The Problem

Science and Religion, and much more Science and Theology sound as strange combinations. They belong to radically different areas and levels of human knowledge, one dealing with the intimate and transcendental area of faith and the other dealing with the mundane empirical world. Even in the heyday of scholasticism under the tutelage of the Church, theology was a minority faculty in universities, the big majority of students opting for the arts and science faculties. There was a climate in Western universities in the recent past in which religion and theology were considered an aberration of human reason, lacking the precision and clarity of the empirical sciences, often grouped with myth, magic and folklore. But today the study of religion and even of Christian theology has gained a certain prestige and standing in the universities.

This began with the emancipation of countries in Asia and Africa, for long under the control of the Western colonial powers: With their gaining of national independence, their traditional religions too came to be better known in the world and they attracted greater academic curiosity. While theological seminaries training candidates for the sacred ministry often continue in their age-old fashion and are sometimes criticized as being some sort of theological cemeteries guarding old bones of outdated theological theories, intense academic study of religions and theological issues came to be pursued in the free atmosphere of the secular universities away from the control of religious authorities. But when ranked and catalogued with other scientific studies like physics, chemistry, biology, psychology, sociology and history there is a great deal of concern on the part of comparative religionists and theologians to justify their existence in the university community on a par with other scientists. The empirical scientists, on the other hand, do not miss any opportunity to challenge this new claim from the professionals of religion while the scholars of the human

sciences like psychology, sociology and history keep wondering what the religious scholars could scientifically add to their own findings in the area of religion: After all, religion is a human phenomenon and all phenomena come under the purview of sciences. In this context the theologian has a great temptation to jump on the bandwagon of secularism.

On the other hand, the theologian finds himself in an extremely difficult situation today. When he explores the central themes of God, creation, sin, redemption in Christ, the church, the Sacraments and the eschatological fulfilment of human life he does not get a positive response from the community at large. He is not interpreting peoples' actual experience today. Religion is no longer the cement of society and faith is not reinforced by social and cultural life. So there is a risk of the theologian retreating into the privacy of an élite group, a sort of underground church, or of reducing religion to a harmless school of ethics, last he should appear as a voice crying in the wilderness. But what is generally questioned today is the institutional aspect of all religions as well as their structures and idioms carried over from a distant past, but not the religious and spiritual dimensions of human life.

Today the task of theology is not merely applying what is discovered from the biblical tradition to the present situation, but rather making the great Jewish-Christian movement enter into an active dialogue with the new experience of all men today. Even the word 'God' can be used in the message of salvation only if that God gives a liberating answer to the questions not alone of the élite but of all people living in the world. In bringing the message of the Gospel to the living experience of man today the resources of the sciences, especially history, sociology and psychology become extremely important to the theologian.

Theology has no longer the overall charge of human life nor the pretentious title of the queen of sciences with philosophy as its handmaid, guarding and guaranteeing all values. In fact, religion is no longer needed to maintain the basic values of a society or to legitimize its social institutions. Its task is more modest, that is, to endeavour to achieve an ultimate integration of the experiences and values of man, to add definiteness and transcendence to the spontaneous reflection of people on their experiences. Modern people reflect in a tentative quasi-religious way on their experience of totality and joy, or of finitude, suffering and liberation, sense of the precariousness of existence. Even in their successes they feel threatened coming up naturally against a limit, the possibility of total failure and, on the other hand, the presence and availability of a merciful and transcendent reality. Religion interprets these vague feelings of an anticipated totality and leads them into integration in religious experience. In this movement from guilt feeling to clear and distinct realization, from anticipation to encounter, from insight to formulation and definition, there is a great deal of similarity between the procedures of the empirical sciences and of theology itself.

The Starting Point: Openness of Science to Integral Knowledge

The point of departure for the modern dialogue between science and theology in recent times is the growing disillusionment with the unlimited possibilities of science itself. Karl R. Popper, Paul Feyerabend and Pierre Teilhard de Chardin may be taken as representatives of three aspects of this throwing open the doors and windows of science to other areas of human knowledge including religion and theology.

