

Cantower VII**Systematics and General Systems Theory****October 1st 2002**

“Now I ask you,
Where are you going?”¹

As I mentioned in *Cantower VI*, these next three *Cantowers* are connected with three of James Joyce’s short stories. They are “*The Dead*”, “*An Encounter*”, “*Eveline*”. You can certainly treat the connection and the references as peripheral or ignore them entirely. The issue is presence: my presence to you; your presence to your own biographic opportunities in the axial stage so close to necrophilia, to *The Dead*; your presence as metaphysician.² It would cheer my elderly heart to take as seriously probable that “a new generation is growing up in our midst, a generation actuated by new

¹James Joyce, *The Dead*, p.6. I note that the references to The Dead will be given thus, in terms of the probable page starting with p. 1.

²This is a massively deep problem of axial culture. Metaphysics is normatively concrete: it simply aims at rendering operations self-luminous. The Joyce stories as context nudge one in the right direction. An illustration helps here, in itself a nudging. Rabbi Harold S.Kushner lost his son at fifteen.”In a sense, I have been writing this book for fifteen years. From the day I heard the word ‘progeria’ and was told what it meant, I knew that I would one day have to face Aaron’s declining and dying.” (*When Bad Things Happen to Good People*, Schocken Books, New York, 1981, 132). The Rabbi brings you gently forward - but a year’s reading is not enough - to the edge of a glimpse of what Lonergan writes about in *Insight* 19.9, 25th place, and to a glimpse of Hefling’s thesis about the law of the cross (see *Cantower IX*, section 6). But you may find it a very different type of reading, because the Rabbi lifts you into genuine metaphysical reading. These three (7-9) *Cantowers* move to an identification of a “scientific moment”: but do they so move you? The Rabbi climbs to that moment and concludes the book very simply: “I think of Aaron and all that his life taught me, and I realize how much I have lost and how much I have gained. Yesterday seems less painful, and I am not afraid of tomorrow”.(148). This is the stance of heroism and fantasy that I would have you absorb when I write of the end of page 250 of *Method in Theology*. “Now that this has happened to me, what am I going to do about it?”(136). Kushner’s painfilled honest climb is very different from trivial talk of adding feelings in Dialectic, of turning to the future in Foundations. The book is also a goodly introduction to the topic of real prayer, real contemplation, a topic to be taken up again in *Cantower XXI*.

ideas and new principles”,³ and that the Tower-start of a new Odyssey would lead to new mollycule Yesing, a galactic gentleness falling on soiled humanity like a manna, like a “snow falling faintly through the universe”.⁴

There are three sections to follow. The first brings together previous invitations to thing out the meaning of genetic system. My effort is clearly impressionistic: I would hope that eventually a community would emerge so conversant with the elementary explanatory heuristics of development of *Insight* as to be capable of lifting into the context of a genetic structuring both of the specialty systematics and of the foundational search. At present, however, the problem seems to be one of generating an ethos of genetic thinking, both autobiographic and phylogenetic.

The second section adds pointers towards the context of contemporary work on systems and it could certainly be skipped on a first reading. But it, too, must be taken seriously and taken into the foundational search if we are really to turn the ‘can’ of “one can go on”⁵ into a decent statistics of achievement, if we are to get out of the breathless dead state that is more than “a little late.”⁶ The final section moves back into the self-search for foundational orientation in a way that sets the stage for the slopes and poises of the last two *Cantowers* of the year. THEN, surely, some of you will be energized to venture onto “The Bridge of Size”⁷ for a year, “a natural bridge over which we may advance from our examination of science to an examination of common sense”⁸ and of the task on interpretation: a six-year project.

³The Dead, p. 20.

⁴The Dead, conclusion. Joyce’s *Ulysses* begins in a tower overlooking Dublin Bay and ends with Molly’s bedroom yes-saying.

⁵*Method in Theology*, 287.

⁶*Insight*, 733[755].

⁷One of seven bridges of growth treated in “Features of Generalized Empirical Method”, *Creativity and Method*, edited by M. Lamb, Marquette University Press, Milwaukee, 1983.

⁸*Insight*, chapter 5, paragraph 1.

1.1 History and Systematics

The Lonergan student of some years cannot but recognize the title as one that belongs to Lonergan's work in Rome, especially during the late fifties. We might well start there, and indeed I invite the reader to do so by passing to section 7.1.x immediately. But I wish to move to the topic in a way that seems more fruitful. First, then, I introduce the topic in an introductory fashion by means of two extracts from previous work: there seems no point in adding complexities to these now, something that I would certainly do if I attempted another version now. The first extract is from an essay written to open up the possibility of collaboration in philosophy of physics; the second extract is from the beginning of chapter five of *The Redress of Poise*. There is a way in which the two should bracket your reflections: the first suggests a homely beginning to reflection; the second leads to dreaming ahead, something that belongs to the category of fantasy. It invites a serious reading of a dictionary definition of a later century.

1.1.1 Systematics: An Introductory Notion

So, let us begin with the first short extract:

Appendix: Organic Systematics

The purpose of this short appendix is to invite a flexing of the imagination with regard to future systematic physics. Such inviting is an integral part of the task of the metaphysician.

My own interest in organic systematics came from work in biology, against the background of *Insight 15*, in the early sixties. Indeed, it was my second option for doctorate work: a sublation of the work of Woodger in axiomatic biology. But its broader significance did not escape me: there were abundant clues in the Epilogue of *Insight* and in Lonergan's Latin works. I recall joking with Lonergan at pool side in Regis in the mid-sixties about Dog-matic theology. Still, it wasn't till the late seventies,

when I began following up his leads, especially in *De Intellectu et Methodo*⁹, that the massive cultural shift involved became sufficiently clear to astonish me. Most recently I had the advantage of following up parallel clues from Lonergan's Logic: the pursuit of truth in logic is associated with a sequence (analogically organic) of systems refining that pursuit.

While I have tried to draw attention, in these past decades, to the shift involved, there has been little response.¹⁰ My hope here is to bring it to the attention of those interested in the methodology of physics: it will be both a necessary internal development of future physics and an analogue from a "successful science" for theology. So here I note helpful images

The primary helpful image is one's own struggle in life towards a present coherence that carries forward, genetically ordered, the potential of ones past.. The four images I touch on here should help give a fullness to that task: images from biology, theology, physics, tennis.

(a) The images from biology, of course, can lead one right up to the remote complexity of *Insight's* treatment of development, but try to struggle with the topic at the level of description. The acorn and the tadpole are both 'working systems', as are the oak and the frog. An elementary text could help you to glimpse the development gap, the need for types of intermediate systems.

(b) More familiar to you, perhaps, are systems in philosophy and theology: though here the development question becomes problematic. However, that very problem helps us along towards thinking of how one gets from story, or history, to system, where now you are thinking, I hope, of system as a system of systems: that is the key jump. And the central point in the problematic is to note that the sequence of real systems - in philosophy, in theology, even in sciences - are not related genetically. To get a genetic sequence you have to envisage "twisting"¹¹ flawed systems as best you can

⁹I would note that this work, the lectures on logic, and the related works on "History and System" all belong to Lonergan's creative surge in the late fifties. There is the need both to sublimate then into his later Hodic context and to enrich his tired expression, *Method in Theology*, of that context.

¹⁰Robert Doran has brought the topic into focus in theology in recent years (1998-2000) of *Theological Studies*. See also *Method*, 2000.

¹¹This, of course, is an image of the 'reversing counter-positions' of *De Intellectu et Methodo* and of *Method in Theology*.

(the 'you', of course, is a global hodic community). What, for instance, is genuinely progressive about the semi-system of Irenaeus, or Tertullian, or Damascene, or Descartes, or Hegel? (You get a sense here of the massive task of p. 250 of *Method in Theology*?) The image sought here is an image of a genetic systematics, say in theology, of which Thomas Aquinas system is one 'slice', one transition stage.

