presented a version of the third chapter, on Meaning, conversing about a spontaneous disappointment: we were tuned to expect greater things. I carried that expectation into the task of indexing *Method*, November-December 1971, and I recall vividly my delight in finding that Lonergan had his own answer to the problem of putting *Insight* into *Method*. There was first the reference to the book in relation to self-discovery.¹⁵ But, more importantly, there were the pages on general categories, which echoed the contents of *Insight*.¹⁶ It was only in the year 2000 that I came to temper luminously my delight. That tempering emerged, oddly, in my struggle to arrive at an integral perspective on Lonergan's two volumes of economic writings.¹⁷ It seemed to me that, if Lonergan's perspective in that field was to have a better chance – in a full statistical sense – of success, a broader foundational perspective would be more convenient. Briefly, that broader perspective would replace the doctrinal challenge of those pages in *Method* with a stand on two categorial attitudes: (a) a vaguer view of the human dynamic as one of *sensibility*,¹⁸ a bent towards *making sense*: that phrase refers, indeed, to the concrete human capacity and need of page 48 of *Method*, but with a meaning that could be identified, foundationally, by the full range of present philosophical stands; (b) an empirically-founded view of Adam Smith's "division of labour"¹⁹ as a necessity in things of the mind, and

¹⁵ *Method*, 260.

¹⁶ *Ibid.*, 286-7. Note the absence of reference to chapter 19. I suspect that this was due to an attitude of some participants in the 1970 Florida Conference. In later years he indicated that he had not backed down on the drive through the book to the existence of God.

¹⁷ I refer to Volumes 15 and 21 of the *Collected Works*. The integral perspective is offered in the book referenced in note 5 above. The original suggested title (see *CWL 21*, 325) was *Lonergan's Economics: Structures and Implementations*.

¹⁸ The neologism, with the shift from an inner *e* to an inner *a*, has, of course, all sorts of resonances, but as it stands it is acceptable to empiricists, pragmatists, whatever; by idealists in their own way; even by those who consider the *a* as epiphenomenal.

¹⁹ "The division of labour, so far as it can be introduced, occasions, in every art, a proportionable increase in the productive power of labour." (Adam Smith, chapter one of *The Wealth of Nations*.)

the empirical consequence that Lonergan's eightfold division fits the bill neatly and adequately.

(b) is the topic of the next section. Before turning to that, however, I would add two other comments regarding the problem of *Method in Theology*. First, there is the problem that Fr. Crowe and I sensed regarding the "low level" presentation of the problem of meaning in Lonergan's sixties presentation of chapter three. At the end of that presentation I give voice to my expectations by the question, Does the order of topics in the chapter correspond to a climb through mounting complexities of meaning? Lonergan replied modestly that the chapter just pointed out some significant areas of meaning.²⁰ It was only after a quarter of a century reading *Method* that a further and magnificent subtlety of page 287 of the book dawned on me and answered my question. The key paragraph relating *Insight* to *Method* is now, for me, not the dense listing that carries through the first half of the page, but the paragraph to follow regarding the vast enrichment of the meaning of the first half of *Method* that can occur when it is mediated by *Insight* in its transposition from doctrine to system by later generations. I shall return to this point briefly in section 15, but I would claim that it is of major significance in the cultivation of dialogue with contemporary sciences and secularities.

My second concluding comment ties in with the previous one. It is well known that Lonergan was a tired warrior when he wrote *Method*. One can sense a hurry to the end after the chapter on foundations. But the whole book was a tired effort, not even up to the standard he was setting for himself when he wrote a sketch of chapter one, probably after his discovery of functional specialization.²¹ Crowe tells of Lonergan's admission, in correspondence from Rome, of the old energy fading; he tells too, of Lonergan speaking of the short chapter on research as inadequate: after all, as he said, he had spent a great deal of his life doing research.²² In particular, the final

²⁰ Later (at note 65) we shall consider fruitfully in what way he was doing for our times what Damascene did around 740 A.D. That he was capable of much more is obviously the issue here.

²¹ See above, note 14.

²² I am recalling various conversations with Fr. Crowe. See also p. 113

two chapters are minimalist. If one traces his view on system throughout his works,²³ one finds on that topic not a short chapter that might well suit Aristotle but the seeds of a very large book that sublates Hegel, throws off Descartes and Husserl, exploits the best of modern biology, and gives a subtle heuristic of a genetic systematics adequate to this millennium's effort.²⁴

5 Fragmentation's Potential

I first tackled the question of what I call fragmentation potential in the late sixties while working on musicology in Oxford: the result was the second of two papers written for the 1970 Florida Lonergan conference. It was on the need for functional specialization in musicology and it is useful here to think of this need positively, "presenting an idealized version of the past, something better than was the reality."²⁵ In this sense one sees the fragmentation that I find paradigmatically symbolised by the transition from Aeschylus to Euripides as a positive need of adolescent humanity. The long period of history in which we now live little and move too much and have our schizothymic being is the axial way towards the second time of the temporal subject: but more on this in section 10.

What is important, in particular, is the need for the

of Crowe, *Lonergan* (London: Chapman, 1992), where he quotes a 1980 letter from Lonergan: "I fear that my book did not emphasize enough the importance of research."

²³ A task that Robert Doran is pursuing. See, for examples, "Intelligentia Fidei in De Deo Trino Pars Systematic," *MJLS* 19 (2001), 35-83 and "Bernard Lonergan and the Functions of Systematic Theology," *Theological Studies* 59 (1998), 569-607, and other articles in both journals.

²⁴ There is an account of genetic systematics in chapter 2 of *Pastkeynes*. One has to think of a genetic sequence of systems, including "reversed erroneous systems," inclusive of contrafactual historical analysis. So, for example, both Aquinas and Bonaventure occur as integrator-operator "cross-sections." Another perspective is "Systematics: A Language of the Heart," chapter five of Philip McShane, *The Redress of Poise* (Axial Press Website, 2002). An earlier effort of mine is "Systematics, Communications, Actual Contexts," *Lonergan Workshop Volume 7*, edited by Fred Lawrence (Atlanta: Scholars Press, 1987).

²⁵ *Method*, 251.

intellectual division of labour as global, pointing to a global enterprise, a new *Wendung zur Idee*.²⁶ Most recently I have become sensitive to the need in physics, and in that most secure of ancient studies, geometry.²⁷ Lonergan's attention during the Roman period was on theology. While he was not unaware of the broader need, he touched on it only in a limited fashion.²⁸ An important task of Lonergan studies is to indicate clearly and pragmatically the full global need and scope of functional specialization. The structuring of that task is a large topic, aspects of which are treated elsewhere.²⁹

6. Lonergan's Achievement

This brings me to my next point for discussion. I would suggest, then, that Lonergan's major achievements are two: (a) the thematisation of functional specialization, (b) the lifting of economics to the level of a respectable empirical science that is

²⁶ Lonergan, in *De Deo Trino I: Pars Dogmatica* (Rome: Gregorian Press, 1964), 10, n.10, translates this as *displacement towards system*. He had not yet envisaged the functional system but he was, in that text, struggling to build in the perspective of a genetic systematics that would be a full and just retrieval of history. See note 23 above.

²⁷ This work was done in connection with my editing of *CWL 18*, springing from an analysis of Husserl's essay "On the Origin of Geometry," which is given as an Appendix to his last work on *The Crisis of European Science*. It forms part of chapter three of *Pastkeynes*. There is a fuller consideration of Husserl on geometry and Science in chapters 3 and 4 of my *Lack in the Beingstalk: A Giants Causeway*. (This is the sequel to *Phenomenology and Logic*, promised there under the title *Lonergan: Phenomenology, Logic, Grammatology*.) It adds a balance to Lonergan's reflections on the late Husserl by considering Husserl's neglected 1882 doctorate thesis (under the brilliant Weirstrass) on the Calculus of Variation.

²⁸ On physics, see *Method*, 126; on human studies, *ibid*, 364-5. See also William Mathews, "A Biographic Perspective on Conversion and the Functional Specialties in Lonergan," *MJLS* 16 (1998), 147, on Lonergan's interest in Wellek and Warren's *Theory of Literature* in late 1965.

²⁹ My broadest treatment of the topic is the third chapter of *Pastkeynes*. For law there is Bruce Anderson, *Discovery in Legal Decision-Making* (Dordrecht: Kluwer, 1996). For musicology see chapter two of McShane, *The Shaping of the Foundations* (Washington: UP of America, 1976). For literature see McShane, *Lonergan's Challenge to the University and the Economy*, chapter 5. The work cited in note 13 above deals with the need for functional specialization in physics.

adequately normative. The other generally recognised achievement is his rediscovery of the interiorly-directed perspective of Aristotle and Aquinas. I certainly expect this suggestion to be debated. But I would make two points towards my suggestion. In the first place, like any scientist, I would contend that a re-discovery that is not, so to speak, an independent discovery – think perhaps of Newton, Leibnitz and the calculus – cannot be considered as major cultural achievement. In the second place, interiority is an axial emergent, fermenting through other cultures and disciplines. Even within the Christian and Thomist traditions, there is no clear discontinuity between Lonergan and previous gropings. One can line up recent characters in the drama either from Thomism, like Marechal, or from the broader Christian culture, like Kierkegaard and Newman.³⁰ Indeed, such a scholar as Thomas Gilby O.P. was not off the mark when he wrote about St. Thomas' presentation of the decision process in the *Ia IIae*,

We take as model of a complete human act one not fraught with moral issues; it could be going to the dentist or planting a hedge as a wind break, but let us simplify: A night at the opera. From a newspaper I see there is to be a performance of *Cosi Fan Tutte* tonight. (1) How good to attend; (2) I've a good mind to; (3) it's perfectly feasible; (4) I will. So far the end, now for the means. (5) I can go up to town by car or by train; (6) I pursue the advantage of each; (7) I decide on a train; and (8) choose the 16.26 to Liverpool Street. So far nothing has been set in motion and I am still in my chair. (9) I must do something about it; and so (10) I bestir myself to (11) the performance of the appropriate actions, which culminate when (12) I settle down at the first bars of the overture to enjoy myself.³¹

³⁰ I recall here the various historical writings of G.A. McCool. Michael Vertin contributes an added perspective in his doctorate thesis on Marechal, available in the Toronto Lonergan Centre.

³¹ St Thomas Aquinas, *Summa Theologiae, Vol. 17 (Ia IIae 6-17)*, translated and edited by Thomas Gilby O.P., in Appendix 1, p. 214. A context for reflection on this text is F.E. Crowe, "Complacency and

7. The Decision Problem

The quotation from Gilby brings me to my next point. Certainly, the Decision Problem can be taken to refer in quite different senses to the two sets of lectures published in volume 18 of the *Collected Works*. But here my interest is in the problem symbolised by page 233 of that volume, where I diagram the move to a judgment of value. The diagram makes explicit (a) the what-to-do question, (b) the meshing of that question with feelings. The references given are to *Insight*. You notice immediately that I am dissociating myself from a tradition of Lonerganism that (a) neglects the planning-question, (b) finds a definite newness regarding value in *Method in Theology*. I cannot help bringing to mind the silly fellow sitting below me in the audience at Florida – I omitted his name in the edited version! – who asked Lonergan whether he discovered feelings when he read Scheler.³² Lonergan's pause was a delight and the beginning of his answer was "I've got feelings too!"

Not only had Lonergan feelings³³ but he had lived in the worlds of both St. Ignatius and St. Thomas. Ignatian discernment of feelings was a life-style; Aquinas' hylemorphism of the decision process was a step on the road to his doctorate.³⁴

Concern in the Writings of St. Thomas," *Theological Studies*, 1959. It is quite a tricky task of self-attention to correct the slips in Gilby's commentary.

³² "An Interview with Fr. Bernard Lonergan" in fact omits all the questioners' names and tidies up abrupt exchanges such as the one mentioned. It was originally published in *The Clergy Review* 56 (1971) and reprinted in *2 Coll*, 209-30.

³³ Two anecdotes seem worth relating, referring to events in Lonergan's life separated by about seventy years. On a visit to Halifax in the mid-seventies, I played Beethoven's Kreutzer Sonata for him. His eyes lit up afterwards as he related how, as a little boy, he had paused, enthralled, in the open air, listening to his mother playing a piano version of it. My second story is of an exchange we had by phone. I had just returned from Boston and his economic lecture that I attended each Thursday in the Spring of 1978. This time I had left him a copy of Beethoven's last quartets and, as a matter of habit, I checked back with him. "What did you think of them?" I asked (foolishly). "I do not think: I feel!" was his reply.

³⁴ In spite of lack of discussion of feelings and sensibility in the text, and a corresponding absence in the ordinary index of *Grace and Freedom*,

8. Theoretic Conversion

And, I would claim, Lonergan so lived in the world of theory that he did not bother to specify the particular conversion that titles this section. Indeed, had he not written *Insight* from a strategic and moving viewpoint, might he not have described his own life and the full life of theory – recall the Greek Patristic sense of *theoria*³⁵ – as “the intellectual pattern of loving” rather than “the intellectual pattern of living”? One of the tricks of *Insight* is the dodging of the mention of the concrete dynamics of the absolutely supernatural, the ground, in Lonergan’s life, of the “call for relentless perseverance.”³⁶ Here I think of a study of the word *home* in Lonergan’s writings. So, for instance, systematic theology, however, elitist, “is really quite a homely affair.”³⁷ From conversations with Lonergan about mathematics and mathematical logic it seems to me that he was at home in the world of theory, as he was “at home in transcendental method”³⁸ in its difficult sense, a sense which includes the world of theory. He had chosen, in Christ, the finer way of Aristotle. The central message of *Insight* is that the theoretic way is a grim necessity of Christian renewal: grim, only because of present cultural and Christian bias. For the Lonergan of *Insight* the conjugates of $C_{55}H_{72}MgN_4O_5$ (Chlorophyll a) are talents of Wordsworth’s daffodils, and the aerodynamics of Hopkin’s *Windhover*, are “the achieve of, the mastery of the thing.” Certainly Lonergan admired “commonsense contributions to our self-knowledge”³⁹ such as those of Augustine, Descartes, Pascal, Newman, as he admired the contribution of aesthetic consciousness.⁴⁰ But I suspect that

there is no doubt about his familiarity with the relevant sections in the *Summa* and other works. See the massive set of references in the Index of Loci, 481ff of *CWL 1*.

³⁵ Recall also Lonergan’s brief discussion of it in “Mission and Spirit,” *3 Coll*, 27. In that same place Lonergan writes of Aristotle’s challenge “to live out what was finest in us.”

³⁶ *CWL 3*, 210.

³⁷ *Method*, 350; see also 351.

³⁸ *Ibid*, 14.

³⁹ *Ibid*, 261.

⁴⁰ The admiration was deeply personal, and one can hear it resonate in

he would find an unaesthetic commonsense Lonerganism breathless and unhomely.⁴¹

9. Intellectual conversion

It would seem odd to ask whether Lonergan was at home in intellectual conversion. In my first conversation with him, Easter 1961 in Dublin, I asked him about his experience, referring I think to that bracketed remark about startling strangeness in *Insight*. In his reply he talked of having to go and ask someone about it. I have often wondered since whether the someone had any clue to what he was at. Again, I recall in the late seventies talking one evening with him of a morning lecture in which it was claimed that Jesus was intellectually converted. I cheekily put it this way. “Jesus did not spend the forty days on the mountain reading *Insight*.” His succinct reply: “Exactly!” He went on to speak marvellously about the central element in life being “saying Hello,” raising his hand illustratively, talking of Dante’s Beatrice. But, for Lonergan, the Jesus of Galilee and of Thesis 12 of *De Verbo Incarnato* was not intellectually converted.

In this context, then, I would make three points. First, a good Christian, even one who has read *Insight*, may not be intellectually converted. Secondly, a good methodologist, even if intellectually converted, even after a lengthy time in that *position*, may not be at home in it: “no one reaches it easily; no one remains in it permanently; and when some other pattern is dominant, then the self of our self-affirmation seems quite different from one’s actual self, the universe of being seems as unreal as Plato’s noetic heaven, and objectivity spontaneously becomes a matter of meeting persons and dealing with things that are ‘really out there.’”⁴² In the two conversations that I mentioned, I, and I suspect Lonergan, were dealing with each other “really out there.” The transition to homeliness is a further differentiation and refinement of consciousness with

his delivery of the lecture on art, published as chapter nine of *CWL 10*.

⁴¹ *CWL 3*, 755, has the phrase “a little breathless and a little late.” Pages 442 and 566 give his blunt dismissal of commonsense pretentiousness.

⁴² *CWL 3*, 411.

which I associate the word *Poosition*. One can, in fact, struggle towards positional conversation with some success, especially with a conversant that has a Plotinian edge on intellectual conversion. That struggle was, I think, not part of Jesus' life, nor was it part of Lonergan's vastly lonesome life. In Jesus' case, the struggle, certainly grasped in his beatific vision, full in its intellectual appreciation of actual finite being, could not occur since the prior conversion was not present in his human consciousness. In Lonergan, his lifestyle and companionships did not press him in this direction.

From these two points comes my third. Intellectual conversion is rare, even among Lonergan students. This is a conclusion of mine based on conversations with people with quite some expertise in Lonergan studies. It would seem better to recognise this more publicly: because one strange man fought his genius way to a luminous thematic possession of Aquinas' position on "Is? Is! Is," it does not follow that that possession can become relatively communal in the half-century to follow. But it seems to me that the pedagogy of the position, curiously, should involve the struggle I have identified descriptively. Jack and Jill⁴³ should look each other in the eyes, look at both their hands, edge and hedge their separate solitudes towards a poise that would cultivate the possession of the position.⁴⁴

10. Lonergan's Stages of Meaning

The "Poosition" may well be a possession of, a possessing of, a creative minority in the third stage of meaning. But here I am pushing for a refinement of Lonergan's discussion both of the stages of meaning and of the two times of the temporal subject.⁴⁵ I have treated this topic in various places, so here I shall be brief, offering the point for discussion.⁴⁶

⁴³ The context is given in Lonergan, "Cognitional Structure," *CWL 4*, 215.

⁴⁴ An extended invitation of this type, but from writer to reader, is given in chapter five of *A Brief History of Tongue*.

⁴⁵ The stages of meaning are discussed in *Method*, 83-99. For the two times of the subject see *De Deo Trino II: Pars Systematica* (Rome: Gregorian Press, 1964), 196-204.

⁴⁶ The first presentation was in the work cited at note 67, in "Middle

I think that Lonergan would sympathise with Toynbee's criticism of Jaspers' view of an axial time: Toynbee would see it as certainly including the time of Jesus. My own struggle with Toynbee, Voegelin, and Jaspers led me gradually, in the eighties, to envisage the axial period as a transition period between the two times of the temporal subject, considered phylogenetically.⁴⁷ The axial period would then separate the first and the third stage of meaning, and could be identified roughly as the second stage of meaning. Certainly, the *quest* of the third stage of meaning is an emergent of the second stage of meaning, which however primarily, lifted humanity's creative minority into science. But the shift to *method* in contrast to *content* is a slower emergent. *Method in Theology* and "The Ongoing Genesis of Methods" recognise this.⁴⁸ For me, the third stage of meaning is still remote from our stumbling and truncated adolescent humanity. One might associate that remoteness with what Lonergan calls third-order consciousness: "Second order consciousness is the presence of the subject to himself as introspecting; second-order intentionality has as subject a second-order object that in a first order is not an object but a datum of consciousness. Similarly, when as at present one introspects introspection, then there is a third order consciousness and a third-order intentionality."⁴⁹ It

Kingdom, Middle Man; *T'ien-hsia, i jen.*" The most recent is in chapter one of *A Brief History of Tongue*.

⁴⁷ The diagram on page 124 of *A Brief History of Tongue* links the three stages with a trinitarian theology of history that meshes with Lonergan's analysis of the the finite participations in divine personality (see *De Deo Trino II: Pars Systemtica*, Quaestio XXVI) and with a perspective Fr. Crowe developed (unpublished lecture notes).

⁴⁸ "The Ongoing Genesis of Methods." *3 Coll*, 146-65. Tracking the topic "ongoing genesis" in *Method* is a tricky task of attending not only to discussion of mind's discovery but to the manners in which Lonergan edges *passim* beyond contents to methods.

⁴⁹ I am quoting from a nine-page beginning of a chapter one for *Method* from 1965, reproduced in the work by O'Leary referred to in note 14. In a separate part of the archives (A 697 in the new indexing) I discovered what seems a continuation of these nine typed pages, beginning with an incomplete p. 8 and running to p. 23, where it ends in mid-sentence. A quotation from page 14 adds a context to our topic. "As the labor of introspection proceeds, one stumbles upon Hegel's insight that the full objectification of the human spirit is the history of the human race. It is in

is perhaps useful to suggest that in the post-axial period philosophy might be expected to reach various maturities. First, methodology will be to methods – which, as Felix Klein remarked of mathematical method in the nineteenth century, shift from decade to decade⁵⁰ – what zoology is to animals. Third-order consciousness is then revealed in its full biohistorical richness. Secondly, methodology will acquire a respectable unity of efficiency.⁵¹ Thirdly, philosophy or methodology will be definitely philosophy *of*, in accordance with Lonergan’s later definition of generalized empirical method.⁵² Finally there will be a clear recognition of the distinction between popular philosophy as a ninth genus of reflection on method, and the inner eightfold dynamics of *Die Wendung zur Idee*.⁵³

the sum of the products of common sense and common nonsense, of the sciences and the philosophies, of moralities and religions, of social orders and cultural achievements, that there is mediated, set before us the mirror in which we can behold, the originating principle of human aspiration and human attainment and failure.”

⁵⁰ A brief review of the past two centuries of searchings reveals a genetic and dialectic complexification of methods in areas as disparate as mathematics, psychology, and history.

⁵¹ “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.” *CWL 10*, 160. This should be linked with the problematic of ethics and implementation raised in notes 2, 8, and 10.

⁵² “Generalized empirical method operates on a combination of both the data of sense and the data of consciousness: it does not treat of objects without taking into account the corresponding operations of the subject; it does not treat of the subject’s operations without taking into account the corresponding objects.” “Religious Knowledge,” *3 Coll*, 141. I would note a homely educational version of this: “When teaching children geometry, one is teaching children children”: geometry or anything else; and the teacher is also teaching the teacher. The cultivation of such a classroom lift, difficult at first, would shift the probabilities of the ending of the axial period.

⁵³ I have no doubt about Lonergan’s convictions in this regard, but the circumstances of his teaching often left him, ironically, with a reception in the mode of *haute vulgarisation*. The irony is focused in Volume 6 of the *Collected Works*, where his comments on *haute vulgarisation* (*CWL 6*, 121, 155) rest in a series of talks which lent themselves precisely to that reception. *CWL 18* and *CWL 10* are worth considering in the context of the same problematic. See also notes 2, 8, and 10 above. I would see an

11. Translating the Latin Works

The translation in question is not only the translation into other languages but the translation to the public. The scholarly importance of the Latin works should be noted. One instance suffices regarding difficulties in chapter 17 of *Insight*: the nature and concrete reality of mystery, the meshing of the two sets of canons, the actual dialectic of methodological viewpoints. My instance is the meaning of *pure formulations*.⁵⁴ Certainly, for me, this meaning was impossibly elusive until I extended my search for it into such a work as *De Verbo Incarnato*. Lonergan's precising of conciliar struggles illustrates the effort of interpretation in question here. More broadly, one cannot lift the meaning of this chapter from doctrinal reading to systematic understanding without adverting to the empirical background in Lonergan's own theological work. The majority of the Latin works, of course, post-date *Insight*, but their seeds are in the studying and teaching of Lonergan in the forties.⁵⁵

12. The Roman Notes

I refer here especially to the seminars that Lonergan gave over this period, some of which are familiar, e.g., *De Intellectu et Methodo* and various versions of his struggle with systems relation to history. I would hope that the "far larger" work promised at the end of *Insight* would be attempted by someone in the next generation, and a large source of enrichment of the impoverished treatment of *Method in Theology* lies here. For instance, my notion of a genetic systematics – of which, for instance Aquinas' system would be a neglected integrator-operator slice – emerged only from my struggle with this

especial danger in presentations of specialised ethics that do not acknowledge an ongoing dependence on the undeveloped speciality Communications. Ethics is isomorphic with metaphysics and shares the same burden of generalized empirical method (see the previous note).

⁵⁴ *CWL* 3, 602.

⁵⁵ It is good to see (*MJLS* 19 (2001)) Michael Shields' translation work emerging. His translations of Lonergan's writings on Providence, Faith, Supernatural Being, "On Intellect and Method" and "On Good and Evil" (a supplement to *De Verbo Incarnato*) deserve to reach a wide and needy public.

hidden resource. The notes should be available in all Lonergan centres, and eventually edited for publication.

13. Communications

By *communications* I mean both the eighth functional speciality and the communications that I conceive as the ninth genus of implementation. The chapter on this topic is subtle but altogether too slight.⁵⁶ It was never presented in his Summer method courses: even after finishing *Method*, he left me with the unenviable task of saying something about it in the Dublin Institute of 1971. Early scholarly struggles with the topic tended to shrink the meaning⁵⁷: I tried to restore the balance in “Systematics, Communications, Actual Contexts.” A massive global genetic systematics is to be linked with interdisciplinary, transpositional, and media reachings⁵⁸ in order “to speak effectively to undifferentiated consciousness”⁵⁹ and to scientific and aesthetic consciousness, however reductive. Because of general bias’ effect within Lonerganism, the speciality of Communications requires massive dedication if it is to develop into the seriously remote global-local speciality that it should be. It brings to mind my favourite parable, The Unjust Steward, when I pursue the complexity and sophistication of secularity’s commitment to communication, the energy devoted to selling soap as compared to selling salvation. The children of this world seem, indeed, wiser.

14. Special Categories

Some few remarks. Lonergan’s sketchy treatment of these

⁵⁶ The first brief section, linked to the other brief section of the book, chapter three, section 6, is powerfully suggestive of the mature categorial character of post-axial times, mediating foundationally both the character of all hodiks (*Method*, 292) and eventually the character of culture, the topic of the second section. *Character* is full of deep resonances and also recalls the breadth of the beginning of the Aristotelian *Magna Moralia*.

⁵⁷ On this, see the concluding sections of Sinead Breathnach, *Communications in Lonergan*, a doctorate thesis in the Department of Higher Education, Trinity College, Dublin, 1986. A copy is available in the Toronto Lonergan Centre.

⁵⁸ *Method*, 132.

⁵⁹ *Ibid*, 99.

in *Method* is restricted to the Christian tradition. But it would seem methodologically wise to envisage a genus of such special categories, related to various groups that claim revelation, and even differentiated within Christian groups according to the character of their revelation claims. But I would also see secular groups making claims for special categories, whether they be groups of microbiologists or mysticisms of Africa and the Orient. The Global spiralling of what I term Hodic Method⁶⁰ calls for such a fuller tolerance. “The use of the general categories occurs in any of the functional specialities”⁶¹ but the special categories will also be operative, in an ongoing spiralling of mutual self-mediations and communal purifications.

15. Nine Genera of Implementation

We have, then, nine genera of implementation, with species and varieties that need to be made explicit in order to furnish a linguistic control of meanings. This effort should gradually generate a complex foundational literature. The implementation that interests me most immediately here is that which occurs at the level of H₄ and H₅, the level of intellectual loving that eventually should replace philosophy as a discipline. Here we have an implementation that regards primarily the characters of that level: think, for example, of a dozen characters following the challenge of page 250 of *Method*, writing, criticising, self-criticising, in the manner brilliantly described by Lonergan. The topic is altogether too large for development here.⁶² But perhaps one small foray into “the use of the general categories” would be useful in illustrating the move towards developing the isomorphic differentiations of consciousness. Let me take, then, the question of comparison, which in the new structure of method

⁶⁰ I have been using the term *hodic* for some time now: it has both Indo-European roots and ordinary suggestive usage, as in that Joycean song, *Finnegans Wake*, “. . . and to rise in the world he carried a hod.” It is easier to talk about than “functional specialist” method.

⁶¹ *Method*, 292.

⁶² See Frank Braio, “The ‘Far Larger Work’ of *Insight*,” *Lonergan Workshop Volume 16*, edited by Fred Lawrence (Atlanta: Scholars Press, 2000).

is a precise subtask of dialectics.⁶³ Consider a possible book or article or thesis that seeks to compare Yanah ibn Mansur ibn Sargun (67X- 749: better known as John of Damascus) and Lonergan. Lonergan studies, and indeed theses, abound in which some such comparison is attempted, and my comments here can be taken as a descriptive transposition of the “first principle of criticism” of the third canon of hermeneutics.⁶⁴ The old style comparison just won’t do, except in the eighth genus of commonsense communication.

But it is worthwhile being quite specific in the illustration. Take, then, the comparison of John Damascene, *De Fide Orthodoxa*, round about chapters 27 - 38,⁶⁵ with the beginning of chapter three of *Method in Theology*. That section of Damascene can well be read as a marvellous shot – even to locating affectivities in the cerebellum – at descriptively categorising the dynamics of human emotions. The first point, then, is that the comparison is strictly a dialectic operation. But surely comparative comments would be legitimate in the new specialist history? No. Sentence by sentence, expression of the new history would be under the control of meaning of a differentiated consciousness. This certainly is food for thinking. What, then, of interpretation? Again, comparative comments find no place there. The interpreter of this section of *De Fidei Orthodoxa* would obviously be using his or her own categories, not somehow applying or “comparing” Damascene and Lonergan. However, it should be noticed how belief-structures enter into that use. First, if the interpreter accepts the hodic challenge of Lonergan, then there will be a nominal

⁶³ Again, I refer to *Method*, p. 250: lines 6-7. The article in the previous note gives a context. Here, perhaps, is a place to start lifting Lonergan scholarship, availing of the first principle of the canon of successive approximations. It would “make conversion a topic and promote it” (253), the conversion here from a comfortable established mode of writing to a mode that would lift hermeneutics towards the perspective suggested by Lonergan.

⁶⁴ *CWL* 3, 610.

⁶⁵ I am referring here to a Latin text of a particular version, edited by Eligius M. Buytaert O.F.M. (New York: The Franciscan Institute, 1955), 119-144. The corresponding chapters in an English translation are Book 2, chapters 13- 23, pp. 239-253 of *Saint John of Damascus*, translated by Frederic H. Chase, Jr. (New York: Fathers of the Church Inc., 1958).

assent to the categories as described in the relevant section of *Method in Theology*. Indeed, in so far as my own effort is taken seriously, the interpreter will be thinking nominally the terms *capacity, need* of p. 48 of *Method* as aggreformically structured: my odd identification of the human as $f(p_i; c_j; b_k; z_l; u_m; r_n)$ would be a heuristic aid to humility and progress. What is “feeling angry” for John Damascene? The interpreter will recognise and identify an early description of a reality that in our day we seek to define in the fullness of its lower conjugates and acts.⁶⁶ But the interpreter is not stuck with description: a nominal hold on the universal viewpoint boosts the struggle to an explanatory level. One might think here even of a pure formulation: but now we are flying away from my few “points for discussion.” It is time to bring my ramblings to a close.

16. Concluding Remarks

I had envisaged a penultimate section dealing with practical suggestions regarding implementations in education and in scholarly practice, but perhaps a collegial effort is a richer route here. At all events, the concluding chapter of *Pastkeynes Pastmodern Economics: A Fresh Pragmatism* gives a sufficient generic indication for discussion.

I began with a *haiku* of butterfly-hope, previously used to begin a Preface to a Lonergan collaboration.⁶⁷ It seems suitable to end with the end of that same preface, which points hopefully to a new contemplative tradition that would take seriously in all its details the agony and the ecstasy of the Cosmic word.

Part of the glory of history is man’s envisagement of
its schedules of probabilities and possibilities. If the

⁶⁶ *CWL* 3, 489 is the key page here. Note that when one is studying the human organism, then one can replace “study of an organism begins...” with “self-study of an organism begins...” The topic deserves much elaboration, e.g., what are “phantasm,” “dream,” “naming,” “nodding assent” etc as conceived with full heuristic adequacy?

⁶⁷ *Searching for Cultural Foundations*, edited by P. McShane, (Washington: UP of America, 1986). The book involved five meetings of five collaborators, Crowe, Doran, Lawrence, Vertin, and McShane.

sapling of history is cut down from within, still it can have, within, a vision of the temporal noosphere that, paradoxically, redeems God. The envisagement is the core of future academic growth: its opposite is an elderhood that is the fraud of being in reality “not old folk but young people of eighteen, very much faded.”⁶⁸ Our molecules, “our arms and legs filled with sleeping memories,”⁶⁹ passionately demand that we fly after the butterfly.

‘There the butterfly flew away over the bright water, and the boy flew after it, hovering brightly and easily, flew happily through the blue space. The sun shone on his wings. He flew after the yellow and flew over the lake and over the high mountain, where God stood on a cloud and sang.’⁷⁰

Philip McShane is the author of twenty-five books relating to applications of Lonergan’s thought, most recently, with Bruce Anderson, *Beyond Establishment Economics: No Thank You Mankiw*. As this is his *festschrift*, more biographical detail would be somewhat superfluous.

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⁶⁸ Marcel Proust, *Remembrance of Things Past* (New York: Random House), 1042.

⁶⁹ *Ibid*, 2, 874. The full note in the original text is relevant here.

⁷⁰ Hermann Hesse, *Wandering*, translated by James Wright (New York: Farrar, Straus, and Giroux, 1972), 89.

PHILIP MCSHANE: THE FIRST FORTY YEARS

CONN O'DONOVAN

As I struggle to word some reflections on McShane I keep recalling how he laughed at me one day in the Autumn of 1960, when he was leading me into Lonergan. I was sitting in my room in Milltown Park, Dublin, early in my third year of theology, hand under chin, brow wrinkled, puzzling over the original dust-cover of *Insight*, which I hope is still available to students of Lonergan. He just kept on laughing until I finally exclaimed (among other things), "Aha!" when insight finally yielded me the outline of a puzzled person, hand under chin, looking at me. Six to nine months previously, before he had begun his formal four-year study of theology, he had found me entering on a minor *via inventionis*, reading St. Augustine's *De Trinitate*, and had gently but quickly moved me to the first of the *Verbum* articles. Beginning with these (for me) memorable moments, I shall attempt to move back and forward, to earlier and later times that I shared with McShane and, with his help, back beyond those earlier times to the time of his conception in Glasgow.

McShane writes jokingly and helpfully that his biography needs a twist on the title of Carl Jung's *Memories, Dreams, Reflections*, to yield *Memories, Screams, Deflections*. He says that we shared many of the screams in his final years in the Jesuits, and suggests that it might be worth while discovering from what exactly he was deflected. For those who read this *Festschrift* with serious existential concern what is surely most important is the present drive and direction, shown in an astonishing million-word project, begun not many years after a

declared retirement from writing for public consumption, which McShane sees as continuous with an original drive and direction, “that somehow was, and is, however shabbily, maintained.” Perhaps, with his help, I may return to the present and future, but now I must twist backwards to more comfortable terrain.

My first meeting with McShane was in the Autumn of 1952, in Rathfarnham Castle, Dublin, the home of Jesuit scholastics who, having completed their two-year novitiate, were studying for degrees in Arts or Science at University College, Dublin. The Novice Master, Fr Donal O’Sullivan, had allowed him to take vows, in spite of the risk that he would be quite unsuited to the long years of Jesuit study, not for lack of academic ability - his performance at school, in all areas, was far above average - but because he had, by the middle of the second year of his novitiate, acquired what was called a “broken head”, which meant that he was unable to study, or even to do any serious reading. After much discussion, Novice Master and novice agreed that it was worth the risk.

Not only was McShane allowed to risk university studies, he was also allowed to risk a very challenging programme of mathematics, mathematical physics, physics and chemistry. Given the “broken head” syndrome, this made me feel concern for him, having struggled through the same course myself in the academic year of 1949-50, before getting approval to divert happily into languages. As a senior, fourth-year scholastic, I felt the urge to comfort the struggling first-year, telling him not to worry if things did not work out particularly well. At the end of his first year he achieved outstanding results – three first places, including first place in physics out of 450 candidates - and then specialised in mathematics and mathematical physics for the following three years. So much for my concern and comforting! In his fourth year at UCD McShane was one of two MSc candidates. They worked through particular areas in mathematics and mathematical physics: relativity theory, quantum electrodynamics, functions of a complex variable. McShane was later to recall, on various occasions, that it was through his struggle with the classic, *Functions of a Complex*

Variable, by Whittaker and Watson,¹ that he learned how to read: it was one thing to read the short, concise chapters; it was quite another *really* to read the chapters by tackling the classic problems, with famous names attached, at the end of each chapter.

Before following McShane through the next stage of his Jesuit training, I want to return to the beginning. The youngest of six children, three girls and three boys, Philip was born on February 18th, 1932, in Bailieboro, County Cavan. His father was a retired Glasgow policeman from Cavan, his mother a shopkeeper from Fermanagh. Cavan is a “border county”, one of the three counties of the Irish province of Ulster not retained by the British as part of Northern Ireland in 1922, while Fermanagh is one of the six counties retained. I believe that this background had a significant influence on the development in McShane of an attitude towards England that was less than warm. He certainly used to enjoy telling his doctoral colleagues in Oxford in the mid-1960’s that he came from “unoccupied Ulster”. Not long after his birth the family moved from farm to village public-house, and when he was aged four they moved to a public house in Parnell Street in the centre of Dublin, where they lived above the bar, and where there is still a small bar. He is happy to recall that he spent his first few weeks in Dublin in a flat in Eccles St., familiar to readers of James Joyce’s *Ulysses* as the street where Leopold and Molly Bloom lived. McShane became deeply involved with Joyce only in the 1960’s but I suspect that he might look on that first address in Dublin as somehow providential. In the bar of the public-house there was a lively atmosphere of piano-playing and singing. An early family addiction was the cinema, and their local cinema was the *Volta*, the first cinema in Dublin, founded by James Joyce in 1909, with the financial backing of four small businessmen from Trieste.

In 193? The McShane family moved a short distance to a house beside the river Liffey and in 194? to a house beside the river Tolka. Philip is happy to locate himself in these years with reference to rivers rather than streets, because the rivers

¹ Possibly he means E.T. Whitaker and G.N. Watson, *A Course in Modern Analysis* (Cambridge: The University Press, 1943)?

flow deeply through his psyche, bearing history, folklore, legend, saga and myth. From the public-house and from the Liffey it was a short walk to the Christian Brothers' school called *Plas Mhuire* (St. Mary's Place), which McShane attended from 1937 To 1948. It was not much farther to the Jesuit School, Belvedere College, but even if they were interested in a Jesuit education, which they were not, McShane's parents could not have afforded it. Most of the boys' secondary schools in Ireland, some with primary schools attached, were run by the Christian Brothers, whose ethos combined a strong commitment to Catholic education with a strong commitment to the restoration of the Irish language and an idealised Gaelic culture. It was normal in the Brothers' schools for all subjects, except English, to be taught through the medium of Irish; *Plas Mhuire* was one of just a few schools where staff and students were obliged to speak Irish all the time. From how he appeared to me when I first met him I would have expected McShane to have been a gentle, cooperative schoolboy, but a classmate at *Plas Mhuire* says that he could be quite mischievous and at times perhaps arrogant. He recalls McShane writing a negative assessment of the special brand of self-sacrificial revolutionary republicanism associated with Patrick Pearse, the executed leader of the Easter Rising of 1916, and remarking that he would hardly expect someone who lived in Howth (as his teacher did) to agree with him. The school at *Plas Mhuire* did not offer the final two years of secondary education. McShane could have moved just around the corner to a larger, sister school, but because it was very similar, he chose to go to a much bigger, but much less "gaelic" school, O'Connell's School, also run by the Christian Brothers, and his parents approved. There he was introduced to physics and chemistry, but he remembers most of all the decisive influence that his teacher of mathematics, Kit Carroll, had on him. In his lectures later on he used to describe Carroll's teaching as "orgasmic." However, the main influence on McShane at this time was Frederic Chopin. Sometimes he would spend up to three hours battling with a *scherzo* or a *ballade*. Music was in his genes: his father was a very competent fiddler and he also played an instrument or

instruments in the police band. He had formal music lessons for several years, but he says that he only began to learn music when he gave up the lessons. Now he looks back on his “battling” with mathematics and with Chopin as central to the genesis of a humility in the face of meaning.

For a boy growing up in Dublin in the 1940's it was difficult not to feel, at least at some stage, that he had “a vocation,” which was narrowly defined as a call from God to be a priest or a Religious Brother. I do not know when or how he “got” his basic vocation, but I know that living quite close to the Jesuit church of St. Francis Xavier helped to specify it, because the Jesuits, as well as being considered sympathetic, broad-minded confessors, were well-known for their foreign missionary activity and were credited with being interested in serious thinking, both of which held a strong attraction for McShane. And so, in September 1950 he entered the Jesuit novitiate and spent two years in spiritual formation, central to which was the thirty-day retreat based on the Spiritual Exercises of St. Ignatius. The Novice Master, Fr Donal O'Sullivan, was ahead of his time in that he encouraged his novices to read widely and to develop an interest in music and the visual arts. Novices generally found his daily talks, called “Exhortations,” interesting and inspiring, but when he asked the young McShane what he thought of them the answer he got was, “They're fine while they last, but then they just seem to follow you out of the room like hot air.” McShane had a genuine affection for O'Sullivan in later years, but when I asked him recently about the origin of the “broken head” in the novitiate, he told me that it had a lot to do with the lack of a supportive environment for really serious thinking.

Having taken his vows in September, 1952, McShane moved to Rathfarnham Castle, Dublin, to begin his university studies, and so we come back to where I began. Having completed his MSc in 1956, he moved to St. Stanislaus College (colloquially known to Jesuits as “The Bog”), which was situated near Tullabeg, a very small town in the Irish midlands. There he spent three years studying philosophy, and there he met Fr John Hyde S.J., a man who had a profound influence on him. In Jesuit philosophates at that time the

principal subjects were named and taught as follows: Critica and Ontology in the first year, Cosmology and Rational Psychology in the second year, Ethics and Theodicy in the third year. Fr Hyde, who had begun teaching philosophy in 1945, was Professor of Theodicy and of the History of Ancient Philosophy from 1947 to 1962. He was a quiet, shy, ascetic man, sparing with words, always humorous and at times wickedly witty, who had established an excellent reputation as a teacher. He was admired by generations of Jesuit students for his skill in providing the data – the diagram, the metaphor, the analogy, the simple story – to encourage insight, and for his capacity for spare, clear, schematic summary. It was he who introduced McShane to Lonergan, firstly to the *Verbum* articles and, in 1958, to *Insight*, and when McShane had finished his course of Philosophy, Hyde is said to have commented, “There is nothing more that I can teach him.” McShane does not recall hearing this, and says that it is, in any case, quite untrue – he is still learning from Hyde. In his years in The Bog McShane led a quiet, regular life but gave time very generously to help colleagues who were struggling with their studies or were otherwise finding life difficult. In his second year he was appointed Beadle, a kind of go-between with little authority, but with a moderate amount of responsibility for organisation and for two-way communication between the scholastics and their rulers: the Rector of the community, the Prefect of Studies, and the Minister, who was responsible for discipline and health (including the provision of adequate food, a contentious issue in those days). When the Irish Provincial Superior came on his annual visitation that year the gentle, softly-spoken McShane told him that the scholastics were treated worse than pigs. The Provincial replied, “That is a hard judgment, Mr McShane.”

Having completed his study of philosophy McShane could have expected to spend 2-3 years teaching in any one of the six Jesuit schools in Ireland, or learning the language and adapting to the culture of Hong Kong/Malaysia or Zambia, where the Irish Province had a significant missionary presence. However, in response to an invitation to Jesuits worldwide from the General in Rome, he volunteered to go to Japan. He was not

accepted; instead, he was sent back to University College, Dublin, to lecture in the department of Mathematics. There he gave undergraduate courses to students of mathematical physics, engineering, and commerce, and graduate courses in special relativity and differential equations. While lecturing in UCD he lived in the nearby residence at 35 Lower Leeson Street, where Gerard Manley Hopkins had lived from 1884 to 1889. He was able to continue with his work on Lonergan and was fortunate to have as superior Fr Roland Burke-Savage, editor of the Jesuit quarterly, *Studies*, who was sympathetic to Lonergan's work, and was, incidentally, a confidant of the Irish poet Patrick Kavanagh, for whom McShane was soon to develop a great affection. Burke-Savage and McShane plotted the invitation to Lonergan to come to lecture in UCD; Lonergan came the following year, 1961, and gave what are now known as The Dublin Lectures. We shall return to the 1961 visit of Lonergan below.

After a single year of teaching at UCD McShane was fast-tracked to theology, the intention being, apparently, to get him through as fast possible to teach cosmology, and so, in Autumn 1960, he moved to Milltown Park, Dublin. This was the first time that Jesuit students, who had been in Tullabeg later than 1957, the year that *Insight* was published, came to study theology at Milltown Park. Paddy Doyle, a mature student with a background in science, had, like McShane, left there in 1959 and, like McShane, he came to Milltown with a great admiration for Lonergan. McShane, however, also arrived with a strong sense of mission. He has described Milltown Park at this time as "a ghetto of commonsense eclecticism," where serious thought was not required and indeed was not encouraged. He was not alone, however, in judging Milltown harshly. I know from personal experience that in the years 1958-1962 there was considerable discontent, and even cynicism, among those Jesuit students, whether Lonergan-inspired or not, who looked on theology as something more than just a canonical prerequisite for ordination, or who had already achieved considerable success in some other field. Many of them simply went along with the system, mastering the matter presented and producing it, on request, at

examination time; others registered a kind of protest by pursuing private interests as much as possible; those inspired by Lonergan tended increasingly to raise questions in class in a manner that challenged their professors' authority, at times, unfortunately, with a crude appeal to the authority of Lonergan. We did not know then that we were living through the final years of a system that Lonergan later described as hopelessly antiquated but not yet demolished, that what was happening at Milltown was happening all over the world, and that the upheaval that was soon to come would affect much more than the traditional seminary courses in philosophy and theology. Still, whatever about other threats to the system, and whatever about wider and deeper rumblings in the Catholic Church, there is little doubt that by the time of Lonergan's visit in 1961, although his ardent devotees numbered perhaps no more than 1/8 of the total student body, many of the lecturers at Milltown Park felt threatened by him and by his followers, and most of all by McShane.

There is no doubt that the arrival of McShane at Milltown marked the beginning of a major development in Lonergan's influence in Ireland. Fr Desmond Coyle, Professor of Theology from 1948 to 1962, used to say half-seriously that it was he who "discovered" Lonergan for Ireland, and there is a slight basis for his claim. He had done doctoral studies at Woodstock, Maryland, from 1946 to 1948, and there are bound copies of the first two *Verbum* articles in the library at Milltown, with his name written on them. Having attended lectures from Coyle on Grace, however, I do not remember any reference to Lonergan. McShane recalls asking him mischievously, "Are we going to be asking, 'What is grace?' Father"? While Coyle was not an inspiring lecturer, he was a gentleman, and it was quite sad to see him, in his final couple of years, being undermined in the name of Lonergan.

Fr Michael Hurley, later the foremost ecumenist in Ireland, lecturing to us on the Trinity in 1960 (before McShane arrived), held up the *Verbum* articles and read a note from John Hyde, in response to a request for an opinion on them. The note read, "I'd sit at his feet." Hurley did not discuss the articles in any detail, however, and he himself came to feel

threatened, in the years following, by Lonergan and his followers. In 1987 he wrote with great feeling, in an Irish Jesuit newsletter, an article in which, urging “unity in diversity,” he recalled “the days when the thinking of Bernard Lonergan was in the ascendant in Milltown.” “I myself,” he wrote, “had sat at his feet in Rome. I knew and recognized him to be an eminent thinker, but I could not bring myself to believe that he had the whole truth about everything. ‘He can’t be God,’ I remember myself saying, ‘and so his divinisation must be resisted: there can be no question of “Him only shall we serve, follow, study”.’ This was a difficult, painful experience. I don’t brood on it, but it keeps coming back in recent years.” Hurley was probably thinking particularly of the decade from 1966 to 1976, but the seeds were being sown abundantly from 1960 and McShane was certainly the principle sower.

In May, 1961, Lonergan came to Ireland, invited by Fr E. F. O’Doherty, Professor of Logic and Philosophy at University College Dublin, to give a series of lectures on *Insight* to third year honours students in philosophy, and as many others, staff and students, who wished to attend. At that time, although the situation was beginning to change, philosophy, for Irish Catholics generally, meant part of the training for priesthood. Most of those working for degrees in philosophy were clerical students and almost all of the Professors were priests. O’Doherty had written a very positive review of *Insight* and at the end of the lectures he told the audience (about 120) that they were privileged to have listened to a man who already had a permanent place in the history of philosophy. Later on he was less than happy about Lonergan, and especially about Lonerganism. In a letter to Fred Crowe, dated May 28, Lonergan, having returned to the Gregorian, commented: “success.”

While in Dublin, Lonergan stayed with the Jesuit community at Lower Leeson St., where McShane had been living during the previous year. On Saturday, May 19, he went to Tullabeg to give a lecture to staff and students, and he was warmly welcomed. In the letter to Crowe, mentioned above, he wrote: “Big boom for *Insight* at Tullabeg; also for F. E.

Crowe's *Complacency and Concern...*" On Monday, May 21 (Whit Monday) he gave a lecture in Milltown Park, entitled, *Theology and Communication*. I recall thinking at the time that there was nothing in his lecture that could have antagonised those members of the faculty who were no great admirers of his. What happened after the lecture remains vividly in my mind, and in the mind of McShane. The lecture ended at about 12 noon, an hour before lunch. We had anticipated an opportunity for questions, but none was offered; this was hardly Lonergan's wish, as there had been a lively question session in Tullabeg and there would be questions also in UCD in the following days. Our Rector, who taught the course *De Ecclesia*, but seemed to spend less time on theology than on looking after the farm, gave a quick nod to the Prefect of Studies, Fr Kevin Smyth, who promptly stood up, before the applause had ended. His vote of thanks was brief and ungenerous. Carefully avoiding any praise of Lonergan himself, he said it was a great tribute to the importance of *his topic* that there was a full attendance of staff and students on Whit Monday, when there were no normal classes. He concluded by remarking that Lonergan was truly "a Danielou come to judgment," which left Lonergan looking bemused and many of us feeling angry, because Smyth, one of the few Professors highly regarded as a scholar, was in the habit of making disparaging comments about the famous and prolific French Jesuit, whom he considered something of a dilettante. About fifteen minutes later, as I stood, fuming, looking out the window of my room, I saw the Rector forking hay. After lunch a small group of us, hoping to have a brief meeting with Lonergan, waited at the exit from Milltown Park. He appeared, accompanied by McShane, who had been appointed to look after him. He smiled, we smiled, McShane smiled, then he and McShane passed by without a word. When I rebuked McShane gently later that day, he told me that he had been instructed to lead Lonergan off the premises quietly and quickly, without delaying for any conversations with scholastics. McShane confirmed this almost thirty years later; as I reflect on it now, a further twelve years on, I am surprised that he, already so willing to challenge authority in other ways, and being himself

at least partly responsible for the ungenerous reception of Lonergan, did not disobey those instructions. In the letter of May 28 to Crowe Lonergan remarked: "At Milltown Park there is a first year theologian, Mr McShane, who in regency taught maths at UC; still does a bit; has been invited to lecture in Harvard on his line in maths this Summer; top-flight enthusiast for *Insight*. About 11 more theols onto *Insight* at Milltown."

At some time during the following academic year (1961-'62), in spite of his being a threat to the system, McShane was chosen to play the principal role of "defence" in one of the annual formal debates attended by all staff and students. He totally ignored the traditional scholastic mode of presentation, which comprised definition of terms, announcement of the theological "note" assigned to the thesis being debated, a listing and brief discussion of "adversarii," and finally a proof of the thesis from Scripture, the Church Fathers, and the Magisterium of the Church, supported by a "ratio theologica." Instead, appealing to the "aliqua intelligentia, eaque fructuosissima" of Vatican I, to which Lonergan so often referred, he embarked on an impressive exercise in systematic theology.

In the Autumn of 1960 McShane wrote "The Contemporary Thomism of Bernard Lonergan," and sent it to Fr John Courtney Murray, then editor of *Theological Studies*. Courtenay-Murray sent it back to him, saying that it was not quite suitable for his purposes, but he would love to have something that would make the *Verbum* articles accessible to his readers. So McShane sent his article to the Irish journal, *Philosophical Studies*, where it was published in 1962.² Then, in August 1961 he wrote "The Hypothesis of Intelligible Emanations in God," to send to Courtenay-Murray.³ Anything written by Jesuits had to be read by two appointed censors before being offered for publication, and in this case the obvious censors would be theologians. It gave McShane pleasure to think that two of his professors, who knew that he

² Philip McShane, "The Contemporary Thomism of Fr Bernard Lonergan," *Philosophical Studies* 11 (1961-62).

³ Philip McShane, "The Hypothesis of Intelligible Emanations in God," *Theological Studies* 23.4 (1962).

had not yet taken a course on the Trinity, would have to read his manuscript. It was duly passed by the censors, however, and published in *Theological Studies* in 1962. During the year 1961-1962 he wrote "The Causality of the Sacraments," which was published in *Theological Studies* in 1963.⁴

During the years 1960-1962 McShane was a constant source of enlightenment and encouragement to me, and I know that he was very generous with the time he gave to others, whether they were struggling with their studies or had other problems, as he had done in Tullabeg. Two little incidents come to mind, that typify for me the McShane of that time. In my third year of theology (1961-'62) I was concerned about the danger that I would be asked to specialise in theology, with a view to returning to teach in Milltown. I told McShane that I felt I needed about ten years to be prepared for such a task. He laughed, as he so often did, and said, "Cheer up, you'll never be prepared." So I relaxed. In the following year I came to him with a problem I had just created with one of my professors, with whom I had raised a question about God and myself. After some discussion the professor said, "Well Conn, at least you must admit that God could destroy you now and recreate you identically." Believing that I had just had an insight into what Lonergan meant by essentialism, I said, "I don't think so, Father," and tried to explain why I thought that the real God, if he destroyed the real me, could not recreate the real me identically. I left my professor looking puzzled, about what exactly I don't know. Then I went straight to McShane and asked, "Am I right?" Again he laughed and said, "Don't worry, the real God couldn't even destroy you." The professor in question was the Provincial who had visited Tullabeg when McShane was Beadle. In Milltown McShane gave him Lonergan's "Finality, Love, Marriage"⁵ to read and he enjoyed his comment when he returned it: "That was difficult; I had to read it twice."

From mid-1962 to mid-1966, although we kept in contact, McShane and I met only sporadically; for this period I am very

⁴ Philip McShane, "On the Causality of the Sacraments," *Theological Studies* 24.3 (1962).

⁵ Bernard Lonergan, "Finality, Love, Marriage" *CWL* 4.

reliant on his reminiscences. As he was entering his third year of theology in Autumn 1962, I was entering my tertianship, the last official stage of Jesuit training, in Germany. During that year the question of his immediate and more remote future arose. The new Rector, who was quite sympathetic, told him it would probably be better if he did his fourth year of theology elsewhere, and McShane agreed. So he went to Heythrop College, Oxford, in the Autumn of 1963, when I went to Rome to work for my doctorate in philosophy at the Gregorian. He was certainly happy to go to Heythrop, and I have been told that many of the faculty at Milltown were happy to see him go, as he would have been a very difficult fourth year student for them to handle.

McShane says that he did little theology at Heythrop, but he had great fun preparing for the “Ad gradum,” the final, 2-hour oral examination covering all of philosophy and theology, with the poet Peter Levi, whose company he enjoyed again at Campion Hall Oxford, and who, like McShane, later left the Jesuits and the priesthood. Another enjoyable experience he recalls is discovering *The Blandyke Papers*, with contributions from Lonergan as a young student at Heythrop.⁶ He spent most of his time, however, working on an article for the 1964 *Festschrift* in honour of Lonergan, entitled, “Insight and the Strategy of Biology.” And he was very happy to receive from Lonergan the newly-published two-volume *De Deo Trino*, the second, systematic part of which he has practically worn out.

In the Autumn of 1964 McShane went to do his tertianship in Paray-le-Monial in France. He had wanted to go to France partly to improve his French, but mainly to avoid Fr Michael Connolly, now Tertian Master, but formerly Professor of Ethics, with whom he had clashed in his third year in Tullabeg. He says that he survived “a very strange year” in France, and he recalls an American Jesuit, sharing the experience, who packed his big trunk in the late Spring and sat on it, waiting for the time to leave. He spent much of that year focused on chapter 8 of *Insight*, struggling with the notion of “thing,” which he eventually grasped from his image of Jonah in the

⁶ Lonergan’s contributions to the Blandyke papers are available at the various Lonergan Centres.

whale. He used this image later to help me and others to grasp the notion of “thing,” and he included it in a couple of his books.

In 1962 the Jesuit philosophate in Tullabeg had been closed down and the students sent abroad, mainly to France and Germany. Consideration was given to continuing like this, or sharing resources with the English Province, or opening a new house of studies in Belfast (the local Bishop, apparently, having consulted his priests, said, “No, thank you!”). Eventually it was decided to send philosophy to join theology at Milltown Park, and McShane and I were to be two members of the new faculty. Where would McShane do his doctorate? At the Gregorian University Jesuit doctoral students, as well as working on their dissertations, were required to take a total of 10 courses over two years. When I conveyed this information to McShane, he was determined to avoid Rome at all costs, so in 1965 he went to Oxford. A strange choice, Oxford, for a man so opposed to the type of philosophy dominant there! Perhaps McShane relished the prospect of challenging linguistic analysis at headquarters and risking the consequences. His thesis supervisor was Rom Harré, who had quite recently published a book entitled, *Matter and Method*,⁷ so McShane probably thought that he would have a reasonably good understanding of what he wanted to write about. In fact, he found Harré very tolerant and encouraging, even to the extent of taking no offence when he reached down one day, patted him on his foot and said, “Rom, if you think that is your foot, we have nothing to talk about.” The thesis was entitled, “The concrete logic of discovery of Statistical Science, with special reference to problems of evolution theory.” It was later published, after some re-writing, with the title, *Randomness, Statistics and Emergence*.⁸ In the preface to that book McShane gives a helpful indication of how he handled the problem of writing the thesis in Oxford. He describes his work as “an attempt at inaugurating dialogue between various schools of philosophy,” and continues: “Because of this, the work will obviously be difficult reading for the members of

⁷ (London: Macmillan, 1964).

⁸ (Dublin: Gill and MacMillan, 1970).

any one school. It was written at Oxford, and draws on that background, yet it is not of Oxford, for its philosophic stance is continuous with the structured critical realism of Bernard Lonergan. Yet the writing was governed by an appreciation of the chasm between the two views of philosophy, and so the philosophic position presupposed by the entire work becomes explicit only in the concluding chapter.”⁹

While McShane got on well with Harré, there was the obvious danger that he might have problems with examiners. Harré and he “hunted round” for suitable examiners, and Harré chose two, one a chemist and the other a biologist. There were just three people present at the defence of the thesis: the chemist, the biologist, and McShane himself, all three of them formally dressed. The examiners did not like the first chapter, “Problems of Content and Problems of Method,” and wanted a simpler version. The chemist thought that the chapter on probability, which dealt with differences between the first edition of *Insight* and the second, was nothing more than mathematics. The examiners united were not prepared to award the doctoral degree without some revisions, but McShane told them not to worry, he would be happy to publish the thesis as a failed D.Phil. Oxon. Then he got up and left the room. As he was leaving the building Harré rushed after him and begged him to reconsider. McShane was not interested in making changes or additions; encouraged, however, by Harré and Lonergan, he relented. He received from Lonergan the memorable postcard with the message: “Give the fellow what he wants; it’s only a union card.” My own concern at that time was that McShane might later be accused of resentment or bitterness whenever he criticised Oxford philosophy, as he surely would, and I expressed my feelings in the rather rude words, “You can’t shit on it until you’ve got it.” Roughly six months after the initial defence of his thesis McShane returned to Oxford and presented himself to his examiners, having made only modest revisions, and sailed through the defence in a few minutes, with no problems at all.

In the Autumn of 1966 Jesuit philosophy came to join theology at Milltown Park. That Summer I went to Oxford for

⁹ Ibid., vii.

a month, with the mandate to draft, with McShane, a two-year programme in philosophy, since the scholastics no longer had to do a three-year course. We were joined about a week later by Fr Eamonn Egan, a highly intelligent and very thoughtful and learned man, the only one of the former faculty at Tullabeg who would be a full-time member of the new faculty. He had read Lonergan and respected him, but was not a devotee. When he arrived we more or less presented him with a *fait accompli*, which obviously, and reasonably, disappointed him. He had a wonderfully clear, analytic mind, and he enjoyed discussions, preferably, it seemed at times, inconclusive ones, which was why McShane was so keen to have the draft programme completed before he came. I could find no fault, however, with a first year programme that was dominated by Philosophy of Knowledge, based on chapters 1-13 of *Insight*, comprising a course in Methodology in first semester and a course in Epistemology in second semester; neither could I object to second-year courses in Metaphysics and Philosophy of God, based on chapters 14-17 and 19-20 of *Insight* respectively, as long as McShane took God and gave me all the help I needed with whatever I had to teach. We could not control Psychology and Ethics, but there was no problem with Cosmology, because we just left it out. Given the extent of Lonergan's influence on this programme, and on another programme soon to be introduced, and McShane's enormous influence on their drafting and implementation, there was bound to be some tension. Egan, for example, while he was greatly respected, would suffer much from the "Lonergan says" attitude of his less tactful students and from the serious questioning of others, who had been greatly influenced by Lonergan, mainly through McShane. Michael O'Brien, still at an early stage of his career, teaching a course in Ethics based on Joseph de Finance, which in itself should not have been particularly problematic, had trouble from the beginning, I think mostly because of his style of teaching, and left Milltown in 1970. McShane was a wonderful teacher, but his dismissive attitude towards practically all major philosophers and theologians provoked some resentment among his less secure colleagues.

Early in 1968 the faculties of philosophy and theology at

Milltown agreed in principle to integrate the two disciplines in a single six-year course. A four-man committee was appointed to prepare a draft programme: James Healy, Dean of theology and Patrick O'Connell, Professor of Church History, representing theology, McShane and O'Donovan representing philosophy. Healy, still at an early stage of his teaching career, but already established as an impressive moral theologian, was very sympathetic to Lonergan, and he was happy with a division of content suggested by Fred Crowe in his "Notes on the Doctrine of the Most Holy Trinity" (Regis College, Toronto, 1965-1966), provided by McShane. When the faculties met to discuss the draft, it received quite broad support, but there was also much opposition to it, on various grounds. In retrospect, I cannot say how much of this opposition was specifically anti-Lonergan, but I know that a significant amount of it was anti-Lonerganist and reflected a resentment of philosophers presuming to pronounce on method in theology, and resentment of the extent of McShane's influence in particular. At the full meeting O'Connell actually repudiated the draft, obviously feeling that he had been rather steamrolled at the drafting sessions. After many hours of often tense debate, a much-modified programme was agreed, which many accepted as a good compromise. McShane's view was that the original, complex plan had been butchered and that what remained demanded inverse insights.

The integrated programme went into operation in October, 1968, and there were problems with it from the beginning, but in any case its days were already numbered. The newly-established Milltown Institute of Theology and Philosophy, a joint-venture of many religious orders and congregations, centred on Milltown Park, brought a big increase in the number of staff and students, but it also led to a change to the traditional structure of having philosophy first, then theology. The philosophy faculty, enlarged to cope with increased student numbers, included the Jesuits Bill Mathews and Peter Coughlan, and the laymen Garrett Barden and Andy Johnston, all greatly influenced by Lonergan and by McShane. There were several new, Lonergan-inspired members of the theology faculty too, the Jesuit Raymond Moloney, the Carmelite John

Lawler and the Oblate Frank Dromey, but they, and the already well-established and much-admired John Hyde, were more discrete than their counterparts in philosophy. Overall, however, the new Institute came to be considered as a something of a threat to the philosophy department in UCD and to philosophy and theology in St. Patrick's College, Maynooth, the university college run by the Irish Catholic hierarchy. The threat was a broad one, but Lonergan was certainly a significant part of it. So the final five of McShane's first forty years were spent in a strongly Lonergan-inspired environment, but with growing opposition, from both within and without.

Since 1968 McShane and I had been discussing the prospect of having Lonergan come to Dublin, to give a course of lectures on method in theology at Milltown Park, both of us having experienced similar events at Boston College and having spent time with Lonergan at Regis College, Toronto. He came in 1971, and the two-week *Lonergan Summer School* attracted much publicity, with extensive newspaper coverage of his arrival and brief reports on national radio and television. About 160 attended, roughly 1/3 from Ireland, but only one each from the philosophy departments at UCD and Maynooth; from Maynooth there also came two theologians, in response to an invitation I had sent to the editor of the *Irish Theological Quarterly*, and one student. McShane's main responsibility was to take care of Lonergan himself. We were rather anxious about his health and wanted to make him as relaxed and comfortable as possible. To this end we arranged for him to stay with a small Jesuit community, close to Milltown Park, which included a friend from the time at the Gregorian, Fr Kevin Quinn, whom Lonergan used to describe as the economist with whom he had hoped to collaborate, but who went off to Zambia. Each day McShane would collect Lonergan and accompany him to the hall where the lectures would take place; he would protect him from intrusions during his mid-morning break and bring him back to his base before lunch. The procedure would be the same for afternoon question sessions. We were trying to protect Lonergan from exhausting over-exposure, but McShane arranged individual contacts for

some people who particularly wanted to talk with him, and he put a great deal of thought and effort into planning lunches and dinners, in homes and restaurants, to provide good food and drink, with relaxed conversation, both for Lonergan and for carefully chosen groups. He also arranged, knowing Lonergan's great interest, visits to the movies, and a less than wholly satisfactory visit to the famous Abbey Theatre, to which Lonergan is surely referring in *Caring about Meaning* when he says, "I remember going to the Abbey Theatre in Dublin and I couldn't understand a word they were saying. The beautiful, lilting Irish talk was unintelligible to me!"¹⁰ There was also an informal meeting with a small group us, including Kevin Quinn, which McShane obviously thought might yield some fruit, but which appeared not to do so. Years later Lonergan was still referring to Quinn, but McShane recalls that he said to him at the time, "There goes my economist." He also recalls how, as he walked back with Lonergan one day from the nearby residence of the Jesuit Provincial, Lonergan asked, "What century were we in back there?"

The final half-dozen years of McShane's first forty were very busy, very productive, increasingly social, at times controversial, at times tumultuous, at times distressing to himself and others. At Milltown he taught wonderful courses in Methodology and Philosophy of God. He also gave public lectures at Milltown and at UCD. He wrote three books: *Towards Self-Meaning*¹¹ (with contributions from Garrett Barden), *Music That is Soundless*,¹² and *Plants and Pianos*,¹³ and he edited the proceedings of the Florida Conference of 1970.¹⁴ The title, *Music That is Soundless* came to McShane as

¹⁰ *Caring about Meaning: Patterns in the Life of Bernard Lonergan*, ed. P. Lambert, C. Tansey, C. Going (Montreal: Thomas More Institute, 1982), 92.

¹¹ (New York: Herder and Herder, 1969).

¹² (Dublin: Milltown Institute, 1969).

¹³ (Dublin: Milltown Institute, 1970).

¹⁴ Philip McShane, ed. *Foundations of Theology: Papers of the International Lonergan Conference Volume 1* (Dublin: Gill and MacMillan, 1971); *Language, Truth and Meaning: Papers of the International Lonergan Conference Volume 2* (Dublin: Gill and MacMillan, 1971).

he walked along Sandymount Strand (a Joyce-filled environment) reading the poetry of St. John of the Cross, and he had the chapter headings in his head by the time he got back to Milltown Park. In December, 1971, as he was approaching his fortieth birthday, McShane handed John Todd the corrected proofs of the index to *Method in Theology*.

I have just remembered reading some of the typescript of *Plants and Pianos* and thinking that McShane's written expression was not as precise as it might be, that he was beginning to let language run away with him. I said something like this: "But Phil, what you are actually saying there is this ..., what the words actually mean is this..." He paused for a moment, then laughed a little and said, "Maybe that *is* what I mean." Without wishing to make too much of it, I now wonder was I then witnessing in McShane the emergence of a deliberate, self-consciously new approach to language and meaning? Was he perhaps deciding to allow language to run away with him, but somehow under his control, and not to allow himself to be controlled by already controlled meaning? Was this a key moment in the development of his own special kind of creative scholarly writing?

Always deeply involved with music, McShane, towards the late 1960s taught himself how to play the guitar, and loved to sing songs of the 60s, such as "Blowing in the Wind" and "The Sounds of Silence," as well as traditional Irish-language songs. He even composed a haunting melody to go with the words of a short poem by Patrick Kavanagh, "Wet Evening in April":

The birds sang in the wet trees
 And as I listened to them it was a hundred years from now
 And I was dead and someone else was listening to them
 But I was glad I had recorded for him
 The melancholy.¹⁵

In that final period of his first forty years McShane had many meetings and parties with his special Methodology

¹⁵ Patrick Kavanagh, *Collected Poems* (London and New York: W.W. Norton & Company, 1964), 140.