Karl R. Popper starting out "to discuss the physical sciences, their methods and some of their implications, physical cosmology and the role of the theory of knowledge in the physical sciences" fights against both philosophical and scientific determinism.¹ Philosophy muddled by common sense asserts that every event is caused by some preceding events, so that every event can be explained or predicted if we know all the relevant preceding events in sufficient detail," while La Placean physics emboldened by the apparent success of its deterministic theories assumed "that the state of the universe at any moment of time, future or past is completely determined, if its state, its situation, is given at some moment."² Popper argues that such determinism, even though widely believed to be part of science especially of Newton's and Einstein's theories of gravitation and Maxwell's theory of the electro-magnetic field, is neither tenable nor required by classical or contemporary physics. He shows that the world of bodies

2. Ibid. pp. 142-162

^{1.} Karl R. Popper, The Open Universe, An Argument for Indeterminism. (Totowa, N. J.: Rown & Littlefield, 1982) p. xix

or of physics, the world of human consciousness and language and the world of human brain and physiology though partly autonomous belong to the same universe and they interact.³ The knowledge of this universe which itself is part of the universe is incompletable very much like a man who draws a detailed map of the room in which he is working, including the map he is drawing. "All explanatory science is incompletable, for to be complete it would have to give an explanatory account of itself."⁴ All attempts at reducing the phenomena to definite laws and regularities may be fruitful not only by their partial successes, but also by their partial failure which reveals new problems. In our universe of "emergent novelty" complete reduction is impossible and open problems are almost as interesting as their solutions. Almost every solution opens up in its turn a whole new world of open problems.⁵

If people like Karl Popper, Thomas Kuhn and Imre Lakatos have tried to shift the attention from the earlier concentration on scientific method to the area of scientific practice and its similarity with other branches of human knowledge, Paul Feyerabend shows that the so called scientific method was never a closed system nor strictly rational. In fact, the most successful scientific inquiries have never followed a strictly rational procedure as the idealogists of the scientific method seemed to claim. Insistence on a well-defined mode of procedure may be useful and even necessary for training the professionals in any field. But often chauvinism and propagandism and the concern for false prestige make science unnecessarily complicated. It is false to suppose that the positive results of science have arisen without any help from non-scientific elements, that the unscientific procedures such as the herbal lore of witches, the astronomy of mystics etc. are totally without merit and that science owes its success to the correct method and not to lucky accidents. In fact, modern astronomy started out with the attempt of Copernicus to adapt the old ideas of Philolaos, a muddleheaded Pythagorean, to the needs of astronomical predictions. Medicine profited from the herbalism of witchcraft, astronomy from Pythagoreanism and the Platonic love for circles. Even in recent times the Chinese adoption of ideas and methods contained in the Yellow Emperor's Textbook of Internal Medicine, far from leading to the

- 3. Idid. pp. 1-11
- 4. Ibid. p. 162
- 5. Ibid.

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downfall of Chinese medicine as many professionals of Western medicine predicted, has actually introduced a great many innovative techniques like acupuncture and pulse-diagnosis.⁶ Hence, "the separation of science and non-science is not only artificial but also detrimental to the advancement of knowledge. If we want to understand nature, if we want to master our physical surroundings, then we must use all ideas, all methods, and not just a small selection of them."⁷

Father Pierre Teilhard de Chardin, S.J. trying to defend the value and relevance of the empirical sciences for philosophers and theologians expands the conception of science in a more positive direction. Following Pierre Duhem he argues that science does not grasp the thing as it is in itself but only tries to know it in terms of models and frameworks interpretative of our understanding. Duhem, whom Teilhard de Chardin seems to follow closely, concentrated attention on building up a scientific method asking what information it provided on physical realities, how one could detect and distinguish the phenomenal and ontological realities and the like. His main conclusions were that any science should restrict itself to the phenomenon, anything beyond the phenomenon being transcientific or metaphysic, the "physics of the believer," and that any physical theory must be judged as a whole and not in parts. He also pointed out that all truth is open to experiential observation, and that it is always only an approximation, since we are addressing a certain language to reality and the reply itself has to be in the same language. So there is need for a certain scepticism regarding what science says about reality: physics is not the perfect mathematically accurate science it is often supposed to be.

