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*Cantower II*

Sunflowers Speak to Us of Growing

May 1st, 2002

Sun, flowers, Son-flowered,  
Speak to us of growth  
Seed cauled, cribbed,  
Kabod yet confined,  
Crossed with dark earth,  
Light-refined,  
Rill open-ends a trill  
Annotaste of Throat.

1. The Central Foundational Question

I just now typed the final sentence of this essay, leading back to the poem, and find myself a stranger to the person who started with this poem.

I am, in general, a stranger to myself of last week: does this have some meaning for you? Were I to meet myself of last week, perhaps it would take a pedagogical day to bring that stranger up to speed on what is called the level of mind, but even at its best there would be molecular deficiencies in my cloneself. So, I might introduce a little lightness of humour by claiming that this essay is about a challenge: ‘to thy cloneself be true’. What could I possibly mean by *that*? I mean that, if you are integrally and harmoniously growing in meaning, then there is a pace of harmonious intussusception, mutual mediation of self and cosmos. Might I throw in the word *sunflowerwise*? Of course, if you are thus harmoniously growing, then you have reached a strange level of enlightenment, sublating Zen and Ken enlightenments into a Then enlightenment.
Perhaps a Western turn might help. There is Marcel, with his sense of nescience and
growth and mystery. Precisely thirty years ago I typed into an essay title “Being and
Loneliness” a quotation from Gabriel Marcel’s Being and Having: “.... the thinker, on the other
hand, is continually on guard against the alienation (through inertia), the fossilization of his
thought. He lives in a continual state of creativity and the whole of his thought is always called in
question from one minute to the next”.¹ I have been coming to grips increasingly with this
perspective in the past few years but it may surprise you to read that only in the past weeks did
the second sentence of this section become evident to me: that I am a stranger to myself of last
week. Indeed, it astonished me, still astonishes me, to see my previous selves missing the point
for years.

I had known, of course, that there was such a reality as adult growth and growth in
meaning. I spent many hours in 1958-9, in my third year of philosophic studies, pondering
Thomas’ texts on crescentia.² My previous writings are liberally laced with reflections on
elderhood and adult growth, with views of psychologists, views of artists, views from Africa and
India and China and Japan. But what was missing from my previous selves was the
contemplation and exploitation of a key analogy of nature - Aquinas’ famous sicut. The analogy
was, so to speak, staring me in the face: it was one I regularly appealed to when criticizing
philosophical and theological education: my experience of teaching mathematical physics. It only
needed a twist.

Classic mathematical texts are laced with the phrases, ‘it is easy to see from this’, ‘il est
facile a voir’, ‘es folgt gleich darauf’. There is the old chestnut regarding the two mathematicians
sharing their insights. A writes an equation and uses one of the above phrases. ‘I do not see this’

¹Gabriel Marcel, Being and Having, Fontana, 1965, 181.

²See the beginning of chapter 2 of Process. Introducing Themselves to Young (Christian)
Minders.
is the reaction of B. They part. B spends some hours in her office on the equation and its consequents. Her remark to A later: ‘yes, its obvious’. Might we not bring this truth regarding the simplest of subjects, with satire and humour, into other areas of meaning? Human understanding’s reach beyond naming is horrendously slow-growing, and the luminosity of that, somehow compactly haunting the early first stage of meaning, is to be a reality of the distant third stage of meaning. But there is, in our axial immaturity, the odd anticipatory sport of growth and luminosity like Lonergan, self-critical of his own reaching: he grew in his appreciation of his “potency in the realm of intelligence.”3 During his two weeks of 1971 in Dublin we had many conversations on reachings: I had the privilege of being his constant chaperon. I recall him remaking, as we paced our way between lecture hall and residence, “that was much better than Method”4: but who was it better for, or would the improvement be noticed? Late one evening, brightened by Scotch, we talked of basics of his view. I asked him when he reached precision on the meaning of ‘is’ (is? is! is.): his answer, “when I got that far in Insight”. Is this in conflict with my view regarding his viewpoint in writing Insight from a mature viewpoint as a moving viewpoint?5 By no means, and this is important to think through. I appeal to my own experience of teaching, indeed teaching a particular piece of Lonergan’s work: the third chapter of Method in Theology, on Meaning. I made a point of teaching that chapter in almost every one of sixty courses taught over twenty years. The teaching normally took about ten lecture hours. I slowly reached a more serious understanding of meaning. Did my classes benefit from my growth? I

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3Insight, the final page of the Epilogue.

4Method in Theology had been completed, except for an index, finished in December.

would say, a little, but mainly because of changes in pedagogy rather than in content: in the main, the students were guided to an initial glimpse of their own wondrous capacity, need. So, as Lonergan wrote the chapters of *Insight*, solitarily, between the ages of 45 and 49, he climbed with each page. But that climb did not intrude on his elementary pedagogy. In so far as a student struggles with the book seriously for a few years, then he or she arrives at a B.A. - a Barely Adequate - level of understanding. Lonergan’s daily-shifting viewpoints of those Everest years remain massively obscure. Obviously, however, he wrote each chapter of the book from the viewpoint that he had at the time.

Now, how much of that last paragraph is obvious to you? At least, does it make sense? You may be a teacher, or a student, either in a class or struggling independently. The cultural problem of the book is that, in all cases, the meaning is very much out of reach, and it is amusing to come across the equivalent of the phrase I mentioned above, “it is easy to see that”. Teachers can admit, like myself, that there are sentences about which they do not wish to be questioned in class. So, much of this *Cantower* will be focused on a page I have been struggling with for over forty years, one I mention regularly, “study of the organism begins....” And, in recent years, I have added the twist, which I shall maintain here, ‘self-study of the organism begins....’

If you agree with me in some comprehending fashion about all this, then this is an essay of hope, of a gracehoper to a perhaps younger grasshopper. You can begin each day freshly on

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6There were certainly exceptions to this. One central one is worth noting. On page 70 of *Method in Theology* Lonergan has ten lines on Helen Keller’s 5-week struggle of 1887. By 1998, after twenty years teaching, I was able to give the more precise doctrinal pointing summarized in pages 31-37 of *A Brief History of Tongue*.


8In chapter three of *The Redress of Poise*, “The Arctic Grail”, I enlarge on this analogy.