Group, and with others; there were, increasingly, late evenings followed by early starts next morning, so that some of us wondered how long he could last the pace. And some were scandalised by his lifestyle. Some of the young people whom he had profoundly affected no longer found McShane as friendly and lovable as before and felt, I think, that he was being rather arrogant and intolerant. There was a definite estrangement from Garrett Barden, on whom he had had a profound influence, and who had collaborated with him on *Towards Self-Meaning*; other close associates, who were now trying to establish themselves somewhat independently of him, were rather hurt by the way he spoke to them, and at the same time were concerned that his lifestyle might bring him to harm. He had also begun to alienate members of what might be called the Lonergan Establishment, the depth and breadth of whose desire to know he had begun to question publicly. This is a delicate area that requires fuller treatment than I can give it here, so I shall offer only a brief comment. I have never known anybody so eager to help people to learn, so skilled at creating and disposing phantasms for those whom he judged to be genuinely and humbly eager for insights. If, however, he came to believe that people felt they already had a thorough grasp of the implications of Lonergan's thought, it upset him greatly, and he resorted, in speech and writing, to some sarcasm and, I think, to some deliberate obscurity, analogous to the obscurity of Joyce's *Finnegan's Wake*, in a bid to enforce humility in the face of meaning.

Here I must end, at least for now. I have been offering some not very profound reflections on a very good friend and an extraordinarily gifted man. I am very happy to have been so closely associated with him during years that were crucial for both of us, to have spent many night-hours at Milltown Park, aided by John Jameson and occasionally, for want of better, by pilfered altar wine, attempting to conceive, affirm, and implement the integral heuristic structure of proportionate being. I am also happy that I have been able, in more recent years, to maintain at least a heuristic of a heuristic of what he is doing. Ad multos annos, Phil!

Conn O'Donovan is perhaps best known in Lonergan circles from *The Way to Nicea*, his translation of the first part of the first volume of Lonergan's *De Deo Trino*. His long association with Philip McShane is plotted above.

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STATISTICS AS SCIENCE: LONERGAN, MC SHANE, AND POPPER

PATRICK H. BYRNE

On this occasion of honouring the achievement of Philip McShane, I would like to recall his earliest and, in my judgment, most important work, *Randomness, Statistics and Emergence*.¹ In particular, I will recall how that work situated Lonergan's important breakthrough on statistical method in relation to the major currents of thought on the subject, many of which remain influential still today.²

From afar, the question of the scientific status of statistics seems beyond question. For better and worse, statistical analyses and tables of data suffuse almost every scientific publication (as well as quite a few that are non-scientific), but especially in the fields of health care, economics, sociology, and psychology. Readers of such publications often must wade through lengthy and tedious justifications of the statistical methods, assumptions, and protocols. Indeed, instruction in statistical methods and procedures are required of virtually all students of the social and natural sciences.

Yet, if one moves in for closer inspection, the exact scientific status of statistical methods becomes blurry, despite their pervasive usage. Few scientists could give a coherent account of why they employ statistical methods – beyond very

¹ Philip McShane, *Randomness, Statistics and Emergence* (Notre Dame, IN: U of Notre Dame Press, 1970). All page references to this article appear in the text in parentheses.

² McShane's book also contains keen insights of exceptional value for the newly resurgent interest in 'emergent properties.' However, I must limit my discussion in this essay just to his treatment of randomness, probability, and statistics.

pragmatic justifications such as, ‘The journal or the funding agency requires them,’ or ‘Such statistics are needed if we are to impact public policy.’ In fact statistical methods have been intertwined with pragmatic concerns since their very inception in Girolamo Cardano’s efforts to improve the fortunes of gamblers.

If we turn from these pragmatic justifications to philosophical discussions more centrally concerned with the epistemological issues raised by statistical investigations, we are confronted overwhelmingly with thinkers from within the empiricist tradition. Early on, writers in the empiricist tradition – most notably John Locke – attempted to invoke probabilistic notions in order to extricate themselves from a series of impasses – only to have David Hume raise a seemingly insurmountable barrier to their efforts. Much of the subsequent history of philosophical reflection on probability and statistics has been dominated by the effort to improve upon Locke’s approach and to overcome Hume’s critiques. Even those authors who worked diligently on questions of the foundations of probability but who cannot be strictly classified as empiricist were responding to sets of problems framed by this empiricist debate.

Two major twentieth century thinkers – Bernard Lonergan and Karl Popper – recognised that in order to properly treat the foundational issues raised by probability and statistics, it would be necessary to step outside of the confines of empiricism. In *Randomness, Statistics and Emergence*, McShane carefully and comprehensively situates the contributions of Lonergan’s thought with respect to the spectrum of epistemological and metaphysical issues that arose out of the empiricist tradition. Although McShane does mention Popper a few times, he does not bring Popper and Lonergan into direct dialogue on the issue of statistics as science. In this essay, therefore, I will explore how the positions that Lonergan staked out, and the ways that McShane developed those positions, can address the work of Karl Popper on the subject of statistics as scientific knowledge.

McShane on Randomness, Probability and Statistics

I first encountered Philip McShane's *Randomness, Statistics and Emergence* as a graduate student, seeking aid in understanding Lonergan's formidable achievement in the philosophy of statistical method. Returning to McShane's 1970 study for this *Festschrift*, I could not help but be impressed once again. Its style of expression is engaging. It leads the reader carefully, patiently, and gradually through many complex issues. This is not to say that the book does not make considerable demands upon the reader. It does – because the subject matter that it treats is intellectually demanding by its very nature. *Randomness, Statistics and Emergence* is comprehensive, not only in addressing the issues presented in Lonergan's *Insight*, but in its treatment of the other major writers on the problems of the foundations of statistics. McShane gives careful, fair, and clear presentations of each thinker's positions. He also makes Lonergan's treatment of statistical method even more accessible to the introductory reader than Lonergan himself did.³ All the while McShane organises his presentation in accord with the exigences of Lonergan's 'moving viewpoint.' McShane's book remains far and away the very best source for anyone wishing to enter into the details of the *Insight* chapters on empirical scientific method.

Early on McShane identifies the bewildering array of seemingly disconnected topics that appear almost at random in the writings of various thinkers on probability and statistics. He treats, for example: the problem of defining 'randomness,' the question of the proper axiomatic foundation for probability theory, the concept of a 'population' or 'aggregate' as fundamental, the elementary operations of classifying and counting, the vexing relationship between causal and statistical accounts, the 'difficulty of defining an initial state accurately enough' and why 'data are effected by numerous causes,' the problem of the complexity of laws governing concrete

³ An exception is Chapter 6, 'Chance,' where McShane engages in a lengthy, tangential discussion of space-time structure. While there is an indirect connection between this discussion and chance, clarity would have been served by making space-time the subject of another book.

situations, and especially the intractable debates over 'induction and probable degree of confirmation' (14-16). Not only does he provide an overview of this complex and seemingly disjointed field; he also gradually shows the great dialectical and hermeneutical value of Lonergan's fundamental insights for the reading of the history of discussions on these topics. Let me offer but three examples:

McShane quotes a standard textbook definition of statistics as follows: statistics is 'the branch of scientific method which deals with data obtained by counting or measuring the properties of populations [or aggregates]' (14). He then notes that the textbook authors rightly identify population or aggregate as 'the fundamental notion of statistical theory,' but then astutely observes that they fail to explain how this fundamental notion is connected in any way with the basic statistical operations of classifying and counting. Somewhat later McShane surveys a series of attempts by different authors at defining randomness, and then notes (reminiscent of the spirit of Aristotle) that 'the common factor in all the usages of the words 'random' and 'randomness'' is some form of 'no reason why,' [an] absence of reason' (18-28). He then goes on to show how this shared denial of intelligibility is in fact the denial of a particular kind of intelligibility – namely, the kind of intelligibility that permits precise prediction, or, in the more refined terms Lonergan developed, a lack of classical, systematic intelligibility. McShane shows the surprising unity among these disparate efforts, for a 'population or aggregate' is more precisely defined as 'a coincidental manifold not held together by any [classical] law.' This more refined definition further implies 'residues' in the data which can be properly investigated by the elementary statistical procedures of classifying, counting, and calculating actual relative frequencies. Later McShane goes on to show how the seemingly 'abstract' theoretical treatment of 'ideal probabilities' by a still third cohort of authors is related to the concrete procedures of statisticians investigating concrete populations. Drawing upon his sophisticated appropriation of Lonergan's ideas, McShane reveals how the disparate work of these various groups of authors 'can all be contributions to the

clarification of some basic but polymorphic fact,' to adapt a phrase from Lonergan himself.⁴

A second example comes in McShane's careful discussion of convergence. Convergence was a topic of considerable difficulty as the calculus was passing through its adolescence. What is now called 'analytic convergence' was initially thought of by relying upon the imagination – i.e., relying upon unacknowledged imaginative elements rather than careful formulations of the purely intelligible elements.⁵ Put imaginatively, an analytic function converges to a limit when it 'gets closer and stays closer' to that limit. Now if one conceives of a probability as an ideal limit to actual frequencies,⁶ one encounters a difficulty. Actual frequencies diverge non-systematically from ideal probabilities. They do not 'stay closer to' the ideal frequency. They keep bouncing around. Probability theorists employ the fiction that actual probabilities converge on ideal frequencies (probabilities) 'as the number of cases goes to infinity.' But in empirical investigations, the number of cases never goes to infinity. McShane's summaries and analyses of this set of problems (149-69) are remarkable for their clarity. His proposal for an alternative to the prevailing conundrums is deeply insightful. I will return to this issue in the last section of this paper.

A third example comes in McShane's clear and illuminating analysis of a very concrete statistical investigation: the distribution of three species of buttercups in two grassland areas near Oxford, England. He shows how several points from Lonergan's treatment of the complementarity of classical and statistical procedures illuminate the deeper assumptions and significance of these concrete studies – and, by extension, empirical investigations in general. As McShane puts it, this 'example illustrates in the simplest way the oscillations of [the classical and statistical] attitude within the process of inquiry' (71).

McShane narrates how, in the first of the two grassland

⁴ *CWL* 3, 412.

⁵ See Carl B. Boyer, *The History of the Calculus and Its Conceptual Development* (New York: Dover Publications, 1959), 267-87.

⁶ See for example, *CWL* 3, 81-85.

settings, statistical procedures were used to confirm randomness of distribution of the three species. In the second setting, however, ‘there was a marked heterogeneity shown by a significant non-randomness in the distribution’ (71). The non-randomness in this case was due to the phenomena of the ‘clumping’ of like species. He then explains that this rather surprising result led investigators to search for a classical explanation of the clumping. They once again used statistical procedures to demonstrate a remarkable statistical correlation of each of the three species with a distinct kind of microhabitat: ‘*Ranunculus bulbosus* was found to occupy bands of land running along the tops of ridges; *Ranunculus acris* occupied the sides of the ridges and *Ranunculus repens* lay in the furrows’ (73). This statistical correlation eventually led to the discovery that each of the three species is classically correlated with (adapted to) differences in drainage and moisture content of the soil. As McShane notes, the statistical results provided ‘clues’ for further classical investigations, and the classical results provided ever more refined, scientifically significant categories for statistical investigations. In other words, use of the intrinsic statistical notion of ‘significant difference’ can lead to investigations of what might be called ‘classical residues’ in a body of statistical data, as well as the reverse.

McShane’s buttercup example is much more illuminating than the old chestnuts of coin flips and billiard balls (both of which McShane also treats as a matter of course, but within a far richer context). This example also underscores Lonergan’s insistence that statistical investigations are far more closely tied to the concrete than are classical investigations.⁷ It also reveals how statistical investigations seek ‘to disentangle a complex of causes ... to discover what causes are the important ones and how much the observed effect is due to each’ (75-76). This use of statistical methods to disentangle causes is absolutely essential when actual experimental separation of variables is not possible, especially in cases of human studies where physical, experimental of separation of variables would violate ethical norms. McShane’s analysis of this series of

⁷ *CWL* 3, 121.

investigations shows how one can appropriate ‘what scientists are doing when they are investigating’ even when scientists themselves have absolutely no explicit, thematic awareness of Lonergan’s ideas on these topics. McShane also shows the foolhardiness of trying to use statistics to determine the probability of an individual event; a population, not an event, is the proper object of mathematical probabilities. McShane’s analysis of this example should be required reading in introductory courses on the use of statistical methods of research.

Karl Popper on Science and Statistics

McShane clearly studied the work of Karl Popper carefully at the time he was writing *Randomness, Statistics and Emergence*. He comments on Popper at several points in the book.⁸ It is somewhat surprising, therefore, that he does not enter into an explicit dialectical encounter with Popper on the issue of the scientific status of statistical investigations. In this section I will outline Popper’s positions on science and statistics. In the next section I will show how McShane, drawing on Lonergan’s work, offers resources for a nuanced dialectical critique of Popper’s position on statistical science.

Popper was something of a maverick among philosophers of science in the 1930’s and 1940’s. He deliberately distanced himself from the hegemonic ‘Received View’ of logical positivist philosophy of science that reigned in those years.⁹ In particular, he thought that logical positivism faced insurmountable obstacles regarding the meaning of theoretical terms and the confirmation of theoretical claims. Scientific theories, Popper recognised, make universal claims. As such, their theoretical statements cannot be made to conform to the positivist criteria of meaningfulness, because universal, theoretical statements can be neither logically ‘derived from

⁸ McShane, pp. 21 n., 24, 30-31, 67, 136 n., 153, 245-46. There are possibly also indirect comments on pp. 60 and 147.

⁹ For a masterful historical account of the rise and fall of the ‘Received View,’ see Frederick Suppe, ‘The Search for Philosophic Understanding of Scientific Theories,’ pp. 3-232 in *The Structure of Scientific Theories*, second edition, Frederick Suppe (ed.) (Urbana, IL: U of Illinois Press, 1977).

experience' nor 'logically reduced to elementary statements of experience.'¹⁰ Such elementary statements are, after all, particular, and there can be neither logical derivation nor reduction of the meaning of a universal to a particular. Likewise, insofar as one regards the telling feature of a scientific statement to be its empirical verification, Popper claimed that none of the outstanding and widely recognised examples of scientific theories would be acceptable as scientific. It is of course possible to verify particular observational predictions that are derived from the universal laws and principles of a theory. However, no finite number of verified particular predictions ever constitutes the verification of a universal principle, let alone the conjunction of several such universal principles. Hence Popper's strong and disturbing claim, 'Theories are, therefore, *never* empirically verifiable.'¹¹

Popper argued that his critique of the positivist account of science posed a serious problem because, if science means 'empirically verifiable' and theories are not empirically verifiable, then there is no clear way of separating scientific theories from metaphysics. The positivists (and indeed Popper himself) wished to draw that line very strictly. Hence Popper argued that a new 'criterion of demarcation' was needed to strictly separate statements that are scientific from those that are non-scientific (i.e., mathematical, logical, and metaphysical). Popper's own criterion of demarcation is 'falsifiability' rather than verifiability: 'it must be possible for an [authentically] empirical scientific system to be refuted by experience.' Popper explains that, whereas the universality of theoretical statements prevents them from being confirmed by singular statements, the logical form of inference known as *modus tollens* makes it logically possible to refute (falsify) a system of universal statements by singular statements.¹²

¹⁰ Karl R. Popper, *The Logic of Scientific Discovery* (NY: Harper and Row Publishers, Inc., 1968), 34-36 (emphasis in original).

¹¹ Popper, 40.

¹² Popper, 41. Popper acknowledges that there are sly ways to evade 'naïve' falsification (42), and later refines his criterion by supplying additional, methodological 'rules' or 'conventions' (78-92). Those details need not occupy us for present purposes. As an aside, it should be noted

Popper's discussion of singular, empirical statements is quite subtle. He astutely points out the difficulties involved in presuming a simple basis for empirical statements in perceptual experiences, in the ways that positivists did. For Popper, experiences do not justify statements; 'statements can be justified only by statements.'¹³ He further argues that statements such as 'I perceive a patch of red' are purely subjective¹⁴ and not subject to intersubjective testing. In addition, he points to the indispensability of using theoretical terms in reporting experimental data.¹⁵ All this leads him to an unusual but ingenious way of defining experiential, or rather 'basic,' statements. First, basic statements are defined in virtue of their logical form as those statements that are potential falsifiers of a theoretical system. Second, basic statements make assertions about events, not experiences.¹⁶ Finally, basic statements divide into those that are 'accepted' and those that are not accepted (rather than those that are 'affirmed' or 'denied' as Lonergan would claim). That is to say, acceptance rather than verification is basic to science as empirical because it is a matter of intersubjective testability and falsifiability. Recourse to reports about my perceptual experiences will not do. The empirical basis of a science is intersubjective agreement. As Popper puts it:

Any empirical scientific statement can be presented
... in such a way that anyone who has learned the

that Lonergan also has a kind of 'demarcation criterion' regarding the difference between scientific and metaphysical claims (see *Insight*, *CWL* 3, 548). But whereas Popper offers a dismissive tolerance of metaphysical statements – dismissive because metaphysical statements offer no 'contact' with evidential statements, tolerant because his theory cannot claim they are meaningless – Lonergan's metaphysical statements are grounded in data of consciousness, and thereby are really albeit indirectly related to scientific statements (*CWL* 3, 5).

¹³ See Popper, 93-98.

¹⁴ Popper, 44.

¹⁵ Popper, 84.

¹⁶ On this point Popper and Lonergan share a remarkable level of agreement, although because of their diverging views on the need for a grounding of judgments in reflective insights (grasping the virtually unconditioned), their residual disagreement is significant.

relevant technique can test it. If, as a result, [someone] rejects [our] statement, then it will not satisfy us if he tells us all about his feelings of doubt or about his feelings of conviction as to his perceptions. What he must do is to formulate an assertion which contradicts our own, and give us his instructions for testing it. If he fails to do this we can only ask him to take another and perhaps more careful look at our experiment, and think again.¹⁷

Hence, for Popper, empirical science is empirical insofar as there are intersubjectively accepted basic statements about events. It is science (rather than, say, metaphysics) insofar as there is intersubjective agreement in advance that certain basic statements, if accepted, will constitute a falsification of a system of universal, theoretical statements.¹⁸

Although this intersubjective and volitional dimension of Popper's thought is frequently overlooked, it is in fact quite foundational to his whole enterprise. For Popper agreement is a matter of choice, both about what statements are to be accepted, and about what 'methodological rules or conventions' one will adhere to in attempting to falsify hypotheses and theories. These choices, says Popper, are founded in value judgments:

I freely admit that in arriving at my proposals I have been guided, in the last analysis, by value judgments and predilections. But I hope that my proposals may be acceptable to those who value not only logical rigor but also freedom from dogmatism; who seek practical applicability, but are even more attracted by

¹⁷ Popper, 99. Although Popper clearly believed that he had abolished 'subjective' statements about perception and reflective grasp of the virtually unconditioned from philosophy of science, one can easily notice his failure to do so completely in this remark.

¹⁸ I would note that Lonergan offers 'relevant techniques' for attentiveness, understanding, judging and intersubjectively discussing claims about the data of consciousness. These are no less subjective than discussions among well-trained observers concerning the data observed by looking into a microscope. See Ian Hacking, 'Do We See through a Microscope?' *Pacific Philosophical Quarterly* 62 (1981).

the adventure of science, and by discoveries which again and again confront us with new and unexpected questions, challenging us to try out new and hitherto undreamed-of answers.¹⁹

Hence, for Popper the foundations of empirical science do not lie in a bedrock of sense perceptions. Rather, the foundations of empirical science are value judgments and choices. In the next section I will return to this issue, and suggest that although Popper is basically correct in this claim, still he has not entirely appropriated value judgments and choices as they relate to the praxis of empirical science.

Popper's account of the nature of scientific knowledge has received a kind of tacit reception within large domains of the scientific community. I have had numerous conversations with practising scientists who will eventually say something like, 'We don't know what the reality out there is really like. What we discover and prove is what it is not like.' I have come to suspect that these sorts of statements reflect the vertigo and anxiety of being a scientist in the twentieth and now twenty-first centuries. The shocks of the revolutions in twentieth century science shook modernity's confidence in the solidity of Newtonian mechanics. Contemporary scientists live with an intense (albeit marginalized) awareness of the possibility that their current theories may be proved incorrect. Often enough, they are well aware of the 'anomalies' that trouble and tend to subvert their theories. I think that psychologically scientists protect themselves from full confrontation with this fact.²⁰ This is indeed better and more realistic than smug confidence in the unrevisability of Newtonian physics and its mechanistic worldview (including its essential assumptions of an absolute space and an absolute time). However, as I shall suggest below, Lonergan offers a better basis for practising this humility than does Popper.

¹⁹ Popper, 38.

²⁰ For an illustration of a thinker who dares to contemplate this fact without psychological protection, see Max Weber, "Science as a Vocation," *From Max Weber: Essays in Sociology*, trans. and ed. H.H. Gerth and C. Wright Mills (New York: Oxford UP, 1946), 129-156.

When he turns to the question of the scientific status of probability and statistics, Popper's reflections bear some remarkable affinities with those of Lonergan. Like Lonergan, and especially as amplified by McShane (131-48), Popper recognised the erroneous conflation of probability of events with probable truth of statements (judgments). Like Lonergan and McShane, Popper delves into the significance of the relationships between actual and ideal relative frequencies. However, in the overall context of Popper's positions on empirical science, probability statements are going to present a special difficulty. We might say that Popper set himself a difficult task because he got his cognitional theory wrong. But the way he handled that task is quite impressive – as well as instructive for students of Lonergan.

How is it possible to falsify a statistical claim – whether statistical law or probability? On the one hand, there is no great difficulty in finding basic statements that could falsify a classical law such as 'Light always and for every inertial observer has the same velocity.' For example, 'Smith and Jones are both inertial observers, but obtained unequal measurements of the velocity of light' will falsify the universal, theoretical statement. On the other hand, how does one find basic statements that will falsify Gregor Mendel's statement that the probability (ideal frequency) of smooth peas is $3/4$? If Lonergan and McShane are correct about events diverging non-systematically from ideal frequencies, then an actual observed frequency differing from $3/4$ does not falsify the claim. Even a multiplicity of experiments, all resulting in actual frequencies different from $3/4$, would not falsify the probability claim. (Indeed, none of Mendel's experiments came up with even a single instance of an actual frequency equal to $3/4$).

So it would seem that, by Popper's standards, statistical investigations regarding probabilities cannot be regarded as empirical science. Statistics, then, must be metaphysics.²¹ (Some people have suspected this all along!) But here we witness the brilliance of Popper, for he met this challenge head on and creatively. While displaying great respect for the work

²¹ Popper, 197.

of von Mises (like McShane), Popper recognises that von Mises's 'axiom of convergence' is an untenable assumption for an empirical science.²² He sets out, therefore to develop alternative accounts of randomness, convergence, and the fundamental theorems of probability theory.

His argument is lengthy, detailed, technical, and meticulous (dazzlingly so).²³ However, the general thrust of his ideas can be simplified without too much distortion for present purposes. Popper first develops his own, modified definition of randomness.²⁴ He then considers a random sequence, infinite in length, of events characterised by a set of definite properties (say heads or tails), and develops a definition for the probability p of the occurrence of a property P (say heads), in that sequence. He then considers a selection (or sample) of finite length n from that sample. He then notes that the actual number of occurrences m of P in that finite sequence will constitute a relative frequency m/n of that property, and that, in general, m/n will be different from the probability p . This difference can be called the deviation of m/n from p . Popper defines that deviation as $D_p = |m/n - p|$. Popper then considers the question of how one might falsify the hypothesis that the probability of occurrence of property P is p . He offers his answer to the question in terms of the behaviour of D_p . The mathematical theory of probability says, in effect, that p is the true probability if D_p converges toward zero as n tends toward infinity. But this is no help in a finite world or for scientists working under even more restricted circumstances. Popper therefore does something that in a rough way resembles Lonergan's approach – he asks what scientists (at least physicists) are doing when they are doing statistical investigations. His answer:

the physicist might perhaps offer something like *a physical definition of probability*, on lines such as the following: There are certain experiments which, even if carried out under controlled conditions, lead to

²² Popper, 151-54.

²³ See Popper, 151-214.

²⁴ For McShane's critique of Popper's reconstruction of randomness, see pp. 30-31.

varying results. In the case of some of these experiments – those which are ‘chance-like’, such as tosses of a coin – frequent repetition leads to results with relative frequencies which, upon further repetition, approximate more and more to some fixed value which we may call the *probability* of the event in question. This value is ‘...*empirically determinable* through long series of experiments to any degree of approximation’; which explains, incidentally, why it is possible to falsify a hypothetical estimate of probability.²⁵

In effect, the scientist’s answer – ‘to any degree of approximation’ – says that D_p is ‘sufficiently small.’ Popper recognises that logicians and mathematicians will raise a series of objections to the scientist’s answer, for, as he notes, that answer ‘modifies the concept of probability: it narrows it.’ He further observes that this amounts to a ‘methodological decision’ to modify the mathematical definition of probability for scientific purposes. Popper himself follows this lead, and adopts this methodological decision of the practising scientist as a principle of his philosophy of science.²⁶ He goes on to note that, in practice, scientists settle their decision of what is an acceptably (or unacceptably) ‘small’ D_p by their choice of the number n – and he shows how the two are intrinsically related.²⁷ As he points out emphatically, it is only by means of this (or some comparable) methodological decision that probability statements become falsifiable.

²⁵ Popper, 199. The last emphasis is my own; otherwise, the emphases are Popper’s. The abbreviated quote is from Born and Jordan’s book on elementary quantum mechanics.

²⁶ Popper, 199.

²⁷ Popper, 200-203. Popper’s argument is more complicated than suggested in the main text. More specifically, Popper examines not just D_p , but rather the probability that the actual relative frequency, m/n will fall within D_p of the ideal frequency, i.e., probability p . In effect this places the ‘measurement’ of m/n within a set of other such measurements. Although Popper does not say so, this means that the practising scientist is choosing n in light of the tacit knowledge (or at least a tacit belief) that the ideal frequency p is implicitly re-tested in all sorts of related experiments. See CWL 3, 98.

As noted earlier, Popper recognises that methodological decisions rest upon value judgments. Yet he does not tell us just which value judgment grounds the scientist's (or his own) methodological decision regarding the testing of probability hypotheses. If pressed, he would almost certainly agree that the value of the 'adventure of science,' the value of keeping the 'game' going,²⁸ motivates this decision. After all, his long and detailed treatment of statistics and probability is followed immediately by his discussion of quantum mechanics – and surely the history of quantum mechanics has been an adventure of science par excellence. But earlier Popper explained that, to his way of thinking at least, the value of the adventure of science amounts to the value of 'discoveries which again and again confront us with new and unexpected questions, challenging us to try out new and hitherto undreamed-of answers.' Should we take him at his word? Surely Popper's career reveals a mind that has spent long periods of time absorbed in what Lonergan called the 'intellectual pattern of experience.' His writings on probability alone give clear evidence of that. But is Popper really affirming the value (in Lonergan's terms, 'the objective') intended by the pure, detached, unrestricted desire to know? Here I must hesitate. For all Popper's laudable and dogged pursuit of questions, it seems that there are questions that he is not really interested in pursuing after all. Metaphysical ones, for example, although he is not as dismissive as the positivists he criticises.²⁹ More substantively, he is not interested in questions pertaining to the data of consciousness – or whether there even are such data. This is revealed in his dissatisfaction with reports about 'feelings of doubt or feelings of conviction,' which certainly could describe experiences of (data of consciousness on) inquiring and grasping the virtually unconditioned. It may also be that his understanding of freedom (as portrayed in his political writings) is subject to further pertinent questions that he was not interested in entertaining – e.g., concerning the limits and snares of merely immanent forms of human self-criticism. In other words, he is not interested in pursuing

²⁸ Popper, 53.

²⁹ Popper, 38.

questions of human moral impotence and divine grace. For these reasons I now turn to consider how McShane's parallel consideration of probability as verifiable can be used in a dialectical refinement of Popper's approach. This is not to deny, however, that Popper's reflections on the foundations of statistics and probability are admirable and bring to light issues that few others considered.

McShane on the Practice of Statistical Science

Lonergan fretted about the problems associated with verifying (not just falsifying) probability hypotheses. It is likely that these concerns were responsible for the relatively few and technical changes made for the Second Edition of *Insight*.³⁰ McShane takes up this issue in an extended discussion under the heading 'Foundations of Statistics' (149-69). There he grapples with the problems of whether and how actual relative frequencies converge upon ideal frequencies (probabilities). 'We will be concerned ... not so much [with] ... axiomatic formulation as [with] ... empirical origin and reference' (149). Like Popper he points out the difficulties involved in this non-analytic form of convergence. Like Popper, McShane appeals, beyond the mathematical definition of convergence as n tends toward infinity, to the actual practices of empirical scientists. But unlike Popper, McShane (equipped with Lonergan's normative guidance into self-appropriation) can appeal to the conscious activities of the scientist for assistance in approaching this problem.

As a first step in this direction, McShane draws attention to an implicit 'broader insight' underlying the 'intuitive notion of probability' (161) that is already imminent and operative in the practices of statistics. This insight underlies the operative assumption that, though possible, 'indefinitely long runs of either heads or tails ... are somehow not to be expected.' But rather than attempt to formulate that unformulated insight, McShane takes a reflective step back and focuses instead on 'the process toward that developed theory as illustrative of the general process of developing science and mathematics' (153). That general process is familiar to students of Lonergan's work

³⁰ See *CWL 3*, 'Note to Second Edition,' 9.

as the invariant structure of consciousness, underpinned by the pure, unrestricted desire to understand correctly, choose the good, and love unconditionally. When it comes to the more specific practices of statistical investigation, that general structure is differentiated and specialised by the questions that focus upon empirical non-systematic processes and coincidental manifolds. In other words, attention to the actual statistical practices of empirical scientists leads to an exploration of the kinds of insights, judgements of fact, judgments of value, and decisions that surround the non-systematic.

To speak of non-systematic processes implicitly presupposes, in turn, some notion of systematic processes. But just what is a systematic process? It is a temporal sequence of events, the data from which ‘possess a single intelligibility that corresponds to a single insight or single set of unified insights,’ other things being equal.³¹ The context of Lonergan’s remark makes it clear that the single insight, or at least the most prominent members of the single set of unified insights, will be insights into what Lonergan calls ‘classical correlations’ that grasp explanatory relations of things to one another. But what exactly are classical insights? Ultimately this is a question settled by self-appropriation, not by definition. Definitions of classical insights presuppose insights into those insights. Insights into classical insights presuppose that one has had such insights and has invested considerable effort into attending to them and understanding them correctly. Understanding classical insights correctly is itself an ongoing, self-correcting (even a hermeneutical, circular) process that begins with obvious examples (such as Lonergan and McShane present) and passes on to consider more subtle examples. This amounts to saying that the proper foundation of the concept of systematic process is the practice of classical empirical method. Practising that method, as Popper rightly notes, is ultimately a matter of decision.

Likewise, decisions to practice are the foundations of the notion of non-systematic process. Lonergan defines a non-systematic process in terms of a systematic process: “whenever

³¹ *CWL* 3, 71. See also McShane, 34-51.

a group or series [e.g., a systematic process] is constructed on determinate principles, it is always possible to construct a different group or series [e.g., a non-systematic process] by the simple expedient of violating the determinate principles.”³² This means that the very notion of non-systematic processes relies upon the practices of classical method for its heuristic formulation. But of course the practices of empirical statistical methods also rely upon additional decisions to methodically pursue inverse insights into non-systematicity, and to pursue the further types of insights into empirical (vs. abstract mathematical) probabilities. Such decisions also entail commitments to pursue judgments regarding the correctness or incorrectness of those probability insights: ‘whether world process is systematic or non-systematic is a question to be settled by the empirical method of stating both hypotheses, working out as fully as one can the totality of their implications, and confronting the implications with observable facts.’³³ Although many might desire a well-formulated, simple set of rules for the testing of the implications of statistical hypotheses regarding non-systematic processes, Lonergan and McShane are more realistic. They recognise that this sort of simplicity is but a pipe dream, and that the only reliable guide is the ‘pure question’ underlying the self-correcting acts of knowing and deciding. It is these concrete acts of knowing and deciding that constitute the concrete patterns of ‘oscillations of attitude’ between classical and statistical procedures in investigations of concrete sets of data. McShane nicely illustrates this in all its concreteness in his intentionality analysis of the scientific studies of buttercup ecology.

Although Lonergan’s account of the relationship between judgments of value and decisions was too brief in *Insight*, and although neither he nor McShane brought even that much to bear upon the practices of empirical statistical methods, still there are elements in Lonergan’s writing that point to a more

³² *CWL* 3, 72. Something similar holds true, ultimately, for the heuristic definitions of coincidental aggregates and randomness. See p. 73, 78-81.

³³ *CWL* 3, 76. On the subtlety in Lonergan’s thought regarding ‘observable facts’ as it parallels that of Popper, see *CWL*, 94-97, 299.

satisfactory account than Popper offers. First and foremost, Popper construes rationality on the narrow model of formal logic. (This is why Popper says that methodological decisions ‘must, of course, be ultimately a matter of decision, going beyond rational argument.’³⁴) Lonergan, on the other hand, opens up the meaning of ‘rationality’ to include all the resources and ‘more rudimentary elements’³⁵ that the human mind employs in the self-correcting processes of knowing and valuing. For Lonergan, the broader meaning of rationality derives from asking and answering questions in quest of invulnerable insights grounding judgments of fact and value. This includes but goes beyond mere logical operations. Hence rationality for Lonergan includes but goes beyond formal logic. Decisions and judgments of value need not be ‘beyond rational argument’ in this more profound sense.

Moreover, the ways that practising scientists follow the lead of their questions and figure out how to properly oscillate between classical and statistical procedures reveal their decisions to attempt to understand the concrete empirical universe – or at least some part of it. Their methodological decisions to do so rest upon rational and responsible judgments of value that it is worthwhile to attempt to correctly understand the concrete universe, even if it is in fact non-systematic. But, we may ask, why is it valuable to attempt to correctly understand a non-systematic universe? In what does that value consist?

On the one hand, there is the ‘horizontal finality’ of knowledge as a good in itself – ‘knowledge for its own sake.’ That is to say, scientists and indeed philosophers like Popper take their stand on judgments of value that the achievements of understanding, and understanding correctly, are good within a limited meaning of ‘good.’ Moreover, Popper’s advocacy of falsificationism reveals, further, that it is also valuable to know which understandings are incorrect.

But I believe that we are pushed beyond this limited meaning of ‘good’ if we contemplate the full range of Popper’s affirmation of the value of ‘discoveries which again and again

³⁴ Popper, 37.

³⁵ *CWL* 3, 306.

confront us with new and unexpected questions, challenging us to try out new and hitherto undreamed-of answers.' This is an affirmation not just of the knowledge that results from the interplay of classical and statistical methods. It is an affirmation of the value of being led wherever the pure, unrestricted desire leads. This is a matter not just of the value of horizontal, but of vertical finality. In its most general form, that vertical or 'terminal' value is to be known in a judgement that the objective of the unrestricted desire to know, to choose the good, and to love unconditionally is good, and that the pursuit of that objective is worth the commitment of one's life. That 'objective,' Lonergan argues, is God and all that God values and loves.³⁶ In addition, there is also the more limited vertical value that affirms that correctly understanding the systematic/non-systematic/emerging universe is of profound worth for the good of the human race. For human beings can

discover emergent probability; [they] can work out the manner in which prior insights and decisions determine the possibilities and probabilities of later insights; [they] can guide [their] present decisions in light of their future influence on future insights and decisions ... [thereby assuming] responsibility to the future of [humanity].³⁷

These are the proper value-foundations for the truly scientific practices of empirical statistical methods. In the brilliant radiance of these values, the more commonly cited values – winning at gambling, or getting research accepted for publication, or even impacting public policy – pale by comparison. Perhaps a more detailed exploration of the transcendent value of God that grounds the universe and all human pursuits within it would be desirable. But an extended elaboration is beyond the proper bounds of this *Festschrift*.³⁸

³⁶ See *CWL* 3, 686.

³⁷ *CWL* 3, 252-53. See also the larger context of this remark, pp. 250-67. Of course the chapters from *Randomness, Statistics and Emergence* not treated in this essay explore this larger set of issues.

³⁸ See however Patrick H. Byrne, 'Analogical Knowledge of God and the Value of Moral Endeavor,' *MJLS* 11 (1993), 103-136.

Conclusion

On this occasion of honouring Philip McShane, I have endeavoured to recall the great contribution of *Randomness, Statistics and Emergence*. In doing so, I have tried to show how that work, and the work of Lonergan that it advanced, has implications beyond its explicit discussions to issues such as those raised by Karl Popper. I hope that I have succeeded in persuading at least some readers to return to this impressive starting point in McShane's career.

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HUSSERL, LONERGAN, AND PARADOXES OF MEASUREMENT

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Best wishes to Phil McShane on his 70th! His range of interests and expertise in both the natural sciences and in the work of Bernard Lonergan provide a special link between us – not to mention, of course, Joyce and the ancient Celtic myths that underlie our cognitional method, whether or not Lonergan has a prime numbering for these! As for implementation, let's see!

My scientific field is theoretical physics.¹ My philosophical orientation is phenomenology, especially hermeneutical phenomenology, as modified and extended under the influence of Bernard Lonergan's cognitional theory.² In fact, I was al-

¹ During my post-doc at Princeton, I came under the influence of Eugene Wigner who always referred to himself as a chemical engineer. He was the founder of the group theoretic formulation of the quantum theory. Among my publications, those that are most relevant to the philosophy of chemistry, as I understand this from my very limited reading of this new field, deal with (1) quantum logic (Heelan 1974, 1979, 1983a/1987), (2) the group-theoretic structures of observational data (Heelan 1988, 1989a) and thus, (3) the praxis-ladenness rather than the theory-ladenness of scientific data (Heelan 1989b, 1997, 1998, 2002b, 2002c, 2002d). I find myself now in critical dialogue mostly with the work of Hans Primas (Primas 1983) and Harald Atmanspacher (Atmanspacher and Primas 1997). I have great admiration for the views of Primas, tempered, however, with criticism; admiration for his long-term strategy of not excluding the subjective dimension from his analysis of natural science and criticism that he did not pursue this topic further than he did and with philosophical resources, such as the work of Husserl, that were surely available to him. I want especially to thank Jaap van Brakel whose book raised my awareness of the differences between physics and chemistry (Van Brakel 2000).

² Phenomenology is a tradition of thinking that has scarcely been applied to the philosophy of natural science, for historical and cultural reasons

ready deeply under the influence of Bernard Lonergan's work before I went to Louvain/Leuven to study phenomenology as a propaedeutic to my preparation in the philosophy of science. The specific topic of this paper is one close to the center of Philip's interest, namely, to articulate the right balance among theory, experiment, and what Husserl called '*die Sache selbst*' or the 'givenness' of scientific objects as experienced and understood. The method I shall adopt is that of Husserl's phenomenology of perception, as modified by Lonergan's method of 'self-appropriation.' I will be concerned then with the 'constitution' of experimental data in science – any science.³

How data are 'given' in scientific inquiry was much in dispute in the 1950's and 60's when the positivism of the Vienna Circle was challenged by a new generation of philosophers, such as W. Sellars, who showed that the observational 'givenness,' even of a 'pink ice cube,' no less than a scientific 'datum,' is 'laden' with 'theoretical concepts.' The

connected with the aftermath of World War II. Lonergan's acquaintance with *phenomenology* came from a meeting he attended of phenomenologists at Louvain, Belgium, in 1951. This meeting stressed the existentialist side of phenomenology, supported at that time by Louvain. Lonergan did not on that account become familiar with Husserl's interest in the natural science which was not on display at that meeting – see *CWL* 5, 41. The dominant school of the philosophy of science after WW II was led by logical positivism, then by logical empiricism. The source of this influence was principally the Marburg School of Neokantian philosophy, to which Carnap, Cassirer, Felix Cohen, and others belonged (Cf. Primas, 1983, also Friedman, 2000). Presently, logical empiricism – and with it the philosophy of science – is in great disarray, so there is an urgent need to broaden the philosophical understanding of natural science.

³ The term 'constitution' is a technical term with Husserl. An object 'constituted in perception' means that it is structured by the perceiving subject 'intentionally,' that is, for the purpose of presenting to the perceiver a named (or nameable) object of perception different from and over against the perceiving subject. Note: scientific and functional orderings can be incompatible with one another, consequently there is only a contingent connection between the scientific and the functional orderings; for instance, a hammer, even though it may have the geometrical and other technical specifications of a hammer, is a hammer essentially and eidetically only because it actually serves the purposes of a hammer (see Husserl 1960, 1983, 1989).

notion of physics was also changing at that time from a predominantly positive experimental science to a predominantly theoretical science led by Platonic ideas under the leadership of Einstein, Heisenberg, Pauli, and other followers of the University of Göttingen on the mathematizing of physics.⁴ Since the 1960's there has been a consensus among philosophers of science on the 'theory-ladenness' of data. I will show in this analysis that, not one, but two theories are involved in the constitution of a datum. The two theories are isomorphic and can be expressed group theoretically. One applies to the *observer as a noetic* agent, that is, as a perceptual knower; the other applies to the observed as a *noematic* object, that is, as an experimental datum. Of these theories, the one familiar to the philosopher of science is the theory of the scientific object. The other theory is a theory of the scientific observer's essential contribution to the phenomenological constitution of data. This study will show that neither theory in fact plays a definitive role in the constitution of data. These are instead praxis-laden. Such a conclusion would also coincide with that of Primas and Atmanspacher (see references).

In this paper and with respect to terms, by 'object' I mean principally a scientific datum. This is an event occurring usually in the laboratory that manifests to an experimenter the local presence and measure of a named element belonging to a scientific explanatory account, that is, of a datum as distinct from, say, just experimental noise. Other terms for this are a 'scientific phenomenon,' or a 'measurement event'; all are local, particular, observed, described in scientific terms, and recorded by an experimenter. However, 'object' may also at times be used to refer to an abstract conceptual object such as a term of a theoretical model; the context of the discourse will tell where this is so.

The starting point for my reflection is an application of Husserl's eidetic phenomenology of perception to measurement in physics.⁵ From this I go on to the analysis of data

⁴ See Sellars (1963), "Philosophy and the Scientific Image of Man," 1-41. For 'observational givenness' in physics, see Primas and Atmanspacher on 'intuition'; Atmanspacher and Primus (1997); Primas (1984), p. 32.

⁵ I have listed in the references some relevant titles from my published

constitution, and thence, to establish two theses to be stated below. These theses are basic then to cognitive science. They are also philosophical theses applicable, I claim, to any science based on the theoretical understanding of data.

Thesis I: In classical physics, there are, contrary to its mainline tradition, basic ‘uncertainty principles’ for scientific data or phenomena that are analogous to those of quantum physics. These are due to the overlooked ‘entanglement’ of the observer and the observed in the phenomenological constitution of a scientific datum using measuring instruments, and possible ‘complementarities’ in the dynamic interplay of *noesis* and *noema* in relation of observation in the process of measurement.

Thesis II: A quantum object exists and functions as ontologically prior to and independently of the constitution of everyday or classically scientific perceptual space-time(s).

Understanding Measurement

Husserlean phenomenology is both a phenomenological psychology and a philosophy of what is ‘given’ in perception. It claims to be both a ‘science’ and a ‘scientific philosophy’ (cf. Husserl, 1960). I argue that by the term ‘scientific’ Husserl meant scientific by the standards and models of the mathematical physicists who were his contemporaries and colleagues in the Faculty of Philosophy at Göttingen in the early decades of the 20th century. These were the leaders who helped to transform the conception of physics in Germany and later in the larger world during the first half of the twentieth century from that of a principally experimental science in the ‘Baconian empirical’ tradition to that of a principally mathematical-theoretical science in the ‘Newtonian rationalist’ tradition. This transformation involved a change in the perspective from which scientific data were understood. Data once interpreted as positive facts came to be re-interpreted as theoretically-based facts. In this transposition, the influence of the Göttingen school of mathematical physics was paramount. This school of

papers. A complete list will be found on the web site, www.georgetown.edu/heelan. Heelan (1983a/1987) is an early attempt to deal with these problems on the broadest scale; see also Heelan (2002a).

natural science stemmed from Gauss in the 19th century. Through the geometry of Riemann and the algebra of Lie it came to see physics as a set of mathematical models. ‘Physics,’ said David Hilbert in 1901, ‘was too difficult for physicists, they needed the help of mathematicians.’ Besides philosophers, the Faculty of Philosophy in Göttingen at that time also housed natural philosophers who were mathematicians and physicists. Among them were David Hilbert, Felix Klein, Richard Courant, and Emmy Noether (see Heelan 1988, 1989a, Petitot 1999). These were all distinguished leaders of this movement. They were later joined by Einstein and Heisenberg, the two currently most identified with the transformation of physics – and by analogy, the very notion of science – into a branch of mathematics.

Husserl was trained in mathematics as well as in philosophy. He taught philosophy at the University of Göttingen from 1901 to 1916. The new notion of science as tied to mathematical models gave a special privilege, first, to geometry where group theoretic invariance and covariance reigned and, secondly, to the algebra of Lie groups. Influenced by the intellectual and scientific environment, Husserl set about trying to cure the positivistic crisis in the philosophy and psychology of his time by re-doing psychology and philosophy on the model of Göttingen science. Following his earlier works, *Logical Investigations* (orig. pub. 1900 and revised in 1913), and *Ideas I* (orig. pub. 1913) and *Ideas II* (orig. draft. 1913), there came the mature works, *The Crisis of European Sciences* (orig. draft 1936) and his *Cartesian Meditations* (orig. 1929) in which he claimed that phenomenology was to be a ‘scientific philosophy.’ I believe one must read his project as attempting to marry the new definition of science as mathematical and group theoretic with the notion that science had to be essentially about phenomena, i.e., data as perceptual objects.⁶ His clue probably came, I think, from the phenomenological solution of a simple question: how can an extended body ‘given’ in perception be modelled as a covariant spatial structure of the perceptual space-time group? Such a theory would preserve the

⁶ I realise that the use of group-theoretic considerations is also taken to be an important step by chemists and chemical engineers.

form invariance (covariance) of the object-(as-imagined-or-perceived)-in-space-and-time under the space-time transformation group of motions in (imagined-or-perceived-space-time). Assuming that there was an evident isomorphism between the objective ('real') world of things in public space and time and the normative 'given' intuitions of the embodied self (the observer) and phenomena (the observed) as stable and independent 'things' covariant relative to a common and shared perceptual spatial and temporal environment. This gave birth then to phenomenological psychology and to phenomenological philosophy.

What is perceived in science are data. So phenomenology can claim to be a scientific philosophy of scientific data. I will be concerned with the phenomenology of measured data. While this may seem to narrow the notion of experimentation and to fall short of giving recognition to other traditional modes, say, of chemical or biological experimentation based more on the observation of quality-changes than of quantity-changes, the argument to follow holds for quality-changes too.

The theoretical model, of course, purports to 'represent' the real individual perceptual object. This is an empirical, not an abstract, object; it is an intuited sensible particular object, an observed datum seen locally in and against the background of that part of the lived perceptual world that is the laboratory. The perceptual object or datum and its theoretical model are then two different objects; one is something presented to the experimenter in the perceptual world of the laboratory, the other is a mathematical model that purports to reflect accurately the bare objective structure of the former in abstract non-intuitable terms. We ask: with what justification or within what limits do we 'equate' – if that is what we do! – the scientific model with the scientific phenomenon? The question may sound odd to scientific ears because scientists by their training orient their thinking and reasoning objectively, as it were, within just one perspective, that of a universal impersonal viewpoint that privileges theory. In keeping with this perspective, they use the same scientific term for the particular phenomenon and for its theoretical model almost as if these were the same entity. This practice is disturbing because, to use

possibly an extreme example, it risks confusing, say, Number 10 Downing Street with the number, here 10, within the numbered system used to number the houses on Downing Street which may tell you nothing about what it is that is most important to know, namely, that it is the British Prime Minister's official residence. These two numberings belong to different categories. Clearly, some kind of explanation is necessary of how we observers use measurement to link mathematical models with given practical scientific objects, such as data. Going to Husserl, we find an answer in his analysis of perceptual objects in a series of his works, notably in the *Cartesian Meditations*, and a parallel one for scientific objects in his posthumously published work, *The Crisis of European Sciences and Transcendental Philosophy* (Husserl 1976). Let me briefly summarize what here is essential to our inquiry.⁷

Husserl asks: what is involved essentially in perception? When we see, hear, feel, smell, etc., something; that something manifests itself as a stable something by and through a multiplicity of potential appearances or (what he calls) 'Abschattungen'.⁸ We usually translate this German term either as 'appearances (of something)' or 'profiles (of something).' Literally, *Abschattungen* means 'a shadowing forth (of something).' We recall Plato and the Myth of the Cave! We never see a perceptual object as a simple unity, but as a unity distributed over an indefinite multiplicity of ways of appearing in typical situations. The ancient Greek philosophers were puzzled by sensible objects because their appearances changed dynamically all the time while nevertheless being recognised as manifesting one stable and unchanging object. Husserl was the first to note that sets of appearances constituted continuously connected sequences that could be sampled and controlled by the perceiver's movements or actions in relation

⁷ See Petitot (1999) or Heelan (1983a/1987, 1989a) for a more technical account.

⁸ In this paper the term 'appearance' will have the sense of Husserl's term '*Abschattung*' which implies a 'shadowing forth' of some to-be-found perceptual object. This process may or may not be successful; when successful it will be an '*Erscheinung*.' There are terms in English to express this difference in connotation. Other terms more or less synonymous with 'appearance' are 'perspective' and 'profile.'

to the perceived object, and that there could be an infinite variety of such sequences. He noted conversely that the object could independently manifest different sequences of appearances to a perceiver as it was moved in relation to the perceiver. He concluded that the relative movements of observer and observed were connected in perceptual space and time in a way analogous to the inhomogeneous Galilean transformation group of the space and time that perceiver and perceived shared.⁹ His essential point was that the same identical space-time transformation group governs (1) the possible movements and acts of the subject whereby the object is constituted in the subject's perceptual space and time and (2) of the object as constituted within the common worldly space and time that they both inhabit as bodies. Whether the subject moves independently of the object in perceptual space and time or the object moves independently of the subject in their common worldly space and time, both in accordance with the same group, the same identical object shows itself to the observer in the observer's perceptual space and time, and is located in the common worldly space and time that their respective bodies inhabit. Husserl was thus able to claim that perception was made possible because the perceiving subject and the perceived object were linked by an essential condition, namely, the exis-

⁹ Physics recognises three different physical space-time transformation groups: the Galilean group characteristic of Euclidean geometry (assumed by classical mechanics), the Lorentz group (assumed by Maxwell's Equations and Special Relativity), and the Continuous Group (assumed by Gravitation and General Relativity). While it is generally assumed that Euclidean scientific space-time is the unique idealisation of perceptual space-time, Heelan (1983a/1987) has criticised this assumption claiming that perception and pictorial space, unassisted by physical techniques of measurement, is better described by the family of hyperbolic Riemannian geometries. These are incommensurable and incompatible spatial orderings. Although Euclidean geometry is taken to be the normative model for perceptual/scientific objects such as crystals, plants, colours, etc, it is often (mistakenly) taken to be essentially (or eidetically) normative for such objects. Two dubious assumptions tend to lead to this conclusion: (1) that classical (measurement dependent) objects are simple idealisations of perceptual objects, and (2) that Euclidean space-time (based on rigid rods and standard clock measurement) is a unique idealisation of perceptual space-time. See Husserl (1960).

tence of a space-time transformation group common to both subject and object as covariant perceiver and as covariant perceived in the space and time both of the perceiver and of the public shared scientific world.

So far, so good! What the explanation so far given lacks is the capacity to explain the fact that the observer constitutes a single perceptual object – a datum – as out there spatially in the public world and as other than and independent of the act of constitution whereby the individual observer-subject posits the observed object in perceptual space and time. This capacity of human observers to constitute stable perceptual objects that are constituted by the act of observation while being presented as public fact is a primitive, given, ontological, human capacity. According to Husserl, it is the capacity for ‘objectification,’ also called ‘intentionality,’ that is a universal condition of possibility of all human inquiry into the world. An object so objectified is said to be present to the perceiver by its perceptual ‘*eidos*’ or ‘essence.’ Such ‘*eidoi*’ are retained by the subject as concepts and used habitually for recognition, description, and categorisation. Their existence supposes the possession, construction, and retention of these ‘*eidoi*’; they seem to play the role that ‘schemata’ play in Kant’s philosophy, mediating between concepts and sensible intuition. Husserl called the subject’s constitutive activity in perception ‘*noesis*.’ This probes the environment for objects and gives meaning to group-theoretic invariants of sets of possible appearances according to an implicit dynamic plan or ‘schema’ structured by the space and time transformation group of the perceived world. Husserl called the object’s self-manifestation in the world according to its eidetic form, the ‘*noema*,’ or the ‘object normed by its proper set of ways of appearing.’ To what extent the activities of *noesis* and the discovery and constitution of *noemata* are historical, developmental, and potentially creative is a question to which Husserl and Heidegger gave different answers: Husserl chose fixed transcendental a priori norms for both *noesis* and *noemata*; Heidegger chose to take the historical and developmental view (cf. Petitot 1999).

Data: Are they theory-laden or praxis-laden? By abstraction or interpretation?

It is a truism in the philosophy of science that ‘all scientific data are theory-laden’.¹⁰ This phrase was originally coined in the 1950’s by N.R. Hanson (Hanson 1958) to refute the then widespread view that data, qua perceptually given, were intuited facts, free of interpretation; these then were only subsequently networked by a theory. He showed that scientific data made no sense antecedent to theoretical relationships that mutually define their theoretical scientific essence. As far as the logical analysis goes, so far, so good! But what about a phenomenological analysis of data? How do practical data fulfil this logical analysis? How are thought and perception put together? One answer is that the logical analysis is an ‘abstraction’ from what is already there displayed in the practical data and achieved by eliminating the merely irrelevant from consideration. But the elements of most scientific explanations are not displayed in the original ‘given’ to be then separated out by analysis; they are produced with the aid of elaborate technologies in a special laboratory environment that is designed by theory. Data are what are ‘given,’ not at the beginning, but at the end of a piece of basic research; they are understood as phenomena only when the research is completed. Hence, philosophical reflection begins only at the end when the phenomenon can finally be presented to the philosophical inquirer for his/her reflection. Its aim is to understand the phenomenon in terms of how it is constituted as an object of human scientific knowledge. This is what Husserl means by phenomenology as being a science.

But is the phenomenon first given in the form of a rich chaotic background from which data are then ‘abstracted’ by disregarding what is already present in the background but

¹⁰ In the practice of science, the term ‘theory’ usually implies a model insofar as it is related to the world, and one needs to be reminded that within the model the relationships are mathematical while within the world, and between the model and the world, the relationships are just factual. There is much confusion in scientific and philosophical literature about this, particularly where science is viewed from a Pragmatist perspective (see Heelan with Schulkin, 2002c). See also Heelan, especially Heelan (1997, 1998, 2002c), on the praxis-ladenness of scientific phenomena.

irrelevant to the inquiry? Or is it something new, produced by human theory, practice, and objectification? And if the latter, is it just an artefact of human invention, perhaps, a whim? Or does it present itself as something discovered in the world as there but hidden prior to human science, an object long concealed and now revealed for human acceptance, contemplation, and cultural use? It is this last. It is an object in the world long concealed as to its possibility and now revealed in human culture for human acceptance, contemplation, and cultural use, not by 'abstraction' but by 'interpretation.'

How does an observer come to recognise in the given outcome of a measurement the discovery and presentation of a new stable object in the lifeworld of the experimental laboratory? The answer seems to be that we *learn* to do this. Having learned to do this, a well skilled experimenter is capable of accepting a scientific datum unquestioningly, often on the occasion of just one measurement, that is, of one glimpse of what he/she then unhesitatingly pronounces to be there in the world. Such an observer experiences a 'given,' or what Husserl calls, '*die Sache selbst*,' and Primas calls, an 'intuition' of a scientific object. We have this experience ourselves every day with things familiar to us. For example, we glimpse a familiar face ahead of us, we recognise it, and immediately get ready, say, to greet the person in question. However, if a moment later the familiar face turns out to be just a life-size cardboard snapshot, we would quickly know that we were mistaken because the view turns out to be immobile and singularly flat. Now, one single measurement is no more than a single snapshot of something that could, like the life-size cardboard snapshot, turn out to be something quite other than what at first sight it appears to be. We can compare this situation with the duck/rabbit illusion. At the intersection of a particular set of duck images and a particular set of rabbit images there is a single image that coincidentally has the possibility of belonging to the two series of images and so can serve two purposes equally. This illusion illustrates the existence of underlying subjective cognitive structures operating in ordinary perception. A skilled experimenter has developed a similar subjective cognitive structure for the laboratory measurements with which he/she has ac-

quired familiarity and skill. Such hidden structures of measurement exemplify a theory of that which in the measuring subject underlies the praxis of measurement, a cognitive structure that leads the skilled observer eventually to treat the outcome even of a single measurement as praxically a 'scientific datum.'

Husserl wanted to tie down philosophically and scientifically the theory of such intuitive givenness. While Husserl asked the question of everyday perception, I am asking it of measurement. Both experience the 'givenness' of perceptual objects, everyday in one case, scientific in the other. Both are given as stable objects revealed as present both in intuitive sensibility and in the public world only through infinite manifolds of possible appearances structured in such a way as to reveal the presence of a single stable object both in the space and time of the experimenter's sensible intuition and of the public world. It is through this multiplicity of quantitative and qualitative appearances that we come to recognise (what Husserl calls) the 'core meaning' of the kind of worldly being that is 'shadowed forth' in perception.

Revisiting for a moment the seeming truism that scientific data are 'theory-laden', and given now that there are two theories in question, one for the observer and the observer's perceptual space and time, the other for the observed datum in the public world, we can ask: to which does this truism refer? My answer is, to neither, for the recognition of a measured object always occurs in the lifeworld as a contingent empirical act dependent on experimental skill, the discernment of 'all things being equal' in environmental circumstances, and the assessment of the purpose of inquiry. Data then are primarily praxis-laden, based on measurement and on their circumstantial 'givenness' or 'intuitiveness,' that under doubtful circumstances is checkable with reference to the two theories just mentioned. I wish to point out that these conclusions belong to the genre of philosophy; not just sociology, history, psychology, anthropology, or empirical cognitive science. Similar views have been expressed by Hacking (Hacking 1983), Latour (Latour 1987), and some others, but not argued on ultimate philosophical grounds; argued, however, on social

science or common sense grounds.

Before going on to discuss the paradoxes of measurement, let me summarise where we are with Husserl's scientific philosophy of the constitution of a phenomenon as reconstructed for the purposes of this inquiry: *A phenomenon is a perceptual object that is displayed in the dynamic world of perception by a multiplicity of continuously connected appearances which, where measurement is involved, are data. Data are stable appearances of stable scientific objects. The multiplicity of appearances or data is generated by a noetic-noematic intentionality-structure guided by a group-theoretic set of practices satisfying the empirical condition that the phenomenon is maintained in conscious awareness as of stable form under the dynamic variations produced by these practices. These practices follow and contingently fulfil an explanatory model in which the practices are taken to be group theoretic representations of the group of space-time transformations that constitutes the relevant model for the perceptual space-time in which the scientific phenomenon is presented in measurement to skilled scientific observers. The stability of the phenomenon given in perception is then explained as the object constituted by the group-theoretic set of transformations among the multiplicity of its appearances or data. This account also supposes that a phenomenon is always foregrounded against a wide range of backgrounds where 'all other things are equal.'*

Paradoxes of Measurement, Thesis I

Using this analysis of scientific phenomena and data, I will briefly summarise two fascinating but paradoxical philosophical principles about the natural sciences to which they lead. They are the 'Paradoxes of Measurement' mentioned in the title of this paper.

Thesis I. Classical Uncertainty Principles

The first thesis is about the existence of some basic similarities between classical phenomena in natural science and quantum phenomena, such as 'Uncertainty Principles,' 'entanglements,' and 'complementarity.'

To explain what this thesis means: consider two individual experimenters or observers in a suitable laboratory context. S_1

is a first-person observer, and S_3 is a third-person observer. They are looking at the same measurement process but from different perspectives. S_1 is the individual skilled experimenter who is observing the scientific datum, a datum of O ; he takes a certain response of the measuring instrument M as manifesting the present of O under a certain quantity given by the measurement. S_1 makes a report, a report of a first-person witness to an event. S_3 is someone who is observing S_1 's engagement with the physical process of measurement; S_3 's is a scientific eye blind to S_1 's interpretive perceptual act. S_3 sees only M , the measuring instrument in its physicality as a construction of metal, plastic, etc., wired as a physical process, and, of course, S_1 as a physical body. S_3 could be an engineer, a social scientist, a cognitive scientist, or even a skilled experimenter attending just to the experimental setup. S_3 makes a report, a report of a third-person witness to the physical process of measurement.

$$\begin{array}{ccc} S_1 & M & O \\ & & S_3 \end{array}$$

Figure 1

Figure 1 just lists the two subjects, S_1 and S_3 , and the two possible perceptual objects, M and O , each given through one of a set of its appearances without 'entanglements' deriving from perceptual relationships.

$(S_1 + M)$ *observes* O (but M is NOT an object for S_1)

Figure 2

In figure 2, S_1 observes O , the measured datum; the measuring instrument M is in this case a functional part of the operating subject S_1 since it brings into play the measured datum through which O makes its appearance to S_1 in the laboratory.

S_3 observes M (but O is not an object for S_3)

Figure 3

In figure 3, S_3 observes M in one of its appearances, but O is not present to S_3 because the one appearance of M that could be taken as evidence of the measured datum O cannot be at the same time both an appearance of M and an appearance of O to the same observer S_3 . The reason for this is the same as that given for the duck/rabbit illusion; the ambiguous image cannot be seen at the same time as an image of a duck and as an image of a rabbit because an object is perceived only if the entire range of its connected appearances is virtually present through the dynamic noetic-noematic schema in which objective information is virtually exchanged between the observer and the world. This relationship is a kind of dynamic hermeneutical ‘entanglement’ between the observer as a noetic agency and the observed as a noematic responder.

Analogy with Quantum Physics

The analogy between classical physics and quantum physics can be pursued further. Let the dynamic world of multiperspectival classical human perception be modelled by a Hilbert space Ψ where the states of the dynamic world of perception are represented by vectors in this space. Let S_1 and S_3 generate projection operators, $P(S_1) = P_1$ and $P(S_3) = P_3$ on the space Ψ . P_1 generates $P_1\Psi$, the subspace of Ψ that represents the dynamic world of S_1 's perception, call this $\Psi(O)$. P_3 generates $P_3\Psi$, the subspace of Ψ that represents the dynamic world of S_3 's perception, call this $\Psi(M)$. The subspaces, $\Psi(O)$ and $\Psi(M)$, are theoretical representations of the empirical scientific noetic-noematic perceptual horizons of S_1 and S_3 respectively in the Hilbert space representation of the dynamic world of multiperspectival human scientific perception. In the subspace $\Psi(O)$, O is represented as an object but not M; in the subspace $\Psi(M)$, M is represented as an object but not O. Thus, the subspace $P_1P_3\Psi = P_1\Psi(M) = \Psi(O)$ contains O but not M, while the subspace $P_3P_1\Psi = P_3\Psi(O) = 0$ contains neither M nor O. Forming the commutation operator $[P_1P_3 - P_3P_1]$, we find that the commutation operator

$$[P_1 P_3 - P_3 P_1] \Psi(O) = \alpha \Psi(O)$$

where α is some scalar parameter. The commutation operator therefore is not zero. It preserves the form of $\Psi(O)$, and is the basis for a formal analogy between classical physics and quantum physics.

The formal analogy is between pairwise phenomena of classical physics and pairwise phenomena of quantum physics. This analogy becomes apparent only when it is understood that data recognition assumes an identical unconscious group theoretical structure in the viewing subject and in the datum. This common structure describes the ‘entanglement’ of S_1 with O and S_3 with M that preclude their separation. The reason is that S_1 and S_3 embody particular *noetic* orientations towards O and M respectively that shape and are shaped by O ’s and respectively M ’s *noematic* structures as perceptual objects known. Neither can exist apart from the virtual flow of information that establishes S_1 and O , and S_3 and M , as functioning unities of pairs of perceptual knowers and knowns. Each needs the other to establish its respective existence. On this Husserlean account of perception, the basis of the analogy between perception and quantum physics can be expressed in the following way: S_1 is dynamically *entangled* with O , and S_3 with M , in such a way that subject and object are dynamically inseparable; moreover, the respective horizons of S_1 and S_3 are *incommensurable* within the world of human perception in a way analogous to complementary observables in quantum physics, that is, they are constrained factually and hermeneutically by *Uncertainty Principles*.¹¹

Who are First- and Third-party Observers, S_1 and S_3 ?

Returning to the real world: who in real life should be concerned with the results just obtained? Who are S_1 and S_3 and what roles do they play? Clearly S_1 is a scientific researcher in his/her native habitat, the ‘enclosed garden’ of the laboratory. S_3 , however, could have several roles; for example,

¹¹ This is another way of saying that quantum logic is a non-distributive logic of contexts (see Heelan, 1974, 1979 and 1983a/1987 on this topic).

the following: (1) a scientist reflecting critically on the foundations of scientific thinking, or (2) an interdisciplinary scholar concerned to know how to evaluate cross disciplinary factual data, or (3) a philosopher reflecting on the hermeneutic paradoxes of scientific thinking, or (4) a cognitive scientist puzzling how to link the theory/practice methods of modern science to human consciousness. There are lessons that each can draw.

Regarding the foundations of scientific thinking, it seems that, contrary to the traditional expectations of scientists, the thesis that a universal objective space-time exists onto which all factual data can simultaneously be mapped from a single universal point of view that is human, theoretical, and practical proves not to be the case. It may, of course, turn out to be a useful fiction or postulate – Plato’s ‘likely story’ – for certain purposes, for example, for the solution of classes of problems for which the models and practices of, say, classical mechanics are found to be *de facto* successful. However, the thesis stated above is true for any science that is based on the theoretical modelling of factual data. The root of the classical uncertainty is in measurement, where instrumental data are converted into scientific data, not by a textual hermeneutics (or reading) as, perhaps, in the Cartesian view, nor by deriving the higher from the lower by ‘abstraction,’ but by a human embodied object-constituting interpretative process that Husserl called, ‘a noetic-noematic intentionality structure.’ This is not just a scientific thesis but, according to Husserl, it is a transcendental philosophic thesis.

And what science is not so structured? We certainly know that the thesis is true of the quantum physics we presently have and it provides a specially interesting case that will be my second thesis.

Paradoxes of Measurement, Thesis II: Quantum Systems as Disembodied Physical Objects

If ‘to be embodied’ means ‘to have a stable extension in some perceptual space-time,’ quantum systems turn out not to be embodied beings or ‘bodies.’ Quantum systems then seem to exist and function as logically prior to and in some way in-

dependently of the constitution of perceptual space-time(s), everyday or scientific.

While objects disclosed by measurement would be displayed with the anticipation of a classical body, there is no such body in the quantum case; there is only the residue of a bodily presence in the potential set of isolated episodic appearances, its footprints, as it were, in the world when the quantum system is measured. Though these isolated appearances do not constitute a body that fulfils the Husserlean protocol, they are nevertheless more than just signs of an abstract or non-physical presence, they show a momentary local presence in the ‘*place*’ where they appear. It is helpful here to use Aristotle’s notion of an object’s ‘*place*’; this is the smallest closed surface in the perceptual world of the subject that contains the object. A quantum system can be said by the subject to have occupied a place in the neighbourhood of any footprint whenever and wherever a measurement occurs which is in the laboratory. Quantum systems then are objects in the scientific perceptual world because they show their presence within the world even if only in specially prepared places such as the laboratory. They are not, however, classical bodies, though they are certainly physical and material. What relationships they have to the structured perceptual space-time of the laboratory they acquire only by measurement. These relationships are episodic because quantized, and isolated seemingly from the continuous dynamic ordering of perceptual space-time. On that account and despite their disembodied state, they can be said to be objects in a ‘*place*’ in perceptual space of the observer and, consequently, part of the furniture of the observer’s world.

In quantum physics, a scientific object or datum is not just a conceptual object, but it is intuitively given in measurements by the footprint it leaves in the perceptual world of the experimenter. Though as an object, it can be represented locally by a measurement event in the classically modelled scientific world of the laboratory, it does not have an independent covariant extension or space-time environmental structure in that space. Though it is not then an ‘embodied’ object in its own right, it is physical and material since it can have a multiplicity of isolated footprints in the world— the record of a potential

sequence of individual measurements. A quantum object exists and functions ontologically prior to and in some way independently of the constitution of everyday and classically structured scientific perceptual space-time(s).

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References

- Atmanspacher, H. & Primas, H. "Representation of Facts in Physical Theory." *Time, Temporality, and Now*. H. Atmanspacher & E. Ruhnau, eds. Berlin: Springer. 1997. 241-263.
- Friedman, M. *Parting of the Ways: Carnap, Cassirer, & Heidegger*. Chicago: Open Court Press, 2000.
- Hanson, R.N. *Patterns of Discovery*. Cambridge: Cambridge UP, 1958.
- Hacking, I. *Representing and Intervening*. Cambridge: Cambridge UP, 1983.
- Heelan, P. "Afterword." *Hermeneutic Philosophy of Science, Van Gogh's Eyes, and God: Essays in Honor of Patrick A. Heelan, S.J.* B. E. Babich, ed. Dordrecht and Boston: Kluwer. 2002a. 445-459.
- _____. "Phenomenology and the Philosophy of the Natural Sciences." *Phenomenology World-Wide*. A-T. Tymieniecka, ed. Dordrecht and Boston: Kluwer, 2002b. 631-641.
- _____. (with Jay Schulkin). "Hermeneutical Philosophy and Pragmatism: A Philosophy of Science," *Philosophy of Technology, The Technological Condition: An Anthology*. Robert Scharff and Val Dusek, eds.. Oxford: Blackwell's, 2002c. (Same as *Synthese*, 115 [1998], 269-302).
- _____. "Lifeworld and Scientific Interpretation." *Handbook of Phenomenology and Medicine*. S. Kay Toombs, ed. Series in Philosophy and Medicine 68. Dordrecht and Boston: Kluwer, 2002d.
- _____. "Scope of Hermeneutics in the Philosophy of Natural Science." *Studies in the History and Philosophy of Science* 29 (1998): 273-298.
- _____. "Why a Hermeneutical Philosophy of Natural Science?" *Man and World* 30 (1997): 271-298.
- _____. "Experiment as Fulfillment of Theory." *Phenomenology and Indian Philosophy*. D. P. Chattopadhyaya, Lester Embree, and J. N. Mohanty, eds. New Delhi: Council for Philosophical Research, 1992. 169-184.
- _____. "Hermeneutic Phenomenology and the Philosophy of Science." *Gadamer and Hermeneutics: Science, Culture, and Literature*. Continental Philosophy, Vol. 4. H. Silverman, ed. New York: Routledge, 1991. 213-228.