In this line of Duhemian thinking Teilhard de Chardin points out that the thing itself is neither simple nor static but complex and evolving. Evolution is a basic dimension of physical things which progress in consciousness proportionate to the increase in the complexity of its structure. Evolution itself is not a push from behind and around as the Darwinian theory of the survival of the fittest may seem to imply, but rather a pull from above, so much so that the goal and term of a thing's movement also should be a concern of science as much as or even more than the preoccupation with its static aspects of mass and energy.

^{6.} Paul Feyerabend, Against Method (London: Verso, 1978), pp. 304-5

^{7.} Ibid. p. 306

On the other hand, man, around whom philosophy and theology concentrate their attention, is not outside the realm of science. He is a phenomenon like other phenomena and has to be dealt with objectively like any other object of scientific study. But instead of taking the material inanimate things as the model for studying all things, as scientists generally do, Teilhard points out that the higher and more perfect levels of phenomena should be assumed as models for studying and judging the lower. In this perspective consciousness appears as the most outstanding phenomenal datum concerning man and it can be seen in less evolved forms in the lower levels, in a most rudimentary form even in the atom. The contrast and complementarity between the radial and tangential energies that tend on the one hand to preserve the identity of the individual and on the other to go outside and beyond its limited nature are taken as basic expressions of consciousness understood in a very general sense.

The movement from the lower to the higher is not entirely unstructured either. There are definite stages or spheres on which distinct forms of consciousness break forth marking out the flow of evolution into distinct segments as lithosphere, geosphere, biosphere and nousphere culminating in an Omega which is at the same time the final point of the whole movement as well as the goal that pulls all things to itself. Interpreted in this Teilhardian way science appears very close to the concerns of Christian theology which sees the created universe as a work of the divine Logos, who becoming flesh becomes the inner redeeming principle of the whole universe ordering all things to the Omega.

Movements in Religion and Theology

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On the side of theology too there has been a great deal of modification in attitudes towards accepting a scientific approach to life and reality. The deistic era, when religious thinkers were trying to find gaps in scientific theories to provide a role for their God, is long past. The main facts that brought about this change in theological attitudes were the emergence of the comparative study of religions, a shift of emphasis in theology to its anthropological meaning, and a search for an inductive option in theology in the place of the traditional deductive approach.

Comparative Religion

One liberating factor from Christian fundamentalism which looked upon the Bible as a sort of literally dictated message of God, the only source of all religious knowledge, was the emergence of Eastern religions into world consciousness. For many centuries Christianity was the one religion present to the consciousness of the West: the Jews who lived scattered among Christians were considered more a nuisance than any real challenge to their traditional faith. Muslims were, of course, at the distant borders of the so-called Christendom. Though Islamic philosophy and law made a great impact on Christian thinkers, Islam as a religion did not hold any fascination for the sophisticated West. But starting with the nineteenth century the non-Christian Eastern religions like Buddhism, Hinduism, Chinese and Japanese and African religions and a great bulk of esoteric religious literature bombarded Western religious consciousness. Though at first they were written off as expressions of simple human culture and of interest only to linguists and humanists, a closer and deeper study created the awareness that there is a basic unity of faith in all religions and that the existing diversity was produced to some extent rather by beliefs, practices and traditions than by the basic content of faith itself. When comparative religionists endeavoured to discover the unique contribution of each religion to the overall religious experience of humanity the value of particular human sciences like psychology, sociology and history became very evident and they raised questions for the Christian believer about the identity and uniqueness of his own religious tradition.