9*Insight*, 464[489].
the infinitely-towering mountain of meaning, and you too can tower in your own unique way. But the ‘can’ is of course the problem: culture and statistics are against you. The statistics are summed up in the familiar twentieth century slogan of Maslow: less than 1% of adults grow.

Add to this the fact that Lonergan’s type of philosophic thinking is deeply discontinuous with the normal student and professorial background. Add then your circumstances and luck, or the lack of it, as a student or a teacher, and you may be able to conclude - with some honest personal comfort - that the can of the past paragraph is simply a lost potency. So, we find ourselves back at the beginning of the first Cantower. You find, to follow a musical analogy, that you like the symphony, or the nine symphonies of Beethoven as they embody his climb, but you are not going to write one or nine; you may not even be up to playing in an orchestra; you may not even be able to play that famous beginners’ Nocturne in Eb by Chopin. You may not even be able to play any instrument. So, no panic: but please struggle against the mentality that would claim, as one professor of music remarked to a class as he sketched the early bars of Beethoven’s first symphony, “this is all the Beethoven was doing here”.

I am hoping, of course, that there are a few potential symphonists reading this, perhaps in a much later decade. Then you have been lucky, or the general culture of luck has changed. Indeed, I hope that this Cantower effort has some part in that general change of luck. The third Cantower will move to particular strategies of finding one’s place: contributing as a functional specialist, contributing to progress in some other way. Here I merely wish you to notice that I am writing here mainly in terms of foundational doctrines: identifiable therefore in the matrix of specialized conversations as $C_{56}$. Further, I am trying to promote two developments, and this will be generally true in the Cantower series. The broad development is that of a slow gentle implementation of functional thinking and talking and work, not only in theology and philosophy

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10 The matrix is the 8 by 8 matrix diagrammed in *A Brief History of Tongue*, page 108.
but in general culture. The narrower objective is the “Cultivation of Categorical Characters”\textsuperscript{11}, Foundations persons. I will be well pleased if I find globally a few such lucky eccentrics cunning enough to make time for the climb. The next hundred years may see more: and here I would note that, if you are a present teacher, struggling like myself, at some level, to make sense of Lonergan’s Impossible Dream,\textsuperscript{12} then sow the seeds of more adequate foundational thinking in the next generation. Like Albert the Great, you may have a Miss O’Quinas in your class.

These next two sections are foundationally doctrinal, identifying foundational work to be done. Perhaps, psychically, the best way to read them is in admiration, as you might read \textit{The White Spider} by Heinrich Harrer: an account of the horrors of climbing the North Face of the Eiger. But what I am writing about in these two sections is the type of \textit{contemplation} that was the topic in \textit{Cantower I}, section 2.2. It is the type of contemplation that stretches foundationally\textsuperscript{13} but which is sadly rare in our time or indeed in the axial period. “Theologians, let alone parents, rarely think of the historical process.”\textsuperscript{14} Further I would note that it is the type of contemplation that breaks from the Cartesian split that haunted Existentialism.

I have suggested a strategy of reading. But there is also an ordering of reading that may be useful to different readers. The first section might be viewed as dealing with general categories, the second as focused on special categories of the Christian tradition. You might prefer to tackle

\textsuperscript{11}This was the title of the West Dublin Lonergan Conferences, 2000 and 2001.

\textsuperscript{12}A useful context here is Chapter six of \textit{Lonergan’s Challenge to the University and the Economy}, “An Improbable Christian Vision and the Economic Rhythms of the Second Million Years”. See also note 51 below.

\textsuperscript{13}There is an enormous problem here of transposing perspectives on Christian contemplation. One might take as an illustration the Exercises of St. Ignatius which begin with Foundations and end with a Contemplation for Obtaining Love, and try to envisage lifting them into a contemporary context of adequate categorical usage. See also note 61 below.

\textsuperscript{14}Lonergan, “Finality, Love, Marriage”, \textit{Collection}, 1988, 47.
one section before the other. Eventually you will find that the two sections feed on each other, and both circle round the same page in *Insight*: that odd issue of “study of the organism”. So, off we go.

### 2. Sunflowers

Here we pause over doctrines regarding listening to and thinking about sunflowers. They address us, rooted in the cosmos, with an ancestry of 3,000,000,000 years. Their address is just one aspect of their patterned capacities-for-performance. The sunflower’s address is probably best known in the West through the response of Vincent van Gogh, but for me, and perhaps for many of you, there is the greeting of the sunflower in the garden throughout its annual life. I wrote of this in *Lack in the Beingstalk* and will not repeat myself. My wife Sally is the gardener, but we both do morning walkabout, meeting the sunflowers from their tipped infanthood to their heavy-headed ten-foot tall adulthood. I spent a great deal of time last summer listening to them, asking How do you work? But you must note the strange twisting of that word *work*: you must reach, in yourself and in the flower, for the root meaning of the Indo-European *werg* or the Old English *wyrcan*: How do you do, What are your goodly habits?

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15 A first reading may well pass over the notes: these extend the doctrinal challenge, indicating possibilities of a larger foundational perspective. So, immediately I add the closest context to the present pointings, that of chapter 3 of *Lack in the Beingstalk*, with its focus on the language of flowers, the character of *haute vulgarization*, the redeemed meaning of study as *stewing over*.

16 The intussusception of that address, pondered on in Chapter three of *Lack in The Beingstalk: A Giants Causeway*, calls in the complex context introduced at the conclusion of both chapter two and chapter four of that book.

17 Sally and I meet the flowers differently: a large topic of different differentiations that calls for our attention later, in *Cantowers VI and IIX*. 
Habit, Capacity-for-performance: there’s our problem here. Were you in the habit of what I call the first word of metaphysics we could plunge forward with that blessed control of meaning, but you probably find that first word discomforting. So we will climb gently towards some elements of its meaning. We had best begin with the less terrifying reflections of Lonergan on Potentia Activa.19

We have here perhaps, in the pair capacity-for-performance and active potency, a powerful way of intussuscepting the popular or introductory nature of the book Insight. The trouble we are in lurks quietly in the only explanatory note added to that fifteenth chapter, yet if “Metaphysics as Science” is to become the desperately-needed new control of meaning, then that note must rise up and walk to centre stage.21 Perhaps I might put the matter bluntly and concisely by recalling the problem of metaphysical equivalence? What do you think of the challenge of finding the metaphysical equivalents in the case of the following sentence taken from an account of photosynthesis:

The intricate structural organization of the photosynthetic apparatus is essential for the efficient performance of the complex process of photosynthesis.