- _____. "Husserl's Philosophy of Science." *Husserl's Phenomenology: A Textbook*. J. Mohanty and W. McKenna, eds. Pittsburgh & Washington: CARP & University Press of America., 1989a. 387-428.
- _____. "After Experiment: Research and Reality." *Amer. Philos. Qrtly.* 26 (1989b): 297-308.
- _____. "Husserl, Hilbert and the Critique of Galilean Science." *Edmund Husserl and the Phenomenological Tradition*. R. Sokolowski, ed. Washington: Catholic U of America Press, 1988. 157-173.
- _____. "The Epistemological Contribution of Ludwik Fleck." *Cognition and Fact*. R. Cohen and T. Schnelle, eds. Dordrecht and Boston: Reidel, 1985. 287-307.
- _____. *Space Perception and the Philosophy of Science*. Berkeley: U of California Press, 1983a (1987 pbk.)
- _____. "Natural Science as a Hermeneutic of Instrumentation." *Philosophy of Science* 50 (1983b): 181-204.
- _____. "Complementarity, Context-Dependence and Quantum Logic." *The Logico-Algebraic Approach to Quantum Mechanics*. C. Hooker, ed. Dordrecht: Reidel, 1979. 161-179.
- _____. "Hermeneutics of Experimental Science in the Context of the Life-World." *Interdisciplinary Phenomenology*. D. Ihde & R. Zaner, eds. The Hague: Nijhoff, 1975. 7-50.
- _____. "Quantum Logic and Classical Logic: Their Respective Roles." *Logical and Epistemological Studies in Contemporary Physics*. R. S. Cohen & M. Wartofsky, eds. Boston Studies in the Philosophy of Science Series, Vol. 13. The Hague: Reidel, 1974. 318-349.
- _____. *Quantum Mechanics and Objectivity*. The Hague: Nijhoff, 1965.
- Heisenberg, W. "Ueber quantentheoretische Umdeutung kinematischer u. mechanischer Beziehungen." *Zeit. f. Physik* 30 (1925): 879-893.
- _____. "Ueber den anschaulicken Inhalt der quantentheoretischen Kinematik u. Mechanik." *Zeit. f. Physik* 43 (1927): 172-198.
- Husserl, E. *Cartesian Meditations*. Trans. D. Cairns. The Hague: Nijhoff, 1960.
- _____. *Crisis of European Sciences and Transcendental Philosophy*. Evanston, IL: Northwestern UP, 1976.
- _____. *Ideas: General Introduction to Pure Phenomenology [Ideas I]*. F. Kerstan, trans. Dordrecht and Boston: Kluwer, 1983.
- _____. *Ideas Pertaining to a Pure Phenomenology: Second Book [Ideas II]*. Dordrecht and Boston: Kluwer, 1989.
- _____. *The Shorter Logical Investigations*. J.N. Findlay, trans. & D. Moran, ed. New York: Routledge, 2001.
- Latour, B. *Science in Action*. Philadelphia: Open University Press, 1987.
- Petitot, J. 1999. "Morphological Eidetics for a Phenomenology of Perception." *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*. Petitot, J., Varela, F.J., Pachoud, B., Roy, J-M., eds. Stanford: Stanford UP, 1999. 330-371.
- Primas, H. *Chemistry, Quantum Mechanics, and Reductionism: Perspectives in Theoretical Chemistry*. Berlin: Springer, 1983.

Sellars, W. F. *Science, Perception, and Reality*. New York: Humanities Press, 1963.

Spiegelberg, H. *The Phenomenological Movement: A Historical Introduction, Vols. I & II*. The Hague and Boston: Nijhoff, 1982.

Van Brakel, J. *Philosophy of Chemistry*. Leuven: Leuven UP, 2000.

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REFLECTIONS ON PROGRESS IN MATHEMATICS

TERRANCE J. QUINN

1. Introduction

The beginnings of mathematics go back to ancient times. Tens of centuries before Greek mathematics, special cases of the sum of squares relation were known in Babylon, China, and India. Standard history texts also discuss early arithmetic and "pre-algebra." Later, in the 3rd - 4th century BC, Euclid attempted something that was radically new, namely, a fully rigorous and comprehensive geometry and number theory. The earlier discoveries for certain right triangles were then raised to a single general formula which now is called the Pythagorean Theorem.

In those earlier times, results were obtained by eccentric individuals, often working in considerable mathematical isolation. Many centuries have passed, however, and (eccentricity of mathematical research aside) the social situation is now quite different. In the 20th century mathematics was "transformed from a cottage industry run by a few semi-amateurs into a world-wide industry run by an army of professionals."¹ So, in contrast to the early times of mathematical discovery (where mathematics was available to only a few), there has emerged a global ongoing complex range of mathematically related disciplines, publications, institutions, conferences, and meetings.

The vitality of mathematics, however, "is conditioned

¹ V. Arnold, M. Atiyah, P. Lax, B. Mazur, eds., *Mathematics: Frontiers and Perspectives* (Providence: Amer. Math. Soc. for the International Mathematical Union, 2000) [hereafter *M:FP*], viii.

upon the connection of its parts.”² What, however, are the “parts” and “connections”? Is there, perhaps, some general pattern to this ongoing enterprise? In other words, is there some recognisable order to the mathematical project, not as in something to be imposed, but an order that can be verified in actual works and collaborations?

A main purpose of this paper is to offer an answer to this question in the affirmative. For there is accumulating evidence for the existence of an eight-fold periodic sequence of functionally related zones of enquiry H_1, \dots, H_8 – where for the rest of this paper these zones will be called *functional specialties*. In particular, each functional specialty would seem to have its own main objective and to involve its own differentiated type of enquiry.

The overall pattern of specialties is somewhat analogous to an 8-term periodic sequence of homology groups, as found, for example, in algebraic topology. In algebraic topology, however, the typical group sequence of interest is “exact,” and so elements that pass through the sequence are quickly annihilated. The sequence of functional specialties for Mathematics is quite different. Specialty zones of enquiry do seem to form differentiated groups of operations, with their proper objectives. But the cyclic structure not only need not annihilate elements, but would seem, rather, to constitute a principle of growth and unity. Results of one specialty are materials for the next. And there would also seem to be vital cross-over relations between the various zones.

A detailed analysis of the periodic sequence of functional specialties in mathematics is not within the scope of the present article. The purpose of this article is to offer merely preliminary evidence, and so to raise the issue as a topic for possible further discussion. And since the question is intended to be generally empirical, suggesting the possible existence of the pattern is not suggesting that individuals or groups of investigators artificially confine their work to any one of the specialties. The initial result is, rather, that these specialties would seem to exist. Indeed, while some authors tend to favor one type of work over another, other authors would seem to

² D. Hilbert, quotation from *M:FP*, ix.

move from one zone to another, sometimes in a single paragraph.

As already mentioned, the contemporary situation in mathematics is, of course, both extensive and complex. There are textbooks in elementary mathematics, graduate mathematics, journals and periodicals emphasising certain areas of “pure” and/or “applied” mathematics, mathematics of physics, of chemistry, of biology, journals and textbooks on mathematics education, mathematics and technology, the history of mathematics, the philosophy of mathematics, mathematics institutions and organisations, and so on. And even within what is sometimes called “pure” mathematics, in addition to subject classification, there seem to be “two cultures,” “mathematicians who regard their central aim as being to solve problems, and those who are more concerned with building and understanding theories.”³ Furthermore, the results of these numerous areas are not independent, but can have influence on each other, sometimes through explicit reference and sometimes through the (often implicit) point of view of an investigator.

A secondary purpose of the paper, therefore, will be to give some first indication of how adverting to the eight specialty zones mentioned may be helpful. The specialties do not occur in isolation, but are functionally related, and so, as mentioned above, reveal a functional unity to Mathematics. Identifying the specialties, therefore, could ground “a coherent ordering of ... zones ... that could help shift the statistics of ... efficiency.”⁴ (Note my indebtedness to McShane for introduction to the functional specialties. See the last paragraph of this paper for more details.)

Following up on Atiyah’s analogy that mathematics is “run by an army of professionals,” armies need as much as possible to be familiar with the terrain, to be aware of possible strategies (both tried and new), to be in control of supply lines, and generally to have efforts well-co-ordinated. For the “Mathematics Campaign,” existence of the specialties suggests

³ W.T. Gowers, *The Two Cultures of Mathematics* in *M:FP*, 65.

⁴ Philip McShane, *A Brief History of Tongue* (Halifax: Axial Press, 1998), 97.

the possibility of finding a strategic division of labour.

Whatever one's individual talents and dispositions in mathematics, in as much as findings are shared, results can be drawn into the developmental dynamic of functional specialization. The long-term possibility would then be for the mathematics community to slowly reach toward improved collaborative control, in ways that would hopefully more efficiently exploit the natural potentialities of the total mathematical enterprise.

2. Past and Future

A first, possibly evident, distinction is between work that is oriented toward the past and work that is oriented toward the future. The mathematics expositor, for example, devotes most of his or her effort to understanding what has been already discovered. Some professional mathematicians, on the other hand, devote much of their effort to finding new solutions, and in many cases to discovering new problems. Again, there are the mathematical social structures of the past and present; and there are the mathematical (and interdisciplinary) structures that may develop (or decline) in the future.

The two orientations are related. For "mathematics has shown a consistent ability to renew itself by a synthesis of preceding work and an infusion of new ideas."⁵ Indeed, what has been learned in the past becomes material for the future. And what is discovered in the future can shed new light on results of the past.

3. Encountering the Past

H₁ Research

Early discoveries were recorded on stone, clay, and papyrus. Groups of scholars formed, sufficiently like-minded to establish schools and libraries; in Europe's medieval times, there were some of the first universities. Undeniably, however, the stories of individuals and communities have not followed any straight course, and each has had its ups and downs. In some cases, libraries were buried under the debris of natural

⁵ M. Atiyah, *Preface to M:FP*, ix.

disaster, or worse, were destroyed by war. Still, artifacts have survived, and in special cases documents themselves have been preserved, cherished perhaps by some collector.

Archaeology emerged and has become its own professional discipline. But, while archaeology includes the retrieval of artefacts, within the context of the total academic enterprise its very name expresses an ulterior motive. For there is the need to rescue the recorded “logos.”

In other words, one of the purposes of archaeology includes providing data not only on how people of previous times lived, but also on what they said. There is, then, the question of meaning. But meanings vary in discipline and in type. So there is also library science, whereby documents, manuscripts, journals, books and other sources are collected, ordered, catalogued.

The first functional specialty H_1 therefore is characterised by its focus on data. This is meant broadly, and so includes all possible types of data, whether stone, clay, papyrus, paper, Braille, PC file, spoken word, and so on. In the *OED*, one of the suggested usages of the word “research” is: “systematic investigation and study of materials, sources, etc, in order to establish facts and reach conclusions.” So, while the name “research” can be used in many ways, in the present context *Research* will be the name used for the first functional specialty of Mathematics. We can then further distinguish *Special Research* as the work of assembling data relevant to some particular question, such as, for example, Hilbert’s view on mathematical development. *General Research* would be the work of archaeology, museums, libraries, etc.

H₂ Interpretation

Within each zone of enquiry, individuals of course both experience and understand. But it is the “large-scale” pattern of the zones of enquiry that is presently at issue, within Mathematics as a whole. So, where the large-scale work of the first functional specialty Research is to provide data, the proper work of the second functional specialty H_2 is interpretation. Research then is not aimless accumulation of random data, but is done “in order to establish facts and reach conclusions.” Ideally, the work of Research is to compile and order data in

ways that could help those working in the follow-up specialty *Interpretation* both understand and express what previous authors meant.

Note that the relation of Research to Interpretation evidently has an inverse relation. For where Research seeks and orders data for Interpretation, Interpretation provides some guidance to Research on what ordering of what data might be significant. (A more profound grounding of both specialties will come from “contemporary general categories.” These emerge in the fifth functional specialty that, in fact, reaches out to all zones.⁶

Without a doubt, the problem of Interpretation is profound. In addition to treatises of mathematical results, there have been influential works on the nature of mathematical understanding, mathematical education, mathematical learning. But what is it to understand mathematics, let alone philosophical statements on mathematical understanding? If one reaches some tentative understanding of a first author, to what extent is it possible to faithfully express that understanding to some further audience?

These are fundamental questions. But the fact remains that Mathematics was an “(on)going concern” long before hermeneutics was discovered as a science. The work of the second specialty therefore does not properly include such fundamental questions. In no way is this intended to diminish the profound significance or necessity of hermeneutics. The present purpose, rather, is to describe and locate a particular type of work that happens to go on in Mathematics, a task that naturally follows on the results of Research. That is, authors read the works of authors and frequently publish reports of their findings to peers. So, keeping questions of efficacy aside for the moment, a type of work occurs that in this paper is being called Interpretation.

H₃ History

Mathematics has been in the making for some time. Millennia have passed since early counting techniques and pre-geometry. As cultures developed, it became possible (and

⁶ See H₅ Foundations, below.

sometimes occurred) that discoveries of individuals either were shared with contemporaries, or were preserved for people of a later time. In any case, the discoveries of the individual can become the possession of a group. The group need not be a “village community” or even consist of scholars living all at the same time. Indeed, a mathematical group of scholars can consist merely of individuals who have a common base of questions, discoveries, and concerns. One oddity of “time,” perhaps, is that individuals of an earlier time can share their results with those of a later time. Mathematics, then, is in an ongoing community enterprise.

There have been clusterings of interest, stages of development, and unfortunate periods of decline. There is the task, therefore, of determining what was going forward, or not. And this reveals the existence of a third functional specialty, which in this paper is being called *History*. Where the second functional specialty focuses on interpreting the results of individuals, the third functional specialty is for determining lines of development of, and within, the mathematical community, of identifying periods of progress and decline, of explaining transitions. History, therefore, seeks to know, as comprehensively as possible, what in fact happened.

H₄ Dialectic

Imagine two friends who are asked to review the activities of their mathematics department over the last decade. A main objective is for them to determine a (partial) history of the department.

Their individual findings may mesh together very nicely. A past department activity familiar to one colleague may be unknown to the other. Pooling their resources, there is the hope, then, of obtaining a fuller account than either of them could manage on their own.

It may also occur, however, that renditions of some events may differ considerably. They may each have different mathematical points of view. Even if they are from the same mathematical area, one colleague may be a senior expert in a particular mathematical discipline, the other perhaps a more junior faculty member. So their grasp, or even awareness, of certain issues and colloquia may differ significantly. In as

much as some differences can be accounted for by their respective stages of development then (in principle at least) the differences could be reconciled. Some differences, however, may (once they are reduced to their roots) be found to be incompatible.

Besides differences in the historical accounts of the department, there may have been also differences operative within the department itself. A particular group may have favoured one area of mathematics, with a corresponding influence on graduate courses and department funding. Again, a chair of the department may have subscribed to a “school of pedagogy,” affecting classroom policies and teaching practices. And so on.

In general, then, not only can different perspectives and viewpoints give rise to differences in written histories, but there may be differences in the lived history of the community itself. Atiyah refers to one of these community differences: He suggests “Arnold as the inheritor of the Poincare-Newton tradition, and Bourbaki as ... the most famous disciple of Hilbert. Bourbaki tried to carry on the formal program of Hilbert of axiomatising and formalizing mathematics. Each point of view has its merits, but there is tension between them.”⁷

One of Gödel’s answers to the question of axiomatisation is his Incompleteness Theorem. Among other things, his theorem proves that no single set of axioms can be a basis for all mathematical theorems. In fact, one consequence of his theorem is the existence of multiplicities of unbounded sequences of higher viewpoints. While Gödel’s result does establish the naivety of Hilbert’s dream of reaching a “singly axiomatised” mathematics, it does not negate the importance of axiomatisation. In a positive sense, it provides some clue for the role of axiomatisation in the development of mathematics. For, besides “horizontal” development within an axiomatic context, there is the possibility of breakthroughs to new and higher contexts. In elementary mathematics, for example, we see arithmetic subsumed by elementary algebra; elementary

⁷ M. Atiyah, “Special Article – Mathematics in the 20th Century” *Bull. London Math. Soc.* 34 (2002), 1-15; 5.

algebra subsumed by group theory; Riemann Integration subsumed by Measure Theory; and so on.

The two traditions to which Atiyah referred have had some bearing on differences in mathematics education. In fact, there would seem to be a number of not only distinct, but in some cases fundamentally irreconcilable points of view. One approach seems to be somewhat in line with the Bourbaki school, focusing on “logical deduction” from axioms. In basic Calculus, for example, a large proportion of student texts begin with definitions (of, for example, “limit,” “continuity” and “derivative”). In the sense of Bourbaki, this approach of starting a text with definitions is logically rigorous. Another approach, less common perhaps, attempts primarily to foster questions and insights that then lead naturally and secondarily to solutions, definitions, techniques, and the emergence of further viewpoints (known to exist from Gödel’s Theorem).

In the Introduction to *A Concrete Approach to Abstract Algebra* W.W. Sawyer states:

In planning ... a course, a professor must make a choice. (The) aim may be to (have) every axiom stated, every conclusion drawn from flawless logic, the whole syllabus covered. That sounds excellent, but in practice the result is often that the class does not have the faintest idea of what is going on. ... On the other hand, ... students (may be lead to) collect material, work problems, observe regularities, frame hypotheses, discover and prove theorems for themselves. The work may not proceed so quickly ... but the student knows what (they) are doing, ... has had the experience of discovering mathematics, ... no longer thinks of mathematics as static dogma learned by rote, (is) ready to explore further on (their) own.⁸

It is well known that the “logically rigorous” approach has not proven to be pedagogically successful. Likewise, the derived approach of focusing on mere symbolic technique has

⁸ W.W. Sawyer, *A Concrete Approach to Abstract Algebra* (Toronto: W.H. Freeman and Co., 1959; San Francisco, Dover Pub, 1978), 1.

also been found to be ineffective. These are matters of high concern to the Mathematical Association of America. In fact, there is a rapidly growing number of professionals working toward developing new adequate pedagogical principles. However, the precise nature of the solution (whatever that solution may be) is not yet part of the general community.

Evidently, much as two colleagues in a department may, with regard to certain issues, have fundamentally different points of view, there can be differences in the mathematics community that are fundamentally incompatible, exerting forces on the community that yield quite different results. Some points of view would seem to foster mathematical and community development, while other points of view would seem to be less beneficial, and even with the best of intentions can prove harmful.

It follows that the first three functional specialties (Research, Interpretation and History) do not fully account for possible encounter with the past. For there can be fundamental differences in histories, histories both written by community members and living histories of the community itself. But no new historical account will answer the questions posed by those differences. Reminiscent perhaps of Gödel's Theorem, results from History can set problems that cannot be solved within History itself. What are needed, therefore, are studies that "are historical in an unusual sense, namely, in virtue of a thematic direction which opens up depth-problems quite unknown to ordinary history."⁹ What is called for then is a further viewpoint, indeed, a further specialty. In this paper, this fourth specialty is called *Dialectics*.

The challenge of Dialectics is the challenge of a deeper engagement with past and present achievement, an engagement that will include the effort toward identifying conflicts emergent from History, Interpretation, and Research. Dialectics also will seek possible resolution of these conflicts. Work in this fourth specialty will seek to differentiate between

⁹ E. Husserl, "Essay on Geometry," Appendix to *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*, trans. David Carr (Evanston: Northwestern UP, 1970), 354.

perspectives and viewpoints that can (in principle at least) be reconciled, and which not. Are there results from History or Interpretation that are involved in “singularities” – that is, some kind of internal conflict or self-contradiction, and so are in some way inimical to mathematical development? Can those inconsistencies be reversed and so can results be preserved, at least in part? Are other results, while perhaps incomplete, otherwise compatible with sources of data and performance at all levels? Which are the points of view that are essentially sound and allow for, or even promote, development; and which require modification?

This direction of questioning will need to be allowed its full reach. So when results and perspectives have been found to be consistent with possible development, or when inconsistencies have been removed, there is the further possibility of exploring implications and possible prolongations of such positions. Based on differentiations, directions, potentials already determined, what are some of the consequent lines of development? In summary then, investigating what has been achieved already, the work of Dialectics involves identifying sound positions and remedying unsound positions.

Finally, note that the results of investigators in Dialectics will, of course, also not be immune to differences. In psychiatry there is the need for analysts to be as much as possible aware of their own biases and blocks. The situation in Dialectics is somewhat similar. In order for Dialectics to be efficacious, therefore, investigators will need to perform a similar analysis of their own and each others' results. The work of Dialectics therefore calls for openness, detachment, discernment - like friends from a department trying (in some friendly way, with doses of humour perhaps) to get to and reveal the roots and implications of their differences.

4. Meeting the Future

H₅ Foundations

The fourth functional specialty seeks to determine the best (and the worst) of what has been. In turning toward the future we may ask, what is the best possible? So, if one were looking

forward to the future of a department say, it would be useful to have some understanding of general needs and potentials; of types of work that might go well together; of types of meaning; and even some grasp of the full human potential.

This reveals, therefore, a new (and future oriented) zone of enquiry, which in this paper is called *Foundations*. In the literature, the name “foundations” has been used in several ways, so before going on, a distinction: There are books with titles such as “Foundations of Topology,” which are “foundational” in the sense of usefully providing a more or less complete axiomatic treatment of a particular range of theorems. There is, however, another meaning to the word “foundations.” Where one may seek to determine what is logically first in any particular axiomatic context, one may also seek to determine the very categories and principles of development which not only shape the expansion of results proper to a given context, but also drive toward breakthroughs to new and higher contexts. The fifth functional specialty is concerned with foundations in this second sense.

The results of past achievement (carried to the present by the first four functional specialties) constitute an invitation. The person working in the fifth specialty takes this invitation personally. There is the work of seeking out all possible categories of “best-possible growth.” Part of the purpose of Foundations, therefore, is a type of development that would include “pushing orientations forward heuristically but concretely, toward possible and probable relative invariants.” Note, also, that in as much as invariant groups of operations of functional specialization are verifiable, then they too would be embraced by foundational categorisation.

As mentioned above,¹⁰ foundational development reaches out to and grounds work in all zones of enquiry. Whether or not one makes a study of it, one’s basic orientation influences one’s directions and efforts. In all specialties, therefore, categorial development from Foundations would foster an emerging control of meaning. Note further, that when involved in the work of one of the other functional specialties, one’s foundational stance will also need to be “relatively stable.” For

¹⁰ See n.6.

in that case one's orientation is not a mere enrichment in itself, but also is a functionally operative basis for one's involvement in the work of the other specialty. At the same time, since progress in Mathematics is ongoing and collaborative, it can be expected that new results and materials from any of the functional specialties could provide new data that would call for a return to Foundations - bringing refinement, further development, or even revision.

Each investigator, then, will have some basic orientation. And in some cases there can be memorable turning-points, implicit discovery of new basic directions. As expressed by F. Kirwan: "I have loved mathematics ever since my father showed me my first mathematical proof (from Euclid: 'the three angles inside a triangle are equal to two right angles')." ¹¹ Foundations seeks to discover and commit to the full potential of all such breakthroughs.

H₆ Policies

The fifth functional specialty is part of the forward oriented phase of Mathematics. To some extent, however, it involves a necessary withdrawal. The fifth specialty does not, for example, provide directives on particular issues; neither does it yield new mathematical theorems. Rather, as already discussed, the fifth specialty provides a grasp of, and commitment, to orientations. Following on Foundations, then, there is the need to surrender to the norms and criteria of one's chosen orientation. In other words, there is the need to work with "the issues at hand." The sixth functional specialty is called *Policies*, and its function is to begin a direct engagement in that next forward part of the process.

As it happens, individuals may look to knowing and doing new mathematics. But individuals may also look to knowing and doing their part in the functioning of the mathematical community. What is revealed, therefore, is a bifurcation in the functional flow, a double focus in the future oriented phase of the mathematical enterprise. For, while there is the question of ongoing discovery of mathematical results, there is also the question of the ongoing structuring of the community, as a

¹¹ F. Kirwan, *The Right Choice?* in *M:FP*, 117.

community.

Before working on particular new theorems, however, and before offering specific plans to a department regarding say, its organisation, it could be shrewd to first determine “basic guidelines” that pertain to the situation. In the structuring of a department, for example, there could be guidelines regarding “the mission of a mathematics department,” “library needs and international communications,” “teaching mathematics and the mathematical learning process,” or even “humane principles for social groups,” “group dynamics,” etc, etc, etc. Regarding mathematical discovery itself, there could be counsel regarding worthwhile and promising new directions.

These “basic guidelines,” or rather “policies,” are of course not best deduced in isolation. The good consulting team will learn from past experience. So, reaching toward “true (and good) policies,” the detailed results of Dialectics will necessarily come into play.

Again, we can do no better than go on from wherever we are; and it is the function of Dialectics to fully determine that part of the equation (in all of its implications). In response, Foundations develops and commits to “general field equations,” as it were, on best possible fundamental directions. The sixth functional specialty Policies then makes a start from where we are; is grounded in and enriched by the general possibilities grasped by Foundations; and consequently works toward the development of guidelines, not only for worthwhile mathematical development, but also for community structuring that would promote worthwhile mathematical development. In short, Policies seeks to determine “reaching, relevant, pragmatic truths.”¹²

Some mathematical examples might be useful. In geometry, Dialectics may conclude that Euclid’s geometry had tremendous value, but that it suffered from certain deficiencies in method. It provided Mathematics with a first and extraordinary leap toward system and explanation. Euclid did not, however, clearly distinguish between description and

¹² Philip McShane, *PastKeynes Pastmodern Economics – A Fresh Pragmatism* (Halifax: Axial Press, 2002), 62.

explanation. Consequently, there were certain logical difficulties.

The distinction between description and explanation, however, might be verifiable within the open context of one's foundational stance. One's developing orientation could then provide one with a basis for some grasp of geometric possibility in general. A resulting modest (but significant) mathematical "policy" might then be: *Euclidean Geometry is neither necessary nor self-evident*. Or, something in a more positive fashion: *Adequate axiomatizations of geometries (Euclidean and non-Euclidean) will have definitions that are free of description*.

The mingling of explanation and description has also directly affected the community. For instance, as revealed in Dialectics, there have been influences in mathematics education that have failed to distinguish mathematical understanding from a (mathematically empty and) merely descriptive understanding of symbolic technique. A possible corresponding community policy might be: *Good educational theories, plans, and institutions are verifiably in harmony with growth patterns of native intelligence; and in particular, they foster the emergence of mathematical (as opposed to merely descriptive) understanding*.

Certainly, policies may be understood from various points of view. (Functional specialization does not artificially confine the understanding of an investigator.) The functional role of "mathematical policies" from the sixth specialty, however, is part of the present question. But, following on Foundations, and prior to explanation, there is the possibility of description. The role of Policies, therefore, is well-defined.

In physics, seen light is, to a large degree, similarly described from age to age. Explanations of light, however, have improved with theoretic advance. In a somewhat similar way, by virtue of being descriptive, some policies in some contexts could also be relatively constant. Subsequent explanatory accounts of such constant policies would, though, be provisional, open to ongoing development and revision. This, however, would lead us into the work of the next specialty.

H₇ Systems-Planning

There is, therefore, further work to be done. For following on descriptive policies, we may ascend to an explanatory investigation, appreciation, and elaboration. It follows that there is a seventh functional specialty, which will be called *Systems-Planning*.

If there are directives and counsel on further geometry, what are examples of possible geometries, worked out in accord with best available geometry policies? Thus there is the ongoing development of new mathematical results, with explicit policies serving as helpful signposts.

Again, if there are policies on mathematics education, what is mathematical development? In particular, how is one to understand emergence of new viewpoints, worked out in a context that is fully explanatory?

H₈ Executive Reflection

It is one thing to have reached an explanatory understanding of possibilities. But choices need to be made. What in fact is to be done? This determines a selection-problem that defines the eighth and last functional specialty, *Executive Reflection*.

With regard to ongoing mathematical discoveries, there is the problem of expressing what has been discovered in the previous specialty. What one knows, one may also express. And in general, one expresses less than one knows. So expression requires a selection. What theorems will be published? What will be one's actual contributions? What results will be communicated to one's colleagues in the world community of mathematics scholars?

The world mathematical community, though, is structured. There are institutions, agencies, journals, conferences, all dynamically interlinked. There is, therefore, the actually functioning order of the community. This order, however, is an ongoing project, open to revision.

The object of Executive Reflection, therefore, continues the double-focus on mathematics and the mathematical community. For while selection of mathematical results for communication would contribute to the deposit of mathematical knowledge, this communication occurs within

the context of the actually functioning, concretely ordered mathematical community.

Executive Reflection calls on the accumulated understanding and wisdom of the previous seven specialties. There is the need for selections that would contribute to the advance of both mathematics and the mathematical community. Executive Reflection, therefore, seeks the productive continuation of the mathematical collaborative enterprise.

Executive Reflection is the last of the functional specialties. For selections made in this eighth specialty will determine data that would be material for Research. And so the process cycles, and re-cycles.

Concluding Remarks

We are in a period of history where it may seem that all that one can do is at most keep up with the advances in some one or two specialized areas of expertise. One group of historians might focus on the origins of symmetry groups; one group of mathematicians might work primarily on certain problems in ring theory; one group of educators may enjoy certain types of field work in classrooms; and so on. And as is well known, this type of "subject specialization" has, for many, resulted in academic isolation. Adverting to and developing "functional specialization" promises to help break that isolation by allowing an investigator to be both in more control and to know better exactly how her work might contribute to the total collaborative mathematical enterprise.

Admittedly, already there have been certain notable achievements in interdisciplinary work. Interdisciplinary results in themselves, however, merely provide further instances of subject specialization, although hybrid in nature. Interdisciplinary results therefore provide additional rich material that needs to be included in a comprehensive study of progress.

In addition to the fact that functional specialization can be conceived as an intelligible and coherent model, there seem to be significant ways in which it is verifiable. Is one to attempt interpretation without having access to significant data? Can

mathematical histories be written without knowing what individuals meant? The usefulness of collaboratively seeking sound positions cannot be denied. Perhaps it will be claimed to be a nice idea but not actually possible. Are we then to agree with that? If one is to deny the possibility of identifying categories, then by implication one has already determined the range of possible categorial development, for how else to discuss limitations to such development? So, unless one is to engage in an unfortunate type of self-contradiction, the alternative is to do one's best at foundational development and then to (at least provisionally) commit to the resulting norms and criteria. Before advancing to the development of new mathematics and new community plans, could there not be wisdom in seeking relevant pragmatic counsel? Once there are new discoveries and possible plans, there is always the need to select. And finally, all selection enters into the dynamic concrete structured community, and so produces new data.

Besides the differentiated work of each specialty, and its function relative to subsequent specialties, the total functional unity implies the existence of numerous cross-correspondences. For example, historical knowledge of what has already transpired could be relevant in the development of wise and good policies regarding what is to transpire. Again, consider the relations that will exist between Research and Interpretation.¹³

Functional specialization is, of course, not new. Features of the natural division of labor are implicitly alluded to in Husserl's paper quoted above. For a fuller presentation of the relevant quotations, see McShane's *Pastkeynes Pastmodern Economics*.¹⁴ Also mentioned by McShane in the same text (p. 60) is the fact that "Arne Noess, the father of the Deep Ecology Movement, recognizing (the) disarray (in the movement), arrived at four collaborative layers that correspond roughly to the four forward-reaching tasks described above."¹⁵ Furthermore, a main purpose of chapter 3 of *Pastkeynes* (again,

¹³ See H₂ Interpretation and footnote 6.

¹⁴ *Pastkeynes*, 63-64

¹⁵ *Pastkeynes*, 60; A. Noess, "Deep Ecology and Ultimate Premises," *The Ecologist*, 18, (1998), 131.

same text) is functional specialization in economics. So there is now ample evidence that the eight-fold division of tasks is relevant to the general academic enterprise. As mentioned in the Introduction, however, the present paper is intended only to introduce the possibility of functional specialization within Mathematics. A more comprehensive investigation of source evidence and other issues would certainly be needed.

In 1878, Felix Klein discovered “that a certain surface, whose equation (in complex projective coordinates) he gave very simply as $x^3y + y^3z + z^3x = 0$, has a number of remarkable properties, including an incredible 336-fold symmetry. He arrived at it as a quotient of the upper half-plane by a modular group ... Since then, the same structure has come up in different guises in many areas of mathematics.”¹⁶ The name *The Eightfold Way* was given to a sculpture of Klein’s group¹⁷ because of the eightfold tessellation obtained “after the surface was folded over itself.”¹⁸ There is also “The Eightfold Way” in theoretical physics. Discovered by Murray Gell-Mann and Yuval Ne-eman, the “eight” here refers to the number of generating commutation operators of the symmetry group for strong nuclear interactions.¹⁹

As analogies, both of these Eightfold Ways seem relevant to the division of labor envisioned by functional specialization. Like the method of physics, functional specialization is an empirical process that yields ongoing cumulative results, especially in light of new data from the field. Like Klein’s equation, the eight functional specialties would seem to be deceptively easy to describe, but potentially would admit numerous internal correlations of wide application. Moreover, the breakdown into two phases of inversely matched zones would seem to correspond to a mirror quotient group structure of a normative four-level ascent from data through to viewpoints.

¹⁶ Silvio Levy (Ed.), *The Eightfold Way – The Beauty of Klein’s Quartic Curve* (Cambridge: Cambridge UP, 1999), ix.

¹⁷ Ibid, Plate 1 following 142. Ferguson’s sculpture is on exhibit at the MSRI, Berkeley, California.

¹⁸ Ibid, ix.

¹⁹ Murray Gell-Mann and Yuval Ne’eman, *The Eightfold Way* (New York: Benjamin., 1964).

Unlike the Eightfold Ways of Klein and Gell-Mann - Neemann just described, the eight-fold way of functional specialization reveals a beauty and structured unity to mathematical progress itself (progress that in the Systematics phase and seventh specialty generated Klein's particular mathematical group).

In *Recent Developments in Integrable Curve Dynamics*²⁰ Calini discusses the "self-induced dynamics," "self-energy" and "core acceleration" of certain "integrable vortex filaments." Functional specialization would reveal the self-energy of Mathematics, and that Progress in Mathematics is a self-induced dynamic core accelerating integrable eightfold community vortex.

In conclusion, I would note my indebtedness to Professor McShane, an indebtedness that will be evident to those familiar with his work on functional specialization in various areas: musicology,²¹ literary studies,²² linguistics,²³ and economics.²⁴ It seems to me that he has enlarged considerably the significance of Lonergan's discovery of the division of labor relevant to theology. He has, indeed, shown that functional specialization meets the emergent needs of all areas of inquiry, and that it grounds an academic ethics.²⁵

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²⁰ Annalisa Calini, in *Geometric Approaches to Differential Equations*, eds., P.J. Vassiliou and I.G. Lisle, *Australian Mathematical Society Lecture Series*, 15 (Cambridge: Cambridge UP, 2000), 56-99.

²¹ Philip McShane, *The Shaping of the Foundations - Being at Home in Transcendental Method* (Washington: UP of America, 1976), chapter 2.

²² McShane, *Lonergan's Challenge to the University and the Economy* (Washington: UP of America, 1980).

²³ McShane, *A Brief History of Tongue* (Halifax: Axial Press, 1998), chapter 3.

²⁴ McShane, *Economics for Everyone* (Halifax: Axial Press, 1998; Edmonton: Commonwealth Publications, 1996), chapter 5.

²⁵ McShane, *Cantower 18*, <<http://www.PhilipMcShane.ca/>>, 2002.

ON INTELLECTUAL CONVERSION¹

GARRETT BARDEN

Intellectual conversion is rare, even among
Lonergan students²

... *alius est actus quo intellectus intelligit lapidem, et
alius est actus quo intellegit se intelligere lapidem...*³

Prelude

One evening at dinner, when I was an undergraduate studying literature in, I think, my third year and so in the academic year 1961-62, Philip McShane introduced me to *Insight* through a puzzle in Euclid: PROPOSITION I *PROBLEM To describe an equilateral triangle on a given finite straight line.*⁴ He added another problem: *to prove that the circles, constructed to solve the first problem, intersect.* I do not remember what clues he gave me, how he disposed the phantasm to elicit understanding but I do remember that I was eating lamb chops and this tiny and publicly unimportant detail shows this to have been a cardinal moment in my intellectual, and not only intellectual, life. I finished the chops (there were two) quickly and spent the evening trying, without success of course, to prove what was

¹ For comments and discussion my thanks to Cyril Barrett, SJ, Patrick Barry, William Desmond, John Dowling, William Mathews SJ, Raymond Moloney, SJ and David O Mahony.

² Philip McShane, "Implementation: the Ongoing Crisis of Method," in this issue, at 24.

³ St Thomas Aquinas, *Summa Theologiae* 1a, q.87, a.3, ad 2m.

⁴ Isaac Todhunter, *Euclid's Elements* (London: Everyman Library / Dent, 1961), 7.

‘visually’ obvious.⁵ I am grateful to Philip McShane for other things, other co-operations, other suggestions, disposals of other phantasms, but this essay is presented to him in thanks for that original moment.

I

Two questions: What is intellectual conversion? Why is naive realism attractive?

The attempt to elucidate intellectual conversion brings with it a peculiar risk. What it is can be asked by one who is not himself intellectually converted but it cannot be answered by him⁶ unless he, in the course of his enquiry, becomes intellectually converted. Someone who is not intellectually converted *cannot* understand what intellectual conversion is. To this conclusion it may be objected that, without being oneself intellectually converted in Lonergan’s sense of the term, it is possible to understand what Lonergan means by “intellectual conversion.” The objection succeeds only in case Lonergan is mistaken. This seems peculiar to cognitional theory. For cognitional theory includes the activity of “objectifying the subject” and, if Lonergan’s account of intellect is correct, then this can be discovered only by the subject who succeeds in that work of objectification. Whoever succeeds will understand and accept Lonergan’s account to the extent that it is exact.⁷

When Lonergan writes of intellectual conversion, what the reader has before him are words that express a theory of conversion and this prompts one to ask if “intellectual conversion” is a theory only⁸ or a personal intellectual shift from one state to another of which the theory is an account. When the student of logic learns the principle of contradiction,

⁵ I suspect most readers will know that this problem cannot be solved using only Euclid’s definitions, postulates, and axioms. That it is “obvious” that the circles must intersect prevented, for several centuries, the discovery of this gap.

⁶ Unless otherwise clear, ‘he’, ‘him’, and ‘his’ are used in their epicene sense.

⁷ *Method*, 20.

⁸ It is true that every discovery is a shift from one state, that of not understanding, to another, that of understanding.

what he learns is an account of a spontaneous, although developed, intelligent practice,⁹ which were it absent, the student could not learn logic. The normal intelligent human adult operates with the principle of contradiction but need never formally learn of it.¹⁰ The normal intelligent human adult asks questions of his environment, attempts to understand, suggests and tests hypotheses, judges and, in practical matters, decides but may never make these activities the object of his investigation. Any suggested account is an objectification of what already goes on; these “conscious and intelligent operations ... as given in consciousness are the rock [upon which one can build and which is] ... the subject in his conscious, unobjectified attentiveness, intelligence, reasonableness, responsibility.”¹¹ Similarly, a correct account of intellectual conversion will be an account of a development that has already occurred or, in the limit, that occurs during the course of the investigation.

II

Every normal human adult asks questions, suggests hypotheses, submits these to the test, judges, and decides. If not every normal adult becomes intellectually converted, then what we are trying to account for is a development that may or may not occur but that may be, nonetheless, a development in a spontaneous direction, a naturally emergent development, an intrinsic finality of mind.¹²

Intrinsic is the conscious orientation from experience through understanding to judgement and decision. What we are oriented towards, what we intend, is Being (what is, reality), and so Being is intentionally intrinsic. We intend what is not yet known. Thus, if I ask if and how a circle and an ellipse are related I intend an answer as yet unknown to me. However, although I consciously intend the answer, I do not formally

⁹ This intelligent practice has not yet developed in, say, a three month old human baby.

¹⁰ In some cultures contradictions are not alone recognized in practice but are referred to, as when someone says of another that he has contradicted himself.

¹¹ *Method*, 20.

¹² *CWL* 3, ch. XV.

know, merely by asking the question, that I intend the answer because I am concentrating on the object defined by the question rather than on the act of questioning. When it occurs to me that a circle is a special case of an ellipse and when I am satisfied with that answer, then I know the answer to that question but I have not yet engaged in the objectification of myself as questioner; I have simply engaged in the conscious and intentional activity of asking and answering a question.¹³ It is one thing to understand the relation between circle and ellipse and quite another to understand my understanding of the relation.¹⁴

The question as to the relation between a circle and an ellipse emerges within a certain culture and can be asked only by humans who have reached both a certain intellectual background and *a certain age*. The human baby cannot yet ask the question and so it becomes a task within the scientific study of human intellectual development to discover how the basic pattern of knowing emerges.¹⁵ The basic pattern of operations involved in knowing and deciding is established as the human infant develops into childhood and adulthood. This development occurs within society, and the emergence of the linguistic question is a crucial step in the effort to make sense of the surrounding world. In the course of development, the child experiences the difference between understanding and not understanding, between being correct and being mistaken.

¹³ The peculiarity of usage here should be roundly admitted. To say “Peter is engaged in the conscious activity of asking a question” is to say that Peter is asking a question. Does Peter know what he is about? As ‘know’ is used here, Peter certainly knows what he is doing: he is asking a question. Does he know that when he asks a question he is looking for an answer? Again, he does know this. Did he not know it, he wouldn’t be asking a question. This ordinary knowing of what one is doing is what Lonergan calls “conscious” and what St Thomas calls *ipsa mentis praesentia*. Of someone who, we suspect, is simply talking in his sleep or in delirium we might ask whether or not he knows that he is asking a question or making a statement and so on. When jesting Pilate asked of truth but did not wait for an answer, did he genuinely ask a question?

¹⁴ *Summa Theologiae* 1, q. 87, art. 3 ad 2m.

¹⁵ What the developing child needs to know, at what intellectual stage he needs to be, before he can genuinely ask and understand the relation between circle and ellipse is a related but distinct question.

This ordinary intellectual and moral development is towards a conscious pattern of intellectual and moral acts that are not yet, and may never become, the object of any formal enquiry. Nonetheless, in everyday language, there is a set of ordinary words that express a preliminary, yet not ordered, account of thinking and deciding. Thus, anyone who asks a question, when asked what he is doing is able at once to say that he has asked a question. Anyone who fails to understand is able to report the failure by saying that he does not yet understand. Anyone who accepts that a suggestion is correct is able to say that that he now judges the suggestion to be correct and, when asked why he accepts the suggestion, will answer that he has grounds or reasons for his judgement and will be able to say, more or less well, what these grounds or reasons are. Anyone who thinks about what is to be done may, when he has decided on a course of action, announce that he has decided. There is, then, in everyday language an objectification of the acting subject, the extent and clarity of which will no doubt differ in different cultures but it seems unlikely that any cultural development would be such that people could ask and answer questions, could make judgements and come to decisions and yet be quite unable to say that they did any of these things.¹⁶

Consider the following matrix

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

If any four numbers in the matrix are added together according to the rules set out below the resultant sum will be 34.

Rules: Choose a number, say, 5, then eliminate the

¹⁶ No doubt infants ask questions and take in answers before they can identify what they are doing in language. It seems unlikely that there should be a language in which this identification remained closed to adults. It is, of course, impossible that there should be a language in which it was impossible to ask questions and give answers.

numbers in the row and column from which 5 is taken [i.e., 6, 7, and 8 from the row and 1, 9, and 13 from the column are eliminated]. Add three other numbers, each chosen according to the same rule, to 5 [e.g., if 2 is chosen 3 and 4 and 10 and 14 are eliminated. 1 and 6 have been eliminated already].

Question: Why is the sum of any four numbers chosen in this way, the number 34?

Someone may well work on this matrix and satisfy himself that indeed the sum is always 34 without understanding why and so may be expected to say: "I don't understand why 34 is always the sum." And when he has understood, he may be expected to exclaim that now he does understand. In saying that he does or does not understand he, in a preliminary way, objectifies his conscious operations. For now he is talking not about the puzzle but about himself.

There is, then, a first intellectual conversion, or development, from infancy to adulthood that consists in the establishment of the mature conscious pattern of intellectual and moral activities. Included in that development is the ability to refer to the activities that make up the pattern inasmuch as the person says: "I understand", "I'm still trying to understand", "I haven't yet made up my mind", "I've decided" and so on.

Intimately connected with this conversion or development is a second conversion. This is a moral conversion that determines the way in which a person conducts the intellectual life. When we ask a question we can attend more or less carefully, more or less casually to the relevant data, more or less intelligently to questions, more or less reasonably to the evaluation of hypotheses. Because we can, as a matter of lived fact, attend more or less carefully, intelligently and reasonably, how we attend is a moral fact. To attend carelessly is intellectually bad. It is also morally bad precisely because we can choose how we attend. To attend carefully is part of the intrinsic morality of the intellectual life.

To be intelligent does not require one formally to know what to be intelligent involves. But it does demand some understanding of what the instruction "Try to understand" means. It is no use asking someone who has not the least idea

of what is in practice involved in understanding, to try to understand the workings of the matrix. Equally, it is no use asking someone to try to understand who does know what is involved but is unwilling to make whatever effort is required of him.¹⁷

Everyone, the Duc de Rochefoucauld remarked, complains of his memory but none of his judgement. And yet there is a specific failure at the level of judgement: to judge on too little evidence or to fail to judge on enough.

The first three transcendental precepts, Be attentive, Be intelligent, Be reasonable regard the pattern of operations in knowing. They are immanent and operative. They are, in one sense, unexpressed.¹⁸ But they are, in another sense, expressed in as much as they are quite commonly used as criticisms of, or exhortations to, others or ourselves: Pay attention, Try to understand, Don't judge too quickly.

The second intellectual conversion takes the intrinsic orientation towards truth as a deliberate goal. Sometimes there is no overriding difficulty against taking truth, however unpalatable, as a goal. If, on the other hand, acknowledgement of the truth in a particular domain would so undermine me that I yield to the temptation to conceal it, perhaps even from myself, the question as to who I am and how I am to be, may press upon me, however strenuously I try to avoid it. There is an existential tension between how I have decided to be and the intrinsic finality that I am. The second intellectual conversion is the deliberate choice of that finality. Moral conversion, as Lonergan writes of it in *Method*, "goes beyond the value, truth, to values generally."¹⁹ This second intellectual conversion is moral conversion to the value, truth.

We are spontaneously curious but this second conversion to truth as a value may include the conversion to discovery as a value. There is the bias that distorts the enquiry in which one is already engaged and this affects everyone for none engages in

¹⁷ What effort is, in practice, demanded will differ from person to person. For someone who is totally ignorant of mathematics, to learn some mathematics will be part of what is demanded of him.

¹⁸ *Method*, 302.

¹⁹ *Method*, 241-242.

no enquiry whatsoever. There is also the cultural and personal inclination to limit enquiry to what is obviously useful²⁰ and against this inclination stands the cultural and personal discovery that knowledge is valuable in itself.²¹ Truth and so Being puts demands on us.

The first intellectual conversion is the spontaneous development of the patterned set of conscious intellectual operations. The second intellectual conversion is the deliberate choice of the value, truth and so “in a sense everyone knows and observes transcendental method. Everyone does so, precisely in the measure that he is attentive, intelligent, reasonable, responsible.”²² The phrase “precisely in the measure that he is” indicates the moral dimension, for each one chooses this measure for himself. Although the moral choice is personal, there is a social and cultural aspect to it, for some cultures are to a greater extent than others the fruit of this choice and continue to encourage this choice. To become intellectually converted in this second sense is one of the accepted and defining values of an open society. Even within such a culture it is far easier and, because far easier commonplace, for the value to be lauded while the accepted practice remains mired in bias. And so, in some domains more than in others, the intellectual history of a society is the history of fashion.²³

With this second intellectual conversion there may emerge the intellectual pattern of experience and the possibility of the discovery and development of the world of theory. The differentiation of consciousness in which there is “a radical opposition ... between the world of community, of common sense, the external world, the visible world and the world of theory.”²⁴ The world of theory is not the inevitable consequence of this second intellectual conversion but relies upon it. The world of theory is a fruit of the intellectual pattern

²⁰ What is “obviously useful” will, of course, differ from culture to culture, occasion to occasion, and person to person.

²¹ *CWL* 3, ch. VI.

²² *Method*, 14.

²³ *Insight*, 292-295.

²⁴ Bernard Lonergan, “Time and Meaning,” lecture September 25th, 1962, typed notes, p. 14.

of experience yet is distinct from it for the intellectual pattern of experience can and does occur in the world of common sense, for example, in jural enquiry.

In the world of theory “things are conceived and known, not in their relations to our sensory apparatus or to our needs and desires, but in the relations constituted by their uniform interactions with one another.”²⁵ The world of theory “is constructed only through a manifold use of commonsense knowledge and ordinary language”²⁶ and this is a slow, difficult, and not inevitable cultural process that depends crucially on this second intellectual conversion and emergence of the intellectual pattern of experience and the discovery of knowledge as a value in itself.

The third intellectual conversion is that to which Lonergan refers by the term ‘intellectual conversion.’ I have written of the first and the second to bring out the fact that the third is in some respects unlike them.

The third intellectual conversion is a discovery and, therefore, the answer to a question. According to Lonergan it is also the eradication of an error. “Intellectual conversion is a radical clarification and, consequently, the elimination of an exceedingly stubborn and misleading myth concerning reality, objectivity and human knowing.”²⁷ As radical clarification, it is a discovery. As the elimination of a myth, that is, of a mistaken account, it is the eradication of an error.

It is a radical clarification concerning reality. Consider a game of chess. Not *the* game but an actual game in progress. Two people are watching the game. One knows chess well; the other knows something of board games but nothing of chess. Do both see what is going on? In one sense, they do and, in another sense, they do not. Each can see what is to be seen. But more is going on than what can literally be seen. What is going on is known by understanding correctly what is seen.²⁸

When one player moves a small piece of wood from one

²⁵ *Method*, 258, and see *CWL 3*, “Index” under ‘Relation(s).’

²⁶ *Method*, 259.

²⁷ *Method*, 238.

²⁸ Whoever understands the game grasps the ‘form’ of the game in St Thomas’ usage. See Wittgenstein, *Zettel* (Oxford: Blackwell, 1967), #143.

place to another on the board, then both onlookers see this. One grasps the sense of the move within the game – he may well understand the move better than the player; the other understands the displacement of the piece as part of the game but can as yet make no further sense of it.

Both acknowledge that what is going on is not grasped simply by seeing the movement of the pieces. The one who knows no chess, knows that he does not grasp the sense of what is going on. The one who understands chess, understands to a greater or lesser extent what is going on. Both know in practice that what is going on is grasped by understanding the sense of the observed movements. In other words, both know, in their intelligent practice, that the reality of what is going on is reached by correctly understanding what they observe. Both know that what is going on is discovered by understanding what they see. Yet another – if convoluted – way of expressing this is to say that an intentional spontaneity, presupposition, or guiding principle²⁹ of their activity is that the reality of what is going on in this game of chess is reached only when they have correctly understood the moves made by the players.

The understanding of the game in progress is subjective in that it occurs in the enquiring subject who correctly understands the game. It is objective in as much as it is correct. As the movement from enquiring into what is going on to the judgement that one has correctly understood what is going on is a spontaneous and conscious pattern of inter-related activities, so there is a corresponding pattern of objectivity. To understand the game correctly the onlooker must follow attentively and accurately the moves that are actually made: he must constantly try to understand these moves and must check his hypotheses as the game progresses. If and only if he succeeds in correctly understanding the game will he have objective knowledge of the game. Only if *someone* correctly

²⁹ See R.G. Collingwood, *An Essay on Metaphysics* (Oxford: Oxford UP, 1940) [hereafter *Metaphysics*]. An operative presupposition may be objectified and expressed as a proposition, as is done above, but as operative in the activity it is not a proposition nor is it usually adverted to. The set of operative presuppositions written of above are the conscious spontaneities of enquiry. Cf. *Method*, 18 and Barden, *After Principles* (Notre Dame UP, 1990), Ch. 5.

understands the game will there be objective knowledge of the game, for objectivity does not occur apart from subjects.³⁰

The delusion that objectivity exists apart from subjects is really an awkward and misleading attempt to grasp the enquirer's self-transcendence.³¹ The enquiring subject in true judgement reaches a truth that is independent of his judgement. Thus, when a correct understanding of the game of chess is reached, what is reached is knowledge of a fact, that is, knowledge of what is the case independently of the judgement. Here again, is a principle or presupposition of knowing; few say,³² and none can coherently hold, that his understanding of the game is correct but that, nonetheless, the game is not as he understands it to be.³³ In other words, X's understanding of the game is correct if and only if the game is as he understands it to be.³⁴

Logic seems independent of subjects but it is so in precisely the same way.³⁵ If it is true that llamas are native to

³⁰ *CWL* 3, ch. XIII; *Method*, ch. 10, §9 and ch. §11, 8.

³¹ In everyday conversation it is sometimes found that 'objective' means 'what everyone holds without question' or 'what is not simply someone's opinion' but the sense of something being true independently of the subject who discovers it to be true is in the background. To claim that a given proposition is objectively true is simply to claim that it is true.

³² Some modern pragmatists and relativists seem to come close to saying this but I suspect that this is because they have, or think that their opponents have, an inflated, obscure, and confused idea of what it is for a proposition to be true or probable. As a prime example of this, see Richard Rorty's essay in *The New Republic*, October 18, 1982. pp. 28-34. Does anyone claim that a particular proposition is true but that what the proposition asserts is not the case? ("S is P" is true, yet S is not P.)

³³ *Method*, 338.

³⁴ I assume here that the correct understanding is intelligently and reasonably associated with the game and not merely correct by chance as might happen were someone to arrive at the correct answer to a sum while having made two unnoticed mistakes that happened to cancel each other. "For, it is said, it is only knowledge if things really are as he says. But that is not enough. It mustn't be just an accident that they are." Wittgenstein, *Zettel*, #408.

³⁵ *Method*, 338. The sentence: "If one considers logical proof to be basic, one wants an objectivity that is independent of the concrete existing subject" might seem to contradict what I have claimed in the text. I think that it does not. My argument is that however much one may want an objectivity that is independent of the concrete existing subject, one cannot

South America and that the animal I am looking at is a llama, then it is true that the animal I am looking at is native to South America. But the conclusion, although valid independently of the subject, and true independently of the subject if the premises are true, is not reached independently of the subject. Similarly, the judgement, “The structure $[(A \supset B \ \& \ A)] \supset B$ is a valid inferential structure” is true independently of the subject making the judgement but the judgement is reached only by the self-transcending subject who makes it. Bergson remarks that one cannot prove a mathematical theorem to someone except by way of his learning to prove it for himself.³⁶

What I have been trying to show in the discussion of the onlookers’ efforts to understand the game of chess is that the presuppositions, principles, or spontaneities of their efforts include a notion of objectivity and reality an adequate account of which will be part of a correct understanding of the pattern of human enquiry. To this adequate account of the inherent and spontaneous notions of objectivity and reality, Lonergan refers when he writes that “intellectual conversion is a radical clarification.”³⁷

This radical clarification is an account. It states that the real is reached in judgement. “The real is, what is: and ‘what is,’ is known in the rational act, judgement.”³⁸ To be able genuinely and personally to affirm this is to have come to, or towards, the third intellectual conversion. It cannot be come to unless one genuinely and personally raises the question to which this account is the answer. “In proportion as a man is thinking scientifically when he makes a statement, he knows that his statement is the answer to a question and knows what that question is.”³⁹

The sentence from *Verbum*, quoted in the foregoing

get it and, hence, one does not get it in logic, however much one may mistakenly think that one does.

³⁶ Henri Bergson, “L’Effort Intellectuel” in *Oeuvres*, 5th ed. (P.U.F., 1991), 943 [orig. *Revue Philosophique*, Jan. 1902]. See also my “Method in Philosophy” in John Mullarkey [ed.] *The New Bergson* (Manchester UP, 1999), 32-40.

³⁷ *Method*, 238.

³⁸ *CWL* 2, 20 and *passim*. See index under ‘Real, Reality.’

³⁹ *Metaphysics*, ch. IV, proposition I.

paragraph, is not difficult to understand at a purely verbal level. It can take on the character of a *mantra*: its users may mistake incantation for conversion. It may be no more than a verbally understood sentence related to no question that the speaker has in fact asked.

“The real”, “reality”, “what is (really) the case” is what we hope to discover when we ask a question and what we in fact discover in a true answer. These are fundamental presuppositions of questioning: the questioner does not yet know the answer to his question; he does not yet know what, in this instance, is the case. Did he already know, he would not ask. But neither would he ask did he not presuppose that to reach a true answer was possible and that a true answer reveals what is the case.

Reflection on the example of the onlookers trying to make sense the game of chess shows that they will not understand simply by looking more carefully. To make sense of a move is quite different from observing, however clearly, that a player moved a piece from one square to another. In a physics that now is elementary but once was not, the scientist who asks how a ball rolls down a slope will be no nearer a solution if he confines himself to observing the movement of the ball. He will try to understand the movement and so must know what counts as understanding within the physics of his time.⁴⁰ His attention is directed to understanding how the ball descends. He knows what he is doing; he knows that his work is guided by a question, he knows when an idea occurs to him (for an idea to occur to him and for him to know this are identical – this is what St Thomas calls *ipsa mentis praesentia*);⁴¹ he knows when he has reached an answer that satisfies him. Nonetheless, what he is asking about is the descent of the ball, not about the character of his thinking.

He may, however, change the focus of his enquiry to ask about his thinking. A curious feature of this new attention to oneself as one comes to know, this noticing oneself coming to

⁴⁰ If the physicist invents a new idea of what counts as understanding, he has radically changed the question and has brought about a ‘paradigm shift’ within the science.

⁴¹ *Summa Theologiae* 1, q.87, art.1c.

know, is that one is not presented with puzzling data that are to be understood. To ask a question is to intend but not yet to know the answer. Consider: why is it that a circle is a special case of an ellipse? Only the reader who does not already know can ask this question.⁴² Only the reader who does not already know and who has the necessary background can hope to answer the question. The question makes puzzling something that beforehand was not puzzling. Before the question emerges, the circle and the ellipse are simply two apparently quite different shapes. In asking about the movement from question to answer there is no *comparable* puzzle. Whoever attends to himself questioning understands at once that the question is oriented towards, looks for, an answer. Whoever notices himself coming to an understanding that yields a suggestion knows at once that this understanding is a suggested answer to the question and makes sense of data.⁴³

Whoever asks why a circle is a special case of an ellipse wants to know something that is not apparent. He knows that he cannot know this by seeing the two figures more clearly – by, say, bringing them into better light. His teacher may bring the two foci of the ellipse closer together with the visual result that the new ellipse is more visually like a circle than was the former figure. The student may see that as the foci of the ellipse approach each other the ellipse becomes more and more like a circle and it may suddenly occur to him that a circle is an ellipse with coincident foci. He may also notice, but is less likely to notice, that the discovery that an ellipse with coincident foci is circular, is reached not by seeing but by understanding. What the enquirer may notice – but may equally overlook – is that the reality of the relation between circle and ellipse is reached when he is satisfied that a circle is a special case of an ellipse. This is a methodological discovery, a crucial feature of which is that it is the discovery of what one

⁴² The question has not disappeared: it does not cease to be a question; only it is no longer an unanswered question. See *Metaphysics*, ch. IV, prop. I.

⁴³ Compare Collingwood, where he writes that every proposition is an answer to a question and cannot be understood unless the question to which it is an answer is understood.

already presupposes. The startling strangeness is coming home and seeing the place for the very first time. As Collingwood remarks: “In expounding these propositions I shall not be trying to convince the reader of anything, but only to remind him of what he already knows perfectly well.”⁴⁴ For the reader already to know perfectly well what Collingwood makes clear, what St Thomas calls *ipsa mentis praesentia* is sufficient.

The startlingly strange discovery is a cardinal moment in a philosophical life. That cardinal moment occurred in and for me during my effort to prove that when the centre of one circle lies on the circumference of another the circles intersect. The story of this is told in the prelude. The startling moment was not the realisation that I could not prove that they intersected. The startling moment was to notice that I could see⁴⁵ that they did *in fact* intersect and could not see, yet understood, that they *must* do so. What must be the case could not be seen, yet was fact. Conversion is personal, autobiographical.⁴⁶

The “appropriation of one’s interiority”⁴⁷ gives clarity about reality and objectivity and from it comes an account of knowing that makes the presuppositions explicit. It is a necessary step in intellectual conversion but for the discovery to penetrate one’s thought explicitly takes time and effort throughout “the long and confused twilight of philosophic initiation.”⁴⁸ The philosophical trajectory is longer than an initiation and lasts a lifetime. Having discovered that reality is reached in correct understanding, one may discover that, consequently, reality is intrinsically intelligible, and when one recognises that reality is intrinsically intelligible, the question

⁴⁴ *Metaphysics*, 23.

⁴⁵ A subtler analysis is required of the proposition “The circles intersect.” *CWL* 2, 86-87; 2 *Coll*, 28, and my “Insight and Mirrors,” *MJLS* 4.2 (October 1986), 102.

⁴⁶ *CWL* 3, 22-23: “The beginning, then, not only is self-knowledge and self-appropriation but also a criterion of the real.” Further, philosophy’s “primary function is to promote the self-appropriation that cuts to the root of philosophical differences and incomprehensions” (*Method*, 85). The importance of autobiography is a constant theme in William Mathews’ work.

⁴⁷ *Method*, 83.

⁴⁸ *Method*, 85. At this point the pages from 83 to the end of the ninth section are crucial.

of the intelligibility of the existence of what in fact exists⁴⁹ may arise. But no question arises inevitably for questions arise in subjects or do not and “wonderment is not something that can be injected or inculcated.”⁵⁰ How one will go on, always remains to be seen for the philosopher, no less than others, can suffer from loss of problems.⁵¹

III

Lonergan commonly writes of intellectual conversion as a shift from a mistaken idea of reality and objectivity to a correct idea. The central feature of the mistaken account is “that all knowing must be something like taking a look.”⁵²

In my account of the radical clarification I have written of it as the making explicit, or the objectification, of already operative presuppositions or spontaneities. I hope to have made it clear that these presuppositions or spontaneities are at work as much in commonsense as in theory. I have not presumed that the person who undertakes the task of radical clarification is committed to a contrary account. I have rather presumed that he is committed to no account whatsoever.

However, contrary accounts are put forward and adhered to. They are mistaken because, and precisely to the extent that, they do not square with the actions for which they presume to account. They can be shown to be mistaken, not by some conclusion derived from unquestionable premises, but only by bringing the person in the grip of error to a personal discovery of the presuppositions of his own actions. It is not possible logically to prove to someone that the real is what is intended in and by questioning, that is, it is impossible logically to

⁴⁹ “It is not *how* the world is that is the mystical but *that* it is.” Wittgenstein, *Tractatus* 6.44; *Method*, 101: “...once that (the universe is intelligible) is granted, there arises the question whether the universe could be intelligible without having an intelligent ground.” Yet whether or not the question arises is an autobiographical fact.

⁵⁰ See Cyril Barrett, SJ, “The Usefulness of God.” *Milltown Studies* 42 (Summer 1998), 23-34; and John Dowling, “Philosophy of Religious Experience,” in Dowling and P.J. McGrath, *Philosophy of Religion* (Dublin: Osaic, 1999), 14ff.

⁵¹ See Wittgenstein, *Zettel*, #456.

⁵² *Method*, 239.

prove⁵³ that questioning intends a reality other than the sum of what is sensed: it is possible only to show this. The person convinced by the showing – and conviction is personal⁵⁴ – is thus intellectually converted, his way of looking at things has been changed.⁵⁵

A different enquiry would discover why such mistaken accounts arise. Why does the naive realist think that he knows the world by looking? Lonergan's reply is that the world of immediacy conforms well enough to the idea that knowing is looking and the "...world of immediacy is the sum of what is seen, heard, touched, tasted, smelt, felt."⁵⁶ This answer transforms into the recurrent claim that the opponent of the critical realist account thinks of the world as the-already-out-there-now.

The suggestion that "the world of immediacy is the sum of what is seen" is open to misconstrual since "what is seen" is less clear than might be thought. In common speech between two people who share the same language and everyday context, one might ask the other: "is that animal a pine marten or a mink?" Suppose the person asked replies that it is a pine marten. The questioner, since a pine marten resembles a mink, might well ask, "Are you sure? How do you know?" Both can see the animal equally well and so it turns out that the assertion that it is a pine marten is an interpretation of what is seen. One of them "sees it as" a pine marten whereas the other does not. But this "seeing as" is not like seeing a cloud as a camel, a whale

⁵³ This is impossible because logical proof depends eventually on indemonstrable premises and we are here working at the level of these. See my *After Principles*. It is not possible to prove to someone that "If A, then B. And A. Therefore B" is a valid argument form: the learner must "see," "grasp," "understand," this. The learner grasps the validity of the argument form in the discovery that he cannot avoid it in his intelligent practice. See G. Isaye, "La métaphysique des simples," *Nouvelle Revue Théologique* LXXXII, No.7 (Juillet-Août, 1960).

⁵⁴ *CWL* 3, 13: "No one else, no matter what his knowledge or his eloquence, no matter what his logical rigour or his persuasiveness, can do it for you."

⁵⁵ Cf. *Method*, 338, and Wittgenstein, *Zettel*, #461; *Philosophical Investigations*, #144. Changed, of course, either from a mistaken view or from no view at all.

⁵⁶ *Method*, 238.

or a weasel.⁵⁷ The everyday response is imbued with habitual understanding.⁵⁸

To return. Before either is sure that the animal is a pine marten both see the animal. If the animal is in fact a pine marten, then what they see is a pine marten. What they see is the real pine marten. Precisely here, I think, is the source of a linguistic confusion that leads people astray. The naive realist slips from the assertion “What I see is the real pine marten” to the assertion “The real pine marten is known by seeing it.” This slippage may well be associated with another common way of talking in which a question such as “Do you know what a pine marten is?” is used as the equivalent of “Can you recognise a pine marten when you see one?” or “Have you any idea at all what a pine marten is – for example, do you know that it is an animal, not a bird?” Before either is sure what animal it is, both see the animal. They see it “as an animal” for their seeing is mediated. The mediation, however, has become so habitual that there is “a deceptive appearance of ‘immediacy.’”⁵⁹

There is, then, a crucial difference between “(conceiving) the real as the empirically experienced”⁶⁰ and judging that what is empirically experienced is real. These are philosophical positions. The person who asserts that what he sees is a pine marten is not taking a philosophical position.

What is meant by the assertion: “The real pine marten is

⁵⁷ As does Hamlet when mad or feigning madness in Act III, Scene II. Neither is it the ‘seeing as’ of which Wittgenstein writes in his discussion of the duck-rabbit figure in *Philosophical Investigations* IIxi. Think of taking a glass of gin for a glass of water. The person who, being thirsty, drank from the glass would say that he had thought it was water. Think of a culture in which a whale is “seen as” a fish.

⁵⁸ See Benedetto Croce’s essay “The Myth of Sensation” [1942] in Sprigg [trans. and Introduction] *Philosophy, Poetry, History* (London: OUP, 1966), 72-76, and in Lonergan’s account of the dramatic pattern of experience in *CWL 3*, ch.VI. §2.5, it is abundantly clear that the kind of knowing at work is not “the elementary type . . . constituted completely on the level of experience” (*CWL 3*, ch. VIII, §2).

⁵⁹ Cf. *Metaphysics*, 34.

⁶⁰ In *CWL 2*, 113 n.33, Lonergan attributes this view to Bergson. Bergson’s position is, I think, more complex. See my “Method in Philosophy.”

known by seeing it”? If what is meant is that when one sees a pine marten it is a real pine marten that one sees, the assertion is correct. If what is meant is that when one sees a pine marten one knows what is to be known of pine martens, the assertion is false and, furthermore, presupposes not simply that ‘knowing’ is like ‘seeing’ but that it is identical with seeing or, more generally, with the sum of sensing the pine marten, hearing it, touching it and so on. The ordinary and correct statement, ‘That is a pine marten,’ is then, by ‘realists,’ thought of as the expression of ‘an immediate apprehension or intuition.’⁶¹

It might well be agreed that knowing the pine marten would have to include dissecting it and naming all the sinews and bones and so on. At an early stage in zoological investigation it is not clear how to understand animals. What the relevant and interesting questions are is not always obvious and paradigm shifts in a science are cardinal changes in the questions asked. At first there will be a tendency towards ever greater observational precision and the accumulation of small insights may pass almost unnoticed because the insights have become habitual and are, so to speak, obvious within the culture. Even the naturalist’s classification may be thought of as no more than careful observation.

