LEARNING-LEVELS

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I. INTRODUCTION

What I have been asked to do is to give an account, for beginners, of Lonergan's cogntional theory. This is a theory of what knowing is, but "knowing" is a strange word, so I have changed the title to "Learning Levels." Some of the secular philosophers have criticised Lonergan for using the word "knowing" which they say is too vague, probably with some justification. Hugo Meynell[1] and some others speak instead of "coming to know" or the "acquisition of knowledge", and of course that is learning. So Lonergan's theory of knowing is a theory of learning - in a serious sense of the word, a theory of coming into the possession of knowledge.

Lonergan's Levels:

Judging

Understanding

Experience

Lonergan's theory is that knowledge is a structure, a structure made up of three levels. That is, learning involves activities that are distinct from each other yet coordinated, and so he speaks of levels. I myself refer to two columns, crossing those levels. You can find them easily enough in his text[2]. He himself uses the word "three" but he tends to talk about more than three elements in that three-level structure - sometimes four, sometimes up to seven or eight. It does not matter a great deal as they are always subdivisions of the three levels. The additional elements beyond the three are not added from outside but distinguished within them.

Judging        Assent

His fuller structure: Inquiry Understanding Formulation

Experience
The idea of a structure of diverse elements is best illustrated by swimming or walking. It is very important to Lonergan, and something that he thinks he is adding to most of the previous philosophers. When I was studying philosophy myself between 1945 and 1949 we had a thesis on what was common to all sorts of knowledge. That is precisely what Lonergan was trying to overcome. Our thesis was not particularly harmful, but was not nearly as helpful as one recognizing structure would have been.

In swimming you must move your legs, and move your arms in a different way, and also move your head in a different way again. If you fail to move your neck you won’t continue swimming much longer. The neck movement makes a quite different contribution from those of the legs and the arms. So swimming is not well described through what is common to breathing, kicking and overarm movement. Once you have realized that, you are open to one of Lonergan’s greatest contributions: that learning requires a coordinated variety of different types of activities, so that there are levels of coming to know. I will approach this through a series of eleven questions.

II. CAN WE EXPERIENCE THE WORKINGS OF OUR MINDS?

Can we experience the processes we use in learning? First of all, I note that we can experience our bodies. That is fairly simple. I can see my hands, I can see my legs, I can feel their movements through the kinesthetic sense which is comparable to seeing and hearing. So I know my body directly by seeing it and feeling its movement.

Can I know my mind in that way? No. Not as an object, and not directly on its own. Lonergan pointed out the strange fact that we do not experience our minds as direct objects. What we do experience directly are the green, the brown and the red, music and other noises, and the hardness or the softness, and the flavour of our lime or our sugar, and so on. These are the things our minds are giving us. But do we experience the minds themselves?

Let us write all this down: We have green and music and softness and the like. You can continue all day like this in a class, asking for some experience of a significantly different sort and finding nothing. Is the green just a part of something else? People have been taught not to notice anything else. I will not, however, delay further on this today. Along with green I experience seeing. Along with music I experience hearing. Along with softness I experience touching. Once we have been told this,
Learning-Levels

it is quite obvious. But until then we have not named it, we have not understood what is going on. But when we have recognized it, we have understood something about ourselves. We experience ourselves as subjects only while we are experiencing something else as an object. Thus we have:

seeing green; hearing music; feeling softness.

One of the key questions I put, especially to children, is "What am I?" or "What are you?" They reply "A human being" and I ask "What on earth is that?" Then we can try to build up an answer. A start is "I am something which is able to contact green", then "I am something which is able to experience the seeing of green".

There is a further question: "Is there anything else in this experience of seeing green, anything else always given along with the green and the seeing?" They will again find identification of any further element quite difficult, but quite easy when you point it out, by asking "What about the seer?" So the experience was of

a seer seeing green; a hearer hearing music; a feeler feeling softness;

and so on. The basic data are always of this triple form: a seer seeing green. You cannot have an experience of a seer without some seeing and without some object. You cannot have an experience of a hearer without some hearing and some object. But you can distinguish between the three. If you concentrate on the green and the music and the softness and try to understand them and compare them you get scientific knowledge. It is not easy to compare green with red, but eventually you find an instrument that helps, such as the prism. Such science tells us more about the world than we knew before. You can try, similarly, to relate the seeing to the hearing and the touching.