You find the problem pretty mind-boggling perhaps? And indeed it is. I see no way easy way to deal with this, where by this I mean both your problem and the problem on hand. What sort of effort will it take to begin to read such sentences with metaphysical control? I mean, of courses, in the present culture, where neither generalized empirical method nor seriously-developed linguistic feedback are operative.

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18 I discuss this first word of Metaphysics and its consequences in chapter four of A Brief History of Tongue. From Big Bang to Coloured Wholes, Axial Press, Halifax, 1988.

19 The title of the centrepiece of the third chapter of Verbum.

20 Insight, 434[459].

21 It will be nudged towards centre stage in Cantower V:”Metaphysics Then”
But I think that we have to brood over an earlier and deeper problem, an axial problem, a *Gorgias* problem. Is it really worth your while to bother with this problem at all?

Now, as I remark regularly in these early *Cantowers*, it really may not be worth your while to tackle this problem: you have other things to do, other directions to follow. Still, let’s consider the need, the emergent need, to tackle such problems.

My efforts are directed very much towards fostering a new foundational effort, so such an effort is evidently not a requirement for non-foundational people. Let me then think in terms of someone who is of a foundational bent, a philosophic bent in an older terminology - though this older name covers, in the new context, both foundations and dialectic. Here I must twist to avoid getting caught in the usual debate about the nature and scope of philosophy: so let me presume that we are thinking of someone who would wish to have an adequate heuristic of what’s going on. That someone is not content to just glory either in the morning sunlit sunflower or in the artists efforts to vie with nature. That someone would wish to listen to the language of the sunflower with the openness of an advantaged friend. It is the openness that is the yearning to understand, to understand wholly and wholesomely. Is it a yearning for a rich concept of the sunflower? It is much more than that. But do not take this as a rejection of the ‘concept’: it is rather an affirmation of context. The sunflower is in the garden and the garden is in the field.  

So, if there is a yearning for a rich concept of the sunflower it is a yearning for a concept of the sunflower reaching out of the earth towards the sun in its galactic turnings. But notice now that the point cuts the other way. Might you be yearning for a wholesome vision of the whole? Then the sunflower calls for your attention.

Nor am I saying anything that I did not learn from Lonergan - an important point to which we must return. So it seems worthwhile to quote at length from some notes that are related

22Note the ambivalence of *field*. See the index of *Phenomenology and Logic* under *Field*: see also chapter three of *Lack in the Beingstalk: A Giants Causeway*. 
to his work of the *Verbum* articles.

“The conceptualization of understanding is, when fully developed, a system and one must advert to the implication of systematic knowledge in the Aristotelian *quod quid est* if one would grasp the precise nature of the concept; the concept emerges from understanding, not an isolated atom detached from all context, but precisely as part of a context, loaded with the relations that belong to it in virtue of a source which is equally the source of other concepts....”23

One may lift that quotation a level by noting that the conceptualization of understanding in the fuller sense that Lonergan describes in various ways is also a system loaded with relations, but now the system is the total field, and its strength is the strength of its weakest link. Further, that conceptualization is what is sought in foundations. It is the system that is the symphony of being, and the described sunflower has a place there only by a twisting round of the loaded relations of sensibility’s take. Metaphysical equivalence is the key to balancing the loads in favour of a heuristic that can control the necessary flights of fancy that belong to foundational thinking.

But all this can be, as it is, merely a summary of the summary considerations of chapters fifteen and sixteen of *Insight*. In very simple terms, the foundational person must reach for an understanding of the flower if the field is not to be essentially misconceived. But the ‘must’ is not some burden for the foundations person, but a quite joy-filled task, like the request lurking in the title, “Sunflowers, tell us of growth, tell us of molecular capacities, for we too are molecular desire”.

But this reaching is as yet not foundational work - and this statement you perhaps find astonishing. Above, I mentioned learning from Lonergan. Recall now what I wrote regarding his own foundational effort in *Cantower I*, section 3. It was, in many senses, a recovery, a learning.

23Quoted in an Appendix to *Verbum: Word and Idea in Aquinas*, University of Toronto Press, 1997, 238. This edition will be cited in future as *Verbum*. 
an integral bringing up-to-date. This is true even of the point that is the focus of our attention in this section: the metaphysics of capacity-for-performance. It is not true of his creative achievements either in economics or in specifying functional specialization. The recovery and integral up-dating was magnificent: but it is primarily, especially when systematized in the new hodiic context, a dialectic effort. So, when I write here of the foundational person growing and going forward, I need to draw attention to a distinction between the less strenuous learning and the risky lucky reaching forward towards structured fantasy.

Here I am emphasizing learning rather than reaching creatively in fantasy. But you may well be an aspiring foundations person and still be quite chary of this challenge to come to some explanatory grip on the flower, the sunflower. There is, you may say, already such a vast amount of foundational work calling for our attention. But what is this foundational work of which you think? It cannot be, on present terms, the work of sorting out various views on foundations, for that is the task of the previous specialty.

You have your thematic foundations, more or less developed. If they require development, then you must learn with a bent towards futurology. The learning, in so far as the functional specialties develop, is not a matter of a venture back into history but a venture in generalized empirical method in its requirement of explanatory understanding. Best repeat that here: “Generalized empirical method operates on a combination of both the data of sense and the data of consciousness: it does not treat of objects without taking into account the corresponding operations of the subject; it does not treat of the subject’s operations without taking into account the corresponding objects”.\(^{24}\) This is a methodological doctrine that sublates the stuff on metaphysical equivalence and its significance in *Insight* chapter 16, sections 3.3 and 3.4; but the twist here is tougher on the standard axial scientist in that it points to the need for self-luminosity in method. However, our concern here is with the foundational person, who sublates

\(^{24}\) *A Third Collection*. Paulist Press, 1985, 141.
that particular task of metaphysics that is creative implementation. Section 3.4 should be pondered over in this new context that calls in both the cycling of hodic method and the general doctrinal pressure on the scientist and on any thinker to rise to the context of the times. The pragmatics of the implementation of this is a topic for later *Cantowers*.

