

PROJECT FOR INTERDISCIPLINARY RESEARCH

TOWARD UNIFICATION OF THE SCIENCES OF MAN

The epistemological situation of the human sciences today is characterized by a state of dismemberment corresponding very closely to the very dislocation of the present world. For all science of man is a knowledge of man.

The need for unification of this knowledge is, therefore, also an aspect of the urgent demand for world unification, and for a reconciliation of man with his fellows and with himself. Having predetermined this need, the importance of the task to be undertaken comes to the forefront; at the same time, its limitations are marked. Carrying such a reflection to its conclusion implies a gathering together of the human community: a state of affairs certainly very far from the present political and social universe.

In the order of learning, each social science, by virtue of the projective character of knowledge, presupposes an image of man

Translated by Sidney Alexander.

and sets it in operation. The specialist, satisfied with his specialization and believing in the specificity of his methodology, cuts man into pieces. He convinces himself that man is a collection of bits and that if he finally adds them all up, he will reconstitute man in his integrity. However, once man has been cut to pieces, he is no longer a man for the good and simple reason that we have begun by killing him.

The mathematician, the statistician, the cybernetician, the biologist, the paleontologist, the economist or the philologist who studies this or that technical aspect of organic, psychological or social reality must never forget this ultimate reference to a human being at work in the human world. Their methodology itself will not be changed for that reason, but inspired by a new spirit, it will be oriented toward a sense of closer collaboration with neighboring sciences and respect for indispensable cross-checking.

Working to orient the human sciences toward confluence is therefore working for human unity. For this unity is first of all a state of mind. And if it is not found at the beginning of our investigation one may be certain that it will not be found at the end.

Only a concern for interdisciplinary convergence can permit the various sciences of man to truly become human sciences.

THE DOMAIN OF THE HUMAN SCIENCES

The concept of a science of man has been interpreted very differently throughout time and from one country to another. We are unable at this point to undertake a theoretical discussion of this fundamental concept. But it would seem to be indispensable to our task to accept as a whole, under the heading of sciences of man all those disciplines which have man or some specifically human activity, as their object of study.

The Germanic concept of *Geisteswissenschaften*, which is placed in a Hegelian perspective, would therefore appear to be too narrow to the degree that it considers man as spirit, but rejects him as nature; furthermore, it presupposes an entire philosophy. In the same way, the Anglo-Saxon concept of *social sciences*, which is tending to spread in France, reduces

human sciences to psychology, sociology, supplemented by ethnology or cultural anthropology. Here again the span of the concept is much too much restricted since it excludes all those disciplines dealing with the natural history of man or humanity, as well as the biological and historical sciences.

We, therefore, propose as a basis for study the following table. This, of course, makes no pretensions at being complete but furnishes us the outline of an enumeration of the epistemological families spread out among the human sciences. One may note the watertight compartments separating these various groups.

1. *Natural Science: Natural History of Man*
Paleontology, prehistory
Somatic anthropology
Biology, medicine, neuro-psychiatry, psychosomatics.
2. *Cultural Sciences*
Social Anthropology
Psychology, psychoanalysis
Psycho-sociology
Sociology
Ethnography, ethnology, folklore.
Juridical Sciences
Political sciences, political economy, demography, human geography.
Historical Sciences
General history and particular histories
History of sciences
History of ideas
History of religions
History of arts, history of techniques
Philology, archaeology, linguistics.
3. *Exact Sciences*
Statistics, cybernetics, theory of information
Psycho-physics
Economic mathematics
Operational research.

Some of these groups comprise subjects of almost indefinite subdivisions, no single one of them dominates a group of disciplines.

The question might be posed of knowing whether it would be opportune to proceed to a preliminary investigation as to the current situation regarding unity of the human sciences.

For each culture and intellectual tradition, the significance given to human unification in the main areas of knowledge will be examined. Also the degree to which this is taken into consideration by scholars will also be considered.

Furthermore, it will be important to determine whether the idea of the science of man is a particularly Western concept. In other cultural areas what is the proper form of the knowledge of man by man? The Occident separates positive science and spiritual discipline; now, it might be that the idea of human unity is located at the very point where these two perspectives converge. Long-existing traditional non-Western experience can help us estimate what is really at stake in the discussion.

However, in order that such an inquiry might be fruitful, it will be necessary for each of the specialists questioned to have the desire and leisure to respond after a sufficient amount of reflection. It will also be necessary that all those questioned reply to the same question.