On the first question then, "Can we experience the workings of our own minds?", we can look at some of the quotations from Lonergan that I have distributed. He says the

data of sense include colours, shapes, sounds, odours, tastes, the hard and soft, rough and smooth, hot and cold, wet and dry, and so forth[3].

Those are the data of sense. He adds that
on the other hand, the data of consciousness consists of acts of seeing, hearing, tasting, smelling, touching, perceiving, imagining, (acts of) inquiring, understanding, formulating, (acts of) reflecting, judging, and so forth[4].

If you do not like the word "act" here you can substitute "event". It does not matter. Both the acts or events and the agent are given, and as given are data and experience. Our job is to try to understand those in the same way as we managed to understand colours and sound and hot and cold, wet and dry, which led on to early physics and chemistry. The data in which to seek such understanding are the data of consciousness, in which both agent and activity are present, along with the direct object of our attention. We can set out each experience thus:

<table>
<thead>
<tr>
<th>Agent</th>
<th>Activity</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>A seer</td>
<td>seeing</td>
<td>green</td>
</tr>
<tr>
<td>A hearer</td>
<td>hearing</td>
<td>music</td>
</tr>
<tr>
<td>A wonderer</td>
<td>inquiring into a puzzle</td>
<td></td>
</tr>
<tr>
<td>An understander</td>
<td>grasping</td>
<td>a point</td>
</tr>
<tr>
<td>A judger</td>
<td>affirming</td>
<td>a fact</td>
</tr>
</tbody>
</table>

You notice that while the objects are quite different from each other, and the activities, too, are distinct, all the words in the first column are names for the same thing, the thing we normally call "me", and this word could have been substituted there in each line.

The first and lowest level of Lonergan's structure consists of this experience in which we notice data, and it includes experience of the agent and of his or her activities as well as experience of green and music and the other direct objects of the senses.
III. HOW CAN WE HIGHLIGHT SUCH EXPERIENCE?

Not, surprisingly, by looking into self, but by looking at the colours and listening to the sounds, and by asking questions about such external data. That is one of the reasons why it is hard to move beyond science to psychology. You feel for the softness and listen to the music, and look for the colours, but if you try to experience hearing without music you fail. On the other hand, the better you hear the music, the more you experience hearing and yourself as hearer; and the more varied the music is, the more you appreciate the hearing and notice the hearer. The same applies to the seeing and the touching.

If you try to look directly at your mind, or to look at yourself or listen to yourself, or to get in touch with yourself in some way or another, you just miss out. Consciousness is developed by listening to or looking at ordinary external objects, not internal ones. One of Lonergan's most original contributions to philosophy is on the nature of consciousness. He has a fairly simple solution to problems that Gilbert Ryle[5] and others have struggled with. Lonergan shows us that we get the experience of self by directing our attention to something other than self, and that the experience as acquired still needs to be understood, just as the direct data of seeing and hearing need to be understood. We are given data on ourselves but not full knowledge of ourselves. After we have noticed those events we call hearing and seeing and touching, we can continue to attend to them and ask questions about how they fit together.

We highlight our experience of ourselves and our activities by being active. Lonergan illustrates the point thus:

When an animal has nothing to do, it goes to sleep.
When a man has nothing to do, he may ask questions[6].

We have the power of being active, and by being active we experience ourselves. In the case of this sort of activity, that of asking questions, I experience myself as a questioner, an inquirer, a wonderer. That brings us to a new section and some quotations from Aristotle.
IV. CAN WE UNDERSTAND OUR MENTAL PROCESSES, TO SOME EXTENT?

The first sentence of Aristotle's *Metaphysics* is:

All men by their very nature feel the urge to know[7].

We all experience the urge to know, as wonder or inquiry or the desire to ask questions. There is given an inquirer asking about some puzzle. The puzzle here is not necessarily just an object of the senses, but an object of inquiry, and along with it we have an inquirer and his or her inquiry. Aristotle goes on, soon afterwards, to say:

Philosophy arose then (in its earliest days), as it arises still, from wonder[8].