(c) Can you envisage this in physics? A critically established systematics that would include the best of past struggles that would give the global community the humblest best context for progress? But this envisagement is the centrepiece of our heuristic work on physics: you will need to draw on the work e.g. of Lochlainn O'Raifeartaigh¹² to reach towards it, and help it forward through (d).

(d) Finally, there is the pedagogically-challenging image of genetic system in tennis. It is a challenge because, if you pause over the notion, you may well find that you have no image, or perhaps you think of changes in tennis rules and techniques over the past century. But the image I wish you to grapple with - leading back to a fruitful approach to (c) - is the image of a 'growing' tennis player: Martina Navratilova, Martina Hingis, some familiar top-player. I recall Navratilova saying, in an interview after her retirement, that she was a much better player 'now', but her body wasn't up to it. What might she have meant?

An enormous question, of course, bringing to mind for you again the heuristic reaching regarding harmonious development in *Insight* ch.15, but now within the broader collaborative structure of coaching, physiology, etc that is a slim analogue for hodic collaboration. But your initial effort should be directed towards some molecule-minding appreciation of, say, the poise of Hingis before serves in the present (June, 2000) Wimbledon. Has she not struggled, with a range of helpers, to incarnate a revised version of her past returns of serve? This is a lead image for a post-Proustian post-axial Remembrance of Things Past that would be the seventh functional specialty, in physics as in theology, which might better be called Pragmatics.

¹²For those interested in advanced work in the philosophy of physics I recommend his two books, *Group Structure of Gauge Theory*, Cambridge University Press, 1986 and *The Dawning of Gauge Theory*, Princeton University Press, 1997.

1.1.2 Systematics: Reaching Forward

The second extract is important not only for its content but for the character of the invitation that it gives to cultivate fantasy.

SYSTEMATICS: A LANGUAGE OF A HEART

This essay points forward to structures within a new control of meaning made remotely possible by the subtle leaps of Lonergan's heuristic perspective, especially after his fiftieth year. Indeed, my focus is on some hidden achievements of his Roman years. There are the manifest achievements, of course, evidenced in his work on logic and existentialism, his lectures on education and meaning, his Latin writings, his various courses and summer schools on theological method. But, far less conspicuous is a drive, summarized in the title, "History and System",¹³ that led him forward towards a new viewing of himself and others, "the theologian as moment in history resuming past and pointing to future",¹⁴ and of his science of natures and meanings, rooted in the efficiency of each "single intelligent view", viewer, giving the universe a unique unity, echoing hearty friendship for a groaning globe.¹⁵ The drive fractured into a new unity in February, 1965, but the new unity remained unexpressed, and his final major work, *Method in Theology*, did not go beyond gentle prescriptive description. In it, certainly, it is hard to recognize the Ken Mastery that calls nature and diary and history into a seventh haven of proleptic histosystematics. But then would the twentieth century academy, "well wadded with stupidity",¹⁶ have recognized that mastery had Lonergan been able to carry forward his project of "a third-order

¹³These are notes from Lonergan's Roman days, available in the Toronto centre. The relevant notes here are those in Batch V.8.

¹⁴A quotation from handwritten notes of Batch V.7.c of the notes referred to in the previous footnote.

¹⁵On the efficient cause as grounding the unity of a science, see *Topics in Education*, 160. The "single view" of *Insight* 520[544] is part of that efficiency. My essay might be viewed as a discussion of an efficient cause in the absence of *materia disposita*.

¹⁶George Eliot, *Middlemarch*, W.W.Norton, New York, 1977, 135.

consciousness and a third-order intentionality¹⁷ with the energy that produced *Insight*? And this was a massive fleshing out and flowering of the foundational stance of *Insight*.

So, the present essay invites my reader both to an impossible dream, a sympathetic glimpse of Lonergan's efficiency as it lived in tense solitude, poised in, crucified by, the absence of a contemporaneous *praemotio metaphysica et psychica*, and to a hoping suspicion, a reduplicative discernment, of one's own self-tasting system that may be called to cling self-creatively forward to a system-flavour of finitude's future.

I must appeal to, cajole,¹⁸ my reader, at this stage, to fantasize,¹⁹ to reach forward in a proleptic heuristic exercise associated with the envisagement of actual, probable and possible schemes of a later millennium. I will return to the difficulty of this exercise shortly: it is, so to speak, a matter of your heart being in the effort. I invite you to imagine, with concrete global reference, the following note on Systematics as being from an dictionary of theology of the year 3000 A.D. (translated from the Hindi). Theological systematics is by then, the eventual budding of the third stage of meaning and the second time of the temporal subject, an established enterprise, on the scale of present zoology. The evolutionary paradigm is in place, and a global collaboration of detailed reaching is operative in functional specialist journals, and in the hearts of theologians living richly in a transposed retrieval of Greek Patristic *theoria*, focused in a *Wendung zur Idee* that is their cultured divine spark, shadow of Idea, generating, from their *oktoechos*,²⁰ melodies of local common meaning.

¹⁷I quote here from a nine-page typescript of Lonergan from the same Batch V, & which contains the February 1965 “discovery Pages” of functional specialization. The typescript handles the two first sections of what would seem to be an outline for a chapter one of *Method* contained in the same file. The file is reproduced as chapter 2 of Darlene O’Leary, *Lonergan’s Practical View of History*, Axial Press, Halifax, 2002.

¹⁸Part of the method of metaphysics: see *Insight* 398[423].

¹⁹I introduced the notion of fantasy, in a technical sense, in *The Shaping of the Foundations*, 117.

²⁰Tradition gives credit to John of Damascus for the invention of the eight melody types of Byzantine chant, but they had an earlier origin. (See *Process*, chapter 5, section 5). The metaphor helps towards a sense of the different tonal rhythms of thinking and talk to be expected within each functional

Here, then, is our dictionary extract, modified down from its self-referential density of expression out of deference for twentieth century truncation's language.

"SYSTEMATICS

The theological transposition of the Atlas project (1568) of Mercator (1512-1594), linking, meta-histosystematically, beings of meaning in critically redemptive fashion. It has now reached the scientific dimensions and respectability that the elementary natural science of zoology reached in the twenty fourth century when it moved beyond reductionism to evolutionary and genetic psychic categories. The analogous focus in theological systematics is on the evolution of minding, upgraded in content through a positive dialectic sieving. The global effort is controlled creatively by a normative genetic metalogic of irregularly sequential systems, pseudo-systems, depraved systems, 'sport' systems, etc. The logic allows for, and thematizes, a larger irregular periodization analogous to the Kondratieff of Economics,²¹ this rhythm being related to micro-paradigm surges in other specialities. The present character of the achievement of systematics is grounded in the massive enlargement of data-base made possible by psychic shifts of dialectic scholarship. The basic drive remains rooted in the detailing efforts of seventh-level theologians, who carry forward the now-classic strategy of dialectics, prolepting of system warps, into creative sub-operators of the total, micro-revisable, genetic prolepses of meanings of finite spirit. The classic strategy took its present form through the work of the school of Mo Ti (China: 2784-2832)²², who profited from the development of contrafactual economic history in the twenty sixth

specialty as theologians move into those differentiations. Each speciality becomes a non-geographic regional group, with “something similar in the tone, the color, the way of doing things, the attitudes that are said to be characteristic of the regional group”.(Lonergan, *Topics in Education*, 252).

²¹Kondratieff cycles' periods are not dictated by a normative macrodynamics but are subject to the circumstances and dimensions of innovations. See either of Lonergan's Economic volumes (15, 21), the indices, under *Kondratieff*.

