REDISCOVERING PHILOSOPHIES THROUGH COGNITIONAL MODELS

T.V. DALY S.J.

1. Exploration, a need and an opportunity

The great lovers of wisdom have provided us with a rich endowment of philosophies, but the disorder and even contradictions among their contributions show that wisdom still eludes us. Attempts have been made to classify them into "schools", but what philosopher fits neatly into any school? And who accepts that he himself belongs to one?

An important task for present philosophers thus arises - an exploration of philosophies, seeking prominent landmarks and their relationships, in the hope of fitting them together. This task is not hopeless. Maps of various parts of the world were very distorted and most difficult to coordinate in the days before longitude could be measured accurately. But with longitude they fell into place, so that many older maps could be identified and even make useful contributions to a detailed knowledge of less travelled coasts.

Our main resource in approaching this task is our own mind. Other people have given us written marks or sounds as clues to what they meant. But I can never discover such a meaning without inventing it for myself, grasping a possible intelligibility and checking its compatibility with those signs and others that surround them. The reception of any communication requires interpretation,

and interpretation requires an active and agile mind. My suggestion is that we plunge directly[1] into an exploration of this resource itself, instead of using it merely for unravelling a few particular communications that may happen to have been put before us.

Exploration requires both the identification of a few prominent landmarks, that can be recognized at other times and from different directions, and a grasp of some relationships between these landmarks. An exploration of the human mind, then, will involve the grasp of recognizable prominent types of mental activities or events, which can be related to each other, and to which all types of mental event can be related. The resulting set of terms and relationships I can call my philosophy.

This philosophy, if it covers widely enough the field of human events, should help us to account for much of the variety in different philosophies. I can investigate how my own philosophy would have turned out if I had completely neglected one or more of these landmarks that I have in fact identified, or if, on the other hand, I had set up a dummy landmark to which none of my mental events genuinely corresponds. I should be able to describe, clearly and definitely, the gaps in the overall philosophy that result from these omissions, and also the weaknesses even in some of the acknowledged landmarks, due to the lack of the support in their own functioning which they normally receive from the elements omitted. In this way I shall have developed a large number of diverse models of possible philosophies that can be developed in quite extensive detail.

Since the main source used for this construction of models is simply my own mind, anyone who has learned to distinguish the various

activities of his own mind, and to describe the contribution that each such activity makes to learning (and so to knowledge) or to human productive initiative, can go on to exercise his own creativity by developing accounts of each of the models. Such exercises can be performed by students of philosophy even before they have studied the accounts that have been given of the well-known "schools" like empiricism, rationalism, scepticism, and traditonalism, and before doing extensive reading in the philosophers who are said to belong to such schools. Much of what they discover later in such reading will be an exciting rediscovery of what they have already constructed for themselves.

This sort of procedure is followed by Lonergan in his article "Cognitional Structure".[2] After outlining a theory of knowledge as produced by a structure of three levels of distinct but complementary types of conscious activity, he shows how neglect of one or two of these levels gives clear and definite models of possible cognitional theories, and he uses these models to help us to understand, appreciate, and criticize various philosophical schools.

When constructing models, it is important to delimit carefully the scope of our investigation. A complete model of human knowing will be an inadequate model of the human spirit in so far as decision and executive action are activities of the human spirit that need not be directly considered when the scope of our inquiry is limited to knowledge. So there will be no gap in the theory of knowledge that omits decision. But there will be weaknesses in it nevertheless, due to lack of support of some of the elements accepted. We may well find terms that can be used to describe intelligently a variety of lesser scopes, each covering fewer and fewer of the elements we accept in our

complete theory of the human spirit. But we must note that these weaknesses just mentioned will become more serious with each omission of a further element, even though no direct gaps are left when we have designated the scope effectively. Examples of possible designations of scope will be given below after a proposed structure of knowing has been outlined.

2. The abstract concept of models

I wish to propose here a theory of human knowing that is more articulated than that of "Cognitional Structure", but before discussing any concrete instances of types of mental activity that can serve as landmarks, and before making a claim for a particular philosophy as complete within the scope just mentioned, it may be helpful to clarify the notions of model and of rediscovery in the abstract.

Let us assume, therefore, that I can identify in my own conscious life, as conducted within a particular field, or scope, activities or events of five kinds that I can distinguish from each other, so that I can meaningfully assign the labels V, W, X, Y, and Z to these five kinds of events, and that, without precluding the possibility of, or indeed the need for, sub-divisions within these, I can with reasonable confidence, assign to one or other of them any of my sufficiently notable or important mental events.

After arranging thus for their identification, my next task will be to investigate their relationships and interdependence, and to explore within my own mind, and describe, the results of their occurring in various small or larger groups, until I become reasonably familiar with the terrain. In this way I should be able to describe

in some detail the normal contributions to my conscious life (which includes, of course, my knowledge of the real world, and also much of the impact that my actions have in changing that world) of events of type V. And the same for each of W and X and Y and Z. We will thus know also, in a negative way, the inadequacies that are likely to appear if any of these were to be neglected.

On the basis of this hypothetical norm thirty-two models can be set up. The first is the norm itself (or adequate model) which recognizes all five elements, V, W, X, Y, Z. There are five models which each lack just one of the elements, namely VWXY, VWXZ, VWYZ, VXYZ, and WXYZ. There are ten that lack two elements: VWX, VWY, VWZ, VXY, VXZ, VYZ, WXY, WXZ, WYZ, and XYZ. Another ten lack three elements each: YZ, XZ, XY, WZ, WY, WX, VZ, VY, VX, and VW. Five have only one element each: V, W, X, Y, Z, and finally there is one model in which none of the elements at all are acknowledged.

Before proceeding we should note that each of these models is intended as a model <u>of an exploration of</u> the human spirit (or of a field within it), not as a model of the human spirit itself. An inadequate model is not to be taken as an account of <u>what a human person would be like</u> whose conscious life consisted in various activities of type V, say, and of no activities of types W, X, Y, or Z. What I am interested in is the sort of account that would be given of a person who in fact performs a variety of activities of each of these types by a philosopher who (in this case) has identified only type V, and has not recognized the existence of events of any of the other types, even though they do occur. The models are not of human beings but of philosophies.

