FuSe 9 "What is Functional Research?"

I wish first to thank Mark Morelli as well as other hidden instigators for this honoring of my near-death experiences. The title I chose does not seem fitting enough for the occasion, but I hope to surprise you: it is a profound topic of both history and the eschaton. It is the topic of the first of our twenty five online seminars, the first eight on the general categories, the second eight on the special categories of Christian Faith, the third eight on the special categories of revelationary religions, the single final 25th seminar merely a pointer to the eschatological resolution of finite exigences.¹

The question of the title has not been answered by that first seminar: such an answering would be like an isolated study of neon being mistaken for an answer to the question, What is neon?, an answer given without reaching toward the other inert gases, much less reaching towards the periodic table's meshing with finitude. Our periodic table here is the relevant diagraming² of the ongoing cyclic genesis of the global omni-cultural Cosmopolis that was an X for Lonergan in 1953, that was seedlingly identified by him in February 1965. That seedling identification is very thin ice on which to try to skate towards globalized metaphysical equivalents:³ so the foundational pressure should be heavily towards fantasy. Of fantasy and its chemical problem I shall speak later, but I would have you enter here - or should I say **you enter here by this bold-faced print**⁴- with a muster and a mustard of poise.

¹See the index of *CWL* 18, under *exigence*.

²A handy display of such diagrams are available in Humus 2, "Metagrams and Metaphysics"

³On this problem, see the Website book, *Method in Theology: Refinements and Implementations*, chapter 10, "Metaphysical Equivalence and Functional Specialization."

⁴The strategy of bold-print emerged during the writing of the *Field Nocturnes*. It as a way of alerting the reader to the possibility that the reading is being done outside the poise (see the

I ask you to muster the mustard poise as best you can,⁵ and that request leads me to mention two contexts: the context of my first meeting with Lonergan and the context of Mark and I first talking of a topic for this paper.

My first meeting with Lonergan, by odd coincidence, was during the week after Easter, exactly fifty years ago. I had conspired with my Superior at the Jesuit House in Leeson Street, Fr.Ronnie Burke-Savage, during my previous year of teaching mathematical science (1959-60) in University College Dublin, to import Lonergan after Easter in 1961. He came for a week to that residence near to the university at 35 Lower Leeson Street and dined with us there under a dirty old painting later found to be a missing Caravaggio worth millions. He gave lectures in the university and in the Jesuit House of Theology at Milltown Park.

But I wish to recall our first conversation, in the little room overlooking Leeson Street in which he was living or partly living. He paced and I sat at his desk, at the centre of which lay an Agatha Christie novel, face-down. We rambled, but the high point for me was when I asked him, "When did you catch on to the already-out-therenow?" He never did tell me the when, but he plunged in with the remark, "Well, when I caught on to that I had to go and ask somebody!" Nor did he tell me what that somebody said: did he nudge Lonergan to "get real?"

The recalling of that first context leads to the second, Mark Morelli's work on Hegel, which is very much concerned with how and when Lonergan "got real". In a recent article Morelli remarks: "I think it is fair to say that the last twenty-three-and one-half years of the twenty-eight year search - from the discovery of insight in the summer of 1930 which reading Stewart until the completion of *Insight* in 1953 - were spent in the halfway house of idealism, engaged in the terrific epistemological struggle

next note for a key reference, and the note following it for a key contribution to poise) of the position that cuts down naive realism of print.

⁵ It is a slow climb to Position, and from Position to Poise: see *Cantower* 9, "Position, Poisition, Proto-Possession"

required to move beyond it."⁶ This is a shocking claim, and should certainly give you pause about your poise, mentioned above, "about" the **entering bold-face print** mentioned above.