Anthropological Theology

The second stage in the approach to the concern of empirical sciences was the shift in emphasis in theology from God to man. Paradoxically, it was the atheist and materialist Ludwig Feuerbach who advocated a translation of theology into anthropology with the plea that what religion is all about is human life, human reality. human fears and hopes. Though what it did immediately was to provide a basis for Karl Marx's re-interpretation of the world and vitally shaped both Freud and Nietzsche, subsequently theologians did not fail to realize that if religion is a human phenomenon, greater emphasis had to be placed on its meaning for the life of man. In reply to Feuerbach it was pointed out that if religion is symbolization of the human world, with greater reason we can say that the human world in its entirety, including various symbol systems, is itself a symbol of the divine. That every traveller to a foreign country tends to interpret the country he visits with reference to his own native land does not deny the objective reality of the foreign land itself but only affirms its value for himself and his country. As Peter Berger remarks, the point of Marco Polo's travel accounts is not that he was an Italian with all his native preoccupations and prejudices, but that he actually visited China.⁸

The great impact made in our times by Marx, Freud and Nietzsch, was to make theologians realize that though they were talking about God, religion is more a human phenomenon than divine, that it is the meaning of God for man, his understanding of and approach to the divine reality than a simple ontology of God. It was dramatically expressed in the simple statement that theology is not an ontology of God for man, but rather an anthropology of man for God. Even the immanent Trinity of the Godhead is knowable for us only in and through the manifestation of the three divine Persons in the economy of our salvation, the economic Trinity. Christ and the Church represent God's encounter with man only because they are the effective sacrament of man's encounter with God.

This anthropological emphasis brings theology very close to the sciences. The world is realizing today the great danger in leaving the sciences all to themselves to pursue their own independent course of research and experimentation since such totally autonomous pursuits may bring about even the total destruction of man himself. The only reason for their existence is man, his central position in the world of things, his control over things and their nature and impact on his life and future. As Karl Rahner says "whether these sciences are called physics, chemistry, biochemistry, genetics, paleontology, sociology or whatever, they are all quite legitimately trying to derive and explain man, to dissolve him as it were into his empirical causes which can be analyzed and isolated."⁹ Any data gathered by the empirical sciences in their effort to derive and explain man can provide theology with new

Peter L. Berger, The Heretical Imperative, Contemporary Possibilities of Religious Affirmation (Garden City, N. Y.: Double Day, Anchor Press, 1979), p. 123

^{9.} Karl Rahner. Foundations of Christian Faith, p. 8

paradigms to understand and convey traditional religious meaning in categories relevant to the changing times.

Liberation from traditional philosophy was another aspect of this anthropological shift and approach to the empirical sciences. Traditionally there was a sort of "sweet-heart arrangement" between Western Christian theology and the Aristotelian-Thomistic philosophy which was characterized as "perennial:" Philosophy restricted itself mostly to those aspects of metaphysics, cosmology, psychology and ethics which were particularly relevant to the interpretation of Christian faith, while systematic theology returned the compliment by interpreting the data of divine revelation as a concrete application of the basic principles of the "perennial philosophy." This was a typical case in which the clever handmaid easily dominated and manipulated the lady of the house. As Gregory Baum comments, the exclusive concentration on the dialogue with philosophy to the neglect of the social sciences has immeasurably impoverished theology.¹⁰ To be relevant to the life of the people today, theology must necessarily enter into dialogue with a pluralism of historical, sociological and natural sciences, a dialogue no longer mediated by philosophy.11