The following set of questions should help towards a description of the philosophy based on any one of these models:

1. What are the normal contributions (within the designated scope) of the elements recognized in this model?
2. Hence what strengths can be expected in a philosophy based on this model?
3. What are the normal contributions of the elements omitted?
4. Hence what gaps can be expected in a philosophy based on this model?
5. What further weaknesses might there be in the elements accepted, due to a lack of support by those omitted?
6. What renunciation theories might be conceived (within the model) to accept and rationalize these gaps and weaknesses?
7. What compensatory theories might be conceived, to try to make another element do the work of the one omitted?
8. What substitution theories might be conceived, that use elements not recognized even by the complete model, to try to make up for the gaps?
9. What are the weaknesses of this model in accounting for reality (and illusion)?
10. What weaknesses would it have regarding objects? and subjects?
11. What ontology (i.e. concept of being) would be appropriate to this model?
12. What problems would this model be liable to introduce into metaphysics?
13. What problems would it have for moral philosophy?

I cannot yet, of course, go on to apply these questions, because I have been talking about models only in the abstract. I

need first to establish what in fact I consider to be the norm, by identifying a certain number of distinct kinds of human spiritual activity. This is done by an examination of consciousness.

I have postponed that task in order to make clear the independence of these questions and of this procedure from the account I am about to give of human activities. Someone who holds an entirely different view of which human activities are the key ones will set up a different norm, but he can then go on to establish and describe a large number of models in the way just outlined, and he can attempt, taking these as a basis, to rediscover for himself systems very close to those of the great philosophers. His success in doing this would, of course, be an indication of whether his account of his own mind corresponded more closely to the actual minds of these great men than does my account of my own mind.

3. An analysis of consciousness

By consciousness[3] I mean all that is available to me concerning myself and my activities in virtue of the fact that I am awake, though not available when I am asleep or under an anaesthetic. It is available whether or not I am attending to it, and whether or not I have identified any elements within it or have grasped any relationships between such elements. On the other hand, consciousness is not developed or intensified in any special way by attention to myself, though it can be developed very considerably by attending to objects other than myself. If I look intently at a colour or listen eagerly to a sound there is an accompanying awareness of myself and of my seeing and hearing that is richer than before my attention was aroused by that colour or sound. Similarly, puzzling over a problem or

deliberating about an important decision heightens my consciousness, even though I am not attending at all to myself and though any attempt to do so would distract me from the problem or from the task of making that responsible decision. This rather puzzling characteristic of consciousness has been summed up by Lonergan by saying that in consciousness I am present to myself as a subject and not as an object and that consciousness is a characteristic of a spectator rather than of a spectacle.[4]

Once I allow for this I can, nevertheless, explore my consciousness, and this exploration is not unlike the exploration of colours, sounds, tastes, and the like that has led to the development of the sciences. Just as I can develop the skills to identify red and green, sour and sweet, and to distinguish them from each other, and, eventually, to find some relations between them, so there are conscious events or activities that are identifiable, distinct from each other, and yet related to each other in a definite way. I can, for instance, identify seeing as an experience I have whenever colours and shapes are before my mind, that disappears when I close my eyes, but that can be quite as lively when other colours or other shapes are present, so that it is not tied to any particular instances of them, but occurs in me or not at all, so that the notion of my seeing apart from me doesn't seem to make any sense, whereas the notion of the colour I see having some reality while my eyes are shut fits in well with my ordinary experience. This is not to say that I rely much on a difference between my experience of seeing and my experience of colours. All that I need at this stage of the argument is that both are present and both are part of the data that are available prior to any names that I may apply to them and to any understanding of them that I may acquire. This is why Lonergan calls the procedure that I am following here "generalized empirical

method",[5] with the suggestion that the events which we name seeing and hearing and wondering and the like are simply part of the data that are available to us, along with such data as colours, sounds, odours, etc., and that an empirical method that attends to, and investigates, only these latter has to be called a restricted empirical method, since it presupposes an arbitrary exclusion of much of the immediate data.

Experience, then, is the first landmark we note in our exploration of human consciousness. It is exemplified by what I acquire when I open my eyes and lose when I close them. This is made up of colours and shapes experienced as seen, which will be present whether I can put any names on them or not, and all these can easily be extended to include sounds and hearing and flavours and tasting and odours and smelling, and rough, smooth, hot, cold, wet, dry, and feeling any of these, and to that givenness of an alert self that goes with the exercise of any of the other landmarks that I am about to name.

One of these is inquiry[6] - the drive behind the whole process of coming to know. It can also be called wonder, or the desire to know, or a questioning attitude, provided we realize that it is not just questions, but the power that makes questions possible and important, and that gives rise to the questions themselves, since it is prior to all questions in the sense that it is prior to formulations. Every question is a formulation of inquiry, and without inquiry the question would be pointless. Inquiry may arise spontaneously with regard to a particular field of experience to which we have already been attending, or there may be an attitude of inquiry that actively seeks out appropriate experiential data, thus

gathering in more than would otherwise have been available. It is distinct from what I have called experience, because of its dynamism, its positive orientation to understanding, and its complete openness both to every possible form of experience and to every possible insight.

Understanding, the next landmark, is what I acquire most noticeably in the sudden flash of an insight, and what then remains as long as I can retain a grasp of some unity in a set of experienced data, or can see the point within some experience that otherwise would be chaotic and confusing. Apart from the experience of control and unification and order which I myself have when I understand something, there are criteria[7] that can be applied to me by other people as well as by myself: Am I able to give expression to what I have understood? And, if so, can I rephrase the expressions in a flexible variety of ways which, despite their diversity, focus on a single intelligibility and relationship? Can I bring foward instances of this intelligibility that can be proposed as hints to others who have not yet grasped this insight in the hope of helping them, too, to understand? Can I apply the insight, using it to solve problems or to bring coherence to issues that when first proposed would seem to lack any such key?

These criteria would seem to be sufficient to show that understanding is a kind of event clearly distinct from experience, so that both are identifiable and recognizable, and thus able to serve as diverse landmarks in our exploration of the human mind. At the same time, like all good landmarks, they have a definite relationship to each other. Understanding has been described as unification and power, but unification is of what would otherwise be diverse, and

power is control over elements that without it would be unruly and unmanageable. Thus, understanding requires the data of experience, even while adding to these data its own special contribution which is unity, bringing out the intelligibility of the things which brought the data to our attention. Or, if, on the other hand, we start off from experience, there often emerges a demand for intelligibility, an interest, a curiosity, a wonder, which, even though not at all easily satisfied, provides us with an orientation towards that other landmark. Sensation and understanding are distinct, but complementary, parts of our mental life.