In other words, such an investigation will not be very hopeful of success. One cannot ask specialists to testify with regard to the unification of the human sciences insofar as these specialists by their very vocation and training are ignorant of, or deny, this very unity. And one cannot even trust in those who profess to stand for the unification of the human sciences, for each one of them would be satisfied in defining his familiar point of view, and more or less justifying his own pre-suppositions. Therefore, one would obtain discordant information all of which would go toward confirming, all the more, the urgency of the problem.

Another method would consist of assigning an informational project to a research man who would carry out his mission on the spot in the main cultural centers. Then it would be possible to bring the situation to a kind of focus by virtue of a single and solitary point of view, consulting the most typical scholars.

In any case, such an inquiry can have only a preliminary character. It would specify the current state of the question and provide a kind of survey of the situation at the very beginning of the work being undertaken. The essential labor is located beyond that point.

TOWARD AN OPERATIONAL PROGRAM

Specialization is inevitable in the domain of the sciences of man and one might think that it will be more and more narrow with technical progress and the multiplication of areas opened to human knowledge. It is therefore normal that a pedagogy of specialization should make specialists more and more specialized.

From this point there derives a growing spread of knowledge and a quantitative abundance of information which strongly risk going beyond the possibilities of the human mind. Henceforth, the human mind seems so overwhelmed by its riches that it doesn't even seem capable of drawing up an inventory.

Conscious of this state of affairs, cultural leaders must concern themselves with making a contrary and compensating movement possible.

In the present situation each specialist is in charge of his speciality but nobody is in control of the entirety. The human sciences exist alongside each other; at most, attempts are made to reunite them by addition to certain teaching or research institutions or reviews. But disciplines thus reassembled will not interpenetrate; they are ignorant of each other, each continuing on his own path.

An effort must be attempted *to comprehend the human sciences within a science of man.*

Of course, it is not a question of abstractly formulating any dogmatism whatever, in the name of *a priori* principles, whatever they might be. The only admissible imperative would be that of a unity of intention, a need for synthesis.

In other words, in addition to the indispensable pedagogy of specialization there must be opposed a no less indispensable *pedagogy of unification.* Both movements, far from being in contradiction, are in the long run complementary.

Notes and Discussion

At present, researchers and technicians are being set up everywhere within existing frameworks. The specialist arrives at a view of the entire field only by chance; he attains a perspective of synthesis only at the very limits of his domain. But he stops short; he is discountenanced, for nothing in his personal experience has prepared him to go any further.

The remedy would be to encourage a new category of researchers oriented toward synthesis. The major effort and reason for being of these researchers would be to *create interdisciplinary intelligence and imagination*. The unification of the science of man would be a state of mind with these people and an attitude of the will even before making itself felt on the level of acquired knowledge.

In the great period of renescent humanism, and then in the 17th century, when the mechanistic revolution set forth a new prototype of knowledge, the creation in the West of Academies corresponded to a regrouping, a mobilization of various forms of competence and good will for the advancement of science. In principle, the Academies are groups for work and research, gathering learned men together for the accomplishment of a great common goal. The same thing holds true for modern Universities (Collège de France, the Universities of Goettingen, Berlin, etc...) created not so much to administer existing capital, teaching what one knows, as to promote centralized research involving the collaboration of specialists gathered together under the common aegis of the same institute.

Today, academies and universities have lost their sense of unity and universality. They must be called back to their proper vocation by working to make possible a unitary awareness of contemporary culture. Today, all sciences, directly and indirectly, as a result of their technical applications are sciences of man; that is to say, all disciplines put man in question; they have man as their point of application. Whether they want to or not, therefore, they find themselves interdependent, and each of them must be aware of its implications and correlations in order to truly achieve progress.

In such a perspective, researchers must try to bring out the convergences and cross-checks among various branches of knowledge which ordinarily develop independently one from the

other. A sort of mental mutation will be asked of them, a renewal of thought, the first condition being to renounce the particularist mentality of each discipline, and to reject the attitude of the little proprietor grappled onto his property, which too often characterizes the usual type of scholar. Of course an indiscussable competence in a particular intellectual domain would remain a fundamental requirement. Such a sharp change of thinking would necessarily have an international character. At one time, frontiers corresponded to material distances which no longer exist today. It is therefore necessary to foresee a vaster mental space on the scale of today's culture. Furthermore, it will be observed that if geographical distances have not ceased to diminish, intellectual distances on the other hand have increased. The republic of scholars and men of letters who, in the 17th and 18th centuries were aware of their unity and corresponded in Latin or French, no longer exists. Diversity of language and traditions, as well as political conflicts have singularly partitioned off the cultural universe. It is scarcely possible for a mind, no matter how wide ranging and curious it might be, to keep *au courant* with what is happening in countries other than his own.

