

Cantower XIX**Ultimates****October 1st 2003****19.1 Introduction**

Since I committed myself to parallel these particular **Cantowers** to the chapters of *Insight* that correspond in number - I end the year with **XXI**, which corresponds to the Epilogue - I find myself now facing what for me is an impossible task. What might I say, in one short essay, about my favorite chapter of the book, the chapter on which I have spent most time in the past 45 years? Eventually I decided on sharing beginnings with you. The beginnings belong to my third year of philosophy, a year after I had begun struggling with the book *Insight*.¹ What I present, then, is a pedagogical essay I wrote that year to help my fellow-students grapple with Aquinas' Five Ways. I later used the essay for my own students of "Philosophy of God" in Milltown Park, Dublin: I taught both an honors and what we called a seminary course in that area over a number of years at the end of the 1960s. At that stage (1968) I added a short Preface which I include here.

I see several advantages in dealing with my problem of commenting usefully on chapter 19 in this way. First of all, it helps as an illustration of foundational pedagogy. Foundational teaching is not dialectical except in so far as such dialectic is evoked by

¹I had the extraordinary fortune of being guided towards the *Verbum* articles by Fr. John Hyde S.J., then Professor of Theodicy in the Jesuit house, St. Stanislaus College, in the midlands of Ireland. The book *Insight* came into my hands as soon as it was published. It was a cultural shock: for instance, I had spent the four years 1952-56 reaching forward towards an understanding of Space and Time, yet I found Lonergan's chapter on the subject altogether beyond me. **Cantower XII** may help you forward in that area: strangely it meshes discomfortingly with the question of the corresponding chapter 12 of *Insight*.

student struggles.² It follows the pattern of successful science-teaching. Such teaching includes good presentations from the past: Richard Feynman's lectures of the 1960s³ may still be right on pedagogically for physics in certain areas. Similarly, Aquinas' may have the odd good pedagogical pointing, even if e.g. the view of time lurking in his *aliquando* of the Third Way is blocked by an ancient cosmology. Here I illustrate a piece of my own pedagogical strategy. I had the benefit - and this remained true of my twenty years at Mt. St. Vincent University in Halifax - of not having to deal with Hume, Kant, Sartre, etc. So I could try to meet the metaphysical needs of young ladies in their "native bewilderment... unsure of their way...trying to live without a known purpose... threatened with insanity".⁴

But my early teaching of philosophy of God was a much more leisured and contemplative business, an invitation to graduate students who were also clerics to contemplate through a course that was four hours per week for an entire year. So, for instance, we could spend at least an hour of class - and so a day or so of contemplation

²I have sadly discovered that some of my Lonergan colleagues clutter up courses on the Trinity, on God, on Christ, on philosophy of X, with various conventional opinions. Certainly there is room and need for picking up on past viewpoints: one can nudge students forward regarding black-body radiation by recalling the classical mess; one teaches Newtonian planetary theory before getting to Einstein. But Thomas comment remains terribly true: inform the students of a bundle of opinions and they depart empty-headedly. "*Nihil scientiae vel intellectus acquirat, sed vacuus abscedet*" (Quodl., IV, a. 18). No doubt some of the clutter is due to departmental needs: still, one has to take a stand and, like Thomas, have a reply. The reply is not Lonergan's but the teacher's. We are back here at the issue of the "scientific moment" introduced in section 5 of *Cantower IX*, to be further investigated in *Cantower XXV*. I would note here the importance of coming to grips with the claims of the fifth paragraph of chapter 19. Debate has been left behind. Within hodic method the history of the debate is drawn up into the dialectic process of the fourth specialty.

³Published in 3 volumes as *The Feynman Lectures on Physics*, Addison-Wesley Publishing Company, 1963, with many later printings. These lectures will concern us in some detail from *Cantower XXVI* on.

⁴The answer to the question 'What is metaphysics?' lurking in the first page of chapter 14 of *Insight*.

- on each of the 26 places of section 9 of chapter 19. The year's work was simply reading that chapter, supplemented by the early part of Thomas' *Prima Pars*.

You have probably already detected, then, another advantage of this presentation. There is a parallel to be drawn between my advice in the previous **Cantower**, to return to the early part of the *Secunda Pars*, and my strategy here. I have never had the formal task of teaching ethics, beyond the introductory meta-ethics of *Wealth of Self* chapter 7. But one might envisage such a teaching generating - you might do it? - equivalent essays on particular articles of the *Prima Secundae*. I think, for instance, of that final question, 17, in the series qq. 7-17 as calling out for a lengthy book.⁵

Again, there is the benefit of giving a background to section 8 of chapter 19 of *Insight*. The beginning of the section draws attention to the fact that "causality denotes the object and real counterpart of questions". Interestingly, there can be associated with this general pointer an elementary exercise which throw light on these five ways: it is a classroom delight, a few days in which students can be pre-Aristotelian strugglers. The exercise is included in pp.13-15 of *Process: Introducing Themselves to Young (Christian) Minds* and was referred to earlier in **Cantower XV**. It obviously connects with the diagrams from Appendix A of *Phenomenology and Logic* recalled in **Cantower XVIII**.