Inquiry, too, is distinct from understanding, because it is not yet the achievement of insight, even though it is a direct and conscious orientation to it and so can rightly be put on the same level as understanding, as having a quality much more closely allied to understanding than has the merely passive openness to understanding that is characteristic of experience.

Understanding itself is a personal thing that cannot be reduced to prior concepts or propositions, but it carries with it a desire for communication, so that it leads on naturally to some form of expression, especially as a proposition or as a definition, that will help to give it some permanence for later use by the person himself who understands, as well as some accessibility for others. It is such an expression, as flowing from understanding, and still understood, that I designate by "C" (for conceptualization). This is distinct from the insight itself precisely by having an externality that makes it suitable for communication and retention.

The fifth major identifiable kind of element in our cognitional life is judging, or the establishment of justification for assent.

This differs from understanding as verification differs from hypothesis, or as "yes" differs from each of the vast range of propositions in interrogative form which would be completed by a "yes" and which offer various ways in which such an affirmation could become meaningful. Understanding presents us with an intelligible possibility, while judging puts us in contact with a fact. There is a definite distinction between these, but there is also a clear relationship, in that, while every fact is essentially a reality it is also the reality of some specifically definable intelligibility.

At the same time judging is also a distinct sort of thing from experience. Experience can make its own proper contribution to knowledge even though it may itself be very confused, whereas judging must be quite definite and final. Illusions are experienced, so experience must be subject to illusion, while judging must be able to test and verify and consider alternatives until it is ready to pronounce that reality has been reached and illusion excluded. Experience is subject to question, while judging requires the resolution of questions, or at least of those within a reasonable range of relevance. But, despite the distinction, they are complementary as well. Judging is in accordance with evidence, and normally much of the evidence will come through the senses. But the evidence, of itself, does not demand the statement of fact, and cannot lead to a statement of fact before being brought into some theoretical framework. And often, when the theory has been formulated with precision, scientists are able to verify theories by observations that involve only tiny amounts of data, and data even of a type that would seem to be intrinsically uninteresting. Another

way of putting this is that, in such cases, the data used legitimately as evidence for verifying theories would only very rarely be such as might stimulate even a minor insight, let alone an important scientific theory.

Assent is expressed as a "yes", and so has, like conceptualization, the mark of externality and common access that enables it to be retained and shared. It depends, regularly, on judging in accordance with the evidence and makes permanent its outcome. If there is, sometimes, a connotation, in the word "assent", of response to the initiative of another person, then I should make it clear that I am not here concentrating on that aspect of the word (though not excluding it either), so that I would be just as satisfied to use the word "affirmation". I use the word "judging" (not "judgment") for the source of personally justified affirmations. Lonergan calls this "reflective understanding", and often speaks of it as a grasp of the sufficiency of evidence for the affirmation. It is, of course, more than a weighing of the evidence, for it remains beyond the moment when any further weighing would be superfluous. Since judging thus involves the completion of the process, there might seem to be no distinction between judging and assent. But the validity of this distinction becomes apparent when we reflect that a person may retain, quite firmly, an assent to a particular proposition long after he has lost control of the evidence in the way that originally forced him to the assent. The distinction between personal appreciation and communicability applies here, too, as on the level of understanding.

A diagram will help to clarify the distinctions between, and the interrelations of, the six key activities that contribute to learning experiencing, inquiry, understanding, conceptualization, judging and

assent. I will refer to these briefly by their initials - E, I, U, C, J, A, respectively, and when I wish to indicate the omission of any of these activities, I will put brackets around the appropriate symbol. Lonergan's threefold[8] structure of knowing has a lower level, which is my Experience, a middle level - of understanding, which I articulate into Inquiry, Understanding and Conceptualization - and an upper level - of judgment, which I articulate into Judging and Assent.

J A

I U C

E

I have put these in columns, of which that on the left is the most interior, conscious, powerful and initiating, and that on the right is the most external, communicable, material and definite. Of the levels, the lowest is the most primitive, the middle the most rich and creative, and the highest the most complete and definitive. Thus the distinctions between all six elements can be summed up by saying that the columns are distinguished as drive, personal success, and communication, while the levels are distinguished as presentations, possibilities and fact or reality.

There is no mention here of responsible (or irresponsible) decisions or their execution in action. These would come on a fourth level (introduced by questions such as "so what?" or "what ought I do about it?"), if we were constructing a philosophy of the human spirit as a whole. But I have already restricted my inquiry here to a particular scope by stating that it is the structure of knowing (or learning) that I am investigating, neglecting the structure of doing. Though I avoid gaps in my theory by this delimitation I do not, as explained above, escape weaknesses in my account of these six elements.

For instance, a theory of knowledge within a structure that includes decision could allow explicitly for free choices to look around and to listen and feel, which would account for a much richer fund of sense experience than would come from what I merely happened to see or hear or touch.

If I had set other scopes, I could have had other, smaller, structures. And in each case we would expect to find that our account of many of the elements within the structure concerned could be expanded and enriched as we widened the scope to bring in a further element and so come closer to an overall exploration of the human spirit. Examples of explorations of limited scope would be a philosophy of the interior spirit, which would concentrate on Inquiry, Understanding and Judging; a philosophy of verification, with Experience, Conceptualization, Inquiry, Judging and Assent; a philosophy of discovery, with just the first two levels. Indeed, we could have a philosophy of experience, or even of sensation (which is part only of experience), or of any of our other six key activities, provided we recognize that such a philosophy would be impoverished, even within its limited terms of reference, by abstraction from its natural collaborators.

4. Complementary Definitions

Because each of the six kinds of mental event that contribute to knowledge stands very much in need of the others, and all are mutually complementary, the intelligibility of their mutual relationships enables us to define each of them in terms of the others. In this way we get what Lonergan would call an explanatory account of human knowledge.