Therefore, first of all, it is necessary to undertake putting together again the immense domain of knowledge of man by man which has been spread over innumerable parcels without any communication of one with the other, and at the same time establish a reciprocal awareness of different specialized fields of knowledge at the point where they issue from their particular elaborations out into the various cultural areas constituting today's world.

FUNDAMENTAL RESEARCH IN THE SOCIAL SCIENCES

By fundamental research in the domain of physics, for example, one means theoretical research bearing on basic principles, or certain developments of the field of knowledge outside of all practical application, or outside of any preconceived idea with regard to the usefulness of the results eventually obtained.

The unity of the human sciences might be considered as

defining the domain of a fundamentally interdisciplinary research, the undertaking of which eventually have favorable effects for the future of each particular science. At the level of this fundamental research, questions are posed relating to all the disciplines, or some of them, but remaining irreducible to the competence of any single one of them.

Ordinarily, human problems are confronted from the angle of a speciality. Fundamental research would set as its task the confrontation of these problems in the perspective of unity or totality.

This conversion of the epistemological attitude might lead by itself to very important consequences. Notwithstanding the slight attention paid to it, it is clear that the various sciences of man, far from constituting autonomous domains, lend meanings and schemas to each other. Throughout history those who have developed or brought new ideas to the science of man, took off from a particular field which they knew profoundly, but thanks to them, this knowledge gradually permeated little by little throughout the totality of the human domain.

Newton's genius, focussing especially within the realm of mathematical physics, never ceased, for more than a century, to provide an epistemological model quite beyond its place of origin, for Hume's psychology, Haller's physiology, Buffon's natural history, Turgot' political economy, Barthez' biology... The Newtonian model of intelligibility therefore imposed itself to some degree everywhere; it contributed to the advancement of knowledge even outside of Newtonian fields of competence.

In the same way, during the entire 18th century, Leibnitz provided the natural and cultural sciences with methodological suggestions and speculative themes, which were expanded into the entire program of the *Encyclopédie*: among other things, the epistemology of probability and the idea of continuity.

Closer to us, the great inspirers of the 19th and 20th centuries in the field of the human sciences are extremely competent specialists, each in his own field. But their true genius is revealed in the fact that suggestions which they brought forward were utilizable beyond the limits in which they were born.

Darwin is a naturalist, but the idea of evolution is a leading

thread which has equally stimulated new ideas in psychology, anthropology, sociology, etc.

Marx is a philosopher who gave himself out to be a competent economist. But Marxist analysis has furnished schemes of interpretation which are utilizable in all fields, and are much more fecund to the degree that they have permitted a veritable conversion and education in awareness even among those who reject Marxist doctrines—insofar as it is a closed intellectual system.

In the same way, Freud's psychoanalysis has triumphed universally despite the resistance which it has encountered. For his adversaries themselves have been trained toward a new way of studying human phenomena in its entirety.

These examples of Darwin, of Marx and of Freud show very clearly what can be a fundamental form of research in the field of human sciences. Such research, linked of course with the positive results obtained in various specialized sectors, would dwell beyond the specialization. It would seek to reveal the internal coherence, the total rhythms of human reality. The point of departure of this investigation would consist in taking account of the fact that the human domain is a domain occupied by one tenant; it constitutes one indivisible reality. Now, the various human sciences all operate according to an inevitable carving-out of the epistemological field, denying the specificity of the human object by that very act of dismemberment. More and more, with the advance of knowledge, the human sense of human reality disappears.

The epistemology of convergence will strive to emphasize the mutuality of meanings among various departments of human sciences.

Various studies might be undertaken—whose common object might be, while taking full account of specialized knowledge, to attempt to go beyond specialization.

In short, the question is to propose an understanding of *the total human phenomenon*; and this can be obtained only by bringing to focus *a new methodology, the epistemology of dissociation yielding to an epistemology of convergence.*

SUBJECTS OF STUDY

First of all, it is necessary to test the movement in motion. Specific research experiments, based on the collaboration of specialists working at the same time in their speciality and at the limits of their speciality, clearly show that the science of man is a science on the confines of all those sciences which concern themselves with man.

As indication of this, we will here review some subjects capable of providing research programs of interest at the same time; the psychologist, the sociologist, the economist, the ethnologist, the philologist, the historian, the geographer, the statistician as well as the philosopher.