Vatican Council II in its document, *The Church in the Modern World*, unequivocally affirmed the need for theologians "to co-operate with men versed in other fields of learning by pooling together their resources and their point of view. "For, theological research in deepening the knowledge of the revealed truth should not lose contact with its own times, so that experts in various fields may be led to a deeper knowledge of the faith. As Pope John Paul II acknowledges in his apostolic exhortation "Familiaris consortio", for understanding the historical context in which pastoral action has to be developed and for attaining a better grasp of the truth itself sociological and statistical research is of great value.¹²

An Inductive Option

An exaggerated concern for doctrinal orthodoxy and constant preoccupation with possible heresies was a direct consequence of a

^{10.} Gregory Baum, "Personal Testimony to Sociology", The Ecumenist, vol. 8 (1969), 1-4

^{11.} Karl Rahner, Foundations of Christian Faith, p. 8

^{12.} Gaudium et Spes. art. 62

purely theoretical and philosophical approach to theology. As Peter Berger forcefully argues in his *The Heretical Imperative*, all forms of orthodoxy follow a purely deductive method merely applying once conceptualized and formulated doctrines to our times. Classical orthodoxy was primarily concerned with the task of keeping faithfully what was handed down in order to keep it unchanged and unaffected by the conditions of history and of societies. The neo-orthodoxy represented by Karl Barth and other theologians reacting to the liberal theologians who allegedly went too far in adapting the Gospel message to the spirit of the modern age declares that the Word of God revealed in the Gospels can in no way be affected by human judgements and attitudes and the changing phases of history. Often it is forgotten that the Word of God is addressed to man in human events and human speech and they have to be interpreted in their socio-cultural and historical context to be properly understood.

The secularist theologians go to the opposite extreme following a reductive option accepting the religious message only to the extent it can be accommodated with the immediate concerns of man and even identifying it with any particular political agenda deemed convenient at the time. Between these deductive and reductive options Berger finds an inductive option of choice, which following the terminology of Schleiermacher he calls the "heretical" option according to the literal meaning of the Greek word "heresis", choice.

Schleiermacher was one of the first to advocate the use of the scientific method to arrive at the true meaning of the Gospel message and to make religion relevant to the life of man today. According to him the essence of religion is neither theoretical speculation nor moral preachings, which are only the result of reflection, but the experience of absolute dependence. Since this implies encountering the infinite within the finite phenomena of human life, the specific forms of religion in history and culture may be viewed as being closer or farther away from the core experience of God. Even in the Bible the proper approach must be to find out what the actual writers of the sacred books Paul or John or Mathew really meant. But "every specific form of religion... is a particular positive religion, and in relation to the totality of religious phenomena a 'heresy', something specially chosen among several possible expressions." In the opinion of Schleiermacher, Christianity should be chosen over against other positive religions because it is "the most perfect idealization" of

religion, because it is centred in the idea of Christ as the mediator, presenting the infinite within the finite. Here the idea is taken not in an abstract and theoretical sense but meant as the core motif of experience, the essence of the Christian experience. Christianity is not a mere doctrine but a culture and in Schleiermacher's view the missionary's task is to carry to the rest of the world the Christian experience as concretely realized in the European culture. There is no doubt Schleiermacher was guilty of a certain psychologism and subjectivism in interpreting the Gospels, and he took for granted the superiority of the Western culture over the rest of the world. But his positive contribution was in pointing out that religion is not an abstract doctrine but concretely expressed and realized in a living culture in historical situations and for understanding this religion the aid of human sciences like psychology and history are of great importance.

Integration of Theology to Scientific Methods

Complexity of Human Knowledge

The integration of theology to the modern context of the empirical sciences involves several steps and stages, especially an analysis of theological activity itself, recognizing the role of modern hermeneutics in understanding the ancient religious texts, exploring the theological content in the actual life of people, and taking note of the actual limitations of sciences in handling the unique aspect of religious faith itself.

