Second Lecture

Religious Knowledge

Three questions may be put regarding religious knowledge. First, there is a question of fact. Second, there is a question of philosophic possibility. Third, there is a practical question.

The question of fact is whether religious people know anything that non-religious people do not know. With the question of fact we are not concerned tonight and we shall not be concerned tomorrow. It is an enormously complicated and intricate issue that must be left to departments of religious studies and/or theology.

The question of philosophic possibility is our concern tonight. It asks what could be meant by affirming the validity or objectivity of religious knowledge. Our answer will be in terms of the inner conviction that men and women of any time or place may attain. To an account of such inner conviction there will be added a survey of the many ways in which such conviction is formulated as human cultures advance in self-understanding and self-knowledge.

The third practical question adverts to the conditions and requirements of setting up an academic discipline. It confronts the issue whether or not religious conviction at the present time and in the present state of scientific

knowledge has to be regarded as at best a private affair. Alternatively it envisages the conditions under which the study of religion and/or theology might become an academic subject of specialization and investigation. This third practical question will concern us in our third and final lecture tomorrow.

I have been blocking off our present topic by contrasting it with a question of fact and a question of academic appropriateness. The question of academic appropriateness we leave to tomorrow. The question of the factual validity of this or that religion we leave to religious authorities and academic experts with more than three lectures at their disposal for the communication of their views.

It remains that something be said about the connection between yesterday's topic and today's. Yesterday we began by noting a distinction between single elements that are merely an infra-structure within human experience and the larger context within which they may flourish, or intermittently recur, or tend to vanish. We went on to consider the cultivation of religious experience. There was considered the sacralization of man's world in preliterate societies when religious thought and affect penetrated the organization of man's apprehension of his world, the structure of his social arrangements, the content of his cultural and moral aspirations. There was contrasted the emergence of religious specialists, of ascetics and mystics, of seers and prophets, of priests and ministers; of their role as the religious leaven in human experience; of the formation of religious groups and the genesis of their rituals, their beliefs,

their ideals, their precepts. There was raised the question of authenticity in its twofold form: the authenticity of the individual in his appropriation of his religious tradition; and the authenticity of that tradition itself which becomes questionable when the failures of individuals become the rule rather than the exception, when vital reinterpretation is corrupted by rationalization, when heartfelt allegiance more and more gives way to alienation. Finally, we raised the question of religious commitment, illustrated its nature from the precept of loving God above all found in both the book of Deuteronomy and the gospel according to Mark, but postponed the agonizing question that arises in such a time as our own, namely, how can one tell whether one's appropriation of religion is genuine or unauthentic and, more radically, how can one tell one is not appropriating a religious tradition that has become unauthentic.

To that question, yesterday postponed, we now turn. Our remarks will fall under two main headings. First, we shall attempt to describe the experience of authenticity in terms of self-transcendence. Secondly, we shall attempt to relate the inner conviction of authenticity, generated by self-transcendence, with the various notions of validity or objectivity entertained in successive stages of man's cultural development.

Self-transcendence

In various ways clinical psychologists have revealed in man's preconscious activity a preformation, as it were, and an orientation towards the self-transcendence that becomes increasingly more explicit as we envisage successive levels of consciousness.

Perhaps most revealing in this respect is a distinction drawn by the existential analyst, Ludwig Binswanger, between dreams of the night and dreams of the morning. He conceives dreams of the night as largely influenced by somatic determinants such as the state of one's digestion. But in dreams of the morning the subject is anticipating his waking state; however fragmentary the dream and however symbolic its content, he is anticipating his world and taking his own stance within it.

It remains that it is on awaking that we begin to be pushed or pulled beyond ourselves. Our felt needs and our multiform sensations, our memories of satisfactions and our anticipations of their repetition, engage us irrevocably in an ongoing interplay with our immediate environment.