The concept of *Pattern* and the associated concepts of idea, image, archetype, explanatory schema, as guiding threads of intelligibility.

The direction and function of patterns or models in the history of knowledge: myths in primitive society; intellectual and scientific norms; patterns and examples in moral life; the concept of imitation in artistic and religious life; the notion of analogy.

The epistemology of patterns: the astrobiological pattern in astrology and alchemy; the mathematical pattern since Pythagoras; the mechanist pattern since the 17th century (animal machine, man machine, world machine); the biological pattern, the idea of organism, the idea of evolution; the cybernetic and axiomatic model of today.

The concept of *Development* with regard to the necessity for dynamic coordination among phenomena, order in movement.

Physical development: conservation and degeneration of forms of energy, disintegration of matter, cosmic becoming.

Biological development: growth, attrition, ageing, evolution of species and individuals; origins and life-goals.

Historical and social development: the idea of progress and the idea of decadence as leading threads in interpreting cultures and societies, social evolution and revolution; stability and instability, phases and periods, the concept of the epoch; crises.

Individual and moral development: the ages of human life; progress and decadence, accomplishment, degradation.

Revolutionary, reactionary, conservative, traditionalist, progressive.

The notion of *Health* and *Illness*.

Equilibrium and disequilibrium in physical systems.

Norm and normal.

Normal and pathological in the organic order; the problem of monstrosities.

Psychology, ethnology, and sociology of aberration, of monstrosities, of the a-typical, and of aberration.

Historical and ethnological development of illness and madness in diverse cultures.

Sickness and civilization; the future of illnesses and medicine.

Sociology of illness and the ill.

Deviations, perversions, and corruptions in society.

The psychology, ethics, and metaphysics of illness and health.

The concept of *University*.

The pedagogical ideal as an exemplary human type within a culture.

The history, ethnology, and sociology of educational systems with stress upon differences between Orient and Occident.

The pedagogy of pedagogy; pedagogy before pedagogy; current inflation of pedagogy; the future of pedagogy.

The University as an institution, as tradition, as reality.

The University as a dream.

The concept of *Landscape*.

Geography of landscape: from physical geography to human geography.

History of landscape; the development of landscape closely connected with the history of mankind.

Psychology of landscape: man and earth; landscape and mentality; forest, desert, steppe, sea, mountains, islands, as well as human landscapes.

The sociology and economics of landscape; property systems and modes of exploitation.

Notes and Discussion

Esthetics of landscape: landscape as dream and art. External and internal landscapes. Landscape in painting, literature. The art of gardens, its history, psychology, sociology.

The City

History of cities

Geography of cities

Economics and sociology of cities

Psychology of the citizen: the city-man

City esthetics: from architecture to urbanism

City politics

Many other interdisciplinary themes could be proposed for unified studies, for example:

The evolution of the idea of *Community*, from national solidarity to international solidarity—in the sociological, economic, psychological, juridical and moral order;

The sense of *Technique*.

Festivals (sociology, economics, psychology, ethnology, philosophy).

Play (sociology, economics, psychology, ethnology, philosophy).

It will be observed that all these themes have already given rise to studies of indisputable value. The question is not that of beginning them all over again, but profiting from what has already been done, trying something else, thanks to the living collaboration of several disciplines.

But it is not a matter of gathering together various specialized studies each limiting itself to work within his own speciality; in that case one would simply obtain a collection, an anthology, whose elements would have only the cover in common. Undoubtedly, publications of this kind are not without use; however, they contribute nothing to that renewal of intelligence which we are advocating here.

Authentic interdisciplinary studies assume research in common, good will on the part of each of the participants, in order to break out of the confined realm imposed on him by the division of intellectual labor. Each specialist would not only seek to instruct the others, but also receive instruction

from them. Instead of a series of juxtaposed monologues, as usually happens, one would then have a veritable dialogue, a discussion resulting, one may dare to hope, in a reaffirmation of a feeling of human unity.

Such studies, undertaken in common, would therefore provide an important contribution to the *theory of cultural wholes*.

It will be noted that the movement for the creation of Academies in the West (Bacon, Leibnitz) is bound up with the stress on dictionaries and encyclopedias. The determinant of a common tongue is an early symptom of a new understanding. For the human sciences, the lexicography thus far accomplished remains very fragmentary. Only the neo-positivists of the School of Vienna have realized the usefulness of a unitary language of knowledge, but, fascinated by physics, they have only renewed the theme of those universal characteristics of a mathematical type. Thus, human reality is denied at its very source. Furthermore, the neo-positivists could not consider the human sciences as sciences in the strict sense of the term.