E. Experience is the conscious reception of data of sense or consciousness, which can be had prior to inquiry and insight and knowledge of fact, yet which can stimulate inquiry and can have an order and unity in their diversity that can be grasped by insight and then formulated under the control of this insight for submission to judging in the light of further elements of experience so that eventually assent can sometimes be given to this expression as representing an intelligibility genuinely contained in the data presented by this and similar experiences.

I. Inquiry is a conscious desire to know, which, when applied assiduously to experiential data sometimes leads to an understanding of some intelligibility possibly contained in those data, an understanding which, when expressed, can be submitted to further inquiry that spurs us to judge this formulation as applied to further relevant data along with the original data, so that, if the judging is successful, an assent can be given to the formulation as true and thus as bringing us into contact with one more small aspect of reality.

U. Understanding is a conscious unified grasp of some aspects of otherwise apparently diverse data that have been presented in experience, providing us with a positive partial answer to the question "what?" which springs up from inquiry into a particular field of experiential data. It gives us the power to select and propose an ordered set of signs as embodying that same act of understanding (or insight) for testing against more data in the light of further relevant questions that have originated under the continuing drive of inquiry as relevant to a question of the form "is that so?" as we aim at justifying an assent that brings us to knowledge of a truth and, through that, to conscious possession of one further aspect of reality.

C. Conceptualization is the conscious selection, under the guidance of a simultaneously conscious insight, of a set of words or other signs as unified by that insight, in a form that can be submitted to a process of verification under the direction of further questions, so that, if this examination is successful, I can affirm it and so have knowledge of some real element of the universe.

J. Judging, or verification, is the conscious submission of a proposition to inquiry in accordance with the available evidence, and under the direction of a number of questions that suffice to allow for the total context, so that this proposition is known as expressing symbolically an intelligibility that belongs also to some aspect of the field of data originally investigated, and of other sufficiently similar fields of data. It justifies the judger in making a definitive affirmation in terms of the proposition concerned.

A. Assent is a conscious personal definitive acceptance, as true and as representing reality, in view of justification in a judgment, of some proposition that has been expressed in the light of understanding, as making sense of some presentation by our senses or our consciousness into which we had been inquiring.

With this structure of six elements as our norm we can set up and investigate 64 models of possible philosophies, by selecting all or none of the six elements, or taking them one at a time, or in pairs, in triplets, in fours, or in sets of five.

5. Contributions and Corresponding Gaps

As a preliminary to describing the philosophies corresponding to each of these models it will be useful to attempt to pin-point the contribution of each element to our acquisition of a particular item of

knowledge, and to outline the corresponding gaps in a philosophy that fails to allow for such an element.

E. Experience gives material to work on, diversity to puzzle over and wrestle with, data to be unified by insights, evidence that sets up demands during verification, signs that can convey insights to and from other people.

(E). So the philosopher who claims that knowledge can be had without experience, or who simply fails to notice experience or allow for it, will have difficulty in accounting for the range, and diversity, and cumulativeness, and exigency, and verifiability, and communicability of our knowledge.

I. The strength of inquiry as an element in a theory of human knowing is especially in the way it can account for activity, flexibility and openness in the human mind, and so give some intelligibility to the relationships between experience and understanding on the one hand, and between understanding and judging on the other. (If we were not at present limiting our investigation to knowing, we would add that inquiry gives a similar intelligibility to the link between knowing and decision or action). Inquiry is a powerful a priori that has no need to be postulated, as it is given in consciousness as a spontaneous source of mental activity, one that acts in a way that, while not fully intelligible, makes a good deal of sense. It is flexible enough to be applied acceptably and reasonably to any sort of presentation, however puzzling, made by our senses and to any presentation of consciousness, with its simple "what?" or "why?" or "how?" And its "is that so?" or "is there one?" can be directed at any intelligible formulation produced by our mind. It is not limited to any category of questions, nor to any class of objects, making sense as applied to anything whatsoever, even to the

extent of going further to seek the nature of the paradox which seems to come up with a nonsensical question.

And this drive and openness are profitable to an account of our acquisition of knowledge, as we can naturally see the point of asking for intelligibility or for verification, and of directing such questions at concrete objects in all the wealth of detail in which they appear to us, as well as at abstract theorems with all their precision or technical sophistication. We ask questions about data in the hope of reaching some understanding. We ask further questions about propositions in the hope of occasionally arriving at some fact. This is the obvious and meaningful and powerful link between all six types of mental event that we have identified and distinguished from each other. There should be a notable coherence in a theory of knowing that takes explicit account of inquiry.

(I). There will be corresponding weaknesses in any cognitional model that fails to take inquiry as one of its parameters. It will have puzzles about the relationships between experience and understanding and between propositions and verification and truth. And, when these links are puzzling, difficult questions may arise about the sources of concepts or insights or of our knowledge of facts or of their proofs. There will be questions or presuppositions about the limits of our cognitional powers. There will be oversights of the very notion of connections between our mental activities, leaving them to be considered as separate powers, possibly in conflict with each other. Briefly, there will be problems regarding the coherence, the openness, and the spontaneity of our mental powers. This will apply to the model EUCJA and to any model made up of a smaller combination of these elements, that is to any of the 32 models in which I is omitted.

U. The power of a theory of knowing that correctly identifies

understanding is in its ability to accept the intelligibility of even concrete sensible things, and so to account for scientific laws and hypotheses, and for the power these have to unify diverse data and to extend beyond the instance or instances in which they were discovered so as to apply to other instances as well, and especially groups of signs, which it can enliven as expressions of its own unified content.

(U). A model without understanding will give us a theory of knowledge that cannot account for these things. It will misinterpret science, missing the intellectual excitement and freshness associated with the birth of a new hypothesis. It will have puzzles about teaching, and about the intelligibility of concrete things, probably bringing concepts (or forms or ideas) in as compensation, and treating them as universal ideas that become objects of knowledge in much the same way as sounds become the object of hearing.

C. The strengths given to a theory of knowledge by conceptualization are in its treatment of communicability and permanence of knowledge, which make it, for instance, amenable to the use of logic. It can show the extent to which carefully defined terms enable us to reach out beyond the limits of a familiar world to a much wider world that includes scientific entities, and past and future events, and mathematics, and conjectures for testing.