The Theological Activity

Theology like the sciences is not merely a set of statements or a list of conclusions but primarily an activity of the mind, the *logos* about the *theos*. In science this activity includes (a) selecting the appropriate data that involve sensible consequences and can be reproduced under controlled conditions or at least be properly observed, (b) performing operations around them such as analysis, reconstruction verification, systematization and rising to higher viewpoints, (c) checking their relevance in providing a starting point for different types of insight, leading to different causal aspects and yielding greater intelligibility regarding their inter-relationships, (d) always watching out that one's conclusions do not exceed the available data, (e) yet seeking

to achieve a complete explanation of all the cases of the particular phenomenon under study, and (f) also acknowledging that science is a work of abstraction and systematic unification that draws the general from the particular, and the partial aspect under consideration from the totality.¹³

But the specific concern of theology as a scientific activity is the search for meaning. Meaning itself has a great many dimensions such as the inter-subjective meaning of communication of feeling between persons in the I-You relationship, linguistic meaning distinguishing between true and false, subjective and objective, and between what we feel, desire, fear, think, know, wish, command or intend, the artistic meaning of the objectification of pattern or form, the evocative meaning of symbols and images, and the incarnate meaning according to which a person and his way of life are expressed in his words and deeds. Theology as the science of God's meaning for man and as the interpretation of the Christian texts revelative of such meaning in a way intelligible and relevant to the men of today involve all these different aspects of meaning whether they be actual or only potential, partial or full, implied or formal, instrumental or effective. Theological activity includes the discovery of that meaning moving from the world of immediate experience to the totality of worlds, effectively constituting that meaning in theoretical formulations, social institutions, culture and way of life, and communicating that meaning to others artistically or socially.

According to Bernard Lonergan, "to put method in theology is to conceive theology as a set of related and recurrent operations cumulatively advancing towards an ideal goal. Here it is not a question of dividing and sub-dividing the field of data into Scriptural, patristic, medieval and similar areas of study, nor merely classifying the results of investigation into sections like Hebrew history, religions of the Near East and Christian theology, but rather distinguishing and separating successive stages in the process from data to results. Lonergan indicates eight functional specialities in theology: Theological activity starts with researching the data relevant to theological investigation, interpreting and understanding what was meant, grasping them in their general and specific historical contexts, and discerning the dialectics in the Christian movements taking note of their dynamic

13. Bernard Lonergan, Insight, pp. 203 ff.

and often conflicting aspects. Investigating these conflicting factors like conversions and the different motives behind them one is led to the foundations of Christian theology, namely "the horizon within which the meaning of doctrines can be apprehended."¹⁴ There can be many Christian horizons and they can lead to authentic or false conversions according to the particular perspective they provide. Within the horizon of foundations, doctrines can be formulated subdivided into different areas like dogmatic, moral, ascetical, mystical and pastoral theologies. The next stage is to work out appropriate systems of conceptualization, removing apparent inconsistencies and grasping spiritual matters both from their inner coherence and from analogies drawn from human experience. The final function of theology is to communicate these ideas effectively.

In these operations theology has to satisfy certain minimum requirements for rightly claiming a scientific status, and these are in short the postulates of propositions, coherence and control. First of all theology like any other science is not a matter merely of intuitions, insights and experience, but of human rational discourse and hence it must have besides questions and definitions only propositions, that is, statements whose truth is asserted. A science must be able to state its propositions as axioms and as theorems deduced from these axioms. Secondly, all these propositions must have a certain coherence forming a single field of study. That these propositions should be subject to testing or be verifiable is a third postulate common to all sciences. The mode of verification will vary from science to science according to the particular aspect of the thing that is being studied. The critical principle that is being used for the verification of intelligibility and formulation should be clearly stated.

