Quodlibet 14.

Reply to "Reading the Book of Herself"¹

October 1, 2004

14.1 To Phil

1. Your *Quodlibet* prompted me this morning to read through page 464[489] of *Insight* once again. I intended to start by musing over my re-reading of that page but first I find I have some thoughts about diagrams. You mentioned the diagrams of Appendix A in *Phenomenology and Logic* as well as the diagrams in *Wealth of Self* on pages 15 and 48 as a starting point. These are diagrams that are 'with me' most of the time and the 'with me,' I found unexpectedly as I sat down to write, is an interesting question. How are these diagrams 'with me'? They are for me an "ingrained inner image" – of the perceived 'how they look to me' sort - that I can recall at any time, can use to sketch out my own version of the diagrams if need be; they're part of the "all I know [that] is somehow with [me]," part of my living knowledge, my vital personal context.

2. But this kind of distinguishing is mostly descriptive, and even in a sense, vague. How, precisely, are the diagrams with me? If they're a permanent 'inner image' for me, where in my brain 'are they' and what in my brain is functioning to constitute that 'image'? When I ask, 'where in the brain are they?' I don't mean that I have some notion that a perfect little replica of the diagram is lurking somewhere in my brain, maybe scotch-taped to some stray organ!! That sort of idea is naive. What I'm thinking of is the fact that our brains are complex systems of neural, molecular, chemical and

¹Obviously, the reply - section 1 - comes from Alessandra Drage, to whom the previous *Quodlibet* was addressed. From the appeal of *Quodlibet* 12 it should be evident that the conversation may be interrupted/entered any time. However, public inclusion in this conversation - in a given *Quodlibet* - pivots on the judgments of relevance by Alessandra and myself. You may well have a magnificent contribution that reaches out into another domain: in which case, if you are so inclined, you may be generating your own conversational *Quodlibet* in another context.

With Alessandra's permission I added paragraph numbers to her reflections for convenience of later reference.

physical properties and functions which 'somehow' (the field of neural science!) function to allow me to 'have' a perception, an image of the diagrams.

3. So there are all sorts of questions which are properly within the field of neuroscience, and it seems this field is highly relevant to the whole business of philosophy and metaphysics, that is, of striving to understand just what understanding is, and just what goes on, on the various levels of consciousness. For instance, is my ability to recall this image linked to the functioning of memory only? And what constitutes that complex functioning, neurally speaking? The eyes as organs are obviously involved as a first step here and so we're into the whole physiology of eyes and of seeing and of the corresponding parts in the brain that function together to enable my seeing. We're into the complexity of the neuron cell specifically operating now for the purposes of vision and perception. We're also into the neural processes of how (and where in the brain) those perceptions are 'stored.' And what precisely could "stored" mean? How do the relevant cells function to 'store' what I see? And since my seeing is selective, do cells only 'store' what 'registers as significant' (another whole question!) or do they 'store' all that my eyes happen to rove, even if 'I' don't 'register' some of those images? 4. 'My registering' is another whole set of questions that at first seems to be related to conscious questioning, to wonder and asking 'what is this?,' say. But then think of a dog or a cat, or think of a falcon 'registering' from thirty meters a mouse in the field. What are the differences in the 'registerings'? One is driven by hunger for food, the other by hunger for understanding. At any rate, these are really large questions that will need the collaboration of neural science. But at least we can stay in 'the position' of extreme realism, that the real diagram is nothing like the seen diagram, however little we know of what actually is happening when we 'correctly understand our experiences.'

5. But I was going to muse over my re-reading of page 464. I certainly came to it differently this time than any time previously, as much because of your quodlibet as because of my own growth over the past several months since I'd last read it. I have to

say that my first question is about the twist you give to that opening line: "*Self* study of the organism begins…" Am I studying myself 'as an organism,' I mean the organic component of my humanness? Or is there a further twist: am I 'studying myself studying the organism'? This latter option gets into complexity and yet as I study the organism, whether my own human organism or any other organism, I'm obviously engaged in 'correctly understanding experience.' So I need to try to stay clear on the fact that the 'two levels' are one, as in Lonergan's definition of generalized empirical method (p 141, *A Third Collection*). Is this part of the reason for your addition of the word "self"?