(C). A theory that neglects conceptualization will be puzzled about how we can reach realities that are not immediately and directly present to our minds, about the nature of language, about the value of logic, and even of science. So it will have difficulties in explaining communication, and in accounting for culture and giving it a satisfactory status in reality. Indeed, it will be unable, in general, to give anything more than a very vague account of what is real, since it will

have no precise propositions to submit for verification.

J. A philosophy that identifies judging will be strong in its treatment of problems concerned with truth and with certainty, and hence with verification (and falsification). It will be interested in alternative possibilities that can be contrasted with any proposition that is put before it. It will be concerned with evidence, and so will be alert to data, and especially to sense data, and it will make a distinction between data as evidence for a fact and the fact itself which has this evidence in its support. It will recognize the importance of a very personal and interior act in enabling each of us to come to a realization of something which is essentially external to any subject, namely truth and the facts. It will accept, as central, questions of existence and of occurrence, that is, questions of the form, "Is there an X?" "Is X a P?" whether X exists, and whether X is a P. It will bring the context of propositions into prominence, and will be able to show why we so often modify a proposition to include some delimitation of its context before we are prepared to affirm it. It should be able to deal effectively with the problem of error, and also to account for a cumulative element in knowledge by which some particular items of knowledge are eventually taken as definitively known even while closely allied issues are left for further investigation.

(J). A philosophy that disregards judging may nevertheless recognize assent so we must be careful in specifying its own special failings. Even if it allows for truth and certainty and an element of definitiveness in knowing, and for the accumulation of knowledge by gradually arriving at particular assents, it will have problems about the source of these elements of knowledge, and similarly about the nature of error, and the meaning of fact, and the place of reason in verification

and falsification. It will be unclear about the way in which sensation can serve as evidence in support of a proposition, and even about the distinction between evidence for a fact and the fact itself. It will neglect the personal aspect of affirmation, the element of responsibility in giving assent, and the way in which objectivity, though meaning independence of relativity of truth to the subject and implying accessibility to all, can nevertheless be reached only in this very personal exercise of each subject's own responsibility in assessment of evidence. It will miss the distinction between the naive observer who is unable to assent with confidence to any truth that is not "before his eyes", and an expert who has sufficient familiarity with the field to which the proposition at issue belongs, and so is able to assess it in the total context by dismissing all the irrelevant questions and concentrating his search on evidence that will have a bearing on those questions that still remain relevant.

A. The value brought to a theory of knowledge that recognizes assent as involved in knowledge will be in an appreciation of the permanence of achievement in each item of knowledge, its definitiveness, its objectivity, externality and place in the real world. At the same time it will accept the distinction between existence, as what is known in assent, and content or essence, as what is fully known in the proposition even when no assent is possible. It will be able to account for the modesty of truth, by constantly facing the difference between each small fact for which assent is called as we investigate the world, and the total reality of the world towards the knowledge of which each such small fact is a contribution, but which includes also so many other facts to which we have not yet been able to assent, and to which as yet we would be quite unable to give any sort of formulation. It will be able to face

up to what we mean by certainty, and truth, and reality, and objectivity. It will be open to inter-personal (as well as personal) ways of arriving at knowledge, in which assent is not based directly on one's own judging but upon acceptance of the communicated assent of another person.

(A). On the other hand, if assent is not taken as an essential element in coming to know, even though judging has been allowed for, then an unsatisfactory philosophy of knowledge will emerge. It will be marked especially by a failure to account for the commitment people have to particular facts as true, for a personal involvement with the truth simply as a matter of knowledge, for the value of knowledge in itself, as distinct from the enjoyment of the chase in pursuing and completing an investigation. Hence its metaphysics will have difficulties with existence and occurrence, and its ontology will not be clear about the role of the word "is", which it set out to investigate, nor about how we can grow gradually in our contact with being. It will be embarrassed by certainty and truth and objectivity, and missing the firm attainment of these by individuals it will not easily deal with the publicity of truth and communication and the sharing of it among various persons.

6. Stunted Growth Close to the Gaps

A philosophy that fails to recognize any particular one of the central activities that contribute to knowing will not only leave a gap that will give rise to a problem concerning knowing as a whole, but will also lead to an inadequate appreciation of some of the knowing activities that it does recognize, especially those that are most directly related to the one omitted since these will normally either provide the natural source and stimulus for that activity and have it as their goal, or else will rely on that activity as their own source. We should thus

investigate the ten sets of ways in which the omission of one of the activities will weaken the account given of its neighbouring activities. These ten main cases then are: J(A); (J)A, C(J); (C)J, U(C); (U)C, I(U); (I)U, E(I); (E)I.

J(A). In a philosophy that neglects assent, judging will seem to be merely interior and incommunicable, and so will seem to be subjective in the sense of lacking contact with reality. It will also seem unproductive, so that it will give rise to very limited expectations, since no allowance can be made for the freedom to consider further propositions on their own merits, that comes from definite acceptance of the previously considered propositions that need make no further demand on our time or energies.

(J)A. Where judging is neglected, the number of propositions to which assent can be given will tend to be greatly restricted, since there will be no clear or satisfactory account of the source of assent (or of the criterion of truth). Assent will be looked on as something impersonal, and truth as something outside the mind, while at the same time the link between truth and evidence will be puzzling, and the value of careful and appropriate use of evidence neglected. Or a naive philosophy may suggest a cheap assent to every intelligible proposition.

C(J). At the same time conceptualizing will be left as subjective and purely speculative or hypothetical, and the amount of formulation recommended will be limited, because this philosophy will miss the value of alternative formulations, and of a variety of equivalent or nearly equivalent formulations, and of separate expression of parts of an assertion, in so far as these activities might direct us more easily into a field of relevant evidence that would contribute to the making of a judgment.

(C)J. A philosophy which does not allow for conceptualization as a stage in the constitution of knowledge will have to take judging as an activity with very limited resources, since it will not be able to enter into any of the details or ramifications, or methods (especially indirect methods) of verification, and so will neglect the importance of the distinction between the reference of a proposition and the evidence for it.

U(C). It will also take a very static view of understanding, missing its power to accumulate and to develop and expand, and to stimulate further inquiry by explicitly meeting its present limits in careful efforts at expression.