In short, it will be necessary to resume the task of the *Aufklärung* in the sense of the 18th century, the task of the *Encyclopédie* of d'Alembert and Diderot, insofar as this *Encyclopédie* was not a dictionary but first of all a team and a spirit, the spirit of an epoch examining itself in a confluence of good will. An authentic encyclopedia must be the examination of conscience of a culture, the clarification of established values. He who thus becomes aware of his assumptions, by that very fact, goes beyond his assumptions; he escapes them to the degree that he is no longer ruled by them.

The international character of these tasks permits us to investigate differences in meaning from one cultural area to another. Each intellectual and scientific tradition puts forward its preferences, which are, as it were, patents of nobility. Thus, a community of understanding will be created contributing toward strengthening the interdisciplinary state of mind. Of course, it is not a matter of choosing or judging, but of examining values and specifying, as far as possible, those attitudes which justify them. The task here undertaken must not pretend to be anything other than a clarification of the epistemological conscience, a broadening of its horizons.

There exist psychological dictionaries edited by psychologists; sociological dictionaries, dictionaries of the history of religion, or philosophy, edited in each case by competent specialists. Useful as these works might be, they cannot but delimit the mental space of the specialists, and list their contradictory choices. Now, it would undoubtedly be more fruitful to also question the philologist about psychology, the linguist about the history of religions, the historian about sociology, the mathematician about philosophy, etc. All those who contribute toward the widening of human knowledge have something to say about Man. In the sense in which we understand them, interdisciplinary studies must seek to re-establish a unitary human significance underlying the diversity of interpretation.

THE HISTORICAL DIMENSION OF KNOWLEDGE

The history of the human sciences offers a field of research of capital importance.

Here again, numerous works already exist in various languages and in a certain number of disciplines. But the problem is not only reviewing these works or translating them.

Basic research is distinguished from pure and simple erudition by its concerns, stressed from the very start and always maintained, for interdisciplinary unity. In fact, most histories of such and such a science, written by a specialist of the science in question, are ultimately lacking in the historical spirit. The historian begins by enclosing himself within the framework of his speciality, thus imposing the limits of his own narrow-mindedness on his research. Reading them, one would say that geology, botany, ethnology, or any other epistemological field, compose an autonomous unit, cut off from the rest of knowledge, and developing by reason of its own logic and force.

Thus, too often the scholar who becomes a historian considers the present state of knowledge as an absolute, like a capital of certainty founded on truth, and acquired once and for all. The past appears to him as a simple preparation for the present; the past merely serves to demonstrate how those verities established today were slowly acquired as a result of the patient effort of generations, all oriented in the same direction, despite

errors and false starts in which the human spirit, as a result of some inexplicable aberration, is often involved. History takes the odd trick, casts the deciding vote between truth and error, not without some disdainful pity for the stupidity of our predecessors who so often couldn't even see the truth lying before their eyes.

Now history, properly historical, is not this kind of an abstract diagram, this geometric accumulation of a straight-line progression inevitably leading toward the current state of knowledge, considered as the almost definitive achievement. The mirage of positivist history must give place to a new state of mind, capable of finding the questions and answers of learned men of the past applicable to their own needs. An effort must be made to prepare a history of human knowledge as a global relationship of man to his world, setting man in his world, according to various times, places and ways of thinking.

Periodically, discussions arise on the question of knowing which type of history possesses a decisive value: political history, military and diplomatic history, social history, economic history, the history of the arts and techniques, the history of culture... Often the historian who is a specialist in one of these fields openly maintains, or acts as if he considers it beyond question, that his speciality controls the development of all the others.

The problem is analogous to that of unity in the human sciences. No science makes up the unity of man, no human activity can impose on all the others. Man in his reality is not the mere sum of his activities; he is the node, the imaginary nucleus of all his qualifications and deeds. He is no more explained by them than they are explained by him.

In other words, to put it in its simplest terms, man is not in history only as a *patient* but also as an *agent*. He exercises a right of initiative in the various situations in which he finds himself. The situation defines the condition under which this right is exercised. Philosophers are almost always wrong to concern themselves only with the initiative, while neglecting the conditions under which it is exercised. Historians search out these conditions in a given area, and they proceed from condition to condition without ever dealing with the initiative.

Authentic history will be that which endeavors to examine,

with perfect clarity, a given initiative in terms of a given set of conditions which are themselves human conditions and, as such, indefinitely refer to each other.