In one of the sets of lectures⁶² that led to *Method in Theology*, Lonergan, referring to “Whitehead’s bifurcation of nature – the everyday view of things, trees, animals and so on; and the further theoretical view...” writes of the biologist who goes with his son to the zoo where both look at a giraffe: “The boy notices the long neck and the short tail and so on. What does the father see? He sees an interlocking set of systems, the skeletal system, the muscular system, the digestive system, the vascular system, the nervous system and so on, interlocking and giving you this living thing. And this giraffe is one way of

⁶¹ Cf. *Metaphysics*, 34: “And if I never think at all except in this quite casual and unscientific way, I shall always be content to believe that this is all that knowledge can ever be: the simple ‘intuition’ or apprehension’ of things confronting us which absolutely and in themselves just are what we ‘intuite’ or ‘apprehend’ them as being.”

⁶² “Transcendental Philosophy and the Study of Religion: an Outline,” typed notes, n.d. Ch. 3 “Horizons and Categories,” §4.

having all these systems interlocked and functioning.” More precisely, what the zoologist *sees* is exactly what the boy sees.⁶³ He may recall his habitual knowledge of mammals in general and more specifically ruminants: he may recall more particularly what he knows about giraffes and how they differ from, and are related to, other ruminants. Lonergan continues: “Is it the same animal? Yes. Entirely different apprehensions of the same animal, one the theoretic apprehension, the other the common sense apprehension.” I should prefer to say that the biologist shares his son’s apprehension and goes on, or may go on, from it to the theoretic apprehension. He sees what the boy sees but can think what his son cannot yet think. And yet his seeing is impregnated with his background understanding. But would it be were the animal suddenly to turn on him?

What account is to be given of this common sense apprehension of the pine marten or the giraffe? And it is worth remarking that between the boy and the zoologist are the keeper in charge of the giraffes and the naturalist whose apprehensions, if perhaps still within the realm of common sense, are exceedingly different from the boy’s.

Seeing a giraffe is not a philosophical theory about reality: it is not a theory about itself: it is simply the ordinary apprehension. When Lonergan writes of the “already out there now real”⁶⁴ he is offering an account of an aspect of, or some elements in, that elementary apprehension.

The ‘already out there now real’ is, then, an account of some elements in what the boy looking at the giraffe is doing. The boy comes upon the giraffe. If it is the first time that he has seen a giraffe he will ask what it is, that is, what it is called?⁶⁵ He experiences himself as being with the giraffe in the surrounding world of being with his father, in the zoo, in

⁶³ In his 1962 lecture on “Time and Meaning,” typed notes, p.14, Lonergan uses the same example but writes: “A biologist looks at the same animal (the giraffe). He thinks of it as a unity of systems.”

⁶⁴ *Passim* in his writings, e.g., *CWL 3*, ch, VIII, §2; *Method*, ch. 10, §9.

⁶⁵ “What is it?” is commonly used as the equivalent of “What is the animal called?” and “Do you know what that animal is?” as the equivalent of “Do you know what that animal is called?” But “Is that a pine marten or a mink?”, “Is that a stoat or a weasel”, these ask for more than a name.

sunshine or rain, heat or cold, when his underlying mood is joy or sadness and so on. The giraffe is the focus of attention but he is present to himself as being with the giraffe. The present surrounding world in which he finds himself is given now, yet were he to move from the giraffe to the zebra enclosure he would not suppose that the giraffe no longer existed; nor does he attend to the supposition that the giraffe endures; yet the way in which he is present to himself is within a world that now includes the giraffe. Only the extremely neurally damaged live in a world bounded by the very immediate past and an expectation of only a very immediate future. We live in a world in part constituted by what we now see, hear and smell, in part by memory, including the memory of what we have read and heard, in part by present interest. Common sense questions, understanding, and accepted interpretations penetrate the whole. The ‘already-out there-now-real’ neither is, nor does Lonergan put it forward as, an account of this complex way of being in the world. Rather, it is put forward as an account of elements in the complexity; elements that contribute to the constitution of the present complex experience. At an early stage in a person’s development ‘the already out there now real’ may constitute⁶⁶ an entire way of being in the world: “A world quite apart from questions and answers, a world in which we lived before we spoke...”⁶⁷ Lonergan may in places give the impression that he thinks that we as adults sometimes live in this immediate world: I think to understand him thus is mistaken.

In so far as elements of the original immediate world remain in our ordinary way of being in the world, they are not to be repudiated. The boy at the giraffe enclosure has no theory

⁶⁶ Whether or not the human world, at an early stage of individual development, is constituted entirely by the ‘already out there now real’ is a difficult question within developmental psychology.

⁶⁷ *Method*, 263. See *CWL 3*, ch, VIII, §2. Antonio Damasio’s discussion of what he calls *core consciousness* may be found illuminating here: core consciousness “provides the organism with a sense of self about one moment – now – and about one place – here...” *The Feeling of What Happens* ([1999] New York: Vintage, 2000), 16: see also the third chapter. None but the extremely disturbed lives as adults in the world of core consciousness.

of reality (neither has the zoologist); he takes it as given that he and the giraffe are not identical, that is, he deals with the giraffe as with something other than himself: his presence to himself is as one to whom the giraffe is present as other than himself: for him the giraffe is real. But if he uses the word 'real' to say, for instance, that the giraffe is 'real,' he is not talking about a theory of reality, he simply means that the giraffe is a real rather than, say, a stuffed giraffe or a particularly effective hologram or model.⁶⁸ He can be, and may know that he can be, mistaken about whether or not the giraffe is real in this sense. But that he lives in the real world is utterly taken for granted; to ask whether or not the giraffe is real may be on occasion a question within his ken; to ask whether or not the world including himself is real does not occur to him; to ask whether the real is reached by correctly understanding is a question quite outside his horizon. The boy lives and takes it for granted that he lives in the real world:⁶⁹ he does not ask if the real is reached in sensation or in judgement. He is not a naive realist; he knows the world mediated by meaning. He does not think that he knows it by looking. This is not because he thinks otherwise but because he does not think about the matter at all.

Is the giraffe "already out there now" for the onlooker? The words in this phrase are glossed in *Method*.⁷⁰ For the onlooker who comes upon it, the giraffe is "given prior to any questions about it," it is spatially separate from the onlooker as "the object of extraverted consciousness," it occupies a place in lived space different from the space occupied by the onlooker

⁶⁸ Had he encountered a giraffe only in a story he might well have asked whether or not giraffes were real or, like unicorns and dragons, imaginary.

⁶⁹ In common usage 'real' is used in contrast to 'pretend' or 'imaginary' or 'illusory' etc.: "Is that real money?"; "Is that a real oasis or a mirage?"; "Did the magician really cut his assistant in half?"; "Is the unicorn a real animal?"; "Is he really amused or just pretending?" "He's not living in the real world" is more or less the equivalent of something like this: "His understanding of how things work in society is faulty." The boy "who takes it for granted that he lives in the real world" does not, of course, say this: he just lives in the real world: he takes it for granted in as much as no questions arise.

⁷⁰ 262ff.

for “sensed objects are spatial,” it is present visually to the onlooker at this moment “for the time of sensing runs along with the time of what is sensed.” Finally, the giraffe “is *real*: for it is bound up with one’s living and acting and so must be just as real as they are.”

But here emerges an ambiguity. Writing of the intellectual pattern of experience in the fourteenth chapter of *Insight*, Lonergan says that “when some other pattern is dominant, then the self of our self-affirmation seems quite different from one’s actual self, the universe of being seems as unreal as Plato’s noetic heaven, and objectivity spontaneously becomes a matter of meeting persons and dealing with things that are ‘really out there.’”⁷¹ The ambiguity is in the term “objectivity.” Is “objectivity” a term used to identify a feature within the dramatic pattern of common sense experience, or does it refer to a mistaken account of objectivity?

Commonly when Peter meets Paul he sees him, hears him, talks to him, touches him, smells him. He may not see him for he may be blind: he may not hear him for he may be deaf and so on, but if Peter senses Paul in no way whatsoever, he does not meet him. To meet another person includes sensing him and this is the experiential component in the meeting. But Peter tries to make sense of Paul-as-experienced.⁷² In his meeting there are three components to objectivity even if he does not know of them. Yet here are three perfectly ordinary questions that, later, might be addressed to Peter: did you meet Paul? what did you think of him? are you sure of your opinion?

Peter and Paul do not meet “in a world quite apart from questions and answers, a world in which we lived before we spoke and while we were learning to speak, a world into which we try to withdraw when we would forget the world mediated by meaning...”⁷³ That is not how we meet each other.⁷⁴ Neither

⁷¹ *CWL* 3, 411. This passage is quoted in McShane, 24.

⁷² Much of the ‘making sense’ is, of course, habitual. Peter at once ‘sees Paul as,’ say, a human adult.

⁷³ *Method*, 273.

⁷⁴ We meet each other daily with greater or less subtlety, honesty, affection, love, dislike, envy, hatred. To know theoretically how we meet each other is an arduous undertaking. Think, of a few among many, of Buber, Unamuno, Sartre, Merleau-Ponty, Lacan, Levinas, Desmond in

do we meet as objects to be understood within the world of theory. Nor should we. Nonetheless, to meet each other demands objective knowing.⁷⁵

“The naive realist knows the world mediated by meaning but thinks he knows it by looking.” If this is true, what the naive realist thinks is mistaken. His thought is at odds with his thinking; he resembles one who asserts that there is no truth. It is perfectly understandable that someone should have no theory about how he knows the world. But why should someone have a theory so at odds with what actually goes on?

We begin philosophy as adults. We live in a complex interpreted world. We do not see or hear a sentence as a mere sequence of sounds or written shapes. Try to eliminate the “thought” from the foregoing and see the printed letters as nothing but shapes. Meaning seems immediate. Then compare this with looking a page of Chinese characters if you can’t read Chinese. Familiar objects, too, are immediately accepted. We see cups and saucers and spoons. We see coins and banknotes. We see dogs and cats and cows. The questions that gave rise to our present habitual understanding of spoons, cups, saucers, dogs, cats, and so on are lost in our past. The familiarity of everyday habitual understanding conceals understanding.⁷⁶

That the habitual world in which we live is imbued with understanding is concealed because the habitual insights are so obvious and so immediate. Hume noticed that he could not literally see that the fire caused the water in the pan to boil. His error was that, having noticed that he could not *see* the cause, he concluded that cause was not real but a convenient way of dealing with the world. Hume knew that we *lived* in a world mediated by meaning but denied that knowledge of this life-world was knowledge of the world. He knew that he could not see relations; he overlooked that relations are “what insight

recent times. Think of Aristotle’s analysis of friendship.

⁷⁵ Lonergan, “Cognitional Structure,” in *CWL 4*, 220-221.

⁷⁶ When habitual understanding fails the familiar becomes questionable. Think of someone who no longer recognises a spoon. He can see the spoon. He no longer sees it *as a spoon*, but perhaps as an implement, as an ornament or as an oddly shaped piece of metal. Perhaps, like Oliver Sachs’ patient, he sees a glove as a purse for coins of different sizes.

knows in sensitive presentation.”⁷⁷ Knowing that relations were not the object of sense, he thought of them as unreal and of reality as the totality of immediately sensed things, not of facts.⁷⁸ The world thus became unintelligible and intelligence a way of dealing with absurdity. In that context the question of the ultimate intelligibility of existence does not arise; to ask whether the unintelligible is intelligible is doubly absurd. The way from Hume to the present, however tortuous, is not long.

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⁷⁷ *CWL* 2, 42.

⁷⁸ The inverse of Wittgenstein in the *Tractatus* 1.1. See Lonergan on the reality of relations in *CWL* 3, ch.XVI, §2 and in *Divinarum Personarum conceptionem analogicam* (Rome: Gregorian UP, 1959), Appendix III.

MORAL OBJECTIVITY

TAD DUNNE

The Issue

Among the facts of life that youngsters learn, the one about moral authority can remain unresolved for a lifetime. Once they discover that the list of what's right and what's wrong is not cast in stone, they question the moral authority of their parents, religious leaders and government officials. Eventually, they question even their own moral authority. Life teaches them to adjust their assessments of other people, and to reconsider opportunities they think are worth pursuing. They come to understand that anyone's moral authority is essentially a matter of being objective about what is good.

This opens their perspective on what is arguably the most basic issue in moral philosophy: "How do we know what is good?"

To address this question, we should sharpen our focus. We are not asking, "How can I be sure I'm right about what is good?" This is a common question, but it begs our question about what moral objectivity is in the first place. To address our question – How do we know what is good? – we first need to understand what occurs when we make a judgment that something is good, and why such occurrences are valid for knowing what is good. While this may sound terribly academic, the question is profoundly personal. Every time we use terms like "should" or "ought" or "better" or "worse," we assume that we possess a method for knowing what is good. The more each of us understands how we do this, the more intelligence we can bring to acting like responsible persons.

Judgments about good and bad are instances of human knowledge. And while our knowledge has many aspects, the

same issue about objectivity underlies them all: How does our knowledge reach reality? The question has a cognitive aspect and a moral aspect. The cognitive aspect is about how we can know what exists, what has occurred, or what explanations are correct. The moral aspect is about what is good, what is better, or what we ought to do. We can lay a foundation for understanding moral objectivity by looking first at cognitive objectivity.

Cognitive Objectivity: The Question

To good common sense, objectivity is a bit of a myth. Every day we are reminded of how fallible our knowing is. Scientific theories are overturned. People disagree on what happened at a party – a phenomenon recognised by historians who write “A History of Rome,” rather than “*The* History of Rome.” We misinterpret what others say, and often discover that what we thought was an agreement was based on a misunderstanding.

In the meantime, we have practical concerns. We don’t wonder if it’s really raining when we’re standing drenched on a street corner. We think, not in order to *be* right, but just to *act* right. And as long as our actions succeed, we assume that our thoughts are reaching their goal. No need to prove to ourselves that our knowledge reaches reality. In the long run, what counts is simply that we act in ways that contribute to our well being. “Truth” seems nothing more than ideas that work, not ideas that correspond to reality as it really is.

Still, religious faithful believe that God actually exists. Parents drum into children the importance of telling the truth. International relations are based on the assumption that every party *really* has in mind the interests it professes and *really* does not intend acts of aggression from which it promises to refrain. Law courts lay heavy sanctions on witnesses who lie on the stand.

So philosophers pose the question of how cognitional events in the mind reach reality outside the mind. They picture our minds assimilating and organising the data coming in through our five senses. But data is just what is “given” to our minds, originating in reality out there, but not identical with

that reality. So the question arises, What could our minds possibly be adding to incoming data that turns it into knowledge of reality out there?

The Duality in Knowing

Lonergan proposed an elegant solution to the problem by posing a different question. Since his solution relies not on logic but on a highly personal experiment, readers who expect a rigorous proof will be disappointed. But readers who find the experiment convincing will be intrigued at first by his approach, then personally stunned by the realisation of how their minds actually reach reality, and finally, if they have pursued the matter, liberated to conduct scientific and scholarly studies by using procedures grounded in the methods they have personally verified to be proper to the mind.

Commonsense or Theoretical

Where other philosophers were stumped trying to explain how thinking could possibly reach reality, Lonergan realised that we already know that we perform these acts of thinking. By knowing this, we have already reached reality “objectively.” So the starting point for understanding how thinking can be objective would be a personal verification of a basic truth: We *really* think.

The question about objectivity, then, is not *whether* we can be objective but *how to understand* what makes knowing objective. Once we understand how our acts of knowing can validly be called objective, we are in a far better position to actually be more objective in all our inquiries.

At the very beginning of *Insight*, Lonergan invites us to notice that our acts of knowing can occur in two different modes. We know sometimes in the mode of common sense, and sometimes in the mode of theory.

In the mode of common sense we are concerned about how we live together, and what practical steps we might take to improve our lives. We want to know how other people and things are related to our experience, our use, and our advantage. It’s an opportunistic mode. Where there’s explaining to do, we explain how to work things more than how things work. We point; we remember the appearance of

things. Our expressions are mainly descriptive. They involve narratives rich in imagery, vivid nouns and dynamic verbs.

In the mode of theory we are concerned to understand the inner workings of things. We seek to grasp connections between things without immediate regard for personal opportunities they may give us. We rely on explanations devised to mean exactly the same thing in any time or place. We select those pieces of experience that can be explained, and we put aside the rest. We rely on words with technical definitions, and on well-formulated questions. We make connections between very restricted aspects of things. Where a picture depicts all visual aspects of something from a point of view, an explanation links only a few aspects – and not from a “point of *view*” but from a “point of *inquiry*.”

(Lonergan uses the adjective, theoretical, to include not only formal theories, but any attempt to understand causes and relationships independent of our personal role. So “theoretical knowing” can include understanding anything, from knowing how computers work to knowing how spiritual events like knowing and loving work.)

In both modes of knowing, earlier expressions are often followed by later expressions, but each mode has a unique relationship between the earlier and the later expressions. In the commonsense mode, we rely on metaphors that shift in meaning as time goes by. “He was going like 60” used to mean someone driving too fast; on expressways today, it means practically the opposite. But metaphors easily coexist. It makes little difference if we find expressions quaint, as long as we get the speaker’s meaning. However, in the theoretical mode, when a better explanation appears, we consider previous explanations not just quaint but imprecise and mainly irrelevant.

Misunderstanding the Duality

Philosophers who don’t understand the difference between their commonsense and theoretical ways of knowing will blend the two. Usually they will *describe* how the mind *explains*. They will rely on a picture of a thinker over here and a reality over there, with only foggy notions of the fact that the thinker already knows that he or she *really* thinks. On the other hand,

philosophers who realise how their theoretical inquiry differs from their commonsense inquiry will conduct their inquiries based on an intelligent grasp of just what their intelligence actually does.

Mathematicians who don't understand the difference between their commonsense and theoretical knowing will find it difficult to picture how 0.999... can be exactly 1.000.... Now most adults can get the insight that $0.333... = 1/3$, and that when you triple both sides of this equation, you get both exactly 0.999... and 1.000.... But only those who understand that insight is not an act of imagining but rather an act of understanding will be comfortable with this explanation. Among them are the physicists who understand what Einstein and Heisenberg discovered about subatomic particles and macroastronomical events – you can't picture them, but they're intelligible.

Neurobiologists who don't understand this duality in their knowing will support research aimed at discovering the exact cluster of neural synapse activations that constitute a thought. Encouraged by discoveries of locations in the brain where chemical activity corresponds to thoughts, they examine these areas hoping to see – actually see – the complexes of chemical changes that we call thoughts. On the other hand, neurobiologists who understand the nature of scientific understanding seek instead simply to *understand* a correlation between chemical activities in the brain and cognitive operations of intelligent consciousness in the mind.

Scriptural exegetes who don't understand their two ways of knowing are not happy with textual interpretations until they have a rich visual picture of what a biblical figure was actually doing. Those exegetes who do understand are happy if they can explain what the authors had in mind when they wrote down these particular marks for others to read.

Puzzle lovers who don't understand this duality cannot solve the old conundrum about the tree falling in the forest: If there's no one around to hear it, does it make a sound? If we picture the tree falling, we see no reason why it doesn't make a sound, regardless of whether anyone is within earshot. But if we define "sound" theoretically as the impact of air pressure

waves on an eardrum, then there certainly is no sound. The conundrum works because the answer is Yes with commonsense knowing and No with theoretical knowing, and not everyone understands the difference.

Parents, educators, and religious leaders who are oblivious of their two ways of knowing inadvertently retard the intellectual growth in children. At first, children have no alternative but to know in the commonsense mode. Only gradually will their minds expand into theoretical knowing. So, while pictures are necessary to educate them on practical living, so too is an attentiveness to their emerging ability to seek explanations in response to intelligent questions. This is true in spades for their understanding of how to live morally and religiously.

Cognitive Objectivity: Commonsense or Theoretical

“Objectivity” is just a word. As an English word, it represents English-speakers’ currency for exchanging of ideas on how our acts of knowing relate to what we know. So, to understand “objectivity,” we are not aiming to understand what the word “really means” – the typical conceptualist’s error. Instead, following the canons of critical realism, we aim to understand how our acts of knowing produce knowledge of reality.

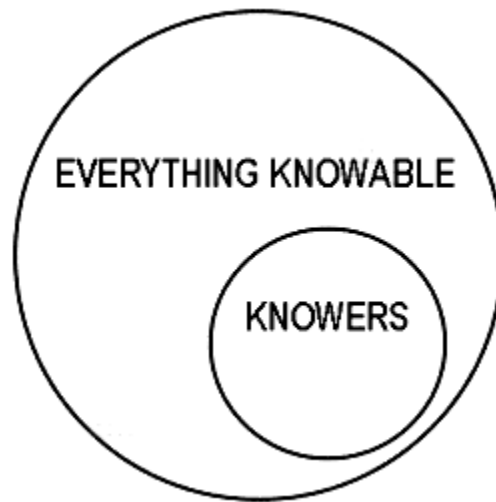
If we have two ways of knowing, it follows that there will be two ways in which our acts of knowing produce knowledge. That is, the term “objectivity” will represent two different understandings of how we know reality. In the commonsense way of knowing, we speak of objectivity to talk about the response of our sensations to what we sense. So we distinguish between a dream and what we see with our waking eyes. The thrill of watching magicians is that they upset our natural sense of commonsense objectivity. What we thought was “out there” really wasn’t “out there” after all.

In the theoretical way of knowing, objectivity will be a property of a relationship between the knower and what he or she knows. In this mode, we need to restrict our speech about objectivity to refer to the response of our intelligence and reason to questions about what really is. To understand this

relationship between knowers and knowns, we should follow the procedures of explanation. I cannot underscore enough how important this is. If, in the commonsense mode, we try to *describe* objectivity, we end up describing the kind of objectivity that goes with commonsense knowledge. But if we want to *explain* objectivity, we must be careful not to expect a description. An explanation does not give a description; it gives an answer to a question for intelligence.

So, to grasp the meaning of objectivity in theoretical knowing, it is important that we remain in an intellectual pattern of experience. This means that we restrict our critical sense to correlations and verifications of conditions, and not also expect that this grasp should include an imaginable picture. We may need images to help give birth to our insights, but our insights don't produce images.

An Image



I believe Lonergan actually does rely on an image when he speaks about objectivity. This image may help us get the insight, but it won't hurt to repeat that the insight itself is not a memory of the image but a grasp of a relationship. I suggest that Lonergan imagined a small circle nesting in a big circle. The image suggests a relationship: The universe of everything

we could possibly know has a unique subclass we call knowers. In this relationship, knowers are not outside of being, since they can also know themselves, but there are many things that are outside of this subclass, namely, everything that cannot know.

In this context, the essential meaning of the term, knower, is someone who knows himself or herself as distinct from other knowers, as well as from beings that cannot know. Lonergan's meaning of the term, objectivity, is based on this relationship between knowers and knowns. This seems to be his point in *Insight*: "there is objectivity if there are distinct beings, some of which both know themselves and know others as others."¹ From this theoretical perspective, then, "being" is understood within a correlation between anything that exists and those existents in the subclass that also want to know. So he defines "being" as "the objective of the pure desire to know."²

The "Notion" of Objectivity

Lonergan proposes that the question of "objectivity" asks about the relationship between our acts of inquiry and the "objects" of those acts. Our initial acts of knowing he names "notions." This is not the commonsense usage, "I have a notion to buy a new car." Nor is it the conceptual equivalent of "idea" – "Where did you ever get the notion that I dislike you?" Rather he uses "notion" to indicate a pre-conceptual inkling. As an inkling, it is the movement of our intelligence heading somewhere by raising questions. As the origin of every question before we conceptualise it, it anticipates some features and excludes others.

Our principal "notion" of objectivity is our assumption that there is a "world" that we know. Within the theoretical perspective, this is not the world "out there" that we know by looking around. It is the world made real to us through the concrete entirety of all correct judgments – our collective judgments about friends, family, clouds, earth, trees, lakes, roads, schools, hospitals, governments, events present and past, events around us and events within us, and so on. We fully

¹ *CWL* 3, 401.

² *CWL* 3, 372.

expect that some of our judgments will prove to be wrong, but when we think, we don't start with a universal scepticism. We start by assuming that most of what we know is the product of correct judgments. We expect that any mistaken beliefs and misunderstandings will eventually show themselves as such, at which time we will revise our judgments.

Our expectation that the real world is not pure illusion is the basis for our notion of "objective." But because our knowing is also a compound of experiencing, understanding, and judging, there will be three corresponding secondary "notions" of objectivity. It's easy to see a conceptual correspondence here between three elements in knowing and three meanings of objectivity. But to really understand the different notions of objectivity, we have to validate in ourselves three distinct but related anticipations.

First, we anticipate that there's a world of everything that's merely given to our minds prior to our understanding it. We also anticipate that a purely experiential residue will remain after we understand what we wanted to about a situation. This "experiential notion" moves us to set aside elements that are irrelevant to our question, even though from other perspectives, these elements may be quite relevant. To clarify this with a contrast, the experiential notion of objectivity is not the familiar question about being right: Did I really see the sight I thought I saw? Hear the sound I thought I heard? Rather it's our prior hunch about what data will be relevant.

Second, we anticipate that our curiosity has built-in norms that are prior to all rules and principles – the norms for being attentive, intelligent, and reasonable. Under the pressure of a question, this normative notion of objectivity focuses our attention on some data while ignoring others. It drives us to intelligently grasp a pattern, to identify a correlation, in order to understand. It gives us criteria for reasonably grasping whether all the conditions required for something to be or to occur have been fulfilled – criteria such as what evidence is relevant, when evidence is sufficient, and how X cannot be both true and false. We count on these aspects of the normative notion to guide us through any inquiry. Again, for contrast, the

normative notion of objectivity is not the idealist's questions about rules for understanding: What are the rules that will ensure objectivity? Upon what principles should all thinking rely? Rather, it's our prior expectation that our thinking has built-in norms that direct us toward answers.

Third, we anticipate that we will continue our inquiry until, but not after, we have reached an answer to our question. This absolute aspect of objectivity is our pure desire to know reality. We experience this desire as long as we inquire, and we cease desiring an answer as soon as we reach one. We call this notion "absolute" because our judgment aims to say what is so, regardless of who made such a judgment. By contrast, this absolute notion is not the dogmatist's questions about certitude: About what can we be absolutely sure? Are there truths that are "absolute"? Rather it is the prior experience of wanting to know how things actually stand, absolutely independent of the fact that we happen to know it.

Within our absolute notion of objectivity, we should distinguish two kinds of affirmation. We can affirm that proposition P is true, and we can affirm that explanation E is correct. For example, I can first make the judgment that my car is out of gas, and then explain why. In both cases, my absolute notion of objectivity heads toward knowing reality. In both cases, I can be wrong. In both cases, if I also realise that I could be wrong, then my judgment is based not on a virtually unconditioned, but on a possibly unconditioned. The content of my judgment is a once-removed affirmation about a possible error in a direct affirmation. "I think I've just run out of gas – I could be wrong." And "I suspect I ran out of gas because my fuel gauge is broken – but I could be wrong."

There is another kind of once-removed affirmation, an affirmation crucially relevant to our overall goal of explaining objectivity in the moral sphere. We can make the judgment that explanation E is the best currently available. That is, we propose an explanation that is patently provisional. We have grasped not a virtually unconditioned but only a possibly unconditioned. Theoretical explanations almost always are provisional. In the Middle Ages, for example, the reigning theory of personality categorised people into either phlegmatic,

sanguine, choleric, or melancholy types. Today, there are numerous typologies of personality, which, taken together, explain far more about our personalities. In these cases, our absolute notion of objectivity aims to assert, not a “final answer,” but a “best available explanation.” Strictly speaking, we should express this kind of theoretical knowing in the syntax, “Explanation E explains more about situation S than any other known explanation.” Later, we will draw the parallel to the syntax of moral knowing, which may be expressed, “Assessment A reveals the moral potentials in situation S better than any other known assessment.”

Objectivity and Authentic Subjectivity

These observations about objectivity may cast light on Lonergan’s celebrated definition, “Objectivity is the fruit of authentic subjectivity.” There are two ways to understand this, ways as different as night and day. The first way is prescriptive. It means something like, “If you want to see things as they really are, then follow the steps, Be attentive, Be intelligent, and Be reasonable.” The commonsense character of this approach is evident. It seeks to understand a practical method by which we personally might know reality. It also appeals to the gnostic in us looking for the trick to feeling sure about things.

The second way is explanatory. It might be expressed, “Objectivity is that three-leveled pattern of knowing which results from anyone being attentive, intelligent, and reasonable.” Here, our understanding grasps the intelligibility intrinsic to knowing. That is, we give a personal meaning for a familiar philosophical term – objectivity – by relating it to events in our consciousness. As such, it occurs in the theoretical mode of knowing. Another way of expressing Lonergan’s definition might run as follows: “You will understand how acts of knowing reach reality by attending to the innate method of consciousness – particularly, to the notions, the dynamics, and the objects of being attentive, intelligent, and reasonable.”

If you still have nagging doubts, I can only invite you to inquire more deeply into your hesitation. I believe you will find that it rests on the ever-recurring assumption that knowing

has to be like looking. For example, you may discover that you have assumed what objectivity ought to be and you were searching for an explanation of how it's possible. Lonergan breaks from this assumption by defining "objectivity" as a correlation within being between knowers-impelled-by-notions and knowns-grasped-in-judgments. Similarly, "objects" are what are intended in questions. Each time you rediscover this, you may again be "stunned by the realisation of how the mind reaches reality" that I mentioned above.

Vocabulary

It may help here to talk about the noun "objects," the predicate "objectivity," and the adjective, "objective." We hear these terms among people of common sense everywhere. We also hear them among theoreticians in every discipline – the natural sciences, art and architecture, literary criticism, historiography, psychology and sociology, religious studies and theology, and, naturally, philosophy. Hearing them, we need to understand the speaker's meaning, alert, of course, to the possibility that the speaker is confused about the duality in his or her knowing.

Objects

When we wonder about what is, we intend being, reality, what exists – "objects." A theoretical definition of objects should encompass both the question we pose and that which we question. An object, then, is what is intended in a question for judgment. This is an implicit definition – defining "questions for judgment" in relationship to the "realities intended by judgment." It is meant to appeal directly to our experience of making judgments, rather than to conceptual categories used by the more familiar explicit kind of definition.³

³ In a response to a question posed during a symposium, Lonergan said, "May I add a final word on definition? All defining presupposes undefined terms and relations. In the book *Insight* the undefined terms are cognitional operations and the undefined relations are the dynamic relations that bind cognitional operations together. Both the operations and their dynamic relations are given in immediate internal experience, and the main purpose of the book is to help the reader to discover these operations and

So, in cognitional theory, anything we wonder about – including people – are all “objects,” while in commonsense parlance, “objects” includes people only in an impersonal or demeaning sense.

Objectivity

A definition of “objectivity” is particularly difficult because we often think of it as a property of any object that exists. A good radio has “receptivity.” A prisoner is in “captivity.” A juggler has a “proclivity.” So it seems to follow that anything that really exists must have the property of “objectivity.” What’s important to notice, however, is that we understand properties through insights, in response to the question, What kind of ...? But about whether something really is, we ask, Is it? In other words, “objects” cannot be verified to exist by an insight into some anticipated property of “objectivity” that they may possess. We verify objects by grasping that all the conditions necessary for it to be so are fulfilled – a very different kind of operation, occurring at a noticeably different level of consciousness.

Grammatically speaking, however, “objectivity” is a property of something or other. Lonergan uses it to denote “What kind of knower” and not some anticipated property of the known. Where the knowns happen to be also knowers, their “objectivity” is what makes them self-transcendent, not what makes them exist. So, from a theoretical viewpoint, it’s important to think of objectivity as a way of being intellectually honest. In contrast, commonsense approaches tend to think of objectivity as a way of being right.

Objective

Sometimes we use the adjective “objective” about a subject and sometimes about an object. Regarding a subject, “objective” points to qualities in the knower who wants to know reality, as when we claim to be “objective” investigators. This adjectival usage is the same in both commonsense and theoretical knowing.

Regarding an object, we say that we intend to reach

their dynamic relations in his own personal experience.” See “Theories of Inquiry: Responses to a Symposium” 2 *Coll*, at 34.

“objective” reality or “objective” truth. Here, “objective” points to the real that we intend to know, as opposed to the merely supposed. Even when we make the provisional kinds of judgments found in the sciences, objective reality is what we intend to approach when we validate hypotheses, knowing that a better hypothesis may come along. Again, this adjectival usage is the same for both ways of knowing.

However, when Lonergan uses these terms, he assumes that the reader actually understands “objective” as modifying a noun understood within the context of a correlation between knowers and knowns.

Unfortunately, newcomers to generalized empirical method easily fall short of this understanding and settle instead for a picture. They assume that terms like “objective inquirer” and “objective reality” must refer to someone really seeing what’s really out there.

Moral Objectivity

Besides cognitive objectivity, there’s moral objectivity. Here we enter the realm of values, where the question of objectivity returns in a tempest compared to the calm waters of cognitive objectivity. Now the issue is existential. What counts is both what we are going to do and what we will make of ourselves. When we make decisions, we have to live with the consequences, which include not only the immediate results, but also the praise or blame of people affected. However, they will praise or blame us more for our moral objectivity, or the lack thereof, than about the consequences they enjoyed or suffered. So we also have to live with ourselves, whether as morally objective or as merely self-regarding.

The Passionateness of Being

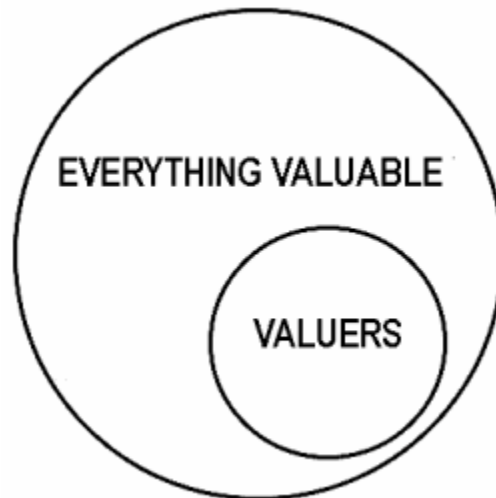
In “Mission and the Spirit,”⁴ Lonergan discussed the nature of morality, particularly how its core norms in consciousness head toward a kind of disinterestedness that’s opposed to mere self-regard. He adds, “The disinterestedness of morality is fully compatible with the passionateness of being.”

⁴ “Mission and the Spirit,” 3 *Coll*, 23-34, especially at 29.

Readers familiar with typical philosophical discussions about “being” will be jarred by this seeming anthropomorphism. How can everything in existence be called passionate? Isn’t “being” simply what’s to be known in correct judgments, the objective of the pure desire to know?

Although Lonergan had always identified being with the good, here, 27 years after publishing *Insight*, he gives an account of the good within a fully moral perspective on human self-transcendence. By articulating the drive toward the good that we experience on a fourth level of consciousness, he completed the foundation for method in the sciences, which formerly he had discussed in light of our drive toward the true. Because theoretical knowing about morality will propose correlations, and not pictures, we can expect that Lonergan’s analysis of the moral dimensions of consciousness will have its total corollary in moral dimensions of all that exists.

An Image



To understand the moral dimensions of the “passionateness of being” more thoroughly, it may help if we return to the image I suggested was at work behind Lonergan’s insight into cognitive objectivity. Besides seeing here a representation of *static difference* within being, we can also see a representation of a *dynamic differentiating*. In other words, this image of the moral order can represent ongoing

improvements. It can suggest to us that within being there is a historical *emergence* of the higher correlative forms of valuers and the valued.

From the vantage of understanding reality as moving, searching, birthing higher and ever higher forms (despite recurring stillbirths), we can envision the knower-known pairs as also emerging valuer-valued pairs. That this emergence is dynamic and blossoming is clear from evolution. That it is also unfinished is attested by the witness of our desires and failures. That it is sadly ambivalent in its outcomes is subtly clear from our consciences and manifestly clear from history. So everything knowable is also everything valuable – either in its present situation or for its potential in a future situation. And every knower is also a valuer – whether by appreciating the good that exists or by intending to capitalise on the potential for the good that he or she envisions.

In this perspective, the field of knowing and knowns linked by the pure desire to know becomes a field of valuing and values linked by the pure desire for value.⁵ Within this more encompassing field, the pure desire for value “sublates” the pure desire to know inasmuch as knowing is itself an improvement of a knower.

We should not restrict “improve” to the products of our actions. The improvements in question are not “out there.” From our theoretical viewpoint, improvements are new relationships emerging between subjects and the realities in their world. They are correlatives of valuing and values. Advertisers may promote a “new and improved” toothpaste, but sales personnel know very well that “improved” really means nothing unless an act of appreciation occurs in customers with teeth. Admiring an evening sunset is likewise an improvement within the field of passionate being, not because “the sun is beautiful” nor, as common sense has it, because “beauty is in the eye of the beholder,” but because a new relationship has emerged between the sun and its beholder

⁵ “Lonergan was asked whether, just as he had spoken of a pure detached desire to know in *Insight*, he would now be willing to identify it with a pure detached desire for value. He answered, yes.” See Introduction, 2 *Coll*, vi

– a link made by the event of admiration. Beauty, we might say, is a burst of passionate being linking the beholder and the beheld.

The Dimensions of Morality

The role of the subject is essential to keep in mind in every consideration of morality. While this may seem obvious, the subject's role is not simple, as anyone familiar with Lonergan's work can attest.

After he referred to the "passionateness of being," Lonergan spelled out some of the complexities in the subject's role: "For that passionateness has a dimension of its own: it underpins and accompanies and reaches beyond the subject as experientially, intelligently, rationally, morally conscious." He went on to describe the various ways in which being expands in the subject: We become aware of deficiency needs; our minds are filled with images that anticipate insights; our internal symbols include the archetypes that guide our emergence as authentic persons. We experience "the mass and momentum of our lives, the color and tone and power of feeling." And we are drawn out of our isolated selves by the offer of camaraderie, of friendship, and of company in our faith.

Within the moral dimension of the total field of passionate being, Lonergan spells out further differentiations as a "structure of the human good." There are the particular objects correlative to our needs and desires. There are the social, technological, and economic institutions correlative to our skills, habits, and insights that ensure the continuing flow of particular objects. And there are the cultural standards correlative to the network of responsible decisions that select among these particular objects and the ordered arrangements that keep them coming. As yet a further differentiation, Lonergan sketched out the dialectic of progress, decline, and redemption that constitutes an intrinsic intelligibility of emergent history. Readers familiar with Lonergan will recognise these analyses. What I want to point out here is simply that they reveal further moral elements within the total field of passionate being of which we are part.

Misconceptions about Morality

Lonergan's theoretical approach clarifies some common errors about morality.

A familiar error is the position that some things like murder and abortion are "intrinsically evil." This view results from the "in here / out there" expectation that some things "out there" are bad "in themselves." This expectation is usually based on the analogy of "facts" considered as sitting in front of a viewer. What makes this erroneous is the assumption that we determine facts by seeing what's there to be seen, along with the inference that we probably perceive wrongness by perceiving wrongness out there in things.

To the theoretical view, however, the only "intrinsic evil" we know of is when a knower judges some act to be responsible and decides not to do it. That is, the intelligible correlation between valuer and valued is corrupted by a failure to let the desire for the valuable drive him or her to responsible commitment.

A similar error is the assumption that while deeds can be wrong, the results of those deeds are morally neutral. So the robbed house, the fooled audience, the changed expectations of an oppressed society are reduced to mere "givens." The moral precept is, "Get used to it." Although some moral philosophers call distorted situations "systemic evils," not all draw the connection from the bad situations to the imperatives felt by anyone being responsible. To the theoretical view, however, shortcomings in the spiritual capital of a community are dynamic correlatives to the pure desire for value – in this case, a pure desire to improve. We are all "responsible" for the evils resulting from basic sin – not necessarily in the sense that we personally committed the basic sin, but in the larger, analogous sense of experiencing the question of what we ought to do to turn things around. Because occurrences of these "ought" questions are realities within the sphere of being, responsibility arises in whomever they occur.

We find a typical religious error in the assumption that "finding God's will" is mainly a cognitive achievement – a judgment of fact about the state of God's mind. This myth has marvellous staying power, despite our scepticism when we

hear self-appointed prophets claim to know what God wants. Lonergan, not surprisingly, includes both the values and the valuers in a single perspective: “The will of God is order in the universe and order within the human soul.”⁶ In other words, what we think of as “God’s will” is not a matter of people doing the “right” things and forgoing the “wrong” as properties determined by the mind of God. It’s people taking responsibility, propelled by their inner moral dynamism. That dynamism is doubly propelled: In the order of spirit, their hearts are flooded with a love for the world and for the people in their particular situation – a love that comes from God. In the order of history, their minds shine with the flesh and blood examples of people who live spiritually exemplary lives. Obedience to these inner moral dynamics doesn’t guarantee certitude about what God wills in any one situation. But God does give moral conviction by pouring forth divine love in our hearts and divine presence in our history in self-transcending men and women.

The fully theoretical viewpoint also clarifies the status of a “right.” The typical view is to consider rights as properties of persons. When they are called “intrinsic” rights, the accompanying observations often convey a picture of rights being “inside” people. This explains, in part, why the idea of rights raises so many unanswerable questions – such as: What exactly are these basic human rights inside us? Do animals have rights inside them? Does a terminally ill man have an inner right to put an end to his inner rights by suicide? If I truly have a right, how could anyone have an opposing right?

From a theoretical approach that anticipates a correlation between values and valuers-with-notions-of-better, we can define basic rights in their correlation with basic duties: *A right is an expectation that others will act authentically.* In other words, the core meaning of “right” is a reasonable expectation about the core duties in others to be attentive, intelligent, reasonable, responsible, and open to love. In the 20th century, there had been a global dawning of awareness of human rights – a significant advance for the race. But from the perspective of emerging being, this dawn has yet to illuminate the core

⁶ *CWL 10, 97.*

duties we experience as transcendental precepts, how they underlie all progress, how they remain permanently vulnerable to bias, and what the nature of any “redemption” must be. How and when this illumination might occur is anybody’s guess. But it’s certainly clear from Lonergan that “method” in any discussion of rights needs to incorporate an understanding of our notions of the real, of the good, of the affective dimension of all being, and of the phenomena of conversion, bias, and healing.

Moral Objectivity

Within the context of the moral dimensions of the passionateness of being, we can now address our question of moral objectivity. Again, our question is not the conceptualist’s question about the meaning of the word “objectivity.” Rather it is the critical realist’s question, How do our value judgments give us knowledge of what is truly good? What we are doing, by the way, is making our latent metaphysics explicit.⁷ That is to say, we are identifying occurrences in our self-transcending selves, seeing how they relate to each other, and defining the basic terms and the relationships among them with which to speak about how moral judgments can be considered valid.

“Notions” of Moral Objectivity

The validity of our moral judgments rests on our moral notions. Again, we are using “notion” in Lonergan’s dynamic and heuristic sense. So “notions of moral objectivity” will be the anticipations we experience when we wonder about value, the good, improving what we have and eliminating what works against human transcendence.

Our principal notion of moral objectivity is the anticipation that the real world includes a network of responsible decisions consistent with intelligent and reasonable knowing, and the shared world that results. (Again, notice the contrast with the commonsense notion that the real world includes “a lot of things that are good.”) Whether or not we notice it, whenever we think of “better,” we are concerned not only about the products of our decisions but also about the

⁷ *CWL* 3, 421-426.

changes in ourselves that occur in every decision. In the same manner, Lonergan's "cosmopolis," Teilhard de Chardin's "Omega Point," Jesus' "Kingdom of God," and every past achievement that we consider good encompasses not only the external consequences of people's deliberations but also their deliberating selves as well.

We saw how, besides a principle notion of cognitive objectivity, there are the secondary notions of experiential, normative, and absolute objectivity that correspond respectively to our attention to raw data, to our experience of the norms of mind, and to our intention to know reality. Each of these three aspects has further dimensions when we inquire about value.

Our experiential notion of moral objectivity will include the anticipations carried by our feelings. Feelings, as Lonergan has defined them, are our initial responses to value. We might define them as "notions of value" because they point toward what is better or worse and guide our questions about what is really better or worse. Inasmuch as our feelings spontaneously distinguish between good, bad, and irrelevant, they constitute an experiential aspect of our moral objectivity.

Our normative notion of moral objectivity will include the criteria by which we test better and worse. All the criteria for cognitive judgments still hold, because they bring us to knowledge of situations. Beyond knowledge of situations, the essential criterion for moral judgments is the absence of relevant questions about value. Our experience of this absence is what we call the "settled conscience," but it can as well be called a "settled consciousness," since what occurs in a judgment of value incorporates what also occurs at the levels of reason, intelligence, and attention.

The absolute notion of moral objectivity is our intention to know what is truly good or better. While our experience of this notion is often muddied by self-serving desires, a person in love experiences the absolute notion more purely, more deeply, and more often.

The "absolute" character of our objectivity does not imply that our judgments are "absolutely right." Our judgments will miss the mark when questions relevant to the issue at hand do

not occur to us. What the absolute character implies is simply that we intend to make a value judgment whose content about value is absolutely independent of who makes such a judgment.

Achieving Moral Objectivity

From an explanatory viewpoint, then, our personal achievement of moral objectivity rests on a correlation between our authenticity and the reality of the situation we are evaluating. That correlation may fall short for any of several reasons. When we are considering a course of action, we always fall short of a full understanding of the situation we aim to change. Earlier, we discussed how much of theoretical knowing expresses itself in the syntax, "Explanation E explains situation S better than any other known explanation." In the same manner, most of our judgments about values can be superseded by judgments that meet more of the relevant questions. Their syntax may be expressed, "Assessment A reveals the moral potentials in situation S better than any other known assessment."

Besides the obscurity resulting from the complexities in any situation, are also obscurities arising on the side of the subject. There are the obscurantisms of bias – neurotic fixations, egotism, group loyalism, and a fear of complexity. There are the more deeply rooted obscurantisms that refuse to wonder about ultimate meanings at all, or to commit oneself to objective values, or to consider what occurs when one considers anything. So when it comes to proposed courses of action, our value judgments are always provisional.

Still, we recognise two areas in moral living where we can be fully objective. The first is about facing the past. We can usually be more objective about the wrongs we did than about the good we achieved. For we often experience the humiliation of knowing that we knew exactly what we ought to do and refused to do it – or, its corollary, we knew exactly what we should *not* have done and yet we did it. Here moral objectivity fills us with shame and drives us straight to repentance with no perhapses. The second is about facing the future. Prior to considering concrete courses of action, the morally converted person recognises that it is better to seek what is truly good

rather than merely self-serving. This value judgment, about the value of pursuing value, carries a 100 percent validity as well as a peaceful conscience.

A Complete Notion

So far we have been discussing the meaning of “objectivity” in knowing what is so, and in knowing what is good. We saw how the larger perspective of morality encompasses our anticipations of what is or could be good beyond our anticipations of what happens to exist. But there is a further anticipation yet. When we seek to know what is valuable, we also intend to do something about it. Our very intention to know what is worth doing is incomplete until we decide to do it.

We might call this a “complete notion” of moral objectivity. This is our anticipation that we will go ahead and decide on the basis of what we value. The term “complete” underscores how being authentic will be incomplete if we fail to go beyond what we know, and beyond what we value, to acting responsibly.

Such a complete objectivity is an ideal that no one reaches continuously, owing to the tragic flaw by which we act against our better judgment. Even when we are objective about what is better, we sometimes turn aside from deciding to act accordingly. When we do this habitually, we withhold intelligent solutions to problems. What is worse, we perversely rewire the already complex wirings of our self-transcendence. We begin to hide from ourselves the very value judgment that we refused to act on. We suppress further questions about the situation that required a moral response from us. We turn a deaf ear to moral voices, those of our neighbours and those of our consciences.

Still, we also have the spark of the divine in us, which we experience as an admiration of good people, a hope to become better persons ourselves, and a heartfelt love for our neighbour. These are what concretely constitute the principal notion of moral objectivity that draws us beyond our self-serving preoccupations toward the complete objectivity that intends to improve the world we share.

Intellectual Conversion about Morality

We have explored how we know what is good. Our purpose has been to explain moral objectivity within the theoretical mode of knowing, rather than merely describe it within the commonsense mode. But Lonergan's approach is fundamentally invitational, not argumentative. He invites us to an intellectual conversion about morality. This requires not merely understanding on our part, but also verification of what we understood. It is verification, after all, that makes any difference in what we know to be *really* good.

We undergo an intellectual conversion when we verify how our self-transcending operations reach the real world and true values. This is a real change in us. It is a change in the entire set of questions we are able to ask. Under such a conversion, we discover that knowing is a self-correcting process, both in ourselves as individuals, and in us together as a people. We personally dethrone moral certitude from the high status it held in our childhoods, and take a higher viewpoint on the status it held in the Middle Ages. In its place we crown progressive and cumulative understanding as the leader of progress. We discover in ourselves the biases of neurosis, egotism, group loyalism, and anti-intellectualism, as well as the deeper damage resulting from the absence of intellectual, moral, or affective conversion. With these discoveries, we bring a critical eye to the words and works of others. We pull aside the curtain labelled Truths and Values, and we reveal a dialectic of personal horizons as their real, dynamic, but heretofore unexplored source. A dialectic of personal horizons takes into account the writer and the written, the speaker and the spoken, the artist and the artwork, with an awareness, sharpened through intellectual self-awareness, of the many ways we settle for myth when wisdom is the harder climb.

In *Insight*, Lonergan speaks of intellectual conversion as based on a "discovery – and one has not made it yet if one has no clear memory of its startling strangeness – that there are two quite different realisms."⁸ For years I had expected that intellectual conversion would radically transform how I look at the world. Actually, it seemed to leave my common sense

⁸ *CWL* 3, 22 .

alone – so that in my daily, practical living, there seemed to be no effect at all. But there was an effect when I investigated anything from a theoretical perspective – in my case, mostly ethics, art, psychology, and spirituality. In retrospect, I can say that these theoretical developments “sublated” my commonsense living. That is, it left my commonsense practicality intact, but gave me an upper set of controls to help me understand what I do when I make moral judgments, or paint, or counsel, or pray. I offer this reflection to help newcomers to Lonergan know what to expect when considering how our moral judgments can be considered objective.

Tad Dunne currently assists Blue Cross/Blue Shield in its efforts to establish programs on quality and ethics by using Lonergan’s structure of the human good and his analysis of historical process. A collection of his writings is available at <http://www.concentric.net/~Tdunne/writings.html>.

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THE PLIGHT AND THE PROSPECTS OF LONERGAN STUDIES: A PERSONAL VIEW

HUGO MEYNELL

I would like in what follows to discuss the uses for civilization of Lonergan's philosophical work, and then say something about the broader significance of the method which he propounded for theology.

In his very useful and stimulating article, Professor McShane raises the question of "the central present problem of Lonergan studies."¹ In my opinion, it is above all one of what Lonergan would call 'communications' – how to make his work, and its immensely important implications for our culture, available for the general intellectual community (as opposed to a small and embattled segment of the learned Catholic ghetto). Apart from the small, though widespread and vocal, community of his followers, the thinking public, notably the philosophers, have received his work with deafening silence. Even books on the nature of understanding as such often do not include *Insight: A Study of Human Understanding*² in their extensive bibliographies. And this consorts rather strangely with the opinion held by some of us, that *Insight* is among the outstanding intellectual achievements of the twentieth century. Those, like philosophers and psychologists, who might be expected to take most interest in Lonergan's work, do not even pay him the compliment of attacking him.

Catholics too are often unsympathetic to his work, though the reasons that they give for this are not very impressive, so

¹ Philip McShane, "Implementation: The Ongoing Crisis of Method," in this issue, pp 11-33.

² *CWL 3*; first edition (London: Longmans, Green and Co., 1957).

far as my experience goes. A well-known British Dominican once made fun of me for my interest in Lonergan. When I asked him whether he had read *Insight*, he admitted that he had never got further than the title, by which he had evidently been put off. One might account for his attitude partly by the traditional rivalry between the Dominican and the Jesuit orders. But it was a fellow Jesuit who told me that Lonergan's work taken as a whole was "sheer pedantry." Yet I myself thought, and continue to think several decades later, that Lonergan has succeeded in solving once and for all a number of central and intractable problems of traditional philosophy. Of course, not a few, like Descartes and the Logical Positivists, have claimed to do this; but their alleged solutions have usually been refuted easily by their colleagues. I know of no serious or convincing attempt to refute Lonergan's central philosophical claims and arguments.

From the point of view of professional philosophy, with its well-established and mutually-opposed dogmas and schools,³ it is a disadvantage for Lonergan that he is, so to say, neither fish nor fowl. He certainly does not practise what goes by the name of "analytical philosophy." I can only recollect one reference to Wittgenstein in his work, and that a curiously indirect one, in the context of a quotation, and in the form of the adjective "Wittgensteinian."⁴ The phenomenologists tend to dismiss him as an atavistic Thomist; the Thomists as having capitulated to the subjectivism of the phenomenologists. Yet if one follows him, one sees important points in each of the doctrines of these apparently opposed schools. One can see in them, in fact, virtues which they are notoriously indisposed to see in each other.

When I first began to read *Insight*, I soon felt what one may call the pressure of philosophical genius, as I had previously felt it in reading passages of Plato, Descartes, or Kant. In my enthusiasm, I assumed that everyone interested in

³ It is fair to observe, that there has been a slight relaxation of this tendency over the last few years.

⁴ See Lonergan's response to a number of discussants at the end of *Language, Truth and Meaning*, ed. McShane (Dublin: Gill and Macmillan, 1972).

philosophy or theology would soon be reading and talking about the book. Naturally I tried to share with others the treasure which I thought that I had found. But very soon, and persistently, I encountered the intellectual equivalent of doors slammed in my face. Yet I myself was usually ready and eager to read books for which my colleagues expressed such enthusiasm.

In some ways it is unfortunate that Lonergan was a Catholic, a theologian, and a Jesuit. One reviewer, himself a priest, remarked of my own *Introduction*,⁵ that it was odd that I never mentioned that Lonergan belonged to the Jesuit order. The omission was quite deliberate. I wanted people to attend to the merits of Lonergan's claims and arguments for themselves. I hoped that they would wonder, for example, whether the argument for the existence of God in chapter XIX of *Insight* might be sound; rather than dismissing it with the reflection, 'he's a Jesuit; he would argue like that, wouldn't he?' (Lenin seems to have thought it a sufficient refutation of Berkeley's philosophical position, that Berkeley was a bishop.)

One might even say that one of the greatest needs of the Lonergan movement is for informed polemic against their master. One volume of critical essays, *Looking at Lonergan's Method*,⁶ at least paid Lonergan the compliment of subjecting his work to negative criticism. There were even offerings to this effect by some highly distinguished contributors. But these scholars were uniformly at their worst. Misunderstandings of Lonergan's arguments and claims, based on very superficial readings, were presented, and then sarcastically dismissed. One critic saw Lonergan as peddling a confused blend of rationalism and empiricism. He did not apparently even consider the possibility that one of the main merits of what Lonergan has to offer, is a viewpoint from which empiricism and rationalism are both revealed as partial truths, each

⁵ *An Introduction to the Philosophy of Bernard Lonergan* (London: Macmillan, 1976 and 1991). My projected title was *Understanding Understanding*, with the present title as subtitle; but the publishers, to my regret, felt that this would not do.

⁶ Ed. P. Corcoran. (Dublin: Talbot Press, 1975). I have discussed this book at some length in *The Theology of Bernard Lonergan* (Atlanta, GA: Scholars Press, 1986), chapter 3.

needing to be complemented by the other. Empiricists are right in insisting that human knowledge has to start from experience, although, since David Hume, they have had a fatally restricted conception of what such experience may be. We are not only aware of our sense-experience and our feelings, but, as John Locke noted before Hume, of the mental operations, of questioning, hypothesizing, weighing evidence, judging, deciding and so on, which we apply to this experience.⁷ And rationalists are correct in maintaining that if our knowledge is to be at all extensive, let alone critical and systematic, we have to subject it thoroughly to our mental capacities of intelligence and reason.

What is the present state of philosophy in general? And what contribution might be made to it by a sustained attempt to take Lonergan seriously, for better or for worse? My own impression is that the dominance of the linguistic philosophy which has prevailed since the late fifties is almost at an end. It is being succeeded by scientism and postmodernism. Since the demise of logical positivism, which presented itself as a vindication of science, scientism has tended to take the superiority of science, and its imperious if not exclusive claim to constitute genuine knowledge, as sheer dogma.⁸ One is inclined to retort with the scholastic maxim, that what is asserted gratuitously, is to be denied gratuitously.⁹ In stark opposition to scientism, postmodernism evinces despair at ever finding any coherent account of the world at large, or of the place of human beings within it. The 'whole in knowledge' which Hegel declared to be the objective of philosophy turns out, on this view, to be the object of a fool's errand.

From Lonergan's point of view, there is a 'position'¹⁰ and

⁷ I do not think that it has often been observed how far Locke, in his notion of 'reflection' as well as 'sensation' as a source of ideas, anticipates Lonergan's 'generalized empirical method', as opposed to the 'empiricism' of Hume and his myriad followers. See Locke, *An Essay Concerning Human Understanding*, Book II, chapter 1, paragraph 4.

⁸ Cf. especially the work of W.V.O. Quine and his followers. I have tried to provide a brief critique of Quine's position in a forthcoming article in *MJLS*.

⁹ *Quod gratis asseritur, gratis negatur*.

¹⁰ It seems wise to retain the inverted commas, as these are terms of

a ‘counterposition’ in both scientism and postmodernism. It will be remembered that a ‘position’ is an assertion or assumption which is compatible with its being attentively, intelligently, and reasonably asserted; a ‘counterposition’ one which is not so.¹¹ Science splendidly and outstandingly exemplifies the results of attentiveness, intelligence, and reasonableness as applied to belief about the physical world. But the metaphysical theory or assumption which may be called ‘scientism’ implies that such ‘mentalistic’ conceptions as attentiveness, intelligence, and reasonableness cannot have real application to the world, since everything real is reducible to physics and chemistry, and what is mental is not so reducible. On this view, reference to the mental will either have to be abandoned as a result of the advance of science, or be relegated to the status of mere convenience or metaphor, rather as we still speak of the ‘rising’ of the sun in spite of the discovery of Copernicus.

It may readily be seen that this is a clear example of a ‘counterposition’. If attentiveness, intelligence, and reasonableness do not exist in the last analysis, then scientism cannot in the last analysis be attentively, intelligently and reasonably affirmed. One of the main reasons for the apparent plausibility of postmodernism, of course, is the dogmatism implicit in scientism, and the apparent failure of attempts to show how the pretensions of science can be justified otherwise than by sheer assertion. But on Lonergan’s view, the authority of science, within its proper bounds, can be justified; though not the *obiter dicta* of which some scientists may see fit to relieve themselves on the subject of metaphysics, ethics, or theology, when these are consequences of scientism. And it may be asked how far the characteristic doctrines of postmodernism, largely negative as they are (about the failure of the Enlightenment enterprise, and the impossibility of satisfactory ‘grand narratives’ on the model of Freudianism or Marxism) can be attentively, intelligently, and reasonably

art in Lonergan’s thought which have a sense that is slightly different from their usual ones.

¹¹ Cf. *CWL* 3, 413-15, 513, 519-20, 523-4 etc.; *Method*, 249-254, 270-1, etc.

asserted. If they cannot, it seems as arbitrary to accept them as it is to accept the claims of scientism. If they can, one seems to be committed to the 'grand narrative' which consists in and follows from the applicability of attentiveness, intelligence, and reasonableness to the justification of assertions in general. One may hazard that there are perhaps 'positions' and 'counterpositions' in Freudianism and Marxism themselves; according to how far the accounts they offer of the world and human affairs bring out the manner in which attentiveness, intelligence, and reasonableness may be enhanced or frustrated by, say, early individual upbringing and socio-economic circumstances; or how far these systems seem to make such mental activities impossible or inconceivable in the last analysis.

As to scientism, it depends on oversight of the 'aha-experience' or act of understanding which is constitutive of every scientific discovery. For Lonergan, each such 'aha-experience' is a glimpse of God, whom he describes in *Insight* as 'the unrestricted act of understanding.' Scientism, of course, is closely associated with what one might call the Cartesian-Newtonian nightmare. According to this view, the world is by no means the beautiful prospect that is presented to our senses, which really is just the result of its impinging upon the surfaces of our bodies; it is an invisible, inaudible congeries of particles or waves, an absolutely pointless chaos. Such disenchantment of the world has been felt by very many, like Max Weber, to be the inevitable consequence of the advance of reason in our apprehension of the world and the place of humankind within it. But Lonergan's account reveals this to be merely a mistake. True, there is a world which exists prior to our senses and the application of our mental processes to them; but it is an intelligible world, grasped and to be grasped by the insights or acts of understanding of scientists over the course of the centuries. Such an intelligible world is full of enchantment, radiant as it is with divine creative intelligence. Its progressive decipherment, furthermore, is a primary component of that service of God to which humanity is called.

For all their radical opposition to one another, scientism and postmodernism are at one in their repudiation of what is

called 'foundationalism.' It is not the least of the merits that may be claimed for Lonergan, however, that he has found satisfactory foundations for knowledge. It is now commonly argued, of course, that it is impossible to find such foundations.¹² The combination of logic and experience, as expounded by the radical empiricism which was in vogue six or seven decades ago, is woefully inadequate, as would now be almost universally admitted. From the fact that I seem to see a coloured patch, it follows logically that I seem to see an extended patch; but this is hardly an adequate basis for contemporary physics or astronomy. But other candidates for the foundations of knowledge seem all to founder on the rocks of infinite regress. If I propose foundations for knowledge, you may properly ask, on what those in turn are founded; and if I give an answer, you may simply reiterate the question; and so on for ever.

Some religious believers have reacted with great relief to the apparent failure of the quest for the foundations of knowledge. The foundations expounded by the radical empiricism which issued in logical positivism, as is well known, were atheistic in implication; except on a very primitive conception of 'God,' no course of sense-experiences counts as being of God. On the other hand, what some have taken to be 'experiences of God' always have quite a different explanation for their occurrence, like obscure memories of life in the womb, or of the loving parent deemed by the infant to be omnipotent. But if such irreligious or atheistic claims have no better foundation than theistic ones, which follows from the supposition that they all equally lack foundation, then the religious person or theist has nothing to fear from polemics of this kind. Such a view is typical of what has been called the 'Reformed epistemology' expounded by such authors as Alvin Plantinga and Nicholas Wolterstorff. On their view, a religious believer may properly take a statement like 'There is a God' to be what is called a 'basic statement', not requiring justification by appeal to any other statement or corpus of statements. Since unbelievers, on anti-foundationalist assumptions, have statements which are basic to their own position, they are in no

¹² E.g., by Quine and Richard Rorty.

position to object to statements characteristically made by theists or Christians on the ground that they are basic. The obvious trouble with this position, however, is that it is hard to see at this rate why any belief whatever, however monstrous or bizarre on first appearance, should not be defended by its champions on the ground that it is basic. To use Plantinga's own example, why should I not take it as basic to my belief system, that there is a Great Pumpkin which descends to earth every Hallowe'en?¹³

But the foundations of knowledge proposed by Lonergan are not subject to the objection that they lead to infinite regress. It was a standard and crushing objection to the foundations proposed by the logical positivists that they were self-destructive; since there is no course of experience by which you can verify or falsify the presumably meaningful and non-analytic proposition, that all meaningful non-analytic propositions can be verified or falsified by experience. But it is the *contradictories* of Lonergan's proposed foundations which are self-destructive. According to Lonergan, I tend to get to know what is true, so far as I am attentive to the relevant experience, intelligent in envisaging possible explanations for it, and reasonable in preferring as likely to be true the explanation which does appear best to explain it. Suppose someone denies that one tends to get to know the truth about things in this way. Has she attended to the relevant evidence, and so on? If she has, she has used in support of the alleged truth that she is expounding the very mental procedures whose relevance to the determination of truth she is denying. But if she has not attended to the relevant evidence, and so on (and is not even appealing to an authority supposed to have done so), what is the point of paying any attention to her?¹⁴ The proposed foundations seem not only secure in themselves, but to do the required job. Why do we believe that there are quarks or

¹³ I have criticized the Reformed epistemology at greater length in "Faith, Foundationalism, and Nicholas Wolterstorff" in Linda Zagzebski, ed., *Rational Faith: Catholic Responses to Reformed Epistemology* (Notre Dame, IN: University of Notre Dame Press, 1993).

¹⁴ For Lonergan's account at the foundations of knowledge, see especially *CWL 3* chapter XI; for a brief argument showing the self-destructiveness of the denial that they are such, see *Method*, 16-17.

leptons? Because physicists over many generations have been attending to the relevant evidence in experience; have envisaged the hypothesis that there are quarks and leptons as one of the ways in which this evidence can be explained; and have come to prefer the judgment that there are such to any other explanation that has been proposed of the relevant evidence. And just the same applies, of course, to the confidence of astronomers that there are quasars and pulsars.

To set store by 'basic statements' is incidentally objectionable as encouraging the intellectual equivalent of the ghetto mentality. Rather than feeling obliged to reason for my position, in the face of opposition, all I can do, in effect, is to plead that, since everyone in the last analysis plumps for their own position, why should I not plump for mine? Surely it is more healthy, from the point of view of the life of the mind, to regard every position as owing a defence to its opponents on principles of a comprehensive rationality. This would be impossible, of course, if such principles were not available; but on Lonergan's account, they are so.

If Lonergan is correct, the older foundationalism, including logical positivism, was on the right lines, at least in what it was searching for. But in another respect his position is the very antithesis of logical positivism, or indeed of the view of the later Wittgenstein. Logical positivism stigmatized all philosophy that was not purely critical of other philosophy as nonsense, while Wittgenstein claimed that it depended in what he called 'language gone on holiday.' For Lonergan, on the contrary, all philosophies make some sense, as emphasizing one aspect of the cognitional process at the expense of the rest. Like Aristotle and Hegel, he regards himself as obliged to give some account of why intelligent and reasonable persons have maintained philosophical positions other than his own. Thus empiricists are right to attend to the important role of experience in knowing, but neglect the contribution made by constructive intelligence. Idealists on the other hand stress the role of constructive intelligence, but neglect the part played by reason in determining which of the constructions of human intelligence are true of the world. Materialism rightly maintains that the world largely exists, and is as it is, prior to

and independently of the application to it of the human cognitional apparatus; but does not take proper account of the fact that it is nevertheless nothing other than what is to be known by means of its proper application.

Linguistic philosophers such as J. L. Austin, or some of Wittgenstein's disciples, have been inclined to stress the traditional wisdom that is preserved in the attributions, relations, and distinctions implicit in ordinary language. Marxists, on the other hand, have been inclined to regard ordinary language as dominated by ideology. Which party to this dispute is right? It is said that matrimonial therapists, in approaching the problems posed by warring couples, often resolve disputes by suggesting that both partners are right. Perhaps disappointingly, much the same applies to this case; the thesis of the ordinary language philosophers, and the antithesis insisted on by the Marxists, each have a point, but are to be *aufgehoben* on Lonergan's account. Ordinary language preserves results of attentiveness to experience, intelligence in envisaging possibilities, reasonableness in making judgments, and responsibility in coming to decisions, which have been occurring from time immemorial. On the other hand, the Marxists do well to point out the probability that results of inattention, and of restriction of intelligence and reason, may also be crystallized in ordinary language, particularly when these suit privileged groups and economic classes within societies. It is amusing and instructive to note, in this connection, that the English word 'noble' is used to ascribe both membership of a privileged class, and possession of high moral character.¹⁵ This makes it natural to assume without question that to have the one attribute is always to have the other, which is not, it is to be feared, invariably the case. Similarly, the word 'villain' was once descriptive of persons very low in the social hierarchy of the European feudal system. Furthermore, it is surely only common-sense to acknowledge that the arcana of science and philosophy, with which ordinary language did not evolve to cope, are not themselves matters of common sense, and so involve extensions and modifications of

¹⁵ This was pointed out by the anthropologist and philosopher Ernest Gellner.

the conceptual apparatus provided by ordinary language.

The minds of philosophers and scientists have long been plagued by the recalcitrant problem of the relation of consciousness to the world, and how consciousness could possibly have evolved in a universe which, from the point of view of a science based on physics and chemistry, seems so alien to it.¹⁶ For the disciple of Lonergan, the problem of consciousness as usually conceived is (largely) solved by being turned inside-out. Reality or the concrete universe is nothing other than what one can become conscious *of* in a particular way by using one's conscious faculties in an appropriate manner. We attend to the experience available to us on any topic; we envisage a range of possibilities; we judge that possibility to be the case which is best corroborated by the evidence to which we have attended. So we come to a number of judgments; and reality or the concrete universe is nothing other than what these judgments tend to be about so far as we have followed the process to an indefinite extent. The real world is nothing other than what true judgments are about; judgments converge on the truth so far as they are well-founded; and well-founded judgments are those which are based so far as possible on attentiveness, intelligence, and reasonableness. The more strictly scientific problem still remains, of course, of just what physical and chemical circumstances must obtain for consciousness to arise within the world, and why they must do so. It may be remarked as well, that the fact that the world is ineluctably *for* consciousness in the manner just described consorts well with its being *due* to the creative act of the consciousness which all call God.