²²The mention of Mo Ti here may bring to mind her illustrious predecessor Mo Ti (470-391 B.C.) and his three foundational laws of reason: See P.McShane (ed), *Searching for Cultural Foundations*, 39-40.

century made possible through the acceptance at that time of the Lonergan paradigm of economic dynamics. The beginnings of the strategy, however, are found in the descriptive suggestion, "reverse the counterpositions" of Lonergan (Canada: 1904-1984) which gave a new historical twist to an early second millennium interest in "sic et non", "sed contra", etc. So, to shift our zoological analogy from evolutionary to organic development, one can view the strategy as comparable to the self-system coping with malnutrition, poisoning, etc. Cancerous systems of proposed or operational meanings are rendered benign, not by excision from the anamnesis and prolepsis that is lower core of the genesis of Christ's Body²³ but by the creative suffering of all to grow that is the tropic classic strategy at its Mysterious best. The totality of viewpoints²⁴ is ordered and nurtured, fostering the ongoing sublation of a theological systematics that is a metasystem of systems of possible and probable sub-systems - institutions, roles, tasks - of locally-common human meanings.

An accepted control of meaning within the community is the transcultural control of expression made possible by the advances of the lower and middle sciences, so that the generic aggregiformic expression of the history of finite meanings, $HSf(p; c_j; b_k; z_l; u_m; r_n)$, is filled out in a manner that is neither culture-bound nor handicapped by semi-descriptive categorizations.²⁵

So, for example, Aristotle's analysis of virtues and Durand's analysis of symbols have been intussuscepted into a systematic theology of progress in a way that opens their genetic affinity to still

²³The suggestion should be tied in with *Insight* 742-3[763-4], the 'rock' of *Method in Theology* 19, and *De Deo Trino II, Pars Systematica*, Gregorian Press, 1964, 107-109 (on the procession of the Word from the understanding of creatures). However, the entire system of this latter work is relevant to a theology of history that would link trinitarian reality to the genesis of human history and glory.

²⁴Ivo Coelho, *Hermeneutics and Method: A Study of the Universal Viewpoint in Bernard Lonergan*, Rome, 1994, discusses the fate of this universal viewpoint of *Insight* in Lonergan's later work: to say the least, it is not centre stage. (A revised version of the work appeared from University of Toronto Press in 1999. I will return to it in more detail in *Cantower XIII*). What I am pointing towards is the transposition of the later explicit writings into that full explanatory heuristic context. That transposition is the topic of those key pages, 286-8, of *Method in Theology*. What emerges then is a vast enlargement of the task envisaged by the canons of hermeneutics of *Insight*.

²⁵B.Lonergan, *De Deo Trino II, Pars Systematica*, 308-309.

further advances in biopsychology and neurophysiology. Genetic affinities, time-branched fibres within the heuristic structure, enrich the possibility and probabilities of the mediated mediation that is the larger eighth specialty of Executive Reflection. So, for example, the theoretic fibre that contains Thomas Aquinas' ontological analysis of incarnate love, Bernard Lonergan's semi-descriptive account of the finality of human intimacy and Hossima Toti's psychodynamics of sexual mysticism makes possible the mediation, by the eight specialty, of selections of larger significance, grounding multicultural sophistications of conjugal affectivity. Entwining the metalanguage is a sustaining image of the enterprize, shared by all theologians: a three dimensional histomap - based on the Mercator projection, in historic regard and in conventional convenience: its area distortion leaves space for bracketing commentary - to the foundational markings of which each specialty adds its particular flaggings. So, Systematics is fundamentally an ordering of S_{xyt} , where the use of the symbol 'S' in our Hindi dictionary implicitly acknowledges the English-language achievement of the Canadian-Irish thinker, Bernard Lonergan, who thematized descriptively the specialties in the mid-sixties of the twentieth century. S_{xyt} is not, of course, a continuum of viewpoints to be ordered, nor indeed does it include a vast array of second-rate viewpoints. Again, we recall the seminal suggestions of Lonergan: "Theology: 1) not a Platonic Idea 2)but the many species [not individuals except as types, as dominating personalities] 3) in a genetically and dialectically differentiated genus".²⁶ Lonergan's work gave rise, in the late twentieth century, to Lonerganism, which faded in the twenty third century as the fibre paradigm running from Aristotle through Lonergan became increasingly respected as empirically and metacritically grounded."

1.1.3 Lonergan and the Development of Mathematics

The key piece in this section is the quotation from Lonergan that appears on the next page. I give it an added context by quoting it as in occurs on pages 125-6 of *Lack in the Beingstalk*, where I

²⁶From handwritten notes of Lonergan, as described in footnote 12 above. Batch V.8.v.

am dealing with the place of Husserl's thesis under Weierstrass on the Calculus of Variations, but don't let that put you off. We are not venturing again into that area, but I do wish to draw attention here to the parallel I drew in chapter four of that book between the development in the 19th century of this calculus of variation and the possible development in this 21st century of the calculus of variation that is functional specialization. Internal to that development is a development of a developmental perspective on philosophy.

So what I aim at here is a relatively lightweight introduction to a developmental perspective on method and methodology that I have been mentioning for some years without sufficient guiding hints. I want to pick relevant hints from this key text of Lonergan and lift those hints into the context of his clearer hint about a developmental perspective on method that occurs in the unpublished draft of a chapter one on "Method" that would seem to date from early 1965.

Here, then, is my single-page quote from *Lack in the Beingstalk* that leads up to the key text in question.

"My last pointing here.... regards the notion of development. I have, perhaps, given you some impression of a development in an area of mathematics. So you have some notion of development. Are you critical of that notion? Can you agree with the biologist Paul Weiss: 'Does not everyone have some notion of what development implies? Undoubtedly most of us have. But when it comes to formulate these notions they usually turn out to be very vague.'²⁷ Weiss was struggling with the notion of biological development, in a way indeed that in the past century has become unfashionable: genetic shifting means a static of genes rather than a dynamics of forms. Here we have a development that is historical.

Husserl's thesis is certainly a piece of the story of the development of mathematics. It is a piece of history but is it a piece of system? The reader familiar with Lonergan's struggle in the decade after *Insight* will recognize this as a form of one of his primary questions.²⁸ I raise it here in relation to the

²⁷Paul Weiss, *Principles of Development*, New York, 1939, Introduction.

²⁸See Robert Doran on this struggle, "Bernard Lonergan and the Functions of Systematic Theology", *Theological Studies* (59) 1998, 569-607; "System and History: The Challenge to Catholic

calculus of variations and its stages, and perhaps the reader - recalling stages of the development of the system that is the plant or animal - already has a sense of where this is going. I recall now - for your encouragement and my delight - my own leap in this area to a genetic perspective on the seventh functional specialty, systematics. I was struggling in the late 1970s with the work *De Intellectu et Methodo* when I met the key page dealing with the development of mathematics and began to glimpse the genetic structure of that functional specialty, and now find it relevant to the genetically- spiraling stages for the hodic enterprize. It seems worthwhile to quote the relevant passage fully here.

‘The history of any particular discipline is in fact the history of its development. But this development , which would be the theme of a history, is not something simple and straightforward but something which occurred in a long series of various steps, errors, detours, and corrections. Now, as one studies this movement he learns about this developmental process and so now possesses within himself an instance of that development which took place perhaps over several centuries. This can happen only if the person understands both his subject and the way he learned about it. Only then will he understand which elements in the historical developmental process had to be understood before the others, which ones made for progress in understanding and which held it back, which elements really belong to the particular science and which do not, and which elements contain errors. Only then will he be able to tell at what point in the history of his subject there emerged new visions of the whole and when the first true system occurred, and when the transition took place from an earlier to a later systematic ordering; which systematization was simply an expansion of the former and which was radically new; what progressive transformation the whole subject underwent; how everything that was explained by the old systematization is now explained by the new, one, along with many other things that the old one did not explain - the advances in physics, for example, by Einstein and Max Planck. Then and then alone will he be able to understand what factors favored progress, what hindered it, and why, and so forth. Clearly, therefore, the historian of any discipline has to have a thorough

Systematic Theology”, *Theological Studies* (60)1999, 652-678; “*Intelligentia Fidei in De Deo Trino, Pars Systematica: A Commentary on the First Three Sections of Chapter One*”, *Method* (19) 2001, 35-84.

knowledge and understanding of the whole subject. And it is not enough that he understand it any way at all, but he must have a systematic understanding of it. For that precept, when applied to history, means that successive systems which have progressively developed over a period of time have to be understood. This systematic understanding of a development ought to make use of an analogy with the development that takes place in the mind of the investigator who learns about the subject, and this interior development within the mind of the investigator ought to parallel the historical process by which the science itself developed.’²⁹

This reflection on the understanding of a development requires a digestive pause.