Each aspect of the human condition may be considered a cause as well as a reflection of the totality. For example, one may study the history of means of transportation and how transportation techniques are closely connected with the development of civilization, and one would be tempted to conclude from this that transportation plays a determining role in this development. Etc. But one must never forget that means of transportation are made for men and by men and not—man for or by transportation. If it is true that the history of knowledge represents a privileged aspect in man's history, one only denatures it by seeking to isolate it as if it constituted an autonomous realm. Making the various specializations of the human sciences conscious of their history, aware of their precedents and developments, is an effective mode of struggle against ingenuous science-mindedness which is always attempting to build up a kind of absolute technique with relative methods and provisional suggestions. The history of knowledge teaches us that before any particular certitude, there have been many different certitudes, and that there will be others afterward. The history of knowledge attests to the fact that there is no last word in the field of knowledge, for respect for the past carries with it a respect for the future.

It is necessary for the researcher to possess a certain intellectual courage to admit that he is not himself the culmination of the history which he is recounting, and that he does not know what is to come. All men are mortal, even the historian and the philosopher or the scholar. The history of knowledge thus appears as a reservoir of meanings; it puts us on guard against the illusion of the already-finished and of the definitive.

On the other hand, if the history of knowledge is very much a form and expression of the history of humanity, it must attempt to become a study of correlations beyond the technical compartmentalization of specializations. The development of the human sciences, just like those of the natural sciences, never presents itself as a harmony of linear independent series.

Scientific concepts, subjects and methods gradually react closer and closer to each other, and from one area to another, by a kind of oil-stain spread of the most efficacious epistemological instruments. The entire field of knowledge presents itself as a unified field of manoeuvre for testing essential ideas as they are discovered.

The history of knowledge also clearly demonstrates the general influence exercised by certain individuals, scholars or philosophers, despite all the epistemological specialization: Thomas Aquinas, Bacon, Descartes, Galileo, Leibnitz, Newton, Linnaeus, Kant, Lavoisier, Hegel, Marx, Darwin, Freud, among others, have given new meaning to certain conceptions; they have created other meanings of them. After these men, the domain of knowledge is no longer what it was.

History shows that disciplines which are divergent today had a common past. They have been together and that authorizes one to believe that, without denying themselves, they can travel on the same road together, again, thanks to interdisciplinary research.

Historical research bearing on contacts and exchanges among neighboring disciplines, or fields which are apparently far from each other, will reveal the extreme importance of these interactions. For example, at a certain period, mechanics was the prototype of all science, including organic science and political science. Then biology exercised a considerable influence over philology, sociology, and political economy. All the life-sciences have had complex relationships with theology, in which polemics played a large part; but theology itself has been influenced by, and is still influenced by, the repercussion of the development of philology, political economy, biology and the natural sciences. The great scientific concepts of analysis, synthesis, experiment, induction, genesis, evolution, dialectics, etc., have appeared in a particular epistemological realm, but their very success gave them a force of expansion of interdisciplinary radiation, undoubtedly to the detriment of their original meaning.

Thus a kind of priority is attributed, according to the period, to this or that discipline, to this or that concept, to this or that scholar of genius, which seem to concentrate within themselves a high degree of explicitive power, before losing this privilege

in their turn. The entire domain of the human sciences appears like a system of constant interferences, reciprocities and borrowings. A new kind of historical intelligence will be deliberately careful to see and understand these interdisciplinary connections which spell out the articulations of human knowledge in its entirety.

A recent scientific German undertaking sets as its task, under the general title *Orbis Academicus*, that of publishing a large collection of monographs bearing on the history of scientific problems in the various fields of exact sciences and the human sciences. The idea is new and meritorious, and the first achievements undoubtedly have a certain value. However, it must be noted at the outset that this *Orbis Academicus* is only an *Orbis Germanicus*: germanic authors expressing themselves in German cannot always give a constant and necessarily illusory priority to their own intellectual tradition. A kind of unconscious nationalism, difficult to avoid, impedes this otherwise estimable effort from claiming to be universal. Furthermore, the division of work among the specialists, each assigned a well-determined task, weakens a good deal of the value of this project in advance. A thick, very interesting volume sets forth the birth and development of problems posed by interpretations of the New Testament. Another volume deals with the evolution of linguistics. Another retraces the history of studies bearing on classical antiquity. Other publications will deal with the history of theology, ecclesiastical history, etc. Now, it is very evident that the interpretation of the New Testament is connected with the progress of philology, and that it is affected by the rebound of all contemporary intellectual, spiritual, and religious events. The hermeneutics of the New Testament is only a particular aspect of hermeneutics in general. Trying to isolate it only deforms it, congealing it in an illusory autonomy.