6. Moving beyond that question, my reaction to the page this time was a new appreciation of my experiences of studying anatomy and physiology in my Kin. degree. I loved especially the anatomy course, a year long course at the Medical Department of Dalhousie, with a good professor; someone with humour! I remember the class gathered around a table on which sat 'an arm' (we worked with actual specimens of limbs and cadavers stored in the notoriously rank-smelling solution of formaldehyde – the smell always permeated our classes), about to be introduced to the bones, muscles, tendons, etc.,. As he waited for us all to get settled around the table, the professor slyly positioned himself so that he was able to pull on a tendon connecting to one of the fingers of this arm without us seeing what he was doing. Eventually some of us noticed with shock the fact that a finger on this 'dead arm' was waving up and down at us! He went on to identify for us the tendon in question and ever since that episode, the functional relation of those tendons has been forever in my memory.

7. Anyway, I realized as I read through p 464 again that first of all, anatomy as descriptive is quite a statement. The descriptions that we learned that year weren't half of what a medical student, for instance, has to learn and yet they were demanding. The shift from that intense course in description over to physiology was a noticeable strain, at least for me: anatomy was much easier. Even though I struggled through the physiology component poorly, I realize now that my experience in that course is a

terrific lift for me when I read page 464: I can at least appreciate the depth of meaning that is indicated here by Lonergan in a mere few lines.

8. But what I would really like to ask, one of my pressing questions about this page, involves the third step, "transition to the thing itself." So maybe a string of questions as they occur to me.

14.2 To Alessandra

October 4, 2004

So, we are on the move, searching towards foundational dialogue **and** its meaning: the '**and** ' nudges us towards the context, towards being Kontexts, of what I call GEMb, what you might call *gem*, p. 141 top (*A Third Collection*). Or into the "Childout Principle" that we would wish to become an *ethos* of shifting into the third stage of meaning. AND already, in these four lines, those who may be "reading along with us" are bewildered, and have a right to complain if we claim that our speaking be in the realms of public discourse. We don't make that claim: but still, there is legitimate bewilderment, and that bewilderment must be addresses and, literally, given an address, a home in transcendental method, something to be tackled in Quodlibet 15.

Let us suppose that we are being joined by beginners in that vague sense that could include people advanced in Lonergan studies yet unfamiliar with my Cantowers. Those Cantowers are, unfortunately, relevant to our dialogue, but I wish us to so move forwards that the burden of reading them does not fall, like 41 large bricks, on the heads of the over-listeners. So I have a nice compromise to offer.

I have been "introducing Lonergan" for 45 years in various ways, in various texts. But, as it happens, my most recent effort of introducing is part of the Cantower series and is also key to you and I - and our over-listeners - handling² your 8

²"Handling"? Embracing? Cherishing? Cherishing as? You may suspect that you will come to read such words quite differently, after a day or a decade.

paragraphs of quest. So you and I can judge when and how to go back to those Cantowers - 27-31 - in our climbing on and round. The paradox is that you and I know that we have to thus go back, round again, freshly beginning: better than perhaps most of our over-listeners. I have, of course, already gone back to find a much larger meaning than when I first meant them.³

The nice compromise is, yes certainly tackle those 5 Cantowers if you have the bent and the leisure. But at least I must insist on you pausing for a spell or a season over the footnote (it is footnote 14) from Cantower 27 that I quote after I finish this next paragraph.

The note gets to the heart of many matters, but especially your questions about diagramming, registering, ingraining, in those first four of your paragraphs. I don't want to comment further here except to note that your 8 paragraphs raise questions that need the pauses of the next few Quodlibets. For instance I paused over the little word **as**, which I suspect you used quite casually twice in paragraph 5: "**as** I study the organism"; "**as** in Lonergan's definition". What did you mean by the word **as**; what might be meant by the word **as**? And, you may ASk, why am I ASking that?! There is a profound sense in which "Diagrams are for the As King."⁴ So, let me quote the footnote which at present is missing a diagram: have a shot at filling in that diagram. It is simply

⁴The title of section 5 of Cantower 28 is "Feynman Diagrams for the As King".