When it comes to moral philosophy, Lonergan shares the existentialist stress on personal responsibility, without any of the tendency to arbitrariness which may be attributed to existentialism. One may come attentively, intelligently, and reasonably to make a judgment of value as well as of sheer fact; and decide responsibly to act accordingly. We have plenty of data on the question of what will contribute to a relatively happy and fulfilled human life, in others as well as ourselves;

¹⁶ See Jonathan Shear, ed., *Explaining Consciousness: The Hard Problem* (Cambridge, Mass. and London: MIT Press, 1998).

and what will not. That knowledge of what is of value is so similar to knowledge of ordinary fact, in Lonergan's view, distinguishes it sharply from the extreme subjectivism, the 'emotivism' and 'prescriptivism', which have plagued the ethical thinking of so much analytical philosophy since G.E. Moore¹⁷ and the logical positivists. The latter seem to have assumed that goodness cannot be *a matter of* contribution to happiness, universalizability, and so on, without being *logically deducible* from them. Of this assumption, subjectivism was the almost inevitable result; what else can a moral judgment be, at this rate, but the evincing of an emotion about something, or the encouragement in oneself or others of a practical attitude towards it? And according to nearly everyone who is not philosophically sophisticated, to subjectivise moral judgments to this degree is fatally to trivialize them.

The philosopher Leibniz looked forward to a time when, on all matters of dispute between human beings, they would be able to resolve them by saying, 'Let us calculate.' In one sense, Lonergan's work is an indication of why this cannot be done; not only experience, but also understanding and judgment cannot be reduced to calculation. But in a more important sense, I think, it is a kind of fulfillment of Leibniz's ideal. What he offers us is a method for resolving important basic disputes. It is a corollary of antifoundationalism, of course, that there can be no such method. But surely this augurs rather desperately for the future. There are many important differences of belief which divide human beings, some of them with momentous practical consequences, as we were reminded on September 11, 2001. Unless reason is in principle available to resolve them, we seem to have no other recourse but the guns and the thumbscrews, and perhaps the psychiatric wards. If it is available, in the manner that Lonergan shows us, perhaps we may be able to afford after all, as Dr. McShane says, "an optimism that regards humanity's butterfly history as

¹⁷ It should be noted that Moore himself was not a subjectivist; but subjectivism was soon inferred from his arguments against 'naturalism' in *Principia Ethica* ([1903] Cambridge: Cambridge UP, 1956).

being at present in a grey but golden chrysalis stage.”¹⁸ Dr. McShane alludes to “the complex issue of the relation of Lonergan’s work to feminism.”¹⁹ It ought to be admitted straight away, that the lack of inclusive language in Lonergan’s work can jar on later sensibilities. But the essence of what is at issue in feminism is not at all difficult to convey on his account. We tend to get at the truth, especially about the human world and about what is of value, by encompassing within the range of our own understanding as many points of view as possible. It is therefore obvious that we are liable to stray very far indeed from the truth on such matters if we systematically exclude the point of view of half the human race. As postmodernists like Foucault have well brought out, we are apt especially to err when we have an interest in not attending to a viewpoint, or not taking it seriously, due to our group or class position. Unfortunately, males have been very prone to neglect the female viewpoint for these reasons.

What is Lonergan’s contribution to the dialogue between religions, and between religion and irreligion? *Insight* culminates in an argument for Roman Catholic Christianity; whereas *Method* is at pains to emphasize that different religious traditions may each in their way encourage, or discourage, authentic human living.²⁰ These positions are usefully seen as complementary to one another. A Buddhist, or a secularist, could of course in principle use Lonergan’s method to show that an authentic human being should reject the doctrines of the existence of God, and of the special revelation in Jesus Christ, which are of the essence of Catholic Christianity. It appears to me that, in the foreseeable future, after so much barren polemic and mutual misrepresentation, the main stance of the religious traditions should be to listen to one another. This does not imply, as some have argued,²¹ that all religions are really expressing the same belief from the point of view of different cultural contexts. But the fact remains that they all have a great deal to learn from respectful

¹⁸ McShane, 12.

¹⁹ McShane, 12, n. 3.

²⁰ See *Method*, chapter 4; *CWL 3*, chapter XX.

²¹ Notably, John Hick and Wilfred Cantwell Smith.

listening. For example, a Christian may have much to learn from Buddhists on the restraint of the passions, from Marxists on the importance of social justice in promoting the reign of God, from Confucians about the merits of traditional decencies in maintaining a good society, from Muslims about the immediate presence of God in the actions and events of human life, and from secularists about the demand that one should not neglect the moral requirements of the present life on the pretext of preoccupation with the next. If one is a theist, it is not reasonable to claim, or to imply, that no-one has ever been an atheist and at the same time to a great extent attentive, intelligent, reasonable, and responsible. It is worth insisting in some circles, of course, that the converse also applies; that there have been attentive, intelligent, reasonable, and responsible believers, even in religions other than one's own. Lonergan's method, it may be concluded, provides a basis for fruitful dialogue not only between religions, but between religion and irreligion.

I believe that Professor McShane is perfectly right when he says that "(a)n important goal of Lonergan studies is to indicate clearly and pragmatically the full global need and scope of functional specialization."²² When I first read *Method in Theology*, I was quite disappointed at what I found. I had expected that Lonergan would have more to say on the topics covered in chapters XIX and XX of *Insight*, where an argument for the existence of God is followed by an apologetic for Christianity. But my expectation, as well as turning out to be wrong in fact, was quite misguided. To use an analogy I have used before, the area devoted to weapon training is not the same as the battlefield. But both are essential, if one is to engage in successful campaigns. *Method in Theology* is analogous to the former; it sets out what has to be done in articulating what the Christian message has been in the past, and applying it to the present and future. Part of this task is to provide reasons for believing that there is a God, and showing

²² McShane, 19.

what can be demonstrated of the divine nature by following through the consequences of these reasons; this is done in chapter XIX of *Insight*. Another part is to commend specifically Christian beliefs as more worthy of acceptance to the thoroughly rational mind than their contradictories, as is done in chapter XX. If these things are to be done in a rigorous rather than a shoddy manner, and in a way which meets the fundamental objections head-on, it has to be within the context of a systematic theology; and systematic theology is the topic of the seventh of the functional specialties distinguished by Lonergan.

What is the nature of Lonergan's distinction between functional specialties in theology, and what is its point? Christianity is a set of beliefs and practices which comes to us from the past, and which we may feel (if we are Christians) obliged to defend and apply in the present and future. Getting clear what the beliefs and practices have been is the role of the first phase of theology, and the first four of the eight functional specialties; and setting out what they are to be here and now is the role of the second phase of theology, and the fifth to the eighth of the functional specialties.

Perhaps it will make the matter dearer if we take a non-Christian example, since the method is applicable to every human utterance and performance which comes from the past and is felt to be relevant to the present. Suppose I am a Muslim scholar dealing with one of the suras of the Koran. I may wish to establish what is the correct original text (research); what the prophet's meaning was when he first uttered it (interpretation); how it fits in with the whole milieu of the prophet's life and times (history); how the prophet was in good faith and acting for the best in delivering it, rather than, say, using the pretext of divine revelation to increase his own power or privileges (dialectic). I may on the other hand be more directly concerned with the here and now – with what it is to be a fully authentic and converted human subject (foundations); with why a fully converted human subject should embrace rather than deny the basic tenets of Islam (doctrines); with how these doctrines form a systematic and coherent whole which fitly crown the edifice constituted by the rest of human knowledge and

appropriate belief (systematics); and how this systematically-understood set of doctrines is to be expressed and lived in all the multifarious cultural milieux and life situations in which the twenty-first-century Muslim may find herself (communications).

Now it seems to me clear, when one reflects on the matter, that whenever anything has been said or done in the past which is felt in any way to have relevance to the present, all of these eight types of activity are relevant and important. And it is extremely useful to have them dearly and distinctly set out, so that none of them is omitted. In our own times, the first three functional specialties are heavy industries; as applied to religious matters, they constitute what is generally known as 'Religious Studies'. But the question, 'Why should this old stuff be of any significance to us here and now?' which is the point where 'Religious Studies' may be said to issue in theology properly speaking, can hardly be passed over. Nor does it seem very sensible just to expect the individual to work out for herself what is to be believed and why, when so many considerable minds over the course of history have applied themselves to these problems. What is it to be an intellectually, religiously, and morally authentic human being, and what is it to strive to become such a being? Why are the doctrines of the religion in which one has been brought up, or some other set of religious (or irreligious) doctrines, appropriate to be believed by an authentic human being? How, if at all, do these doctrines form an intellectually coherent whole, fitting together with the rest of human knowledge? How is this whole to be applied by each human being to her own special situation, which is not quite the same as that of anyone else? Thomas Aquinas has been a notable systematic theologian for the Catholic tradition, John Calvin for the Protestant, Shankhara and Ramanuja for the Hindu. But it is of no use just repeating what they said; their language and concepts have to be communicated to people who are struggling to direct and order their lives in our own time.

One author has seen fit to object to Lonergan's method and its scheme of functional specialties, that they presuppose

that one is a Roman Catholic.²³ Nothing could be further from the truth. The scheme would be just as useful to an atheist, or one who repudiated all religion as mistaken from an intellectual and reprehensible from a moral point of view. Any thinking person, in confronting a document or monument from the past, has to ask the questions: What did they say then, and what attitude should we take to it? What, in consequence of what they said, are we to say now? Presumably some writers in the past, like David Hume²⁴ or Vladimir Lenin, are regarded by atheists as having expressed and argued for their point of view more effectively than others. If this is so, it is worth establishing as accurately as one can the actual text of, say, *The Natural History of Religion* or *Materialism and Empirio-Criticism*; what the authors meant in writing as they did; what was going forward at the time; and how far the authors in question were intellectually clear-sighted and virtuously motivated in what they did. Furthermore (to move from the first to the second phase), atheists just as much as theists have a proper concern with what it is to be an intellectually and morally authentic human being. Also, as atheists they are and ought to be concerned with why the judgments of fact and value constitutive of atheism are proper ones for authentic human persons to believe; with how these judgments fit together compellingly into a logically consistent whole which is compatible with the rest of human knowledge; and by what means atheism is to be communicated to women and men of all

²³ See Corcoran, *Looking*, 80. The source of this bizarre mistake is presumably that Lonergan, as writing in the first instance for Catholic theologians, concentrates on Catholic theology and doctrines for his examples. One may usefully cite the contrary objection, brought by Karl Rahner, that the method is not specific enough for explicitly theological or religious doctrine (*Language, Truth and Meaning*, 194-96). I concede that it is unfortunate that Lonergan should have insisted that 'religious conversion' was a prerequisite for doing theology; as some have, understandably though wrongly, taken this to imply that one has to be a Christian, or even a Roman Catholic, to engage fruitfully in theology at all. I am convinced, however, that the difficulty here is rather terminological than substantial. For a longer discussion of this point, see *The Theology of Bernard Lonergan*, 38-41.

²⁴ This is not to imply unequivocally that Hume was an atheist; but there is no denying that his work has, and quite properly, proved useful to atheists.

temperaments, cultural types, and educational levels.

Why is it anything more than pedantry to distinguish these functional specialties? Most of these stages in communicating a message are not usually explicitly distinguished, and it is surely of importance, if the enormous range of messages which come to us from the past, and of the backgrounds of their proclaimers and hearers, is to be taken properly into account, that they should be so. There is of course no lack of persons effectively engaged in research, interpretation, and history as these relate to religion and Christianity. Dialectics, however, is apt to be done unsystematically and intemperately; foundations to be left in obscurity; doctrines to be affirmed or denied stridently and with 'insecure resentment' (as Lonergan put it). Systematics is largely neglected, or carried out on the crumbling basis of 'scientism'. Certainly there is no lack of attempts at communication, but these cannot be done either adequately or honestly when the work to be done in the fourth to seventh functional specialties is not even adverted to as needing to be done. Each of us assumes more or less without question that she is intellectually and morally authentic; surely it is useful that the question of what it is to be so should be explicitly set out (foundations), so that one may not only apply oneself to be a fully authentic subject, but ask the question how far those to whom one is attending in the past are so in what they wrote, said, or did (dialectics).

Dr. McShane reports that, when Fr. Frederick Crowe asked what functional specialty he was working in, he replied that he was working in all of them. I would not have responded to Fr. Crowe's question in at all the same way. What I have tried to write has always been pretty closely related to the functional specialty of dialectic, with a view to doctrines. I have tried to expound various authorities to whom I have attended, with a view to developing the 'positions' in their thinking, and to reversing the 'counterpositions.' It is characteristic of dialectics, that the various sorts of intellectual insufficiency and bad faith which are possible are articulated and thematized. In this way the range of possible hidden agendas may be brought to light.

I hope that what I have said does something to account for

my view that Lonergan is a thinker of first-rate but vastly underestimated importance, who has contributions to make to our culture which are urgently needed.

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MC SHANE'S PUZZLES: APOLOGIA FOR THOSE WHO FLUNK THEM

FREDERICK E. CROWE

Philip McShane has had as one of his leisure specialties the provision of tantalising puzzles which are meant to provide samples of insight but sometimes, instead of promoting insight, reduce his readers to angry frustration. In collaboration with Garrett Barden he provided a sampling of such puzzles in their book *Towards Self-Meaning*¹ but, leaving the book aside, I will take as point of departure for my reflections a single puzzle Philip once presented on his own to some learned society – I forget which. Those present were invited to find the meaning of the letters SMTWTFS; when it was clear they were getting nowhere, Philip rescued them from their frustration with the answer: the letters are the initials for the seven days of the week. Facing then the understandable chagrin of his audience at their failure and their irritated protest that they couldn't be expected to find a sensible answer to such an absurd question, Philip informed them: 'I gave the problem to a class in Grade School and they solved it.'

As one of the frustrated academics who didn't solve the problem, I wish to reflect on this exchange, not just because, like the person in the Gospel, 'I am willing to justify myself,' but more importantly because it suggests an appropriate topic for the volume Michael Shute is editing in Philip's honour, and gives me an opportunity to ponder once more a question we will never ponder enough or come close to exhausting: the

¹ Garrett Barden and Philip McShane, *Towards Self-Meaning: Exercises in Personal Knowledge* (New York: Herder and Herder, 1969); see especially pp. 126-37.

working of the human mind as it strives to achieve and sometimes does achieve an insight. How does insight occur? How can it be encouraged to occur? And why in the present case did it not occur in the circle of academics, when it did to a Grade School class?

Some Sample Puzzles: Word Games

Let us start with a puzzle that is the simplest possible, hardly worthy to be dignified with that name: to find a word with three letters doubled in the spelling. Naturally I start running through the words in my memory, or perhaps resort to a dictionary. I may come very quickly or very slowly to 'bookkeeping' (or some other word that answers the problem) but unless I go into fancy mathematics, the solution is just a matter of time, and the time needed is just a matter of running through the words I know, one by one, till I come to a word that fits. So this simple exercise is solved on the pedestrian basis of checking the possibilities – a material exercise, with no intelligence required. (Of course the intelligent puzzle fan will work out tactics that go beyond the pedestrian level.)

Take now an exercise requiring more intelligence, depending more on insight than on material checking: namely, doing crossword puzzles of the challenging kind. My daily paper provides one Monday to Friday called in fact a 'Challenge,' and a much harder one on Saturdays called 'Cryptic.' We find now that mere material checking plays a quite subordinate role, that an act of insight is far more often called for. Thus, 'Trunk roots twisted' means 'Torso,' 'A Greek follower' means 'Beta,' 'First offender caught in the very act' is 'Eve,' 'NMN' means 'German Cardinal,' and 'cites' said out loud can mean what a tourist seeks as well as a procedure in a law court. These samples show how patterns of search develop; familiarity with these patterns and with the style of the puzzle-maker leads one to check recurring ploys. An anagram turns 'roots' into 'torso,' the ambiguity of 'follower' applies to the order of the Greek alphabet, the letters of 'Eve' were hidden in the words 'the very act,' 'em in ens' describes what is seen but when spoken leads to the answer, 'cites' sounds the same as 'sights,' and so on.

Patterns of Discovery

From these few samples, and their contrast with mere checking, emerges the role of patterns of discovery; in puzzle-solving they function the way they do in science, as the upper blade in what Lonergan calls the scissors action of heuristic method. There is no upper blade in my first example (though we may be able to create one), but the various ploys adopted in the second sampling – anagrams, hidden words, and a score of others – are an upper blade that will possibly yield the solution, and greatly reduces the labor of research.

A special type of pattern is the work of the ‘cogitativa.’ If I were asked to ‘date’ a fragment attributed to Thomas Aquinas and find it discussing historicity, horizons, foundations, and the like, I could say at once that it’s not from Thomas; these are not his usages. Again, if the question is whether a reported lecture comes from Lonergan, and I find that it uses ‘upon’ rather than ‘on,’ locates ‘also’ early in the sentence rather than after the verb, and resorts often to the phrase ‘in other words,’ then at least I can say that those are Lonergan usages and they encourage further investigation. Now to notice such usages is an exercise of the ‘cogitativa’; Thomas, after Aristotle, could say that a nurse knows from repeated experience that a certain medicine works, but the doctor knows why it works. To have that ‘repeated experience’ and notice the repetition is the work of the ‘cogitativa’ discovering a pattern; there is a puzzle, and the ‘cogitativa’ offers a pattern for discovery of the answer.

From patterns in the ‘cogitativa’ we may turn to concepts and categories. Though we do not generally think of them as solving puzzles, they too function as patterns of discovery do, to bring into play as an upper blade a huge thesaurus of possibilities that we may test for their relevance. Every concept offers a pattern of discovery, and provides an upper blade of research. It functions in collaboration with the nurse’s ‘cogitativa’ (knowing *that*) and the doctor’s science (knowing *why*). It is derived from an insight, is applied to a case the way the ‘cogitativa’ is applied, but adds science to repeated experience. This is more obvious in the exact sciences, but holds also for historical science; any reader exercising the faculty of the ‘cogitativa’ may notice a certain Pauline usage,

but only the scientific historian, knowing the Pauline writings and their place in the history of New Testament literature, can say 'This is Pauline, but that is not.'

Context

When Lonergan used the Archimedes experience as a dramatic instance of insight, he proceeded to list five features of the experience. It comes as a release to the tension of inquiry, it comes suddenly and unexpectedly, it is a function not of outer circumstances but of inner conditions, it pivots between the concrete and the abstract, and it passes into the habitual texture of the mind.² Some twenty years later, from the matrix of those five he described a feature more specifically directed toward achieving insight. It plays a key role in what he called 'discovery of discovery,' thereby assigning exceptional significance to the insight, and bringing me to my exhibit A in the technique of solving questions or problems or puzzles.

My exhibit A is 'context,' a term of high importance for Lonergan. A good locus for its study is found in one of the most neglected of his papers, 'Method: Trend and Variations.'³ Here he deals with the 'law of effect. Development goes forward where it succeeds. So one's horizon ... tends to extend and expand where extension and expansion are already under way.'⁴ This is the occasion for the passage on context that I have found so helpful.

The key point here is context. To learn is not just the sensation of seeing or hearing or touching or the like. To learn is to perceive, and to perceive is to complete that hypothetical entity, the raw datum, with memories, associations, a structure, and one's emotive

² *CWL 3*, 27-31.

³ *3 Coll*, 13-22. The paper was listed on the program of the Southwestern Regional Joint Meeting of the Societies affiliated with The Council on the Study of Religion (Austin College, Sherman, Texas, March 15, 1974), under the title 'Method: Theme and Variations;' it is just possible that someone somewhere misread the title and 'theme' got changed to 'trend'; 'theme' actually fits better, but Lonergan certainly wrote on 'trend' (see p. 20).

⁴ *3 Coll*, 17.

and expressive reactions. It is this difference between sensation and perception that underlies the range of strange phenomena called ocular illusions.⁵

Lonergan appeals to Collingwood to support his case in regard to sensation and perception.

What the investigator needs, what the methodologist recommends, is a mind well stocked with questions. ... So Collingwood could urge the archeologist never to dig a trench without first formulating just what questions he hoped to be able to settle or at least advance by the digging. ... The investigator needs a well-stocked mind, else he will see but not perceive; but the mind needs to be well-stocked more with questions than with answers, else it will be closed and unable to learn.⁶

The relevance of this to the present question is that the difference between sensation and perception works itself out quite differently in Grade School and Academe. Grade School, I would say, is strong proportionately on sensation and less strong proportionately on perception. Those who perform magic, I am told, don't like to perform before children, for children see what actually happened, what the performer actually did, whereas adults perceive so much more than they sense that they fail to see what the Grade School pupil sees, and misinterpret what they do see.

The academics have a different proportion of sensation and perception. In the puzzle Philip gave them they were handicapped by their erudition (people of culture) or by their specializations (people of science), which would preempt their thinking and point them away from the true solution. People of culture, who know history, literature, music, geography have an immense storage in brain cells compared to a pupil nine or ten years old. They may be more likely to hit upon the answer in the long run (certainly more likely, when it comes to judgment, to find the true answer), but less likely to do so in

⁵ Ibid.

⁶ Ibid. 14; see 21.

the short run.

Of course the central idea in Lonergan's paper is method, but he weaves method and context together in a close linkage. Method has discovery of discovery as its end,⁷ it 'takes command ... when one grasps how questions combine with answers, how they are woven together into contexts, how contexts merge into the horizons of subjects ...'⁸ All this suggests a closer study of the context of the puzzle solver.

So what enters into one's context? We think at once of ideas and judgments and commitments, but there is a prior element of context more important than any idea or set of judgments and values: it is the dynamism operating in the background, the Scholastic agent intellect, pushing us always to know and to understand, and providing a permanent basic context. Next, having given priority to dynamic interiority, we can add context in the usual sense: whatever experience we have had, whatever concepts we have learned, whatever judgments we have formed, or values made part of us, or education, socialization, inculturation received – all this gives an ongoing habitual context. Though habitual, it varies, partly because it is steadily growing, partly because the habitual core admits the fleeting context of the moment, depending on what TV show I watched last night, or what French I read on my serial box at breakfast this morning.

Further, let us not omit the despised material factor that also belongs in the context. In speaking of an upper blade for the scissors action of our research, and of the role of context in cognitional process, I have moved further and further from the simple checking that I used in my first exercise. If we are not just to squirm helplessly, running through the several million brain cells stored in memory, we need an upper blade. If development is to go forward according to the principle of effect, we cannot ignore context. Nevertheless, the quantitative factor has its own importance. It is easy to see that a large quantity stocked in the mind is both a plus and a minus: plus, for it is more likely to contain associative ideas; minus, for it takes longer to run through the stock. On the plus side, the

⁷ Ibid. 21.

⁸ Ibid.

quantity of brain cells available to the human species is enormously greater than that of the animal kingdom, and becomes an accordingly powerful instrument of intelligence. Further, there are similar quantitative differences within the human family that make for higher or lower intelligence. And besides quantity and numbers we must also consider paths of communication in the brain, and the degree in which they serve intelligence. This factor may be as important as quantity of cells in making us quick-witted or slower.⁹

Application to Our Question

Within this general framework belongs the present discussion of puzzles and their solution. For individual persons, context will vary greatly, but we can still hazard some remarks that will apply widely, if not universally. Consider the limiting case of the new-born infant, as innocent of the days of the week as it is of Einstein's ideas, and perform the thought-experiment of following the child from infancy to Grade School. What slow process of mental acts gradually prepared children for puzzles like McShane's? When did they learn the days of the week? When how to spell them? Suppose the class to have been taught just yesterday to spell the seven days; would they not solve his puzzle almost immediately? Or, suppose they were just yesterday taught a batch of acronyms (as necessary in the curriculum today as spelling once was); would they not see the present problem as a parallel case?

Academics, however, if they do see the seven letters as parallel to acronyms, will not think of days of the week but rather of something concerned with their interests, perhaps learned societies and journals: AAR, CTSA, JBL, and so on. Thus, expecting something recondite, they would be led astray in the search for it. The expectations of young pupils would also be determined by their interests, maybe the classes of the day, or if they learn of their victory over the academics on

⁹This little note says nothing on empirical psychology, neurology, and intelligence, but the need for dialog between Lonergan's thought and empirical studies of intelligence is obvious. From our viewpoint the trick is to find empirical scientists who are open to interiority and cognitional philosophy.

SMTWTFS they might be led astray themselves and waste time seeking a similar interpretation of NMN.

Grade School pupils do have their expectations, their own upper blade of context in storage. But they have a much smaller storage, which means, of course, that they would come more quickly to any particular item stored there. Then, as the days and years pass, and their minds become the storehouse of more and more materials, the seven days, once nearer the foreground, recede into a larger and larger background against which they are but insignificant details. When I first began to store items on my computer, I could do a search for a particular term and find it in seconds; now that I've filled my storage space with motley materials, the same exercise takes minutes. Perhaps the human brain doesn't work like a computer, but perhaps it is not totally dissimilar either.

It is time to consider an objection. Does not the use of patterns and context prejudice the issue? It could do so, if one does not understand the difference between the level of insight and the level of judgment. Patterns and context give us ideas, but the wise person knows better than to seize on the first idea that comes along and adopt it as the truth. Verification is necessary. In the McShane example there is implicit verification; it would be expressed in some such remark as 'What else could SMTWTFS mean? If there is another set of words with initials in that pattern, it is to be found in some situation so remote from the actual as to be rightly judged irrelevant. Therefore ...' Patterns and context guide our expectations, but do not give the final word of judgment.

Writing this note for Philip's *Festschrift* has been a truly pleasant exercise. May it encourage him to continue his life-long apostolate for a better understanding of understanding, even if – especially if – it means irritating us with more of his challenges.

Frederick E. Crowe is founder of the Lonergan Research Institute and General Editor, with Robert M. Doran, of the *Collected Works*.

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MEMORIES OF BERNARD LONERGAN, S.J.

MICHAEL NOVAK

When I was thirteen, I considered entering the Jesuits, but they told me when I inquired that they did not take candidates until they had completed high school. So I went back to a choice that was attractive to me for other reasons, the Congregation of Holy Cross at Notre Dame, Indiana, whose spirituality and activism were a cross between that of the Benedictines and the Jesuits – a strong sense of community, liturgy, and contemplative prayer, along with an unusually broad range of activist vocations, from university professor to foreign (or home) missionary, from Hollywood to inner city parish. In my time in the seminary, 1947-1959, the Holy Cross Fathers had a very high standard of intellectual life, and sent their willing candidates to the best universities all around the world.

Thus it happened that when my other U.S. classmates and I arrived in Rome for theological studies in 1956 – David Burrell, Jim Burtchaell, and Nick Ayo from Notre Dame, and I from Stonehill College in the Eastern Province – we caught up with a truly distinguished band of older fellow students, such as John Dunne, Jim Doig, Harry Baker, Jim Simonson, Bob Kruse and several others, all of whom already were talking with some enthusiasm about Bernard Lonergan, who was in those years teaching dogmatics at the Gregorian University. There was the usual teasing about his flat Canadian accent and inimitable enunciation of Latin. Most of all, there was an unusually deep respect for what all our guys recognized as a truly profound intellect, one of the greatest to appear at the Greg in many a generation.

This high estimation of Lonergan was not entirely shared by our German or French friends, for Lonergan's style had a

distinctive Anglo-Saxon empirical bent, always grounded in experiences accessible to observation. He also had a knack for making subtle distinctions rooted in shades of daily experience. Grasping what he meant by these entailed careful observation and verbal precision. This verbal precision was helped by the concreteness of the English language, and was not neatly so obvious to those used to thinking in the rather more abstract French or German of their native languages.

For example, at one important place in his analysis, Lonergan invited students to note the difference in their own experience between “first awareness” and “second awareness.” The first of these is akin to the kind of simple consciousness that is the opposite of being unconscious, the state of being awake, alert, attentive, noticing, although perhaps at ease and relaxed and not particularly engaged in any concrete object or project. The second is rather more self-conscious, like being conscious of being conscious, and being quite aware of one’s noticing particular objects or being engaged in a particular project.

Some people are so acutely involved in second awareness that they are constantly self-conscious about what they are experiencing: “Here I am standing on this incredible ridge with the wind in my hair and the sun on my face, looking out on the Pacific Ocean, it’s amazing to find myself here!” (Sometimes the secret to a good party is to serve the sort of beverage that turns second-awareness people into first-awareness people.)

When Lonergan makes this distinction in Latin in *De Constitutione Christi*, it is not nearly so clear as it becomes when one renders it into English, as above. The distinction is crucial for understanding the consciousness of Jesus Christ in both its human and divine capacities. It is also a crucial piece in understanding Lonergan’s abiding resistance to what he calls “conceptualism,” the mistake of imagining (as Richard Rorty does) that understanding is like “taking a look” or “inspecting an image in a mirror.” That is to confuse the sort of understanding that occurs as second awareness with the sort that occurs as first awareness. The latter – the insight – is far more alive, fiery, living, complete, complex, sweeping and reflexive than the words in which we may express it, as is

shown by the need for more than one expression, and the fact that in different languages the expression may come in at the insight from a very different angle. The French *raison d'être*, for instance, nails a particular insight in a way that no expression in English or in Italian quite does; and so we tend to slip into the French at that point.

The difficulty arises in learning how to summon up the living insight, as a resource from which *to thematize* or *to articulate* its many aspects, angles, nuances, and shades. The work of conceptual intellect is highly important and invaluable, but it is not at the heart of understanding. It is the servant, not the master. The achievement of the blaze of insight, all inarticulate and rich and as-yet-unthematized as it may be, is the living fire of the mind.

Insight is an instance of first awareness, not the only sort of instance, but a crucial one. An awareness of experiences that prompt a demand for insight, a noticing of something odd, an incipient questioning, is even prior to insight, and also arrives often in the mode of first awareness.

When we arrived in Rome in October of 1956, Holy Cross College on Via Aurelia Antica was abuzz with the impending publication of *Insight: A Study of Human Understanding*, due out the following spring. I begged the older students to put me on to other writings of Lonergan, and Jim Simonson suggested starting with the series of articles on St. Thomas's use of the word *Verbum* that had appeared in *Theological Studies*, articles that had by that time been pretty heavily fingered in the Holy Cross library. Then to try his series on *Grace*, in the same periodical, on St. Thomas's invention of the various terms for grace and their multiple uses. Here St. Thomas was greatly helped by having worked out first various terms for the phases and types of human action, before the effects of grace had become known. This knowledge, verified in the ordinary experiences of his own and his readers' lives, forced upon him a more extensive exploration of the phases and types of grace than he would otherwise have had to face.

Let me pause to point out here that neither Aquinas nor Lonergan was imagining that there is a two-tier world, nature

below like the cake, and grace on top of it like the icing, or anything like that. On the contrary, both imagined that there is in reality and history only one world, all of it conceived and created in, by, and through the Divine Word, *Verbum*, *Logos*, and all of it redeemed by Him. The theory of grace and nature is a theoretical construct, designed to make sense of human experience both among those, like Aristotle, who knew nothing of the *Verbum*, and those like St. Augustine, who did, and who wrote especially well both about the fall of human beings into sin and their need for healing, as an athlete who breaks his ankle needs to heal before he walks again – and always is in greater danger of re-injuring himself than he had been when he was whole. The theoretical construct of grace and nature should not be reified, in such a way as to lead us to imagine two separate realities, nature here, grace “up there.” As Georges Bernanos wrote, and Yeats suggested, “Everything is grace,” and yet grace works in and through nature, which it penetrates as yeast penetrates dough.

I couldn’t understand everything in those articles on the first or second reading, because they presupposed a surer working knowledge than I possessed of the several different books in which at various times in his short life Aquinas treated of each of these subjects. What impressed me about Lonergan at that time was his distinctive historical awareness of the state of the question in writers earlier than Aquinas, and then in Aquinas in earlier and later periods of his life, depending on what Aquinas had been reading and working out in other contexts in between these different treatments.

Ever since I had been an undergraduate at Stonehill, where blessedly we were taught directly from the *Summa* itself and not from some derivative textbook (executed, as one historian commented, inevitably by a mind smaller than that of Aquinas, and often reaching up to his full stature no more than to his knees), the question had haunted me: What is the starting place of Aquinas? Where do all his key terms and axioms come from? How can I trace them back to beginnings, so as to grasp his thought from inside? Lonergan was the first writer who convincingly showed how to do that historically, key word by key word.

With such words as “insight” and “judgment” (from the uses of *Verbum*) and “grace” and “freedom” (from the uses of *gratia* or *grace*), these two sets of articles alone set me upon a path toward a wholly new appropriation of Aquinas. It was exactly what I had been looking for. I couldn’t wait for *Insight* to appear the next summer, and placed my order early.

In one’s first year at the Greg at that time, it was impossible to sign up for a class with Lonergan. In the second year, I would have a chance to hear both his lecture courses, on the Incarnation and on the Trinity, and we were among the first to have his new treatises on these subjects (in their elegant, economical Latin) in our hands. I would also have a chance to take his advanced seminar on *Gratia Operans*. That would be a special joy, in a class of about twenty, in which my friends and I would be among the youngest admitted.

But before that, toward the end of my first year, I was walking in the passageway outside the Grand Aula of the Greg one morning when I espied Father Lonergan approaching, head down. My heart jumped as I instantly grabbed the opportunity, cut off his path and asked, “Fr. Lonergan?”

He looked up, his eyes friendly from behind clear plastic eyeglass frames of the Anglo-American sort, and breaking into a smile (one could see tobacco stains on his teeth), said something the equivalent of “Hi there!”— altogether down to earth and familiar.

Breathlessly I rattled out my message, I was at Holy Cross College where he had a lot of admirers, and I had just finished his *Verbum* and *De Gratia* articles, and they were terrific, and just what I had been looking for for years. I could see scepticism welling up in his eyes, and a little discomfort. It was obvious that I wouldn’t have been reading him for that many years, and it had to be a large question whether I had understood him at all. Still, I blabbered on. “Ever since I read Maritain’s *Creative Intuition in Art and Poetry* – I’ve read almost everything Maritain ever wrote – I’ve thought I would do a book on the idea of intuition in Aquinas, and now it looks like you’ve done it. From what I see, there’s a lot in common between you and Maritain, but you are more interested in

insight in science...”

He cut me off, pulling back his chin a little diffidently. “I suspect there are a lot of differences between me and Maritain.” He said that out of the side of his mouth, as he often did.

“Yes, he talks more about love and art than you do,” I stupidly blundered on. “And he’s more poetic and less exact, and he doesn’t do the precise history of terms the way you do, but still, there’s a surprising amount in common.” It was clear from some impatience or hurry in his eyes that this wasn’t getting me anywhere, except that I did think I saw a question ignite behind his eyes, and so I tapered off somewhat lamely. “Anyway, I’m really looking forward to *Insight* this summer, and to taking some classes with you in my second year. Really good meeting you.”

My handshake was a relief to him, and he left me with a wispy smile whose meaning escaped me but didn’t discourage me. I felt a little embarrassed for my outburst, but glad that I had at least taken the chance.

The next year, I invited Father Lonergan out to Holy Cross College for an evening of conversation on his work with a half-dozen or so of his most devoted followers at our house. (I really had the impression, probably false, that Holy Cross College supplied the most serious and enthusiastic bunch of his students in the whole city.) In any case, he enjoyed it enough to come back at least once more, and maybe twice, although memory fails me. I remember that we particularly urged him to turn to a study of insight in love and in the arts. The Holy Cross tradition was heavy in poetry, literature, and the arts. Our guiding theme was “culture” – to plant the seed of the gospels deeply in the culture, in its every aspect. That matched a passion of Lonergan’s that, at that time, had not become as highly visible in his work as it was later to appear. Some of that work he had already done, but in manuscripts that neither we nor many others then knew of.

One thing that I remember from his lecture courses was the way his accent and his way of talking out of the corner of his mouth drove the German and French students nuts. They were

usually so proud that their Latin was far superior to that of the tongue-stiff Americans, that it disconcerted them to see that we followed his flat accents better than they. One day, the entire American section (well, the part that was awake and attentive, not surreptitiously reading the *Herald Tribune*) erupted into laughter when Lonergan interjected an example that referred to a contest *duplicis capitis*, meaning a doubleheader baseball game, and the Germans and French and all the others saw immediately that they were for once entirely left out of the world of allusions, and perhaps for the first time experienced how we Americans frequently missed European allusions.

I remember also submitting the paper I wrote for Lonergan's *Gratia Operans* seminar to *The Downside Review*, and not only getting it accepted and seeing it published (under the title "St. Thomas in Motion"), but also receiving a kind note from Abbott Christopher Butler, O.S.B., who was later to play a significant role at the Second Vatican Council, and who wrote in that note that he shared my view about the historic importance of Lonergan across the centuries since Aquinas.

One of the maxims I particularly took from Lonergan's conversations and asides during his lectures was that disciples can be a great danger to an original thinker. He said for example that he himself had gone out of his way to avoid controversies during his long career, so as not to distract himself from plowing ahead on the task he had set for himself, to understand the implications of the act of understanding across the whole field of human understanding, and to do so both in the context of reason and in the context of grace. He often stressed the importance of clinging to the insight, without allowing the scaffolding of concepts to entrap the freedom of one's roving inquiries. He never diminished the necessity for doing the hard conceptual and analytical work, and he was anything but romantic about o'erleaping that work to get to flashy (and perhaps insupportable) insights. But he clearly stressed the difference between getting the point and memorising the conceptual jargon. One could fake it by doing the latter, and almost deceive even a master, but sooner or later the difference would come out. He encouraged his students to think for themselves, and to shape for themselves their own

vocabulary, so as not merely to parrot his. He called attention to the fact that that is what he had had to do, so he could hardly discourage others from doing likewise.

It seemed to me then that there is something so captivating about Lonergan's moves, distinctions, brilliantly chosen terms, and the connective links of his thought from one area to another, that many of his disciples get caught up in a cocoon of precious language. It seemed to me that he was doing his best to warn us not to allow that to happen. I am quite confident that my friends – John Dunne, David Burrell, and David Tracy, for instance – would back me up in remembering that lesson, which he mentioned quite explicitly in those days. The worst thing, I remember concluding, would be to turn Lonerganism into a form of conceptualism. Of course, such a fate is in some sense so highly probable as almost to be inevitable.

For this reason, although my own work, from *Belief and Unbelief* through *Ascent of the Mountain, Flight of the Dove* and on up through *The Spirit of Democratic Capitalism* owes a great deal to distinctions and moves I learned from Lonergan, I have tried as far as possible to put things in my own words and in my own way. I have tried to show that I mastered important insights without having to repeat his canonical words. Perhaps I have got them not quite right; perhaps it would have been better to stick to formulae. But that would have meant betraying the whole main point, regarding the difference between the insight and its conceptualisation; the whole main point about *verbum*. The freedom that comes from mastery means stepping out on one's own, taking chances, and offering one's own reasons for doing so at each point.

I have tried to be faithful to Lonergan, and to do honour to his example, without becoming a Lonerganian. Lonergan himself gave great honour to St. Thomas without being, in quite the sense Maritain was, a Thomist. Maritain did not lack his own originality, his own poetic gift in rendering Thomistic distinctions in new ways, and in distinctive twentieth-century ways. But Lonergan was original in a far deeper and more thorough way. Indeed, not many people have the brain power to plumb the full dimensions of what Lonergan achieved. To do so, one must master not only the complex vocabulary of St.

Thomas, but also the far more widely ranging vocabulary of Lonergan himself, who had to contend with seven centuries of scientific and philosophical exploration after Aquinas.

There was one side of Lonergan that did not entirely appeal to me, although I could admire it with some awe. He truly was caught up with the Eros of theoretic inquiry. He could delight in tower upon tower of abstraction, inventing a methodology of methods, and behind that a set of reflections on alternative principles of methodology. That's important work, and somebody has to do it. But it is also an area fraught with self-deception, and very far distant from steady verification principles and reality checks. Furthermore, it requires an almost superhuman, almost angelic, detachment from the concrete things of this world and from fleshly involvement in the daily struggles of the world. I do remember Lonergan protesting from time to time, "Y'know, I have feelings, too!" But the point of that was that he often did seem wonderfully phlegmatic and detached, content with the self-imposed discipline of his own concentration on his work. His emotional tonality was emphatically not Maritain's. When Bernie (a name I think I never called him to his face, but one which sometimes arises in my mind when I think of him with gratitude and affection) also insisted that love had a great deal to do with the way he lived his life, I had no trouble seeing the love of God in him, and the faithful Jesuit's full commitment A.M.D.G. [*ad majorem Dei gloriam*]. But even the way he said it had the emotional flatness of one who seemed to shepherd all his passion for his vocation to theoretic inquiry. That was his way of loving God, so it seemed, and I honoured it.

Bernie could also be a challenge to his friends when they wanted to introduce him to other distinguished people to show him off, and to win for him some of the fame we all felt he richly deserved. I remember once, sometime before 1980 I think, when James Billington, then Director of the Woodrow Wilson Center, decided that it was time to bring Lonergan (about whom he had heard much) into contact with some major economists, and contacted me over at AEI to see if I could help arrange this. With some difficulties, having to overcome the

natural scepticism of some famous economists who did not at all think of themselves as believers, and were not terribly inclined to think an evening with a Jesuit theologian writing on the theory of economics would be an evening well spent, I persuaded them to give it a try. We met in the living room, as I recall, of the genial President of AEI, William F. Baroody, a Catholic and a trustee of Georgetown University, warmly disposed towards Jesuits.

Poor Bernie! In the company of strangers, he pretty much froze. Mr. Baroody, Dr. Billington and I tried to break the ice, and to feed him some leading questions, even on less than theoretic subjects. His answers were not exactly monosyllabic, but on the other hand were not much more than that either. We had brought him together with a stellar group of economists, who had been prepped on his theoretical interests, so different from their own preoccupations, who knew well the differences between Canadian and U.S. debates on political economy, and who could guess the predilections of a Jesuit living much of the year in Europe. Father Lonergan could not, or would not, engage them with questions of his own, or challenges of his own. He was not a master of small talk, in part out of all of us feeling so sorry for the discomfort of Fr. Lonergan, I think that was one of the most painful nights that I have ever experienced.

As the years have passed, I have been constantly surprised and pleased by the number of people I keep running into, in many walks of life, who have one way or another stumbled upon *Insight*, and tried to start small discussion groups so as to deepen their grasp of Lonergan's method with the help of others. It is as though, in learning to become familiar with one's own way of understanding, one has to have the reality check of comparing it with how others are doing. Besides, there are so many different areas in which understanding occurs, from algebra to calculus to the arts and politics and common sense, that one feels the need for help in areas one scarcely knows from one's own experience.

Karol Wojtyla in his own philosophical journey recalls how both Max Scheler and his own experiences under the Nazis forced him toward a more inward, experience-directed

adaptation of Thomistic distinctions. For those moments when he had to do what he had to do, against the screaming rebellion of his own fears and dreads, Wojtyla found Thomas on will superior to Scheler on the sentiments. But Wojtyla found he had to supply for himself the psychological and inward descriptions, which Thomas in his angelic objectivity barely paused to hint at (except on rare occasions). Wojtyla had to invent terms for the “subjectivity” of society and the “subjectivity” of individual human actions.

In an analogous way, Lonergan has provided an inward, descriptive method by which each of us might appropriate the key moves and distinctions of the perennial tradition (from Aristotle through Aquinas to Newman, and still growing) in our own conscious experience and our own favourite words. He has taught us how to become aware of these experiences, and how to put them in words (or ‘thematize’ them). And how to think critically about them.

Gaining power over the good and trustworthy use of one’s own understanding is a very great gift. It is a gift that that sometimes publicly tongue-tied, very private, and most passionate lover of theoretic inquiry – our good friend and great teacher, Bernard Lonergan of Canada – bequeathed us. His gift, considering all the vistas it has opened up, a gift without price. We shall not have done exploring those vistas for many generations to come.

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THE FRAGMENTED SELF/SUBJECT

WILLIAM MATHEWS

The existential gap consists in the fact that the reality of the subject lies beyond his own horizon.¹

Dr McShane's discussion paper drew my attention to the theme of fragmentation. There is the fragmentation in our sense of our known worlds brought about by the relentless explosion of change in our collective knowledge and the related life styles which it necessitates.² There is also the fragmentation in our sense of ourselves which will be our present concern. In Chapter 15 of *After Virtue*, entitled "The Virtues, The Unity of a Human Life and the Concept of a Tradition," Alasdair Macintyre comments on the manner in which modernity partitions a human life:

So work is divided from leisure, private life from public, the corporate from the personal. So both childhood and old age have been wrenched away from the rest of human life and made over into distinct realms. And all these separations have been achieved so that it is the distinctiveness of each and not the unity of the life of the individual who passes through those parts in terms of which we are taught to think

¹ *CWL 18*, 281.

² Lonergan's major writings, being concerned with frameworks for collaborative creativity, are in a sense antidotes to fragmentation. The metaphysics of *Insight* can be interpreted as attempt to articulate the creative framework within which a scientific community operates. *Method in Theology* does the same for the theological community, *An Essay in Circulation Analysis* for the economic community.

and feel.³

A good deal of modern experience and thought has, for him, made our sense of the unity of a human life almost invisible. MacIntyre is against the tendency to think atomistically about human actions and conversations. He poses the question, how do actions and conversations add up or cohere in the unity of a human life? In this he is following the line of thought of Nietzsche and Foucault that the self is not something that is fixed but rather something that is constantly in the process of becoming.⁴ Translating MacIntyre's question we can ask: how might questions, insights, formulations, judgements, and decisions add up, cohere, and shape the form and identity of the self in time? It is a question which I believe students of Lonergan need to address.

I

A first window on the problem will be opened up by assembling a textual phantasm or image of the kind of remarks that Lonergan has made about the self and subject at different times in his life. Published in 1943, "Finality, Love, Marriage," with its acknowledgement that marriage involves the full realization of the existence of another self, hints at the question of the self and the other.⁵ In his notes for his course on Intelligence and Reality in 1951 the term self-affirmation occurs, possibly for the first time. Without self-knowledge, Lonergan suggests that the subject can become a self-regarding centre capable of ecstatic devotion to a person or a cause.⁶

In Lonergan's opening remarks on the self in Chapter 11 of *Insight*, written close to the start of the process of composing the autograph, the emphasis is on unity: "By the self is meant a concrete and intelligible unity-identity-whole."⁷

³ *After Virtue: A Study in Moral Theory* (London: Duckworth, 1985), 204.

⁴ James Miller, *The Passion of Michel Foucault* (London: Flamingo, 1994), 69.

⁵ *CWL 4*, 33.

⁶ "Intelligence and Reality," Lonergan Research Institute, Toronto, Library Reference 131.5, 29, para 2.

⁷ *CWL 3*, 343.

That unity is for him a fundamental given: "What is meant is that a single agent is involved in many acts, that it is an abstraction to speak of the acts as conscious, that, concretely, consciousness pertains to the acting agent."⁸ What, he asks, does he mean by 'I'? He suggests that without formulation he knows very well what is meant and accordingly finds fault with various formulations. For him 'I' has a rudimentary meaning from consciousness. Consciousness is an awareness, not of known objects in the world but of the cognitional acts of the self, experiencing, questioning, understanding, and judging, which make those objects present. Such conscious acts or operations cannot be found in our known world. But this in turn poses the question: how, without insight and formulation, can we know the meaning of something? Is there not a need at this point to think about the cognitional self as characterised by an intellectual history, as incarnated in a tradition, and as engaged in a quest to know that is specific to each individual?

A further series of contexts for treating the self and subject follow. Chapter 4 of *Insight* deals with the relation between the theoretical knower and the known world of emergent probability.⁹ That knower is characterised by classical and statistical types of questioning, insights and judgements. The correlative known world is constituted by an emergent probability. Chapters 6-7 introduce the dialectically developing commonsense subject with its patterns of experience and the commonsense world that he or she engages with. If the cognitional self is defined in terms of conscious cognitional operations, the subject is defined in terms of its world, or later, horizon.

Somewhat tacitly chapter 14 of *Insight* introduces the dialectically developing philosophical self followed, in chapter 15, by the developmental self constituted by the operators and integrators to be determined by genetic method. Chapter 18 enlarges the field of consciousness from the cognitional to the ethical self. The last two chapters point towards a further

⁸ *CWL 3*, 350. This passage poses the question as to whether the self is a basic unity or a part of the wider unity of the agent, human being or person.

⁹ *CWL 3*, 128f., 138.

enlargement of the self into the realms of religion.

At the end of this itinerary one is left with the question, how do all of these aspects of the self pertain to its unity? As a unity is made up of parts the question arises, what are the parts of the self and the manner of their relation to the whole? How is self affirmation a part of the self? What implications does it have for the life of the self? Related is the distinction between the questions, what is happening when I am knowing something, and who knows? That second question is concerned with the manner in which a particular individual, through engaging with the questions of their life, comes to know certain facts and in so doing becomes the one who knows them. The specific questions and insights that an individual pursues constitutes their intellectual identity, makes them who they are.

Some of Lonergan's most sustained reflections on the meaning of 'I' and consciousness come in his *The Ontological and Psychological Constitution of Christ*, written in 1955/6 after *Insight* was completed but before it was published. There he seems to hold that the human person rather than some intellectual self is the ultimate subject of attribution. 'I' may refer to this person who I am and be filled out in terms of events I experience in the world with little reference to consciousness. 'I' may be taken to refer to conscious experiences of this person who I am and may be filled out with no reference to situations in the world.¹⁰

In 1957, shortly after writing *Insight*, Lonergan gave a course of lectures in Boston on Mathematical Logic and Existentialism. In them the notion of the subject and related categories, horizon, conversion and dread, rather than the self are more to the front. On the question of the unity of the subject we find him asking: "What is oneself? The oneself is the irreducibly individual element whence springs the choices of the decisive person and the drifting or forgetting of the

¹⁰ *CWL* 7, part 5, sections 2 and 3, 169-189. Lonergan offers five rather complex meanings of the referent of 'I'. He also addresses the question, what does 'I' refer to in Christ's statement: "Before Abraham was, I am."

indecisive person.”¹¹ He also defines the existential gap as the fact that the reality of the subject lies beyond his own horizon.¹²

In his 1958 lectures on *Insight* in Halifax the question of the unity of the self is again addressed:

Is there an ‘I’? Is the unity that perceives, understands, and judges merely a postulate, or are my insights into my sensible presentations, and is the rationality of my judgement dependent upon my insights and my experiences? Is there the one subject, not in the sense of finding the concepts, one subject, in oneself, but in the sense of finding in myself somebody at home, presence of the third type, that is intelligent and rational and performs activities that are described in this way... First of all, then, the unity is given.¹³

In 1959 in Xavier Cincinnati there followed his lectures on the Philosophy of Education.¹⁴ Central is the notion of the developing subject which is treated in the context of Piaget and the crisis of adolescence, of art, and the human good. Reference is also made to the scientific, philosophical, and moral development of the subject. In his treatment of development Lonergan poses the question, who is to be a man? There is involved here a transition in his thinking from the human being as substance to the human being as a conscious subject, as Dasein. The latter is characterised by a flow of consciousness, a structured unity which has a fundamental autonomy. The concrete existence of the subject involves concerns, a horizon and differentiation of horizons, and world. In the treatment of art and the developing subject there is a reference to differentiated consciousness as a stage in a development of the individual: “What one returns to is the concrete functioning whole. Organic function and organic

¹¹ *CWL 18*, 240.

¹² *CWL 18*, 281.

¹³ *CWL 5*, 140.

¹⁴ *CWL 10*.

interrelation.”¹⁵ Again we are left with the question about the relation between the concrete functioning whole and its parts.

In May 1961 Lonergan gave a course of lectures in University College Dublin entitled “Critical Realism and the Integration of the Sciences.”¹⁶ After introducing his notion of cognitional structure and its objectivity he began an analysis of the notions of subject, object, and presence. The fifth lecture found him comparing two types of subject, the spontaneous and the theoretic who have two quite different apprehensions of the world and distinct languages. There results two societies, the common sense and the theoretic. Lonergan next goes on to add the reflective structure of consciousness by means of which the subject comes to objectify and know both the common sense and the theoretic subject. This critical subject is also concerned with the transcultural: “To conceive the critical subject as bringing to one's mind the point where one's thinking is transcultural and historical does not arise within the field of theory, which is simply a matter of setting out objects.”¹⁷

The sixth lecture introduces the question of the existential subject, what am I to be? Am I to be a spontaneous, theoretical, or critical subject? Involved in going beyond the horizon of the spontaneous and theoretic subjects is a personal development that masters the differences between them: “The existential question is a question that is answered by a conversion, a purification, by a revolution, call it what you please, but what is meant is a development. And the lack of that development is what accounts for the decadence of the philosophical and scientific schools.”¹⁸ What is emerging here is the suggestion that self-appropriation is not simply a truth to be pursued but rather a foundational decision about the kind of subject one wants to be. This leads to a summing up of his realism:

Now I have described six types of realism, the realism of the spontaneous subject, who knows wolves and

¹⁵ *CWL 10*, 209.

¹⁶ A typescript of sections of the lectures is available in the Dublin Lonergan Centre. Page references are to that typescript.

¹⁷ Typescript, 42.

¹⁸ Typescript, 44.

bears, the realism of the theoretic subject who apprehends the same reality through theory, the realism of the critical subject who finds a basis both for the spontaneously known world and the theoretically known word, the realism implicit in the word of God, in the gospels and in the teaching of the Church, the realism implicit in dogmatic theology and finally, the realism that may be detached from theology, and that realism has as its fundamental point the equation between true judgment and reality.... But there is another realism called mythic realism. It starts off symbolically. The symbol is an affect laden image that conveys a meaning and mediates an apprehension of value. So realism is apprehended as a value, a choice or decision.¹⁹

Lonergan's later work in 1969, "The Subject," discusses the Neglected, Truncated, Immanentist, Existential and Alienated Subject but not the unity of the subject.²⁰

In *Method in Theology* (1972) there is a treatment of autobiography and biography as a preface to the problem of historical knowledge, his main concern:

There has emerged a new organization that distinguishes periods by broad differences in one's mode of living, in one's dominant concern, in one's tasks and problems, and in each period distinguishes contexts, that is, nests of questions and answers bearing on distinct but related topics. The periods determine the sections, the topics determine the chapters of one's autobiography. ... Biography aims at much the same goal but has to follow a different route. The autobiographer recounts what "I saw, heard, remembered, anticipated, imagined, felt, gathered, judged, decided, did..." In the biography, statements shift to the third person.²¹

What is significant from our present perspectives is that

¹⁹ Typescript, 48-50.

²⁰ *2 Coll*, 69-86.

²¹ *Method*, 183.

Lonergan does not seem to link the autobiographical or biographical projects with the projects of understanding the unity of the self. Many others, as we shall see, have taken that move.

In his lectures on *Philosophy of God and Theology* (1973) we find him using the term person rather than self or subject:

The contemporary view (of person) comes out of genetic biology and psychology. From the “we” of the parents and the symbiosis of mother and child comes the “we” of the family. Within the “we” of the family emerges the ‘I’ of the child. In other words the person is not the primordial fact. What is primordial is the community. It is within community through the intersubjective relations that are the life of community that there arises the differentiation of the individual person.

It follows that “person” is never a general term. It always denotes this or that person with all of his or her individual characteristics resulting from the communities in which he had lived and through which he had been formed and had formed himself. The person is the resultant of the relationships he has had with others and of the capacities that have developed in him to relate to others.²²

The strong emphasis here on intersubjectivity is notable.

Although Lonergan never expressed a view on the temporal shape or form of intellectual desire and was guarded about discussing his life, he did make a number of informal observations about the life process. He suggests that “Imagination will give you the big leads in your life.”²³ His reading of authors such as Stewart on Plato, Augustine, Aquinas, Toynbee, Schumpeter, Snell and later Voegelin opened up his imagination in a way that gave birth to

²² *Philosophy of God and Theology* (London: Darton, Longman and Todd, 1973) 59.

²³ *The Question as Commitment, A Symposium*, edited by Elanne Cahn and Cathleen Going (Montreal: Thomas More Institute Papers/77, 1977), 110, also 19.

significant questions. Lonergan also recognised that although the unfolding of a life or a work cannot be planned, a direction is unfolding in it. Only after it has been in process for some time with maturity can it be recognised: “You know about it, eh? You come to know about it.”²⁴ He also acknowledges that one can cooperate or not with the direction: “Part of it is the golden cord you have to cooperate with or nothing happens. Part is the chain that jerks; if you pay too much attention to that you are just upset and wasting your time.”²⁵

In a related discussion about the way questions form in our lives Lonergan remarked that there was involved two stages. The first opened up the big questions that could occupy one for a lifetime, the second brings to light the subordinate questions which illuminate the big questions.²⁶ By temperament he needed big questions which would occupy him for long periods, even most of his life. The manner of the interaction of the big questions and their subordinate parts is of the form of a story, a narrative in which there is disclosed the who of the questioner. On an occasion in his later years in Boston when he was trying, unsuccessfully, to convince Harvey Egan about the significance of Progoff he commented that he had simply followed his own dynatype. In 1980 he restated this point:

The cognotypes are symbols. The dynatypes are the root of the life-styles to which we are attracted, in which we excel, with which we find ourselves most easily content. By the dynatypes our vital energies are programmed; by the cognotypes they are released.²⁷

Towards the end of his life he is stating that his imagination,

²⁴ *Caring About Meaning: Patterns in the Life of Bernard Lonergan*, edited by Pierrot Lambert, Charlotte Tansey and Cathleen Going (Montreal: Thomas More Institute Papers/82, 1982) [hereafter *CAM*], 147. See also 95, 146-7, 198-9, 22-3.

²⁵ *CAM*, 147. For a discussion of the golden thread see Eric Voegelin, *Plato* (Louisiana: Louisiana State UP, 1981), 232 ff.

²⁶ *The Question as Commitment*, 9. This seems as close as he gets to affirming the significance of intellectual desire for an understanding of a life.

²⁷ “Reality, Myth, Symbol,” in *Myth, Symbol and Reality* Ed. A.M. Olson (Notre Dame: U of Notre Dame Press, 1980), 37.

through symbolic cognotypes, led his pure desire to know, his dynatype, on its quest into the unknown.

A survey of the Lonergan texts on the self and subject leave us with questions about his understanding of the relationship between the parts and the unity of the self.²⁸ How our questions, insights, judgements, and decisions, how our horizons of common sense, theory, and interiority, our intellectual, moral, and religious conversions constitute the parts of that unity, remains to be worked out.

II

The question of the unity of the self has been widely discussed by philosophers in recent years. For present purposes I will offer a sample of the considerations of five, Hannah Arendt, Adriano Cavarero, Stephen Crites, Simone de Beauvoir, and Alasdair MacIntyre.

After discussing labour and work, Hannah Arendt opens chapter V of her 1958 work, *The Human Condition* with perceptive remarks on the human significance of speech and action.²⁹ It is through their actions and conversation that human beings become present to each other as human rather than as physical objects; show, not what, but who they are to the others who are present in their world. Out of this web of human actions and relationships stories emerge. In a passage in her lecture, 'Labor, Work, Action,' delivered on November 10, 1964, she brings sharply into focus what that means:

It is because of this existing web of human relationships with its conflicting wills and intentions, that action almost never achieves its purpose. And it is also because of this medium and the attending unpredictability that action always produces stories, with or without intention, as naturally as fabrication produces tangible things. These stories may then be recorded in documents and monuments, they may be told in poetry ... They tell us more about their subjects, the "hero" ... and yet they are not products

²⁸ The survey is necessarily minimalist. It is necessary to read each of the passages quoted in its proper context in the basic texts.

²⁹ *The Human Condition* (Chicago: U of Chicago Press, 1958), 175.

properly speaking. Although everybody starts his own story, at least his own life-story, nobody is the author or producer of it. And yet, it is precisely in these stories that the actual meaning of a human life finally reveals itself.³⁰

The accumulation of human actions produces an implicit story. For Arendt the fullness of the meaning of a human life is given, not in the labour of our bodies or in the works of our hands, but in the manner in which our actions add up in time to form a story. It is a somewhat startling claim.

Adriano Cavarero, drawing on Arendt, opens her *Relating Narratives, Storytelling and Selfhood* with a reflection on Karen Blixen's story of the stork.³¹ One night a man was awakened by a loud noise which seemed to come from the direction of a nearby pond. In the darkness, guided by the noise, he ran around and around until eventually he discovered a leak in the dike from which fish and water were escaping. He responded to the problem and when the leak was repaired returned to his bed. The next morning when he awoke he was surprised to discover, on looking out the window, that his feet had traced the pattern of a stork. At this point Karen Blixen asks herself: 'When the design of my life is complete, will I see, or will others see a stork?' Involved is the suggestion that the actions and conversations in our lives are not arbitrary but in a sense compose a design which is of the form of a story.

In her reflection on the story Cavarero makes a number of important points. Firstly, the design is not something one could self-consciously set out to live, rather it is left behind after the life has been lived. Secondly, the design has a story form. Thirdly, it is one thing to live the design; it is another to recognise it. Because of this there is such a thing as the narrative gap, the gap between the subject's notion or sense of the design in their life and the reality of who they are. It is only by writing one's autobiography or by someone else writing one's biography that in fact, existentially, that gap can be

³⁰ *The Portable Hannah Arendt*, ed. Peter Baehr (New York: Penguin Books, 2000), 180.

³¹ *Relating Narratives, Storytelling and Selfhood* (London: Routledge, 1997), 1-4.

overcome. Narrating the story answers the question, who am I?

Stephen Crite's essay, "The Narrative Quality of Experience" addresses a different but related point, namely the tense structure of consciousness.³² Augustine in the *Confessions* pondered the manner of the interrelation of the past, present, and the future at every point in time in a human lifetime. Consciousness, for Augustine, "anticipates and attends and remembers, so that what it anticipates passes through what it attends into what it remembers."³³ It follows for Crites that the temporal structure of consciousness could never be a chronicle of actions or of questions and insights. Discussing the implications of this tense structure of the past, present, and future he concludes:

I want to suggest that the inner form of any possible experience is determined by the union of these three distinct modalities in every moment of experience. I want further to suggest that the tensed unity of these modalities requires narrative forms both for its expression (mundane stories) and for its own sense of the meaning of its internal coherence (sacred stories). For this tensed unity has already an incipient narrative form.³⁴

For Crites our understanding of the unity of consciousness in time will be in terms of a narrative insight. If this is the case there must be qualities of consciousness whose tense structure is narrative in order to make this possible. Obvious candidates would be the transcendental notions, the pure desire to know, and the desire for the good and values. The tense structure of problem solving is such that as it unfolds it presently unites the now past inspiration of the problem with a future anticipated solution. Through the natural operation of that activity an intellectual story of the problem solving comes to be written in the life but not yet read.

According to Jo-Ann Pilardi, Simone de Beauvoir in her autobiographical writings began to make her own life a

³² *Journal of the American Academy of Religion* 39 (1971): 291-311.

³³ *Confessions* XI: xxvii

³⁴ Crites, op. cit., 303-4.

philosophical text: “The fifty two year old narrator, being both narrator and protagonist, insists that the only way to an understanding of the self is through the story of the life of the self, a ‘personal account’ of the autobiographer.”³⁵ Her life is an object; her self-life-writing is a description of that object. Tacitly it involves appropriating the design of one’s life, who one is.

There are parallels and differences in Lonergan’s exercise in self-affirmation. It does involve making one’s own intellectual life as it is involved in empirical science, common sense and later, scholarship, a philosophical resource. In so doing Lonergan’s concern is with enabling us to master the structure of what it is that is happening when someone is knowing something in the world. He differs from de Beauvoir in that he does not make the wider intellectual autobiography the text for self-affirmation. Making that further move makes more readily accessible the question of the unity of the self.

Alasdair MacIntyre’s remarks on fragmentation and attempts to think atomistically about human actions have been noted. Like Arendt he too asks the question, who acts and converses? He answers: “Narrative history of a certain kind turns out to be the basic and essential genre for the characterisation of human action.”³⁶ His discussion of the context of conversations leads him to conclude: “I am presenting both conversations in particular and human actions in general as enacted narratives.”³⁷ Addressing his basic question of the unity of a human life he continues:

It is now possible to return to the question from which this enquiry into the nature of human action and identity started: in what does the unity of an individual life consist? The answer is that its unity is the unity of a narrative embodied in a single life. To ask what is the good for me is to ask how best I might live out that unity and bring it to completion..... The unity of a human life is the unity of a narrative quest.

³⁵ *Simone de Beauvoir, Writing the Self, Philosophy Becomes Autobiography* (Westport, Connecticut: Praeger 1999), 110-111.

³⁶ MacIntyre, *After Virtue*, 208

³⁷ *Ibid.*, 211.

..... A quest is always an education both as to the character of that which is sought and in self knowledge.³⁸

In this MacIntyre is suggesting that in some sense an individual co-operates with the unplanned design that is emerging in their lives. The question arises, in what sense do we have ethical responsibilities for the narrative dimension of our lives?

III

As Arendt and MacIntyre posed questions about the manner in which actions and conversations accumulate within the unity of a life, students of Lonergan need to do the same for intellectual, ethical, and religious activities. Do our insights accumulate after the fashion of a chronicle or a story? Are the series of questions we pose and the related insights, judgements, and decisions we make so many isolated atoms of cognitional activity and knowledge or, from the perspective of the lifetime, can we discover an emerging design in our intellectual, ethical, and religious life, a story? Is it the case that cognitional activity constitutes our personal identity just as much as it constitutes our relation with the known world? How does intellectual, ethical, and religious activity add up in a life time?

Two observations are in place. Firstly, in his treatment of plot Aristotle was fully aware that only a small amount out of the myriad of actions that an agent engages in have a place in the plot or storyline.³⁹ Certain actions, conversations, questions, and insights belong in the narrative proper rather than the chronicle. To omit any of them would result in a gross distortion of the plot. Secondly, making sense of the relation between the unity of meaning and its parts in a narrative involves a grasp of narrative categories through related narrative insights.⁴⁰

³⁸ Ibid., 218-9.

³⁹ *Poetics*, Chapter 8, 1451^a 15-20.

⁴⁰ Dilthey's analysis of the relationship of the parts of a life to the whole in terms of the category of meaning complements Aristotle's plot based approach. See *W. Dilthey, Selected Writings*, edited, translated and

By a narrative moment or event is meant an event in a life which is such that its meaning cannot be understood in terms of the moment in itself. More generally Ira Progoff's steppingstones would be illustrations of narrative moments.⁴¹ The life moves through these events and its meaning is to be understood in terms of the manner in which each of them relates to and constitutes the meaning of the whole. The meaning of the narrative event is an integral part of the meaning of the whole life.

Examples of narrative events would be the awakening of the wonder of an agent to a significant problem, the emergence of a significant insight, a meeting and consequent experience of falling in love. Some narrative events stand out as constituting the beginning of a quest/story or of a chapter in a quest or story. Examples of a beginning would be Jacqueline du Pre's experience of hearing the cello for the first time when she was five years old or Gandhi's experience of being thrown off the train in South Africa. The meaning of the beginning is present in all that follows. Such a beginning, involving an awakening of the core desires of the subject to his or her path, has a directing presence in all that is to follow. From this perspective desires can function as the operators and integrators of a narrative. Further events in the journey could include a meeting with a person, an accidental event, the reading of a book, or, for Lonergan, attending Leeming's course of lectures in Rome in 1935.

The issue can be put to the test in the context of Lonergan's own life. In his life can we discover through a series of narrative insights what Progoff would term the steppingstones of the plot or Dilthey the parts of the unity of the meaning? A further task will be to contemplate how they give meaning to the unity of the life. By way of a response I offer the following account of Lonergan's steppingstones:

The Steppingstones of Lonergan's Life

1. I was born, the eldest son of Gerald and Josephine Lonergan, in Buckingham, Quebec, on December 26th

introduced by H.P. Rickman (Cambridge: Cambridge UP 1976), 235-245.

⁴¹ *At a Journal Workshop* (New York: Tarcher, 1992), chapter 7.

1904.

2. When I was 15 I found myself troubled by a religious vocation. I thought that a subsequent illness would have ended the matter but it persisted and sometime after, on a streetcar in Montreal, I made the decision to join the Jesuits.
3. It was in 1926 at Heythrop in Oxfordshire that my passion for philosophy was awakened by the unsolved problem of knowledge. I was suspicious of the philosophy I was taught and became a nominalist, but the path to *Insight* had begun.
4. Reading Stewart's *Plato's Doctrine of Ideas* coaxed me out of naïve realist accounts of understanding and intelligence. The experience of the Depression in Montreal at the time began in me a 14-year quest to understand the causes of the economic cycle.
5. By accident I was sent to Rome for theology studies in 1933. While there I struggled with idealism and the philosophy of history until, in 1935, while attending Bernard Leeming's course I made a breakthrough on the meaning of judgement and its relation to existence.
6. In 1938 it was decided that I was to become a teacher of theology rather than of philosophy, as I had expected. My subsequent postgraduate studies in theology awakened my interest in the question of the method of theology.
7. Because of the war I returned to Montreal in 1940 and wrestled with the causes of the economic cycle. I had the insight into the dynamics of the pure rather than the trade cycle but in 1944 this project petered out.
8. In 1943, inspired by Hoenen's articles, I made the decision to research what Aquinas had to offer on the problem of knowledge.
9. In 1946, encouraged by the response to my course on Thought and Reality, I made the decision to research the vision of the new and compose the book *Insight*, as soon as the *Verbum* articles were completed.
10. In 1947 I was moved to Toronto, which I initially found upsetting. There resulted a short creative illness

after which, as I began to compose *Insight*, I enjoyed great peace of mind and consolation.⁴²

11. In the process of composing a proto-*Insight* I had my own insights into cognitional structure, the notion of being, and the problem of objectivity
12. When composing the autograph of the final text I had further insights into emergent probability, the dialectical development of common sense, the irreducibility of things, the dialectic of philosophies, process metaphysics. All of those insights guided the process of composition.
13. After *Insight* was completed I was moved to Rome. In 1958 after a conversation with Longman I made the decision to compose *Method in Theology*.
14. In the course of composing *Method*, in February 1965 I had the insight into the functional specialties. A year later, in the course of recovering from a life threatening cancer illness, I had the equally important insight into the distinction between theology and religion. Involved were significant insights into the religious significance of intellectual, moral, and religious conversion.
15. Laboriously, I worked at composing the text, finishing it in 1971.
16. After *Method* was completed I made the decision in 1975 to return to economics. In my last years in Boston College I attempted to put my thoughts on that discipline in order.
17. After a further cancer operation I realised that my intellectual journey had come to an end and lamented that fact.
18. I died in Pickering, Ontario, on November 26th 1984.