One can begin, in a classroom situation, with any deviation from the normal: a sudden noise, a scream in the corridor. Or one can begin with the drawing of a cart-wheel. In all cases one raises the question Why? By raising, of course, one means in the minds of the students, and the realistic raising should introduce an enlightening change of pace. In an hour or two one has a collection of answers that can be reduced to five generic answers - one has to sift out certain questions that pirouette round the empirical residue, like "Why now?" - and so one finds that there is a plausible reason for the five of Thomas' five ways. And indeed, one can push on: instead of a shout or a

⁵The question focuses on reason's ordering of the will.

wheel one can pick up on the drive of the book *Insight*, so that the form in question - or rather in the answer to the second-level Why-question - is the heuristic form named emergent probability (variously filled by different levels of students and teachers). So, one may bring the students to the threshold of section 8 of this 19th chapter of *Insight*.

That bringing, of self or other, to the threshold of section 8, differs profoundly in the person who has been lifted to what we may call theoretic differentiation and conversion, but what I prefer to call theoretic transformation and displacement.⁶ It is not a displacement that Lonergan talks about explicitly in *Insight*: I would say that he took it for granted, just as he perhaps took for granted, foolishly, that the reader would buy and digest something equivalent to *Foundations of Physics*.⁷

We are at the heart of the problem of the book *Insight* as it was received by my generation and perhaps the next: the community that received it were just not in the contemporary world. They were mainly people versed in philosophy and theology who had little scientific understanding of anything. This remained true even of the learned group that gather for the International Lonergan Conference in Florida, Easter 1970. As I noted previously, two problems emerged regularly in that conference, one of which was the transition to chapter 19. I recall one session where a learned chap - I call him Adolf since he is still alive - claimed that he could climb all the rungs of the ladder of *Insight* to the 18th, but the 19th was unacceptable. I replied, rather bluntly, "the trouble with you Adolf, is that you got off at the first rung". This point, about the first chapter of *Insight*, I have made and elucidated elsewhere, and it relates to elevating the book out of the moving viewpoint. But my general point here is that you are simply not

⁶I introduced this change of terminology in *Process. Introducing Themselves to Young (Christian) Minders*, chapter four, and gave reasons from Lonergan's own work for the suggested change.

⁷I have recalled before the session in a Boston Workshop where, to the question "How much physics should a theologian know?" Lonergan answered, "Well, he should be able to read Lindsay and Margenau". Now, there's a question-stopper!

reading the book if your consciousness is stuck in a commonsense culture, however sophisticated and erudite it is in the world of philosophy, theology, literature.

And by using the word ‘you’ I presume I raise that question for you, and it is discomfoting, especially if you are teaching the book. But let me think of you as reading along now with me, discomfoted or perhaps, privately, enjoying the “proofless, purposeless laughter that can dissolve honoured pretense.”⁸ Then, as you read on here, you will notice that my analogies are relatively lost on you. I can, and will, draw analogies from science to describe the structure of chapter 19 to you, but can you be with me? Are you perhaps like the medieval theologian who slides past Thomas’ frequent use of the word “sicut”, “just as”? I think now of that magnificent sustained “sicut” of *Contra Gentiles* IV. 11, where Thomas is climbing, leading, up to the intimacy of the Trinitarian processions but spends wonderous paragraphs on trees flowering.

Is there a parallel with successful science in the structure of chapter 19 of *Insight*? My teaching parallel in the late 1960s was the discovery of the neutrino. One brings a broad culture of physics to a particular situation. The drive, like that of the early sections of chapter 19, is for making thorough sense. What is the equivalent of section 8? It is an initial small hypothesis about this odd ‘undetectable’ particle that in fact fits the bill with relative but not integral adequacy. What next? One has to push on to a respectable hypothesis that will pull the whole prior context together and open up larger issues of investigation and verification. So, the physicists generate the parallel to section 9. But we could enlarge that parallel in a way that recalls our dalliance with GUTS in *Cantowers XIII* and *XVII*.

So, we can envisage the developed physics of the later twentieth century. It is the result of massive pushes in a range of areas. Might it come together, perhaps even in some strange geometrical coherence? But at least we can get to a section 8, a bundle

⁸*Insight*, 626[649].

of Lie Algebras that are verified. Can we go further, to a section 9 that is an integrative Lie Algebra and indeed beyond to an integral geometry that would give the full possibilities of the secondary determinations of the beginnings, middle and terminal state of the universe?

But you might be more at home with a modern version of Thomas' reflections on plant growth. Then one adverts to the drive that brings people to investigate the thriving of plants: can I store my plants in a warm basement during the winter, watered and fed so that they will be ready for Summer next year? Well-fed and watered, they nonetheless fade. It has something to do with sunlight: the plants need and "eat" sunlight. We can improve our small section 8: check gas-changes in a glass-enclosed plant. But what is going on? So we venture into a section 9 and find ourselves grappling with such equations as:



And the search continues for a fuller section 9 here.