A decade after that first meeting with Lonergan I had the rather unique experience of spending each late evening alone with Lonergan for nearly two weeks. It was the summer of 1971, and of his Dublin lectures on *Method*, and we were in residence in a little Jesuit house near Milltown Park with our supply of whiskey. We rambled of course, but I have a very precise memory of coming out with my original question, and indeed Mark's question, but in the apparently simpler form, "when did you really pin down the meaning of 'is?'?". His reply, "when I got that far in *Insight*". So: Lonergan seems to echo Morelli's conclusion. But the point I would raise for us here today is, "when were you really pinned down by the meaning of 'is?', 'is!', 'is.'? Are you pinned down now by its meaning or are you, Jack and Jill, looking out there comfortably at Phil, in the real-room-surround of a megaphoned voice?

We could pause there in the lecture - and indeed I may well pause if the mood strikes us. But pause you must over this topic, for a day or a decade. And I shift in the next paragraph to a pause that we did not have, at the beginning.

For indeed it would have been salutary for us to pause, to poise, before beginning, a poise in the question marking the title, to better benefit from this paper: and you could pause now if you are privately reading. This is an unusual request, one that is so against our culture that you are now reading the second sentence of this paragraph, and may well flow on to the third. So this third sentence builds in a countercultural pause that calls to your attention the three month pause that was the e-

⁶Mark Morelli, "Lonergan's Debt to Hegel and the Appropriation of Critical Realism," *Meaning and History in Systematic Theology. Essay in Honor of Robert M.Doran, S.J.*, edited by John D.Dadosky, Marquette University Press, 2007, 420. On Lonergan's reading of Stewart's book on Plato's doctrine of ideas, see Morelli, *At the Threshold of the Halfway House. A Study of Bernard Lonergan's Encounter with John Alexander Stewart*, The Lonergan Institute, Boston College, 2007.

seminar focused on that question, What is functional research?

What is functional research? The e-seminar began on that quest, or at least tried to, on January 15th, and the quest continued officially till April 15th. Unofficially it continues, indeed continues through 24 other consecutive seminars, the next 7 asking, in a general categorial manner, "What is X?," X being one of the usual sequence of eight specialties. The following eight turn to these eight questions in the context of the Christian claim. The third eight do so in the supposition that there is a mysterious God-talk in the Cosmos, in the hundred billion Galaxies spread around our little globe through 13.7 billion years of expansiveness, but whispered to human loneliness in these past short millions of years: a whispering of a divine super-expansiveness that is not to end: the topic of the 25th seminar.

There: might that paragraph be worthy of a pause spanning these next six years? The difficulty of the first seminar was to manage gentle pausing. I wrote various guidelines throughout the month before we started, but quite a number of our 54 members were so eager to start that they plunged into outlines of their selected topic even before we started in January 15th.

What's this about **selected topics**? Well, best to go back a little. My proposal, emerging the previous year, was for some of us to try functional research within the context of Lonergan's writing. That proposal was the result in me of a very slow fermenting, indeed one that I could track back to a messy creative afternoon in an Oxford library in 1969, where there was a fresh dawning in me about what this **new structure** was that Lonergan had proposed. It was to be more than four decades before I could diagram comprehensively⁷ the multidimensional patterns of omnidisciplinary baton-exchanges that were to constitute that **new structure** in later global operation, a towering reality that was to solve "the problem of general history, which is the real

⁷For Lonergan's view of a comprehensive diagram, see *The Ontological and Psychological Constitution of Christ*,151.

catch."⁸ Fantasy, precisely conceived and patiently fostered, was central to that decades-long climb. The chemistry of the fostering, carrying the neurodynamics beyond the habits⁹ of an axial super-ego,¹⁰ is complex, only slowly maturing as a topic of standard empirical method, not yet at all effectively seeded.

So: I bring us back, thus nudged forward, to the problem you and I now share with the seminar group, or rather to the problem that I struggled to share with the seminar group, the problem that I struggle to share with you.