First there is the historical sequence of developments; a twisted sequence, we may say, but still a sequence of less developed states. If the sequence is studied, then the student generates an instance of development by the study. Is it a parallel to the historical sequence? No. The study is a sorting out of the historical sequence. What sort of sorting out? Notice here that, if this is your question, the answer must come from illustration: have you such illustrations, from any field? Or is this just purely doctrinal listening? (It is purely doctrinal talk if I am simply repeating Lonergan’s prose, like some non-climber reading out a mountain-climbing instructional book to a group of non-climbers) You may claim that it is not purely doctrinal: then check your illustrative instances for purely descriptive characters. Is your illustration the theory of phlogiston in the history of chemistry? But do you understand oxygen and combustion?

This sheds light on the phrase at the beginning of the next sentence, “this can happen only”, that can so easily be glided over. The adequate sorter must know his or her stuff: understand the fully developed subject, which means the subject thus far developed, the incomplete genetic systematics of an open-ended search. There follows in Lonergan’s text two ponderous sentences each beginning “Only then”, both illustratively enlarging on the characteristics of the required understanding. In the paragraph to follow he invites you to bring it all together, beginning with that wondrously misleading

²⁹I am quoting from Michael G.Shield’s translation of 1990, *Understanding and Method*, 130-2. The original Latin text I have of *De Intellectu et Methodo* has the material on page 55. You might like to go back now to our discussion of John Damascene on chapter one of *Lack in the Beingstalk* and sense the challenge and the lift that this gives to the tasks of interpretation and history.

“clearly, therefore”, when the clarity, if it emerges at all, emerges by the full reading - perhaps many readings - of the paragraph, in the light, the habitual light, of one’s experience of doing something similar in some field, if not in the field of mathematics. As James Joyce once wrote to a friend, Am I throwing sufficient obscurity on the matter?³⁰

One has to grasp the difference between a thorough understanding of the subject and a systematic understanding. Surely if you understand something completely, you understand it systematically? What difference does it make? These are obviously not questions to be dealt with in the corner of a section that seeks to suggest features of developmental structures, mental or not. But pondering them serves to throw descriptive light on the difficult task of moving from history to system and indeed on moving back to interpretation and history armed with a developed, if incomplete, genetic systematics. One might go on to ponder the possibility of a genetic metasystematics and the relation of such a systematics to the universal viewpoint so skimpily treated in *Insight*. What all this pondering helps to reveal is that there is work to be done, work that centers on evolving a new controlling metaphysics going quite beyond the sketches of the concluding chapters of *Insight*. I hope to add to that impression in the final section here, by pausing over contemporary work on systems. But before I do that I would like to invite a simple pondering on method in relation to methodology.

Felix Klein once remarked that method changes in mathematics every decade. It is common knowledge that method in history has changed, even evolved, over the past centuries. Now method is first spontaneous, then it may be thematized: this connects to our problem above about knowing the whole field but not knowing it systematically, but the present problem is larger in that we are explicitly requiring the subject’s turning of attention to the subject in process. From spontaneous method one moves to explanatorily thematic method. Is this methodology? I suppose one could call it a *logos* about

³⁰At this stage it is as well to recall, re-read, note 2 above, about Rabbi Kushner’s book. First I would note that I am only trying to open up the topic of genetic understanding: so there is nothing here about the various layers of evil, the various facets of dialectic thinking and living. Secondly, that opening up is an invitation to pursue e.g. the reading of Lonergan quoted here in order to face the complexity of what is called “reversing the counterpositions”. But the deeper issue is the issue of reading metaphysically, reading ontogenetically and phylogenetically present in the cosmos in a reaching luminous fashion: might I say, “propositionally”?

a particular method. But for me - and I would claim for the Lonergan of the unpublished first (1965) chapter of *Method*³¹- methodology is another level of inquiry which I have regularly compared to zoology: zoology is to animals what methodology is to methods. Is this overly complicating matters? Not if the matters are complicated. Which opens up the question of foundational metasystematics: how complicated is this zone of inquiry? Before we tackle that briefly in the final section, it is as well to skim past present complexities in systems' studies.

1.2 General Systems Theories

My original intention, when I planned this *Cantower* some months ago, was to aim in this section at some comprehensive pointings towards the significance and the deficiencies of the movement associated with Bertalanffy. By the end of the twentieth century systems theory became much more inclusive, as the various texts and topics touched on below indicate. Still, the project might be manageable if I kept to genetic system: but that keeping itself is problematic. Is there not a genetic dynamic in such curiosities as Mandelbrot structures?³² Or, less far fetched, is not evolutionary structure something of a genetic structure? And what of the genetics of science, as envisaged, say, by Kuhn? So, 'comprehensive pointings' falls by the wayside, and is replaced here by strategic pointings, pointings

³¹See note 16 above.

³²I had foolishly hoped to include reflections on Mandelbrot's work in relation to Penrose's reflections (see the index of his *The Emperor's New Mind*, Oxford University Press, 1990, under *Mandelbrot set*) on it but it certainly would sidetrack us from the present drive. But I do recommend a eyeful of the phantasms grounded in the related mathematics as part of the metaphysician's job of providing "a symbolic indication of the total range of possible experience" (*Insight*, 3396[421]). For the mathematics and the images see Robert L.Devaney, *An Introduction to Chaotic Dynamical Systems*, Addison-Wesley Publishing Company, 1989. For a popularized broad context see Barr Parker, *Chaos in the Universe. The Stunning Complexity of the Universe*, Plenum Press, New York, 1996. A suitable descriptive introduction to the topic is Lars Skyttner, *General Systems Theory. An Introduction*, Macmillan Press, London, 1996. Chapter 3 of that work gives a convenient summary of 14 versions of systems theory. It is a relevant context for the larger problem of *Cantower XV*, the evolutionary mesh of system and non-system. For a critique of the movement see Robert Lilienfeld, *The Rise of Systems Theory*, Wiley, New York, 1978.

that twist through the next fourteen *Cantowers*.³³ So, the problem of evolutionary structures becomes a separate topic in *Cantower XV*, and the work associated with Thomas Kuhn becomes a focus in *Cantower XVI*, “Hodics as Science II”³⁴

My strategy will be recognized by readers familiar with Lonergan’s “three basic questions. What am I doing when I am knowing? What do I know when I do it? Why is doing that knowing? The first answer is cognitional theory. The second answer is epistemology. The third answer is a metaphysics”.³⁵ But there is a fourth question, embedded in the triple occurrence of the word “do” in the first three: ultimately the question of a luminous personal pragmatics.³⁶ I am aiming here, perhaps over-optimistically, for a two-way helpfulness. I would like to give regular Lonergan students a lift towards a suspicion of a larger reach of his work; but I would also like to think that the people represented by the texts quoted below, the people struggling with systems thinking in its various forms, would sense the possibility, in Lonergan’s suggestions, of a luminous lift to their work. Of course, the two liftings are interrelated. There is both dialogue and dialectic. Dialogue, a random reality of shared nourishment or faculty lounge, can be a beginning, but history’s conversation is a matter of the slow slopes of dialectic described in the following *Cantower*. Here we are in the realm of the random, and I plunge us in with a lengthy quotation - which you should associate with the fourth question mentioned

³³I already noted, in *Cantower VI*, the manner in which the chapters of the book *Insight* mesh with the corresponding-numbered *Cantowers*.