So really I am not saying anything different from Lonergan; and indeed I am, sadly, repeating something I wrote of thirty years ago, where I emphasized precisely what I am emphasizing now, when I wrote of having something serious to say after one’s middle years. “But, one may ask, can it be that the cultivation of the adequate contemporary *Weltanschauung* requires the contemporary thinker also be a botanist, not to speak of chemist, sociologist....? An immediate answer to the objection implicit in this question would point out that one can reach first degree level in any of these fields in a few years, which is not long compared to the lifetime of the philosopher or theologian. It is not then a great sacrifice for the enormous benefit of coming intellectually into the twentieth century”.25 In the intervening years there have not emerged foundational persons of this bent. Certainly the emergence is a matter of luck, opportunity, talent. And I suspect that the luck of being pointed in the right direction was not there in the last teaching generation of Lonergan students. That generation was not of a scientific bent, indeed I would say that what I called *theoretic conversion* was somewhat alien to them. The present generation are no better off. But might I at least again nudge those teaching now to notice the inadequacy of their own education, their breathless lateness,26 so that there might be some shift in the statistics of foundational competence in this and the next century? But it may well be

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25"Image and Emergence: Towards an Adequate *Weltanschauung*” was one of two papers presented at the International Lonergan Florida Conference of 1970, this one on botany, the second on musicology, published then as *Plants and Pianos*, (Milltown Institute, 1971). They form the first two chapters of *The Shaping of the Foundations*, available on this Website. The text quoted is just below footnote number 142.

26*Insight*, 733[755].
that the shift will depend primarily on the shift of scientific consciousness that I deal with in *Cantower IV*: “Molecules of Describing and Explaining”.

Now you may well say that this project of learning towards foundational competence is very much tied to believing in Lonergan’s achievements and directives. First, I would say that, yes, there is an element of belief: but that I am assuming, at least in the initial stages of my *Cantowers*: that my readers have been attracted by Lonergan’s work. Secondly, I would note that the attraction to Lonergan’s work cannot be uncritical: its pursuit is a pursuit that drives towards minimizing belief. Thirdly, try some other foundational suggestion, like that of Butterfield or Bertalanffy. But my central point is that, from whatever foundational perspective you are in now or with which you wish to align yourself, your work must be a positive effort to intussuscept luminously the best contemporary understandings of the various zones of an integral reality and to push forward heuristically. It is this latter push that is the essence of foundational work.

Have I any foundational takers? I don’t expect a crowd, even though the reach is towards what eventually will be a global community of foundations persons, *Sargawits*.27 “What will count is a perhaps not numerous center.”28 But if you have that bent, a want to be luminous about all that is as best you can in your own time, then I would appeal to you to give it a whirl.

Later we will have to reflect on your strange Socratic and global role. But here the interest is in the grim climb of your self-education in a culture that is alien to the “theoretic understanding

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27 A marginal note in the “Triv and Quod” section of Joyce’s *Finnegans Wake*, 294, gives “Sarga, or the process of outgoing”. “Sarga’ is the Sanscrit for ‘process of world creation or emanation’.

that seeks to solve problems, to erect syntheses, to embrace the universe in a single view".\textsuperscript{29} You may have that bent, against the odds, in philosophy or in any zone of inquiry. In a century of two, I hope, it will be against the odds not to have it, and people will wonder how the madness of narrow specialization ever emerged in human society. But for now you are probably very much on your own. What to do? Treat your bent as an eccentric hobby. Pursue it as an apparent aside as you wend your way in your own studies in your own zone, be that musicology or linguistics or whatever - or philosophy or theology. In the latter two areas you may well have the opportunity to juggle your interest towards the center. Perhaps a thesis has to be written: so, you might turn towards the philosophy of biology or towards a theology of economics. Let’s pause over those two suggestions.

I have written elsewhere about Lonergan’s economics as a way into serious thinking for Lonergan students,\textsuperscript{30} and there is no need to repeat my advice, the relevant doctrine, here. Already there are stirrings among honest admirers of Lonergan: how can I admire this man and his view of democratic creativity and dodge the challenge of contributing to a democratic understanding of economic reality? Am I happy being unenlightenedly abused by a hierarchy of invincibly ignorant people, ranging down from Greenspan and his ilk through polititian’s and tax-mongers and bureaucrats all the way down to my local bank manager? And obviously, if you have the bent towards luminous living that we are considering now, you will have to take a year or two or ten to figure out just what the normative rhythms of macro- and meso- and micro-economics are.

Am I serious when I mention a decade? Well, what else are you going to do with the rest of your three score years and ten? Go back to puttering through the works of Kant or Husserl or Rahner

\textsuperscript{29}\textit{Insight}, 417[442]. This quotation is the central topic in section 2, “Pert Directions”, of \textit{Cantower IV}: “Molecules of Describing and Explaining”.

\textsuperscript{30}\textit{The Redress of Poise}, chapter one.
or von Balthasar? These works do not belong in the foundational enterprise.

So, what of the philosophy of biology? I have already mentioned some Lonergan-oriented leads in “Image and Emergence: Towards an Adequate Weltanschauung.” If you are lucky enough to be able to wangle your way into that area, then watch your step: a director could well misdirect you into some idiot comparison, like “Lonergan and Crick on Biological Identification.” Obviously if you are really stuck with such a thesis, keep you enterprise going while you churn out 5 erudite chapters in 5 months and pass them in slowly, over at least a year. But you might be tricky enough to get to do your own thing: then your own thing might well be the listening that my title invites. Someone has to write a decent thesis on genetic method!