A further level of self-transcendence emerges from the exercise of intelligence, the learning of language, the construction of a world mediated by meaning. Thereby man moves out of the habitat of an animal and into the universe that adds the distant to what is near, the past and future to what is present, the possible and the probable to what is actual. By unifying and relating, by constructing, by

discovering seriations, by extrapolating and generalizing, there are gradually pieced together the remarks of parents and the lore of one's peers, the tales of travellers and the stories of great deeds, the revelations of literature, the achievements of science, the meditations of holy men and women, the reflections of philosophers and even perhaps theologians.

But the constructions of intelligence without the control of reasonableness yield not philosophy but myth, not science but magic, not astronomy but astrology, not chemistry but alchemy, not history but legend. Besides the questions of intelligence, such as why and what and how and what for and how often, there are the further questions of reflection that arch the eyebrows and ask this or whether that really is so. Then the issue is, not more bright ideas, not further insights, but marshalling and weighing the evidence and presenting the sufficient reason that makes doubting unreasonable just as its absence would make assenting merely rash. Only in virtue of this further level of consciousness can we set aside myth and magic and astrology and alchemy and legend and begin to live by philosophy and science and astronomy and chemistry and history. It is a decisive stage in the process of self--transcendence when we not merely think of the universe but begin to know what the universe really is. In other words, man always lives in his world for his being is a being-in-the--world. But it is far from always true that the world in which he is, is a world that really exists.

Beyond the data of experience, beyond questions for intelligence and the answers to them, beyond questions for

reflection concerned with evidence, truth, certitude, reality, there are the questions for deliberation. By them we ask what is to be done and whether it is up to us to do it. By them is effected the transition from consciousness to conscience, from moral feelings to the exercise of responsibility, from the push of fear and the pull of desire to the decisions of human freedom. So it is that on the level of deliberating there emerges a still further dimension to self-transcendence. On previous levels there stood in the foreground the self-transcendence of coming to know. But deliberation confronts us with the challenge of self-direction, self-actualization, self-mastery, even self-sacrifice.

Already I have spoken of consciousness as a polyphony with different themes at different intensities sung simultaneously. Now I would draw attention to the different qualities, to what Gerard Manley Hopkins might call the different self-taste, on the successive levels. It is we ourselves who dream, but in response to in dreams of the night the subject emerges only to an immanent disturbance, while in dreams of the morning there is the fragmentary self-actualization that anticipates one's world and takes up one's now is the time for all good men to is the fragmentary self-actualization in which one's world is anticipated and one's own stance within it is taken up. With waking sensitive living comes into its own and there are amassed all the skills of posture and movement that Jean Piaget described in his account of the first twenty-four months of the development of his own three children. Now is the time on the successive levels. The same "I" that later is awake already is present in the dream. With waking one's slumbering

on the successive levels. The spontaneous vitality of our sensitivity, the shrewd intelligence of our inquiring, the detached rationality of our demand for evidence, the peace of a good conscience and the disquiet released by memory of words wrongly said or deeds wrongly done. Yet together they form a single stream, and we live its unity long before we have the leisure, the training, the patience to discern in our own lives its several strands.

The basic unity of consciousness reaches down into the unconscious. It is true that conflicts do arise, as the psychiatrists have insisted. But this truth must not be allowed to distract us from the incredible harmony that our bodily reality now is the time for all good men be allowed to distract us from a far profounder and far more marvellous harmony. In man, the symbolic animal, there is an all but endless plasticity that permits the whole of our bodily reality to be fine-tuned to the beck and call of symbolic constellations. The agility of the acrobat, the endurance of the athlete, the fingers of the concert pianist, the tongue of those that speak and the ears of those that listen and the eyes of those that read, the formation of images that call forth insights, the recall of evidence that qualifies judgements, the empathy that sets our own feelings in resonance with the feelings of others — all bear convincing testimony that self-transcendence is the eagerly sought goal not only of our sensitivity, not only of our intelligent and rational knowing, not only of our freedom and responsibility, but first of all of our flesh and blood, our bodies, bones and sinews, our bodies in their nerves and brains.

and blood that through nerves and brain have come spontaneously to live out symbolic meanings and to carry out symbolic demands.