The search for a fuller section 9 is a matter of contemplative devotion - a topic we must return to in ***Cantower XXI***. One is grappling with something so internal and utterly mysterious - that hidden in us that yet can groan forth, like the cosmos of St. Paul, the lonely noise, "what, then, is being?".⁹ I would note that the section, with its 26 places, can be paralleled - as I did in classes - by selections from the first 26 questions of the *Prima Pars*. But there is the massive cultural problem of teaching and learning how to read, to "sense and taste internal things".¹⁰ So, one climbs slowly, and the climb is to be repeated *Finnerganswake*-style, so that one winds towards a more magnificent "scientific moment" when, in the 18th place, one finds the ground of one's own genuine and startling creativity. There is history to be made. And one's startledness can rise

⁹*Insight*, 642[665].

¹⁰A common phrase in the Exercises of St. Ignatius.

slowly to tasting that one's decisions are not just twists in a selected history but the selection of another universe.¹¹ One can go on then to grapple in and with the view, the Viewing, with the horror of evil that is tensely permitted to "have in a finite universe something of the tension that represents and expresses the infinite good."¹² So one moves to a foundational possession, always a beginner, of the dark fact that "the world heads on to God. Man is nature's priest, and nature is God's silent communing with man".¹³

19.2 The Five Ways

Preface (1968)

The following article was substantially written when I was in the third year of philosophy (1958-59) and is heavily dependent upon the work of Fr John Hyde, who was then teaching theodicy. I reproduce it here without any effort at revision: time, energy and talent are against me. I could not possibly, for instance, settle down to the lengthy historical and textual work required to justify the interpretation of the five ways (here presented in reverse order for pedagogical reasons). The student who is anyway serious would compare them closely to the text in the *Summa* and if possible venture into the other texts.

I would like to recall here the treatment in epistemology of the two types of proof: the proof which is associated with the process of deduction and the proof which is equivalent to the process of verification. The existence of God is not something that emerges at the end of a deduction: God is a verified hypothesis. People who come

¹¹This is an extraordinarily rich and complex topic: worth leaving, like a Fermat Last Theorem, with that comment!

¹²*Understanding and Being*, 375. A pointing here to three profound pages of Lonergan speaking on the problem of suffering.

¹³*Topics in Education*, 225.

looking for a proof of the existence of God tend to be looking for a neat deduction. If you think of a proof of the existence of God in terms of a verified hypothesis you will be able to help yourself and others out of that tendency. Also recall that judgment, verification, presupposes understanding. The understanding required for verification here is the understanding of God: that should make you hesitate about rushing for some simple-minded verification. Secondly, and more subtly, as Aquinas regularly remarks, we do not know what God is: our understanding of Them is, so to speak, radically thin. Now, certainty of verification tends to grow with understanding, So, you may appreciate that the certainty reached by natural reason would have nothing of the vigour of the certainty of faith.

Lastly, I would not wish to associate this article with the “proof”, “search for certainty”, “apologetic” mentality. Rather I would wish it to be associated with our effort to understand the world and ourselves.

The 1958 Essay

The following article is an attempt to present St. Thomas’ famous five ways to the existence of God in a manner both faithful to the mind of Aquinas and acceptable to the mind of the average person. A long introductory discussion would be out of place here, but a few remarks may prove helpful.

First, those proofs for the existence of God are both easy and difficult. They are easy in that the argument in each proof is simple and clear. They are difficult in that genuine understanding of their content requires a grasp of the nature of both being and knowing. What, then, should the attitude of the non-philosophic reader be towards what follows? At a slow straight reading, the cogency of the argument should appeal to him or her. More prolonged reflection should give rise to difficulties which have to be overcome in the process of growing in understanding. Only in the context of such experiment can one intelligently appreciate the significance of a minor premise such as,

“the real is completely intelligible”. The basis for the explanation of the world is the natural inclination to have genuine answers to our legitimate questions. The legitimacy of any particular question and the reliability of the emergent answer can be guaranteed by a presence of coherence throughout the process of inquiry. The investigation in each of the five ways brings out a certain absence of intelligibility in our world.

The resulting search for explanation heads us to the affirmation of a necessary intelligible complement to the world. The intelligible complement we recognize as God because it satisfied the ordinary notions that the generality of humanity have of God, namely, something that is outside or above the world, from which the world depends, and which has some influence on the affairs of the world. Further common notions, of course, would be of God as the source of morality and as the object of cult.

Thirdly, those five ways are not the only ways to the existence of God: there are as many ways as there are aspects of unintelligibility in the world. It is of serious interest to note, however, that one finds in each of the five ways of St. Thomas a dominance of one of the five Aristotelian causes.

Lastly, no attempt is made to justify the reading of the texts of St. Thomas implicit here. The texts which form the basis of the proofs, however, are listed for convenience at the end.

V.