³⁴Stephen Jay Gould’s massive book (1400 pages), *The Structure of Evolution Theory*, Harvard University Press, 2002, will provide a context for the revisiting of *Insight* chapter 15; The return to chapter sixteen will be contextualized by reflections on Kuhn’s work mediated by two recent books: Thomas Kuhn, *The Road Since Structure*, The University of Chicago Press, 2000 and Steve Fuller, *Thomas Kuhn. A Philosophical History For Our Time*, University of Chicago Press, 2000.

³⁵*Method in Theology*, 25. See also 83, 261, 287, 316.

³⁶I have been moving gradually towards the deeper issues involved here, especially in regard to sophistications in the thematics of value. These issues will become more explicit in *Cantower XVIII*, “The Possibility of Cultural Ethics”.

above, with operation³⁷ - from a book whose title sings out our full problematic: *Metasystems Methodology. A New Synthesis and Unification*.³⁸ And does it not sing out that issue in a fresher, larger, different key? But you must reach for this sense in a page-reading that twines in your mind with the first pages of either of Lonergan's two chapters titled "Method".³⁹

"God made *Homo sapiens* a problem-solving creature. The trouble is that He gave us too many resources: too many languages, too many phases of life, too many levels of complexity, too many ways to solve problems, too many contexts in which to solve them, and too many values to balance.

First came the law, accounting, and history which looks backward in time for their values and decision-making criteria, but their paradigm (casuistry) cannot look forward to predict future consequences. Casuistry is overly rigid and does not account for statistical phenomena. To look forward man used two thousand years to evolve scientific method - which can predict the future when it discovers the laws of nature. In parallel, man evolved engineering, and later, systems engineering, which also anticipates future conditions. It took man to the moon, but it often did, and does, a poor job of understanding social systems, and also often ignores the secondary effects of its artifacts on the environment.

Environmental impact analysis was promoted by governments to patch over the weakness of engineering - with modest success - and it does not ignore history; but by not integrating with system design, it is also an incomplete philosophy. System design and architecture, or simply design, like science and engineering is forward-looking, and provides man with comforts and conveniences - if someone will tell them what problems to solve, and which requirements to meet. It rarely collects wisdom from the backward-looking methodologies, often overlooks ordinary operating problems in

³⁷If 'you' is someone not versed in Lonergan's work but in systems theory, then the association needs to reach in a reverse direction, towards the advantage of asking what the beginning of Hall's book has in common with the beginning of Lonergan's reflections on method, on "operations yielding cumulative and progressive results" (*Method in Theology*, 4).

³⁸By Arthur D.Hall, Pergamon Press, 1989. Cited below as Hall.

³⁹*Method in Theology*, chapter 1; *Insight*, chapter 14.

designing its artifacts, whether autos or buildings, and often ignores the principles of good teamwork.

Operations research, management science and systems analysis on the other hand specializes in the ‘ordinary operating problems’ that other paradigms often ignored or forgot and by so doing solved hundreds of problems and carved a lasting niche. However, by insisting on mathematical modelling as the central feature of its method, the ‘operational sciences’ tended to isolate themselves from the increasing majority of people who cannot speak mathematics.

The operational sciences hoped to nourish business management, which however largely ignored them, and the latter continues to be undernourished by the business schools which are fairly broad but shallow everywhere. By over focus on short-range financial values, business management in the United States has lost a dozen major markets to the Japanese, added pollution in all its forms, and enriched itself out of all proportion to its value as just one factor of production.

Action science, developed by the social sciences over many years in relative isolation from the applied physical sciences, and which might otherwise have humanized them and made engineering more productive, was doomed to fail by being on one end of the two-culture problem wherein science and the humanities do not even speak the same language.

I could go on listing a few dozen paradigms: art, law, computer software design, medicine, politics, and architecture, each addressed to a certain context, level, or phase, each good in itself, but each limited to the fields of its origin and its purposes. The methodological problem is the same as if, in designing any large system, each subsystem designer were left to design each subsystem to the best requirements he knew. The overall requirement might not be met; overall harmony could not be achieved, and conflict could ensue to cause failure at the system level.

What is envisioned is a new synthesis, a unified, efficient, systems methodology (SM): a multi-phase, multi-level, multi-paradigmatic creative problem-solving process for use by individuals, by small groups, by large multi-disciplinary teams, or by teams of teams. It satisfies human needs in seeking value truths by matching the properties of wanted systems, and their parts, to perform harmoniously with their full environments, over their entire life cycles”⁴⁰.

⁴⁰Hall, xi-xii.

Is this not a substantially sound, even inspiring, introduction to our human problem of history and systematic progress, perhaps even better than the beginning of either of the chapters of Lonergan? “One can go on”.⁴¹ But how can we, as Lonergan-focussed, go on with Hall, or Hall with us? Among the various obstacles to going on there is a root problem. We are back on page 2 of Lonergan’s discussion of Systematics: both the Lonergan community and Hall have to come to grips with “the heavy overlay of conceptualism”⁴² that has colonized global culture in deep pathological molecularity. “The key issue is whether concepts result from understanding or understanding results from concepts”,⁴³ but the pathology nominalises that issue for Lonergan followers and cuts it from the field⁴⁴ for such people as Hall. The lengthy quotation from Hall poses a deep problem for Hall which he never comes to grips with, caught in his first-line word “problem-solving”.⁴⁵ But it poses a trickier problem for those versed in Lonergan’s Aristotle: does the concept of contemporary complexity not presuppose a massive effort to understand the data on that complexity? And does not that effort require a complexity of imaging such as Hall presents in his book?⁴⁶ Serious grappling with “problem-solving” requires the

⁴¹I quote from that key paragraph on page 287 of *Method in Theology* which speaks of a molecular version of the first part of that book, one that would ground the dialogue I write of above.

⁴²*Method in Theology*, 336.

⁴³*Ibid.*, in the footnote.

⁴⁴“Field” here takes its meaning from *Phenomenology and Logic*: see the index there under *Field*. It is the concrete reality that is beyond present horizons.

⁴⁵Hall, xi. The book is remarkably superficial whenever it touches on this issue. See especially the oddments in chapter 10. Chapter 7, “Economic Decision Making” in particular is a sad mess, doubly so because of the brutalizing global effects of the stupid implementation of erroneous economics.

⁴⁶There is, of course, the text and its references as image, but I am calling attention here more immediately to diagrammatic imagings of complex structure of collaboration throughout the book. Central to the drive of this *Cantower* is the reflection, in note 27 (pp. 123-4) of *A Brief History of Tongue*, on the complexification of imaging that goes with advancing civilization. The reflection there was focussed on the basic hodic image given there on p. 124 and repeated and commented on throughout these *Cantowers*. The basic image provides a sublational corrective context both for Hall’s

inclusion of an imaging of contemporary problems: one has to grapple with a scotomatizing pathology which would mistake one's cultured horizon for the field, which would settle for the anti-conceptualist nominalism of a cognitional theory which is operatively deductivist. I am thinking now especially of the challenge in the long Hall quotation, the challenge circled in these next few *Cantowers*, the concept of an integral heuristic structure that includes Mandelbrot and Manhattan: it is not a priori.⁴⁷

Only a cognitional theory that reaches the mass of data of and on cognition of these past centuries can ground sincere dialogue on epistemology. That is the message of the first part of *Insight* which I am uncomfortably complexifying here. I paused in my reflections on current systems literature to cast about in my "Systems" books of the late sixties and early seventies, when it was evident to me - in my optimism - that such dialogue might be immanent. Instead there occurred a narrowing of Lonergan studies and a truncated complexification of the studies of systems. There is still no coherent systems' epistemology; there is still no dialogue. There remains the dual problem under that absence of dialogue: of liberating Lonergan studies from general bias and of the deeper problem of *Liberating Systems Theory*.⁴⁸ The deeper problem is that mentioned above; mind cut off from itself through a neural disorientation that I have called *Psychothymia*. At least Flood senses the problem, "The Need for a New Epistemology",⁴⁹ and he appeals to Habermas,⁵⁰ whom we shall meet again relevantly in section 6 of *Cantower IX*. There indeed we will note that the move to a new epistemology of cultural significance is through a private sublation of the "scientific moment" advocated by Habermas: its cultural significance depending on a fullest dialectic concreteness, a fullness of humble empiricism. Such

images and for his aspiration for a "multi-phase, multi-level, multi-paradigmatic creative problem-solving process for use by individuals, by small groups, by large multi-disciplinary teams, by teams of teams" (Hall, xii).