As self-transcendence is the meaning of each of the many levels of human reality, so too it is the meaning of the whole. But that meaning of the whole, when realized concretely, is falling in love. So the experience of being-in-love is an experience of fulfillment, of complete integration, of a self-actualization that is an unbounded source of good will and good deeds. Such is the love of man and wife, of parents and children. Such is the loyalty of fellow ~~[illegible]~~ citizens to their commonwealth. Such is the faith that has its fount in the love with which God floods our hearts through the Holy Spirit he has given us.

Love, loyalty, and faith can all be questioned. When they are authentic, readily, I feel, ~~[illegible]~~ they are esteemed beyond price. But so easily ~~[illegible]~~ they are unauthentic, whether from the failures of the individual or, tragically, from the individual's authentic appropriation of an unauthentic tradition.

Still, even if only in principle they can be authentic, then at least in principle they point to an/answer to our ~~question. For we are all asking for the source of the inner conviction that is a component in religious knowledge. Now religious knowledge may be expressed in judgments of value and in judgments of fact now is the time for all good men question. For it would seem to be by self-transcendence that man attains truth. The truth of his judgements of fact rest on the self-transcendence that speaks only on the basis of the available evidence. The truth of judgements~~

question. For the man or woman intent on achieving self-transcendence is ever aware of short-comings, while those that are evading the issue of self-realization are kept busy concealing the fact from themselves. But our question has been the grounds of the inner conviction that informs religious living, and the answer we have come up with is that self-transcendence is so radically and so completely the inner dynamism of human reality that one cannot but be aware when one is moving towards it and, on the other hand, one cannot but feel constrained to conceal the fact when one is evading the abiding imperative of what it is to be human.

Inner Conviction and Objective Truth

At first blush inner conviction and objective truth stand at opposite poles. Inner conviction is subjective. Objective truth is the truth about what is already-out-there--now for everyone to see and grasp and handle. It is public truth, and the publicity is spatial. Precisely because it is spatial, because in principle it can be tested by anyone, it is beyond doubt or question.

Still questions do arise. One can distinguish between the world of immediacy and the world mediated by meaning. The world of immediacy includes all the data of sense and all the data of consciousness; it is a world that consists [illegible] of two parts, and the two correspond rather accurately to the public objective sector that [illegible]

all the data of consciousness. It consists of two parts; the totality of the data of sense is the sphere of objectivity that is spatial, public, in principle open to anyone's inspection; the totality of the data of consciousness is an aggregate of distinct and segregated subjectivities none of which can inspect what is going on in any of the others.

To be contrasted with this world of immediacy there is the world mediated by meaning. It consists of all that is to be known by asking questions and arriving at correct answers. It is a world unknown to infants but gradually introduced to children as they learn to speak, to boys and girls as they study in school, to students and scholars in centers of learning.

Man the symbolic animal lives in both of these worlds. As animal, he lives in the world of immediacy and, like Macbeth, is liberated from his fantasies when he adverts to the sure and firm-set earth on which he treads. As symbolic, he both suffers from the fantasies and brings about his liberation, for that consists not merely in the pressure on the soles of his treading feet but also in his certainty that the earth is firm-set and will not give way under his tread.

Still man the symbolic animal has long been a puzzle to man the philosopher. In so far as philosophers search for simplicity and coherence, they opt for one of the two worlds and attempt to get along without the other. Empiricists opt for the world of immediacy, and proceed to empty out from the world mediated by meaning everything that is not

immediately given. Rationalists take their stand on demonstrative argument and, if they go along with the ancient Eleatics, will argue that there cannot be more than one being and that that one being cannot undergo any change.