Not everyone has had the opportunity of visiting a car factory. Yet all of us have some idea of what goes on in such a place. If we wander around the works a bit we see clearly that behind all the hustle and bustle there is the extraordinary organization which makes possible the eventual steady stream of the end product. As we move about in the various sections, we almost forget that the nature of the end-product is new cars, for the factory is full of specialized jobs. Each section works almost independently, producing its own share towards the finished car: here a group work

on wheel construction, there an engine is taking shape. Yet all are wonderfully coordinated so that when the assemblers get to work, all the arts slide smoothly together: faults are rare, success is the accepted rule.

But just how is this possible? How are we to explain the successful transition from the raw material to a good and useful thing like a car? First, we might remark, only a fool would say that the success was due to chance: in fact it is evident that as far as possible nothing is left to chance. The reason why chance is so obviously ridiculous is that chance and regularity are opposed: if something is due merely to chance, it turns up only rarely, if more than once. If, for example, your opponent at poker gets four aces in their first hand, you may say 'what luck': but if the four aces appear for them again very soon, you may be tempted to say more. When we ask, then, how this regular success is possible, chance never really occurs to us as an answer: we think immediately of the need for planning and organization. This organization requires that some person or persons knew just what type of end product is required, lays out the plans, and shares out and coordinates the work in such a way as to achieve efficient output.

Of course, no one person can handle the total planning: but it is certain that someone must have the general organization in hand. The particulars of each section such as gear-systems production or upholstering must be left to experts in that line. But without such overall control the whole business would be somewhat chaotic: one can envisage the monstrosity of a car that would appear if the various sections of the work were given such freedom as allowed them to perfect their own part of the work with no reference to the others. Those working on engines might concentrate on producing a high-class model which in the end would fit only in a bus; the wheels produced might be excellent, for a tractor; and so on. What would appear at the end would be, by common consent, neither useful nor beautiful.

Now when we examine our natural world we notice that for the most part it

proceeds like a well-organized business. To take a simple example, the production of a ripe apple is the result of the combined effort of many things: not only does it involve the apple tree, but also the rotation of the earth, the light of the sun, the clouds, the rain, the earth. There is no need to enter into the details of all this since the various stages in the process from bud to blossom to autumn fruit are sufficiently familiar to all. For the scientist, who appreciates the complex structure and coordinations ranging from the still puzzling fields of physics through the level of the nucleus, cell, plant, to that of the supervening tugs of gravitation, the need for detail is even less.

At whatever level of competence we consider it, we can see that the process of apple-production does work, yet failure can and does occur. For we know of those days when frost can put an end to hopes of a good apple-crop. But for the most part by far, the process is very successful.

Now how can we account for this regular success? No more than in the production of cars can we say that it is the result of chance. Obviously, then, the various operating factors must in some way be designed, 'geared' to give this result. But what kind of a design must this be? It must be such in each thing that, although they may be many, different, even contrary in type, these things cooperative in the consistent production of the end product. This is clear because there is no arguing away the fact that the end result, the apple, turns out almost without fail from the coming together of the activities of all these things. Here we have a parallel with the activities of the different sections of the car factory. And the parallel continues: the dovetailing of the actions of the things involved - the sun, the clouds, etc - cannot result from the structure of any one of them. Each of the separate actions cannot be suitably adapted in isolation, so to speak, from the other actions, no more than in the case of the sections in the car factory. So, the process must be somehow taken as a whole. And just as in the case of the car factory, the various actions cannot possibly be organized or brought into the necessary concordance except by intellect. For, the various actions

must be balanced against one another and the transition from raw material to end product taken into account. In other words, everything involved must somehow be appreciated at once.

But only an intellect can consider all the factors together and so determine the actions of each and every agent that is involved so as to lead to the end effect. In the case of the car factory, the required intelligent being may have been the person(s) who originally decided to build cars: but they certainly do not organize every part of the work: the architect, for instance, may lay out the positions of the various sections, while in turn leaving the details of engine construction, electrical gear, etc to others. On the contrary, in the case of the production of an apple, the required intelligent being can manage without manage without the delegation of detailed planning to another. The intellect that evolves the general plan descends to all the details of the process, those details which scientists of various types for long have sought to grasp. This intelligent being, the, grasps completely and exhaustively the situation: and indeed, not only the situation in our example, but the order and cooperation of the entire universe, from ant to antelope, from nuclear forces to cosmic attractions. For, if the process which results in the production of an apple requires an intelligent being, much more so does the total world process.

Finally, this intelligent begin is either a 'law unto itself', its own guide, or else it is guided by another: there is no alternative. In either case, we are led to an intelligent being which is supreme, guiding, but not guided. And this being we call God.

IV.

Let us presume that you are visiting an art gallery. Among the other pictures you see a definite one which we shall call A. Some time later you are in another gallery and as you move about your eye is suddenly held by a picture, say B, in the far corner of the hall. Your attention has been arrested because of its similarity to A.

You immediately go over to see it, to find out who painted it. You wonder if it is an original or a copy of A. At all events, you know that there must be some explanation of the similarity.