Very obviously - is it not? - the problem is, and was, to share the question, "What is Functional Research?", in a seeding seething manner. Seething: what a wonderfully suggestive word! Your neurochemistry resists, as did that of the seminar group, the pressure-cooking which, if it is to be successful, needs to be a simmering thing, a simmering think. But very non-obviously the problem is, and was, to share the problem of history, the real catch of us being gorillas in the myst. And where to might we now go, in our pre-question poise? Might I invite you to fetch your copy of *Insight* and your copy of *Method* and open *Insight* at chapter 7 and *Method* at chapter 6? The two books sing the same sad song through their 20 lines. Do turn later to your two books, read the two paragraphs. Pause, perhaps, suspiciously, to count the lines of each to see if McShane is cheating or mistaken?

I assume that convention carries you to read on, so best to place in your face, **bold-faced**, the first two sentences, sentences that may well sentence you as guilty of not having been **broadened**, not having being gripped by what was **outlined**. I pass over the two chapter titles: it is painfully obvious that we skim past reading these words, where "the author may be speaking of P, the reader may be thinking of Q. In

⁸Lonergan, *Topics in Education*, 236.

⁹See *Quodlibet* 3, "Being Breathless and Late in Talking about Virtue."

¹⁰See *Humus* 2: *Vis Cogitativa*: Contemporary Defective Patterns of Anticipation."

that case sooner or later there will arise difficulty."¹¹

But let us face, face-to-face, Jill and Jack,¹² our two first sentences: "**The** illustrative basis of our study must now be broadened";¹³ "In the preceding chapter there were outlined some of the chief characteristics of the first functional specialty, research."¹⁴

Here, of course, we desperately need an el-bow to the ulnar nerve of the funny bone. "Proofless, purposeless laughter can dissolve honored pretense; it can disrupt conventional humbug; it can disillusion man of his most cherished illusions, for it is in league with the detached, disinterested, unrestricted desire to know."¹⁵ But should I venture to satirize the conventional reading of the previous chapter in *Insight*, on "Space and Time,", or the over-optimistic outline of the previous chapter in *Method*, a chapter which broadened startlingly and startingly that basis of "the concrete intelligibility of space and time," pointing us towards the second time of the temporal subject?¹⁶ Later in that same page 649 - a lotto page indeed, at least in Canada! -Lonergan comments on the weakness of satire: "the satirist is likely to clip one head off the monster he attacks only to witness another sprout out in its place". Each of those two chapters is "a natural bridge over which we may advance"¹⁷, of which bridges, weaved together or double-decked, one might startlingly startingly claim, "finally the

¹³*Insight*, 196.

¹⁵*Insight*, 649.

¹¹*Method in Theology*, 158. This section of the chapter on Interpretation is on "Understanding The Words", and it drives towards the reader noticing that "the meaning of a text is an intentional entity" (ibid., 159).

¹²See "Cognitional Structure", *Collection*, 1988, 215-18.

¹⁴*Method in Theology*, 149.

¹⁶*The Triune God: Systematics*, 403.

¹⁷*Insight*, chapter 5: the first paragraph.

concrete intelligibility of space and time is indicated."¹⁸

But what if D were Dialectic and A, B, C, were functional research, functional interpretation, functional history? Yet I leap ahead, scorning present probability-schedules of "level of one's time"²⁰ "elitist"²¹ readership.

Let us stay with the *Insight* text. "In this case we may suppose that the probabilities of the single events are respectively the same as before, but we cannot suppose that the probability of the combination of all events in the set is the same as before. As is easily to be seen, the concrete probability of a scheme beginning to function shifts the probability of the combination from the product *pqr* ... to the sum *p* + q + r + ..."²² It is not easy to hold to thinking this through in terms of populations and probabilities: one slides into the conventional thinking in terms of chance, a gambler's

¹⁸*Ibid*.

¹⁹Insight, 144. ²⁰Method in Theology, 350.

²¹*Ibid.*, 251.