But both of these are extreme positions. Empiricists usually find it convenient to take an occasional excursion into the world mediated by meaning, at the very least to expound and prove their own position. Rationalists can advert to the fact that questions are raised with respect to the data of experience and that answers are confirmed by pointing to data that show what they say. So they are led to supplement the apodictic power of demonstration with the intuitions of sense and/or consciousness. But both empiricist excursions into meaning and rationalist appeals to intuition are compromises. They renege on their initial premise of simplicity and coherence. They point the way to a new startingpoint that acknowledges the complexity of man the symbolic animal.

The so called 'new' startingpoint is, of course, very old. It goes back to Plato and Aristotle. It reaches crises in the medieval controversy between Augustinians and Aristotelians and in the later victory of modern science over Aristotelian constructions. It heads into a quite different startingpoint in the twentieth century in which the notion of method aspires to a foundational role.

In search, then, of the meaning of the phrase, objective truth, I propose to speak, first, of the limitations of the Aristotelian notion of science, secondly, of the shift in

the sciences that conceives necessity, truth, certitude more as remote ideals than proximate achievements, thirdly, of the ascendency of method and the partial eclipse of logic in contemporary investigations.

From Aristotle's Posterior Analytics to Newton's Principia

In his study of The Origins of Modern Science: 1300 - 1800, Herbert Butterfield has argued, convincingly I feel, that ~~the many elements of modern science that were discovered by experimenters from the beginning of the fourteenth century onwards~~ from the beginning of the fourteenth century onwards many elements of modern science were discovered by experimenters, but the experimenters themselves were unable to break loose from Aristotelian preconceptions and set up an appropriate conceptual framework of their own.

Now the achievement of Newton's Principia was precisely that it established such a framework and did so in a manner that stood its ground for the next two centuries. It remains, however, that the very title of Newton's masterpiece, Philosophiae naturalis principia mathematica, bears an Aristotelian imprint. For the title suggests that Newton's mechanics is not an autonomous science standing in its own right but a set of mathematical principles for the department of philosophy called natural philosophy. In this respect the title is misleading. What Newton achieved was the vindication of mechanics as an autonomous science. But what he could not bring about was that total refashioning of the Aristotelian ideal that became possible between two and three centuries later.

I must begin by noting that the Posterior Analytics never were normative for Aristotle's own philosophic thinking or scientific work. They represent one of his great discoveries. They express it under the grave limitations of the science of his day. It was their unhappy fate to provide glib talkers with ready answers and serious thinkers with baffling problems until the reality of scientific achievement brought to light a more solidly grounded notion of scientific knowledge.

With the first stage of that transformation we are now concerned. If its triumph was Newton, still its goal was not Aristotelian theoretical knowledge but the practical utility praised by Francis Bacon in his Novum Organum. ~~Its conceptual framework was not Aristotle's metaphysics~~ Its conceptual framework took its inspiration not from Aristotle's metaphysics but from Galileo's program of mathematizing nature. Its field of inquiry was defined not by Aristotle's intellect, capable of fashioning and becoming all, but by the cautious rule of the Royal Society that excluded questions that neither observation nor experiment could solve.

In that movement there were two chief complaints against the Aristotelians. It was urged that they were concerned not with real things but with words. It was felt that the Aristotelian priority of metaphysics constituted an insuperable barrier to the development of experimental science. The validity of both complaints can, I think, be argued from a consideration of the Posterior Analytics.