This type of reaction is not, of course, confined to pictures. So: you are walking down a street. A man passes you. You look at him but take little notice of him. A little later another man passes you. You look at him also, but this time your eye follows him: for he is extraordinarily like the first man that passed you. As he passes on, you think to yourself, 'Perhaps brothers, cousins?'

Now just why do you come to these tentative conclusions? Precisely because of a correct and solid conviction that things are never similar by chance. Of course, one does not advert to this conviction, yet it is present, unanalyzed but operative, in these and other similar cases.

Let us, however, return to our first example. The explanation required in this case will consist in knowing which of the pictures is the original, or perhaps in finding out that they are both copies of an original which you have not seen. But certainly you would tend to raise your eyebrows if someone told you that they were not related, that they just happened to be alike. Why? Again, because real likeness cannot be put down to mere chance.

One can, of course, bring up examples that appear to prove this wrong, but sufficient reflection will show that they do not in fact do so. Take the case of two school-children who appear to have copied their homework. Now let us say that in actual fact they did not do so. Then why are their home working alike. There is a reason, although it is more complicated than if they merely copied or worked together. One might trace down the resemblance, for example, to similar types of mind, temperament, background, linguistic group, etc.

What sort of explanation is expected in cases like these? In the example of the two pictures you will be satisfied if you find that one of the pictures is a copy of the

other, or both are copies of another, or they are two realizations of the idea of one artist. What you really seek, then, is the original, the model, the exemplar. The search is at an end when the exemplar is found and distinguished from the copies. Of course, one might go on to consider who produced the copies - but that is another question.

Consider now what conditions this exemplar must fulfil in order to satisfy us. First, it must certainly have the quality, or the perfection, which occurs in the copy or copies. Secondly, it must have this perfection in such a way as to be an adequate exemplar or model. The original we expect to be at least as good as the best copy - if not better than it.

In our experience of the world we meet many different things, humans, dogs, trees, ideas, fears. Despite the great varieties of these 'things', we have to acknowledge that they have all one 'quality' or perfection in common: for each of them in some way or other has existence. We necessarily admit this, because all these things force from us a common reaction: the judgment that they exist.

Have we not here another example of similarity that needs explanation? The dog, the idea, the tree, exist certainly in very different ways: yet exist they do. Indeed, we spontaneously acknowledge an order in their existence. For even the most reductionist will acknowledge that a human is a superior being and that the existence of a bright idea is tenuous. But how are we to explain the similarity: which is the copy, which is the original?

By demanding an explanation of this fundamental similarity between the things around us, we are led to seek or to identify the model, the exemplar. As I said above, this exemplar must fulfil two requirements: of having the perfection in question, and of having it adequately.

The perfection in question here is existence. Hence it is required that the exemplar itself have the perfection of existence. The exemplar, then, must exist, must be real.

Secondly, the exemplar must be adequate. What does this entail here? As we saw, it means that the exemplar must in no sense be inferior to the copies: in fact it must not in any way be a copy itself, it must be an original. Our exemplar has existence, then, not as copied or received, but of itself. It is a supreme existence, model or exemplar of all other existence. And this being we call God.

III.

The third way takes its start from things which have been generated, and will corrupt. The house cat is a manageable example. The existence of such a thing presents us with a problem, because on the one hand it exists, and on the other hand it does not need to exist. To put the point in another way, the house cat definitely exists, and so is virtually unconditioned in its existence. On the other hand, of its nature it is corruptible, and so it is intrinsically conditioned. Or yet another expression of the same thing: it exists, and therefore here and now necessarily exists; yet it need not exist and therefore it is not really, fully, necessary.

We have plenty of examples of things that have been generated and eventually corrupt: the dogs and cats and flowers and trees that surround us. Such things are called by St. Thomas '*possibilia esse et non-esse*': such things as can be and can not-be. Perhaps we can call them 'corruptibles' for convenience.

It is of the nature of a corruptible that it need not have existed. This should become clear with a pause: this particular cat here might very well never have come to be. We can say, then, about any corruptible, that there could have been a time when it was not i.e. did not exist. Notice that this says even less than the initial statement: in fact we could use the stronger expression 'there was a time when they were not', but this is not necessary for the argument. So we can safely say that if a thing is a corruptible, there could have been a time when it was not.

If *everything* were of this nature, then obviously there could have been a time

when there was nothing. This follows immediately, for the mere addition of corruptibles does not change their nature, their possibility of being or not-being. So there is no more necessity about the existence of the group than there is about the existence of any particular member.

It is to be noticed that we do not at this stage say that there was a time when there was nothing. We argue only to the possibility of the non-existence of things. So our first conclusion is: if all things are corruptible, there could have been a time when there was nothing.

But we can argue from the hypothesis, 'all things are corruptible', in another way. For even if they are corruptible, still, they do exist now. And since they exist now, there could not have been a time when there was nothing. This is so because something cannot come out of nothing, and therefore if there is something now, there must 'always' have been something. Therefore, there could not have been nothing.