³For instance, Cantower 28 "points you towards" the end of my 45 year search for the relation between energy and prime matter, hoping to shorten your climb. But it also points me forward in any re-reading, and indeed after recent hours of brooding over string theory I begin to see new possibilities of lifting physics and its metaphysics forward. My brooding is in the context of a very confused book - to which we shall return - but still a phrase from it might get some reader-physicist excited enough to get into serious GEMb: 'If string theory is correct the list of particles manifests the vibrational repertoire of a single basic ingredient"(Brian Greene, *The Fabric of the Cosmos*, Alfred A.Knopf, New York, 2004, 347). That ingredient doesn't have to be an imaginary very very tiny string! If you have read this note this far, you may be helped to sense that the exercise with the water molecules is right on for brains and branes! (Chapter 13 of the book is titled "The Universe on a Brane" : can we diagram the universe on a brain?!).

[ho ho] a greatly-magnified look at a few molecules of water.⁵

"If you have the text of Feynman, you can take time off to have this adventure. In the absence of Feynman's text, any contemporary text in physics or chemistry will supply equivalent exercises. For the advanced Lonergan student the issue becomes a precise attention, from the viewpoint of metaphysical equivalence, to each sentence, phrase, word. We will return to Feynman and this exercise in the final section of the next *Cantower*. But, with or without the Feynman text, you can get an interesting start on one piece of the problem immediately by brooding over the following extract from the beginning of the second section, 'Matter is made of atoms', of his first chapter.

'To illustrate the power of the atomic idea, suppose that we have a drop of water a quarter of an inch on the side. If we look at it very closely we see nothing but water smooth continuous water. Even if we magnify it with the best optical microscope available - roughly two thousand times - then the water drop will be roughly forty feet across, about as big as a large room, and if we looked rather closely we would *still* see relatively smooth water.... magnify it two thousand times again. Now the drop of water extends about fifteen miles across, and if we look very closely at it we see a kind of teeming, something which no longer has a smooth appearance - it looks like a crowd at a football game as seen from a very great distance. In order to see what this teeming is all about, we magnify it another two hundred and fifty times and we see something similar to figure 1-1.

⁵The text referred to is the First Volume (there are three) of *The Feynman Lectures of Physics* edited by R.Feyman, R.Leighton and M.Sands, Addison-Wesley Publishing Company, 1964. It is a sound investment for a person serious about philosophy: many times reprinted, in paperback. The five Cantowers (27-31) deal, in tandem, with the first five chapters of this text and the first five chapters of *Insight*. In that sense it is an Introduction to *Insight*, but I would say it is at present a graduate introduction.



Figure 1-1

This is a picture of water magnified a billion times, but idealized in several ways. In the first place, the particles are drawn in a simple manner with sharp edges, which is inaccurate. Secondly, for simplicity, they are sketched almost schematically in a two-

dimensional arrangement, but of course they are moving around in three dimensions. Notice that there are two kinds of 'blobs' or circles to represent the atoms of oxygen (black), and hydrogen (white), and that each oxygen has two hydrogen tied to it. The picture is idealized further in that the real particles in nature are continually jiggling and bouncing, turning and twisting around one another. You will have to imagine this as a dynamic rather than a static picture. Another thing that cannot be illustrated in a drawing is the fact that the particles are 'stuck together' - that they attract each other.... The whole group is 'glued together', so to speak. On the other hand, the particles do not squeeze through each other. If you try to squeeze two of them too close together, they repel."

There is some great pedagogy here, but are there flaws? So now you have homework for a month or five: go figure.⁶

You see the connection with our present problem, our page 464[489], your questions about how diagrams are with you? And the concluding four lines of paragraph [3], about storing, selection, registering? And throw in the last three lines of paragraph [4]: what is to be said about Feynman and his water-image from the point of

⁶The five Cantowers were put on the Website, one each month, June-October 2004. The original plan was one per month till I finished 117, to parallel Pound's 117 Cantos, April 2002-December 2011. I got ahead of myself, so Cantowers 1-41 (400,000 words of the promised million) were "up" by February 2004. What are you to make of these, **as** a serious reader? We will face that quietly, most especially in *Quodlibet* XX. But meantime, one must avoid discouragement. These five Cantowers are tough work: a year would be a good initial climb. Why that is so, again is a matter for Quodlibet 15.

view of extreme realism?

So: what is to be said about the diagrams in Carter's book from the point of view of extreme realism? What would be seen with sufficient magnification? How about getting right in there so as to read the genetic code off of those big spirals? AND the subcodes for the various parts of the brain? And maybe codes for those codes?

This is worth mucking round with before going on to more complex issues of your 8 paragraphs. You could cheat, of course, and go to those *Cantowers* 27 and 28!

I was planning to push on here, but isn't this trouble enough for one communication?