These conditions are not imposed on theology from outside by the empirical sciences which are often presumed to be THE sciences the particular methodology of which is assumed to be the model and norm for all human knowledge. In fact, these conditions arise from the nature of theological activity itself. As Edward Schillebeeckx states: theology is "that scientific method in which personal participation in the faith handed on in the church is so effectively present that on the one hand critical rationality with its scientific methods of research and

^{14.} Bernard Lonergan, Method in Theology (London: Darton, Longman & Todd, 1972), p. 131

reflection is nowhere interrupted, supplemented or replaced from outside, and on the other the history of the Christian interpretation of reality is continued and made relevant to the present in creative loyalty by means of practical critical interpretation.¹¹⁵

Work of Hermeneutics

A special aspect of the scientific side of theology is that it is heavily dependent on religious texts. Christian theology is not the interpretation of one's personal religious experience but the interpretation of Christian religious texts which in a special manner embody or refer to divine Revelation to man, sacred Scripture, definitions of Councils and the documents of tradition transmitting the fact of the Christ event to all men down the centuries. Since the self-disclosure of God to man is made in human events and human discourse at a particular point in history and at a particular place they need interpretation to be properly understood. In this for a long time emphasis was placed on exegesis, the accurate linguistic interpretation of the original texts of the Bible in Hebrew or Greek.

Schleiermacher was one of the first to point out the close connection of these texts to their original cultural contexts and to argue that a scientific approach was needed to transcend the cultural barrier that separates us by centuries from the original author. Just as one understands another speaker through shared language so the interpreter of a text must penetrate its peculiar message by way of the author's distinctive use of language, by an analysis of the form and organization which the author uses to present the message and of the initial decision or idea which impels the author to communicate, and trace the stages in the composition of the work from its original inception. There is here a hermeneutical circle, since the whole is understood from its parts and the parts from the whole. Christianity brought forth a distinctive language, a language producing power, and a distinctive content, a new message or 'idea' to be experienced and proclaimed.

Wilhelm Dilthey tried to correct the psychologism implied in Schleiermacher's approach through a personalist interpretation of

^{15.} Edward Schillebeeckx, Glaubensinterpretation, Beitrage zu einer hermeneutischen und Kritischen Theologie, 1971, p. 156

history in which each text was produced. Similarly Catholics in the Tübingen school in the 19th century used a theology to transcend the dichotomy between positive theology that focussed heavily on texts and speculative theology that concentrated on the theoretical study of problems. The philosophical approach to grammar which has been a speciality of the French tradition and which has been revived and refined in recent times by a great many linguists and Structuralists like Strauss and de Saussure hold that in any text meaning basically arises from a "deep" universal sort of grammar common to all languages which is only particularized and enriched by the specific surface syntax of the particular language. Language itself should be approached in a functional way, since in the words of Ferdinand de Saussure "language is a system of interdependent terms in which the value of each term results solely from the simultaneous presence of the others." As Ludwig Wittgenstein maintains, language itself is a self-referring and self-regulating system very much like a game which has to be understood by its own inner rules. So any text, including the religious text should be viewed from different angles, not only from the meaning of the words of a particular language, but also as expressions of feelings, intentions, facts and especially as a self-contained game with its own rules.

Paul Ricoeur, on the other hand, places the emphasis on signification and symbolism that is at the heart of all language. The task of hermeneutics is to interpret rationally the thought encased in symbols starting with a pre-understanding that is before all theology, speculation and myth embedded in the archaic and oneiric which is the birthplace of language itself. Since there is no presuppositionless philosophy or theology there is the need for a sort of hermeneutical arch in arriving at the real meaning of a text: From the original text one has to rise to the fulness of language by a sort of demythologization and then fill it anew with the symbolism proper to our technical age. Whether it be the question of sin and evil or of the Incarnation, the double intentionality of the symbol, its literal meaning as well as the symbolic meaning constituted in and through the literal meaning survive only through the revolutions of experience and of language which submerge it. Theological interpretation for Ricoeur is a movement from living in symbols towards thought that thinks from symbols: It is understanding symbol by symbol or the totality of symbols, getting involved in the dynamic self-transcending of symbolism. No one can understand a religious text or any other text unless one lives in the

aura of its meaning. The hermeneutical circle as far as theology is concerned is: one must understand in order to believe, but one must believe in order to understand. Thus theological understanding is a sort of second innocence; like the naive faith of the ordinary believer who accepts the word without question, for the interpreter interpreting and applying the text to actual life is believing.