The first significant narrative event in Lonergan's life is his

⁴² Lonergan's account of his state of consolation at the time in a letter to Louis Roy on August 16th, 1977 is quoted by F. Crowe in his *Lonergan* (Collegeville, Minn.: The Liturgical Press, 1992), 7. Following Julia Cameron I believe that Lonergan at this point settled into his golden. See her *The Golden Vein* (London: Pan/Macmillan, 1996), 98-102.

response to his religious vocation, the second his awakening to the problem of knowledge at Heythrop. Further narrative events involved his reading of *Plato's Doctrine of Ideas* by Stewart, attending Leeming's course, and, provoked by Hoenen, making the decision in 1943 to research Aquinas on mind. The meaning of these narrative events cannot be grasped within a particular limited context within the life but only within the context of the entire life story. Lonergan's religious vocation is in this sense a directing presence that remains throughout the entire life that follows. The intellectual awakening to the problem of knowledge in Heythrop is also the emergence of a presence that will remain. In this sense, following Dilthey, the meaning of the unity of the life, or equivalently person, self, or subject, is given in the manner in which the meaning of the distinctive narrative events interlocks. Each of them are parts of the story structure. The meaning and significance of the events in the list cannot be grasped in isolation from that of the remaining events. The conclusion of the analysis of the relation of the various events and moments in Lonergan's life is that it is narrative structured. Through this understanding an otherwise fragmented sense of the self is replaced by a more unified one.

A final comment has to do with Lonergan's view that the intellectual, ethical, and religious dimensions of the human person are related in terms of levels of consciousness. Complementing that approach the narrative understanding of the life invites us to explore how those levels interact with each other in the entire lifetime. The initiating narrative event is on the religious level. It is followed by a long period in which the intellectual level, awakened to the problem of knowledge, the economic cycle, and the philosophy of history, is dominant. This in turn gives rise to the emergence of the ethical level in 1943 and 1946 when he makes the decisions to compose *Verbum* and *Insight*. Those works were chosen as his values. It follows that even though their authoring was predominantly intellectual there is also an inevitable ethical presence and level involved in them. Might it be the case that a narrative approach to questions about the relation among the different levels of consciousness might have some light to shed on this difficult

topic?

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COMMENT

SISTER MARY OF THE SAVIOR (CATHLEEN M. GOING)

Professor Philip McShane has been a resource for us in North America for many years now – first as furthering collaboration with Lonergan and then also as an editor and interpreter of Lonergan’s work. The first fact known to me about him remains a key for understanding him. Shortly before the International Lonergan Congress (Florida, 1970), some of us at Thomas More Institute (Montreal) were making excerpts for Congress discussion from each participant’s paper as it arrived in advance. The contributions from Ireland included not one but two papers from a certain Philip McShane: one on musicology, and “Image and Emergence: Towards an Adequate *Weltanschauung*.”¹ Enter Philip McShane the generalist – a title full of honour, as readers of Lonergan will recognise. His brief introduction to the second volume of Congress papers (his first time in print on this continent, I believe) was concerned with one of his continuing themes: the incredible length of the process needed for appropriation of Lonergan’s thought, individually or socially.

My note on the “Implementation” article indicates what I have learned from it (a) about its author, (b) about Lonergan, and (c) about implementation of Lonergan’s transcendental method. My sheaf of quotations from the article may offer a focus – not distorting, I hope – different from the reader’s own.

What I have learned, then:

¹ Professor McShane mentions the two papers in the present article (18). My memory suggests that there was a third – on zoology – but I cannot offer proof. Hereafter, my references to pages in the article “Implementation” will be incorporated into my “Comment” at the pertinent places.

a) about the author ...

As I have long supposed, to understand Professor McShane well one must read Joyce's *Finnegan's Wake*.² An interest in the structures of music is helpful also. And "elevations" such as scientists practice are obviously pertinent to the writing we are considering.

It is a pleasure to consider the questions and hints Professor McShane offers – whichever ones each of us can catch. For example, in regard to integration – so pervasive a theme in Lonergan and the core and goal of every implementation of method – he raises the question whether a feminine perspective, which he calls "integrative," might be a "pivot" for the emergence of the third stage of meaning (to his mind, not yet arrived) (14, n.7).

I learned from the paper that Professor McShane worked out the index of *Method in Theology*. He points to doing an index as an exercise or instance of implementation. His calling attention (15, n.10) to the absence of the term "implementation" in the Lonergan indices³ is instructive about the understanding necessary generally for implementation as well as about the talents needed for the surprisingly delicate, even foundational, work of indexing.

I experience in the paper some moves which suggest difficulties for collaboration over the years (in Joyce's wonderful phrase: "the intermisunderstanding of minds") – the criticisms; the thought progressing as though by distraction. One is sent on so many errands, down so many trails.

The author seems by turns despairing of his readers (as though he were saying: "Well, someone may pick up something somewhere along the line") and by turns enormously trusting that they will indeed carry forward at least some of his suggestions,⁴ if enough and varied hints are given.

In the wealth of hints and nudges, in the invitations,⁵ we

² Prof. McShane will not consider this a reproach. See for example his references to Joyce in the 1995 *MJLS* journal article cited in note 5 below.

³ "Implementation" is absent also from the *Combined Lonergan Indices* (ed. O'Fallon), I may add.

⁴ See for example his expectation that readers will work on the context of his note 10.

⁵ Cf. the mention of "invitatory eclecticism" in "General Method,"

can recognise what may be his best role over the years. As he says (he is thinking of Lonergan): “a poise of such sophisticated direct speech needs slow incarnation (14, n.8).” His question in a 1995 article⁶ is delightfully pertinent here, because the point is the same in both writings: the need and cost of self-appropriation, the low probability of its occurrence.

“You had... a spare hour to check out this McShane article, not envisaging the need for a spare month. ... [L]ater, then, in summer leisure?”

b) about Lonergan ...

It is a pleasure also to follow the lead of the article’s references to Lonergan. In familiar passages, the context of each reference gives fresh understanding. Other passages, forgotten or overlooked, become discoveries. Outstanding for me was the trail to Lonergan’s comment on Aristotle’s “live in accordance with the best in us.”⁷

It is important information that Lonergan “had not backed down on the drive through the book [*Insight*] to the existence of God” (16, n.16). Surely most long-time Lonergan readers have met annoyed opposition to Chapter XIX on the part of some important personage.⁸

Many remember the exchange during the 1970 Congress about Scheler and feelings which McShane recalls (21, n.32). Lonergan’s answer has a different resonance in post-*Method in Theology* days: it personalises but also limits the so-called shift to feelings and values.

Professor McShane encourages us to focus newly on Lonergan’s “practical concerns” (14). He means to include a serious ethics and for that he offers a guide for implementation, namely, that it be “an operation of the [functional] specialities *dialectic* and *foundations*” (15, n.10, emphasis added). As he quickly clarifies, he does *not* mean a focus on commonsense – that, he says (23), can be “unaesthetic,” “unhomely.” I suggest

MJLS 13.1 (Spring 1995), 50, note 51. He uses “nudges” in note 3 of the same article.

⁶ “General Method,” 46.

⁷ *Nicomachean Ethics* X, 7, 1177b. See *3 Coll*, 27-28.

⁸ In my case, Charles Davis.

that the recent preoccupation among Lonerganians with commonsense arises from something like the attitudes which Professor McShane describes: it has to do with a search for a “broader foundational perspective,” and with that “vaguer view of the human dynamic” which he is recommending as belonging to the bent towards “*making sense*” (16).⁹

With Philip McShane I think again about “patterns” of meaning¹⁰ in Lonergan’s own life, and welcome his phrase “the intellectual pattern of loving” as an apt description of it (22). In micro-chip biographies he refers to what he calls Lonergan’s “poise toward retrieval” (14, n.8) and his “temperament of *oratio obliqua*” (14). Even more interesting are his remark (14) that the *systematic* meaning of what he calls Lonergan’s “*doctrinal*” work *Insight* “of course was private to the forty-year-old Lonergan,” and his linking Lonergan’s familiarity with discernment to both his religious lifestyle and his study (Ignatius and St Thomas [22]).

c) about implementation ...

I had not noticed the inclusion of “implementation” in Lonergan’s definition of metaphysics in *Insight* (15). What is instructive is the emphasis in the article on functional specialization as a *global* need (19).

Even if it is obvious that implementation is the “ongoing crisis” of method, for the author of the article it seems a crisis usually overlooked. Here it is presented in the website context of macrodynamic analysis, with a concern about unfocused research as background.

Professor McShane’s remark that initially the contributions to implementation “are bound to be shabby” (11)

⁹ Also in relation to Lonergan’s “practical concerns”: recall the preoccupation of the 2002 Boston College Lonergan Workshop with moral issues, the sharp call of Charlotte Tansey to Lonergan scholars to attend to such issues (in her address for the Frank Braio program at Fordham University in Spring of 2002), and even the efforts begun just before Lonergan’s death, to show the political consequences of his “positions” (e.g., Frederick Lawrence).

¹⁰ “Patterns” was used in the subtitle of Lonergan’s intellectual autobiography *Caring about Meaning*, ed. P. Lambert, C. Tansey, C. Going (Montreal: Thomas More Institute, 1982).

would have a different meaning if we do not think that he includes his own efforts: it would be an instance of “blunt” criticism – such as the one he makes of “comparisons” studiously elaborated without the benefit of basic horizon (31). But if we think he intends to include his own work – and the serious, long-term, work of others – then the point is rather to give a glimpse of the distance yet to be travelled, and the magnitude of the civilizational impact expected eventually from “implementation.”

A new notion for me was that of “elevations,” the elevations needed prior to implementation. For example, he speaks of the lifting of *Insight* into the spiral of functional specialization (14, n.7), of a “classroom lift” (27, n.52), of a “lift” of Lonergan scholarship (30, n.63), of a “lifting of economics to the level of a respectable, adequately normative, empirical science” (20). These phrases sketch for me, in still another way, the scope of the “preliminary work” yet to be done in aid of the reception of Lonergan. “Hodik,” and related terms offered to our vocabularies, suggest elevations also (29, n.60).

The author’s uses of “detachment” – “oriental detachment” as a strategy within undifferentiated wisdom; the “astonishing naïve detachment” of Aquinas and of Lonergan (13-14) – suggest a new guiding theme for doing intellectual history.

Thinking of the functional specialties as genera of implementation (of transcendental method), Professor McShane locates his present paper in a “ninth genus” of implementation, i.e., not as an exercise of one of the eight functional specialties; it is neither research nor history... nor even communications. Implementation practised in this way, it seems to me from his remark, responds to the “neglected transcendental” ‘Be adventurous,’ by “meshing with a category of fantasy” (cf., 14, n.8).

Conclusion

I wanted to know, in studying Philip McShane’s article, whether it contains a contribution to a better formulation of the role of intelligence in human living than do those accounts of

intelligence – especially in religious literature – which lure partisans of “the heart” into speaking of “mere intelligence.” The author has given many elements of an answer to my wish: the discussion (referred to above) of the “full life of theory”; understanding spoken of as the control of meaning available to a differentiated consciousness (31); “systematics: a language of the heart” (18, n.24); “the intellectual pattern of loving” (22); “full heuristic adequacy” (32, n.66); and, not to be overlooked, the two “enrichments”: Scripture and streetlife (14). His efforts serve as a rebuke if one is engaged in making one’s own anti-intellectual contribution – against the step into theory or, more generally, against other forms of self-transcendence.

Professor McShane may want to know what contribution to contemplative living a reader might find his article to be. My present “comment” is the beginning of my own answer. More specifically: I ask myself whether one can think of “poise”¹¹ as a satisfactory characterisation of the contemplative attitude and I begin to work out the possible correspondences: in a transition to homeliness, a creative minority, a differentiation of consciousness, a struggle for “poisitional conversation” in a contemplative life lived communally (a struggle that was neither Jesus’ nor Lonergan’s, he says – for different reasons). The possible links would have to be checked out in *Shaping of the Foundations*, and in *The Redress of Poise*, and in “General Method,” and in.... and in....

It is clear to me, in concluding this note, that the author and I meet at two points which are very important to each of us.

We meet in an image. No, not the butterfly; the “Singer.”

His “Singer” emerges from Hesse, mine from Hesiod via what he calls “the sad little last book of Eric Voegelin.”¹² I have taken a turn at suggesting “singer at the heart of the universe” as a satisfactory variant among images of the life of

¹¹ See the references to “poise” in “Implementation” and in “General Method,” 47-48, 52.

¹² See “General Method,” 36. My own reference is to vol. V of Voegelin’s *Order and History* (Baton Rouge: Louisiana State UP, 1987), 85-86.

cloistered nuns,¹³ since this one includes remembering, reflective distance, full corporeality, and the image-ing of God.

We meet in a goal: to shift the probability-schedules of hope (15).¹⁴

To me this seems to express a lifelong purpose of Philip McShane.

Sister Mary of the Savior (formerly Cathleen Going) is a member of the cloistered Dominicans of the Monastery of the Blessed Sacrament in Farmington Hills, Michigan. She was co-editor and co-interviewer, along with Pierrot Lambert and Charlotte Tansey, of *Caring About Meaning: Patterns in the Life of Bernard Lonergan*.

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¹³ The best-known is Thérèse's "At the heart of the church I will be love." But see: "Contemplative life in the church today: one nun's opinion," in *Sisters Today* 62 (July 4, 1990): 243-247.

¹⁴ See "In love with the universe: a brief introduction to the work of Bernard Lonergan" in *Dominican Monastic Search* 97: especially 69-74 (also on Washington Lonergan website).

IMPLEMENTATION IN LONERGAN'S EARLY HISTORICAL MANUSCRIPTS

PATRICK BROWN

To be sure, it is possible to overinterpret a text that does not bear the weight of concentrated speculation, but it is also possible to underinterpret a text that is a treasure of beautiful and useful thoughts. Either mistake does an injustice to the author, but the latter is more damaging to the interpreter.

Harvey Mansfield¹

My writings are difficult; I hope this is not considered an objection?

Nietzsche²

Philip McShane's writings are difficult. It is not hard to guess why: They express his own extraordinary achievement of theoretic understanding. For forty-seven years, with relentless perseverance and indomitable courage,³ he has steadily

¹ Harvey C. Mansfield, "Preface," *Machiavelli's New Modes and Orders: A Study of the Discourses on Livy* (Chicago: U of Chicago Press, 1979), 11-12.

² The sentence forms part of a discarded draft for section three of Nietzsche's late work, *Ecce Homo*. It is quoted in Nietzsche, *On the Genealogy of Morals and Ecce Homo*, trans. Walter Kaufmann (New York: Random House, 1967), 340.

³ I refer here to McShane's recurring appeal to Gaston Bachelard's late-life existential stance. "Late in life, with indomitable courage, we continue to say that we are going to do what we have not yet done: we are going to build a house." Gaston Bachelard, *The Poetics of Space*, trans. Maria Jolas (Boston: Beacon Press, 1969), 61.

climbed that most demanding, grueling, and rewarding of mountains, the mountain of Lonergan's meaning. It is an immense, difficult, and exacting task.⁴ It requires not only relentless perseverance but also "the solitary cultivation of a strange courage."⁵ In the process he has become, as he himself once described Lonergan, an "elder towering in meaning."⁶

McShane's writings are also difficult because they express his own achievement of insight into existential subjectivity,⁷ and for that reason he has become something like a Jeremiah of the Lonergan movement. Again and again, in writing after writing, he insists on reminding us of a dangerous memory and an uncomfortable fact. The dangerous memory is the memory of our own nescience.⁸ The uncomfortable fact is the likelihood

⁴ I remember first meeting Phil at the June 1979 Lonergan Workshop in Boston. He recited for me Hopkins' lines:

O the mind, mind has mountains; cliffs of fall
Frightful, sheer, no-man-fathomed. Hold them cheap
May who ne'er hung there.

Gerard Manley Hopkins, *Poetry and Prose*, ed. Walford Davies (London: J.M. Dent, 1998), 86. The climb towards Lonergan's meaning is at the same time an ascent towards self-meaning, to mix two of McShane's early titles.

⁵ McShane, "Modernity and the Transformation of Criticism," *Lonergan's Challenge to the University and the Economy* (Washington DC: UP of America, 1980), 61.

⁶ McShane, "Lonergan's Quest and the Transformation of the Meaning of Life," in *Lonergan's Challenge*, 142. The most recent relevant searchings may be found at the website for the Cantowers project: www.philipmcsane.ca.

⁷ See, for example, McShane's discussion of the four fundamental tensions-in-existence and three related psychopathologies in "Middle Kingdom, Middle Man (T'ien-hsia: I jen)," *Searching for Cultural Foundations* (Lanham, MD: UP of America, 1984), 24-34.

⁸ Nescience is a complex topic about which, I am tempted to say, I know little. Human nescience seems to be deeply related both to our native orientation into mystery and to the refusal of that orientation in favor of "nominalisms, fragmentations, ... scotomae, anxieties, resentments, biases." McShane, "Preface: Distant Probabilities of Persons Presently Going Home Together in Transcendental Process," *Searching for Cultural Foundations*, x. As for the orientation, Lonergan subtly sublates the first line of Aristotle's *Metaphysics* into his own complex heuristic when he writes that "man by nature is oriented into mystery." *CWL 3*, 570. As to refusing that orientation, Lonergan stresses that the "effort to understand is blocked by the pretense that one understands already..." *CWL 3*, 529. On

of personal and group failure in genuineness.⁹

The forgetfulness of nescience and the refusal of genuineness stem in part from what Lonergan calls “the conceptualist illusion.”¹⁰ McShane painstakingly explores how that illusion dominates what he refers to as the present “axial period” of history.¹¹ That illusion forms – or rather, deforms – not only the academic world but also history, including our existential history,¹² and part of McShane’s calling has been to foster a real and painful apprehension of just how deformed our institutions are.¹³ As McShane put the point in a popular lecture in 1968, “The heart of the problem is the radical misconception of the nature of human understanding. Understanding is assumed so often to have been achieved when we have arrived at a name and a facility in using it. But so many of you are virtually trapped into mindlessness by

nescience and “the restoration of mystery,” see McShane, *Process: Introducing Themselves to Young (Christian) Minders* (Halifax, 1990), Appendix 4, “God, Man, Mystery,” 228 (noting that “psychic expansion and the restoration of mystery is a century-long labour”); *id.* (speaking of “the challenge to return reflectively to oneself, to reflectively digest oneself, so as to bring forth a transformed self, mystery-laden and expansive.”)

⁹ Lonergan uses “genuineness” in a technical sense developed in his analysis of the tension of limitation and transcendence inherent in human development. *CWL 3*, 498-503. For an extension of that analysis to the levels of community and history, see Lonergan, “Dialectic of Authority,” *3 Coll*, 5-12. Communities no less than individuals can “fear the cold plunge into becoming other than one is” and can “dodge the issue.” *CWL 3*, 502.

¹⁰ *CWL 2*, 223.

¹¹ See, e.g., McShane, “Middle Kingdom, Middle Man (T’ien-hsia: I jen),” *Searching for Cultural Foundations*, 8-9.

¹² On “existential history,” see *Method*, 182.

¹³ McShane makes an extended and persuasive case that the rot runs deep. For diagnoses in various contexts, see McShane, “Preface,” *Searching for Cultural Foundations*, xiv-xxii (examining fragmentation and truncation in journalism, management, education, and logic); *id.* “Middle Kingdom, Middle Man,” 4-19 (examining truncations in sciences, scholarship, economics, history); *A Brief History of Tongue: From Big Bang to Coloured Wholes* (Halifax: Axial Press, 1998) (critiquing truncation in linguistic institutions and language sciences); *Pastkeynes Pastmodern Economics: A Fresh Pragmatism* (Halifax: Axial Press, 2002) (detailing the violence perpetrated by truncated views in economics and education as well as the longterm possibilities of recovery).

the modern world's contempt for you, for human meaning."¹⁴

In short, no one is immune from the modern or postmodern varieties of "the conceptualist illusion" or the truncation and alienation it systematically spawns. Even students of Lonergan seem constantly prone "to forget that there does exist an initial and enormous problem of developing one's understanding."¹⁵ Nor has McShane shied from underscoring the uncomfortable fact that there does exist an initial and enormous problem of developing a willingness to face the enormous problem of developing one's understanding.

For decades McShane has patiently and brilliantly thought out the implications of Lonergan's critique of conceptualism.¹⁶ Those implications are both staggering and largely unnoticed. While most of us were content to give a vague notional assent to conceptualism as a counter-position, McShane insisted on a precise and real apprehension with vital implications for personal and institutional living, for biography and history. While most of us were happy to read Lonergan's remark that "the conventional mind is our situation"¹⁷ without actually thinking of our own minds or situations, McShane labored to lay bare the layers of "dead and actively rotting metaphor"¹⁸ at the heart of the modern philosophical traditions in thrall to Scotus.¹⁹ While many theologians were working on "the

¹⁴ McShane, *Process*, Appendix 4, 218; 226.

¹⁵ *CWL 2*, 223

¹⁶ Even this way of naming the disease is afflicted by it, as if the "implications" were logical, the "critique" academic, and "conceptualism" just another in a series of "isms" – instead of a cancer worming its way into the marrow of individuals, institutions, cultures, and histories. I am reminded of Pat Byrne's account of a conversation with Lonergan about Voegelin. Lonergan's comment: "Oh, Voegelin's wonderful. What I call a counter-position, he calls a *disease!*" Something like that stance informs McShane's treatments of the dynamics of fragmentation in the "axial period." See, e.g., McShane, "Preface: Distant Probabilities," *Searching for Cultural Foundations*, iii.

¹⁷ *CWL 10*, 182.

¹⁸ McShane, "Modernity and the Transformation of Criticism," *Lonergan's Challenge*, 71.

¹⁹ See Lonergan's remark that Kant's "critique was not of the pure reason but of the human mind as conceived by Scotus." *CWL 2*, 38-39; *id.*, 39 n.126.

pedagogy of the oppressed” masses, McShane was identifying massively oppressive pedagogy.

Though every movement really needs a Jeremiah, no movement really wants one. And so McShane has spent years proclaiming, to general annoyance and avoidance, the end of academic innocence.²⁰ Or, perhaps, the open travesty of academic guilt:

But the difficulties, as any academic reading this knows in his or her bones, are an all-pervading presence of politics and power, of paranoia and paper, of committees and non-conversations, and, at its deepest, of intellectual necrophilia. I am not here writing about clear instances of corruption. I am writing about the daily flow of talk and tests and memos and meetings in its continual contribution to alienation.²¹

There are those who complain that McShane's writings are annoyingly obscure, difficult, and demanding. Indeed they are. So are Lonergan's writings.²² But the obscurity is not the fault of either.²³ And one has to locate the annoyance where it properly belongs.²⁴

²⁰ See Lonergan, “The Ongoing Genesis of Methods,” *3 Coll*, 156 (“So we come to the end of the age of innocence, the age that assumed that human authenticity could be taken for granted.”)

²¹ McShane, “Modernity and the Emergence of Adequate Empiricism,” *Lonergan's Challenge*, 83.

²² I am reminded of the Harper and Row editor whose task it was to select the publisher's blurbs for the back cover of the paperback edition of *Insight*. Andrew Reck had written in a review of *Insight* that it was “a profound, incalculably nuanced, and immensely difficult book.” But immensely difficult books tend to be a hard sell, so the editor conveniently and silently excised the phrase, “immensely difficult.”

²³ I find a remark by Wallace Stevens illuminating in this context. “No one tries to be more lucid than I do. If I do not always succeed, it is not a question of my English, nor of yours, but I should say of something not communicated because not shared.” *Letters of Wallace Stevens*, selected and edited by Holly Stevens (Berkeley: U of California Press, 1966), 873. Or one might think of Plato. “A Platonic avatar and a repetition of the dialogues might solve some textual problems but, by and large, it would leave the understanding of Plato exactly where it was.” *CWL* 3, 606.

²⁴ Prophets and gadflies are annoying. But the question is why.

The topic of this *Festschrift* is implementation, and its focus is McShane's paper on "Implementation: The Ongoing Crisis of Method." It seems to me that McShane is right to emphasize just how under-noticed and yet how central is the theme of implementation in Lonergan's thought. You tend not to notice that theme unless you know what to look for. But once you know what to look for, it is everywhere you look. McShane's paper helps us to know what to look for. It provides a context for Lonergan's remark in *Insight* regarding the lack of "examples of successful implementation of the explanatory viewpoint."²⁵

What, after all, might "successful implementation" of that viewpoint be? Surely the Lonergan of *Insight* must have had in mind his own prior 14-year struggle to achieve an explanatory viewpoint in economics,²⁶ not to mention his vision of its implementation in "the cultural development that effects a new

Nietzsche offered a compressed explanation in the draft conclusion to an early work.

For the *conclusion*. If these observations have *annoyed* you, then the author can tell you that he anticipated this: but he cannot anticipate the object at which you will direct your annoyance: whether against the author or against yourselves. In the latter – certainly less frequent – instance, the best thing that you could do would be to forget the author completely: what does it matter who has expressed a truth, as long as it was expressed at all and there are people who take it to heart.

Nietzsche, Notebook 29, from the summer-autumn period of 1873, in *The Complete Works of Friedrich Nietzsche, Vol. XI: Unpublished Writings from the Period of Unfashionable Observations*, trans. Richard Gray (Stanford: Stanford University Press, 1995), 219 (emphasis in original).

²⁵ *CWL* 3, 565. The context is Lonergan's contention that the explanatory viewpoint is not established in the human sciences.

²⁶ From 1930 to 1944, Lonergan worked out the explanatory basis for 'a new science of politics,' or rather, of political economy. See Philip McShane, "Editor's Introduction," *CWL* 21; Frederick Lawrence, "Editors' Introduction," *CWL* 15. See also McShane, *Economics for Everyone: Das Just Kapital* (Edmonton: Commonwealth Publications, 1995); *Pastkeynes Pastmodern Economics*; Philip McShane and Bruce Anderson, *Beyond Establishment Economics: No Thank-you Mankiw* (Halifax: Axial Press, 2002).

transformation.”²⁷ Surely, too, he was thinking more broadly of *Insight's* project itself, the articulation, elaboration, and implementation of “a set of ideas of fundamental importance”²⁸ concerning a normative and critical human science. And he was likely thinking, as well, of how explanatory human science might assist in arresting the short-term and long-term cycles of decline.²⁹ To put it simply, Lonergan's lifelong concern with theory and method was part and parcel of a lifelong concern with effective practice. As I will suggest below, it was a concern with effective practice not only within the natural and human sciences but on the level of our times, on the level of constituting and, in part, directing history.

My remarks touch briefly on three sections of McShane's paper: “Lonergan's Stages of Meaning” (section 10),³⁰ “Theoretic Conversion” (section 8),³¹ and the comment in section 7³² regarding a tradition of Lonerganism that neglects the planning question. But they mainly address section 2, “Implementation of Wisdom in History,” and they mostly relate to the earliest phases of that idea in Lonergan's thought during the 1930s. So while McShane's paper addresses the thematic concern for implementation in Lonergan's thinking in the period from *Insight* to *Method* culminating in functional specialization, I will briefly sketch that concern in its surprisingly vigorous early stages in the context of Lonergan's early writings on history.

²⁷ Lonergan, *CWL 21*, 22; 106. The failure to successfully implement the explanatory viewpoint in economics also has systematic and serious consequences. See *id.*, 110-111; *CWL 15*, 80-86. In particular, as Lonergan remarked with some vehemence in a manuscript from the mid-1930s, “it has landed the twentieth century in an earthly hell.” “Philosophy of History” MS, 99.

²⁸ *CWL 3*, 24.

²⁹ See generally *CWL 3*, Chapter Seven.

³⁰ See pp. 25ff above.

³¹ See pp. 22ff above.

³² See pp. 21 above.

I. Implementation and the Making of History

I saw the oppression that is done under the sun, and
the tears of the innocent. And they had no
comforter: and they were not able to resist this
violence being destitute of help.

Ecclesiastes³³

And much it grieved my heart to think
What man has made of man.

Wordsworth³⁴

In 1970 Lonergan wrote, “I agree with Marx inasmuch as he wants philosophers not only to know but also to make history.”³⁵ That express invocation of Marx’s famous Eleventh Thesis on Feuerbach³⁶ certainly seems a startling statement for a thinker long blandly categorized as a transcendental Thomist. One’s immediate instinct is to think of any statement by Lonergan approving Marx as part of the palpable broadening of Lonergan’s thinking in the 1960s. After all, from his early studies in Aquinas on *Grace and Freedom* and *Verbum*,³⁷ Lonergan had broadened his aim to include a study of modern science in *Insight*. From there he had moved on to tackle the complex and vexing questions of interpretation and critical

³³ The words are from Ecclesiastes, 4: 1-3, as quoted by Lonergan in handwritten notes from the early 1930s titled “General Ethic [Metaphysic of Customs].”

³⁴ William Wordsworth, “Lines Written in Early Spring,” *The Essential Wordsworth: Selected by Seamus Heaney* (New York: Galahad Books, 1988), 40-41.

³⁵ From an unpublished reply to a set of papers given at the 1970 Florida conference, quoted in McShane, “Preface: Distant Probabilities,” *Searching for Cultural Foundations*, iii.

³⁶ Karl Marx, “Theses on Feuerbach,” *The Marx-Engels Reader*, ed. Robert C. Tucker, 2d ed. (New York: W.W. Norton, 1978), 145 (“The philosophers have only *interpreted* the world, in various ways; the point, however, is to *change* it.”)

³⁷ *CWL 1* (originally published in 1941-42); *CWL 2* (originally published 1946-49).

history in the human sciences in *Method*. An encounter with Marx would, then, flow from the later Lonergan's concern with praxis, contemporaneous with his explorations of the fourth level of human consciousness.

But I would like to suggest that this immediate instinctive response, this staid and settled story of Lonergan's development, is quite wrong. Our understanding of Lonergan's development needs to be unsettled.

At some point in his long and brilliant career as an economic, philosophical, and theological theorist and methodologist, Lonergan became concerned with the pervasive oppression of human by human, the violence done to the innocent, the mess man has made of man. But when? For how long had Lonergan agreed with Marx regarding philosophy and the making of history? It may surprise readers to discover that the answer is "at least since 1954," for Lonergan says precisely the same thing about Marx in *Insight*. Moreover, he says it in a highly programmatic context. His whole analysis of the dynamics of historical process in Chapter Seven leads, Lonergan writes, "to the strange conclusion that common sense has to aim at being subordinated to a human science that is concerned, to adapt a phrase from Marx, not only with knowing history but also with directing it."³⁸ In the same context Lonergan speaks of "the vastly ... ambitious task of directing and in some measure controlling ... future history."³⁹ And again: "Just as technical, economic, and political development gives man a dominion over nature, so also the advance of knowledge creates and demands a human contribution to the control of human history."⁴⁰ And yet again: "There is needed, then, a critique of history before there can be any intelligent direction of history."⁴¹

Based on even this simple juxtaposition of texts, it is fair to conclude that Lonergan's 1970 remark about Marx was far more than a rhetorical concession to the *Zeitgeist* of the 1960s or a bow to the aims, if not the means, of liberation theology. It

³⁸ *CWL* 3, 253. See also *supra*, n.36.

³⁹ *CWL* 3, 258.

⁴⁰ *CWL* 3, 253.

⁴¹ *CWL* 3, 265.

was not simply a stray remark. Rather, it represents the tip of an enormous iceberg. What *Insight* calls “a practical theory of history”⁴² turns out to have been a central and thematic concern of Lonergan even in the early 1950s. And whatever might be “practical” about the theory of history he envisioned, at least we may suspect it is connected in some way to implementation, and implementation in some important way is connected to the possibility of a critical human science.

It is, then, possible – as Fred Crowe once said in a different context – “that in some respects we are dealing, not with a development of Lonergan’s thought, but with a further stage of its manifestation.”⁴³ At the very least we are dealing with a much longer arc of development than one might otherwise expect. For I will suggest that even *Insight* represents the middle of this arc, not its start. Its first manifestations appear in the early or mid-nineteen thirties, in Lonergan’s struggle in his historical manuscripts with Hegel, Marx, and Aquinas.⁴⁴ Not only do those early manuscripts display a conspicuous concern with developing and implementing a theory of history, they also show Lonergan working on fundamental notions that would flower 35 years later in his treatment of “constitutive meaning” and “stages of meaning.” In other words, “implementation” was not a late-breaking concern of the *Method* period. To the contrary. There are grounds for suspecting that something like “implementation of wisdom in history” was Lonergan’s long-term project from the very beginning.

To glimpse the continuity of that project, we need to explore what the early Lonergan calls “man’s making of man,” stages of history, and reflex history.

⁴² *CWL* 3, 258.

⁴³ Fred Crowe, “An Exploration of Lonergan’s New Notion of Value,” *Appropriating the Lonergan Idea* (Washington, DC: Catholic U of America Press, 1989), 51.

⁴⁴ I explored that struggle at some length in an earlier article in this journal. See Patrick Brown, “System and History in Lonergan’s Early Historical and Economic Manuscripts,” *JMDA* 1 (2001), 32-76.

“*Man’s understanding and making of man*”⁴⁵

Human beings are shaped by history and, in turn, shape it. But history, like humans, can be misshapen as well. No one coming of age in the first three decades of the twentieth century could have missed the point. The First World War’s apocalyptic outbreak of senseless mass carnage stripped away a complacent veil and revealed nothing more than, in Ezra Pound’s acid words, “an old bitch gone in the teeth, ... a botched civilization.”⁴⁶ Not only the scale of physical violence astonished and appalled a shocked generation. The scale of what one might call spiritual violence was breathtaking as well. An intimation of that can be glimpsed in Karl Kraus’s article, “Promotional Trips to Hell,” in which he describes an advertisement for packaged tourist trips to Verdun and other famous battlefields of the war. “I am holding in my hands a document which transcends and seals all the shame of this age and would in itself suffice to assign the currency stew that calls itself mankind a place of honor in a cosmic carrion pit.”⁴⁷ As Kraus lamented at the time, “The real end of the world is the destruction of the spirit; the other kind depends on the insignificant attempt to see whether after such a destruction the world can go on.”⁴⁸

The young Lonergan was deeply concerned with the destruction of the spirit and the possibility of its restoration. For by the 1930s what man had made for man was, in Lonergan’s words, “an earthly hell,”⁴⁹ a waking “nightmare.”⁵⁰

⁴⁵ *CWL* 3, 258. Compare the Lonergan of the historical manuscripts: “The proximate end of man is the making of man... Essentially, history is the making and unmaking and remaking of man...” “Analytic Concept of History,” *MJLS* 11 (Spring 1993), 16.

⁴⁶ Pound, “Hugh Selwyn Mauberly,” *Personae: The Shorter Poems of Ezra Pound*, prepared by Lea Baechler and A. Walton Litz (rev. ed.) (New York: New Directions, 1990), 188.

⁴⁷ Quoted in Harry Zohn, “Introduction,” *In These Great Times: A Karl Kraus Reader* (Manchester: Carcanet Press, 1984), 16.

⁴⁸ *Id.*, “Promotional Trips to Hell,” 89.

⁴⁹ Lonergan, “Philosophy of History,” MS at 99 (describing the intellectual incompetence or malfeasance of the nineteenth century and noting, “It has landed us in an earthly hell. All the good intentions in the world are compatible with all the blunders conceivable.”) Based on internal evidence, Michael Shute dates the manuscript fragment titled “Philosophy

As Lonergan had come to realize even at this early stage, “The greatest evil in the world is the evil that is concretised in the historic flow, the capital of injustice that hangs like a pall over every brilliant thing ... that culminates in the dull mind and sluggish body of the enslaved people or the decayed culture.”⁵¹ For the early Lonergan, the historical accumulation of irrationality and injustice were facts dominating the objective situation. And these facts, “the inherited capital of injustice,”⁵² were not merely discrete, isolated, or random facts of history; they formed part of an overarching dynamic of history. They were facts in need of theoretic explanation, and they could be explained only on the level of a dialectical philosophy of history that included the objective laws of economics, psychology, sociology, and of material and intellectual progress.⁵³

For the young Lonergan, reversing the concretization of evil in the historic flow required something more than additional concrete insights. What was required was a reorientation of the historic flow, and the needed tool was adequate theory,⁵⁴ a theory of history based on the dynamics of the human mind.

So it seems plausible to suggest that the need for what McShane calls “theoretic conversion” is implicit in Lonergan’s project in the 1930s. Indeed, it borders on an explicit premise of the young Lonergan’s view of the *kairos* of the 1930s. While this is not the place to argue that suggestion at any length, it may be useful to note some of the relevant texts. Here is Lonergan writing around 1934:

of History” to perhaps 1933-34. Shute, *The Origins of Lonergan’s Notion of the Dialectic of History* (Lanham MD: UP of America, 1993), 179.

⁵⁰ “Philosophy of History,” MS at 106.

⁵¹ “Philosophy of History,” MS at 129-130.

⁵² “Philosophy of History,” MS at 129.

⁵³ Letter of January 22, 1935, quoted in Richard Liddy, *Transforming Light: Intellectual Conversion in the Early Lonergan* (Collegeville, MN: The Liturgical Press, 1993), 84.

⁵⁴ “Philosophy of History,” MS at 126 (discussing reaction and higher synthesis, and noting, “You can protect the good either by simply sitting back or by advancing with the good; but to advance with the good you have to have a theory of progress and a will to progress; these were lacking.”) See also *id.*, 124-25.

But, whether we like it or not, the world has got beyond the stage where concrete problems can be solved merely in the concrete. Economics supplies us with the most palpable example: you have to have some economic theory in conducting the state... Politics supplies us with another example. ... The sum and substance of the whole issue is that ideas in the concrete will build you a shanty but not a house and still less a skyscraper. The modern situation demands that questions be settled not in the concrete, not by the petty minds of politics...⁵⁵

And again:

Catholic development is by reaction; but reaction may be mere opposition or it may be higher synthesis. That much has been mere opposition was inevitable as long as Catholics did not grasp the significance of intellectual development and the necessary consequences of such intellectual development in social change.⁵⁶

For the young Lonergan, then, the turn to theory is not merely a desirable option or some luxury of the intellectual or scientific classes. It is an outright necessity for reversing the nightmare of present history.⁵⁷ In other words, adequate theory is the only alternative to accelerating decline. Quite simply, any level of advanced practicality requires a level of advanced theory. And while earlier periods of history were not in a position to grasp this theoretic exigence, we are not in a position to avoid it. "Let us transpose this inclination from the tedium of study to the difficulty of discovery; think of a Greek who heard of Icarus and wished to build an aeroplane that was

⁵⁵ "Philosophy of History," MS at 124-25.

⁵⁶ "Philosophy of History," MS at 125. Lonergan's use of "reaction" here pertains to a broader discussion of cultural transference and healthy and unhealthy reaction. For a more developed account of these ideas, see "Analytic Concept of History," 27-28.

⁵⁷ Lonergan, "Pantôn Anakephalaiôis: A Theory of Human Solidarity" [1935], *MJLS* 9 (Fall 1991), 162 ("Is then the situation hopeless? Certainly, unless we settle down, face the facts, and think on the abstract level of modern history.")

not myth; could he have thought of the necessity of first discovering higher mathematics and advanced physics?"⁵⁸

One could trace the theme through what one might call Lonergan's doctrine of method in the 1930s as well.⁵⁹ But perhaps the young Lonergan's view of the relation of theory to planning provides a better illustration. In describing his theory of history, Lonergan writes that initially material and intellectual progress are automatic up to a point, but after that point they are either "deliberate and planned or the end of the civilisation" ensues.⁶⁰

What in the world did Lonergan mean by "deliberate and planned" progress? At least he meant a contrast to our present condition: "Intellectual advance is now conditioned by chance discovery; the progress of man is not a planned and orderly whole but a series of more or less blind leaps."⁶¹ Or again: "For man had to develop from the mere potency of intellect, had to progress under the leadership of phantasms specifying intellect as chance offered them, became unable to plan progress but had to proceed in a series of more or less blind leaps of incomplete acts of intellect."⁶² But he also meant that an adequate dialectical theory of the development of the human mind in history would provide a base for non-random progress and planning: "the function of the applied dialectic of thought is to *anticipate* the need of the objective situation."⁶³ And again: "The direction of the historic flow is an accelerating progress as man passes from the factual more and more into the reflective dialectic."⁶⁴

⁵⁸ "Theory of History," MS at 3. Shute dates this manuscript to c. 1937. Shute, *Origins*, 179.

⁵⁹ See for example Lonergan, "Analytic Concept of History" 17 ("the reflex use of intellect presupposes the discovery of the canons of thought and the methods of investigation").

⁶⁰ Letter of January 22, 1935, quoted in Richard Liddy, *Transforming Light*, 84. The explanation for the curiously staggered rhythm of material and intellectual progress described in the quotation is complex and interesting. See "Analytic Concept of History," 26.

⁶¹ "Pantôn Anakephalaiôis in terms of about 20 ideas" [sic], MS at 1, §5.

⁶² , "Pantôn Anakephalaiôis: A Theory of Human Solidarity" 154.

⁶³ "Philosophy of History," MS at 124 (emphasis added).

⁶⁴ "Philosophy of History," MS at 128.

The phrase “reflective dialectic” refers to Lonergan’s theory of the three stages of history in the historical manuscripts. I will touch on that in a moment. But first I want to comment on the profound continuity between the historical manuscripts and *Insight*. Lonergan’s theory of history from the 1930s centered on what he calls “the making and unmaking of man by man.”⁶⁵ In it he suggested that we have moved beyond the point where our concrete problems can be solved in the concrete.⁶⁶ Similarly, in *Insight* Lonergan argued that the short-sighted practicality of common sense results in long-wave decline. Not only will the resulting decline be unsolvable in the concrete, it cannot be solved by “any idea or set of ideas on the level of technology, economics, or politics.”⁶⁷ To the contrary, it can be solved “only by the attainment of a higher viewpoint in man’s understanding and making of man.”⁶⁸ That making of man is praxis on the level of historical process, and it can only be effective through the attainment and implementation of a higher viewpoint.

The stages of history in the historical manuscripts

Although the early Lonergan does not use the word “praxis,” he repeatedly raises the issue of “the higher control of intellect”⁶⁹ and its implementation as a key issue in historical process. Indeed, he distinguishes between stages of history based on the development of higher controls and the degree of their implementation. I have discussed the three stages of history in the young Lonergan’s historical theory in an earlier article,⁷⁰ and it is not be necessary to repeat what I said there. Here let me simply suggest a parallel between those stages and the stages of meaning articulated 35 years later in *Method*.

⁶⁵ Lonergan, “Analytic Concept of History” 10.

⁶⁶ “Philosophy of History,” MS at 124.

⁶⁷ *CWL* 3, 258.

⁶⁸ *CWL* 3, 258.

⁶⁹ “Philosophy of History,” MS at 112. The notion of “higher controls” occurs throughout this manuscript; it is associated first with the emergence of philosophy and then with the sublation of philosophy in the transcendent viewpoint of faith. See, e.g., *id.*, 106; 110; 111; 117; 120.

⁷⁰ Brown, “System and History in Lonergan’s Early Historical and Economic Manuscripts,” 32-76.

In Lonergan's earliest formulation, the first stage of history concerns "the development of mind by material need and social collaboration." Historically, it runs from pre-history through the emergence of the idea of philosophy in Plato. The second stage extends from "the development of philosophy from Plato to the emergence of the idea of a social philosophy." The third stage represents "the development of society under the control of a social philosophy."⁷¹ A year or two later he describes the periods this way: "From the distinction of spontaneous and reflex thought, we have three periods of history: (a) spontaneous history and spontaneous thought; (b) spontaneous history and reflex thought; (c) reflex history and reflex thought."⁷²

II. Implementation and "Reflex History"

Much could be said about the relation between these stages of history (based on a division of different kinds of thought)⁷³ and the stages of meaning in *Method*. One could, for example, develop a clear and obvious parallel. The spontaneous and reflex types of intellectual operation parallel what Lonergan later calls common sense and theory, and so the first two stages of history in the historical manuscripts parallel the first two stages of meaning in *Method*. As Lonergan writes in *Method*: "The discovery of mind marks the transition from the first stage of meaning to the second. In the first stage the world mediated by meaning is just the world of common sense. In the second stage of meaning the world mediated by meaning splits into the realm of common sense and the realm of theory."⁷⁴ Indeed in *Method* Lonergan even emphasizes the

⁷¹ "Philosophy of History," MS at 125.

⁷² Lonergan, "Analytic Concept of History" 10. Notice that in either formulation, the key factor is, in the later language of *Method*, "undifferentiation or differentiation of consciousness." *Method*, 85.

⁷³ Insofar as the human intellect "is a conscious potency, there are two types of intellectual operation: spontaneous and reflex. Since the reflex use of intellect presupposes the discovery of canons of thought and the methods of investigation, it follows that there is first a spontaneous period of thought and second a period of reflex thought." "Analytic Concept of History" 16-17.

⁷⁴ *Method*, 93.

specifically economic and linguistic conditions necessary for the emergence of the second stage,⁷⁵ just as he does in the historical manuscripts.⁷⁶ But rather than construct an elaborate comparison of the two sets of stages, I simply want to draw attention to the role implementation plays in the third stage of each.

In the historical manuscripts, for example, the role assigned to philosophy includes a phase of implementation; there Lonergan writes of “the philosophic stage in which the historical expansion of humanity has its ultimate control in a sound philosophy that is not only sound but also is able to guide the expansion effectively.”⁷⁷ It seems to me difficult to read that passage without noticing that Lonergan is talking about some form of implementation, some form of historical praxis.⁷⁸

Perhaps two additional passages will remove any lingering doubts. In the first, Lonergan has this to say about the stage of reflex history: “The ‘class consciousness’ advocated by the communists is perhaps the clearest expression of the transition

⁷⁵ *Method*, 93, lines 29-32.

⁷⁶ See “Analytic Concept of History” 19, 26 (describing economic conditions necessary for emergence of reflex thought); “Philosophy of History,” MS at 106-107 (describing shift from compact symbol in primitive society to concept in ancient Greece). It is worth noticing that the very same theme is explicit in *Insight*. “Nor would the scientific and philosophic developments themselves have been possible without a prior evolution of language and literature and without the security and leisure generated by technological, economic, and political advance.” *CWL* 3, 559. These ideas from Lonergan’s earliest writings become incorporated into his later framework in important and revealing ways.

⁷⁷ “Philosophy of History,” MS at 101-02.

⁷⁸ The notion of implementation is present in Lonergan’s technical term, “expansion.” A nascent idea is discovered; call it a thesis. The thesis is put into practice and its limitations become apparent. The limitations lead to the discovery of a complementary opposed principle; call it an antithesis. Put into practice, the antithesis too reveals its limitations. “The expansion works some transformation of the data through human action, makes more or less evident the insufficiency of its basic idea, suggests a complementary antithetical idea. This antithesis has its expansion, reveals its insufficiency, and so on to synthesis. But synthesis will not immediately be of sufficient generality, and so we have the process repeated...” “Theory of History,” MS at 3.

from reflex thought to reflex history.”⁷⁹ In the second, he writes of the lag in “actual history” “between man’s discovery of the reflex use of his intellect and his utilisation of this discovery for the systematic planning of the making of man by man.”⁸⁰

Are we in the midst of that lag? How long will that lag last? Is it related to what McShane calls “the axial period” of history? Is metaphysics—the conception, affirmation, and implementation of the integral heuristic structure of proportionate being⁸¹—a form of “reflex thought”? Is self-appropriation? Is functional specialization?⁸² Are these forms of reflex thought relevant to reflex history as “the deliberate and social direction of human activity to its immediate goal: history, the making of man by man”?⁸³ If so, we are back at the issue of planning and the implementation of wisdom in history. We are back at the need for a counterpoise to the concretisation of evil in the historic flow, the mess that man has made of man.

⁷⁹ “Analytic Concept of History” 18. I do not think Lonergan was a Marxist at this or any stage of his career. The view in the historical manuscripts is that communism is the lowest stage in the successively lower syntheses of theory capitulating to practice where practice means whatever happens to be done. On the other hand, he was utterly sympathetic to the notion that a comprehensive, critical, and concrete theory of history could help lift human history out of its present nightmare. And he was utterly critical of the mechanisms by which class and group bias not only create “privileged” and “depressed” classes but also become “the concrete and almost irradicable form of achievements, institutions, habits, customs, mentalities, characters.” “Analytic Concept of History” [MS c. 1936], MJLS 11 (1993), 21-22.

⁸⁰ “Outline of an Analytic Concept of History,” MS at 9. It is extremely important not to read the phrase “systematic planning” from within what Lonergan called “the conceptualist illusion.” See supra, n. 11. Whatever else it may be, it is a matter of praxis and not technique. See Frederick Lawrence, “Editors’ Introduction,” *CWL 15*, xxxiv-xxxv (quoting comments by Lonergan in 1977).

⁸¹ *CWL 3*, 416.

⁸² See *Method*, 95.

⁸³ “Analytic Concept of History in Blurred Outline,” MS at 8. One should not assume these ideas somehow disappeared in the later Lonergan. *Method* notes that the process of the historically developing human good “is not merely the service of man; it is above all the making of man.” *Method*, 52.

I saw the oppression that is done under the sun, and the tears of the innocent. And they had no comforter: and they were not able to resist this violence being destitute of help.

Conclusion

It has been said of Pound's great work, the *Cantos*, that it was not "a poem written from within modern civilization, but a poem about a break with modern civilization and a search for a new basis."⁸⁴ Perhaps the same can be said of Lonergan's great works, and McShane's. To use McShane's phrase, they are great pastmodern works. They attempt to move past the massive impasses of self-neglect so thoroughly and pervasively concretized in the historic flow. They involve a search for a new basis beyond the centuries-long and brutal colonization of the life-world by a warped conceptualism which daily denies that "man by nature is oriented into mystery."⁸⁵

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⁸⁴ Forrest Read, "Pound, Joyce, and Flaubert: The Odysseans," in *New Approaches to Ezra Pound*, ed. Eva Hesse (Berkeley: U of California P, 1969), 127.

⁸⁵ *CWL* 3, 570.

FABRICATING FACTS: HOW EXEGESIS PRESUPPOSES EISEGESIS

WILLIAM J. ZANARDI

Discussions of textual interpretation have long assumed that there is a clear contrast between eisegesis and exegesis. "Reading into" the text seems quite different from "reading out" of the text. In the former instance, the interpreter fabricates meanings; in the latter, the interpreter finds meanings within the text. Presumably the first interpreter invents meanings while the second discovers meanings already present in the text. Popular labels of "subjective" and "objective" interpretation are then attached to the two different cases.

The following essay diagnoses a latent ambiguity in talk of "reading into" texts and suggests that, once this ambiguity is recognised, the distinction between eisegesis and exegesis may be tenable but only as descriptive of the difference between conditions for *understanding* a text and conditions for *justifying* that understanding.¹ To anticipate later conclusions, the meaning of a text must first be fabricated, invented, or "read into" the text; however, if an interpretation is ever

¹ This essay is a rudimentary effort at the functional specialization of dialectic. Following Lonergan's maxim in *Insight* to develop positions and to reverse counterpositions, it takes a relatively simple puzzle about eisegesis and criticises some basic confusions about what goes "into" the reading of texts. In the process two counterpositions on the meaning of "text" are criticised and an alternative to both defended. A more elaborate exercise in dialectic that would draw upon a history of the positions and counterpositions regarding textual interpretation is what is actually needed even though it would be a massive enterprise requiring numerous collaborators.

justified, then the invented meaning may likewise be said to have been found or discovered. Put another way, every reading of a text is a “reading into,” but some readings are also “readings out of.” Understanding and defending these conclusions involve sorting through a preliminary puzzle about the multiple meanings of “text.”

What is a text? The question seems simple enough, but complications appear after even a brief survey of contemporary debates over the identity of texts. Think of quarrels about judicial interpretation of the Constitution or debates about “creative misreadings” of literary texts. While avoiding the details of these unresolved quarrels, this paper does ask two basic questions fundamental to such debates: What is the nature of a text and how is it known?

The “nature” one asks about is presumably unknown and so the focus of inquiry.² In asking how this unknown is to become known, one probably makes a common-sense assumption; namely, that a text is a kind of imaginable object “already out there” awaiting investigation. As I will argue below, this questionable assumption is a “counterposition” that leads to a familiar intellectual impasse, but eliminating this assumption and employing a different set of assumptions can help us avoid the impasse.

How can we detect the problematical assumption and the resulting impasse? A shortcut to doing so is available in Nelson Goodman’s commentary on the phrase “a world well lost.”³ He remarks that the “world” seemingly misplaced is supposedly a real order of things already existing and awaiting discovery and description through human inquiry. That there is such a prior order to things seems, at first, to be a safe assumption

² “Just as in algebra the unknown number is x until one finds out what the number is, so too in empirical inquiry the unknown to be reached by insight is named ‘the nature of...’” *CWL 3*, 61. Throughout this paper I am indebted to Lonergan’s work, especially his criticism of naive realism and his argument that the proximate sources of all meanings of a text are in the intelligent subject.

³ Nelson Goodman, *Ways of Worldmaking* (Indianapolis: Hackett, 1981), 4. See also Nelson Goodman and Catherine Z. Elgin, “Interpretation and Identity,” in *Reconceptions in Philosophy and Other Arts and Sciences* (Indianapolis: Hackett, 1988), 49.

since we commonly believe that, by careful inquiry, we make discoveries and uncover patterns and regularities among events. A simple appeal to common sense makes the assumption clearer: we say that Newton discovered the law of gravity, not that he invented it.

In criticising this common assumption, Goodman asks: “Tell me what this pre-existing order is independently of your variable classification schemes, measurement scales and entrenched metaphors?”⁴ The request is, of course, impossible to satisfy. To begin speaking and making sense of any object whatever is to employ the various symbolic devices one is requested to leave aside so as to “get at” the “already out there” in its pristine independence from such devices.⁵

Goodman’s conclusion is that “world” as antecedent to meaning-giving descriptions is unavailable to us; it is “a world without kinds or order or motion or rest or pattern - a world not worth fighting for or against.”⁶ An alternative stance which he recommends drops the singular “world” and endorses talk of a plurality of worlds or versions. Reaching “behind” this plurality for a privileged or fundamental reality he likens to peeling an onion in search of a residual core.⁷

Given the limited focus of this paper, I am not interested in resolving the secondary puzzles Goodman generates for himself and his readers by his alternating uses of “versions” and “worlds.” The puzzles are, I suggest, symptoms of how difficult it is to excise our common-sense faith in an imaginable world “already out there.” As long as we operate with this assumption, we can give no satisfactory account of such a world and are likely to believe we have only two options: either retain an unjustified common-sense belief or embrace a multiplicity of worlds or versions as the referents of our inquiries and understanding. Goodman chooses the second

⁴ Goodman and Elgin, 52-53.

⁵ The request here is that a “world mediated by meaning” be somehow presented as a “world of immediacy.” The background assumptions are that the latter is what is meant by “real” and some type of “showing” of it, independent of understanding and its expression, is the measure of what is real. For the various permutations of these assumptions, see *CWL 2*, 20.

⁶ *Ways of Worldmaking*, 20.

⁷ *Ibid.*, 118.

option. The puzzles that result are fairly easy to state. What are these versions “versions of”? If any answer to this question is just another version, how can we be said to be talking about something more than our talking?⁸

Similar puzzles await us if we try to understand the nature of a text all the while assuming that texts are imaginable objects out there awaiting discovery. To vary the earlier question: What is the text aside from any interpretation? If any answer to this question is another interpretation, what is it an interpretation of? Is all that we ever reach just another interpretation? So the impasse reappears.

A first attempt to evade the impasse may appeal to syntax and an ordered script that antedates the interpreter’s comments. This is in fact the direction Goodman takes in trying to preserve the identity of a text across multiple interpretations.⁹ The syntactical markings offer an imaginable and ordered presence “already out there” providing a public reference point for differing versions or interpretations. Does this save the text from being “well lost”?

I doubt the manoeuvre succeeds. Suppose that in a particular case we pick up what we recognise to be a sheet of paper containing tracings which, if they are linguistic symbols, belong to a language unknown to us. What is “given” are *not* syntactical markings or linguistic symbols but a set of ink marks. (Note that even here we draw upon prior understanding in classifying something as a sheet of paper with inked inscriptions that may be meaningful.) To recognise these markings as rule-governed signs or linguistic symbols, we must bring to the reading a prior understanding of such markings. Absent that understanding we might just as well guess that the markings are the random scribbles of a child with no more claim to being a text than water-etched lines in beach sand or wind-driven shapes in clouds.

⁸ The frequently discussed limits of a coherence theory of truth are a topic beyond the scope of this essay.

⁹ Goodman and Elgin, 54-57. Is this attempt to “locate” the identity of the text in written symbols another version of the common-sense assumption Goodman criticises? “Something out there” is still made the touchstone for claims about what the text really is without any advertence to the operations of intelligent inquirers.

Why should Goodman want to locate in the syntactical content of a document something retaining its identity across variable interpretations? Presumably we are back to the common-sense assumption that interpreters find texts; they do not invent them. While they may invent diverse versions of any text, there still is a residual text to which these versions refer.¹⁰ But then the impasse returns: Can you tell us what this residue is independently of any prior scheme of interpretation? To respond by talking about syntactical markings may help account for the possibility of consensus about the range of meanings plausibly attributable to a text. The shared meanings of some language group make such consensus possible. That is, the shared linguistic conventions and understanding of the group allow its members to recognise the markings as meaningful. But to ask what the text is aside from such a group's conventions or prior understanding is a request for the impossible.

I suggest that a way beyond the impasses about "world" and "text" lies, first, in dismissing the assumption that a world or a text is something imaginable "already out there" and, second, in making an alternate assumption; namely, that such terms are syncategorematic; they are terms which are *defined relationally*.¹¹ Let the focus narrow to just the second term. Suppose we define "text" provisionally as that upon which a reader's inquiry focuses. A text is what is intended by the reader's questioning, and in turn the reader's questioning is defined as that for which the text provides a focus.

How is this decision to treat "text" as a correlative of reading, questioning, or some similar operation an improvement over Goodman's appeal to syntactical markings?

¹⁰ The puzzle of "reference" has a long and tortured history in the philosophical literature. The usual impasse takes the form of a claim that language must somehow "hook onto" a world assumed to be one of imaginable objects out there which words somehow point out or even show by "ostensive definition." So a text must be some object to which descriptions can refer. But what if there is an intermediate term such that (1) descriptions formulate and refer to (2) someone's understanding of (3) some object?

¹¹ For Goodman's discussion of "fact" as a syncategorematic term, see *Ways of Worldmaking*, 93.

More importantly, does this manoeuvre succeed in avoiding the earlier puzzles?

Grant that the initial meaning of “text” is defined by its relation to questioning. A text, then, is something to be understood, and the reach for understanding involves both the text which gives rise to a focused question (or series of questions) and the questioning which responds to the text. If we ask what the text is independently of the questioning, we are left with but half of the correlation; namely, the text as what is not yet understood, i.e., an *x*. If anything determinate is added, then some limited inquiry will already have occurred. For example, the earlier reference to a sheet of paper with tracings presupposed a prior understanding of paper, ink marks, and potentially meaningful symbols. That prior understanding presupposed an earlier series of inquiries with their own texts which once were things yet to be understood.

To reconstruct something similar to one of those earlier inquiries, suppose a teacher scribbles some marks on a chalkboard that are unintelligible to a class of attentive students. The question is, Is this a text for these students? Let me phrase the basic issue in a strange way. Are there any *imaginable* words on the chalkboard? What are words independently of someone’s prior familiarity with the relevant language? As strange as it may sound, words as *meaningful symbols* are not found written on any chalkboards; the imaginable data of words and symbols may be, but words as meaningful symbols require a correlation of understanding and data occurring within an intelligent subject.¹² Of course, the subject’s understanding may be minimal. For example, the attentive students may assume the lecturer is scribbling something they will gradually learn to understand; they presume the markings are meaningful to the lecturer, but

¹² In the classroom example, I am assuming that (1) the chalk markings provide the class with sensible data; (2) for these data to be meaningful symbols or words for any student, they must be related to the student’s operations as an intelligent subject reaching for understanding; (3) the operations immanent in the subject transform the data and images into words or meaningful symbols. (Cf. *CWL* 3, 557.)

initially the markings are not more than a puzzle, an unknown for them.

What if the class does learn to make sense of these jottings? Are there now words on the board for them? The imaginable chalk marks are the same. What has changed is the students' understanding. They have learned to some degree to correlate these marks with their own understanding of the meanings of some set of terms. Words are now recognised where previously there had been only puzzling scribbles.

What has happened in this hypothetical example is, I suggest, what happens in regard to texts. Note that the class *believed* that the markings were potentially meaningful. Their belief was reasonable given their prior experiences in classrooms, their acquaintance since childhood with writing, their awareness of other languages and scripts. In other words, they brought to the experience of puzzling over these chalk marks an elaborate history of relations among teachers, writing, chalkboards, and foreign languages which allowed them to trust that the teacher was inscribing more than nonsensical marks. So it is for adults in regard to any text. We begin as it were in midstream already having some familiarity with writing, depicting, calculating, sculpting, and their products. To ask what a text is aside from such prior understanding is a request which probably should be addressed to a two-year old. Then perhaps we could have a clearer instance of "text" as simply what focuses a question, what attracts the child's curiosity. Short of that exercise we find ourselves already assuming any number of things about a text, from type of document or style of writing, to quality of the digital imaging or age of the monument.

Where are we now in relation to the earlier puzzles and questions about multiple versions, about a privileged or pristine account of a text, about the "nature" of a text? To begin with the puzzle of an irreducible plurality of versions, I simply note that "text" as a correlative of inquiry is as diverse as the inquiries about it. Since different questioners bring with them different levels of understanding, diverse purposes, and varying cultural assumptions about the significance of texts (e.g., how one responds to books or Renaissance paintings may

well vary with cultural background), we should expect there to be multiple accounts of what a text means and how it stands in relation to other human interests and activities. What a text means for a publisher need not be what it means for an antiquarian. What a painting is for an artist need not be what it is for a sociologist. How a bound volume stands in relation to other works need not be the same for the archivist as it is for the literary scholar. In other words, any number of different versions of what a text means or how it “fits” a wider context are likely.

Is there, then, any privileged or pristine account to be had about what a text means? If one expects a single best account that fits all inquiries, the answer is no. If one expects some accounts to be far better than others, the answer is a qualified yes. Any account that achieves a superior ranking over others will do so within a field of inquiry where the standards of evaluation are relative to the purposes of inquiry within that field. When one operates as an archivist, the literary quality of a particular work is not relevant to one’s work in determining the physical condition of the manuscript. The archivist’s subsequent diagnosis of the manuscript’s condition may be technically accurate and the best available account within that field. Of course, if a field of studies, e.g., literary criticism, contains little consensus among practitioners about purposes and standards, there is less hope for agreement on what would be a better or worse account of a particular text.¹³

What of the opening question about the “nature” of a text? Is there any general understanding of what a text is that is more basic than all others? I began by noting that “the nature of X” refers to an unknown. The next step was to suggest that “text” be defined relationally so as to avoid an intellectual impasse. So an initial response to the opening question is that it is the nature of a text to be at first an unknown that is intended by questioning. Of course, the same thing could be said about the nature of a bird, a tree, or rain. The point is that a very general

¹³ In the history of the natural sciences, inconclusive and highly speculative debates about better and worse accounts of events are usually signs of the absence of agreed-upon standards and purposes and of the newness of a field of inquiry.

question about what something is will remain relatively unspecific or indeterminate until the questioning has begun yielding answers. But as noted earlier, we begin our questioning in midstream; we already have accumulated results of various inquiries. So we tend to think of texts as human artefacts the meanings of which are embedded in complex relations among shared understanding, conventional forms of expression, and social practices.¹⁴ Yet a quick survey of these accumulated results reveals multiple accounts of what a text is or how it is related to other texts. That is to be expected since the correlate of “text” is the question, and as questions vary so will the answers. To refer again to the simple classroom example of strange markings on the chalkboard - if one’s question is about the chemical make-up of the markings, answers about linguistic meanings will be beside the point. No one question serves every purpose, and no one answer fits every question.

If one still insists that all the diverse answers must be about the same text and that some basic account should be available for what underlies all these “versions,” then one is repeating the earlier question, “What are all these versions versions of?” As noted before, behind this simple question there usually lies the common-sense assumption: a text is something imaginable “already out there” which ideally should be identifiable without relying on variable purposes, linguistic conventions, or classification schemes. But this assumption is what leads to the intellectual impasse already described.

To avoid this dead end, I suggested that, at first, it is the nature of a text to be a datum, or better, a series of data correlative to the operations of some inquirer. If the data are to mean anything, there must be an intelligent subject ordering them and so trying to answer the questions: “What are these?” “How are they related to something we already understand?”

¹⁴ Let this generality, or some variation of it, be representative of our nominal understanding of the nature of a text. The understanding is “nominal” because we can recognise and label instances of texts and we can use the word “text” competently. However, if a Socrates shows up to ask for a clearer meaning, the outcome is easy to anticipate. Still, if a definition *omni et soli* is not to be had, we can try to clarify the multiple meanings of “text” in relation to human inquiry.

and so on. The standard worry may quickly be voiced that such dependence upon the questioner for the meaning of “text” limits any such meaning to subjective and relativistic readings. This worry gives voice to the familiar contrast between eisegesis and exegesis. A further concern is that locating the making of meaning in the subject condemns any effort to justify one’s reading to a circular proof. These complaints arise usually because one has not let go entirely of the earlier assumption. It is difficult to break with the expectation that a text is something imaginable “already out there” and should be accessible independently of whatever prior understanding a reader brings to the inquiry.

Challenging this deeply entrenched assumption about understanding and about what is to be understood has been one of the purposes of this paper. A brief survey of twentieth-century psychology of perception can provide interested readers with massive evidence against this common expectation.¹⁵ On the positive side, that evidence supports a basic distinction between sensible markings and meaningful texts. The sensible data, e.g., the spatially arranged marks on a chalkboard, provide no more than a material determinant for an intelligible text. The “proximate sources” of the intelligibility or meaningfulness of the sensible data are immanent in the subject attending to them.¹⁶ Remote sources of meaning will,

¹⁵ Popular access to some of this evidence is available in the works of Oliver Sacks. See especially the chapter “To See and Not See” in *An Anthropologist on Mars* (New York: Vintage, 1996), 108-152. One implication of the case of Virgil is that what is given is at first no more than a datum for inquiry. Note Virgil’s difficulties in “seeing” the doctor’s face and in “correlating” his cat. Further case studies in V.S. Ramachandran and Sandra Blakeslee, *Phantoms in the Brain* (New York: William Morrow, 1998) support this distinction between sensory input and the sometimes strange meanings we make of it.

¹⁶ “If objectivity is a matter of elementary extroversion, then the objective interpreter has to have more to look at than spatially ordered marks on paper; not only the marks but also the meanings have to be “out there”; and the difference between an objective interpreter and one that is merely subjective is that the objective interpreter observes simply the meanings that are obviously “out there,” while the merely subjective interpreter “reads” his own ideas “into” statements that obviously possess quite a different meaning. But the plain fact is that there is nothing “out

for example, be the social practices conditioning the subject's earlier and ongoing development in reading, calculating, assessing evidence, and so on.

If we accept the old distinction between the *ordo cognoscendi* and the *ordo essendi*, these claims about the making of meaning should not be too controversial. Recall the commonsensical claim that Newton discovered the law of gravity; he did not invent it. To detect the oversight in this claim, consider how, in the *ordo cognoscendi*, Newton first puzzled about objects in motion, made some guesses, invented possible explanations, formulated them, checked the guesses further, revised the formulations, and so on. Such inventive operations sometimes succeed; they produce acceptable solutions to the original puzzles. Then the invention becomes the discovery. That is, in the *ordo essendi* we claim to have found something; we affirm that something is the case; we know it to be independent of our own thinking. In regard to our understanding of what a text means, the choice is not between: "Is this an invention (something fabricated)" and "Is this a discovery (something found)?" In some cases we correctly understand and so may affirm that what we first invented (e.g., guessed as to what a text might mean) turned out to be what in fact is the case. We can have it both ways: Newton both invented and discovered the law of gravity. Or, to return to the beginning of this paper, eisegesis is a prerequisite for understanding any text, but sometimes the understanding may be correct and so deserving of being called a product of exegesis.

there" except spatially ordered marks; to appeal to dictionaries and to grammars, to linguistic and stylistic studies, is to appeal to more marks. The proximate source of the whole experiential component in the meaning of both objective and subjective interpreters lies in their own experience; the proximate source of the whole intellectual component lies in their own insights; the proximate source of the whole reflective component lies in their own critical reflection. If the criterion of objectivity is the "obviously out there," then there is no objective interpretation whatever; there is only a gaping at ordered marks, and the only order is spatial. But if the criterion of objectivity lies in intelligent inquiry, critical reflection, and grasp of the virtually unconditioned, then the humbug about the "out there" and the simulated indignation about "reading into" are rather convincing evidence that one has very little notion of what objectivity is." CWL 3, 605.

Perhaps it will be less controversial to remark that our reaching for understanding is corrigible (i.e. we can learn to improve our performance) and the results of our questioning are corrigible (i.e., we can improve upon earlier answers). Accept both these claims and there is nothing special to worry about when one notes that puzzling about a text begins on the basis of one's prior understanding.¹⁷ Even if that beginning is very inadequate, the first "versions" need not be where one ends.