In the second chapter of the first book of that work one is aware that Aristotle's basic concern is with causal necessity. We think we understand, he notes, when we know the cause, know that it is the cause, and know that the effect cannot be other than it is.[2] But straightway this concern with things and their causes is transposed into syllogistic theory. We are told how knowledge of causal necessity is expressed in appropriate subjects and predicates, premises and conclusions, and thereby manifests its nature as science. We are told how one science can find its principles in the conclusions of another more general science. But when at the end of the second book it is asked how the initial premises are obtained on which the whole deductive structure has to rest, we are told about a rout followed by a rally. The line breaks. Sauve qui peut! But as the fleeing line scatters in every direction, somewhere someone will turn and make a stand. Another will join him, and then another. The rally begins. The pursuing enemy now is scattered. Victory may be snatched from the jaws of defeat.[3] I think this military analogy is sound enough. For it represents the chance accumulation of clues that can combine into a discovery. But it is not at all clear that a necessary truth will be discovered and not a mere hypothesis, a mere possibility that has to be verified if it is to merit the name not of truth but of probability. If the only premises the Posterior Analytics can provide are just hypotheses, verifiable possibilities, then we have many words about causal necessity but no knowledge of the reality.

Further, the syllogistic approach distinguished philosophy and science simply as the more and the less general. It followed that together they formed a seamless robe with the basic terms and basic relations of philosophy ramifying through the less general fields and robbing them of their autonomy. But experimental science has to be autonomous. For experiment yields correlations. Correlations consist ~~in relations between terms. And the relations and be~~ in relations between terms. The terms and relations determined experimentally were the mass-velocities and mass--accelerations of Newton's mechanics; they were to be the electric and magnetic field vectors of Maxwell's equations; and the corpus Aristotelicum knew nothing about them.

From Logic to Method

The Aristotelian hegemony had been broken, but Aristotelian notions not directly challenged by the new science lived on in quiet possession of the field of common assumptions. Among them was the view that science consisted in true and certain knowledge of causal necessity. Indeed, Newton's deduction of the orbits of the moon and of the planets was regarded as a stunning confirmation of that view. Laplace's proof that a planetary system periodically returned to an initial situation went hand and hand with his assurance that, in principle, any situation in the universe could be deduced from any other earlier or later situation. Right into the twentieth century it was common to speak of the necessary laws of nature and even of the iron laws of economics. Even in our own day there have been loud complaints that Thomas

Kuhn's work on The Structure of Scientific Revolutions was an advocacy of irrationalism.[4]

But the logic of the matter is simple. Verification is not proof. For verification is an affirmation of what follows from the scientific hypothesis, theory, system. But to affirm the consequent of an hypothesis, settles nothing about the truth of the antecedent from which the consequent follows. A logical conclusion is to be had only when the attempt to verify turns up contrary instances; for then one denies the consequent and from that denial there follows the denial of the antecedent. Accordingly, the principles and laws of an empirical science, no matter how frequently they are verified, may be esteemed ever more probable but may not be considered to be definitively established.

Moreover, the progress of modern science points in the same direction. Newton was acclaimed because he was considered to have done for mechanics what Euclid had done for geometry. But in the nineteenth century it became clear that Euclidean geometry could no longer be considered the one and only possible geometry. In the twentieth the repeated verification of Einstein's special relativity made it probable that a non-Euclidean geometry was the appropriate conceptualization in physics.

Similarly, Laplace's determinism was found to have shaky foundations. For Heisenberg's relations of indeterminacy (or uncertainty) reveal a knowledge that is not less but greater than the knowledge offered by classical laws. Formerly, indeed, probability was thought to be no more than a cloak for our ignorance. But now the tables

are turned. For classical laws hold only only under the blanket proviso, other things being equal. So it is that classical predictions can be notably mistaken because they failed to foresee the interference of some alien factor. But further the verification of classical laws is never exact: no more is demanded than that actual measurements fall within the limits set by a theory of probable errors of observation. In brief, classical theory consists of two parts: there is the classical law, and it sets an ideal norm from which actual measurements do not diverge systematically; there is the theory of measurement and it sets the limits within which errors of observation may be considered probable. But as Patrick Heelan has pointed out, the same two aspects are contained within the single formalism proposed by quantum mechanics. For the single formalism admits two interpretations: one interpretation yields an ideal norm from which actual measurements do not diverge systematically; the other interpretation of the same formalism informs us of the distribution of the divergence from the norm.[5]