Wilhelm George Gadamar basing himself on the existentialist philosophy of Heidegger wants to go in for hermeneutics "beyond the limits that the concept of method sets to modern science" and investigate the "scientific" integrity of acknowledging the commitment involved in all understanding. He takes as his starting point the spirit of modern science that imbued the historic human sciences, and the growing rationalization of society and the scientific technique characteristic of our age. According to him there is no contrast of methods between natural and human sciences but only in the objectives of knowledge. Hence his intention is "to discover what is common to all modes of understanding." For him "understanding is never a subjective behaviour toward a given 'object' but towards its effective history, the history of its influence. Understanding belongs to the being of that which is understood. Hence hermeneutics precedes even history, because it discusses how best to understand and interpret effective history. Gadamer finds the best exemplification of the right interpretation of a text in the appreciation of a work of art. There is no sharp division between the original world structure established by a work of art and its experience in the changed circumstances of the spectator. "The work of the art stands in a limitless way for ever new integrations." The experience of the work of art always fundamentally surpasses any subjective horizon of interpretation, whether that of the artist or that of the recipient. The mens auctoris is not admissible as a yardstick for the meaning of a work of art. In the same way the scope of hermeneutics in dealing with a philosophical or religious text is to encounter that meaning with which the author himself. Plato or Paul was struggling, without fully grasping or exhausting it. In order to achieve this a sort of fusing of the horizons of the author and interpreter is necessary. Here application of the meaning which was present to the author, to the horizon of the interpreter, is central to any hermeneutics.

The importance of hermeneutics for a scientific orientation of theology is that its field comprises all the situations in which meaning is encountered. Hermeneutics bridges the gap between the familiar world in which we stand and the strange meaning that resists assimilation into the horizons of our world.

Theology and Sociology

Another scientific area very vital to theology is sociology. Theology is committed to being somewhat sociological because the sociological view of reality is almost essential to the contemporary viewpoint. The very phenomenon of religion is socially located in terms of specific functions and as Peter L. Berger states, though "the sociologist will not be able to make any statements about theological questions in themselves, he will be able to show that these questions have rarely been negotiated in a social vacuum."¹⁶ Even to understand the correct meaning of religious texts including the Bible, of great importance is what biblical scholarship calls the Sitz im Leben or the "social location." But Andrew Greely says that it is very easy for theologians to make a bad use of sociology. As he points out in his ten sociological commandments, for theologians it is very easy to confuse constructs that represent a small minority with the masses, take for granted certain evolutionary models, exaggerate the pace of social change, and distinguish things simplistically into black and white while most of them are grey. Similarly one can fall into the fallacy of good old days as if some stage in the past can be fixed as a golden era, see crises where they do not exist, condemn the religion of the masses as mere culture religion, and go by bad statistics.

Conclusion : Theology-Science Tension

Though theology should maintain a constant dialogue with other sciences and their empirical methodologies, theologians should beware of all kinds of reductionism. Just as theology cannot be reduced to mere philosophy so also it cannot be reduced to mere sociology or history or hermeneutics. Each science is happy only within its own particular framework of its own idioms and categories and tries to reduce everything to them. Thus for a sociologist "the universality of religion far from being a proof of its metaphysical validity, is explicable in terms of social functions."¹⁷ Every empirical science views

^{16.} Peter L. Berger, Invitation to Sociology (Anchor books, 1963), p. 116

^{17.} Ibid. p.115

the interrelationship of its data on a plane of equality in a horizontal manner. The unique character of philosophy and theology is that they move vertically, from empirical effects to causes on a higher plane, from signs to the signified, from facts to values and, above all, from the data of revelation to the One who reveals Himself.