Thus, in the collection *Orbis Academicus* the most interesting aspects will be what is going on among the different volumes, what is assuring a liaison between areas each separately evoked. But these interconnections remain outside the concern of the different authors who are content with bandying compliments to each other by making allusions to neighboring areas, without any one ever setting, as his own object of study, the architectonic

structure in which the particular domains of knowledge play their parts.

All epistemological perspective in the human sciences thus would appear like a projective dimension; it is fed and enriched by constant interferences, reciprocities, and loans. A new type of historical intelligence would be intentionally concerned with comprehending and discerning interdisciplinary connections from a given point of view, and sketching out the articulations of human knowledge in its total significance. Such a type of global intelligibility, an expression of human intelligence, is interdisciplinary in essence.

DETERMINATION OF SPACE-TIME

Clarifying the historical dimension should bring out the true scope and relief of the human domain. While the specialist is satisfied with a schematization of human reality, a flat projection, an inverse effort, returning to reality will permit us to look more deeply into the space of human phenomena and events.

Each of those must be perceived in its concrete situation, that is to say, must be set at the heart of a totality in being. *All understanding of a human fact assumes a prior comprehension of human space-time.*

The unity of the human sciences, therefore, must be established by means of bringing together information, and regrouping it in each setting of space-time. An awareness of what human unity here and now actually means to us will be real and complete only if it is accompanied by a correlative consciousness of what this unity means according to various times and places.

It is important to make this awareness of the situation possible by providing each speciality with elements of general information permitting him to take the bearings of that epistemological situation which he occupies, whatever might be the spacio-temporal horizon in which he momentarily finds himself.

Thus, one may prepare a kind of guide or general atlas which would replace previously existing chronologies. These latter contented themselves with listing events according to their dry nomenclature. It would be worthwhile to describe the situations,

to indicate precisely the new aspects of the intellectual and material conjuncture. A similar *theory of wholes* would permit us to set forth the meaning of elementary facts and dates. This history and geography of culture is the preliminary condition of all specifically representative doctrines.

We may observe that, the celebrated Kinsey report, not long ago, on the *Sexual Behavior of the Human Male* was in reality only the result of an inquiry into certain aspects of human life in American society toward the middle of the twentieth century. To really deserve this title, such a work would have had to sum up investigations carried out in all human societies which have succeeded each other over the face of the earth during all the periods of time. The immensity of such an enterprise might appear discouraging; however, only such an undertaking would make it possible to arrive at a real understanding of the meaning of sexual activity and love in human reality. Works of a similar scope would be indispensable to specify the meaning of fundamental aspects of existence: life and death, health, illness, madness, religion, play, ethics, politics, money, knowledge, just to limit ourselves to some examples—all these are not only what they are here and now. They require being set into place, within human space, and within the duration of humanity.

In other words, human reality, instead of being seen flatly, must be grasped in its volume, in historical relief. The center of perspective, the hearth of intelligibility, then, must be concrete man in his historical presence. Whether it is a question of past or present, every time an aspect of human existence is placed under examination, man in his entirety is being affirmed and expressed by virtue of a total solidarity extending little by little over the entire human domain. Of course, this doesn't make analysis easy. But knowing it is better than ignoring it.

Notwithstanding some worthwhile attempts, historical anthropology is far from being achieved. The result is that the sciences of man ordinarily depend on the fiction of a human being outside of time, no more affected by the diversities of place than by diversities of period. However, it is clear that the very object of political, economical, philological or religious sciences has not remained identical throughout the centuries.

It will be necessary to study this coefficient of new developments and how much value is due to various epochs. Each important moment in the development of culture implies a new convergence of meanings, a regrouping of values. The history of events reflects and expresses this *essential history* of man, of which we dream. Human epochs may be considered as the *great units* of a superior kind imposing their finality on elementary facts. This massive reality of epochs, styles, globally historical attitudes governs any understanding of human phenomena as a whole, and deserves continued study as much in the area of research as in all sorts of specialized training and information.

This preoccupation, furthermore, is already implied in traditional discussions with regard to historical periods: antiquity, the Hellenistic age, the Middle Ages, the Renaissance, the Reformation, Modern times. All these definitions, which have provoked passionate controversy, really represent global phenomena, each responding to a certain kind of humanity. But in the same way, one may study in its entirety the human significance of the Crusades, the French Revolution, or the Russian Revolution. The great geographical discoveries, the advent of Positive Science, Romanticism, Surrealism, Colonialism and De-colonialism, Fascism, etc., etc., might give place to interdisciplinary studies. Thus, one may see how a coherent system of values and attitudes imposes its mark on all human activity: there is romantic economics and romantic religion, there is an ethics and a religion of colonization just as there is an ethics and a religion and an economics of de-colonization.