Such first versions are one's early surmises or guesses about what something is or may mean. In conversations with others, through further reading and inquiry, one may revise or even discard these initial hunches. The simplified parallel is to good detective work where the data provide possible clues for inquiry, the initial list of suspects is a more or less educated guess about how to make sense of the clues, and through further investigation the detective may revise or discard the initial reading of the clues and the initial list of suspects. So a text is first a series of data focussing inquiry, but, once put in some meaningful order, the text is a determinate object of understanding. The "nature" of "text" is no longer an unknown but a possibly known, a possible meaning.

Note that this is where the ways of understanding a text are unavoidably multiple. Just as purposes in using a text vary, so will the questions relevant to those purposes.¹⁸ But as questions vary so will relevant answers, and, as appropriate answers vary (not to mention the diversity generated by inappropriate answers), so will the text as an object of understanding, a possibly known.

There is a third step to understanding the nature of a text. Given multiple versions of what a text is, we can ask which meanings are *justifiable*. At stake in this question is the transition from one's own guesses and bright ideas to what is

¹⁷ The claim is hardly a new one: *Quidquid recipitur ad modum recipientis recipitur*.

¹⁸ I am avoiding use of the problematical phrase "conceptual framework" to describe the origins of multiple accounts of a text. "Purpose" carries less theoretical baggage and allows the user to avoid debates (new intellectual impasses?) about how concepts "hook onto" a world.

actually the case in regard to the text. Trying to make the transition is a matter of further operations, e.g., raising more questions, surveying the range of possible answers, checking for “fit” with the available evidence. Is the transition ever completed? At least the general condition for it is identifiable. If understanding is primarily a matter of raising and answering questions, then one has understood what something means and can justify that understanding as correct if one has raised and successfully answered all of the relevant questions about it. Is this condition ever fulfilled? Given the difficulties in anticipating all the relevant questions about some issue, we usually settle for saying that all the relevant questions recognised at this time have been answered. We perhaps appeal to the informed opinion of experts in the field to support our reading of the text. Yet that informed opinion is also in the dark as to possible future questions. Thus, we settle for saying that our understanding is probably true. Here we claim to be doing more than guessing. We claim that the actual “nature” of this text is probably what we now understand it to be. In other words, our creative efforts of “reading into” the text have discovered or “read out” from the text what it probably means.

In summary, there are multiple meanings of “text.” I began by noting a common-sense assumption that “text” generally refers to some imaginable object “already out there.” This deeply entrenched belief is hopelessly entangled in the old problematic of trying to say what something is without already having anything determinate in mind. To escape this entanglement, I suggested a relational meaning of “text” as an unknown which is correlative to the operations of some inquirer. If these operations yield answers, then a text is a determinate object of understanding, a possibly known. What is determinate about the text as an object of understanding will be relative to the purposes, questions, intellectual development, modes of expression, and so on of the inquirer; hence the multiplicity of meanings possible for a particular text. Finally, whenever answers to the relevant questions about what a text means are correct, the transition from a possible meaning to a known meaning has occurred. The determinate meaning “invented” by the intelligent inquirer is “found” to be true.

What are the implications of the preceding remarks for the conventional contrast between eisegesis and exegesis? As noted at the beginning, what commonly appears as a pair of opposites becomes a distinction between the conditions for understanding or reading a text (eisegesis) and the conditions for justifying that understanding or reading (exegesis). The meaning of a text is not discernible in terms of being “fabricated” or “found” but becomes the more complicated question of whether the creative and inventive guesses of the interpreter have been on target.

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IMPLEMENTATION IN SYSTEMATICS: THE STRUCTURE

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Many of the elements of the problem of implementation have been assembled in Philip McShane's paper and addressed in his life's work to date. The dimension to which I wish to contribute is the need to lift the chapter on Systematics in *Method in Theology* out of its tired and minimalist context into the context that Lonergan seems to have had in mind when, at the time of the breakthrough to functional specialization, what eventually was called Systematics was named 'Explanation' and its mediated object was said to be *Geschichte*. At that point Lonergan had in mind, I submit, not simply summing up and integrating the dogmatico-theological context – and even that task does not emerge clearly in *Method's* chapter – but also advancing that context, in fact catapulting it into the third stage of meaning and onto the plateau where a normative source of meaning has been articulated that, while remaining normative, pays full recognition to historical mindedness.

I have written on this topic before. My thinking on the topic continues to evolve, however slowly, and the best I can do in the present context is to express the latest step in that thinking. I presented a longer paper on this step at the 2002 Boston College Lonergan Workshop, and as I don't expect that I will have moved any further in the two months between the writing of this note and the deadline posed by the editor, I hope that it will be enough for the present occasion if I state briefly and concisely the principal point of that longer paper.

That point is that there is at hand an adequate unified field structure for the functional specialty Systematics. That unified

field structure lies in a combination of a four-point theological hypothesis found in *Divinarum personarum* and *De Deo trino* with what Lonergan says about the general categories in *Method in Theology*, especially as the account of the general categories opens out onto a theory of history. Moreover, Lonergan's theory of history is further enriched by some of the considerations that I attempted to put forward in *Theology and the Dialectics of History*.

My contention can be spelled out by answering three questions. What is meant by speaking of a unified field structure for systematics? What is the four-point theological hypothesis, and why is it so important? What function do the general categories play in the unified field structure, especially as these categories yield a theory of history?

1. What Is Meant by 'A Unified Field Structure for Systematics'?

A unified field structure would provide the basic organizing conception for the entire functional specialty 'systematics.' My colleague Daniel Monsour has used the expression 'the systematic conception of systematic conceptions' to express this function.¹ As each area of systematic exploration – Trinity, Christology, grace, sacraments, and so on – may be expected to have its own organizing systematic conception, so systematics as a whole may be expected to reach toward the articulation of an overarching systematic conception that unites all of the more particular conceptions into a synthetic unity. It would do this, not by presenting a major premise for a series of deductions (something that we may presume is neither possible nor desirable) but by guiding the ongoing genetic development of systematics in much the same way that the appropriated invariant upper context of Lonergan's *Insight* will (at least in the best of all possible worlds) guide the future of philosophy. Thus we might say that it would stand to systematics much as the periodic table stands to chemistry. Again, it would provide an invariant upper blade for all work in systematics.

¹ The expression appears in a paper that Monsour wrote for a seminar conducted under the auspices of the Lonergan Research Institute, Toronto.

The unified field structure (again Monsour's expression) would be in fundamental continuity with the implicit unified field structure of the *Summa theologiae* of Thomas Aquinas, which marks what we might call the first great plateau in the unfolding of systematic theology, and it leaves itself open to further enrichments and differentiations analogous to those that it adds to the Thomist conception. Thus it would stand to contemporary systematics as the theorem of the supernatural joined to Aristotle's metaphysics stood to Aquinas. But it would also be a genetic development upon that structure, since it would make systematics historically conscious and place it into the broader cultural context established by modern scientific methods and achievements.

Like the medieval organizing conception, this unified field structure combines a specifically theological element with a more general set of categories. The theorem of the supernatural was the specifically theological component of the medieval conception, and Aristotle's metaphysics provided its general categories. The principal specifically theological element in the unified field structure now at hand is a four-point hypothesis proposed in Bernard Lonergan's systematics of the Trinity. The hypothesis sublates the theorem of the supernatural into a more differentiated set of connections between the four trinitarian relations — paternity, filiation, active spiration, and passive spiration — and the created supernatural participations in those relations: the secondary act of existence of the Incarnation is a created participation in paternity,² sanctifying grace a created participation in active spiration, the habit of charity a created participation in passive spiration, and the light of glory a created participation in filiation. And so it enables a synthetic understanding of the four mysteries of the Trinity, the Incarnation, grace, and the last things.

The paper was entitled 'The Categories "Gratia Increata et Creata" and the Functional Specialty Systematics.'

² This is probably the most difficult of the connections expressed in the hypothesis, since it has to do with the interiority, not of us but of Christ, who, while fully human, has a different ontological and psychological constitution from us. I find the following helpful: the eternal Word immanent in the Godhead does not speak but is spoken; the incarnate Word speaks; but he speaks only what he hears from the Father.

What, then, about the general categories? Is there something that sublates the Aristotelian framework that gave Aquinas his general categories, in a manner analogous to the way in which the four-point hypothesis sublates the theorem of the supernatural? Obviously, for any student of Lonergan, there is: namely, the basic and total science, the *Grund-und Gesamtwissenschaft*, that can be found in the cognitional theory, epistemology, and metaphysics of *Insight*, the existential ethics of both *Insight* and *Method in Theology*, and the unfolding of these into the theory of history that, for Lonergan, probably reaches its most nuanced articulation in 'Natural Right and Historical Mindedness' and that, I believe, is given a few further refinements in the treatment of the scale of values in my book *Theology and the Dialectics of History*.

2. The Four-point Hypothesis

The four-point theological hypothesis to which we have referred reads as follows.

... there are four real divine relations, really identical with divine being, and so four special ways of grounding an imitation or participation *ad extra* of God's own life. And there are four absolutely supernatural created realities. They are never found in an unformed or indeterminate state. They are: the secondary act of existence of the Incarnation, sanctifying grace, the habit of charity, and the light of glory.

Thus it can appropriately be maintained that the secondary act of existence of the Incarnation is a created participation of paternity, and so that it has a special relation to the Son; that sanctifying grace is a [created] participation of active spiration, and so that it bears a special relation to the Holy Spirit; that the habit of charity is a [created] participation of passive spiration, and so that it has a special relation to the Father and the Son; and that the light of glory is a

[created] participation of filiation that leads perfectly the children of adoption back to the Father.³

The importance of this passage is both theological and methodological. It is theological in that it so sublates the medieval theorem of the supernatural as explicitly to embrace the doctrines on which, it may be maintained, the clearest differentiations have been reached: the doctrines of the triune God, of the Incarnate Word, of the inhabitation of the Holy Spirit, and of the last things; and it so embraces these doctrines that the mysteries affirmed in them are related systematically or synthetically to one another, something rarely achieved in the history of theology.⁴ Not only, however, does the hypothesis present in a systematic order some of the principal realities named by the special categories, the categories peculiar to theology, but also, if my position on the unified field structure is correct, it has the methodological significance of lifting this systematic order into the heuristic upper blade of further work in systematics.

3. The General Categories and the Theory of History

The significance of general categories and their issuing into a theory of history can be appreciated, I believe, if we follow through on a test that Daniel Monsour has proposed for evaluating the adequacy of the four-point hypothesis to function on its own as a unified field structure for systematics. I suspect that my judgment on the results of this test may be different from Monsour's, and I present them for discussion and as subject to correction.

Monsour frames the test in the following terms: 'Take some or all of the five sets of special theological categories enumerated by Lonergan in *Foundations* and actually attempt to work out tentatively the categories belonging to each set. Then transfer whatever categories one has derived in

³ Translated from Lonergan, *De deo trino: Pars systematica* (Rome: Gregorian University Press, 1964) 234-35.

⁴ Monsour refers to Henri Rondet's book *The Grace of Christ* for evidence that the doctrine of grace has rarely been unified synthetically with the theology of the divine missions. The connection is explicit in the four-point hypothesis.

Foundations into Systematics and try to map them onto the proposed unified field structure ... If it is truly a unified field structure for Systematics, it would ... provide the organizing principle integrating all the categories of all the five sets. To the extent that one continued to succeed in mapping the categories onto the hypothesis, to that extent one continues to confirm the hypothesis as indeed a unified field structure for Systematics.⁵ My judgment is that the four-point hypothesis will not be able to integrate the second, fourth, and fifth of these sets into an overall systematic exposition unless there is added to it the theory of history that issues from the *Grund- und Gesamtwissenschaft*, the basic and total science, of *Insight and Method in Theology*.

The first set of special categories, then, is derived from religious experience. These categories, Lonergan says, will emerge from 'studies of religious interiority: historical, phenomenological, psychological, sociological. There is needed in the theologian the spiritual development that will enable [one] both to enter into the experience of others and to frame the terms and relations that will express that experience.'⁶

A second set has to do, not with the subject but with 'subjects, their togetherness in community, service, and witness, *the history of the salvation that is rooted in a being-in-love*, and the *function of this history* in promoting' the reign of God in the world.⁷

A third set 'moves from our loving to the loving source of our love. The Christian tradition makes explicit our implicit intending of God in all our intending by speaking of the Spirit that is given to us, of the Son who redeemed us, of the Father who sent the Son and with the Son sends the Spirit, and of our future destiny when we shall know, not as in a glass darkly, but face to face.'⁸

⁵ Monsour, "The Categories "Gratia Increata et Creata" and the Functional Specialty Systematics' 16.

⁶ *Method*, 290.

⁷ *Ibid.* 291, emphasis added.

⁸ *Ibid.*

A fourth set differentiates authentic and inauthentic humanity and authentic and inauthentic Christianity: ‘... to the unauthentic [person] or Christian, what appears authentic is the unauthentic. Here, then, is the root of division, opposition, controversy, denunciation, bitterness, hatred, violence.’⁹

And a fifth set ‘regards progress, decline, and redemption. As human authenticity promotes progress, and human unauthenticity generates decline, so Christian authenticity — which is a love of others that does not shrink from self-sacrifice and suffering — is the sovereign means for overcoming evil. Christians bring about the kingdom of God in the world not only by doing good but also by overcoming evil with good ... Not only is there the progress of [humankind] but also there is development and progress within Christianity itself; and as there is development, so too there is decline; and as there is decline, there also is the problem of undoing it, of overcoming evil with good not only in the world but also in the church.’¹⁰

Now, obviously the third set matches the four-point hypothesis almost point by point, so that it can safely be said that this set can be mapped without remainder onto the hypothesis. Moreover, I believe the hypothesis provides a key to clarifying religious experience, and so is relevant to elements of the first set of special categories. But mapping the other three sets onto the hypothesis is not only more difficult; in the last analysis, it is, I believe, impossible. One can relate the other three sets to the third set, and so to the hypothesis, but any attempt to go further would be an attempt to reduce the other three sets to the third. The four created supernatural realities that are the created consequent conditions either of the divine missions (the *esse secundarium* of the Incarnation, sanctifying grace, and the habit of charity) or of the beatific vision (the light of glory) have to be located within, or in relation to, the dialectical dynamics of history. Only then can there be integrated into systematics the reality of revelation (which, as Lonergan says, introduces a new meaning into *history*), redemption, the church, sacraments, and Christian

⁹ Ibid.

¹⁰ Ibid.

praxis. The created contingent external terms that make possible that there are divine missions are not enough to allow for the integration of the second, fourth, and fifth sets of special categories into the overall systematic conception. The four-point hypothesis does not in itself tell us anything about what the Incarnation and the Indwelling of the Holy Spirit have to do with historical progress and decline, whereas revelation, redemption, the church, the sacraments, and Christian praxis cannot be understood apart from historical progress and decline.¹¹ As Lonergan himself wrote at the time of his breakthrough to the notion of functional specialization, a contemporary systematic theology in its entirety must be a theological theory of history; or again, the mediated object of systematics is *Geschichte*. And the relation of this comment to our concerns becomes clear when we note that he also said that the mediated object of the preceding functional specialty, doctrines, is redemption.

We may conclude, then, that the basic organizing systematic conception must contain, in addition to the four-point hypothesis, the fundamental elements of a theological theory of history. And I would propose that those fundamental elements are provided at least in an incipient fashion in Lonergan's analysis of the dialectic of history in terms of progress, decline, and redemption and in the complementary suggestions that I offer in *Theology and the Dialectics of History*. These elements of a theory of history are rooted in the *Grund- und Gesamtwissenschaft* that is the cognitional theory, epistemology, and metaphysics of *Insight* and the existential

¹¹ In a discussion period at the 1962 Institute at Regis College, Toronto, on 'The Method of Theology,' Lonergan expressed a conviction that the sacraments and the church are two areas in systematic theology in which an enormous amount of work needs to be done. In fact, he said, there is needed even doctrinal development in these areas. 'The fundamental developments are: the trinitarian doctrine in which the key element is the consubstantial; christological doctrine: one person and two natures; the idea of the supernatural, habit and act. There is then the field in which the categories are not yet fully developed. For example, categories as to the instrumental causality of the sacraments; they have to be developed more fully. There is also *everything regarding history and the mystical body, and the church*; all these need further development.' (Emphasis added.)

ethics of both *Insight* and *Method in Theology*.¹² While there is no doubt that further work (for example, in social theory and economics) will uncover other elements and so other categories, these give us enough to get started and provide the basic map or grid for locating the elements that further work will discover, just as the periodic table provides the basic grid for locating possible further atomic elements.

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¹² A note on the relation of *Insight* and *Method* on ethics might contribute to another of the problems raised by McShane. With McShane I do not believe the two presentations contradict one another. But I do believe that they are two quite distinct accounts, and I would relate the distinction to the second and third moments of election or decision in St Ignatius Loyola's *Spiritual Exercises*. The ethics of chapter 18 of *Insight* is an explanatory account of what Ignatius calls the third moment. The ethics of chapter 2 of *Method* is an explanatory account of the second moment. As the two moments are complementary and would yield the same results, so the two explanations account for two different ways of arriving at the same thing, namely, a morally responsible decision. Which 'moment' the existential subject relies upon and employs depends on the condition of the subject at the time. Is one drawn by affective pulls and counterpulls? Then Ignatius's second moment and Lonergan's account in *Method* are relevant. If one is not drawn by conflicting affects, then Ignatius's third moment and Lonergan's account in *Insight* put forth the set of operations involved in arriving at a good decision.

CLIMBING THE CANTOWERS

TOM MCCALLION

In his seventieth year, paralleling Ezra Pound's life work of 117 *Cantos*,¹ Phil McShane began a long project of writing 117 essays, a new one to be published on the Web on the first day of every month. So far he has kept successfully to this gruelling schedule.² He calls these essays 'Cantowers', the name involving a multi-levelled pun, partly on the word 'canto' itself, but also hinting at the notion that persons 'can tower' above the partial and confused perspectives of what McShane would describe as our interim 'axial' state, this long dark night in our thinking.³

One of his key underlying metaphors is that of a vortex, one perhaps that is in reverse, expanding upwards and outwards from a compact centre. This image could be said both to guide and to describe the whole endeavour. One must not think of the spiralling and twisting that it involves as some kind of random excrescence.⁴ It is more like the shaping of iron filings on a sheet of paper as a magnet is brought close beneath it. It is our response under the pressure of growth of "the type

¹ Ezra Pound, *The Cantos of Ezra Pound* (New York: New Directions, 1948).

² The completed set to date can be downloaded (for free) from <http://www.philipmcshane.ca>

³ In a private communication McShane has told me that the idea for these essays was conceived when he was trapped in a snowstorm in Cape Breton! What a gathering of metaphors, fortunate and unfortunate, could be developed from that!

⁴ History is not just 'the play of being', some kind of 'random walk' through the avenues of possibility. It is much more serious, or perhaps more seriously playful, than that. But to say this, ultimately, is to assert that, as the saying goes, the game is indeed worth the candle!

of organism”, and the type of responding, that we are. It is our dynamic ongoing attempt at a solution to the optimisation problem set for us, for better or worse, by the actual limitations of our multiple level reality. It is a solution in the same sense that a flower is a solution to a problem of living in a world set by the limitations of physics and chemistry that apply to it this place and this time and under the current multiply periodic influx of photons from the Sun.

In relation to the content of the *Cantowers*, one can note a number of dimensions. The first perhaps is prophylactic. McShane is unashamedly a ‘spin-doctor’ for Lonergan. He is greatly afraid that people will read his mentor’s works as they might a series of disparate essays on a variety of topics, to be adopted or adapted piecemeal to suit some prior predilections. There is a book on basic arithmetic by Carl E. Linderholm, that is wonderfully witty (but only perhaps to a mathematician!).⁵ It sets out to ‘teach’ the first steps of elementary counting (‘one and one are two’) from a technically sophisticated viewpoint. Immediately one is plunged into a welter of functors and morphisms, for in a mathematical sense these are indeed ‘simpler’ notions than those of, shudder, long multiplication. It serves as a wonderful zen-like antidote to the slew of ‘made simple’ books for which our age is notorious.⁶ McShane can be viewed as aiming at a rather similar endeavour, ‘Lonergan Made Difficult’. The latter author’s ‘clear and lapidary style’, - *Method In Theology* in particular is deceptively simple, and often merely descriptive - can mean that Lonergan has, unintentionally, contributed to the development in his readers of a kind of verbal skill that enables one to speak *as if* one were in truth a follower – never putting a step wrong in one’s terminology or expression.⁷ One can, indeed, even fool oneself, in what McShane used to call ‘experiential conjugation’.

There is also a more purely theoretic dimension. McShane wishes to push the tradition towards a mutual mediation of

⁵ Carl E. Linderholm, *Mathematics Made Difficult* (Wolfe Publishing Ltd, London, 1971).

⁶ Follow my fingers, then copy and paste!

⁷ The distinction is of course that between memorisation and appreciation.

Insight and *Method In Theology*. In one direction, there is a need to pull the descriptiveness of *Method* into *Insight*'s fullest explanatory perspective. This, as I understand it, is essentially a limit notion, based on the idea of the fullest development of the individual sciences (for only then are 'metaphysical equivalents' meaningfully defined). In the other direction, there is the need for "elevating *Insight*", to understand, reinterpret, and re-affirm its whole vast effort within the context of *Method*'s elucidation of functional specialisation. In that much wider context, what was *Insight* 'at'?

A further dimension is propaedeutic. The *Cantowers* could be described as 'one small step', one man's attempt to shift the historical probabilities, be it ever so marginally, in favour of the eventual *implementation* of the vast project begun by Lonergan. In ordinary actuarial terms the whole endeavour is, of course, deeply hope-filled – 117 months of active, creative writing is a long time when one is already almost seventy. But much more profound by far is the hope that permeates the project's rationale. It envisages the concrete possibility of a real solution to the problem of general bias, "an ongoing global spiralling of functional specialisation, sweeping up a creative minority, gracefully making conversions beyond general bias a topic and an embarrassment, seeding over millennia a global lift of communal meaning."⁸ This notion of implementation was of course a long-time central aim of Lonergan's works. *Insight* elaborated the structure of understanding as it occurs in an individual mind. But the concern was not merely, nor even essentially, just such a theoretical elaboration. It was primarily a call to its recognition as merely the first moment, prior to its conscious and deliberate implementation as a reflexive form of control. Personal authenticity is the kernel of the 'conversion' that this entails.

I have come to view the elucidation of functional specialisation that is the core of *Method* as the parallel discovery of the structure of our communal self-understanding of the 'ongoing objectification of the human spirit.' Its task, to which McShane is forever pointing throughout the *Cantowers*,

⁸ "Cantower I," 7.

is once again implementation: a hodic control of hodics.⁹ Since hodics are interpersonal, or better perhaps transpersonal, and their dynamic sweeps men and women along in its path (with their agreement), one must speak instead of some kind of communal and historical authenticity. Whole communities can prosper or they can fall into decline, and the determination is ultimately left to the implacable judgement of history.

Some medieval philosophers pondered on how a higher angel could communicate with one of a lower order, to which all the higher order dimensions would of course be ineffable. The most obvious danger is that the lower will think it can actually encapsulate the higher, that it ‘understands’ it.¹⁰ In our day this would correspond to the problem of *haute vulgarisation*,¹¹ in relation to which McShane has much to say, some of it in the form of hard words addressed specifically to many ‘Lonerganites’¹². To negotiate these extremes McShane introduced the notion of ‘explaining’ (originally in *Lack and the Beingstalk*, but referred to again in various places throughout the *Cantowers*).¹³ In a realist way he is therefore addressing the analogous question. It is, for our axial days, *the* question of communications. How can our present hinting at the third stage of meaning really shift the probabilities within commonsense descriptiveness, or even within the intervening merely axial theory, in such a way as to augment the chances for the earlier

⁹ McShane has introduced the word ‘hodic’ as a more convenient synonym for ‘functional specialist’. It mirrors the old builders’ hod, a first order tool. But it also serves to remind us of an etymologically false but nevertheless suggestive partitioning of the word ‘method’ – meta-hod : a tool for the carrying forward of tools.

¹⁰ The danger on the other side would of course be the haughty condescension of some ‘philosopher-king/messiah’, who would simply hand down doctrinal ‘formulae’ to be repeated uncomprehendingly and obeyed implicitly.

¹¹ *Haute vulgarisation* attempts to straddle the distinction between common sense eclecticism and generalised empirical method. In so doing it leaves itself out of touch with both adequate theory and sound common sense. See the comments in Cantower XXII, Section 1

¹² See my later comments on contentiousness below.

¹³ *Lack in the Beingstalk*, chapter 3, section 3.6.

<http://www.philipmcshane.ca/books.html>. Among the Cantowers, see, for example, Cantower IV *passim*.

emergence of that very communal third stage itself? How can we proceed so as to improve thereby the possibility of the emergence of what he calls ‘sargawits’? And what would it be to be an ‘elder’ in our day when we have learned, with good reason, to be suspicious of ‘experts’ telling what we should think and leaders telling us what is to be done? How can Lonergan’s discovery of the structure of human collaboration that is hodic actually come to inform its everyday dawnings in specialisations, in the practical division of labour imposed by the vastness of every practical and intellectual field, the fragmentation and loss of encyclopaedic overviews, or even of overviews of what once were quite restricted fields. Who now, for example, would have the temerity to begin in these times a summary of all mathematics, in the manner of the Bourbaki?¹⁴ The task is impossible.¹⁵ In a similar way we are conscious now of a naivety in any writer’s attempt at ‘the history of philosophy,’ or even of ‘a history of philosophy’. As I see it, functional specialisation constitutes the intrinsic structure of human collaboration (just as the four levels elaborated in *Insight* constitute the structure of individual minding).¹⁶ How

¹⁴ There is some discussion of the project followed by this group of mathematicians in *CWL 18* (the name ‘Bourbaki’ is not indexed, but a discussion is to be found on page 48 of that text).

¹⁵ The horizon towards which one was trying to move in search of total coverage is now receding faster than one’s radial velocity. It is not just that one speed is greater than the other, while both remain commensurable. It is the recognition that the measure of the task of coverage will in the limit be uncountably higher than that of the radial, and will ultimately be incommensurable, of a higher order of infinity. (Not just radius to area, but radius to a hypervolume whose number of dimensions is endlessly increasing.)

¹⁶ The relationship between the hodic structure and the individual person seems somewhat analogous to that of a firm in Lonergan’s economics. In that context it is in general not possible to speak of a ‘Basic’ or a ‘Surplus’ firm. The same business can make goods for either economic circuit. Even the goods themselves cannot have any intrinsic designation as Basic or Surplus. The firm may make cars, but it is only the manner in which these are later used that will determine their allocation. Indeed it is even worse than that. The very same car, for example, can be at one time be Basic and at the next Surplus. The distinction is profoundly empirical – how is it ultimately used? In a similar manner, any theoretical work I might do will be variously in one or other, or many, of the functional specialties. It is even

can that transpersonal structure so bespeak itself in individual ‘SensAbilities’¹⁷ as to bootstrap its own emergence? How can we contribute, cooperate, augment? In the absence of that anticipated third stage of meaning (apart from its shadow in the minds of those aforementioned very few ‘evolutionary sports’ who ‘*can tower*’ sufficiently high) how can we *point to it*, not merely contemplatively but effectively? One is, of course, engaged with Lenin’s question: What is to be done?

It would be impossible to give any worthwhile summary of the content of the whole series of these essays. The first and most obvious reason is that the parts do not all exist yet, except perhaps in the most general of outlines in the mind of the author, and it is clear from the content of what he has written to-date that there is an adaptive element in their structure and content. This is not to say that they are merely *ephemera*, passing comments on today’s intellectual news. The central thrust is clear and steady, but it is given added urgency and bite by a responsiveness to current debates, etc.

The second impossibility is more interesting. The essays do not in many instances make precise points that are meant to stand alone. Certainly one could mine them for precious nuggets of wisdom throughout a vast panoply of subject areas, for the author’s mind bubbles forth continuously in novel and profound insights in almost every domain it surveys.¹⁸ But to do only this would be to miss the point. Just when one comes across a really interesting statement, about physics, say, that one might be tempted to just pull out and use in one’s own thinking, one is almost immediately ‘destabilised’ by having it

possible that exactly the same studies might under different rubrics be at one time in one specialty and later in another. There is no sense, however, in which *I myself* am so categorisable.

¹⁷ This, as I understand it, is a neologism introduced by McShane in an attempt to encapsulate the unity in fact and in performance of our molecularity, our sensibility, our wonder. It names the adventurous, hope-filled drive of space-time stardust groping forwards and upwards to become historical spirit. In the context of Lonergan’s ‘extreme’ realism it reflects, humorously perhaps but with a great deal of truth, how we can say that one’s world gets right up one’s nose! On McShane’s use of the notion of ‘sensability’ see, *Lack in the Beingstalk*, 25; Cantowers II and VI *passim*.

¹⁸ The same, of course, can be said of Lonergan’s writings, and especially of *Insight*.

put into some larger context that makes it abundantly clear that this is only beginning to scrape the surface of the question. Such ‘doctrinal’ mining is therefore useful, but somewhat beside the point. McShane does not allow the reader to settle, as a bird might land on a high branch and perch there.¹⁹ In the very manner in which the point is made the branch is shaken and one is pushed ever onwards. Of course one finds a similar ‘destabilising’ style in post-modernist writings, most notably in Derrida’s works. They are often ‘locally’ intelligible, but not globally so.²⁰ One suspects that this is as a result of such writers’ deliberate avoidance of judgement, of notions of fact and truth.²¹ That is clearly not McShane’s reason. Rather, he wishes to stop the reader ‘falling too soon’, settling for the partial insight, missing in particular the reflexivity of the methodological turn. The style is alternately dense, elliptical, full of Joycean puns and self-referential usages. In addition, he emphasises continually the shift of *Method in Theology* ‘behind’ individual minding, a phylogenetic context of the ongoing ‘objectification of the human spirit’ whose structure is one of functional specialisation. This objectification is radically greater than any individual,²² so there is no possibility of it being grasped in a single insight, and so no concept (other than a merely verbal heuristic anticipation) can contain it. *A fortiori* there can be no value in my attempting any kind of summary of a related content. Without any denial of the validity of the notion of truth, we are invited to recognise that we are forever ‘not there’, and instead to relish the relatively

¹⁹ I am reminded of the song: “reaching for the sky just to surrender”, which has always struck me as an important counterpoint to St Augustine’s “our hearts shall ever restless be, until they rest in Thee.”

²⁰ I am thinking of a mathematical analogy here, where, for example, the surface of the Earth is *locally* Euclidean (so that any region can be thought of as being just a ‘plane’ surface with bumps) but is not so in its totality. (Strictly speaking, if one just left out a single point, such as the North Pole, it would then still be Euclidean.)

²¹ Avoidance that stems from a prior anti-theological option.

²² Not just because it is ever ‘not yet’, a future limit, but even in principle, at the end of time. No one person, now or in any future however remote and advanced, can ever know what it is or was to have been human. Only the collaborative mind of all humans is remotely up to such a task (and from a theological perspective, not even then).

infinite openness of even just that component of being that is proportionate to our knowing.

The third difficulty is massively more significant, even though it is in one sense related to the first and the second. McShane's concern throughout is growth and in particular intellectual growth. But wherever this has occurred it has delivered in a person a larger horizon and a concomitant enrichment in the kind of minding, both of which are in some major or minor way beyond anything of which he or she had previously been capable. To the self of this week that of next week is ineffable. If McShane's writing is out of the fullness of such growth then its fullness is beyond even the writer himself at the beginning, or at any stage along the way. So there are two levels of acceleration in the content of the works. One is the ordinary pedagogic one where one begins with the simpler points and gradually introduces more subtlety and complexity. That would be consistent with an overall fixture of message, a foundational viewpoint and body of work. But the viewpoint is also that of a growing horizon (horizon and horizoning – always the object and the subject together), the expression trying to follow a moving target, to encapsulate an expanding vision and an expanding power of encapsulating.

The *Cantowers* are not an easy read, and many times I have found myself longing for the aforementioned 'clear and lapidary' style of Lonergan, or even better, of Fred Crowe. McShane relishes puns, and at times these can be quite excruciating!²³ At others times it can be hard not to find oneself starting to emit an anachronistic 'groovy', such as in response to a title such as that of Cantower 2.²⁴ The author's

²³ See, for example, the projected title of Cantower XXVI; *Refined Woman and Feynman*.

²⁴ *Sunflowers, Speak to Us of Growth!* Cantower II. In fact however this relates to an extremely helpful analogy (such as was used earlier above) for optimised growth under constraints, applied here to plants but equally applicable at all other levels. A relatively simple example would be formation of a minimum-surface soap 'skin' that forms in a closed wire frame (which can curve in three dimensions). To understand this phenomenon adequately requires quite sophisticated mathematics, in the form of the calculus of variations.

frequent neologisms are often very successful,²⁵ but sometimes they can be a little irritating, not least by being overly clever. One fears perhaps that they may occasionally be there more for their intrinsic ‘cuteness’ than for any strict necessity for their existence. Self-referential or reflexive statements, or ones that have a dual purpose, a first order speaking about some object and the need for a second order ‘take’ as speaking about the speaker or listener, are peppered everywhere throughout the text. These are inherently hard to read. But we cannot blame the author for this. It is not in principle a problem with McShane’s (or indeed with Derrida’s) style, but one of fact and historical necessity. Acquaintance with such a manner of speech must indeed become more frequent, and we more easeful in its use, as we try to move into the third stage of meaning.

It would be unrealistic to ignore the occasional contentiousness in the views that McShane puts forward. There is a good deal of ‘sniping’ at other forms of ‘Lonergan following’. This is most notable in regard to the aforementioned *haute vulgarisation*. As a personal comment, I long ago became aware of the emergence in some ‘Lonerganites’ of a kind of group ideological mind, one that saw itself as having ‘the answers’ and could approach other thinkers with the supercilious air of the ‘saved’. For such people *Insight* could almost be viewed as an exercise in philosophical ‘Apologetics’, a manual of ‘answers’ to the aberrations of the unwashed rest! Obviously we must have no time for such a phenomenon. Such casual contempt was never Lonergan’s own response to the great thinkers of the past.²⁶ McShane also repudiates much of the kind of ‘Lonergan and thinker *x*’ studies which currently abound in the literature. If ultimately the views of ‘thinker *x*’ are counterpositional then comparison is not the issue, dialectic is.

It is probably important in particular to refer to his issue

²⁵ I am thinking particularly of ‘hodics’ and ‘SensAbility’.

²⁶ The whole experience hardened my resolve not to get involved in that particular scene. It was indeed lending itself to the production of a group of people such as I criticised earlier, with a facility in the use of Lonergan-like language, but with very little real grasp of their own enquiring minds.

(early) of the text of Cantower XXII, which deliberately fires the first shots in a ‘civil war’, even attacking the other pillar of the tradition, Fred Crowe.²⁷ McShane asserts, fairly bluntly, that the latter’s view on feelings, etc,²⁸ are not compatible with Lonergan’s position on being and becoming.²⁹ If this kind of thing were just intellectual give-and-take it would be interesting and indeed amusing (not to mention grist for Dialectic). But the hodic endeavour is not a game, and one finds oneself being forced willy nilly to take sides. For Lonergan either is or is not ‘anti-foundationalist’, and one cannot but take a view on this. He would have been ‘foundationalist’ if he were “guilty of totalitarian hubris”, insisting on “the philosophic effort to dominate cognitively the world and all reality”. I do not believe he fell into such a trap, but even if he did it would not matter. The real issue for me is whether I myself do! And I do not.³⁰ I remark below that there is no axiomatic home in which we can rest. But the essential point from Lonergan is not just the de-facto absence of such a foundation, because of somewhat unfortunate limitations and leakages to the outside. For me it is the explicit and deliberate openness to a millennia long march into that endlessly wider world. Its foundation, if that word must be

²⁷ One is, of course, sadly reminded of Brendan Behan’s crack that the first item on the agenda of any Irish revolutionary party would always be the split.

²⁸ As expressed particularly in a recent article “Lonergan at the Edges of Understanding” *MJLS* 20 (2002). I do not have a copy of the article to hand and so am loathe to comment in any detail. If it is as McShane reports it would seem that the world of feelings is somehow to be viewed as a separate ‘objectification of a human spirit’, different from that of being (but by some unspecified and somewhat mysterious linkage remaining isomorphic to it?). I cannot see that this is not just a version of a bipolar Hegelian idealism, based on some kind of nominalist abstract system. Surely feelings are just one zone of being, and like everything else are to be grasped in their full being only at the end of a long scientific process, one that is scarcely begun.

²⁹ In the Lonergan context this is tantamount to an allegation of heresy!

³⁰ Ultimately I do not think there is such a thing as ‘Philosophy’ (though I would not wish to close down all the Philosophy Departments). There will really only be ‘Science’, but a vastly extended science, a generalised empirical method, one that in the same breath will study in a fully explanatory context the theory and the theoriser, the object and the subject.

used, is the vast interconnectedness of the 'concrete universal' which implements, and so determines, the meaning of what it is to be human.

Need we worry about this war? Obviously there is a sense in which we have to take sides. There is of course a deeper sense in which the ongoing implementation of the hodic viewpoint, whether it be over a shorter or a longer time-scale, will sort the problem out *ambulando*, in the way of dialectic. I believe, therefore, that in the very long term our choice will not matter. [Where now are Irish (or American) civil-war politics?] But our options may affect whether the time-scale is long or short. A wrong-headed position may lead to vast wasted efforts. Better by far if all those coming Ph.D. students worked on something really worthwhile.

Why then should anybody subject him or herself to all this difficulty and hassle? I believe that despite the stylistic difficulties, the sometimes intensely compacted content, and the occasional taking up of arms, the reading is worth the effort. We sell ourselves cheap if we settle for what is merely partial. We are forever endeavouring to build fine structures of doctrinal points related in some form of logical coherence, to make a congenial intellectual home. But such a thing will always remain a rationalisation. We have no such home. Every time we formulate a new and cosy resting place someone will discover a 'limitation theorem', a non-closure, that will not permit the enquiring mind to rest on its homespun laurels, but drives and cajoles it to burrow out through those gaps into an ever-wider world.

But one must, of course, be practical. As in Lonergan's economics, stipulative norms are of little value if one has not first discovered those that are internal to the system's dynamics. We have only so much time to spend, and time as they say is money. Should we 'buy' these essays, or would we be better to switch our time expenditure elsewhere? We are indeed spirits open to infinity, but we are also perhaps busy individuals with pressures that may even be contractual (related to our jobs or our marriages, for example) that restrict us mightily. We cannot simply spend resources as we please, not even those of time and intellectual 'stamina'. In such a

context, is it worthwhile to give the necessary block of attention to such a very general, future-oriented and to be honest, discomfiting, work as these *Cantowers*? Really, concretely, as a contribution to the future of the human, might we not be better to ignore all this undoubtedly worthy prolepsis in favour of work at the immediately to hand? As when one engages in care of the actually poor as distinct from efforts to counteract poverty? Perhaps yes. This, after all, is the concrete meaning of functional specialisation. Some people will ‘merely’,³¹ do the spadework of ‘research’, say. So these writings may not be of immediate intellectual use for many who may nevertheless be significant contributors to mankind’s ongoing self-understanding. But perhaps even for such people there is a ‘flavour’ of openness that is to be gleaned from reading McShane’s writings, one that remains of real value, at least contemplatively as a felt unrestrictedness that is the savour and taste of mystery, and of the huge extent of our many forms of resistance to its reality. And I do not simply mean a kind of ‘poetic’ grasp, though that does indeed apply. I include an intellectual component, in the form at least of a heuristic generality that contextualises differently whatever first order work one might be engaged upon.

It would be wrong to finish without addressing the religious dimension of these essays. McShane’s *Cantowers* are Christian, and for some readers this is a problem to be surmounted. There are many students of Lonergan who must read his theological works in a kind of ‘as if’ manner; as if they in fact were able to buy into the whole perspective. They do this, of course, because they find value in much of what he says, a depth and adequacy that is not to be found elsewhere. Whereas Lonergan would recommend ‘despoiling the Egyptians’ they could be said to be following the reverse procedure of pilfering from the cathedrals! It seems to me that the main reason for the ongoing vehemence of rejections of religions has been their failure to take history seriously. For most of them the goal was seen as being some kind of personal salvation or enlightenment, to be achieved of course against a

³¹ I do not, of course, agree with the apparent pejorative slant that the word ‘merely’ seems to carry.

background of history. But that background itself was largely irrelevant. If, to put it in extreme terms, there were to be a nuclear war next week, and we were thrown back into a stone-age existence, this would in truth not matter to the predominant kinds of religious beliefs. The individual would still have to work out his or her personal salvation (or whatever) in that new context. There is no sense of caring for history itself, or for the global community, as a community, that is mankind.³² What is appealing in the perspective offered in these *Cantowers* is the true incorporation of history into the religious perspective. It is not, in fact, 'written' what man is to be. There is a need for fantasy, such as will guide and channel our dreams, and cajole our hopes out of a view of the past as 'better than it was' towards a future that is more than it might otherwise end up being.

Neither, for the Christian, is there any real sense in which the Word is already spoken, out there in history. Its expression in symbols is indeed complete in the person of Jesus of Nazareth. But such symbolisations are only vibrations on the air, marks on paper, movements of molecules and the interweave of nerves and the tides of feelings, and we have to struggle mightily to find even portions or signs of these that remain. The content of that expression, on the other hand, will forever be shifting with the enrichment of the context we bring to bear. Above all, perhaps, there is a need for courage in that formation of context. For in our terrifying freedom we shall be the ones who will form it. As McShane emphasises, there is another transcendental: we are called to 'be adventurous'. For the atheist, the ideal, perhaps infinitely distant, terminal expression of the ultimate meaning of what it will have been to be human will be identical with itself, and we will be our own final 'word'.

But more questions remain. Can we offer a 'Heuristics of Ultimate Cosmopolis'³³? What will be left 'after' the

³² I have often wondered why, or even whether, in these traditions, genocide was (as most decent people actually see it) in any sense a worse crime than the simple killing of the same number of individuals, randomly selected.

³³ The projected overarching title of the set of *Cantowers* for the years

astronomical ‘big crunch’? What indeed is left after our own individual death? Can we fantasize? Can we risk some “serious contemporarily-informed shot at the heuristics of the real geometry of eternal life”³⁴? For the Christian in particular the belief is that we shall in the end be astonished. The selfhood we shall affirm shall be as nothing in comparison to what we shall be enabled to admit ourselves to be, and to have been all along. The ultimate mind-killer is the fear of taking the risk of joy; we have so often been let down. If the older expression of “the pure desire to know” has been expanded to an individual and communal ‘pure desire to care’ for being can we not begin to tolerate a non-infantile version of its neglected other side, a pure desire to be the object of care.

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³⁴ Philip McShane, “Elevating *Insight*: Space-Time as a Paradigm Problem,” *MJLS* 19 (2001).

EXPLORING THE IDEA OF PRIVATE PROPERTY: A SMALL STEP ALONG THE ROAD FROM COMMON SENSE TO THEORY

KENNETH R. MELCHIN

I had the privilege of studying with Phil McShane in 1979-80, when he was Visiting Fellow at Lonergan University College, Concordia University, Montréal. It was the year I first began reading the work of Bernard Lonergan and Phil's was a distinctive approach that has left its mark on me. The course was announced as a reading of *Method in Theology*. But as things turned out, the book, *Method*, was simply a launching point for doing what mattered most to Phil, "reading the book of oneself."¹ It is one thing to read about Lonergan's "method," it is another thing to actually put this "method" into practice, learning the difficult skills and doing the hard work of getting insights into one's own operations of understanding. This was the road that Phil took us down. The strange new lands that this journey has since revealed for me have been as exotic as any that have been promised or delivered in the worlds of fiction or travel. For this, I will be forever grateful to Phil.

If I were to choose two points of focus from Phil's work that have stayed with me through the years following, they would be: stick with the method, and be content with beginnings. The first, of course, refers to the method of self-

¹ On the theme of "reading the book of oneself" in Philip McShane's work, see, e.g., Philip McShane, *Wealth of Self and Wealth of Nations* (Hicksville, N.Y.: Exposition Press, 1975). This theme also comes up regularly in many of his more recent works. See, e.g. "Elevating *Insight*: Space-time as Paradigm Problem," *MJLS* 19.2 (2001): 203-229.

appropriation – performing the tasks of attending to our own operations of understanding as they are at work as we struggle to understand things in the world. One of the startling features of this method has been the way it began to change the way I would think about things. Understanding insight reveals that objects of experience are not as they seem as we encounter them in common sense mode. Rather, they are constituted by layers of complex intelligibilities that need to be understood in a linked succession of acts of theoretical understanding.² Discovering these various layers of what things “really are” has always been an occasion for surprise and adventure. It has seemed that the more I understood about understanding, the more my own efforts to understand things revealed both the fascination of new layers of insight and the obscurity of further mystery.

I remember Phil talking about how to understand a rabbit. Typically, in high school biology classes, the first thing we do to teach about rabbits is to kill the rabbit. But rabbits are living creatures and what can students possibly understand about real rabbits when they are confronted with corpses to dissect? If we know that understanding requires getting insights into experience, what insights can they get if we present them with a field of data that leaves out the most important experience, the encounter with the living rabbit? More than this, to understand real rabbits as they are, we can't rest content with gawking at domestic rabbits in cages. Rabbits are what they are by virtue of their own established life routines in interaction with their botanical and zoological partners in the meadow and forest ecologies of their region.

To understand what a rabbit “is” requires understanding what a rabbit “does.” But it also requires understanding how understanding “works.” It requires confronting the difference between common sense and theory.³ Theory requires the much more elaborate and much more concretely grounded

² See, e.g., McShane, *Lonergan's Challenge to the University and the Economy* (Washington, D.C.: UP of America, 1980), chaps. 1, 3, 5, 6. See also, “Elevating *Insight*.”

³ On the relation between common sense and theory, see *Method*, 81-99.

exploration of the full set of physical, chemical, botanical and zoological schemes that interrelate through the lives of generations of rabbits. Phil's alternative was to begin by inviting us to follow the rabbit through the recurrence schemes of her daily life routines, from waking to sleeping, through the seasons of her life, through her feeding routines, her routines of escaping predators, her relationships with other rabbits, and her routines of raising young and launching future generations. More than this, such a journey takes us through the rabbit's interaction with the other life schemes of the grasses, flowers, trees, insects, birds, and animals of the meadow and forest. What emerges from this exploration is the discovery that the "real" rabbit is not confined to her envelope of skin. It is the interrelated set of all of these complex intelligibilities. I have lived in the country for the past sixteen years and from time to time have found opportunities to follow brief segments of this journey. For me, the image of the journey through the schemes of the rabbit's life have become something of a symbol for this curious portrait of Lonergan's "method" that I learned from Phil.

The second memorable point of focus from Phil's work will be familiar to all who know him; be content with beginnings. Phil never ceases to remind us that a fully explanatory understanding of things, particularly in the human sciences, stands in the far distant future. Any scholarly work we will do successfully in our lives will only be a small step along a very long road. If we and our successors travel this road well, there will be revealed worlds of complexity beyond our current imagining. This must give us pause. And the tone appropriate to our scholarly work must forever recognize this place that we occupy in the grand scheme of scholarship fully differentiated by interiority,⁴ a place of modest beginnings.

In the pages that follow, I would like to provide a brief introductory illustration of an application of Lonergan's method that represents my own efforts to learn from the work of Phil McShane. As best I have been able, I have written these pages with Phil's two directives in mind. The focus of these

⁴ On differentiations of consciousness and the turn to interiority, see *Method*, 81-99, 257-262, 302-305.

explorations will be the notion of “private property.”

Private Property

As an ethicist working in a Christian Faculty of Theology, I have frequently encountered efforts to clarify how we should think about private property.⁵ Discussions of this notion crop up frequently in church documents.⁶ And anyone concerned with alleviating the misery associated with poverty has had to wrestle with the question of how property rights have figured into the past and present history of this misery. Having read some of the literature on the topic, I have been left both illuminated and dissatisfied.⁷

To be sure, the right to private property has been considered one of the ethical corner stones of neo-liberal society. We cherish this right as dearly as the right to democratic liberty itself. In fact, traditional architects of liberal theory like Locke⁸ and contemporary interpreters like Nozick⁹

⁵ See, e.g., William O’Neill, “Private Property,” in *The New Dictionary of Catholic Social Thought*, ed. Judith A. Dwyer (Collegeville, MN: Liturgical Press, 1994), 785-790; Ricardo Antoncich, *Christians in the Face of Injustice*, trans. M. J. O’Connell (New York: Orbis, 1987), 84-126; Alan Gewirth, *The Community of Rights* (Chicago: U of Chicago Press, 1996), 166-213; Mary Ann Glendon, *Rights Talk* (New York: The Free Press, 1991), 20-40; Lawrence Becker, *Property Rights* (London: Routledge & Kegan Paul, 1977).

⁶ For examples in the Roman Catholic tradition, see, e.g., Joseph Gremillion, *The Gospel of Peace and Justice* (Maryknoll, NY: Orbis Books, 1976), 27-35, 165-69, 306-7, 393-94. The references here are to the Roman Catholic Church documents, *Rerum Novarum* (1891), *Mater et Magistra* (1961), *Gaudium et Spes* (1965), *Populorum Progressio* (1967). See also the discussions scattered through Donal Dorr, *Option for the Poor* (Maryknoll, NY: Orbis Books, 1983); and Oliver Williams and John Houck, eds., *Catholic Social Thought and the New World Order* (Notre Dame: U of Notre Dame Press, 1993).

⁷ For overviews of theories of property rights and diverse approaches to rights, see, e.g., Becker, *Property Rights*; Anthony Parel and Thomas Flanagan, eds., *Theories of Property* (Waterloo, ON: Wilfred Laurier UP, 1979); Jeremy Waldron, ed., *Theories of Rights* (New York: Oxford UP, 1984).

⁸ For discussions of Locke on property rights, see, e.g., James Sauer, “Who Owns the Economy: Property, Meaning and the Social Economy,” *Journal of Alternative Political Economy* 1.1 (1999): 68-87; also published in *Humanomics* 15:4 (1999); Matthew Kramer, *John Locke and the Origins*

have made considerations of private property central to the very meaning of democracy itself. However, as society becomes more complex, as the various institutions and aspects of social living become more interdependent, the meaning of the terms “property” and “private” have become somewhat puzzling.¹⁰ To be sure, we have our commonsense expectations. Something is our property if we have acquired it legally. And to say that it is private is to say that we have the right to do what we wish with it without interference from others.

However, in fact, things are not so simple. Our lives are lived in close and complex interaction with others. In a democratic society, their free choices perennially shape the material, communal, political, and economic ecologies which make our property what it is. Furthermore, governments have always retained the right to seize our property when we have infringed on others or when the public good is at stake. In recent decades, as the lawsuit has become ever more the strategy of choice for individuals who would pursue their personal claims against others who would infringe on them, the settlement of these suits has more and more involved legally enforced payments of significant sums of money. These payments amount to nothing less than state-mandated appropriations of private property. And they bear witness to a strange and hidden *public* dimension to private property. In some profoundly important sense, private property is never fully private in the sense we would like it to mean. As long as we live in a complex society where our personal choices at

of Private Property (Cambridge: Cambridge UP, 1997).

⁹ See Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974). His specific focus on property rights is found in pp.167-82, but the overall framework of the argument is established throughout the book.

¹⁰ Michel Chossudovsky paints a compelling portrait of this complexity and interdependence on a global scale in *The Globalization of Poverty* (London: Zed Books; Halifax: Fernwood, 1998). See also, Ozay Mehmet, *Westernizing the Third World* (London: Routledge, 1995), esp. pp. 114-134. Other analyses of economic complexity and interdependence that highlight feminist perspectives can be found in Marianne Ferber and Julie Nelson, eds. *Beyond Economic Man* (Chicago: U of Chicago Press, 1993).

times enhance, at times diminish, and forever interact with and modify the welfare of others, our property will always be subtly or traumatically shaped by the work of their living. What, then, remains of the meaning of the terms “property” and “private”?

Exploring the Idea of Private Property

Let us begin this exploration with the term, “property.” And to focus our inquiry, let us consider the purchase of a home. If there is a symbol that most surely captures our sense of property, it must be the ownership of one’s home. We have just purchased a home in a pleasant residential neighborhood. Let us examine what it is that we have purchased.¹¹

As all real estate salespersons know, one of the first things that people look for in a home is its location. Advertisements proudly announce homes that are “on quiet streets,” “close to schools,” “close to public transportation,” “in friendly neighborhoods,” “two blocks from community centres,” “on streets with mature trees.” To think of our home as merely a building on a lot without recalling the care with which we scrutinized its location is to completely misunderstand the actual home that we have purchased. The home we purchased is a home that is situated. Furthermore, the property that we have purchased is this *situation*. Were this same building on this same parcel of land located in a slum, next to a steel smelter, or bordered by a junk yard, we most certainly would not have purchased it because it would have been something else. It would not have been the same home, it would not have been the same *thing*.¹² What the property is, in some profoundly important sense, is defined by the set of relations of its situation.¹³

¹¹ Another example of the sort of “method” that is pursued here can be found in Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House/Vintage Books, 1961). For a discussion of the links between Jacobs and Lonergan, see the essays in Fred Lawrence, ed., *Ethics in Making a Living* (Atlanta: Scholars Press, 1989).

¹² Bernard Lonergan has a very precise and unusual understanding of what a “thing” is. See *CWL 3*, chap. 8.

¹³ David Oyler develops a similar type of analysis in “The Operational Situation,” *MJLS* 14.1 (1996): 37-54.

Let us examine some of the aesthetic aspect of this situation. To begin with, the home is on a street, it is a paved street, it has cement sidewalks, there are street lights on the street that light up the neighborhood at night. The other homes on the street are well kept. The previous owners of this home and the other homes have planted and maintained trees, gardens, shrubs, and lawns. While the homes have a similar basic design, the successive owners of each home, over the years, have modified its basic design in a unique direction with the addition of porches, garages, windows, doors, decks, new rooms, new roof lines, paint, hedges, fences, and chimneys.

The result of all of this activity is a functional and aesthetically pleasing complexity—a complexity that arises as much from the many decisions of homeowners to coordinate their projects with the work of others as from their efforts to express their individuality by differentiating their home from others'. The aesthetic character of our home is defined by an ecology of relations that link it not only to the other homes on the street but also to the history of all of these homes. This ecology of relations, in fact, defines the aesthetic character of the property we have purchased. Apart from this ecology, our property would not be what it is and, in all probability, would not be a home we would purchase.

Let us consider, now, the functional aspects of the property we have purchased. Our home is more than a work of art. It is also a living space and this living is in relation to a whole range of other institutions in our lives. The street on which our home resides does not simply lead onto other streets with other homes, it leads onto arteries that carry us to schools, places of work, shopping centres, corner stores, public swimming pools, parks, community centres, churches, taverns, town halls, firehalls, police stations, courts, universities, businesses, and prisons. We have purchased our home with a view to a life and one of the principal features of the situation we have purchased is the access to the various elements in this life which our home provides. So before purchasing, we gave a great deal of thought to public transportation. Or, perhaps, we looked into the traffic flows in our neighborhood. Maybe we like to walk to work. To be sure, we have thought of the

children. Will they walk to school or will they take the bus? Is there good access to child care? Will we need to carry groceries home on the bus? Of course, one of the most prominent considerations is safety for ourselves and our children. Can we walk home safely at night? Can the children walk safely to their swimming lessons? Will we need to install a security system?¹⁴

This, of course, leads us into another ecology of relations. In this case, the ecology is as much bound up with our own life decisions as it is a public fact about our home. Still, our life decisions are situated and what makes *this* house what it is for us is precisely its situation in the neighborhood or the city. The actual ecology of relations linking our home to the schools, workplaces, shopping centres, parks, and community centres presents a range of opportunities for our living within which we can make our choices. In fact, it is the *public* character of this ecology which establishes the conditions for the range of life choices open to us. This is why we bought this property, because it is situated within this public ecology and this ecology stamps our property with its functional character.

There is another ecology of relations that defines the property we have purchased and whose analysis brings us face-to-face with another dimension of the mysteriously public character of our property. This is the ecology of wires and pipes that connect our home to the homes of everyone else and to the complex technologies of communication, power, water, waste management, and drainage that are essential for its functioning. A home is what a home does, and our home does what it does by virtue of its participation in a host of public ecologies providing cable television, internet, natural gas, water, electricity, drainage, telephone, sewage, and

¹⁴ Jane Jacobs' analysis of city neighbourhoods illustrates how the interaction among diverse functions on city streets gives rise to a diversity of people and activities that typically attract the sustained interest of local residents. These interested residents who are simply watching out of interest become the "eyes on the street" that ensure the security of the neighbourhood. Her portrait illustrates how the "nature" of the secure neighbourhood is constituted by the interplay among the diverse functions, not by any single function or causal factor. See *The Death and Life of Great American Cities*, chap. 2.

high-pressure water for fighting fires in the neighborhood. All of these services might seem to be reducible to private contractual arrangements with corporations and utilities. However, this is not so. In fact, the services are only made possible and available to us through public networks of cooperation that link all of the properties in the municipality together in systems of service provision and delivery. The contractual arrangements are sets of stipulations that allow each of us participation in the public schemes and they define mutual obligations associated with this participation. It is this participation in the schemes that makes our property what it is.

The analysis could go on and on. We have not begun to examine the ecologies of relations that made possible the construction of the house, the fences and hedges which define our relations with our neighbors, or the interior layout of the rooms which set the conditions for the cooperative routines among the people who share the house. Neither have we begun to explore the natural ecologies which deliver the breathable air and the drinkable water to the house, or the timber and minerals to the producers of the building materials. These, and more, contribute to establishing the precise character of the property we have purchased. The point here, of course, is that the meaning of the term “property,” if it is to bear any resemblance to the actual character of the property we have actually purchased, must embrace the *public* character of the hosts of ecologies of relations that define the situation of our home. Our home is what it is by virtue of its situation within the hosts of schemes of technical, social, aesthetic, and logistical relations. Our property is what it is by virtue of all these public ecologies.

What, then, is left of the meaning of the term “private”? It seems as if the deed to our home is like the deed to the tail of an elephant or the spoke of a wheel on a freight train. Is there anything left of our home that we can call our own?

The answer is “yes.” There does remain something significantly private about the property we have purchased. However, there are a number of things that this privacy does *not* mean. It does not mean that our home is free from linkages with hosts of other elements in a matrix of public ecologies. It

does not mean that this situation exempts us from hosts of obligations to maintain and nurture the social ecologies on which our home relies for its existence and its character. Neither does it mean that these obligations are limited to the formal contracts which we have signed to oblige others to maintain the systems in return for our payments of bills or taxes.

What privacy does mean is that the form of our home's linkages with these public ecologies is not determined down to the last detail and our role in coordinating our involvement in these linkages in accordance with the demands of our living can be recognized by others. Our connection to the water lines, to the power lines, to the telephone lines, our aesthetic presentation to the street, to the other houses in the neighborhood, and our location in relation to the schools, pools, and shops of the community admit a certain flexibility. We are connected, but the form of this connection establishes a range within which we can exercise our own decisions. The flow of water into our house is not determined by the water utility. Rather, we have taps that can turn on the water and shut it off. So it is with the busses. They come by with a certain regularity, but we are not obliged to take them every time, or even any time. Likewise, the neighbors, the shops, the workplaces, the churches and the prisons all make a range of services available to us. In each case we are connected, this connection makes a precise range of choices open to us, but, within this range, the choices remain ours to make.

To say that our home can be *private* property is to say that, within the ranges established by the capacities of the ecologies of relations that make our home the *situation* that it is, the decisions to coordinate our form of involvement in these ecologies can be deemed ours to make. It is to say that, within these ranges, limits can be established on how others are allowed to alter particular aspects of the situation of our home without consulting us, and vice versa. It is to say that these public ecologies deliver limited ranges of decisions on diverse aspects of living to us, and that within these ranges, it can be ours to decide how we will coordinate them into a life whose concrete form is our own. In a democratic society, to say that

our property is private is to say that in each of the ecological spheres that bear upon the situation of our property, the determinate ranges within which this liberty can be exercised by us, without intrusion from others, can be assured by the institutions of government.

However, to say that our property can be private is also to say that we will have a responsibility for the public impact of our decisions and, within determinate ranges, this responsibility will properly be ours to bear. In each sphere of our home's situation, the range of personal decision-making that is assured for us is not simply the work of the courts. Nor is it simply the work of the utilities, the corporations, or the municipalities implicated in the service delivery. Rather, because each of these ecologies is a forum for public participation, each person's participation can shape the overall character of the whole system and, thus, the property of others. To say that our property is private is to say that, for better or for worse, the impact of our participation in public ecologies is our responsibility to bear.

Property Rights

To this point, we have only established the grounds for the *possibility* of private property, we have said nothing about why it might make sense for us to accord to each other some sort of *right* to property. We have said nothing about whether private property might be a *good thing*, whether the right to property should be forbidden, permitted or promoted and protected. In fact, this exploration of the fully public character of the schemes that define our property might suggest that we tread with caution. I suggest that the method we have been following can offer some clues on how to begin answering this question.¹⁵

I think there are four kinds of *goods* that can arise with the establishment of property rights, goods that are essential to human living and to the emergence of democracies and complex economies. I suggest these goods would have trouble

¹⁵ The argument offered here is similar in structure to the argument for the foundations of rights offered by Alan Gewirth in *The Community of Rights*. See, in particular, pp. 13-20.

arising and flourishing without some sort of right to property as we have sought to understand it here. The *first* good has to do with living a human life. We live our lives by establishing sets of routines, developing sets of solutions to problems, making choices, meeting challenges, accomplishing objectives, and pursuing chosen goals. In all of these, we embark on our chosen life paths, not by launching single, idiosyncratic actions, but by establishing flexible but recurrent patterns of actions in defined locations, in cooperation with others who are doing the same. Like the rabbit, we work out our living by establishing recurrent schemes of actions in interaction with other relatively stable schemes that are defined and lived by others in our social ecology. To the extent that these schemes become the least bit personally or socially complex, they require a certain stability and property rights contribute towards assuring this stability. They do so by according us determinate authority over specific decision-making loci relevant to our life schemes and by establishing our responsibilities with respect to our impacts on the schemes of others.¹⁶

The *second* good that can come with private property has to do with personal learning and growth. The need for stability becomes significantly more acute when the schemes of life involve our growth and development. Learning is an onerous task that requires considerable practice and considerable focus over long periods of time. It requires that both mentor and learner limit their attention to the learning field and it requires some ability to keep the learning field free from intrusion from other sources. Sustained learning paths are essential to the development of persons and creating the environment for such paths requires sustained control over the elements and environments of learning at each stage in the process. Property rights help to assure this stability by assigning control over the learning environment to those overseeing the learning process

¹⁶ Property rights can assure this control in different ways. For example, leasing or owning a car specify different forms of responsibility for the various aspects of this control. Yet both assure a similar outcome, the stability of the person's access to the car in relation to the routines of his or her life.

and by establishing the social obligations that go along with this control.

A *third* good associated with property rights is related to the possible emergence of democratic forms of society. There is a significant increase in complexity, diversity and richness in human living that can arise when each individual person participates in society, not simply as a passive receiver of the elements of social and political life, but as a contributor to their making. Assuring this participation is what democracies seek to achieve. The good that results from this participation is both personal and fully social. But it makes demands upon the extent to which each individual is accorded some control over the materials and contexts for the experiencing, understanding, judging and deciding that informs this participation. This control is realized, in some measure, through property rights.

Finally, securing our life routines, learning and growth, and democratic participation typically follow tried and true methods. But insight can also give rise to new discoveries that yield benefits for all and this suggests a *fourth* good that can be achieved with property rights, a good that is integral to the emergence of complex economies, the good of innovation. It is one thing to draw upon extant knowledge and skills in our life routines, our development and our democratic participation, it is another thing to build upon this public knowledge by developing new responses to problems, new ways of alleviating human misery, new possibilities for human growth and achievement. Innovation requires insight and insights can only be gotten by persons who are close enough to the problems and the data and who have enough control over the elements in the experiential field to order them in accordance with the demands of the discovery process. More than this, getting insights takes time, and during this time persons must be fed, clothed, housed, and provided with the tools and materials necessary for their task. This means long term investment. None of this can happen without the sets of social agreements whereby innovators are given control over the experiential learning environment and are entrusted with the sustained resources for the processes of innovation. All of this is done by according property rights. Similarly, property rights

establish the various forms in which the fruits of innovation are returned to the publics to whom they belong.¹⁷

Needless to say, there is a lot more that must be said. These explorations have established some direction to the inquiry, but they have left hosts of questions unanswered. What can it mean (if anything) to speak about a “natural right” to property?¹⁸ How should property rights be awarded and adjudicated? Does it make sense to distinguish between public and private *spheres* of economy and society? What about the accountability of trans-national corporations? How are property rights linked to democracy? What about the ethics of capital formation in an industrial economy? And, in relation to all of these, there arise the questions and challenges that will be issued from the perspective of alternative theories and approaches. All these questions, and many more, need to be answered before we come to clear insights and judgements on private property. These explorations offer only beginnings.

What they do offer, however, is a method of inquiry and tools of inquiry that can arise from insights into how we understand and that can set the inquiry process on a new and potentially fruitful track. *Property*, when approached from this line of inquiry, becomes not an object to be touched, grasped, or felt. Rather, it might better be explored as a *situation* of interaction among diverse schemes of recurrence in an ecology of social relations that offers some locus for intelligent ordering by persons. Similarly, a *right* is not a commodity belonging to us but an insight into an opportunity for personal

¹⁷ Bernard Lonergan’s texts on economics present an analysis of the relations between the basic (consumer) and surplus (producer) circuits of an economy that calls for a recognition that economic surpluses or profits yield the public “goods” of accelerating the economy and contributing to the standard of living of all. To yield these “goods,” profits need to be handled differently at different stages in the cycles of an economy. He speaks of these “goods” as a “social dividend” and seems to suggest that a discussion of property rights would need to recognize both the diverse functions of profits at different economic stages and the essentially public character of this dividend. See *CWL 21* and *CWL 15*. In particular, see Fred Lawrence, “Editors’ Introduction,” in *CWL 15*, lxiii-lxvi.

¹⁸ Lonergan presents a brief analysis of “natural right” in relation to the dynamic structure and immanent norms of human consciousness in “Natural Right and Historical Mindedness,” in *3 Coll*, 169-183.

and social *goods* essential to human living that can be achieved through this intelligent ordering and a collective judgement on a set of obligations associated with this ordering—obligations that, in the limit, are rooted in the very structure of human self-transcendence itself.¹⁹

Conclusion

Lonergan's method focuses our attention on how we understand. Yet, insights into understanding yield novel and interesting tools for thinking about the things of our lives. They confront us with the challenge to be attentive, to push beyond mere appearances, to think concretely, to watch carefully the way things actually happen in concrete living, to seek out the strange and novel in ordinary experience and to resist allowing commonsense ideas to delimit the focus or field of our explorations. Theory requires moving beyond mere appearance to exploring ranges of relations among things that, at first glance, may seem to have nothing to do with each other.

I hope I have been able to illustrate something of this method, something of this journey along the road from common sense to theory. The illustration offered here is only a first step along this road. But, hopefully, it offers something of a glimpse of novel resources that may prove helpful in meeting some of the ethical challenges we have encountered in our efforts to think responsibly about private property. It is only a beginning, but if we have learned anything from Phil McShane, it is to celebrate beginnings.

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¹⁹See, e.g., Lonergan, "Natural Right and Historical Mindedness."

REVIEW ESSAY

"IN ECONOMICS, IT TAKES A THEORY TO KILL A THEORY"¹

A REVIEW ARTICLE ON BRUCE ANDERSON AND PHILIP MCSHANE, *BEYOND ESTABLISHMENT ECONOMICS: NO THANK-YOU MANKIW* (NOVA SCOTIA: AXIAL PRESS, 2002).

STEPHEN L. MARTIN

Bruce Anderson and Philip McShane attempt to promote in economics what McShane calls in his editor's introduction a "short term revolutionary change," the long-term one pivoting around the integration of Bernard Lonergan's functional specialties in economics and every other discipline. Following up on the authors' previous work on Lonergan's economics (i.e., McShane's *Economics for Everyone: Das Jus Kapital* (1999) and *Pastkeynes Past-modern Economics: A Fresh Pragmatism* (2001)), they employ Lonergan's macroeconomic dynamics to debunk and provide an alternative to "establishment economics." They choose specifically Gregory Mankiw's *Principles of Macroeconomics* (1998), a popular mainstream introduction to economics textbook.

Anderson does the exposition and comparison/contrast of Lonergan's and mainstream or "establishment" macroeconomics. McShane provides an intermediate chapter on "Thinking Like an Economist," as well as the "bookends,"

¹ Paul Samuelson, quoted in David Card and Alan B. Krueger (contributor), *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton: Princeton UP, 1995), 155.

introductory and concluding chapters on the importance and implications of the two approaches to economic understanding. *Beyond Establishment Economics* as a whole uses Lonergan's *For a New Political Economy* (1998) and particularly *Macroeconomic Dynamics: An Essay in Circulation Analysis* (1999)² to address and overcome flaws in the economic reasoning of Mankiw and by extension mainstream economics. McShane, following Joseph Schumpeter, identifies the main problem of Mankiw's and the general approach of establishment economics: offering in the name of science seemingly practical advice, but which only relates to the present political exigency. This ends up in substituting politically biased commonsense understanding for scientific explanation. The "practical" upshot of this "unenlightening and abusive" endeavor is in McShane's apt mix of metaphors, "economists in a dark room trying to screw in a light bulb, successfully screwing the poor."³

Despite the "Shocking Candor of Economics Professors" on the failures of economics as a science, rendered well by Anderson, a successful alternative in the direction and on the scale of Lonergan's achievement has not been sought. What is therefore needed is a "massive shift of theory, of education, of stance in investigation and statistical analysis, of general attitude." By developing (in order) Lonergan's "key diagram," Mankiw's approach, and then Lonergan's views dialectically alongside Mankiw's viewpoints on method, views on credit, saving and interest rates, centralist controls, free trade, and monetary, fiscal and other government policies, the authors effectively lay out a scheme for others to appropriate Lonergan's view.

