LOCAL ANTHROPOGENIES - PHYLOGENESIS

THE NEW FORTUNES OF HUMANISM

It has become a commonplace to say that Western civilization -all the civilizations of the globe, in fact- is in a state of crisis. Spengler and Toynbee, after studying the laws governing the development of great cultures of the past, expressed the opinion that our experience is repeating what marked the decline of each of them: development of universal empires, atony of languages, cultural as well as religious agnosticism. For those who may distrust such sweeping views, it is sufficient to observe that today's questioning attitudes represent neither mere matters of detail nor even the major renewals experienced by a civilization in a state of becoming. Humanism [1] is shaken to its very foundations, and, the object of criticism and schism has lost its inspirational force. Renaissance and revolutions broke with their immediate past only to breathe new life into an endangered civilization. This new breath was either drawn from an old tradition or anticipated in political and social readjustment. The French Revolution professed to be carrying out the aims of reason and nature, which had inspired the West for eight centuries, just as the Renaissance had professed to rediscover the spirit of antiquity. Our questions, on the other hand, arise not from a disorder in the old but from a conviction that the old has exhausted its principles and its possibilities and that it can henceforth only give way to something entirely new.

This state of affairs admitted by those who see man "in history," that is, by all vital thought today, has given rise to the four attitudes that it seems logically to inspire. Spengler thinks only of abandoning himself to destiny: "We are not free to choose the point to be reached, but only to do what is necessary, or to do nothing; and as past lessons indicate that we have reached a time of Caesarism (this was written before Hitler), we have but to regiment ourselves in the hope of returning through bloodshed to a pristine state of life and race, to that cultural vacuum in which one day a new culture will germinate as if by chance." Others, without really believing that history repeats itself, would at least stop its course and maintain traditional values insofar as possible, not that they are still living values but because they once *were* living. One is reminded of the Action Francaise movement's desperate courage in regard to the classical spirit. As for Toynbee, he sees the only escape from our horizontal impasses in a sort of vertical progress, somewhat in the way that Bergson, concerned about our technical sclerosis, invited man to retreat into the inner life and to take up on the level of the soul an evolution which seemed to him exhausted on the biological and cultural levels.

But one may wonder whether these pessimistic attitudes -we shall speak in a moment of a fourth one which is less so- take full account of the nuances of the situation. Remaining within the morphological framework of Spengler and Toynbee, does our apparent decline not possess characteristics which distinguish it from other known declines and which prevent us from applying to it the general laws observed elsewhere? The fact is that technological developments assure our civilization a durability the others did not have, provided that total catastrophe can

be avoided. On the other hand, while former cultures were renewed by an influx of new blood and resulted from the assimilation of a civilized but aged people by an uncultured but young and enthusiastic people, industrial civilization, once it has enveloped the globe and posed the same problems everywhere, will develop immediately in tomorrow's young peoples the characteristics of the old peoples and will lack the capacity to regenerate them.[2] Thus, if a new civilization were to take shape, it would be without change of personnel and, in any case, without possible recourse to a new or virgin people. And, since the populations in question belong to a civilization which is ending (i.e., a critical and reflective one), it is clear that any new departure will arise out of a deliberate, premeditated act. Simply waiting, whether the act led to bloodshed, stoic lucidity, or mysticism, would then be a criminal act. There is of course no guaranty that a creative departure could ever be born out of reflection (past cultures offer no example, and one may suspect a basic antagonism between lucidity and impulse), but neither is there definite assurance that it is impossible. The past does not tell us what might arise out of a civilization which, knowing itself to be dying, would know also that it is incapable of truly dying and would therefore take the responsibility for its own resurrection. Would this grip on man's consciousness not be a ferment of unforeseen energies, a vitalizing force unknown to peoples who had never known an obstacle of so radical a nature? In any case, if a concerted mutation is our sole cultural hope, we must risk it.