⁴⁷On Mandelbrot, see note 32 above. On imaging Manhattan as a metaphysical problem see *Cantower XIV*, and the comments below, note 71.

⁴⁸Robert L.Flood, Plenum Press, New York, 1990. I will refer to this work below as Flood.

⁴⁹Flood, 161.

⁵⁰See Flood, 33ff, 162ff.

a humble empiricism requires that one lift the elementary invitation of *Insight* chapter eleven beyond the context of *Insight chapter 18* into a context of luminous darkness and personal risk. But we are perhaps reaching too far ahead of the present topic. Perhaps it is sufficient to note that Systems thinking is no better or worse epistemologically than other areas from mathematical logic on up to religious studies.⁵¹

And what of the metaphysics of Systems Theory? The word *metaphysics* is, of course, not much used. System theorists tend to move comfortably along in a muddle of naive realism and assumed objectivity of theoretic results. Here is not the place to enter into the various weaknesses of thinking and presentation: one only is significant for present purposes. It is the consistent failure to handle the issue of complexification, layers, hierarchy. The problem can be acknowledged⁵² or simply slid over, as is it is in the substantial work, *Dynamics of Complex Systems*,⁵³ with an early trivial section on “Emergence and Complexity”.⁵⁴ The resulting fundamental oversight faces two ways: forward to a misconception of planning and control; backwards to a missed feature of cognitional theory.

First let us turn backward: and I might well repeat the strategy used with Hall, by presenting a

⁵¹One might check the index of Lonergan, *Phenomenology and Logic*, under *Truth*, to get a glimpse of the muddle in two particular zones of culture.

⁵²It is clearly acknowledged - as clear as truncation allows - by Howard Patee in his various contributions to the volume *Hierarchy Theory. The Challenge of Complex Systems*, edited by Howard H. Pattee, George Braziller, New York, 1973. His “Principle of Optimum Loss of Detail”(92-94) is as near as he gets to aggreformism. “To this end, there have to be invented appropriate symbolic images of the relevant chemical and physical processes; in these images there have to be grasped by insight laws of the higher system that account for regularities beyond the range of physical and chemical explanation”(*Insight*, 464[489]). So one arrives at the metaphysics of aggreformism: “a concrete plurality of lower entities may be the material cause from which a higher form is educed”(Lonergan, “Finality, Love, Marriage”, *Collection*, 20). My *Randomness, Statistics and Emergence*, (Gill, Macmillan and Notre Dame, 1970) pushes towards such imagery e.g. of the biochemistry of protein-folding in the hunting amoeba. I will return to this topic in *Cantower XV*, which deals with the theory of evolution.

⁵³Yaneer Bar-Yam, Addison Wesley, 1992. Referred to below as Bar-Yam.

⁵⁴Bar-Yam, 9-14. See also the substantial listing in the index under *complexity*.

lengthy quotation from Bar-Yam that poses a problem both for Systems Theory and for Lonergan followers. But the point is too obvious. “The key notion in the explanatory species is that any lower species of things, T_i , with their conjugates, C_i , and their schemes, S_i , admits a series of coincidental aggregates of events, say E_{ijm} , E_{ijn} , E_{ijo} ,, which stand in correspondence with a series of conjugates, C_{jm} , C_{jn} , C_{jo} ,, of a higher genus of things, T_j ”.⁵⁵ What is obvious is a deficient cognitional theory in both Lonergan studies and Systems Theory, a deficiency that can only be remedied by a massive meta-empirical effort to read properly the sentence quoted. We are back at the problem of a subtle nominalist deductivism: “let us admire Aristotle”,⁵⁶ but Aristotle is more admired than imitated. We are back at the problem of “concept”, and at the need to come to grips with the intussusception of the meaning of *aggreformism*. Fruitful dialogue between Lonergan students and System theorists and others will remain impossible until the nature of aggreformism becomes a serious undergraduate topic. The solution probably lies, not in random efforts to push beyond present deficiencies in either school, but in the long-term embarrassing cycling of hodic method that is the topic of the next *Cantower*. So, the problem of understanding protein-folding in relation to helix-structured organic components will press forward a people-folding in the helix of hodic collaboration. Such is the character, such are the characters, of the organic progress of history. But before we pause on that topic, there is the other forward-looking face of deficient cognitional theory; the face described in the initial lengthy Hall quotation.

That forward face regards planning, and its feeble cousin prediction.⁵⁷ It regards the control of intelligibilities and meanings. It could be illustrated abundantly in its weakness, truncation and non-

⁵⁵*Insight*, 262[287].

⁵⁶I am recalling Lonergan, *De Deo Trino: Pars Systematica*, (Rome: Gregorian Press, 1964), 283 “*Admiramini enim subtilitatem Aristotelis*”. Appendix B, p. 325, note 4, of *Phenomenology and Logic* places this quote in a relevant context.

⁵⁷This is a large topic that we might consider as lurking under the phrase, “other things being equal”. Even planetary orbits, which are one solid source of the myth of prediction, are not secure, much less plans. Robby Burns has it right: “The best laid schemes of mice and men [and moons] oft gang awry”.

objectivity from Hall's text, but a general pointing must suffice. At all events, the labour towards an enlightened perspective on it throws one into the deep water of the non-systematic, primary and secondary relations, divergent series of conditions, the randomness of finite realities reaching up in coincidental clusters from photon-events to flights of fancy and insights. It throws us, indeed, towards our final topic in this section. The general point, then, is that planning and norms of planning are intrinsically heuristic, meshed at the highest level of their material object with the secret sacredness of finite spirit's roving commission and failures of commission. When planning takes on the appearance of security and sufficiency, as in war games or centralist economics, it usually is pivoting on statistical norms - or, in the case of present economics, on entrenched stupidities.

So, I leap to the final point of this section which is continuous with the conclusion of the previous paragraph. How do we engineer that elusive project, progress? "Systems engineering anticipates future conditions. It took man to the moon, but it often did, and does, a poor job of understanding social systems".⁵⁸ What is needed is an altogether richer "displacement towards system", tensely harmonious with the differentials of human striving.⁵⁹ You might well pause here to add the lively actual context of the chapter referred to in *Topics in Education*, of which the following quotation is merely a reminder.

"There is a redemptive aspect in revolution, the violent destruction of existing institutions, existing habits, existing material equipment, and the persons that are the carriers of the institutions and the habits of the culture. Thucydides provides a terrifying description of the revolution at Corcyra,⁶⁰ where the people were divided into the rich and the poor, and the rich were simply wiped out, mercilessly and completely. The French and Russian revolutions were more or less complete

⁵⁸Hall, xi.