But was that not our focus here? By no means. I do not wish to contribute, in so far as I can avoid it in the present culture, to the Doctrinaire’s Disease. Still, are we not getting somewhere in this teaching of us by Sunflowers? It works wonderously from dawn to dusk - literally - on or within the task that got us moving, that task described in the heavy print above or on the next page. What I wish you to do now is to place that task in the context of those two chapter, 15 and 16, that are immediately relevant to us. The heart of the matter, of course, are the suggestions of page 464[489] that I annoyingly return to regularly and twist, “self-study of the organism begins....” Notice the paragraph before that, that begins reflection on organic development. Lonergan is asking the same question as we are with regard to understanding the organism that is the sunflower. How to begin. Follow the successful scientists. Work out your

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31Chapter one of The Shaping of the Foundations. Lonergan, during the conference, remarked to me that “it just opened up area after area”. But for whom? I suspect that one area he was referring to was my reflections (beginning at note 81, introduced at note 91) on autonomic form, which for him is related to a “natural potency which, though receptive, nonetheless makes a significant contribution to its acts”(Verbum, 149; there he also notes that “the neglect of natural potency has some bearing on unsatisfactory conceptions of obediential potency” - see also 219). Chapter three of The Shaping of the Foundations also deals with biology: “Zoology and the Future of Philosophy”.
own structures of the struggle as you go along. It is like a mountaineer’s advice to an enthusiast: go to the base camp and learn, so slowly, as you move on up, to breath the thin air. But you have no models on the mountain, so as you pick up on the scientists of your topic you have “to imitate them not slavishly but intelligently”.32 And you are now into reading that second paragraph, about beginning. If you have a suspicion of aggreformic thinking - a massively challenging personal climb that you may remember in its grim months and years - then you venture into the texts and the laboratories of present biologists as a discomforting alien presence; or you read their works as alien to you, colonized by warps of present language. If you have not come to grips with aggreformic thinking, then this is your start. I think now, of course, of my own struggles through the 1960s, some of them expressed all too briefly in the writings of the time. Summary talk here would be just like a reducing of the size of a previous mapping of a mountain.

But what can be done in a short space is to add to Lonergan’s invitation of section 15.7.2 of *Insight*, an invitation to a change of mood. It is the invitation and the mood of chapter three of *Lack in the Beingsstalk*, where I try to revive the meaning of *study*, by reaching for the Indoeuropean roots of the word in you. Did Aristotle have such roots alive in him when he thought and wrote of the greenness and the growth of plants? But do not be distracted: that question is for the dialectician, though you might enjoy the mood of the man as an ancient fellow traveller. “Let us now investigate what we have already mentioned, namely, desire in plants, their movement, and their soul and its function.”33 But the investigation must be a friendly stewing, “in a friendly universe”.34 We are back at the wonder, the gentle sneaky but unobtrusive

32*Insight*, 463[488].


34*Method in Theology*, 117.
contemplation, of what these sunflowers, these flowers, these greeny things, do for a living. We are back with our single heavy sentence. “The intricate structural organization of the photosynthetic apparatus is essential for the efficient performance of the complex process of photosynthesis”. Not a very friendly sentence, is it? Not at all like the conversation *The Little Prince* had with the flower.35 And at the beginning of that same standard treatment there is more of what I might call Cartesian unfriendliness (no wonder the existentialists backed away from science!). “Photosynthesis, which means getting together with light is the process by which green plants and certain other organisms transform light energy into chemical energy. During photosynthesis in green plants, light energy is captured and used to convert water, carbon dioxide, and minerals into oxygen and energy-rich organic compounds”. So much for the warm poised doings of Van Gogh’s smiling sunflower!

And now we are closing in on one feature of the task of foundations persons. Can you glimpse it, sense it? “If we had a keen vision and feeling of all ordinary human life, it would be like hearing the grass grow and the squirrel’s heart beat, and we should die of that roar which is on the other side of silence. As it is, the quickest of us walk about well waddled with stupidity.”36

You must, decadewise, recover greenness. “Who could have thought my shrivelled heart / Could have recovered greenness?”37 You must reach for the genuine understanding that is a human intussusception, lifting the flower from the pinhold of pseudo-science, like Leopold Bloom “tore the flower gravely from its pinhold smelt its almost no smell and placed it in his heart pocket. Language of flowers. They like it because no-one can hear”.38

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35 See *Lack in the Beginstalk: A Giants Causway*, section 2 of chapter three.


38 James Joyce, *Ulysses*, 1986, 64.
That lift, in the axial present of cumulative deterioration, is certainly a zone of fantasy: the task of the global community of Foundations persons, categorial characters, is to reach for recurrence schemings of institutionalizable categories and sub-categories of implementability that mesh creatively with actual probabilities, twisting through the other specialties and ex-planeing into schools, industries, governments.

But you cannot glimpse it, sense it, through this short read: so there is the foundational climb to taste and self-taste. The simple general formula

\[
\text{CO} + 2\text{H}_2\text{O} \rightarrow \text{(CH}_2\text{O}) + \text{O}_2 + \text{H}_2\text{O}
\]

must become a pointer to remembered and membered contemplation. The aggregate of chemical acts that are named (things in their own right, but not when they are ‘planted’) adenosine triphosphate (ATP) and nicotine adenine dinucleotide phosphate (NADPH) must rest easy within your first word of metaphysics and the manner in which these aggregates wind in and out of such cycles as the reductive pentose phosphate cycle (producing the aggregate of acts that is, when free, a thing called Gal3P) must be comfortably identified as recurrence-scheme-structured secondary determinations, all part of the sunflower’s act. This all fits - oh so slowly - into your larger minding home of emergent probability’s spiralling achievement within a background radiation’s signing of materiality’s finality. And, yes, it “calls for years in which one’s living is more or less constantly absorbed in the effort to understand, in which one’s understanding gradually works round and up a spiral of viewpoints with each complementing its predecessor and only the last embracing the whole field to be mastered.”

What has to be mastered, in the present case, is the projective heuristics of the field. And what else might you find attractive in your next thirty or forty years of foundational living?

The mastery must include a refining and maturing of your first word of metaphysics. This refining includes the aggreformic luminosity symbolized in that word by the semicolons, ‘;’.

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39 *Insight*, 186[210].
separating the symbols of the layers: we already adverted to that. But now we return to our central interest, the metaphysics of capacity-for-performance. Perhaps, in the next decade, you will be lucky enough to have some few dialecticians travel down page 250 of *Method in Theology* and present a coherent up-dated foundational expression of what “was not complete”\(^{40}\) in Aquinas, what is struggled with by Lonergan in the article just cited. But I doubt it. You need, then, to do some random dialectic; repeat Lonergan’s struggle.

Of course, I could add some help here: but it would need to be a foundational conversation of some length. And indeed we may take it up later, if this or other issues related to reading our ‘heavy sentence’ continue to baffle you. Let us take a third look at it, and pick up some pointers towards a more mature metaphysics.