It may be that this line of reasoning has limited us too closely to Spenglerian views and that we may now need to give credit to a fourth and more optimistic attitude -that of Marxism. While agreeing that traditional civilization is finished, Marxism rejects the principle of discontinuity of cultures dear to Spengler and sees a metamorphosis of our world, through a painful delivery, into a new universe in which man is reconciled with nature and man with man, in the fraternal exploitation of technical powers. Does this not promise a solution to our problems if we can but be patient? But in this respect ordinary Marxism is cut off from enlightened Marxism. If the first, confined to the oversimplifications of propaganda, deludes itself that dialectics, conceived as the inevitable movement of history, leads necessarily, "scientifically", to a happy future, the second endlessly stresses the fact that today's economic and social situation will not of itself result in a humanism. Historical examples even show that, unless corrected, it is just as likely to engender an inflexible bureaucracy. So intellectual Marxism lays increasing stress on the need for taking a hand in things -the need for a spiritual effort. Marxist optimism thus finds itself in the same corner as Spenglerian pessimism. Both give as our only chance -if the term is not contradictory- the advent of a culture deliberately chosen and thought out in advance.

It must be understood that in these matters there can be no question of pure construction. A system of values is not manufactured, because neither inspiration nor impulse can be manufactured. Reflection must be content to catalyze existing forces whose influence is already making itself felt. In *Gestalt* terms it can contribute by rejecting forms which have no projection or fertility and by isolating those which are fecund. We offer, as the same sort of evidence, the reflections which will follow. More simply, we view things from the Western point of view, which we shall summarily describe as "classical" in its finished form. But, since other cultures are faced with techniques posing similar problems, our analyses will assume a certain universality.

1. THE WEAKNESSES OF CLASSICAL HUMANISM

When attempting to establish the negative balance sheet of our world, we are aided by the innumerable publicists who, following or accompanying Spengler and Toynbee, have denounced its defects, citing the whipping boys of bureaucracy, mechanization, mass media, leveling democracy, religious triviality, and what has been called, in some bad faith, the "defeat of science". But a value judgment is not suited to our plan; such a judgment cannot fail to condemn in advance every symptom of a new cultural start, since each would be judged by the standards of an earlier system, unless the judge professed to place himself above history, a claim difficult to sustain since Marx and Hegel. We will therefore make use of the pessimistic essayists, attempting, however, to underline that part of the old humanism which has no chance of revival (having at best a hope for the future in the form of a tradition) and that part which, on the other hand, is already visible as a "negative" -a shaping, or a signal- of new animating values. At the risk of failing in its aim, our affidavit will be offered without either nostalgia or scorn.

The truth of nature. Classical humanism placed unshakable confidence in nature. Born of a superior force or subsisting in its own immanence, it is there before man, in advance of him, not to be confused in its principles- and successive eras proclaim it wondrously. Middle Ages, Renaissance, seventeenth century, Encyclopedists, Romanticism each thought to return to it, and the history of Western culture can be traced as the history of the meaning of the word "nature". Whether it was held that it was grasped by intelligence, sentiment, or sensation, it was seen as fixed and representable. Non-Western cultures enjoyed the security of the same background: the mystery has everywhere an order, whether it is called "dharma", "tao", or "providence".

Our situation is entirely different. It is in the physical sciences, where nature ought to be most readily attainable, that it most clearly escapes our grasp. The contemporary physicist, instead of embracing his object in a look or touching it with his hands, as the pioneer of yesterday, now finds himself in immense programs, a part in a specialty he shares with only few others in the world, seeking his object through apparatuses, cyclotrons, or synchrotrons whose workings he does not always grasp and which he consults in his own time, lost in a crowd of other scientists consulting the same oracle on subjects of which he understands nothing.[3] This humility of research may well deflate our pride, but it will not shake our faith in nature and in its truth. But the results achieved by this physicist are more disquieting. First of all, they defy our capacity for direct representation. In contrast to the articulated and continuous world described by the differential equations of Newton and Laplace, the wave corpuscle of wave mechanics, the discontinuities and polydimensionalities of quantum theory, and, more recently, the notions of antimatter and antiworld, without necessarily annihilating the idea of causality and substance, confront us with a universe in which our capacities for immediate representation -completely surpassed- return to a mathematical formulation which not only sustains them but replaces them and often contradicts them. Fienman's positive electrons, for example, move in the same direction as negative electrons, but backward in time. And, for another thing, these