But quantum mechanics is not some limiting case or isolated instance. Thermodynamics had already drawn upon statistical theory. Darwinian thought easily moved from chance variations to probabilities of emergence and from the survival of the fittest to probabilities of survival. A statistical view of the emergence, distribution, and survival ~~of forms of plant and animal life could as easily be extended to the investigation of emergence and distribution of~~

of the forms of plant and animal life naturally suggests a similar approach in the investigation of the emergence and distribution of the chemical elements and compounds. Finally, what seems true of nature seems also to hold for man's knowledge of nature: as natural forms evolve in accord with schedules of probabilities, so too man's grasp of natural forms and of their evolution develops in accord with the probabilities of new discoveries.

I have given this section the title, From Logic to Method: Natural Science.

There has occurred, then, a transition from logic to method. It has occurred in the field of natural science. It does not, by any means, involve an elimination of logic: for it still is logic that cares for the clarity of terms, the coherence of propositions, the rigor of inferences. But it does involve a shift in the significance of logic. For Aristotle in his Posterior Analytics made his demonstrative syllogism the central piece in his construction both of the nature of science and of the relations between sciences. That construction has turned out to be a procrustean bed on which science cannot lie. So far from providing the key to the whole nature of science, logic has to be content with the task of promoting clarity, coherence, and rigor in the formulation and application of hypotheses and theories. Further, while it is essential that this task be properly performed, still the significance of that performance is not

supreme. For its significance lies within the performed, still the significance of that performance is measured not by logic itself but by method. For an empirical science is not confined to logical operations with respect to terms, propositions, inferences. It includes observation, description, the formulation of problems, discovery, processes of experiementation, verification, revision. Within that larger whole logic ensures the clarity of terms, the coherence of propositions, the rigor of inferences. And the more successfully it performs that task, the more readily will there come to light not the definitive immutability but the defects of current views and the need to seek more probable opinions.

From Logic to Method: IV. The Study of History

Generalized Empirical Method

We were dissatisfied with mere inner conviction and so we asked whether it bore any relation to objective truth. We have been pondering successive stages in the liquidation of the brave view presented in Aristotle's Posterior Analytics. We have come up with a science that yields, not objective truth, but the best available opinion of the day.

But if science does not give us objective truth, where are we to go? At this point each man has to become his own philosopher, and so I have no more to offer than my own solution to the issue. I have called it a generalized empirical method.[6]

Generalized empirical method is a method. It is a normative pattern of related and recurrent operations that yield ongoing and cumulative results. It regards operations, and so it is

not just a list of materials to be combined in a cake or a medicine. It regards recurrent operations, and so the same method can be employed over and over again. It yields ongoing and cumulative results, and so it differs from the New Method Laundry which keeps on repeating the same result whenever it is used. Such cumulative results set a standard, and because the standard is met, the pattern of related operations is normative: it is the right way to do the job.

Generalized empirical method envisages all data. The natural sciences confine themselves to the data of sense. ~~The Hermeneutic and historical studies confine themselves to data that are expressions of meaning nos is the time~~ Hermeneutic and historical studies turn mainly to data that are expressions of meaning. Clinical psychology finds in meanings the symptoms of conflicts between conscious and preconscious or unconscious activities. Generalized empirical method operates on a combination of both the data of sense and the data of consciousness: it does not treat of objects without taking into account the corresponding operations of the subject; it does not treat of the subject's operations without taking into account the corresponding objects.

As generalized empirical method generalizes the notion of data to include the data of consciousness, so too it generalizes the notion of method. It wants to go behind the diversity that separates the experimental method of the natural sciences and the quite diverse procedures of hermeneutics and of history. It would discover their common core and thereby prepare the way for their harmonious combination in human studies. From various viewpoints man has been

named the logical animal, the symbolic animal, the self-completing animal. But in each of these definitions man is regarded as an animal, and so he is an object for the natural sciences. At the same time, he is regarded as logical or symbolic or self-completing; he lives his life in a world mediated by meaning; and so he is a proper object for hermeneutic and historical studies. What then is the common core of related and recurrent operations that may be discerned both in natural science and in human studies.