**The intricate structural organization of the photosynthetic apparatus is essential for the efficient performance of the complex process of photosynthesis.**

An adequate metaphysics of that regularly re-cycled page of *Insight*, 464[489] would enable you to re-write this sentence. What, for instance, of the “efficient performance”? If you venture back into the *Verbum* study you will find that this is a troublesome zone for Aristotle, Avicenna and Thomas.\(^{41}\) The capacity-for-performance doesn’t fit easily into a standard analysis of efficiency. Is the process of photosynthesis, “a putting together with light.... a process by which green plants transforms light energy into chemical energy,” something that the plant does? Or is it something that is done to the plant? So, perhaps, one comes up with a suggestive name like *autonomic form* as opposed to the forms of physics and chemistry that are *synnomic*. But this still leaves a struggle with this form, real yet dormant in the dark, but that “gets in on an act” in light, with variable success depending on light intensity and a range of other factors. The “intricate structural organization” is wonderously imaged by electron microscoping a

\(^{40}\) *Verbum*, 128.

\(^{41}\) *Verbum*, 110-151 gives a full context.
chloroplast with its lamellae, stroma, starch granules, etc. One can leap to a grasp of the organization: but what is the metaphysical statement that objectifies the statement, “the sunflower is now at work”? And having solved that, and so passed beyond the confusion of Aristotle and Avicenna and Aquinas, can you go on to make metaphysical sense - clear up, then, methodological messing in the three sciences of physics, chemistry and botany involved - of the popular description of the plant transforming energy? The reader of Insight will have noticed that we are still within the battle of learning foundations but also reaching towards the proper task of foundations: might we turn a significant corner in the clouded use of the word energy?

But best conclude this section. Even if you feel that you have a bent for foundations, you may find my ramblings discouraging. You are, perhaps, closer to being a beginner than you suspected when you began to read. And isn’t that wonderful: you have years of excitement before you. To that excitement of discovery is added, of course, the excitement and satisfaction of the Socratic role and task within the hodic institution. Your role of implementation, grounded in a self-taste that is your primary implementation, calls your capacity-for-performance to lift the level of “the use of the general categories that occurs in any of the eight functional specialties”. But that is certainly a topic for another day, some other Cantowers.

3. The Organism that is God

So we turn to some musings on the organism that God became, that God is everlasting. Obviously I am writing now as a Christian to Lonergan aficionados who are Christian: but others

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42 In Cantower IX, “Slopes” you will discover that Foundations is not in fact a beginner’s specialty: one moves into it through a variety of apprenticeships.

43 Method in Theology, 291.
may well be interested in the musings: Jesus is quite an interesting and controversial human.44

Among the various reasons for including this section is the evident one that the volumes of Lonergan’s Latin works are now emerging, with an English translation. It opens a door for Lonergan students. I don’t think that my readers can have any doubt about my view on opening the door. “Behold I stand at the door, knocking” takes on fresh meaning. But is there a need to promote that opening?

Perhaps, in an accepted scholarly sense, there is not: students who do not read Latin with ease will now be able to enlarge their reflections on such central problems as human liberty in the face of divine fixity: the vision necessary for Jesus’ identity and his work adds fresh subtlety to that problem, and Lonergan is expansive on it. But, as in the previous section, so here, I am interested in a twisting of the openness. The twist can be expressed in the same way as I did with the sunflower: Jesus, how do you do, What are your goodly habits?

You notice that I retain the present tense, the same questions as I posed to the sunflower? You would expect, if you were focused on the New Testament and its antecedents that the questions would be, Jesus, how did you do, What were your goodly habits? And these, certainly, are valid questions, questions belonging especially perhaps to scripture-oriented theology done in

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44A background to these musings for both classes of readers is chapter five of McShane, *Process. Introducing Themselves to Young (Christian) Minders*. The six-word subtitle relates to the six chapters and the bracketed chapter is mainly a reflection on God’s relation to the process and our thinking about God, with Jesus as focus. It is available in the present website. The bracket indicates that the general categorial reflections of the other five chapters have an certain independence from this chapter; also that this chapter can be read with interest by non-Christians. So, for instance there is a parallel in the book between the monologue of Molly Bloom at the end of Joyce’s *Ulysses* (summarized in chapter 2) and the monologue of Jesus from the end-book of the New Testament of equal length that appears in chapter 5. The parallel is valid and illuminating even if Jesus, like Molly, were fictional.
the mode of Faith. Here I prefer to hold to the larger questions, which, if taken historically, subsume the past-tense questions into a full foundational perspective.

I suspect that I can introduce for you the tensing and the tensions of that foundational perspective by recalling the words of a poet of the 1916 Easter revolution, Joseph Mary Plunkett, executed in this month of May eighty six years ago. It is a poem that has been with me for more than the past half century.

“I see His blood upon the rose,
And in the stars the glory of His eyes...”

And there is Hopkins,

“Look at the stars! Look, look up at the skies!
O look at all the fire-folk sitting in the air!......
Look! March-blooms like mealed-with-yellow sallows!.....
Christ home, Christ and his mother and all his hallows.”

Is this merging of rose and March-bloom and redeemer, stars and saviour’s eyes, sallows and hallowed home, mere flight of fancy, an opium of the poet? Or is there a metaphysics to the

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While “the use of the general categories occurs in any of the eight functional specialties,” (Method in Theology, 292) the use of the special categories of any culture are special to that culture’s reading of the past. The past may be read with a general categorial orientation: such a reading has been associated with a particular view of positive theology.

The full poem is quoted (p. 107) in Brendan Kennelly, Journey into Joy, edited by Ake Persson, Bloodaxe Books, Newcastle-on-Tyne, 1994, in a short essay on Plunkett, 103-109. This little book gives a key to foundational struggling, summed up in the words of Kavanagh which Kennelly uses of Sean O’Casey, “...all true poems laugh inwardly / Out of grief-born intensity... / ...suffering soars in summer air / The millstone has become a star...”(Ibid., 209)

The Starlight Night.
madness?

So we are lifted to asking that strange ambivalent question, “Jesus, how do you do?” in its full cosmicity, in the mystery of an ultimate Helloed. I am recalling at the moment a conversation I had with Lonergan in the late 1970s at the Boston Lonergan Workshop. The question had come up, during the morning sessions, of Jesus possessing an intellectual conversion: the mood was that of course he had. I recall making the odd suggestion to Lonergan that Jesus hadn’t spent the forty days in the desert reading *Insight*. To which he responded abruptly, “exactly” and went on to speak of life’s meetings, and of Dante’s Beatrice, of saying hello. Waving his hand in the air he remarked, “that’s what life is all about: saying hello!”