So, from one hypothesis, 'everything that is, is corruptible', we have two conclusions:

- (1) There could have been a time when there was nothing;
- (2) there could not have been a time when there was nothing.

These two conclusions are contradictory. Therefore from our hypothesis there follows an impossibility. Our hypothesis, then, is false, and indeed, necessarily so.

We must then conclude that not all things are corruptibles. A being which is not corruptible cannot not be and there must be some being or beings that are thus not corruptible. If however, a being is thus necessary, it either has the cause of its necessity of itself or from another. There is no other alternative. Now we cannot proceed to an unending series of necessary beings, each of which has its necessity from another being. Such a proceeding provides no explanation of the necessity: it merely shifts the problem along. We must come to acknowledge a being whose necessity is not from another, a being which is necessary of itself, and this being we call God.

II.

The starting point of this next way is Mr and Mrs Cat with their kitten. Everyone will admit that Mr and Mrs Cat constitute somehow the efficient cause of the kitten. The complication of the two causes here is not relevant for our present purposes: we might have avoided this complication by taking our starting point from a self-pollinating flower. So let us take the simple view: Cat causes kitten.

After some reflection - more or less prolonged, that's up to you - it will appear that the simple fact is not as simple as at first sight it appears. Certainly we do not doubt that Cat has a large part to play in the coming into existence of the kitten. We are all the more convinced when we see how alike the Cat and the kitten are: the latter is almost an exact replica of the cat. Yet this very fact places a seed of doubt in our minds. First, the kitten is a replica of the cat and will, excluding misadventure, grow up to be a cat. Therefore, the kitten is of the same nature as the cat. Secondly, the cat itself has of course the same nature as a cat: no question about that. But these two facts, namely, that the kitten has the nature of a cat and that the parent-cat has the nature of a cat do not fit in with the idea that parent-cat is the sufficient cause of kitten-cat. Why? Because if parent-cat is fully the cause of the kitten then it must be the full cause of everything that is actual in the kitten. And the nature of a cat is certainly actual in a kitten. Therefore parent-cat must be the cause of the nature of a cat.

At first sight it might seem that this last sentence says too much: that it should only demand that parent-cat be the cause of the nature of this particular cat. But on reflection (at your own pace!) it should become clear that if parent-cat is really the full cause of what is actual in the kitten, then it must be the ultimate source of the nature of cat in this kitten, not just in so far as it is in the kitten, but in so far as it is a definite kind of nature. Not an easy point to grasp: an example may help.

An inventor usually takes out a patent on a new gadget that he or she has made. Why? Not because he or she made the gadget - thousands of others can turn out a like

gadget if it is a success - but because he or she thought out the type, the structure, the nature of the gadget. He or she is certainly more fully the cause of the gadget than any maker that comes after. Similarly, if our cat is to be fully the cause of the kitten, it must, so to speak, have a patent on the type, the nature of the kitten-cat.

Which, of course, it hasn't. For if parent-cat is the cause, the full source, of the nature of cat, it must also be the cause of its own nature, in fact the source of the nature shared by the whole particular 'species' of cat. So parent cat would be the cause of itself, which is impossible: for a thing cannot be the cause of itself.

Obviously, then, parent-cat is not the sufficient cause of the kitten. Nor is there any point in tracking back as we may be tempted to do - to the parents of the parent cat(s), to provide a solution. For, no matter how indefinitely far back we go the very same problem keeps appearing. No generation or sequence of generations of cats is a sufficient cause of the next generation. At all events, it is the here and now problem of the causing of the kitten that demands a solution and it demands a present cause. There is another way of seeing the inadequacy of going back: first, no matter how many generations we consider, their mere addition can never give rise to an explanation; secondly, because one cannot exclude philosophically the possibility of going back indefinitely. So we return to the immediate problem of parent-cat and kitten.

We have been asking whether parent-cat is a fully sufficient cause of the kitten. We have been forced to admit that it is not. What then? We must conclude that there is another cause active in the generation of the kitten. This cause must certainly be the ultimate source of the nature of the kitten or cat. Therefore it must be in some way above the nature of cat, otherwise the same problem would arise as did with parent-cat. Also, there is the fact that this cause is actually operative in the here and now generation of the kitten. Obviously, however, it is not immediately visible, perceptible, to us. This cause makes it possible for parent-cat to cause this effect - the existing kitten - otherwise beyond parent-cat's power. We say then that parent-cat's causing is caused:

that is, the causing depends on another, and cannot be explained without this other. This is what is meant by the idea of a caused cause.

In our case, we can say one of two things about the causing cause: either it is fully sufficient in itself, or it is like the parent-cat, again insufficient. In the first case, it must be an uncaused cause; in the second case, if it were to occur, the problem would repeat itself. But no matter how often it did repeat itself, no matter how many related caused causes were included, the causing of the kitten would still remain unexplained unless there was an uncaused cause. It would remain unexplained because a caused cause - a thing which in its causing is, so to speak, assisted - demands explanation. Moreover, the addition of caused causes, one depending on the other, does not provide an explanation. For an assisted cause, or a series of assisted causes, always leaves a question in our minds: we spontaneously look for a source of assistance, and ultimately to a totally unassisted source, for complete explanation. The situation becomes intelligible, therefore, only when we arrive at a cause which leaves no further questions to be asked, a cause which is not assisted, an uncaused cause.