(U)C. A philosophy that fails to identify understanding will leave conceptualization separated from its sources, and so will take definitions and the way theses are formulated for granted, accepting a narrow set of (probably traditional) theorems, and theses, and axioms, and definitions, and principles, missing the enormous richness of variety in intelligent and significant expression that becomes philosophically warranted and desirable once the power of insight has been recognized. By missing the source of the values that it does recognize as belonging to logic and method and the clarity of expression, it will not be able to deal fully with such values and it will leave us with serious problems regarding the foundations of logic, science, mathematics and the like.

I(U). This philosophy, neglecting the true goal of inquiry since it is not able to distinguish the possession of an insight from a lack of insight, will miss even the intellectual nature of inquiry itself and tend to reduce it to the mere collection of further data rather than encourage it as an ordered attempt to find theories, and solutions to problems, and fresh possibilities in our ways of acting. It may even

designate inquiry itself by the name of "curiosity", suggesting that it is one of the moral weaknesses of human nature.

(I)U. A philosophy that neglects inquiry will relegate understanding to the disreputable domain of hunches and inspirations, and will fail to support the discipline of a persevering search for intelligible possibilities, or to point out the sorts of exercise and activity that can dispose us to fresh insights and to creativity, thus producing a culture that needs therapists such as Edward De Bono[9] who can help to recognize the value of understanding in practical life and business.

(I)E. In its account of experience this philosophy will allow us to be satisfied with the data that happen to be available, instead of collecting an enormously wider range of experiences, and of searching persistently for those very slight variations in data that are sometimes so significant both in science and in scholarship. Thus a philosophy which concentrates on an esteem for sense experience can easily become one that shields us from most of the riches of sensation.

(E)I. Finally, a philosophy which neglects the contribution of experience, whether the exterior experience of the senses or the interior experience of consciousness, though it may praise inquiry, will tend to think of inquiry as a sort of deduction, and to limit inquiry to the fields of logic and mathematics, missing the creativity and investigation that is so powerful in all the sciences, and that is stimulated by intelligent attention to, and search for, data.

7. A Sample Model IEUJ(CA)

What sort of philosophy of knowledge would we produce if we were to identify and incorporate Experience, Inquiry, Understanding and Judging,

but neglect Conceptualization and Assent, thus working within a model that could be expressed briefly as IEUJ(CA) ?

Its strengths and weaknesses can be gathered from the previous sections. It would be strongly personal, dynamic, rich, coherent in an important way, and to some extent critical. It could account for the origin of knowledge, with the full resources of the a priori and the a posteriori, their mutual collaboration, and their achievement in bringing us to understanding as the result of our attentiveness to the full data presented by our senses and conscious life and of the complete flexibility and openness of our drive to understand. It would have a critical attitude, too, and a desire to discriminate among insights, and to take personal responsibility for its knowledge.

There would, however, be limitations on its resources, even in its most powerful area of the mutual complementarity of experience, an inquiring attitude, and understanding, since the omission of formulation would destroy the momentum of understanding that could otherwise be accounted for by prompt notes on each insight that would suggest precise lines for future observation and investigation. And it would leave the activity of judging in isolation, without recognition of its orientation to particular propositions and its task of building up our knowledge by small but permanent steps as we assimilate and store each successful achievement in an assent.

Its biggest problems would be with the communication and retention of knowledge. It would take great pleasure in insights, but be suspicious of any attempt to commit them to paper, and so would be able to revive them only by returning, where that is possible, to the original source of data. And it would allow only the same very limited resource as a means of inviting others to the same insight. Nor would it allow the naming or other designation of this source of data, as this

would amount to a rudimentary type of formulation of the insight. Rejecting propositions and propositional truth, it would despise logic and treat science as a mere instrument for technology, with no intellectual or cultural value. Indeed "intellectualism" itself could become a dirty word, precisely because the proponents of propositions and science might be found to support them by arguing to their intellectual content. All these external products would be portrayed as a betrayal of the spirit itself and the core of the person. The ordinary means of communication in the legal and political systems and in education would be rejected, and along with them the very attempt to enable large numbers of people to collaborate, except perhaps in mass movements, since the only genuine forms of communication available, after the renunciation of the formulation of insights, would seem to be of a sort that could apply only to quite small groups or to a population susceptible to homogeneous emotional impact.

While extolling the interior and personal value of judging and assessing the value of knowledge, it would lack material which could be submitted for judging, methods of verification, and the goal of gradual yet reliable accumulation of knowledge through verification, since the first two of these rely on propositions and the third would be made possible through assent. So judging, while recognized, would have its productive and eliminative powers minimized, and would tend to be praised more under the name of "questioning", with its connotations of personal involvement, but its further connotation too of doubt and low positive ambition. The mistrust of external signs, similarly, would demote understanding from its status as an exploration of the world to that of a step into relativism or even subjectivism or solipsism.

This philosophy, ignoring assent as a constitutive factor in

knowledge, in the form of a conscious personal definitive acceptance of some intelligently formulated statements as true, would tend to banish from the area of intellectual respectability both the enormous wealth of human achievement in knowledge and the modesty of each claim to growth in such knowledge, tied as it is in each case to some carefully delimited proposition. It would deny the value that has normally been attached to truth, directing us rather to a much vaguer personal satisfaction in the intellectual life.

8. Renunciation, Compensation, and Substitution

In accordance with my list of questions I have tried to limit my account of this model in the last few pages to a mere description of the basic characteristics of any philosophy of knowledge based on this particular model, outlining the strengths that remain in the cognitional activities that are accepted and the gaps and other weaknesses that must follow from a neglect of the others. I have now to go on to more creative work, giving some indication of how any one of us, still possessing the full resources of a human mind, might cope with acceptance of such a philosophy, inventing moves that would seem attractive in such a situation, even though the most appropriate moves were banned. In doing this we might come closer to elements with positive content, that would probably therefore be given a good deal of prominence by any real philosopher who might happen to have brought himself into the confines of this model.

The renunciation of definitions, theorems, propositions, logic, science and methodical intellectual endeavour could well be rationalized as a justified reaction against the materialism and the neglect of interior and personal values that have often been a characteristic of such fields, and as an attempt to bring us to a more human way of life. The

intense spiritual joy of fresh understanding, as well as of serious inquiry and of personal responsibility towards the truth, would be stressed, and contrasted with the emptiness of cliches and dead metaphors and with the inauthenticity of the common repetition of formulas that are no longer properly understood. It would be easy enough, then, to portray these failings as though they were essential to the nature of expression itself, thus claiming to establish a division between the interior and the exterior to such an extent that everything external to the mind would seem to be an alienation of the human spirit, thus indicating an ultimate paradox or tragedy in human life. Academic life would be engaged in for its own sake, bringing enjoyment in the exercise of one's own skills, whether alone or in the company of a small elite group, not caring about the accusation of having retreated to an ivory tower.