But here the Hello, How do You do, takes on a foundational character: or rather, I would wish it to do so. I would point doctrinally to its possibly doing so to some degree in all my readers, to a mad degree in those few with a foundational calling. And an enlightening digression is of benefit here: indeed it is not a digression, but an enlargement. I have talked of the “how do you do” as sublating the “how did you do” question. But, in its fullness, it sublates the future-oriented question, How do you do tomorrow and tomorrow and tomorrow? And that is the core of the foundational question.

In *Cantower I* I drew attention to lack of development of Foundations in *Method in Theology*. What is expressed in that chapter eleven is what should result eventually from the work of dialectics: as it were, it is the fruit of the labour described at the end of page 250 of the book. The core creativity of foundations is a reach of fantasy, as I technically conceive it,

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49 The point was already made indirectly in *Cantower I*, and it will be turned to more explicitly in *Cantower V*, “Metaphysics Then” and *Cantower VII*, “Systematic and General Systems Theory”.
towards a heuristics of the various tomorrows, the actual, probable and possible schemings of recurrence- patterns of global and village progresses.\textsuperscript{50} Flights of such fantasy occur in Lonergan’s earlier works\textsuperscript{51}: foundational thinking has the task of bringing those flights closer and into line with the orbiting and aching of earthly ambiguities. But that was a task he did not get to face. He hurried to the end of \textit{Insight} through the year 1953 and rarely after that had occasion to express the long-term optimism of that yearning paragraph in the final chapter: “It follows that the solution will be not only a renovation of will that matches intelectual detachment and aspiration, not only a new and higher collaboration of intellects through faith in God, but also a mystery that is at once symbol of the uncomprehended and sign of what is grasped and psychic force that sweeps living human bodies, linked in charity, to the joyful, courageous, whole-hearted, yet, intelligently controlled performance of the tasks set by world order in which the problem of evil is not suppressed but transcended.”\textsuperscript{52}

What “higher collaboration” had he in mind? I do not wish here to get into the debate that arose on the first publication of \textit{Insight} regarding the identity of cosmopolis, the nature of Christian philosophy, the deep problem of the book regarding “intelligently controlled performance.” It is sufficient for me to acknowledge the meshing of grace and nature in a Faithful discovery and thematization of the relatively-efficient pattern of control that is the central focus of these \textit{Cantowers}. But in so far as we progress in conceiving and implementing that control, the incompleteness of the thematic can become more precise and more precisely suggestive. Certainly contrafactual history is to be a serious component in future studies, but here I cannot venture

\textsuperscript{50}The context is \textit{Insight} 4.2.3 on the probability of schemes and \textit{Insight} 7.8.1, our role in scheming those schemes.

\textsuperscript{51}There is need for research on and interpretation of Lonergan’s longterm optimism regarding humanity: of lamb and lion together, of vastly different patterns of harvesting and leisure, of a molecularizing of charity.

\textsuperscript{52}\textit{Insight}, 723-4(744-5).
into questions about what Lonergan might have done had he been granted an extra year to finish *Insight*, indeed, had he been spared the adventure of teaching in Rome. I stay here simply with what he did achieve, under grim circumstances. And it is clear to me that the one thing he did not do, in spite of being battered down to elementary teaching and pressured towards *haute vulgarization*, was abandon his reach for metaphysics. And this is perhaps nowhere more evident that in the little book, just translated, on the constitution of Christ.

But I must now make as precise as possible my primary interest in this short section of an already strange *Cantower*. My interest is in identifying functional specialties and their tasks and their efficiency. And key to that identification is the problem of expression, a massive problem. If I do nothing more here than lead you back to chapter seventeen of *Insight* with the desire both to understand it a little better and to sublate it into the hodic context I will be satisfied: it is a clear challenge to Lonergan studies.

So let us shift immediately to what appears to be a simple problem of identification. Is VII a foundational work? Might one even say, A great deal of it illustrates a thematic of special categories?

One can consider the book first in a broad way, as one can the book *Insight*. Then one might make the broad claim that both books are primarily foundational doctrine, and give meaning to the word *primarily* by listing sections that do not fit, for example, zones that deal with comparision and contrast and disputes and adversaries. These are proportionately much larger in VII than in III: the concluding Section 5 of Part 6, on the dialectic of opinions, is in itself a tenth

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53 Complexities of the problem will emerged in section 3, ‘Identification’, of *Cantower III*, “Round One Willing Gathering”.

54 I don’t think that it is too stressfull on the reader if I refer here to the new Christology volume as VII and to *Insight* as III.
of the total work.55

A version thus chopped down of VII would probably be only half the length, whereas III would still be over six hundred pages. But back to our question, Does the shortened version of either book illustrate a thematic of categories?

The answer to this requires a leap of one’s context of understanding human growth and the molecularity of ratio humana;56 this problem is, one might say, nicely hidden away in the issue of adequacy of expression raised in chapter seventeen of Insight. A thematic is a hidden thing: who is the possessor talking to?: a wink may be as good as a nod. I took time off, as I struggled here, to return to those magnificent fifty nine steps of Thomas’ thematic of Christ, 366 dense pages in my version of the Third Part of the Summa. Even for me, after fifty years of asking Who are You, it is still dense, short, inadequate as expression. I risk remarking, too, that it is in various ways much richer than what Lonergan retrieves in his various writings.57 So, the short answer to the question is that VII - or III - may be an adequate expression of the equivalent thematic to the reader cultured in that zone.

The analogy with successful science is relevant here. An advance text, or learned article, in areas such as physics or biochemistry, is massively inadequate in expression for a beginner. The solution for the beginner is to spend some years moving up to being B.A., Barely Adequate. Then the graduate text becomes barely adequate in expression: it presents a challenge even to the

55I skim along here, over dialectic issues. Am I writing, doctrinally, methodological doctrine? Is Method in Theology methodological doctrine, foundations presented popularly?

56More on the question of our feeble reasoning nature in Cantower III: “Round One Willing Gathering”, section 1: Communications.