It is worth attending to the relation between the two series that we met with here. The relation can be brought out imaginatively by a consideration of the generation of cats as a horizontal, 'temporarily' gapped, series, and the assisting cause series as perpendicular over it. The perpendicular series, as we have seen, must end; the horizontal series, as can be proved, need not.

We necessarily conclude, then, to the existence of an uncaused cause. And since a similar argument applies to any such causing we take in the world, we see that we are, in each case, led back to an uncaused cause. It is a further step to reach unicity in the manner of the previous proofs, which manners merge here. We reach a single uncaused cause, somehow beyond our world. And this we call God.

I.

It is an undeniable fact that things in the world change. Let us take a simple example. Consider some tree that you have seen growing over the years. You will remember perhaps when it was half its present size.... It has grown. Briefly, we can sum up the relevant facts: it was not a tree (using 'tree' here to denote a full grown tree): it *is* a tree. From these facts we draw immediately an important conclusion. Since the sapling became a tree, obviously it must have been able to become a tree. We might say that it had the makings of a tree in it, or more correctly, it had the potential to become a tree. It was not actually a tree, but it had the potential to become, to be, a tree. It was not actually a tree, but it was one potentially. This is the central point to be digested.

First, when we say that the sapling was a potential tree, or had a real potentiality to being a tree, we are not just weaving ideas or imaginings. We are talking about a real property of the sapling, something which is part of its nature, a real unrealized capacity.

Secondly, when we say that the potentiality is realized, that the actual tree is before us, we must take care not to think that the potentiality is no longer there. This would lead to a ridiculous conclusion. If this thing is an actual tree now, obviously it must still have the real capacity of being a tree. Otherwise, how is it that it is a tree now?

However, our essential conclusion is simple: the sapling has become something which it was not before. The question we wish to ask now is, What moved or brought the tree from the imperfect state of being a sapling and potential tree to the perfection of being an actual tree? It must have been either the young tree itself or some other thing or things with the cooperation of the young tree.

Now we can easily understand that the sapling alone could not have moved itself from the state of being a potential tree to the state of being an actual tree. For the

sapling has not got the perfection of a grown tree, and so it could not be the efficient cause of that perfection in itself. Therefore we are left with the other alternatives: the sapling is brought to the perfection of being a tree by the activity of a being, or of beings, other than itself.

At this stage, were our inquiry seriously scientific, we would proceed by a combination of experiment and theory to investigate the factors involved in the development of the tree. But our concern here is not with the particular natures of the immediate causes involved. We are reaching towards a broader conclusion. Indeed, if we prolonged our investigation of the facts even a little we would conclude easily that there are many things involved in the development of the tree, and further that these things are themselves being moved (we use the word 'move' throughout in a very general sense): but this is not essential to the argument.

We therefore go on to ask in general about the nature of these other things, and since the number of them is not relevant we consider any one thing involved. If this thing which helps to move the tree in its growth is itself changing, we can apply the same consideration to it as we did to the tree. We necessarily come to the same conclusion: either it moves itself or it requires the cooperation of others to move it. And so the problem recurs. In fact it might thus recur indefinitely. However, the essential point to come to grips with is that no matter how many movers we add into the series we come no nearer to answering the problem that presents itself.

The fact is that we can be no more intelligently satisfied with a series of movers all of which require to be moved by another than we would be with an indefinitely long train of coaches moving steadily up a hill without an engine. Going on from moved mover to moved mover provides no solution: unless there is a mover that does not require another to move it - an unmoved mover - the totality of motions remains inexplicable. Indeed, the whole motion becomes impossible, for a moved mover is like a peculiar instrument, like a saw cutting wood. Even the less bright would consider it

ridiculous that a series of instruments should thus move in the absence of some principle agent, like a saw cutting wood on its own.

Hence, we must admit the existence of an unmoved mover, a mover which causes the other motions purely of its own power. No matter what example of change we take in the world, we are led to this conclusion. So, the notions of the world at large must depend on the existence of this mover, whether singular or plural. And this mover we call God.

Relevant Texts for these adaptations of St.Thomas:

V. *Summa Theologica* I, q.2, a.3; *De Veritate* q.5, a.2; *De Potentia* q.1, a.5; q.3, a.15; *Contra Gentiles* I, cp. 13.

IV. *Summa Theologica* q.2, a.3; q. 65, a.1; q.4, a.2, ad 2m; q.44, a.1, a.3; *Contra Gentiles* I, cp. 13; *Contra Gentiles* III, cp. 97.