²²*Insight*, 144.

domain.²³ But a decent struggle can get one to a sound conviction that, holding grimly to population-thinking, "the probability of the combination of events constitutive of the scheme leaps from a product of fractions to a sum of fractions."²⁴

Now the pre-human leaps of emergence were leaps of nature, fomented by finality.²⁵ The significant leaps in our human world, and increasingly so in the past million years, are leaps of minding. "The specific difference of human history is that among the probable possibilities is a sequence of operative insights by which men grasp possible schemes of recurrence and take the initiative in bringing about the material and social conditions that make these schemes concretely, possible, probable, actual. In this fashion man becomes for man the executor of the emergent probability of human affairs."²⁶

You are, I hope, still with me in the concrete, in savouring the good and its emergence, and the particular focus of the space-time distribution of these two chapters of Lonergan? The final issue in both is "the concrete intelligibility of space and time," with *Insight* emphasizing, at that stage, the pre-human, but with *Method* the emphasis moving to "the still larger process of human history."²⁷

That larger process becomes Lonergan's agony in the concluding section of *Insight* chapter 7. "What on earth is to be done? I have done all that I can in spare time and without special opportunities to have contact with those capable of guiding and

²⁴*Insight*, 144.

²⁶Insight, 252.

²⁷*Method in Theology*, 144.

²³See Philip McShane, *Randomness, Statistics and Emergence*, Gill, MacMillan, and Notre Dame, 1970, chapter 4, "Reasonable Betting".

²⁵This topics involves a spectrum of fresh investigations regarding divine cosmic efficiency, natural resultances of finite forms, the exigence of material spirit, the dynamics of the eschaton.

directing me.^{"28} No special opportunities had emerged in the life that bubbled through his little solitary typewriter 16 years later than this quotation's typing, both typings edge-of-the-seat stuff, feebly marking-out "an intentional entity"²⁹ of "his character,"³⁰ growing, over decades, into a deep solitude.

What is to be done has to have characters functionally poised against the "abominable conduct"³¹, characters dedicated to a shatteringly novel collaboration.³² But what sort of functionality? "The answer is easily reached"³³ if you let the question ferment in your nerves for a dozen years. The answer "has to do with method,"³⁴ but somehow it must give a lift, a leap, to the "four functions of meaning."³⁵ The leap must surely be one that shifts little probabilities from products to sums, lifting what would seem, and perhaps is, "effete"³⁶ in-talk of predominantly common sense and nonsense to a new time of humanity where "to speak effectively to undifferentiated

²⁹Method in Theology, 159.

³⁰*Ibid.*, 356.

³¹The conclusion of the first section of chapter 14 of *Method In Theology*.

³²On character, see note 49 below, Regarding collaboration, think of the 29 occurrences of that word in those ten pages (*Insight*, 740-50) on"Resumption of the Heuristic Structure of the Solution". The problem there held Lonergan's attention for another 12 years.

³³The beginning of the final paragraph of chapter 5 of *Insight*. I cannot but recall the Summer's day of 1966, in his little room on the sixth floor of the Bayview Regis College when, with four fingers of two hands pointing to each other, he remarked to me "well its easy: you just double the structure".

³⁴*Insight*, 268; the second last paragraph of chapter seven.

³⁵*Method in Theology*, 356.

³⁶*Ibid*, 99.

²⁸I quote from the conclusion of the agony of his letter of 1935 to a Superior: Pierrot Lambert and Philip McShane, *Bernard Lonergan. His Life and Leading Ideas*, Axial Publishing, 2010, p. 154. The letter is presented in full there, 144-154.

consciousness^{"37} would become almost unnecessary. Functional Research would hold hands with Functional Communications on the plane, the sphere, of common sense, with the modest task of fine-tuning a very livable life.

But I write, of course, in strenuous chemical foundational fantasy, infested with complex schedules of recurrence-schemes, of a later time in the longer cycle of incline. The seventh millennium, perhaps,³⁸ will be refinedly effective in its efforts "to protect the future against the rationalization of abuses and the creation of myths."³⁹ Is this totally off the wall?