When we refrained from going to sleep and started asking questions then philosophy began. Aristotle repeats this point:

All begin, as I have said, by wondering that things should be as they are: puppets, for example, or the solstices, or the incommensurability of the diagonal of a square with the side[9].

The puzzles need not be big and important things like those connected with the moon or the planets, or the solstices. Trivial things like puppet shows can activate our wonder. It does not matter very much. If you wonder about one or other of those then you can become a philosopher, going beyond being a practical man and even beyond being a scientist.

We have experience of wonder aiming at insights and then being satisfied when the insights come. And we experience wonder as directed at experience, and as directed later, in a different way, at our formulated insights in the hope of being able to assent.

Recognition of all these links is itself an insight, and one that helps us to some understanding of ourselves as learners. So we can come to some definite understanding of our own minds.

V. WHY IS THE EXPERIENCE OF INSIGHT ESPECIALLY IMPORTANT?

Insight is on the second level of Lonergan's structure. It goes beyond all data by enriching them with some possible understanding, thus allowing us to contact an intelligibility that is probably that of the subject.
Learning-Levels

I think that this is intrinsically the most important element in learning. Experience prepares us for it, and judging confirms its appropriateness to a particular situation. But understanding is the prize of learning and of invention, the core of knowledge.

But there are also two extrinsic reasons why insight is important. Firstly, because its level is the one that is most neglected, and secondly, because it is the most elusive of our cognitional activities and the hardest to produce.

Insight is very frequently neglected by philosophers, probably because it is too familiar. It is fascinating that the word "understanding" is being used by people all the time, and successfully, yet it is not defined, nor analysed.

Richard Franklin, who was for many years the professor of philosophy at the University of New England, wrote a paper on understanding in which he pointed that out[10]. He noted that the word occurs frequently in the titles of books on philosophy. In the British tradition, you have An Essay concerning Human Understanding, An Enquiry concerning Human Understanding, even, in the present day, Understanding Understanding[11]. But if you look up their indexes you will see many entries on Concepts, Ideas, Belief, Reason, but no mention of the word Understanding! It was only a fine word for the title and receives practically no discussion in the book itself. People were familiar with it and had not thought of the possibility that some analysis of the notion might be of philosophical interest.

One reason why understanding is neglected is that there are no obvious misunderstandings with regard to it. There are misunderstandings regarding belief and concepts and the like, and there are false theories concerning them. There do not seem to be any false theories about understanding, as a word used in the English language. Everyone does understand it in its usage, but few have done any work on defining it. So there is no great harm suffered in the use of the word Understanding itself, but there is harm in philosophy, through the subsequent truncated account of what our minds can do and can reach.

The second reason why insight is neglected is its difficulty of access. We cannot call up a new act of understanding at will. What can we do about this? Lonergan tells us we need exercises. We need activity of the sort that carries some hope of solving a puzzle, and any sort of puzzle will do. It might be some difficulty on the frontiers of science or of literature or of law, or it might be the latest joke that is going around. But if we look for insights without directing our attention at some puzzle we are not likely to find them. This level, therefore, can easily
be neglected by those who are not especially alert, and so it must be given special attention when we wish to approach it in philosophy.

Once we have recognised our understanding, in the insights that come as a possible solution of a puzzle, or the point of a joke, or a promising invention, it is easy to recognize formulation. This is what we do in the light of that insight, in order to preserve it for later recall or for communication to others. Formulation is a concrete embodiment of the insight, and so can vary according to our skill with language or with other types of symbol, and according to our assessment of our audience. We can recognize inquiry, too, as the drive towards understanding, which supports us in a quest which is often long and unrewarding. So we can identify all three activities on our second level of learning.

On the third level we can recognize assent, which is the product of judging in much the same way as formulation is the product of understanding. It is distinct from judging in that it can remain long after the opportunity for judging has passed due to the ephemeral character of much of what we have to use as evidence. We thus see, briefly, how the three levels of learning can be divided up to indicate the six activities or events into which a simple instance of discovery or learning can be analysed.