III. *Summa Theologica* I, q.2, a.3; q. 82, a.1; q.86,a.1; q.50, a.5 ad 3m; *De Potentia* q.5, a.3.

II. *Summa Theologica* I, q.2, a.3; q.3, a.1; q. 46, a.2 ad 7m; q. 104, a.1; q.13, a.4, ad 1m.

I. *Summa Theologica* I, q.2, a.3; *In Phys.* c. VIII, lect. 9; *Comp. Theol.* Cp.3.

19.3 Conclusion

What more might I say here that could be helpful? What I say certainly is doctrinal, directional, an invitation to ponder and fantasize. Indeed, I would claim that massively patient and humble fantasy is called for. Earlier I drew attention to a parallel with GUTS, with the reach of an up-to-date Physics, when it comes to the issue of a

hypothesis of God, a hypothesis jiving with the named of the five ways. I emphasize fantasy because the parallel is quite beyond the tolerance of present culture, as it would have been had I pushed it in the face of Adolf: but it is now in your face, and does not your sensability reject it? Do you not rather sympathize with the person who claims that, yes, she or he can plunge into chapter 19 of *Insight* - perhaps first skimming through some earlier parts - make fair sense of it, and then debate its validity and relevance? It reminds me of the story of the Russian physicist, Andrei Linde, who sat beside a businessman, a non-physicist, on a plane and found him reading *A Brief History of Time*.

‘What do you think of it?’ Linde asked.

‘Fascinating,’ said the businessman. ‘I can’t put it down.’

‘Oh, that’s interesting,’ the scientist replied. ‘I found it quite heavy going in places and didn’t fully understand some parts.’

At which point the businessman closed the book on his lap, leant forward with a compassionate smile and said,

‘Let me explain...’ ¹⁴

The problem is that of the “preliminaries to conceiving the Transcendental Idea”¹⁵ in a manner adequate to and harmonious with, the intellectual development of this stage of human searching. What honestly, is your understanding of understanding? Is it up to making sense of section 7 of chapter 19, and soulfully carrying it, and emergent probability, and much much more forward into the 26 point expansion - it is a deductive expansion only a posteriori - of section 9?

I could go on here to point out another parallel, drawing on the massive confusions of contemporary physics. There is a sense in which that physics is repeating

¹⁴The story is related in Michael White and John Gibbon, *Stephen Hawking, a Life in Science*, Penguin, 1992, 250-1.

¹⁵The title of section 4 of chapter 19 of *Insight*.

at the beginning of this century the arrogance of the beginning of the 20th century, whereas in fact it fails even to distinguish properly the things and the conjugates of that most elementary field of inquiry, flounders around with a mythology of spacetime, and seems to have little suspicion of what is involved in reaching a serious heuristic of real geometry. What, then, of the Ghost in that masked scene? Here, surely, there is need for satire and humour.

Nor is any of this helped by the Hebrew-Christian-Muslim tradition of an obvious God. The Christian, no doubt, can appeal to an incarnation, and that appeal has its legitimacy¹⁶. But for the searcher after *theoria*, up-to-date appreciation, the world of Peter and Paul had best be replaced by the world of Plato and Plotinus, redeemed positionally in the tonality of native peoples' dreamsense of the earth. And that foundational searching is destined eventually to lift¹⁷ the plain of both the **Cantower** search and the sensibility of cult and culture.

We are back, of course, with the ethics of academic and cultural discourse and to a particular instance of the need for strategic embarrassment. Critical method, "method with respect to the ultimate"¹⁸ is to slowly find a post-axial hodic context. And that post-axial context will ground a new humility of directional discourse that would identify the darkness of doctrinal talk.

Section 2, however, simple it might appear,¹⁹ is doctrinal: each sentence requires

¹⁶E.g. contemplative take-off from imaginative presence in Palestine :B. Lonergan, *The Ontological and Psycvholoical Constitution of Christ*, 31.

¹⁷The character of the lift brings up the issue of replacing contemporary patterns of popularization. For a context see the concluding section of chapter 3 of *Lack in the Beingstalk: A Giants Causeway*.

¹⁸*Insight*, 685[708].

¹⁹There is, for instance, a clear contrast between the meaning of 'possible' in the third way and the meaning that became conventional in later cultures. An animal destined to die is a possibility of being and not-being.

a pedagogy of small steps, shared in a resonance of trust. Are the five ways suasive? They were not meant to be: they were meant to reveal the steppings of the human mind, not the summit of its achievement. Might they be a slice of apologetics? The axial culture seems to crave such nominalist rationalism.

I recall now, fifty five years ago, taking small steps of pedagogy with a school friend called Finnegan, Gerry Finnegan, who died some years ago, a lonely bachelor. At the time he had difficulties with ultimacy. We paced the streets of Dublin for five Saturday afternoons, pondering theses five ways: without, as far his convictions were concerned, any seeming progress. The final day we paused at the end in the growing twilight of a parlor where I began playing Chopin's *Funeral March*. There was a Finneganwake: "the busy day" of discourse had bowed, perhaps, to the gracenote finality of "the tranquility of darkness".²⁰

²⁰*Insight*, 625[648].