In the natural sciences the key event is discovery. Whether we recall Archimedes' Eureka or the legend of Newton associating a falling apple with a falling moon, whether we turn from epoch-making discoveries to the larger field of less surprising but no less essential contributions, we ever find ourselves at the point where natural science has made a quantum leap. Something now has emerged. Again, in hermeneutics the key event is understanding: for the theorist of hermeneutics was Schleiermacher, and he got beyond the various rules-of-thumb of classical scholars and biblical exegetes by expounding a discipline based on the avoidance of misunderstanding and thereby the avoidance of misinterpretation. In history, again, the key operation is understanding, and so it was that Johann Gustav Droysen extended the procedures of hermeneutics to the whole of history by observing that not only individuals but also families, peoples, states, religions express themselves. Nor is understanding alien to common sense. It is the everyday experience of seeing what you mean, getting the point, catching on, seeing how things hang together. Indeed, when

~~we esteem someone for his or her intelligence, it is because~~ we esteem people for their intelligence, it is because of the ease and frequency with which they understand; and when we ~~it~~ suspect that they may be a bit retarded, it is because they understand only rarely and then slowly.

However, understanding is only one of the many components that have to be combined to constitute an instance of human knowledge. It presupposes data, whether given to sense or given in consciousness: for our understanding always is an insight, a grasp of intelligible unity or intelligible relationship; and a grasp of unity presupposes the presentation of what needs unification, as a grasp of intelligible relationship presupposes the presentation of what can be related. Again, such insight or grasp presupposes inquiry, that search, hunt, chase for ~~any~~ the way to piece together the merely given into an intelligible unity or innerly related whole. Nor is it enough ~~is~~ to discover the solution. One also must express it ~~adq~~ adequately. Otherwise one will have had the mere experience of the occurrence of a bright idea, but one will not have the power to recall it, use it, apply it. There is a further point to such expression whether in word or deed. Insights are a dime a dozen. For the most part they occur, not with respect to data in all their complexity, but with respect to merely ~~schema~~ schematic images. Dozens of such images are needed to approximate to what actually is given, and so it is that the expression of insight has to be followed by a very cool and detached process of reflection that marshals the relevant evidence and/~~puts~~ submits it to appropriate tests before laying claim to any discovery or invention.

Such in briefest outline is the normative pattern of recurrent and related operations that yield ongoing and cumulative results in natural science, in hermeneutics, in history, in common sense. It will be noted that the operations involved occur consciously: in dreamless sleep one does not experience or inquire or understand or formulate or reflect or check or pass judgement. Not only are the operations conscious but also they dynamism that moves one along from one operation to the next now is the time for conscious. There also is a dynamism that moves one along from one operation to the next. There is the spontaneity of sense. There is the intelligence with which we inquire in order to understand and, once we have understood, there is the intelligence with which we formulate what we have grasped. There is the reasonableness with which we reflect on our formulations, check them out, pronounce in the light of the evidence we have brought to light. Such spontaneity, intelligence, reasonableness are themselves conscious. So it is that both the operations and the relations that unite them in a normative pattern are given in consciousness.