Let us return to that agony of *Insight* chapter seven, section 8. Cosmopolis was there given characteristics,⁴⁰ and here I wish us to push our fantasy so as to breed in our psyches images of character statistics, regular occurrences of patterns of neurochemical patterns that are to be an inner dynamic towards making our human pacings on "the earth, and every common sight, take on the glory and the freshness of a dream,"⁴¹ a vivid anticipation of the eschatological life of "Infinite Surprise." ⁴²

So, to the agony we may add an ecstacy of envisaging "Common Sense as Object" of concern of subjects-as-subjects.⁴³ But I would note that the adding is no mean task: it is a task of kataphatic contemplation, not mystical but molecular, and it will take

³⁹*Insight*, 265.

⁴⁰ In *Joistings* 22, "Reviewing Mathews' *Lonergan's Quest* and Ours" I bring out the identity of the reach of Cosmopolis and the reach of functional collaboration.

⁴¹*Insight*, 556.

⁴²The final two words of the Epilogue, "Being and Loneliness", of *Wealth of Self and Wealth of Nations: Self-Axis of the Great Ascent*, available on www.philipmcshane.ca.

⁴³See *Phenomenology and Logic*, the index on *Subject*.

³⁷*Method in Theology*, 99.

³⁸I think especially here of the transformed New Covenant when money is luminously a promise, cherished globally as an integersonal loveliness.

generations to sense and taste.

I have regularly, in recent years, written of "a hundred years or so"⁴⁴ and once of five hundred years after the fading of Lonergan's pointers.⁴⁵ But I have also written of the past of 13.7 billion years, of a human future under the sun of 2000 billion years hence, of an eschatological future that is limitlessly surprising for all of us, and of an all of us that could go on increasing, an open road to an infinity of humans. Such suggestions require neurodynamic ingesting to reach lodgment, and it is slow, blossoming in an Episode like that of Lonergan mentioned at the beginning, or that of us in **bold-faced astonishment**, that has still slow paths to lodgment. "Episodes that are destined for long-term memory are not lodged there straight away. The process of laying them down permanently takes up to two years."⁴⁶

I would now have you fancy, and indeed that for a couple of neuro-maturing years - our seminars are to last six - not the micro-time of a century or the macro-time of an eschaton, but the meso-time of the climb to the seventh millennium, to the year 6011.

The suggestion relates to the book I outlined, Prefaced and Introduced in the essay *FuSe Zero*. But let me elaborate a little here, road-mapping towards a psychic vortex. Let us imagine, THEN⁴⁷ and then, a population of 10,000,000,000 on the earth at that later stage of meaning, and push on with my optimism to fancy that there would be

⁴⁴A regular theme in the poetry of Patrick Kavanagh. It dominates my website book of 2008, *Lonergan's Standard Model of Effective Global Inquiry*.

⁴⁵See my Website book, *The Redress of Poise*, Chapter 5, "Systematics: a Language of the Heart" contains this imaginative reach, beginning in the text after note 8.

⁴⁶Rita Carter, *Mapping the Mind*, Phoenix pb, 2002, 268.

⁴⁷*Cantower* 5, is titled "Metaphysics, THEN", pointing to a lift of fantasy needed to rise to a new paradigm of global thinking. It begins with the two final poems of Samuel Beckett. [1] "go where never before / no sooner there than there always / no matter where never before / no sooner there than there always"; [2] "go end there / where never till then / till as much as to say / no matter where / no matter when "

roughly 250,000,000 Tower People, people who embrace the world "theoretically" in its full sense,⁴⁸ integral **characters**.⁴⁹