For those not familiar with Lonergan's breakthrough analysis of the set of relationships and exchanges among the basic and surplus circuits, Anderson's introductory chapter on Lonergan's "key diagram" will be the highlight of the book.

² *CWL 21* and *CWL 15*, respectively.

³ While establishment economists have made some refinements to the basic neo-Keynesian/neo-classical model, this has done no more than "obscure the basic muddles under a sophistication of mathematics and models."

Even for those who have already labored to understand what Lonergan is getting at, Anderson's patient and clear exposition of nature of, and the differences and reciprocal relationships between, the basic and surplus circuits of the economy (plus the redistributive function) is very helpful. Beginning with the basic circuit ("consumer goods" as goods that are sold into the standard of living), he adds the successive layers of the surplus circuit (including goods used to produce consumer goods), the crossovers, and the redistributive function, using concrete examples throughout (along with dollar amounts so we can see how it all adds up).

On the other hand, the chapter on Mankiw's textbook is the low point. Not that it is not a clear and balanced presentation – the problem is having to go through the almost inherently impossible task of trying to understand Mankiw's familiar but flawed tenets of methodology and economics. (In my case, reading through this brought back painful memories of 5 years of undergraduate and graduate economics). Anderson's rhetorical technique of constantly saying "we are told [by Mankiw] ..." underlines the specious nature of Mankiw's positions.

Once these five introductory chapters are out of the way, Anderson addresses in four successive chapters the major categories of economic analysis covered by Mankiw and Lonergan. In some cases, especially in the issue of the gains of free-trade, Anderson not only critically compares the two, but also extends Lonergan's unfinished analysis. Most of the insights in these chapters are rooted in the main difference between Lonergan and establishment economics – that Lonergan takes into account the existence and exigencies of two distinct circuits of goods and money, while Mankiw does not.

The fruits of these chapters are too extensive to do sufficient justice to them here, but to at least point to the exceptional value of this book, I will list for each category/chapter one crucial difference between Mankiw and Anderson/McShane/Lonergan:

Using "vague aspirations, common sense generalities, speculations, or ideas that have not been verified,"

establishment economics is concerned with simplifying economic analysis in providing a “snapshot” view of how the “law of supply and demand” end up achieving equilibrium prices, interest and unemployment rates. Lonergan on the other hand is trying to identify the significant variables in a dynamic understanding of economic process.

Inflation for establishment economics is purely a monetary phenomenon, not related to the production process, or indeed any understanding of it. For Lonergan, it is caused by the increased need for money during the surplus expansion. The difference affects the way money should go to investors: Mankiw favors increasing the interest rate to encourage saving and thus funds for investors to borrow; Lonergan favors long term loans because raising the interest rate will discourage lending by firms in the surplus expansion and thus help to derail it.

Both Lonergan and Mankiw admit that some central control of the economy is necessary, though not in the same ways. But since Mankiw has a flawed understanding of economic process, any control of the economy based on it will also be flawed. On the other hand, Anderson shows how, in contrast to current U.S. economic policy, both fiscal (investment tax credits) and monetary policy (shifting interest rates) can be harmful to the economy.

Contrary to the mainstream economic doctrine of “comparative advantage,” neither the “developed” countries nor the “underdeveloped” countries benefit from free trade. Indeed, Anderson compelling shows how the doctrine of comparative advantage is at the root of the international debt crisis. Among “equal” trading partners, it can only be advantageous if done in such a way that does not drain the basic (surplus) circuit in favor of the surplus (basic).

Overall, the authors provide an excellent presentation and discussion of Lonergan's economics and its advantages over establishment economics. The book will also provide clarity to those who are already familiar with Lonergan's economics. It pulls together in a comprehensive way Lonergan's treatment of the various aspects of macroeconomics (the authors also add appendices on "Transitional Payments" and "Trade Turnover and the Quantity Theory of Money"). While no work should be said to be a good substitute for reading *Macroeconomic Dynamics* and *For a New Political Economy, Beyond Establishment Economics* not only helps to make Lonergan's economics more intelligible, but also more urgent when set in relief against Mankiw's text. Both McShane's and Anderson's sections are clearer than McShane's earlier primer on Lonergan's economics, *Economics for Everyone*, without losing McShane's overall vision and rhetorical flair, long familiar to Lonerganians. As usual, he is also concerned with locating Lonergan's method and economics not only among established economists but also in the more "axial" undertaking of reforming human learning and practice. For example, before I even got to the chapters on Lonergan's economics, McShane's criticism of the conceptualist "understanding" of mainstream economics made me reflect more deeply on how I teach.

For those who approach Lonergan's economics from the perspective of moral theology, the author's highlighting of the necessity of proper economic understanding instead of traditional categories of economic ethics, such as social and distributive justice, living wage, option for the poor, etc., may be disappointing. But the authors correctly follow Lonergan's assessment that "a moral economics is a good economics." However, I do believe a "selling point" of Lonergan's economics to social ethicists and humanistic economists, is the superior "economic anthropology" that underlies much of Lonergan's economics, a point that could have been emphasized more in the book. For a long time, *homo economicus* has been a just target of criticism of mainstream economics. It is understating the point to say that Lonergan's *homo* "observant, intelligent, judging, and responsible" is a

decisive improvement. For example, getting those in economics to read Lonergan *instead* of Mankiw, a long-term goal of the book, is going to begin with people on the “fringes” of mainstream economics. Social economists, institutionalists, post-Keynesians, “critical realist” economists in Great Britain, those economists engaged with Catholic social teaching and Christian ethics in general, and even neo-Marxists share some affinity with Lonergan’s implicit economic anthropology, however much their respective macroeconomic understandings pale against Lonergan’s. Despite being marginalized from establishment economics, most still belong to and participate in the American Economics Association, and teach undergraduate economics courses that Mankiw’s text is written for.

Apart from this one minor criticism, I wholly recommend this book to anyone interested in or responsible for understanding economic process, including social ethicists. It could (should!) be profitably used in undergraduate and graduate economics classes, and in upper level and graduate social ethics courses.

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REVIEW ESSAY

FROM LEECHES TO ECONOMIC SCIENCE

A REVIEW OF PHILIP MCSHANE'S *PASTKEYNES* *PASTMODERN ECONOMICS: A FRESH PRAGMATISM*

BRUCE ANDERSON

In *Economics for Everyone* Philip McShane draws an analogy between the circulation of blood and the circulation of money. He asks:

What is blood? It is an aggregate of circulating components that pertain to the health of an organism. Roughly, red cells oxygenate, white cells repair, platelets coagulate. Correspondingly, there are illnesses: red flow shrinkage breeds anemia; white flow can oscillate into leukemia or leukopenia; platelet disorder can have the modesty of an aspirin intake or the massiveness of thrombosis. Details are not relevant here: my point is that these distinctions and related practices are part of our culture. Relevant advances in understanding have led to common talk and acceptable practices. Hospital staff may have slight understanding of the chemistry of leukemia and anemia, but leeches are normally out.

In the economy there are three fundamental components of circulation ... There is, if you like, the red flow of consumer circulation; there is the white flow of repair and replacement of production goods; there is the platelet pattern of a redistributive creative inhibition of clotting. Sometime in the next

millennium the precisions of Schumpeter and Lonergan and Kalecki regarding these functions and their control will be common talk, a common ethos. Random transfusions of government blood and the casinos of economic leeching will be identified, ridiculed, abhorred, in their unintelligent destructive ugliness.¹

But we are not there yet. How can we get moving from leeches to economic science? What actions can we take to initiate the shift toward a time in the future when economists take the basic, surplus, and redistributive circuits for granted? This is the subject matter of Philip McShane's recent book *Pastkeynes Pastmodern Economics: A Fresh Pragmatism*.

Pastkeynes Pastmodern Economics is Philip McShane's fourth major effort to generate serious interest in Bernard Lonergan's achievement in the field of economics. McShane's previous works include *Lonergan's Challenge to the University and the Economy*, *Economics for Everyone*, and *Beyond Establishment Economics*. Unfortunately, even with these books and Bernard Lonergan's two volumes, *For A New Political Economy* and *Macrodynamical Analysis*, Lonergan's challenge to the economy remains to be accepted. What, then, are the strategies on offer in *Pastkeynes Pastmodern Economics* that point towards economic science?

1 Pragmatic Moves toward Economic Theory

Philip McShane has two things to say about his book *Pastkeynes Pastmodern Economics*. One, he claims the book is "introductory," "a beginner's book pointing to the emergence of economic science." Two, he claims the book is "pragmatic," "a new reach for economic wisdom." My aim is to assess these claims. I proceed by tackling the book, one chapter at a time, identifying McShane's strategies and arguments, and commenting on them as I go. At times I pay close attention to McShane's text, and you may find this heavy-going. I do this because I want readers to "get" what he has to say, and also

¹ Philip McShane, *Economics for Everyone: Das Jus Kapital* (Axial Press: Halifax, 1998), 2-3.

how he says it.

Let's begin with chapter one. Previous efforts (not only McShane's) to help people read Lonergan's *five-square* diagram, whether in print or on websites, have had minimal success. Such explanations are overly complex and impenetrable for beginners. Beginners are immediately thrown smack-dab into the middle of an economy experiencing a surplus expansion: banks are adding money to the circuits, governments are spending money, production is taking off, wages are growing, everything is surging. This is too much for a beginner to take in at one time. The problem, as I see it, is that such presentations have been shaped by, and are overly dependent on, Lonergan's dense presentations and ordering of the same topics. Focussing a beginner's attention on an entire economy is like throwing a non-swimmer off a wharf and hoping he will learn how to swim. Wouldn't it be better to let a beginner slowly wade in one business at a time?

These are precisely the type of problems McShane successfully solves with his "fresh" introduction to Lonergan's *five-square* diagram. In his first chapter, called *Some Key Facets of Economics*, his concern is his family's bread making business. This presentation is far less complex than McShane's previous efforts to communicate Lonergan's circulation analysis where he focuses on innovations, major surges in production, and trade. Here he traces how the money associated with maintaining his family's business was spent. Any business person would recognize that buying ingredients, making bread, and selling it, is quite different from saving up and buying a new dough-mixer. By gradually drawing out the differences between buying bread, and buying and selling dough-mixers, he introduces the basic and surplus monetary circuits at a pace beginners can handle.

The way he tackles *pure* surplus income is particularly effective. He begins with *profit*, something familiar to us all. He explains what profit meant for the family business: they could pay themselves and they could save for a rainy day when they had to replace a dead horse or bury a dead relative. But the family didn't envisage expanding their business. In this simple illustration, he identifies profit that is *merely* surplus

income and profit that is *pure* surplus income and distinguishes it from basic income. This certainly is a novel way to introduce such complex matters in that McShane first distinguishes between how the family could spend its profit and then he attaches names to the distinctions. By contrast, typical presentations begin with a name and then the term is lazily defined. For instance, pure surplus income is usually portrayed as what is left over after all expenses have been paid.

The main point of this chapter, and for me the key facet of economics, is that “properly analysing the simple stable ... economy requires the distinction of two circuits of product flow being met by two circuits of monetary flow and without that distinction our economic thinking remains fuzzy, and indeed pretentious.”²

Further fresh pragmatism is on offer. McShane also uses what, presumably, would be called doctrinal talk, that is talk that identifies some key facets, or key pragmatic truths, of Lonergan’s economics. The effect of this strategy is to immediately turn beginners towards the guts of Lonergan’s theory, thereby saving them time and avoiding wasted efforts. It is worth collecting them here.

* If you want to understand economic theory “find out how a stable happy or unhappy economy works before tackling the issue of stimulation, renewal, development” (29).

* “If you want to know what’s going on in an economy or a bakery, or a machine business, you need to keep straight two distinct demands, and of course, two distinct effective demands” (14).

* We need to precisely identify two flows in the economy, a basic flow and a surplus flow. “There is no fuzzy flow in between. A good or a purchase is in one or the other flow” (21).

² Philip McShane, *Pastkeynes Pastmodern Economics: A Fresh Pragmatism*, (Axial Press: Halifax, 2002), 23. Citations to follow in the text.

* “There are two circuits, two effective demands, two national incomes, two taxation flows, and eventually the distinction between two types of import and of export would be relevant, necessary ... The key to economic sanity and health is to hold firm to the idea that one circuit draining the other is a no-no” (27).

* “The real difficulty ... is in the scientific perspective that can come to grips with precise functional distinctions. Surplus goods are related functionally and indeterminately to consumer goods. All the financial flows that relate to the real flows of these two genera of goods require a like distinction if we are to get out of the global and local mess that is mismanaged by descriptive and expectational analyses” (22).

* “Economic science is about what actually happens: it is to be based on past and present facts” (15).

* We need the five-square diagram to know (and control in some sense) economic activity (15).

* We need a fundamental shift of attitude that “eventually makes economic practice more like coaching a baseball team to win, less like planning train arrivals” (17).

* The community, layered upwards from local region to state to nation to globe will maintain balance, control of the economy (28).

* Following the Pragmatic Principle will help us to adequately understand economic activity: *Try to understand as best you can what you are dealing with or using and roll with that understanding* (28).

Without doubt, Chapter One is a fresh and pragmatic introduction to Lonergan’s economic theory.

In Chapter Two, called *For A New Political Economy*, McShane continues his effort to guide beginners through the dense forest of Lonergan’s economic theory. Here he does something that comes as a surprise, yet makes such obvious

sense that it is a wonder no one thought of it before. He identifies ten of Lonergan's own introductions to his theory, and suggests that we read them. The overall aim is to keep the beginner from getting bogged down in advanced complexities in Lonergan's texts. The novel stroke is how McShane pragmatically uses Lonergan's own writings. Next McShane suggests working towards an understanding of the effects of innovative surges on an economy. Wisely, he directs readers to the first chapter of his previous book, *Economics for Everyone*, where he discusses an economy facing a major innovation – the discovery of the plough.

However, in the midst of this chapter McShane directs readers to the fuller context in which economics is seen as one of many problematic zones. Section 2.4, called *Genetic Systematics*, marks the transition from introductions to economic science to a new set of introductions, introductions to functional specialization, what McShane calls *hodic* collaboration. Economic science, he says, requires functional specialization. He carries this focus into Chapter Three titled *Inventing Pragmatics*.

2 Pragmatic Moves toward Functional Specialization/Hodic Collaboration³

In light of the fact that so few scholars have tackled functional specialization in any discipline one of the greatest educational challenges we have to face is how to help readers get to grips with functional specialization. The way that McShane does this in the context of economics is, in my view, creative and effective. It is well worth examining his strategy in detail. This is one of the most important parts of his book.

McShane begins with a brief discussion of genetic system. Here he raises, in general terms, the issues which he will tackle in more detail immediately below under the rubric of functional specialization. The broad point that he wants to communicate is that it would be worthwhile for economists to consider the past in order to shape the future. His rhetorical strategy is to consider tennis players assessing their past

³ Philip McShane refers to functional specialization as “hodics” and “hodic collaboration.”

performances in order to make themselves better players. He portrays this effort as a reach towards a genetic ordering that includes both flaws and successful moves.

Economists, he argues, should cultivate the same orientation. The history of economic systems should be ordered in terms of both good moves and ideas and deviant systems. Also, he notes that in this reach for genetic system, a group of economists would have the task of detecting and discerning both deviant systems and progress.

The way he presents *hodic* collaboration is brilliant. He begins on familiar ground – the problem of conflicting policies. He identifies characteristics of policies. *Policies*, he writes, “evidently do not emerge out of a vacuum. At the very least they emerge out of a party with a family tradition. They come out of a particular tribal history, Republican, Marxist, Maoist, Muslim, whatever. They are, by that fact, not agreed upon” (53). For instance, political parties may differ on tax policy. “The divergence may go beyond tribal history to differences in economic perspective and the history of those differences. It takes no mighty effort to sense how the tracing might bring us back to the emergence of tax in the first place, to primitive rulers and ancient projects” (54).

Next he identifies the problem of ordering the concerns, and sorting out what is right and what is mistaken, in economic journals, monographs, texts, and magazines. “Here or there a significant ideal breaks through, and so, for instance, Keynes gives rise to Samuelson’s texts. Are there significant ideas lost? Are there old mistaken ideas that survive in new disguised forms? We are clearly back here with Schumpeter’s challenge regarding economic theory and practice: contemporary economics is or should be a struggle with past views and achievements, a struggle towards a better future. But the struggle, as represented by present publishing, is a scattered thing, its outcome a matter of convention, luck, nationality, influence, bias. Is there a better way?” (54)

His next move is to invite the reader to engage in a thought-experiment by asking, “Can you make sense of it all?” “Can you find some order in the present spread of interests and printings?” (55) He identifies various patterns in economic

publications: half of economic studies focus on the past and half of economic studies turn to the future. This observation doesn't seem too surprising.

He returns again to familiar territory when he writes that “*policy, planning, and execution* are connected ... Without *planning* there can be no *executive reflection*; without *policy*, the *planning* is not grounded. But what grounds the *policy*?” (55) With this question he raises the question of how the past is linked to the future? “Certainly we can say that the *policy* is grounded in history, some history... *Policy* swings from *history* towards the future: but can we say more about the swing?” (55) His answer is that the swing or link between the past and future is *Dialectics*. He continues. “The swing, then, is represented by a vague collection of publications regarding critical assessment and selection...” He draws again on sports to make his point about the role of discernment: “Time-out or half-time in a football game is a space of critical assessment and reflection, and the reflection ends with suggested or dictated proximate plays” (55). Here the obvious significance of the time-out to football teams bolsters his point that there is also an obvious need for economists to assess the past before turning to policy making.

He pulls his discussions together: “The grounds of *policy, planning, and particularizing* somehow lurk in the given of previous efforts” (57). Those previous efforts are the evident result of economic research, opinion determination or interpretation, economic history of both ideas and facts. But between the searching of the past – *research, interpretation, history* – and the three zones of future intent – *policy, planning, executive reflection* – “there is a haze of human fallibility, but it is expressed in a rich literature of controversies about methods, analyses, grounds, goals: at root, controversies about the nature and goal of human life” (58).

“If we debate about the future, it is in virtue of our presence in the past. *Discernment* seems a reasonable name-candidate for that end of the haze. What of the turning toward the future that somehow would seek to ground policy? Obviously, there is the name *Foundations*.” “What sort of

reality would blossom into a canon?⁴ The sort of reality that would exclude stupid policies. But then who is to say what stupidity means? So, we circle back in the haze to *Discernment*" (58).

He reaches for some sense of the tasks named *Discernment* and *Foundations* by analysing "a couple of classic ain't sos of twentieth century economics" – the IS/LM analyses found in articles by Michel de Vroey and David Romer. McShane claims that discernment requires asking "What is going on in these articles?" Here discernment means identifying which of the eight functional specialties can be detected in these articles. In his opinion, De Vroey is into *Interpretation, Dialectics, History*, and he suggests the reader discern de Vroey's shifting interest paragraph by paragraph. And Romer, he says, focuses on *Dialectics, Planning, Policy, and Executive Reflection*.

McShane asserts that "discernment can reach further." He suggests that "de Vroey and Romer are trapped in the traditions of their journals, their departments, or larger traditions of equilibrium analysis, or old versions of the quantity theory of money, or comfortable assumptions about money and growth, or non-growth" (68). Here discerning reading of these articles would ultimately leave them out of hodic collaboration.

Now McShane is ready to give more refined suggestions about what discernment entails. He asks, "Is there a way beyond this jumble of interpretation and histories, criticism and discernments, policies and theories and practical suggestions? Three directions are discernable ... There is a first direction ... of discerning hodic overlaps, of relocating tasks that belong properly in other specializations, of identifying theoretic flights from the empirical basis." (70)

"The second direction [is] developing a pragmatic inner structure to collaboration in discernment. Both directions, when taken, will lead eventually to their own refinement." (70) He provides a brief sketch of this direction: "this work of assembly, completion, comparison, reduction, classification, and selection will be performed by different investigators and they will be operating from within different horizons. The

⁴ Here the term Canon is equivalent to the term Foundations.

results, accordingly, will not be uniform (lines 15 to 18 [on page 250 of *Method in Theology*]), but at least we may expect some improvement on the jumble illustrated above. That expectation, however, would benefit from a book-length consideration of the page to which I have just referred. But even without such a consideration the present book and Lonergan's achievements to which it refers will eventually ... join the assembly and make discomfiting metaeconomic waves" (70).

The third direction calls for a larger reflection on education. The Pragmatic Principle of "finding out as best you can how something works, and roll with it" (55) also "requires that the lack of uniformity mentioned becomes a topic among investigators. Sensability requires that the sorties and the discernments make sense, that the different horizons, being rooted in sensability, cannot be more than culturally different if sensability has somehow some space-time pragmatic uniformity" (70).

McShane's next significant move (also in Chapter Three) is to enlarge his concern with the pragmatic ordering of economic studies to *all* studies. He identifies the lack of organization as a broad academic problem: "The situation in economics is not unique ... a similar fragmentation of studies, implementations, practices has occurred right across the academic board." There is a need for a division of labour in theology, literature, linguistics, physics, chemistry, botany, zoology, geometry, and so on.

He offers a guide as to how the work should be divided up into eight tasks. His outline immediately below conveniently captures what lies buried in *Method in Theology*. It offers beginners a point of reference.

H1 *Research*: finding relevant data, written or otherwise.

H2 *Interpretation*: reaching the meaning of such data, the meaning of those producing the data.

H3 *History*: figuring out the story, connecting the meanings of the writings and the doings, etc.

H4 *Dialectic*: coming up with the best story and the best basic directions.

H5 *Foundations*: expressing the best fundamental (in the sense that they are not tied to age, time, etc) directions.

H6 *Policies*: reaching relevant pragmatic truths.

H7 *Systems-Planning*: drawing directly and contrafactually on the strategies and discoveries of the past to envisage ranges of time-ordered possibilities.

H8 *Communizing*: local collaborative reflection that selects creatively from the ordered range of possibilities (62).⁵

To drive home the point that we can find order in the disorder of various disciplines, McShane draws on Husserl's essay on *The Origins of Geometry*. McShane selects eight quotations from that essay. He classifies each selection from *The Origins of Geometry* in terms of one of the eight functional specialties. In other words, the eight quotations from Husserl constitute a rough parallel to the eight hodic tasks. For instance, one quotation is an instance of interpretation. Another text is a policy statement. In the next chapter this exercise in concordance takes on a fresh significance for people interested in learning about functional specialization. Economic texts are selected and readers are asked to determine which functional specialty the text roughly corresponds to.

3 Pragmatic Moves toward Discernment in Economics

In Chapter Four, *Macroeconomic Dynamics*, we return to economics. The topic is discernment. McShane invites his readers to engage in discernment. We are told to read other authors' introductions to Lonergan's economic theory, introductions by Fred Lawrence, Charles Hefling, Patrick Byrne, and by himself. But this time we are to read these introductions in terms of eight functional specialties. Our job is

⁵ In various efforts to come to grips with the eighth speciality which Lonergan names "Communication," McShane has, on various occasions, referred to it as both "Executive Reflection" and "Communizing."

to identify the hodic tasks in the various texts differentiating what each author is doing paragraph by paragraph, section by section. The point of doing this exercise is “to bring forth in yourself the division of labour.” This strikes me as an excellent way to introduce functional specialization. Another reason for doing this exercise is that, as I mentioned above, the exercise itself is an exercise in dialectic. It is what people in *Dialectics* do.

The remainder of this chapter identifies specific discussions and debates that call for discernment. I will mention just two.

In the context of offering broad pointers that he thinks may help advance and communicate economic understanding McShane identifies differences between Patrick Byrne and himself regarding Lonergan’s diagrams and terminology. Not only does he use this discussion to indicate that differences among Lonergan’s editors call for discernment, but also that functional specialization must be turned on Lonergan himself. In other words, Lonergan’s contributions must be “recycled” by functional specialists. McShane pragmatically divides up the work.

So, I would distinguish a cluster of *hodic* tasks. *Research* on Lonergan’s archival material is incomplete. As it advances it will supply grist for the mill of *Interpretation* and *History*. *Discernment* has to locate Lonergan’s theoretic and terminological efforts within the context of others within and surrounding economics. The *Canons* that emerge from this enterprise will, I surmise, bear a striking resemblance to the canons that can be detected in *CWL* 21. The move to *Doctrines* will then yield the advice to plain men and women that he dreamed of, here globally and accurately conceived and richly expressed. That accuracy will lean both ways, back towards *Canons*, forward towards the genetic *Systematics* that I attempted to describe earlier. Then one can look to a quite new view of *Communications*, a radiant reaching for community, the village collaboration of women, the wise presence of town economists, the

influence of block entrepreneurs, the caution of government, all opening out in a global rational expectation to the rhythms of the fields and forests and air and oceans in their crying out for attention, for creativity, for care, for cultivation, for a higher civilization that strangely sublates present notions of local fishing, fowling, husbandry, and gardening. (85-86).

McShane ends this chapter by identifying the presuppositions of teaching and learning Lonergan's economics. Stated simply, they are sufficient interest and energy. This, I'm sure, will come as a relief to many people who believed they had to become experts on cognitional theory before they could tackle or teach economics.

4 Pragmatic Moves in the Education Field

In Chapter Five, *A Fresh Pragmatism in Education*, McShane extends his discussion of fragmented studies to the field of education. It may seem strange to have a chapter on education in a book on economics. But education is crucial to economic science for two reasons. One, according to McShane, the problem of fragmentation in education is even "more complex than elsewhere precisely because education ranges throughout all the disciplines and all the ages" (110). And, two, McShane's position is that without a turn to the subject we will not be able to move from a centralized perspective toward economic democracy. Moving towards micro- and macro-autonomy, he argues, demands that we self-luminously consider our desire and need for serious understanding, for leisure, for fantasy, for personal autonomy.

This chapter can be understood as an effort to pragmatically deal with fragmentation in education by trying to identify what progress in education might be. McShane writes about progress in terms of *canons* which he characterizes as minimal discoveries. One canon is that *we should be sensible*. Another canon is that *we should divide up the work*. Although these canons might easily be read as *Foundational* or *Policy* statements made by functional specialists, that is not McShane's intention. The world of hodic collaboration remains

a distant achievement. Rather, he regards these canons as acceptable simple pragmatic truths, something that everyone would agree on regardless of their philosophical orientation.

Here his rhetorical appeal is to everybody. No one can pretend to be doing anything worthwhile if they are not sensible. And isn't it obvious that a division of labour is being forced upon us in all disciplines, even education?

The difficulty of reading *canons* as minimal common sense pragmatic truths is that his treatment of canons is entwined in discussions stressing the importance of self-discovery in education and pointings toward a distant fuller context for discussions of progress, namely functional specialization. For instance, in this chapter McShane points to the distant and future pedagogic use of generalized empirical method when he uses a slogan -- "when teaching children X you are teaching children children. And you are discovering your own sensibility's cry" (108) -- in order to point to the future when self-discovery will be part-and-parcel of teaching anything.

5 Concrete Pragmatic Strategies

The final chapter, Chapter Six, is called *Proximate Pragmatics*. In this chapter McShane identifies and discusses particular actions we can take to promote Lonergan's economic theory. I will focus on only two of them. Again, these courses of action seem so obvious you have to wonder why no one else has thought of them and why there isn't a team carrying them out.

For McShane the key project that should be started is to write a 500 page introductory text to Lonergan's economic theory. Its aim should be to generate fundamental insights. What is novel about this course of action is that he says the book(s) should be *empirically-rich, locally-oriented, normatively-focused, and non-truncated*. This book should be *empirically-rich* in the sense that we should study and find out what is actually going on in economies. It should be *locally-oriented* in that it should be concerned with the economies of local neighbourhoods, villages, towns.

These conditions make sense. Take introductory

economics textbooks by Gregory Mankiw or Robert Gordon. They are used in the United States, Canada, and the United Kingdom. The same text is assumed to be appropriate for each of these three countries. These texts are neither *empirically-rich* nor *locally-oriented*. But even newspapers give the impression that the economies of these countries are quite different. You would think that each country needs its own economic text. The notion that 'one text fits all' becomes even more dubious when you consider, for instance, the Californian economy which is one of the largest economies in the world. Surely the Californian economy merits understanding and an appropriate textbook. Now take New York City. Isn't it safe to say that its economy is likely to be quite different from that of upstate New York? So wouldn't it make sense for an economic text to be devoted to the productive and monetary flows in New York City? When you briefly consider McShane's suggestion that economic texts should be *empirically-rich* and *locally-oriented* it becomes blatantly obvious that we should be identifying and studying the data of economics.

Such a text should also be *normatively-focussed* so that economic sense and nonsense can be learned. Further, McShane stresses that it should be *non-truncated* in the sense that by paying attention to what we are doing self-discovery can become part of learning economics.

McShane also suggests that we make strategic moves in various disciplines to promote Lonergan's economic theory by filling in gaps. For instance, distinctions made by accountants between operating and capital costs could be exploited to educate people about the basic and surplus circuits. Disillusioned economists could be nudged toward taking the politics out of economics. This would build on the view of many economists that politicians distort and mess up economies with self-serving economic policies. Liberation theologians could be helped to recognize that they need a serious perspective on economics in order to cope with poverty and debt. The growing opposition to the so-called Washington consensus might also be nudged toward economic science as the flaws in establishment economics are revealed by economic science. Business ethics professors could be invited to see that

they need a theory of economics beyond the profit motive. The outcry over recent business frauds and questions about the purpose of business could be directed toward thinking about the links between successfully running a business and successfully running an economy.

Pastkeynes Pastmodern Economics ends with an Appendix called *Trade Turnover and the Quantity Theory of Money*. This is a remarkable part of the book in that it invites readers to discover for themselves a startling solution to the quantity theory of money. McShane moves well beyond the simplistic notion that $MV=PQ$ and well into a context where the circulation of money in an economy is related to the frequency and magnitude of the production and sale of goods and services. This little gem is definitely worth reading.

To conclude, this is one very sensible book. It is full of fresh pragmatism. There are simple introductions to Lonergan's economic theory, novel introductions and discussions of functional specialization in economics and education, new minimal pragmatic canons of progress, such as 'be sensible and divide up the work,' refinements of Dialectics, and some very sensible (and sensible) advice about writing introductory economic texts and exploiting gaps in various fields. To put it bluntly, if we want to move from the leeches of pre-scientific economics to scientific economics we need to take this book very seriously.

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OUR JOURNALING LONELINESSES: A RESPONSE

PHILIP MCSHANE

1. Spirant

O winged lady,
Like a bird
You scavenge the land.

.....

Your feet are continually restless,
Carrying your harp of sighs,
You breath out the music of mourning.¹

I delight in sharing Cathleen Going's cloistered imaging, "singer at the heart of the universe," an image teeming with reachings: who is the singer, the sung, the song, what is the heart of the universe? So I am led to weave into my response a

¹ Extract from *The Hymn to Inanna* by Enheduanna (Daughter of the Sumerian King, Sargon, about 2300 B.C.), quoted on p. 5 of Jane Hirshfield, ed., *Women in Praise of the Sacred: 43 Centuries of Spiritual Poetry by Women* (New York: Harper Collins, 1994), herein referred to as Hirshfield. It seems worthwhile to plunge you immediately into the context of W3 – soon mentioned in the text – by connecting the three quotes reversedly to my comment on Hopkin's *Windhover*: "One glimpses afresh the *Beingstalk*, the hold of all that is holdall understanding; and one may distinguish then *Beings-talk*, the speaking within that understanding that is a twosome resonance; and finally, there is the *Beingst-hawk*, joysticking response to the twotalk." Philip McShane, *Music That Is Soundless: A Fine Way for the Lonely Bud* (Halifax: Axial Press, 2003), 131. The creative subtlety is a shift in processions-minding to intussusceptions, a scavenging (Indoeuropean base: *skeu*, to heed).

context for such reachings, three poems out of 43 centuries of feminine² reaching that divide the reply, that subtly call us to tune into the dark womb of being that is history's unfinished symphony. There is the scavenging Spirit, there is the Jasmine Lord, there is the Singer axially named the Father, breathing all inward.

My delight, of course, would be mightily larger if the sharing was with all the contributors and readers but reaching further into the larger inclusive image that I have called W3, the image that editor Michael Shute providentially chose as frontispiece of this volume. Do we share that image? Let me invite you into the middle of page 250 of *Method in Theology*. "Here I stand" with my W3. Do you, as some even of those writing here have indicated on occasion, find this complex imaging business distasteful, unnecessary? Well, at least I have Lonergan on my side, who claims that you really cannot hold together a complex view without complex imaging.³ The singer at the heart of the universe is imaged within a dynamic of history, within a structure that images a present word, an *imitatio theologica Christi*, that gives unity, beauty, efficiency, to metaphysics.

Sister Mary of the Savior moves gently back and forward

² I have already included reflections on the feminist dynamic towards the third stage of meaning in "Business Ethics, Feminism and Functional Specialization," *JMDA* 2 (2003). See also Cantower IV, "Molecules of Description and Explanation," which has to do with the searchings of Candace Pert: section 3, "Will you go, lassie, go?" For a broader sweep that moves from feminine biorhythms to issues of post-axial interiority see Sandy Gillis-Drage, ? *Woman What Gives* (Halifax: Axial Press, 2004).

³ It is as well to quote from Lonergan here, since it is a key to a present Lonerganesque crisis, to the problem of flunking history's puzzle. "The comprehension of everything in a unified whole can be either formal of virtual ... Formal comprehension cannot take place without a construct of some sort. In this life we are able to understand something only by 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." Lonergan, *CWL* 7, 151. Note that the reference to the Latin version of this quotation (p. 80) is internal, self-referential, to the diagram W3. See notes 35 and 62 below.

in a dialogue begun by us at the Florida Conference in Holy Week of 1970, and you must accept that I cannot do justice to that movement of the scavenging spirit here, in regard to her or others' contributions to this volume. But, yes, I look to a distant hearty global grouping to breath out redemptively the music of mourning and morning. Aristotle's finest way will reach new plausibility, bred in the axial wilderness by our daily contemplative focus on the "Epilodge."⁴ That reference to Cantower XXI perhaps sets a tone for my response: that response, really, is the million-word project to which O'Donovan and McCallion refer.⁵ I shall appeal regularly to it and its image to bring us hopefilledly closer to the meeting in image and goal of Cathleen's conclusion.

Conn O'Donovan's reminiscing swings me Proust-wise through "Memories, Screams, Deflections." I was not really the sixth of six children: the second brother, Hugh, died before I was born, in 1927 at age 2, literally masticated by a tram in Glasgow. Who was to blame: my brother John, present there, at age 5? So, parents divide and bring forth a strange daft family. At 16, music enveloped me, but I paced the streets in a

⁴ The title of Cantower XXI, which corresponds to the Epilogue of *Insight*. The mood of this Cantower and the mood and notes of my Response point to the need for a new kataphatic stance of contemplation that is normative for both science and prayer. "Theoretic understanding seeks ... to embrace the universe." *CWL 3*, 440. I take a stand against specialization, whether in science or in anaphatic contemplation. There is the further issue of thinking out "the gift" as a differentiated realm (see *Method*, 266).

⁵ Two large books, published the year I began this new search, serve to give context and mood. They are Stephen Jay Gould, *The Structure of Evolutionary Theory* (Cambridge, MA: Belknap Press of Harvard UP, 2002), 1339 pages, and Stephen Wolfram, *A New Kind of Science* (Champaign, IL: Wolfram Media, 2002), 1260 pages. Stephen Wolfram writes of his half-million words: "It has been a great challenge for me to capture the things I have discovered over the past twenty years in a book of manageable size." *A New Kind of Science*, xi. My challenge is not to capture my past but to free, in creative fantasy, the heuristic structures of a future global collaboration. Gould, too, writes of a life of searching, and I devote Cantower XV to a consideration of his work. Wolfram's sadly truncated efforts do not merit such attention. Occasional insights (e.g., regarding spacetime discontinuities: 472) are crippled by gross oversights (e.g., regarding the entities of physics: 1197).

poetic daze and still possess a “Sonnet to Insanity” that fermented in my walk. There is the mystery of vocation, but I recognise ever-better the reach in me for what I might call explanatory enlightenment, an odd mix, at a much slower pace, of Dogen (1200-1253) and Aquinas (1225-1274). I found alcohol at age 33, while writing my doctorate in Oxford: it sustained me in the next three decades – carbonated water seems to hit the spot best in the accelerating climb of these latter years – but at the time battered the rhythms of friendship and living. Still, it helped me out of the Jesuits, where I had long been a displaced person. I still remember my discontent, that first evening in the novitiate, September 7th 1950, when my “angelus” (a second year novice, Percy Winder, who, as it happens, passed onwards this very weekend) gave points for meditation on the rich young man. They were not at all “thinking points.” O’Donovan records my cheeky comment to the novice-master, who generously tolerated and encouraged me. I was a wreck when I began university studies, pacing the grounds for the first months while others studied, but I recall vividly an enlightening talk by Fr Jack Kelly SJ in those early months, from whom I first heard of “antimind” as an *ethos*. I now appreciate it as an axial ethos, magnificently disguised in its various forms of technical competence and nominalist Platonism, be they oriental or occidental.

Pat Brown, in his very welcome and astute reflections, recognises the Jeremiah in me.⁶ But it reaches well beyond Lonerganism, each day’s pre-dawn contemplation bringing fresh intussusception of the “disease,”⁷ the psychothymia, that tentacles axial neurodynamics. It was in Pat’s company, I think, that I first spelled out my view that “great ugliness is as elusive as great beauty.” It is a massive character-achievement of fantasy to hear with any adequacy Lonergan’s words “... makes life unlivable.”⁸ Like the self-taste of Proust or Hopkins

⁶ Brown, 232. Notes 35 and 55 below locate the grounds of my attitude of short-term pessimism and long-term optimism.

⁷ See Brown, 232, 241, and 248, n. 79. Candace Pert, *Molecules of Emotion* (New York: Simon & Schuster, 1997), adds a context. She quotes a panel remark of David Lee: “What we need is a larger biomedical science to reintegrate what was taken out three hundred years ago” (304).

⁸ Lonergan, *CWL 10*, 232. There is a similar beneficial meditation that

it must become a searching “polyphony with different themes at different intensities sung simultaneously.”⁹ You and I are massively, molecularly, sick, spirit-skinned. Adult growth requires an endless repentant¹⁰ reaching for luminosity, for “the music of mourning.”

Adult growth has intrigued me thematically since I first began seriously to ponder on Aquinas’ meaning of *crescentia* in 1958.¹¹ I finished the Website book *Lack in the Beingstalk: A Giants Causeway* in 2001 startled by the simplicity of a core answer, expressing that simplicity in the concluding Bacchus-page. In so far as I grow, intussuscept into my “dear silence”¹² fresh leaps of meaning, I become a stranger to myself of yesterday. So, for instance, I could not tell the Phil of last week the meanings gained this week.¹³

The climb, then, continues, described in its central expression by Tom McCallion in a critical, balanced, enlightening fashion. Here, obviously, I must appeal to the mountain-map that is the list of 117 Cantowers, available on www.philipmcshane.ca. The first 23 Cantowers are now available: one per month beginning on Easter Monday, April 1st, 2002. I already referred to Cantower XXI, which corresponds to *Insight’s* Epilogue, backed up by Cantowers XIV-XX which correspond to *Insight* chapters 14-20. What is the drive reaching for? The question will be answered better by Cantower XXXVI, dealing with “the Function of the Cantowers,” but the short answer is that it seeks to promote the tower-climb represented by W3.¹⁴ A broader answer lurks in

seeks to read adequately the phrase “the social situation deteriorates cumulatively” (CWL 3, 254).

⁹ *A Third Collection*, 132.

¹⁰ CWL 3, 722, line 3.

¹¹ See *Process: Introducing Themselves to Young (Christian) Minders*, the beginning of chapter 2. The book, written in 1988-89, is available on www.philipmcshane.ca.

¹² See the concluding poem, at note 65.

¹³ This is most evident if one is working in mathematics or physics. It tends to be excluded as one moves up through the more difficult sciences. It is a massively important existential issue, a lift of the discomfort of the Proustian challenge into everyday conversation.

¹⁴ I would note that the representation can be enhanced by taking W3 and making suitable cuts on the page so that a tower can be erected in the

the named enterprise of the final years, 2010-11:¹⁵ where are we, “each member, each group, indeed our whole host and its great pilgrimage,”¹⁶ the 14 billion year-old haunt¹⁷ of the scavenging spirit, going? The question belongs within an explanatory heuristik who reaches, like Thomas, through the best available opinions of the day for light on “destiny.”¹⁸ The question takes on bite when one asks, What are the GUTS¹⁹ of the neurodynamics of the end of the beginning? It resonates with the simpler answers of Therese of Liseaux, “God will sip you up like a little drop of dew”²⁰ and of Pericles’ sea-seized hearing of “The music of the spheres,”²¹ but seeks to elevate

plane of commonsense meaning. There is then the climb of those called to *theoria* in each and all zones (see note 4 above) leading to planes of meaning beyond common sense; there emerges the increasingly refined task of ex-planing, making resonances available in common sense. See *Lack in the Beingstalk*, chapter 3, conclusion, for notions of ex-planing that relate to the redemption of *haute vulgarisation* (CWL 6, 121, 155; CWL 10, 145), and further, Cantower LIV, “Quantumelectrodynamics, Pedagogy, Popularization.”

¹⁵ I comment on the role of Cantowers LXVI-LXXXI below, in note 35. The Cantowers following, of the year 2009, are to deal with Astronomy, Anthropic Principles, Trinitarian Cosmology: see note 27 below.

¹⁶ Herman Hesse, *The Journey to the East*, trans. Hilda Rosner (London: Panther Books, 1970), 12.

¹⁷ Previously I wrote of a sublation of the *hauntology* of Derrida (*Pastkeynes Pastmodern Economics: A Fresh Pragmatism*, 65). A deeper sublation is involved here, dealing with a full heuristic of the aggregate capacities-for-performance in history (related to *potentia activa* of *Verbum*: see the index there, and, further, the references to *obediential potency*).

¹⁸ *Method*, 292. I recall a conversation with Lonergan in Easter 1961; as we walked Dublin’s streets he remarked that one could get a quite coherent cosmology out of Thomas. I was not thinking then of a full cosmology, but was Lonergan?

¹⁹ GUTS, short for Grand Unification Theories in physics. In the Cantowers, especially Cantower XVII, section 3, “The Problem of Interpretation,” I regularly draw a parallel between GUTS and UVs (universal viewpoints considered empirically and sequentially) in order to bring reflections on the *a priori* of interpretation out of a prevalent vagueness.

²⁰ Therese, speaking to her elder sister Pauline, Mother Agnes of Jesus, of her death, *St. Teresa of Liseaux: Her Last Conversations*, translated from the original manuscripts by John Clarke, OCD (Washington: DC: ICS Publications, 1977), 37.

²¹ Shakespeare’s *Pericles*, v.ii.231. In the concluding section of

them to a subtler “love of the invisible.”²²

Why is such a question not at the heart of our intellectual loving? So I step back, or forward, to my Jeremiah mate, Hugo Meynell, who writes of “a small and embattled segment of the learned Catholic ghetto.”²³ Still, we also share an “enthusiasm”²⁴ and an “optimism”²⁵ that foresees “the full global need and scope of functional specialization.”²⁶ The push of Meynell meshes nicely with that of Garrett Barden, whose contribution calls for attention in the third part. But I would like to pause in the conclusion of this section over the problem of the ghetto, and the grounds for a counter-optimism.

The pause is over a presently-favourite quotation from *Method in Theology*, p. 299. “Doctrines that are embarrassing should not be mentioned in polite company.” A doctrine of ghettoism is embarrassing, and it brings to mind a dinner remark of Lonergan in Dublin, Easter 1961, about “big frogs in little ponds” in Christian theology after Trent. But there is a more optimistic doctrine of the residues in which the spirit scavenges: the potencies of fragmentation and sin-states that are a ferment not just in analytic, phenomenological, post-modern poses, but in a global fragmentation and inefficiency and ugliness of minding. This comes into focus in my doctrine of axiality, which is rarely mentioned in any company. There is the chaos of sophisticated fragmentation and sin within which the spirit broods, mourns, groans. There is the twilight of the slow adolescent ending of the first time of temporal subjectivity.²⁷ In the fullness of such time the million-year

chapter 2 of *Lack in the Beingstalk* I reproduce (the typescript was supplied by my good friend Nicholas Graham) a magnificent talk by Patrick Kavanagh on the significance of this play and of being seized by the sea. See also note 64, below.

²² I am recalling a Christmas Mass Preface, “... ut ad invisibilium amorem rapiamur.” The Nativity and the particles of physics conspire to rapture us to the love of the invisible.

²³ Meynell, 167.

²⁴ Meynell, 168.

²⁵ Meynell, 178.

²⁶ Meynell, 180.

²⁷ See Lonergan, *De Deo Trino. Pars Systematica*, Gregorian Press, Rome, 1964, 199. The consideration of the two times of temporal subjectivity apply both ontogenetically and phylogenetically. The

African diaspora learns not only to write and count but also to image within the complexity of a Jasmine flowering of self-noticing and feeble differentiations. The differentiations, already in cycling disease,²⁸ ferment ideas, idea, a blessed lengthy stumbling-bumbling longing for the second time of temporal subjectivity. This is our axial period, pretending enlightenment.

2. Word

“It was like a stream
running into the dry bed
of a lake.

like rain
pouring on plants
parched to sticks.

It was like this world’s pleasure
and the way to the other,
both
walking toward me.

Seeing the feet of the master,
O lord white as jasmine
I was made
worthwhile.”²⁹

Part one of my response curled round searchings, scavengings, screamings. Now the focus is on Word, on W3 and its related symbolizations, on the pleasuring feet-marks

phylogenetic consideration leads one to the tripartite division indicated in W3, obviously related to the divisions of my response and to my axial period. A word of warning, however. Reaching the Trinitarian reality of our history is doubly complexified by considerations both of integral divine efficiency and of each individual’s complex Trinitarian growth. The latter is a topic relating to the strongest Anthropic Principle (see *Lack in the Beingstalk*, the conclusion of section 3.5).

²⁸ See Brown 234, n. 16.

²⁹ Hirshfield, 82. A poem by Mahadeviyakka (a 12th century Indian lady, born in the Indian village of Udatadi; she wrote in the Kannada dialect).

that are the way to the other. Indeed, it is on the word of story and system that concerns Mathews and Doran in different ways; but we shall come to that gently.³⁰ First I would draw attention to the lower ground of loneliness as envisaged by Professors Byrne, Heelan, and Quinn.³¹ But even here I maintain a biographic weave: it is to be part of the new hodic ethos.

Pat Byrne's high praise for *Randomness, Statistics and Emergence* is, of course, welcome if embarrassing: I was merely trying to read some pages of *Insight*. But one twist in the book helps us to break forward into the significance and power of the complexification of internal and external words.³² What was my focal effort in chapter 8 of that book? It was to bring to more precise conception and expression what Lonergan was brooding over in the changing of a paragraph on probability for the second edition of *Insight*. The issue is the looseness of convergence of concrete probability sequences: a million tails can be followed by millions more, messing up your mind and minding. "A common solution to this antimony is to say that very small probabilities are to be neglected and this, I believe, can be defended by granting mathematical but denying empirical existence to the assumed infinity of occasions."³³ Tchebichev lends a hand: pushing for a word

³⁰ My reference in the next sentence to the topic "the lower ground of loneliness" brings to mind the article in which I introduced the mesh of biography and history clearly stated in the title, "Authentic Subjectivity and International Growth: Foundations." It provides a context for my reflections here as they mount towards suggestions of symbolic and systematic complexifications. It was written in the mid-1970s, when I had not yet come seriously to grips with the relevance of genetic systematics to either biography or history. It is available on www.philipmchane.ca as an Epilogue in *The Shaping of the Foundations*.

³¹ See the previous footnote. The upper ground of loneliness is brooding graceful trinitarian presence. The lower ground of loneliness is a central focus of the simplest areas of inquiry, mathematics and physics. In Cantower XXXII (November, 2004) it is attended to as "The Empirical Residence."

³² Recall Augustine's subtle discovery (see *CWL* 2, 6) which can be so easily and destructively mimed. One needs here a post-Goedelian control of self-reference. See notes 35 and 62 below.

³³ *CWL* 3, 89.

about ‘measure zero’ is a gain in control, a step in the righteous way.³⁴

Heelan’s article points towards the need for many more such steps. There is, in general, the increasing need for the control of meaning to be had by sophisticated development of symbolizations at all levels, from mathematical logic to trinitarian theology.³⁵ Heelan brings out that need in the topic of a hermeneutics of measurement. As with Byrne’s essay, so with Heelan’s: detailed follow-up is warranted. Here, again, I can only indulge in vignetting. Heelan’s work evidences needs for refinements of both theories of measurement and measures of hermeneutics. The calculus of variation, home both of Husserl’s doctorate work under Weirstrass³⁶ and of the

³⁴ Again, I draw attention by this phrase to an integral contemplative attitude (see note 4 above), the reach for precisions in the cosmic word that echo the creative content of the Word.

³⁵ I introduced the symbolic complication W3 already, and other Ws are introduced throughout the Cantowers, following the initial effort of chapter 4 of *A Brief History of Tongue*. This intrusion of symbolism into the accepted prose of philosophy and theology is not in general welcome. But it is a reality in other disciplines: how can an integral heuristic dodge it? Indeed, a massive development of symbolisation is needed to control meaning, to exclude the descriptive arrogance of general bias, to handle the aggregiformic and genetic structures of our empirical residence. That development will be the focus of Cantowers LXVI - LXXXI. The full list of Cantowers is available at the beginning of the Cantower Project in www.philipmshane.ca and also in Cantower XXIV, “Infesting History with Hodology.” Distinct titles cease in the present list after Cantower LXV, so Cantowers LXVI-LXXXI have the single title, “Explanatory Heuristic Fantasy and the General Logic of Expression.” I would note, in particular, that the twist of self-reference, raised in note 63 below, must be rendered relatively luminous through pointing and pointed symbolisations. But the symbolisations have to be contextualised within broader and startling transformations of linguistic reference rooted in Lonergan’s suggestion regarding linguistic feedback. This will involve a new grammar and grammatology, with parts of speech identified incarnately and the interrogative adjectives and adverbs heart-centred. Note 56 below indicates a more proximate related task.

³⁶ Husserl’s 1882 thesis is not readily available in Canada. My copy is a French translation: *Contribution à la théorie du calcul des variations*, ed. J. Vauthier (Kingston: Queen’s U, 1983). Chapter 4 of *Lack in the Beingstalk*, “The Calculus of Variation,” deals with it, and draws an analogy with the calculus of variation that is functional specialization.

Principle of Least Action,³⁷ needs creative revisiting to lift the burden of Copenhagen's hermeneutics of measurement. We are back with Bell and forward with Mead "Does Quantum Mechanics carry the seeds of its own destruction?"³⁸ I would say so, but would wish us to cut deeper into self-taste than my fellow-Ulsterman Bell, with nudges from Feynman.³⁹ Mead sets a mood both of historical sensitivity and of empirical work. "Statistical quantum mechanics has never helped us understand how nature works; in fact, it actively impedes our understanding by hiding the coherent wave aspects of physical processes. It has forced us to wander seventy years in the bewilderment of 'principles' – complementarity, correspondence, and uncertainty."⁴⁰ "To most non-specialists, quantum mechanics is a baffling mixture of waves, statistics, and arbitrary rules, ossified in a matrix of impenetrable formalism. By using a superconductor, we can avoid the statistics, the

³⁷ A context here is Cornelius Lanczos, *The Variational Principles of Mechanics*, 4th ed. (Toronto: U of Toronto Press, 1970). The principle of least action is central to the thinking of Feynman, and it hovers over his path integral approach: see his (in collaboration with A.R. Hibbs) *Quantum Mechanics and Path Integrals* (New York: McGraw-Hill, 1965). However, he shares a common confusion regarding the objectivity of statistical correlations.

³⁸ The title of a relevant article – it is a quote from John Bell – by Kurt Gottfried, *Quantum Reflections*, ed. John Ellis and Daniele Amati (Cambridge: Cambridge UP, 2000), 165-85. I would draw attention in particular to the note (168) recalling Maxwell's late reflections on the unsolved problem of the aether. One needs to lift this reflection into the context of a self-tasting of the empirical residue, lifted into an up-to-date perspective on energy and entropy. See also the references to Maxwell's work in the book by Mead referred to in the footnote after the next.

³⁹ I recommend here J. S. Bell, *Speakable and Unsayable in Quantum Mechanics: Collected Papers on Quantum Philosophy* (Cambridge: Cambridge UP, 1987) and R. Feynman's various writings on the Principle of Least Action and the path integral approach to quantum phenomena (see note 37 above). In particular I would recall Bell's refusal to settle for a distinction between the macromeasurer and the measured: this refusal calls for a nuanced development of heuristics and heuristic expressions, a topic of Cantowers LXVI-LXXXI. See note 35 above.

⁴⁰ Carver A. Mead, *Collective Electrodynamics: Quantum Foundations of Electromagnetism* (Cambridge, MA: MIT Press, 2000), 123.

rules, and the formalism, and work directly with the waves.”⁴¹ But the deeper, self-tasting, cutting is the circular sawing spelled out for mathematics by Quinn: so we edge back, and forward, to deeper biography, better history, richer system.

I first tackled the question of biography and history in the 1970s, in “Authentic Subjectivity and International Growth,” but it recently took on for me the complexity of a positional narrative expression belonging in the discomfiting exercise described on page 250 of *Method in Theology*.⁴² It lifts the question of one’s orientations into a “here I stand” that is not just a catalogue of conversions but a clash of persons in history. I have used occasionally what seems a helpful image of the tennis player that self-searches, generating a sequence of systematic orientation that mediate the seasons and the clashing and colluding with colleagues.⁴³

The question of biography has preoccupied Mathews for decades. He is obviously driven by his searching of Lonergan’s life, but no doubt also by his own self-searching. He modestly suggests that “it is a question which I believe students of Lonergan need to address”⁴⁴ and goes on to draw attention to genetic method.⁴⁵ And it is genetic method that occupies center stage when we enlarge our interest into history.

So I move from the issue of biography to history and to the fuller context that concerns Fr Doran, history and system. Doran’s key point is “that there is at hand an adequate unified

⁴¹ Ibid., 11.

⁴² For some details of the discomfiting challenge see Cantower VIII, “Slopes: An Encounter,”; Cantower XI, “Lonergan: Interpretation and History” Cantower XXII, “Lonergan and the Ministry of Mayhem”; and Cantower XXV, “Redoubt Method 250.”

⁴³ The issue is placed in a fuller context in Cantower VII: “Systematics and General Systems Theory.”

⁴⁴ Mathews, 206. See also Mathews, 218, that students of Lonergan need to do what Arendt and MacIntyre suggest regarding life design and story. My pause over Mathews’ contribution pushes against the necessary brevity of my response, because he is raising a vital issue. We have to get beyond simple identifications of conversions to clashing genetic systems of systems and their concomitant narratives. This adds layers of complexities to the questions raised by Doran, quite definitely beyond brief comment.

⁴⁵ Mathews, 207ff.

field structure for the functional specialty Systematics.”⁴⁶ Here I would pause on the word “for.” The functional specialty systematics, if we follow the clues from biography, is a higher genetic unity of a sequence of unified (integrative-operative) field-structurings.⁴⁷ Any one structure is “for” the genetic sequence, poising it for the next.⁴⁸ The unified structure that Doran selects – very soundly I would claim – is Lonergan’s 4-point integral perspective on trinitarian participations.⁴⁹ Rightly, Doran wishes this to mesh with the special categorical suggestions of *Method in Theology*, and here he runs into difficulties. His unified field structure seeks to subsume systematics; mine locates it within systematics, “for” systematics. An integral theology is a system within genetic

⁴⁶ Doran, 264.

⁴⁷ I think that Lonergan’s efforts to give a fundamental meaning to the word “field” is significant. See my comment at the conclusion to the “Index-Introduction” of *CWL 18* (382), and the index there under “Field.” It helps to lift us out of a Scotist or “Aristotelianist” tendency to misconceive real relations – in opposition to the heuristic of chapter 16 of *Insight*. For instance, in the present case of the four graces, those graces have internal to them the rich reality of a netting of the total cosmic word: here we again come up against the problem of generating a symbolisation that would keep us humble and honest. Paradoxically, such an effort, lifting considerations of Divine Incarnation and revelation out of naivete and into the full heuristic of emergent probability, would lift the dialogue advocated by *Theological Studies* 64 (June, 2003) (the topic in this issue is “The Catholic Church and Other Living Faiths in Comparative Perspective”) to a richer level, perhaps, recalling Whitson’s title, to a *Coming Convergence of World Religions*.

⁴⁸ One must continue to think out the tennis analogue. The player in the field-of-being is concrete history (with its minders) in a mediation of the poise towards and achievement of the probable actual performances. The player is to “know” this in the third stage of meaning through the shared upper context of W3. An earlier useful struggle with this is “Systematics, Communications, Actual Contexts,” *Lonergan Workshop 7*, ed. Frederick G. Lawrence (Atlanta: Scholars Press, 1987), 143-74.

⁴⁹ Obviously W3 brings out one aspect of the new slice of systematic theology, with the processions considered in reverse, a stress on Calling instead of Speaking, and on a presence of the Spirant (not unrelated to the Joycean symbolism of the ant and the gracehoper) scavenging, testing, “testifying of me” (John 15: 26). For a fuller context of the challenge to contemplation here, especially in relation to the central grace of the Incarnation, see *The Redress of Poise*, chapter 7: “Grace: The Final Frontier” (available on www.philipmcschane.ca).

systematics, with ancestors and descendants. So, Lonergan's 4-point perspective has antecedents in previous attempts to correlate such realities and, hopefully, will have rich descendants.⁵⁰

But that richness is to have its heuristic psyche-filling privacy: "proceeding by our imagination we arrive at the Palestine of two thousand years ago"⁵¹ and reach an ever more haunting Birdflight, an ever-richer homeward of the Word.⁵² And the psyche-filled privacy must be cajoled, pummelled, supported, by a public control of meaning that is luminous in regarding, self-tasting, the psyche as neurodynamic. The narrative flowering of genetic systematics is less than a bud, and the bud is neurochemical.⁵³

3. Caller

We were enclosed,
O eternal Father,
Within the garden of your breast.
You drew us out of your holy mind

⁵⁰ The richer heuristic shuffles the five sets of special categories into a new layered dynamic: but that, as Fr Doran would agree, is matter for a book, not a footnote. The shuffle would draw on the riches of Thomas' *Summa*, especially qq. 26-43 of the First Part and the beginning of the Third Part, and of Lonergan's Latin treatises, and spiral them into a new context.

⁵¹ *CWL* 7, 31. The reach is not to be piously abstractive but wholesomely concrete, within the total word of history, integrally-heuristically structured, a wordway filled with the human journey into theoria. What is needed here is an enrichment of our grip on the universal operative reach of the human God, "in the stars the glory of his eyes," where the stars are soaked in GUTS. Merge this reflection with the comment at the conclusion of note 47, above, and with the direction of note 27.

⁵² I am translating quite loosely (and reversing conventional processional order) from Lonergan, *De Deo Trino: Pars Systematica*, 256 (top). Add the context of note 27 above.

⁵³ The final section will draw attention to aspects of this problematic. But it is as well to point here to two key texts. There is the text of *CWL* 3 (489), which reminds us that "the study of the organism begins ..." (and the self-study of the human organism begins ...). There is the text of *Method* (287) that asks us to rethink and rewrite the first half of *Method*: "one can go on ..." All this calls for the massive development of heuristics and symbolisms already mentioned in note 35 above.

Like a flower.⁵⁴

The drawing out is our tuned collaboration with history and the heart of the tuning is to be luminous education. My readers may find it strange that I will gather so many of the contributions to the volume under this final heading that relates to drawing, education, hope. At least it intimates that remembering the future is a desperate present need, and most of that remembering is a matter of fresh fantasies of education, all, I would say, demanding the context of functional specialization.

The contributions of Novak, Martin, and Anderson all relate to the challenge of economic education to which Lonergan devoted twenty years of his life. However, while Novak simply reminisces, Martin and Anderson struggle with the deep cultural task, one that merges Lonergan's two great achievements. There is no point in focusing further on this, and at all event what is said below, meshed with the suggestions of Anderson and Martin, places the task in a larger context.

Melchin's article helps to sense a direction here: if one is to teach about evolution one must talk about rabbits and buttercups. If one is to talk about property one cannot talk educatively without the property being on streets, minded by people with banks and documents. Melchin edges nicely round a whole new ballpark of pitching gently upwards to rise to a level of complex democratic control of meaning. It is a distant goal – the mixing of metaphors cries out for new talk – but it starts in the local yard.

And the cry for new talk is lurking in all three of the contributions by Barden, Dunne, and Zanardi. Barden and I lost a naivete at the Lonergan Florida Conference of 1970: whatever that conference was about, it did not pivot on the challenge Barden handles so neatly in the present article. Nor was it a fermenting forward in the mood of the contributions of Zanardi and Dunne. And the discomfiting doctrine that I dare mention in this polite company is that the mood of Lonergan

⁵⁴ Hirshfield, 117, from Prayer 20 of Catherine of Sienna (1347-1380), translated by Suzanne Noffke O.P. Note that the imaging I suggest in W3 (see note 1 above) is a scavenging drawing of seed to word-petaled adopted flowering.

studies is closer at present to Florida than to fermentation. One can forgive Florida for not tuning into self-tasting functional specialization, Lonergan's fundamental discovery: but present dodging of the global and the textual nudging in that direction is unforgivable – invincible ignorance is out as an excuse.

So I come to the last but not the least of the contributors: Fr Fred Crowe. As we shall see, he manages to home in nicely on the key topic.⁵⁵ But first, a preliminary point regarding the puzzle, MTWTFSS. The puzzle was never used by me, as the editor pointed out to Fr Crowe. Fred quite understandably decided to leave the article stand: how many of us, at his grand age, would even write an article? And oddly, providentially, his twist on McShane's puzzle opens up issues of the dynamic of hope that help me think through – efficiently, unifyingly – our present efforts and my response.

The puzzle that I think Fred is referring to is the challenge of continuing OTTFSS ...

Its presentation requires the good-humoured addition of terms, sometimes up to more than 50 of them. The slow addition echoes the deeper problem of starting in, and staying

⁵⁵ Fr Crowe rightly and regularly (Crowe, 188) appeals to the *Cogitativa*, and it nudges me to a comment on our communal failing especially in the decades since *Method*. It just happened that I was forced to face the problem of an explanatory heuristic of the *Cogitativa* through work on an estimative sense in such diverse authors as Seamus Heaney (see note 48 of Cantower VIII) and V. S. Ramachandran (the same place: also the first half of Cantower IX; see also at note 23 of Cantower XVII). The same point may be made about our entire vocabulary of "elements of meaning," moving up through "phantasm," "feelings," "what-question," etc. This is a huge task, the challenge of being more than "a little breathless and a little late" (*CWL* 3, 755) fifty years after those words were typed by Lonergan. One might get a sense of the challenge by the adventure of such a book as Rita Carter, *Mapping the Mind* (Berkeley: U of California Press, 1998). Fr Crowe expresses our common fault when he remarks (Crowe, 192, n. 9), "From our point of view the trick is to find empirical scientists who are open to interiority and cognitional philosophy." This simply does not jibe with the later definition of generalized empirical method (*A Third Collection*, 141, top lines), which requires cognitional philosophy to become empirical. For the push of another philosophic tradition see *The British Journal for the Philosophy of Science* 53 (2002): Dylan Evans, "The Search Hypothesis of Emotions," 497-509; Louis C. Charland "The Natural Kinds States of Emotions," 511-537.

with, the context of biography and history, of staying with and fostering a human pace. It is an axial problem.⁵⁶ Crowe recalls Archimedes from the first page of *Insight*. In the past two months I have made “weighing the crown in water” the centrepiece of a presentation in Ireland, Manhattan, and Mexico.⁵⁷ I avoided the “understandable chagrin of the audience”⁵⁸ by keeping a focus of fun.⁵⁹ No one really solved the problem: most were culturally impatient for an answer. How did *you* fare, at the bottom of that first page of *Insight*? Did you flunk it? Are you flunking the puzzle of history: an invitation to *theoria*, to idea, to the love of the invisible?

Archimedes’ presentation does not help: it is what I call axial talk: over-optimistic deductive doctrinal stuff.⁶⁰ Is

⁵⁶ This relates to an optimism regarding reasoning which my Archimedean reflections, mentioned shortly, seek to undermine. Is Thomas part of that optimistic stream? A substantial specialist problem. In *Summa Theologica*, q. 79, a. 8, he describes reasoning thus: “rationcinari est procedere do uno intellecto ad aliud.” He doesn’t like the view of de Spiritu et Anima, a book he considers of slim authority (ad 1m): my Marietti *Summa* shows him attributing it to an anonymous Cistercian, but this edition mentions Alcherum (died 1169) in a note to q.77 a.8. I rather like the division of ratio from intellectus in that odd work, without denying the identity of ratio (aa. 8, 9 in Thomas): human reasoning is a messing along in the neuromolecular.

⁵⁷ To be published in *Divyadaan: Journal of Education and Philosophy* 15 (2004), under the title “The Wonders of Water: The Future of Lonergan’s Thought.”

⁵⁸ Crowe, 186.

⁵⁹ I travelled to the lecture with a coat-hanger, two bananas for symmetrical suspending, and a glass for a one-banana dip.

⁶⁰ Part of my presentation was the provision beforehand of the first Postulate of Archimedes’ “On Floating Bodies,” which I reproduce here for your perusal. It is a brilliant compact expression of what for Archimedes must have been months of musing. “Let it be supposed that a fluid is of such a character that, its parts lying evenly and being continuous, that part which is thrust the less is driven along by that which is thrust the more; and that each of its parts is thrust by the fluid which is above it in a perpendicular direction if the fluid be sunk in anything and compressed by anything else.” (I am quoting from T. L. Heath’s translation, *The Works of Archimedes* (New York: Dover, 1987), 253.) Would you get that meaning by pondering over rivers and spherical-surfaced ponds? There follows in Archimedes’ work seven considerations, propositions, that build up to the crown-weighing possibility.

Loneragan's talk in *Insight* axial? Was Aristotle's and Aquinas'? If so, then there is need for a rescue by a new culture, a new scavenging of the spirit for internal and external words that take the heartseed gently forward within global rhythms. "Yes, we know that all nature has gone on groaning in agony together till the present moment. Not only that, but this too, we ourselves who enjoy the Spirit as a foretaste of the future, even we ourselves, keep up our inner groanings while we wait to enter upon our adoption."⁶¹ The puzzle is there, in these early days of creation: how many divine dots and days need be added? Foretaste must be oh so slowly elevated to hodic self-taste for adult tracking and tuning of the cosmic word.⁶²

So I return in conclusion to an end-remark of Sister Mary of the Savior: "**We meet in a goal:** to shift the probability-schedules of hope."⁶³ Some few surely now meet. But hope points to a distant third stage of meaning, the second time of temporal subjectivity, when a globe of theologians will remember the future as hodik that make beautifully adequate and darkly luminous the absence from the womb of history of both the Singer and the Everlasting Song ... efficiently poisoning us all towards home. "Ho hang! Hang ho! And the clash of our cries till we spring to be free."⁶⁴

⁶¹ Romans 8: 22-23. I am using here the translation (1936) by Charles B. Williams in *The New Testament in the Language of the People* (Chicago: Moody, 1963). I am indebted here – and of course elsewhere! – to my wife Reverend Sally, who made this translation available to me. The book by Jane Hirshfield, referred to in the first note, which provided the context of women's poetry, was drawn to my attention recently by our good friend Fiona, my former wife (well, not really 'wife' in that the marriage was annulled! There's a tricky piece of Catholic theology).

⁶² This is a challenge that carries the problem of linguistic feedback (*Method*, 88, note 34) over "The Bridge of Oxen" (see McShane, "Features of Generalized Empirical Method: A Bridge Too Far?" *Creativity and Method*, ed. Mathew Lamb (Milwaukee: Marquette UP, 1980). The section of Joyce's *Ulysses* referred to, "Oxen of the Sun," attends to a babel and a birth.

⁶³ Going, 230.

⁶⁴ James Joyce, *Finnegans Wake*, 627, at the end that is a beginning. "So soft this morning, ours. Carry me along, taddy ..." (628). But there is an evident need to move beyond patriarchal symbols (Taddy, Abba; Dad in Welsh). There are symbolisms of madre, mare, sea (see, sea, seize note 21

In mounting higher,
The angels would press on us and aspire
to drop some golden orb of perfect song
Into our deep, dear silence.⁶⁵

Philip McShane should be well known to you by this point in the text.

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above). “Skin-within are molecules of cosmic all, cauled, calling. The rill of her mouth can become the thrill, the trill, of a life-time, the word made fresh. Might we inspire and expire with the lungs of history? But the hole story is you and I, with and within global humanity, upsetting Love’s Sweet Mystery into a new mouthing, an anastomotic spiral way of birthing better the buds of mother” (the conclusion of chapter 2 of *Lack in the Beingstalk: A Giants Causeway*).

⁶⁵ Elizabeth Barrett Browning (1806-1861), extract from *Sonnets from the Portuguese*, XXII.