Returning to our question, "What are you"?, we now have a fuller answer. I am a seer, hearer, toucher, taster, inquirer, understander, formulator, and assenter. All those activities belong to me, so I have arrived at a long description of myself, which has gone far beyond any description based on arms and legs and ears and hands and a mouth and movements. Thus we have reached well into philosophy.

VI. HOW CAN WE UNDERSTAND WHAT WE THUS EXPERIENCE ABOUT OURSELVES AS LEARNERS?

As experienced these activities are just data. Can we understand such data? Not completely. You cannot understand everything completely, but you can understand some relationships between the activities. Indeed, the simplest intelligibility about them all is precisely their relationship among themselves. Can we understand green? Not easily. Can we understand green in relation to red? Yes, much more easily, through the prism and the spectroscope and wavelengths of light. In a similar way we can understand all those processes of the mind if we relate them to each other. We start off with the data that sensation provides for our consciousness, and we inquire into the data, either
because we have noticed something and begin to ask about it, or because we have an inquiring mind which is pretty active and we go out looking for things to inquire about.

As a result of that, sometimes, we get an insight. And when we have an understanding or an insight we can formulate it. And when we have formulated a proposition we can ask a further question about that. The first question regarding sense data was, What? and the second question was, Is that so? Remember, the formulation is only a hypothesis, or a possibility. So we have to do some judging, which is weighing the evidence, and so requires going back to the start again to collect more data.

Judging is not restricted to comparing the formulation only to the original data that we saw it in, but compares it to a whole range of other data as well. There should be much more data available than was used originally. The effort to make a single judgment puts pressure on you to search for a much wider range of data, and so you end up looking at and listening to much more than you would have without that stimulus. Your senses, too, are brought into greater prominence, not less, when you proceed to understand or to judge.

The pure empiricist will urge us just to look or to listen, but a philosopher who recognizes these spiritual activities like understanding and judging will advise us to accompany them with even more looking and listening. We will in this way gather much unexpected data. Eventually we will be satisfied and make a firm judgment, which can then be expressed and retained in an assent. Similarly, understanding has the task of unifying data, and so we can seek an understanding of the data involved in the diagram I have been using. That diagram itself gives us some understanding of the human mind, some understanding of what we are, some understanding of learning as a process that related these activities to each other in the way suggested by the diagram. What I have presented is simply a formulation of my understanding of the learning process. The formulation has three levels, and so we can call it Learning-Levels.

VII. CAN WE CLEARLY DISTINGUISH OUR VARIOUS MENTAL OPERATIONS, AND USE SOME AS LANDMARKS?

The first level, that of experience, can stand independently of the other two, but is complemented by the one above it. The second level, that of understanding, can give a lot of bright ideas that are independent of judging but are complemented by the judging that selects from among them the one that has the richness
of reality. Judging cannot be done without having some formulations which can be submitted to it, and understanding cannot occur, in a properly human way, without some data. My diagram therefore represents a set of intelligible relationships, whose levels can be distinguished in both cases as presupposition and complement.

We can examine the diagram from side to side, too, as well as from bottom to top. On the left you have inquiry, or wonder, which is very powerful, but as yet not specified by the detailed knowledge to which it is oriented. Inquiry has openness and drive.

In the middle column we have understanding and judging, both of which are very personal. Understanding is something which each person must experience for himself or herself. I experience the clarity of an insight, with unity and focus and power. And similarly with judging. Only I can tell when I am satisfied with the adequacy of evidence for the truth of a proposition. I have to be satisfied personally that I am familiar with the area concerned and that I have asked all the questions relevant to the issue, and have dealt with them, and now recognize my responsibility to assent. So the activities represented in the middle column are personal and rich in content.

Assent, which has been produced by judging, can persist after my contact with the evidence has passed, and so assent has permanence, and publicity as well. These are the characteristics of the right-hand column. A formulation, too, is a personal understanding as captured in an expression, through which it can be retained for my future use or communicated to other people. So formulation, too, like assent, has some notable permanence and publicity. Data, also, can be shared with others, for instance by pointing in the right direction, and there is in data at least the permanence that preceded and outlasts any particular act of sensation.