But their givenness, of itself, is only infra-structure. It is not yet human knowledge but only one component within an item of knowledge of which the remainder as yet is only potential. To make that remainder actual one has first to attend to one's attending, note how spontaneously it fixes upon what gives delight, promises pleasure, threatens danger, recall the long years at school when teachers labored to sublimate our animal spirits and harness them to different, allegedly

higher pursuits, so that now without too much pain one can sit through a whole lecture and even listen to most of it. Secondly, one has to advert to one's own intelligence, its awareness when one is failing to understand, its dissatisfaction with explanations that do not quite explain, its puzzled search for the further question that would clear the matter up, its joy when a solution comes to light, its care to find the exact expression to convey precisely what understanding has grasped. In brief, attending to one's own intelligence brings to light a primitive and basic meaning of the word, normative, for the intelligence in each of us prompts us to seek understanding, to be dissatisfied with a mere glimmer, to keep probing for an ever fuller grasp, to pin down in accurate expression just what we so far have attained. Thirdly, in similar fashion, attending to one's own reasonableness reveals an equally primitive and basic but complementary type of normativeness. Ideas are fine, but no matter how bright, they are not enough. The practical man wants to know whether they will work. The theoretical man will wonder whether they are true: he will test their inner coherence, compare them with what he otherwise considers established, work out their implications, devise experiments to see whether the implications are verifiable, and if no flaw can be found, he will grant, not that they are true, ~~but primarily only that there may be now is the time,~~ but only that they seem probable. Our reasonableness demands sufficient evidence, marshals and weighs all it can find, is bound to assent when evidence is sufficient, and may not assent when it is insufficient. Finally, there is the normativeness of our deliberations. Between necessity and impossibility lies the realm of

freedom and responsibility. Because we are free, we also are ~~so~~ responsible, and in our responsibility we may discern another primitive and basic instance of normativeness. It is, so to speak, the reasonableness of action. Just as we cannot be reasonable and pass judgement beyond or against the evidence, so too we cannot be responsible without adverting to what is right and what is wrong, without enjoying the peace of a good conscience when we choose what is right, without suffering the disquiet of an unhappy conscience when we choose what is wrong.

It is time to conclude. We have been ~~inquixxing~~ asking whether there is any connection between inner conviction and objective truth. By inner conviction we have meant not passion, not stubbornness, not wilful blindness, but the very opposite; we have meant the fruit of self-transcendence, of being attentive, intelligent, reasonable, responsible; in brief, of being ruled by the exigences for authenticity in the human person, inner norms that constitute the.

But for objectivity we have distinguished two interpretations. There is the objectivity of the world of immediacy, of the already-out-there-now, of the earth that is firm-set only in the sense that at each moment it has happened to resist my treading feet and bear my ~~xxxxx~~ weight. But there also is the objectivity of the world mediated by meaning; and ~~xxx~~ that objectivity is the fruit of authentic subjectivity, ~~xx~~ of being attentive, intelligent, reasonable, responsible.

In my opinion, then, inner conviction is the conviction that the norms of attentiveness, intelligence, reasonableness, responsibility have been satisfied. And satisfying those norms is the highroad to the objectivity to be attained in the world mediated by meaning and motivated by values.

Notes

1) Ludwig Binswanger, Le rêve et l'existence. Introduction et notes de Michel Foucault. Desclée 1954.

2) Aristotle, Posterior Analytics I, 2 $71^{b}9$ ff.

3) Ibid., II, 19 $100^{a}9$ ff.

4) Imre Latakos & Alan Musgrave, Criticism and the Growth of Knowledge, Cambridge University Press 1970.

5) Patrick Heelan, Quantum Mechanics and Objectivity. A Study of the Physical Philosophy of Werner Heisenberg. The Hague: Martinus Nijhoff, 1965, pp. 53 f., 38.

6) Bernard Lonergan, Insight, London: Longmans (now Darton, Longman & Todd), and New York: Philosophical Library, 1957, pp. 243 f. and cf. p. 72.

7) See the first chapter in B. Lonergan, Method in Theology, London: Darton, Longman & Todd, and New York: Herder and Herder (now Seabury Press), 1972.

8) Distinguish three meanings of the term, transcendental: the most general and all-pervasive concepts, namely, ens, unum, verum, bonum, of the Scholastics; the Kantian conditions of the possibility of knowing an object a priori; Husserl's intentionality analysis in which noesis and noema, act and object, are correlative.