First I invite you to muse over the model I have used in teaching, these past years, where I was led by thinking of Gandhi's India of 10,000 villages. Suppose that there is a functional researcher in every village:⁵⁰ so, 10,000 researchers . Correspondingly I think of 10,000 members of the eight specialty, mediated executives of meaning. Then we have to imagine, with some realism, the other communities of the Tower, and in my model I settle for less people in stages of the cycle forward to dialectic: so, 1000 Interpreters, 100 functional historians per 10,000 villages, and a dialectic community of 10 dialecticians. Correspondingly, I envisage 10 foundational persons, 100 people focused on policy, 1000 people modifying the standard model of a genetic system of Pragmatics. At the end of the cycle we arrive again at the 10,000 villages each with their glocal⁵¹ meaning-executive. The numbers estimated add up to 22,220, the number of people caring in Cosmopolis fashion for the 10,000 villages. Is this enough structured care? But that question needs a more concrete context to which I return shortly.

Before that I now shift the image from village to population and up-scale the proportions: 222,200,000 tower people caring cyclically for 10 billion. A simple matter, this, of upping the number of Tower people to a quarter of a billion or 250 million. That gives 250 Carers - recall Plato and his guardians of Athens - per 10,000 people or, with a

⁵⁰Recall *For A New Political Economy*, 37: "it will make the practical economist as familiar a professional figure...." and ditto the functional researcher.

⁵¹Not a new word of mine: it has been around for some time, bringing together the view expressed in the slogan "think globally, act locally". The slogan has a much more refined meaning in our context.

⁴⁸See *Insight* 442.

⁴⁹Recall the beginning of *Magna Moralia* and section 1 of *MIT*, chapter 14, to which I have referred too often on the nature of **character**.

little mathematical juggling, what comes to 1 functional researcher per 100 people.

We could and should push for a more realistic number, so that the Tower Community would be increased for fuller effectiveness. We are looking for a solution to "the problem of general history, which is the real catch,"⁵² and we arrive at the heuristic notion of the topologically-complex Tower moving upwards on the plane of the Standard Model.⁵³

Identically we are looking towards the methodological solution to the problem of *Cosmopolis* : the functional collaboration adequately populated, in a culture of care and leisure.⁵⁴ To get further in our push for a more realistic view of numbers, we need various shifts of perspective, treated elsewhere at greater length.⁵⁵

One has to envisage, Tower-WISE, in a concrete schedule of probabilities, the shift to a novel format of specializing that is to be generated by fully luminous generalized empirical method,⁵⁶ and its educational equivalent, the Childout Principle, "when teaching children geometry, one is teaching children children."⁵⁷ First there is the tandem process in any discipline; then there is the metaphysical context of each endeavour. The standard Model of UV + GS + FS is to be a presence in the tower community: again, a topic requiring much larger treatment than is possible here.⁵⁸

⁵² Topics in Education, 236

⁵³See Pierrot Lambert and Philip McShane, *Bernard Lonergan. His Life and Leading Ideas*, (Axial Publishing, 2010): the last of the Lonergan Images 160-163.

⁵⁴See *For A New Political Economy*: the index on *leisure*.

⁵⁵Perhaps the neatest reference I can give here is to the recent (2010) book from Axial Publishing, *Sane Economics and Fusionism*.

⁵⁶See *A Third Collection*, 141, the top lines, a massively important shift from the simpler view of *Insight*.

⁵⁷See *Cantower* 41, "Functional Policy"

⁵⁸A decent introductory account is given in section 3 of FuSe 10, "FS + UV + GS".

We next need to build these shifts into a major creative shift in our imaging of the plane of common meaning.⁵⁹ The creativity especially relates to the divisions of labour of the academy that "matured" into disciplines especially in the 19th and 20th centuries, a "maturity" in conflict with the normativity of *Insight*'s "theoretical understanding seeks to embrace the universe,"⁶⁰ but, more deeply, in conflict with the pilgrims' progress.