So the three columns in our diagram are distinguished as openness, personal success, and communicability.

The theory of knowing which I am presenting consists in the relationship of these six elements, Inquiry, Experience, Understanding, Formulation, Judging and Assent. If we do enough exercises to be able to distinguish understanding from not understanding, and to be able to identify each of the other five elements, we can learn to distinguish these mental operations from each other, and to relate them to each other, and so we can start to use them as landmarks.
VIII. HOW CAN WE AVOID ILLUSIONS?

Lonergan tells us that

Insights are vulnerable when there are further questions to be asked on the same issue ... But when there are no further questions, the insight is invulnerable[12].

This is his account of the method of judging, which is in fact the way of saving ourselves from illusions. It is salutary to recognize that unless we judge in this way we can be caught in illusions, and error and mistakes. So it is just the one process that is required here. If we follow it we arrive at reality as distinct from illusion, at fact as distinct from fiction, at truth as distinct from error, at being as distinct from nothing.

Lonergan adds that

An insight is correct, if there are no further pertinent questions[13].

IX. WHAT IS THE MEANING OF REALITY?

Reality is the opposite to illusion. And so we reach reality by responsible judging. We must face up to all questions relevant to the issue concerned. This gives us the operational meaning of the word "real". Reality must be sought by persistent and responsible investigation, and so "real" applies to what can stand up to such investigation.

This meaning corresponds surprisingly well to the usage of ordinary people when they take the notion seriously. For practical purposes they will assume that all that they are dealing with is real, but if any suspicion of error or illusion or deceit should arise they will spontaneously generate a whole range of questions which they proceed vigorously to pursue. In doing so they will uncover further evidence and seek more data, so sensation is normally involved as well, but only as directed by intelligent questioning.

Some philosophers have restricted their attention to the use of data, ignoring the drive of inquiry, and have defined reality as what is available to sensation as its object. Such a definition not only neglects the usage of the words in serious contexts but
also leaves them without any useful suggestion as to how we can be protected against being deceived by illusions. Thus the usage corresponds to the definition by contrast and fits in well with our analysis of knowing as a structure of diverse but complementary components. We can take the very meaning of reality as what can stand up to persistent relevant inquiry.

Reality, fact, truth and being are roughly equivalent. They are what we reach through proper learning. Our learning activities lead us to a positive acquisition, which is knowledge of reality, possession of truth, knowledge of fact in which we are not misled by fiction. In this way we are in touch with being.

We are now ready to ask:

X. WHY IS THE TERM "BEING" IMPORTANT?

Philosophers do not always tell us why. Parmenides knew, and made it an issue for philosophers, though not all his commentators saw his reason. The word "being" is important because it refers to what we mean when we use the words, Is, Are, Am, Was, Were, as well as Be. Most people think of the word Being as an abstract, abstruse philosophical term that is of no interest or use to any ordinary person. It seems to epitomize the silliness of philosophers. But philosophers are not the only people who say Is, or Are, or Am, or Was or Were. Everyone does that. Everyone needs these words for communication. Everyone is constantly communicating successfully by using them. Everyone understands how to use them, even though very few understand them well enough to define them. So the problem of Being centres on how to define all of these words, how to express our understanding of them. Since we use them so much, the problem of being is important.

Being is what we mean when we say Is, as when we ask, "What is this"? and "Is this so"? Thus Is is connected with linking and with assenting. I have used it here in the question form, but it occurs just as much in answers, for instance, "The house is big." The Is links House and Bigness, but also asserts the reality of that linkage. Thus being is what we possess when we have gone through the whole of our learning process. It is the same as reality and truth and fact. We can thus bracket the right hand column of our diagram as coming under the term Being. (And we can insert a fourth column for the metaphysical components of being which are given in each of our learning-levels. That is, we contact potency in experience, intelligibility or form in formulation, and existence in assent.)
Learning-Levels

{ Judging Assent Existence }  
{ Wonder Understanding Formulation Intelligibility } Being  
{ Experience Potency }

And, since what we arrive at there is what the drive of wonder was directed at, we can say that being is the goal of wonder. That is how Lonergan gets his definition, which he puts thus:

Being is the objective of the pure desire to know[14].

adding that

Being, then, is (1) all that is known, and (2) all that remains to be known[15].

and

Being is what is to be known by the totality of correct judgments[16].