⁵⁹A context here is chapter 3 of *Topics in Education*, which deals with these differentials. It was an early focus of Lonergan's attention. On this, and more refinements, see the work by Michael Shute cited in note 74 below. See also note 70.

⁶⁰See *The Complete Writings of Thucydides: The Peloponnesian War*, the unabridged Crawley translation with an introduction by John H. Finley, Jr (New York: Random House, 1951), book 3, chapter 10, esp. 188-92.

liquidations of the past of a country. In Marxism,, there is a Jewish eschatological element combined with the idea of revolution, a sudden, quasi-eschatological transformation of the situation, produced by the revolution.

There is an element of the notion of redemption that is illusory, in archaism with its revival of ancient virtues, in futurism with its leap to utopia, in esotericism with its attitude of 'let the world go by, we shall live out our well-regulated and happy lives by ourselves,' and, of course, in the more recent illusion of automatic progress, which is simply a denial of the problem created by sin".⁶¹

The search - and it is the search of these 117 *Cantowers* - is for an envisagement of "an eschatological transformation of this world"⁶² in harmony with hope and emergent probability. The envisagement, and the heuristics of that envisagement which must be part of it,⁶³ must be some form of metasytem.

Obviously this seventh *Cantower* is meshing, as it is meant to do, with the final section of the seventh chapter of *Insight*, giving it a new context in a non-moving viewpoint. And an enlargement of that context would seem appropriate.

I have not attended in this section to the various efforts of Lonergan followers to come to grip with systems and systematics. The ongoing work of Robert Doran comes to mind, but this is not the place to venture into reflections on his searchings: for one thing, one must acknowledge, with him, the incompleteness of his work: "As there is a more concrete historical exegesis of biblical and other sources that attains a synthetic understanding of the commonsense religious Development of the authors, and as there is a more concrete synthetic theology that grasps the evolution of the economy of salvation and of the church's appropriation of it, so there is a more concrete interpretation of the data on thinkers like Lonergan that grasps in the very interpretation of the data on his development the systematic links that bind elements of that development to one another. It is those links that I am

⁶¹*Topics in Education*, 66.

⁶²*Topics in Education*, 66.

⁶³There is a subtle point here about containment worth puzzling out: there is no contradiction involved, such as with the set of all sets.

searching for in these articles”.⁶⁴ His work, and those of other Lonergan scholars, is certainly relevant to our searchings, but it is necessary to delay their consideration till 2004, *Cantower XXII* and ff. (In particular, I delay precise treatment of genetic method to *Cantower LXIX*, December 1st 2007). The single context I would add here is that given by Neil Ormerod in his searching and stimulating article, “The Structure of a Systematic Ecclesiology”.⁶⁵ “The question I seek to address is what should a systematic ecclesiology seek to achieve? My answer is that a systematic ecclesiology should be empirical/historical, critical, normative, dialectic, and practical”.⁶⁶ “Again, in reference to Lonergan’s theological method, the import of what has been argued is that a systematic ecclesiology must take into account his functional specialties of foundations and doctrines. Foundations will be needed to provide the basic categories to give an account of the kingdom, as well as to control the meaning of those categories through the foundational reality of the theologian’s converted subjectivity”.⁶⁷ “This brings us to the final type of insight proper to the task of ecclesiology. An analysis that is normative and dialectical will also be practical. It will guide action, propose possible courses of action, and outline their likely outcome”.⁶⁸

You would find it interesting, I propose, to put these reflections on system and action back into the context of the quotation from Hall with which I began this section. But what I wish you most to do is to put his reflections into different Lonergan contexts: for instance, mesh the context of the reflections on Cosmopolis in *Insight*⁶⁹ with the fifth and fourteenth chapters of *Method in Theology*. Then there will

⁶⁴R.Doran, “The Truth of Theological Understanding in *Divinarum Personarum* and *De Deo Trino, Pars Systematica, Method: Journal of Lonergan Studies* 20(2002), 33-75, conclusion.

⁶⁵*Theological Studies*, 63(2002), 3-30: referred to below as Ormerod.

⁶⁶Ormerod, 3.

⁶⁷Ormerod, 9.

⁶⁸Ormerod, 10.

⁶⁹ Footnote 73 below mentions the relevance of Michael Shute’s work in the present context. One must lace together, as Shute does, Lonergan’s reflections in *Insight* on Cosmopolis and on the mystical body with his earlier thoughts on **Panton Anakephaliosis** and on heuristic approximations to

appear to be, at least at first sight, a serious confusion. Ormerod seems to be reaching for something like Cosmopolis, and meshing into that reach the identities of different functional specialties. At the same time he would seem to be reaching for the content of the functional specialty Systematics which, since it would “propose possible courses of action”⁷⁰, might better be called Pragmatics.⁷¹ But the function of that specialty is not “historical, critical, dialectic”⁷² as Ormerod would have it. The second half of his article moves within this confusion to speak of symbols of ministry and categories of change, lacing together reflections on such diverse personalities as Clement of Alexandria and Ignatius of Antioch, Hans Urs von Balthasar and Hans Kung, Kasper and Congar, Plato and Aristotle. And I did enjoy his last-page notion of Ratzinger as Platonist - would Plato?⁷³: but his point there brings us right back to the

and differentials of historical process.

⁷⁰Ormerod, 10.

⁷¹Naming the forward functional specialties is a difficulty associated with the problem of “backward-orientation” raised in the first *Cantower*, and with the novelty of seriously envisaging a science of the future. Hall, searching for a definition of Systems Methodology remarks, “Methodology, or **praxeology**, refers to the study of human planning, action and behaviour”. There is need for a vocabulary in English that would bring the tone of *Praxisweltanschauung* into Simmel’s *die Wendung zur Idee*. There is the deeper need, the core message of this *Cantower*, of not letting that turning be also a turning away from phantasm. Both needs are brought into focus in the title and content of section 2 of *Cantower XIV*: “Founders of Manhattan”.

⁷²Ormerod, 3.

⁷³“Plato’s greatness lies in his fidelity to the social problem in its most acute form” (Lonergan, “Philosophy of History”, an 1930s manuscript, quoted by M.Shute, *The Origins of Lonergan’s Notion of the Dialectic of History. A Study of Lonergan’s Early Writings on History*, University Press of America, 1993, a book that provides a relevant context for this *Cantower*. I suspect that few would accuse Ratzinger of fidelity to present distress. Like the porter in Joyce’s “The Dead”, ‘he would be surprized by such a novel idea’ (p.32) as that of attending to the concrete realities of contemporary culture and systems theory. There is, then, the deep problem for all of us, standing like Gabriel at the window, of coming to sense the song of history in its present complex melody. We may well be tempted to our own version of Gabriel’s speech: “I will not linger on the past. I will not let gloomy moralizing intrude upon us here tonight. Here we are gathered together for a brief moment from the bustle and rush of our everyday routine” (p.23). Philosophical reflection is the scientific moment of listening to the concrete reality of that present bustle.

problem of concepts. “One side [Ratzinger’s] proceeds by Plato’s method: its starting point is the primacy of an ideal that is a universal concept”.⁷⁴ Ormerod, like myself, “stands in the Aristotelian-Thomist tradition with emphasis in the concrete reality of ecclesial history”.⁷⁵ Nor have we any disagreement about the inclusion of sociological systematics in ecclesiological reflection. What I have emphasized here is the need for the fuller Aristotelianism that Lonergan reached regarding concrete reality, and the fuller precision that he offers in his distinction of functions in the turn to the idea, to system. The confusion in Ormerod points to that fuller precision but also to a fuller vision. Is the ecclesiology that Ormerod is searching for not perhaps the overarching metasystem that can be identified as *Cosmopolis*, within which certainly there would be a component named Systematics? But I must postpone further reflections on this to *Cantower XXI*.