57This raises the issue of the genetic structure of a full Christological systematics, but I must leave reflection on that to Cantower VII: “Systematics and General Systems Theory”. I can only suggest here that the best of contemporary Christological reflection is not the genetic front unless it includes the uppsyching of history’s riches, including reversed deviations.
talented. All sorts of questions can now occur to you about the success of theology, symbolized for me in the practice that shocked me when I moved in 1960 from physics to theology: the second, third and fourth year students all attended the same level of lectures. One is driven to ask here, What was going on? - perhaps, What is going on now in the house of theology, in the department of religious studies? So we find our reflections twisting round again to the central issue of these Cantowers. Might it not be possible that theology would become successful, so that a third year student can tower, does tower, over the second year student? And so on, now, to a vision of a culture of Elderhood Then?

The possibility calls subtly in the molecular agony of classes in our times. Its call can be towed, towered, round and up, by a new vortex humility. THEN Thomas’ fifty nine steps becomes a lived adult presence, foundational characters of a new kataphatic community, a “Meaning [that is] an(d) Ontology”58 grounding a vortex explaining sweep of living human bodies that lifts “Common Meaning and Ontology.”59 THEN Plunkett’s words - or Hopkins - would bloodstream more bellies and bones..... Are Plunkett and Hopkins dealing in facts? Is Jesus busy today in the “luminous darkness of circumstances,”60 or are the poets just rhyming round pastoral metaphors? Or do the daily doings of Jesus vibrate within multibillion capacities for performance in an intimacy of mutual self-mediation, an intimacy that can become in each year of

58 “Meaning and Ontology” is the title of the first section of chapter fourteen of Method in Theology.

59 The title of section 14.2 of Method in Theology.

60 I am recall here most evidently the essay, “Asia Una Obscuridad Luminosa de la Circumstantia. Insight Despues Cuarenta Anos”, (32)1999, available on various Websites in English, including here, as Archives 2: “Towards a Luminous Darkness of Circumstances: after Forty Years”. Less evident is the reference to Lonergan’s discussions of divine control of events, Thomas’ view of luck, Ortega y Gasset’s reverence for circumstances which ignited the essay mentioned.
theology, in each decade of kataphatic Helloing, a luminous intimacy? What is this herenow
effect that is more real than the light on the flower, from the Son rising therethen, hanging out and up therethen? Thomas asks us to pause in vibrant wonder on the 48th step, on the 56th step. The lag in the effect is at the disposition of the minding Word: so your world and mine are handHeld-charged with the grandeur of the organic God.

But does it have to be the rare rare bird like John the Evangelist or Augustine or Thomas who make a serious business out of the foundational Hello? Is it not time that we move on from an adolescent anaphatic talent-burying to an unjust stewarding and a just stewardessing wiser than John’s Dark World?

Rare birds there will certainly be in these coming millennia: but the cosmopolis of the hodic vortex can shift gently the statistics of those who seize and are seized by anastomatic

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61 Think, for instance of the “round and up a spiral” that might be the annual transposition of the Exercises of St. Ignatius. Might not The Foundation be a fresh beginning, and the endpoint Contemplation for Obtaining Love a new “embracing the whole field”. See also note 13 above.

62 IIIa, 48, a.6, “Utrum passio Christi fuerit operata nostram salutem per modum efficientiae”; ad 2m.

63 IIIa, 56, a.1, “Utrum resurrectionis Christi sit causa resurrectionis corporum”; ad 1m.

64 The recommended context here is the powerful Scholion (276-98) on the psychological analogy for the Trinity in relation to Scripture, B. Lonergan, De Deo Trino, I, Pars Dogmatica, Gregorian Press, Rome, 1964.

65 The gentle process will be the topic in Cantower IX: “Slopes”.

66 Ana-, again, stomein, to provide with a mouth. “Using the device of anastomosis, Joyce attempts, in the last chapter of his last work, to bridge all the great ontological chasms”, Margot Norris, “The Last Chapter of Finnegans Wake: Stephen Finds His Mother”, James Joyce Quarterly (25) 1987-8, 11. See the following note.
Word and words: the rill\textsuperscript{67} of the Gospel can become trill of a lifetime’s melody of minding. Then expression in prose or poetry may have a new dense adequacy. How might you and I come to read section four?

4. Molecular Organisms of Ecstasy

We move round an imaging that somehow entwines a sensang of the Vortex that is the Eternal Idea Now establishing a nowthen bigbanging spiralwise towards a Great bearcrunch\textsuperscript{68} of echoing spirates. Densification of matter in fresh patterned geometries could mesh multibillion yearnings in anastomatic meshednerved circumincecision. Somehow, in everthening superise.\textsuperscript{69} The mystery of molecular finitude is that the Eternal Silent Voicing that we name God Gives itself a living wonder-us everlasting Throat.

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\textsuperscript{67}Rill has two principle meanings: a small stream, or a furrow. The small stream may call to mind Joyce’s green rill in his mother-hello of \textit{Ulysses} (Penguin, 1986, 474) that called for the trill of ocean-going at the end of \textit{Finnegans Wake}. The rill that becomes a trill, a thrill, may also bring to mind Hopkin’s sillion, the ridge between two furrows, and the task of plodding contemplatively that I point to: “Sheer plod makes plough down sillion shine” (\textit{The Windhover}).

\textsuperscript{68}Craunch is an earlier form of crunch meaning echoic. I would note that I am not, in the above, taking a position on end-cosmology speculation. Rather, I am hinting at the need for an imaging that would reach beyond the usual hierarchic structure. One of the big difficulties of any imaging here is the bent towards embedding which even the best of physicists do not escape: the tendency to place finitude inside a “larger” container. “End-times” will be the topic of later \textit{Cantowers}, particularly \textit{Cantower CXI}.

\textsuperscript{69}To give meaning to this is the task mentioned in the previous note. One needs to come to grips, on the level of the upper ground of loneliness, with the incomprehensible surprizingness of Eternal JoyLight for any finite mind, even the mind of Jesus, and on the lower ground of loneliness there is the continuum problem meshed everlastingly into our molecularity. Add the context of a needed precision regarding obediential potency; see note 31 above.
Sun, flowers, Son-flowered,
Speak to us of growth
Seed cauled, cribbed,
Kabod yet confined,
Crossed with dark earth,
Light-refined,
Rill open-ends a trill
Annotaste of Throat.