We seem to be talking here of a subgroup of humanity within a culture of serious understanding, be it Towering or somehow in the plane of common meanings. BUT that culture of understanding is to be, minimally, such a cultural presence as is the periodic table in present culture, and more generous musings are to see and seize on, effectively, a global psychic resonance that lifts town-and-gown into the psychic presence of mystery talked of in the first section of *Insight* 17. There is, then, THEN, a movement towards, as *Insight* chapter 20 has it, "living human bodies linked together … in the intelligently controlled performance of the tasks of world order."⁶¹ How strange that control will be is quite beyond our present fantasy: a billion half-acre gardens, perhaps, with nano- and micro- and bio-mimetic- technologies giving the average ten occupants of each a global intimacy and a local sufficiency? Will money have disappeared, as Lonergan suggests in *For A New Political Economy*?⁶² What certainly will be established globally is a **New Covenant of Promise** : so, we have to innovate a deep

⁵⁹It is useful to think of this shift as going from section 1 of *Method in Theology*, ch. 14 ,"Meaning and Ontology", to section 2, "Common Meaning and Ontology"

⁶⁰*Insight*, 442.

⁶¹*Insight*, 745.

⁶²"Nor is it impossible that further developments in science should make small units selfsufficient on an ultra-modern standard of living to eliminate commerce and industry, ro transform agriculture into a superchemistry, to clear away finance and even money, to make economic solidarity a memory, and power over nature the only difference between high civilization and primitive gardening."(*For A New Political Economy*, 20)

new meaning of *Transition* in the title of chapter 3 of *For A New Political Economy*. **Concomitance**, the key word in the index of that book,⁶³ becomes an operative democratic reality.⁶⁴.

This is altogether too compact a naming of the fruit of five millennia of dedicated creative. And there are a legion of other aspects to this dynamic of progress, but I should halt abruptly, and, in conclusion, turn briefly to the need of our time.

That need is expressed in the effective envisagement of a diagrammatic support system, one we cultured folk must strain fantastically to live by and accept as identifying scandals of our entrapments. a geo-historical imaging of an ongoing, overlapping, intertwining land-zones and sea-zones and mind-zones that sublates Lonergan's talk of ongoing contexts, the ongoing genesis of methods, the unyielding operative presence of the two canons of explanation.

And I would emphasize again, and finally, the task of fantasy. Not at all enough has been dreamed or thought or said about the towering task of foundational fantasy required : dreamed and thought and said within those diagrammatic icefields, in terms of realistic heuristic schedules of probability of recurrence-schemes, and of a heuristic realism that is to be ongoingly concretized by the three specialties that follow foundations, that feed into communications of the C_9 type, that give spherical⁶⁵ feedback to the functional researchers, in and out of the Tower, so generating

⁶³See, there, the Introduction to the Index, which may yet lead us to read, breed, and breath that entry and the conclusion of the index in a global poesis borrowed from Wordsworth: "And now I see with eye serene, the very pulse of the machine"

⁶⁴See the sophisticated image of oscillations of global credit in *Sane Economics and Fusionism*, chapter 6.

⁶⁵I use the word *spherical* here to recall the concrete heuristic needed, minded, but obviously the full heuristic of the groups would be tuned to real detailed asymmetries: the thinking is geographic, land-sea, city, mountains etc. Think, in tentative heuristic, of structures of fixed communications over the land mass (30% of total surface area of the earth) of 150 million square kilometers (or 57 million square miles).

"cumulative and progressive results."66

And now perhaps each of us might read again the title question, "What is functional research?", and find that the chemistry of that voiced or printed quest-mark reverberates just a little better in our psyches, tuning that chemical miracle of evolution's infolding to all of finitude's yields and yearnings, "as it was in the beginning", as it was in the chemistry of that first second, 13.7 billion years ago.

⁶⁶*Method in Theology*, 4, 5. I note that I have minimized mention of religion here, natural or supernatural, and continue to do so throughout the first eight seminars, though it is not easily avoided. There is a growing ethos of a psychic acceptance of "a friendly universe"(*Method in Theology*, 117, line 13) which is not just *The Coming Convergence of World Religions*,(Robley Whitson, NewYork, 1971)