1.3 Symbols of Foundational Metasystems

That postponement leads me to conclude with a focus on a single issue: your tolerance of symbolization. Perhaps the best approach to the present section is for you to ask, How much of the symbolizations of the systems of the previous sections are to be included, in heuristic mode, in a foundational systematics? Foundational systems, of course, are a geo-historical population, and their future thematic genesis will occupy us in section 5 of *Cantower IX*. But here you and I - with Lonergan lurking in the wings - can entertain the question somewhat casually, descriptively: What do we think would be an adequate symbolization of foundational system? In section 8.5 we will meet the same question as it occurs in discomforting dialectic. Here we may relax, perhaps pretend that it is the problem of some other person or persons.

In that case would we not muse that it should surely “contain” heuristically all that we have talked about in the previous two sections? What might we mean by “contain” there? Perhaps we can get somewhere by thinking in terms of symbols of open containment. I would note immediately that the word ‘adequate’ comes into focus here: a wink is as good as a nod or a speech in good circumstances

⁷⁴Ormerod, 30.

⁷⁵Ormerod, 30. Recall the meaning of ‘concrete reality’ above, note 44.

of shared system and perspective. But generally the issue is the significance of symbolism in embracing the universe of discourse in its potentialities. So, I would claim, the first word of metaphysics advocated in these *Cantowers* is an adequate wink in contemporary culture. The potentialities are evident for the wise and they emerge for the beginner through normal pedagogy. So, for instance, the semicolons point to the complex solution to the root problem hierarchy theory - aggreformism - a problem that baffles the systems theorists - when they notice it - and the followers of Bertalanffy. But they also point to the concreteness of intention of that first word: secondary determinations are built into the heuristic. I do not wish to go further in this matter here: it requires a rewriting and enlargement of chapter 16 of *Insight*, mediated by a full transposition and enlargement of the best of Thomas' metaphysics. But the key to the genesis of future metasystematic symbolization is the luminous maintenance both of concrete intent and of linguistic feedback. This genesis, of course, is a key component of that problematic task "implementation". On the broad canvas that problem is solved by functional specialization - I am sliding past issues of effective Revelation here - but there are layers (institutions, roles, tasks) of implement-structures that must be held in vigilant fantasy if the mediations of the hodic recycling is to stand successfully against recurrence-schemes of alienation.

So, the extended symbolization that would give bite to the prose of chapters 16, 17, 20 and the Epilogue of *Insight* has to be a massive directive sublation of all the symbolisms of contemporary technology and aesthetics. Immediately one may notice the inadequacy of whatever symbolism present conventions might read into Lonergan's general categories. The "one might go on"⁷⁶ that follows his listing is seen then as a parallel to saying "one might go on" after stating Newton's three laws of motion. The parallel's central weakness, of course, is that Newton's laws are transient hypotheses that call for the addition of secondary determinations within divergent conditions; Lonergan's categories aim at an invariance that includes both secondary determinations and divergent conditions.

Briefly, then, human systematics pirouettes on symbolisms: "you're not going to hold it together

⁷⁶*Method in Theology*, 287.

without diagramming”.⁷⁷ It is not difficult to conclude that Lonergan’s old view of metaphysics as “the conception, affirmation and implementation of the integral heuristic structure of proportionate being”⁷⁸ must include under “implementation “ the implements of linguistic expression. And, to answer our question regarding the inclusion of the varieties of systems touched on in the previous sections, the replacement of metaphysics that is hodic collaboration must provide types of integral symbolism that reach all other private and public systems in an integral concrete heuristic luminously-feedback fashion. You might now profitably review with fantasy the remainder of the section on general categories in *Method in Theology*. The special categories that follow there, dealing with revelatory claims in various cultures, call for a sophistication of that complex.

In section 9.6 of *Cantower IX* I will touch very briefly on one stream of what I might call the literary tradition of European philosophical debate. It is not one of sophisticated symbolization, no more than present Lonerganism is.

How are we to move towards a relatively invariant adequate controlling heuristic symbolism? It is evident to me that there is a prior question that you have to entertain seriously: is complexification of symbolization necessary, convenient? As you entertain the question now you may well agree with a majority that McShane has an agenda of complexifying what is simple: that “Lonergan had a few clear things to say”.⁷⁹ I could counter that, yes, Lonergan had a few clear things to say, that his account of things and their conjugates and the secondary determinations of those conjugates suggest that he had it all together in a control of meaning associated with such phrases as “the realization in accord with

⁷⁷A loose translation of Lonergan’s Latin: the translation in volume 7 is “Formal comprehension cannot take place without a construct of some sort” (*The Ontological and Psychological Constitution of Christ*, University of Toronto Press, 2002, 151).

⁷⁸*Insight*, 391[416].

⁷⁹I am recalling here the criticism of publisher’s reader, the sex-neutral “Joey”, of the original Appendix A of *Phenomenology and Logic*, which I consequently omitted from the volume but made available as chapter five of *Lack in the Beingstalk*. Joey’s comments are also available there, in section 4.4. The comments on complexification and ‘clear things’ are on p. 138.

successive schedules of probability of a conditioned series of schemes of recurrence⁸⁰ and - regarding the acts of things - “flexible circles of ranges of schemes of recurrence.”⁸¹ Etc. Etc. But that argumentation and counter-argumentation is not the hodic way.

In the next two *Cantowers* you will find that the hodic way requires that the word “entertain” be sublated into a “scientific moment” described in the second half of page 250 of *Method in Theology*. That page presents some of the clearest things that Lonergan had to say. And it brings us back to our reflections in the conclusion of section 7.1, to the issue of authentic traditions. The “scientific moment” will be dealt with in mounting specificity in section 8.5 and section 9.6. But we can claim here that what it does is to follow the nudges of history towards hodic collaboration by locating in that collaborative structure crucial existential experimentation that sublates massively Aristotle’s strategy of getting the sceptic to talk. History’s judgment will thus reach a modest linguistic-feedback control in an expressed identification of minor unauthenticity and a symbolic support of major authenticity.⁸²

From this you will have, I hope, some suspicions, some seeds of fantasy, regarding genetic structurings and the necessary complexification of symbolizings. There is the possible genetic structuring of your own living: its living and its thematic are both massively difficult in our times. I would suggest now that you re-read the second half of that apparently simple chapter nine of *Insight* in this new context, backed up with the suggestions regarding molecules that supplement the sixth chapter of *Insight*. There is the genetic structuring of the functional specialty of systematics, and I would invite you to re-read “The Sketch” of *Insight* 17.3.6 in the new context. “Pure Formulation”⁸³ now takes on an altogether richer contextualizing meaning. Mediated by this on-going enrichment, through the

⁸⁰*Insight*, 125-6[148-9].

⁸¹*Insight*, 465[491].

⁸²The context is Lonergan’s reflection on community, Existenz, and history, *Method in Theology*, 80.

⁸³*Insight*, 580[602].

executive reflection of the eight specialty, there is the shift of statistics and of optimism regarding community's long slope of fragmentation and decline. Finally, there is the genetic structuring of hodic development that, *per se*, sublates dialectic collaboration through the crucial experimenting that is the centre of attention in the next two *Cantowers*. So, slopes of dialectic and genetic development may give rise more generously to new levels, plains, of the individual, of the community, and of the Tower of collaboration that has been our topic from the beginning. Has the ascensional symbolism of the Seawall, the See-well, the Bower, the Black Tower of meaning, given promise to you of a shift from tadpole to frog in the genesis of meaning? Given you, even, a lift towards a fantasy about a distant Pragmatics that is not just genetic but generative and re-generative, a larger care of the sick tadpole of history, the wilting sunflower of second stage meaning, that would lead beyond our present relatively dead theology to a nursing towards glorious maturity?

“He was undecided about the lines from Robert Browning, for he feared they would be above the heads of his listeners”.⁸⁴

⁸⁴The Dead, p.20.