He does not talk about the Is and Am and Was, but I think he takes those for granted. So the account I have just given is a fair justification of his definition of being. The usage of the word makes sense of its being the goal of wonder. And, when reached, it is the fulfillment of wonder, and so we can say that being is wonderful.

In fact, being is the wonderful. So a most appropriate alternative term for being is "Wow!"[17].

In this way too we can make sense of Lonergan's very important statement that "Knowing is knowing being"[18].

Insofar as our knowing is properly done we have already arrived at being.

And the next two quotations, though a little surprising, follow on from what I have just been saying.

Being is divided from within; apart from being there is nothing; it follows that there cannot be a subject that stands outside being and looks at it; the subject has to be before he can look; and once he is, then he is not outside being but either the whole of it or some part[19].
We place transcendence, not in going beyond a known knower, but in heading for being within which there are positive differences and, among such differences, the difference between object and subject[20].

The full objective of inquiry is the whole of being, and each true proposition gives us one subdivision of that. Our further work in learning consists in making those subdivisions. All our further knowledge lies within what has been firmly, though as yet vaguely, reached by our wondering.

XI. WHY IS LONERGAN'S INSIGHT A DAUNTING BOOK?

Lonergan is well aware of the strangeness of the new philosophy which he is offering to the world. He knows, too, the multitude of conflicting alternative philosophies that are available. His strategy seems to have been to offer a justification of his philosophy by trying it out on serious problems at the frontiers of other disciplines. Experts who have already grappled with such problems without full satisfaction can be expected to appreciate his basic thought if, in studying it, they find that it recognizes and clarifies an issue or two in their own field.

Thus, after "at least a jejune and simplified answer" in his preface[21], and "apparently trifling problems" and "a series of instances all of which are rather remarkable for their banality" in the first chapter[22], he goes on to problems on the nature of mathematics, the philosophy of science, the concept of probability, a generalized theory of evolution, Einstein's theory of relativity, depth psychology, political philosophy, the coordination of the sciences, the perennial questions of epistemology and of hermeneutics, concluding with chapters on ethics, natural theology and the problem of evil.

These passages provide educated readers with grounds for taking seriously a book containing otherwise unfamiliar reflections by an unknown author. The good initial sales of the book, and the continuous steady demand for it over thirty years have proved that his strategy was a wise one.
Learning-Levels

XII. CAN IT BE PRESENTED WITHOUT THE DAUNTING SCIENCE?

Yes. A teacher faced with a class eager to learn is under quite different constraints from those on a writer feeling out with a single book into the learned world. He can present exercises, encourage personal effort on the part of his students, recognize each success, and indicate equally simple ways of drawing profit from it[23]. Thus the philosophy itself becomes the centre of attention in all its simplicity. The application of this philosophy by his students to the awesome problems of contemporary education, politics and religion can await the growth and initiative that those students discover in the stages of their own learning.

NOTES


3. Ibid., 274.

4. Ibid.

5. G. Ryle, The Concept of Mind, Hutchinson, London, 1949, Chapter 6, section 1, directs his criticism at "the dogma of the mind as a second theatre" which holds that "its consciousness and introspection discover the scenes enacted in it" as "objects of consciousness and introspection." This criticism leaves unscathed Lonergan's notion of the mind as the subject of consciousness, which experiences its mental powers without having to take them as objects or look at them as though in a theatre.

6. Insight, 10.

7. Aristotle, Metaphysics, Book 1, Chapter 1, (Bekker 980 a22).


247


11. Ibid., 199, n.8, referring, among others, to Locke, Hume, and Paul Ziff.

12. Insight, 234.

13. Ibid., 284.


15. Ibid.

16. Ibid.

17. I am indebted to Mary Keogh for this observation.

18. Insight, 357.

19. Ibid., 377.


21. Insight, ix.

22. Ibid., 3.