Each epoch is characterized by interdisciplinary dominants, as is so well attested by categories of esthetic essence: archaic, classic, baroque... These terms, applicable in the first place to art forms, also have a very valuable meaning in the realm of medicine, politics or economics; they indicate configurations of human experience.

Furthermore, this stylistics of experience would also be important for studies bearing on the current period, and even on those which believe that they can remain outside of history—that is, physical anthropology, biology, and medicine. In being aware of the march of time, scholars will be better informed

concerning their implicit assumptions. The psychologist would be more attentive to his own psychology, the sociologist to his sociology, the historian would be careful to place himself historically, etc., etc. As a result of the disappearance of certain simplistic kinds of evidence, a new structure of epistemological awareness would be set up.

DE-WESTERNIZATION AND GENERALIZED RELATIVITY

One of the most immediate results of the determination of space-time, called for in the preceding paragraph, would be to force Western scholars to test their assumptions. If the West has not invented the exact sciences, it has developed and systematized them; it has, according to its conception of knowledge, assigned a decisive role of importance to them; and this importance is still growing as a result of the operation of techniques resulting in a total reversal of ways of life.

There is no question of denying the historical importance of these achievements which are, furthermore, irreversible. But the West, which has found the source of its prosperity and power in its sciences and techniques, has undoubtedly exaggerated the ontological validity of the basis of its civilization. It has attributed universal value to them without feeling, except in rare cases, any need to re-examine them in the light of evidence which other cultures might have been able to provide.

The current crisis of civilization focusses attention on the decline of Western absolutes. The entire world has borrowed its scientific and technical ways and means from the West, but without thereby admitting the spiritual presuppositions underlying them. Whence, the necessity for a profound examination of conscience and general readjustment. Here the wise path of confrontation is open, a confrontation which can provide research with one of its most fruitful objectives.

The culture of the West must be aware of the relativity and reciprocity of intellectual and spiritual traditions. It must learn to fix its own position among different attitudes attested to by archaic systems and oriental spirituality. The West retains the privilege of technical efficiency, for which it pays very dearly; a consideration on ends and values of civilization would perhaps

permit remedying the present distress within those so-called advanced societies which, naturally privileged, have not succeeded in finding that equilibrium so necessary both to individuals and masses.

In a general way, one may observe that the present moment seems characterized by the appearance of certain new lines in universal history. These perspectives call for appropriate studies.

The appearance of the modern world is connected with the work of exploration and mapping of the geographical world by Western travelers. An inventory of the planet opened the road to colonization and missionary activity, the political and economical expansion of which the 19th century marked the apogée. Now, material imperialism has intellectual and spiritual imperialism as its corollary; Europe, which considered itself mistress of the universe, was the center of the cultural world. But our epoch is witnessing the general emancipation of formerly colonized countries, and de-colonization must also have its counterpart in the cultural realm, where the retreat of the West runs the risk of creating a kind of cultural void.

Here, it is a problem of getting beyond the stage of recriminations, and of that kind of double-entry bad conscience with which the ex-colonizer and ex-colonized too often were satisfied. Aside from after-effects of the former regime, it seems necessary to formulate elements leading toward a new awareness of a world of solidarity. The colonial system has inevitably resulted in the universalization of Western technical norms, which now seem to be an accomplished fact. But electrification, or the motorization of agriculture are not enough to fill the vital space of human existence in its totality. In a state of political and economic regression, Westerners are questioned and they question. Today, what do non-European ways of life mean? This question, which European culture has posed since the 16th century, now becomes decisively urgent; what is more, the question is raised and must be dealt with by non-Europeans themselves, who are now called upon to evaluate the fundamental meaning of their intellectual and spiritual self-determination. If one tries to keep the discussion free of all adventitious passions, the question would appear to be singularly complex.

Notes and Discussion

However, it is impossible to avoid, if one wishes to take a bearing of the present moment of universal history.

More generally, every man working in the field of knowledge, is working at the heart of his own culture and with reference to it. The question is knowing whether it is possible to be aware of this difference of origin, and go beyond it in the direction of a generalization of intelligence looking toward real universality.

The time has come when it is important to proceed from a confrontation of cultures to a culture of confrontations.