This disdain of what is normally prized as truth and communication and intellectually based culture, with the charge that it cannot but be alienating, could be accompanied by an insistence on the intimacy of small groups and a rejection, as incompatible with this, of institutions, organization, literary and cultural norms, industry. The return to a primitive style of life could become an ideal.

The communication and storing of knowledge that is accounted for in our full six-fold model make use of material and sensible elements, such as the marks on paper that are referred to as "words", associating these with some insights or judgments that they can prompt or recall. The model we are considering might see that such material elements are available to different persons, and so, while assuming that they cannot be linked with the interior events of mental life, turn to them in order to give an alternative account of communication and history. Words would be

esteemed as dispelling loneliness and bringing a form of physical union of persons, similar to, and along with, the contact of touch and the contact of eye with eye. Emotional union, too, would be of central importance, and would be studied as the resonance of intersubjectivity. Thus experience would be called upon to compensate for the lack of conceptualization and assent.

Another way in which experience could be used to compensate for omission of concepts and assent would be in a theory of knowledge that takes sensation as giving us truth immediately, by itself, and reality and all the facts, without need for prior formulation, or for understanding, or for any weighing of evidence that might conceivably lead to a rejection of any proposed truth. While this theory would have difficulties in accounting for illusions and error, as well as for invention and discovery, and especially for claims that we can sometimes know past events, or other minds, or scientific entities like electrons, it would also have to find some function for all the other cognitional activities that it identifies and describes, on the supposition which it makes that none of these contribute to knowledge or truth since these would be given to us immediately with sensation. But human inquiry is persistent and human inventiveness is adaptable, even in creating philosophies that can be harmonized with prescribed pre-conditions. Inquiry could be treated as a sort of wonder that admires the truth presented by the senses, and that even suggests questions that can be detached from this truth and sum up its orientation after it has been acquired, rather than as forces leading to its discovery. Understanding could be taken as an exciting event that occurs in the mind as a result of the reception of knowledge from outside, without being able to make any contribution to knowledge itself, and judging could be looked on as a natural temptation to doubt information already acquired, a temptation

that only goes to show the precariousness of knowledge and the dangers of indulging too readily the instincts of the human spirit.

The simplest and most obvious way of giving responsible assent is by saying "yes". But "no" was possible too, and may have been called for, so assent clearly involves a selection between two contradictory possibilities. In this it is very like a decision to act or to refrain from acting, and a choice between alternative lines of action, so our model might well bring in acts of the will as constitutive elements of knowing, that would of themselves produce truth and bring us into contact with reality and being. All our affirmations would be portrayed as "options", and assent would be a perfectly free "commitment". Even judging itself could be called a "decision-procedure". People would not merely be free to collaborate in building up intelligently and rationally the world of technology and culture, but each person could freely choose such a world for himself.

In attempting thus to flesh out this model I am not, of course, trying to be at all exhaustive. I only want to show how the landmarks have given me a foothold that has made it possible for me to map out, rather easily, a number of characteristics of imaginary but conceivable philosophies, which otherwise might have taken decades to build. My suggestion is that exercises of this nature would be a valuable preparation for the study of actual philosophical systems and would make the reading of philosophical books very rewarding and, somewhat paradoxically, both acutely discerning and sympathetic.

9. A Second Sample Model EUCJA(I)

A theory of knowledge that incorporates five of our knowing activities while omitting to take account only of inquiry must, of course,

have many strengths. Its direct weaknesses have been outlined explicitly above in section 5. It acknowledges a solid and rich a posteriori source of knowledge, though hardly one that is being enriched by active exploration. It will also recognize a partial a priori source in concepts and even in insights, though not the fully open or flexible a priori that lies behind these in our wonder. It will stress and esteem the personal and critical aspects of knowledge. It will be able to cope with permanence and accumulation of knowledge, and with its accessibility in communication. It will point to a range of tasks for the knower, set by the abundance of data and by the number of intelligible propositions that can be considered for assessment. It will support logic, and the analysis of language, and science, and will acknowledge a close link between these and human understanding. It will allow for the gradual accumulation of knowledge, even in collaboration with others, and for a large and varied world to which access is gained through knowledge.

Despite these many positive features a philosophy that does not recognize inquiry as a constitutive factor in the acquisition of human knowledge will be weak in giving an ultimate account of the personal and spontaneous origin of knowledge, of the unity and coherence of our cognitional activities, and of the openness of our orientation to knowledge. More directly, since questions are an obvious part of human intellectual life, a philosopher who does not assign them a function in the origin of knowledge will have puzzles about what questions are, whether they are dangerous, or likely to undermine knowledge, or over-ambitious, or not truly human.

The esteem this philosophy has for understanding will be lessened by an uncomfortable feeling that it is quite undisciplined and

haphazard, and by a dissatisfaction with the apparent lack of any means of disposing us for insight, or creativeness, or inventiveness. And the role it gives to our senses as a source of knowledge will be limited by a failure to recognize how the resources of sensation can be multiplied by a conscious and deliberate drive to go out and collect further data beyond what have happened to be presented to us, to investigate slight variations in data (such as those that led men to name and observe planets, and electricity, and the transmission of manuscripts), or to explore the particular and specialized fields of data that seem likely to be relevant as providing evidence for the verification of hypotheses that are under consideration.

10. Renunciation of Inquiry, Compensation for it or Substitution

A philosophy of this sort may prefer the word "curiosity" to "wonder" or "inquiry" or "the drive to know", giving a suggestion that it is a rather unpleasant, or even unhealthy - even if all too human - failing, one that disturbs the dignity and serenity of some sort of regular procedure or automatic unfolding of human cognitional activity.

It may take a stronger line of treating inquiry as disreputable, by pointing to an element of unexpectedness in questions, and going on to claim that the whole of every question is merely a disguised drive of our unconscious libido, or an alienating effect in us of the means of production, or a product of our social conditioning, or a quirk of the hidden structure of our language.

It may warn us that inquiry is dangerous precisely because of its openness and its spontaneity, which lead us beyond the limits that would otherwise be set by one or other of the activities that this philosophy itself has accepted as contributing to genuine knowledge - the limits, for instance, of sensation, or of the contents of consciousness,

or of my present insights, or of concepts, or of axioms, or of analytical propositions, or of the practical needs of life here and now. This last stress on what gets results might be extended to a claim that concern for the unfamiliar or the theoretical, or a hypercritical attitude to our statements, is a waste of time and energy, and a disrupting factor in human life.

Insights, though recognized, will be dismissed as mere "hunches", because their appropriateness to the basic human intellectual drive is missed when that very drive itself has been overlooked. Data will be limited to what is obvious, and the refined details gathered by new scientific instruments or by trained and painstaking observation will be denounced as trivialities.

In the absence of any possibility of explaining our cognitional activity through inquiry, an a priori might be sought in understanding, so that the dynamism of knowledge would consist in the application of actually possessed understanding to assorted collections of data, rather than in the origin of such understanding itself. These actual insights might be extended in number by being portrayed as previously hidden, though really innately possessed, or as forgotten, but subsequently recalled from some previous conscious possession. Or the function of an a priori might be taken by concepts and propositions, already defined and formulated, so that learning would be looked on as simply the assimilation of lessons or books, without any active involvement of the learner (other than the decision to read or listen), and without any of the skills of the teacher in assessing needs, or providing hints, or concocting examples. Or our growth in knowledge might be described more simply as the retention of ideas copied from more lively impressions that had previously been present.

An accumulation of evidence might be offered as the only active factor behind judging, or judging might be described as a mere comparing of pictures. Or the personal experience of judging might be treated as an epiphenomenon on assent, an experience that could make no contribution towards the assent, and understanding taken as a similarly impotent epiphenomenon on concepts. And concepts themselves would be produced by the drive of an unconscious association of ideas in the brain.

Attempts could also be made to repair the theory of knowing that omits inquiry, by bringing in factors other than those we have considered essential. Spontaneous or cultivated interest could be replaced by a pure act of the will, a free decision to understand, or to produce a thesis, or to commit oneseld to a proposition and act on it. Or the development of our insights and assessments for truth could be attributed to some form of divine or angelic inspiration. Or the active force might be said to be God himself or an angel in person. The failure to show the union and complementarity of the diverse activities that contribute to knowing would have led to doubts as to whether one or more of these activities should really count as belonging to the person himself who acquired the knowledge.

ll. Conclusion

Exploration of a country is not completed ın a day. Maps are improved and extended and clarified. And at times newly constructed features such as roads and channels have to be added to them. But if a careful and thorough basic survey has been carried out the improvements and additions will make sense and will be related fairly easily to the previously known contents of the map. If, on the other hand, the basic survey was inaccurate, as was the case before chronometers made the determination of longitude possible, there will be much confusion about

the coordination and comparison of maps. I believe that Lonergan has helped us to identify the main distinct activities involved in the acquisition of human knowledge, and I have attempted to show how this identification can help us to account for a wide range of diverse theories of what knowing really is, and even to re-invent elements that have at times been added in order to repair their deficiencies. The two examples given have not been treated in full but have been offered as illustrations of how Lonergan's theory of knowing, though quite definite, leaves great room for creativity in the study of philosophy, and can, after such exercises, open the way to a very illuminating, sympathetic and yet alertly critical and well-oriented reading of many of the great contributions that have been made to philosophy.

Footnotes

1 Lonergan speaks in Insight (London, 1957, Longmans) of "anticipatory concrete inferences" (47) which lead to "the formulation of ideal or typical processes", each of which he calls an "imaginative model" (ibid.). So there is "a possibility of mapping out in advance the alternatives between which theoretical effort has to choose" (304). Later he speaks of "a heuristic structure that contains virtually the various ranges of possible alternatives of interpretations" (564). He offers Method in Theology (London, 1972, Darton, Longman & Todd) as itself "a model", that is, as "an intelligible, interlocking set of terms and relations" (xii), of the sort that "turn out to be useful in guiding investigations, in framing hypotheses, and in writing descriptions" (285), and that are largely "transcultural" (ibid.).

2 B.J.F. Lonergan, Collection, Montreal, 1967, Palm Publishers, Ch. 14, p 221-239, especially p 231-6.

3 See Lonergan, "Cognitional Structure", Collection, Ch. 14, third section (p 224-7); Method in Theology, p 8-10; De Verbo Incarnato, Rome, 1961, Pontificia Universitas Gregoriana, p 269-312, especially p 273-290: De Constitutione Christi Ontologica et Psychologica, Rome, ^{3}1969, P.U.G., Pars V (p 83-99).

4 Collection, p 226.

5 Insight, 72, 243, cf. xi, 382, 423; in Method in Theology he uses "intentionality analysis", p 96, 340, 343, cf. 15.

6 Insight, p 4, 9, 74, 349, 370; Aristotle, Metaphysics, I, 1&2, De Anima, III,5, Posterior Analytics, II, 1&2.

7 Cf. Gilbert Ryle, The Concept of Mind (1949), Harmondsworth, 1963, Penguin, p 163. In "Improvisation", Mind, 85(1976) p 69-83, Ryle remarks that "unfortunately the whole topic of originality has, until recently, been very wrongly neglected by epistemologists" (p 70). Cf. R.L. Franklin, "Knowledge, Belief and Understanding" The Philosophical Quarterly, 31(1981) p 193-208, "Few terms are so widely employed and yet so little examined in contemporary English-speaking philosophy as that of understanding" (p 199), though "the discernment of relevant structure, which is involved in understanding, . . . is the essence of our most valuable knowledge" (p 208).

8 Insight, Ch. 9; "Cognitional Structure", Collection, p 223, third paragraph, p 224. For his statement of our sixfold structure see Collection, p 223, fourth paragraph, and Verbum, London, 1968, Darton, Longman & Todd, p 47-8.

9 Edward De Bono, The Five-day Course in Thinking, (1967), Harmondsworth, 1969, Penguin; The Use of Lateral Thinking, (1967) 1971, Penguin, and his many other books.