non-representable truths are hypothetical in the significant sense that, instead of being set on a straight path leading to the true, they serve as guideposts along paths parallel to others, none of which is the unique one. Contemporary axiomatics have shown the convertibility of axioms and theorems for every system and therefore also for a physical system; more directly, Destouches and Février have established that an indeterminist theory is transformed into a determinist theory through the introduction of elements inaccessible to experiment and, reciprocally, that these elements may be eliminated by a return to indeterminism.[4] Thus eminent physicists are known to speak of their science in the plural: "physical science" has become "physical sciences". Without going so far as the pragmatism of Poincaré or the Vienna school, we understand that Oppenheimer recently denied all cultural and humanist value to this irrepresentable and hypothetical science, at least if one reasons, as he did, within the frameworks of classical culture postulating a stable and perceptible nature.

At the other end of the scale -and this is also true for what lies between- the picture offered by the humanities is no less compromised. Our classics believed in a nature of man as in a nature of things: the eighteenth century of Lesage, for all its taxing us with madness, weaves this madness into a web so clear as to be almost reassuring; when the nineteenth century boasts of having discovered history, it means, from Hegel to Taine, that it has found the laws by which history is governed. Nothing, on the other hand, is more symptomatic of our feeling of uncertainty than the way in which we are turning back to Michelet. Whereas Michelet attempted to approach the historical event in its multiple guises- psychology, economics, geography, etc.but only in order to restore its living unity in a broad passionate movement, his disciple today sees these elements only as independent strata, each of which has its own causality. The human fact is broken up, for the scientific historian as well as for the novelist, from Faulkner to Robbe-Grillet. It is true that, to reweave all this, we have discovered the thread of dialectics; but this thread, re-formed by existentialist and psychoanalytic thought, gives rise to a process of infinity, as evidenced by the prolixity of phenomenological descriptions. Like physical nature, human nature has lost its character of representable and continuous datum, and the traditional solid humanism of man as a stable figure has been even more roughly handled.

If only this diffused character of truth had remained the property of scholars, without reaching the people, that reservoir of energy and faith! But the man in the street breathes it in his everyday life. Technical expansion has engulfed him in a tide of information of all kinds, breaking the framework of narrow conviction which gave assurance and guidance to yesterday's peasant and artisan. The press, radio, and television, disturbing more for their omnipresence than for their malice, constantly place the average man face to face with the various cultural systems of his own civilization, as well as with those of all civilizations on earth. And here our situation is absolutely unique. While the cultures of the past either felt contempt for each other (the idea of out-groups as barbarians) or else absorbed each other, we have invented the disquieting concept of coexistence which, in addition to its political meaning, is a humanist conception recognizing that a culture can be different from one's own, can be based on principles which one does not admit, and still be effective in attaining truths (though it be savage or impious) which cannot be attained through the principles that one admits one's self. In short, if the nineteenth century, by discovering history, invented a sort of successive coexistence in which epochs are linked in a rupture and a sympathy called "historicity", the man in the street has inaugurated a simultaneous coexistence having the added weight of presence. But one can hardly fail to see that this respect for all cultures is most likely to have a disintegrating effect upon culture, at any rate upon traditional culture, since it attacks the mainspring: sureness of self, the conviction that one's culture is based on a nature unique in its truth.

The morals of nature. - The most convincing image of classical morals is that of Hercules at the crossroads. The iconographical fecundity of the subject proves this. And, in fact, if there is a stable nature -it matters little whether it be rational or perceptible- there are also good and evil. The first must be chosen and the second rejected; this is a matter of courage.

Today, Hercules can still represent our ethical steps, but on the condition that his decision be situated on a path which peters out rather than at a fork in the road. Our choice is no longer so much a matter of choosing good instead of evil as of inventing a good in risk and chance. How can it be otherwise when nature is less to be observed than constructed? But in this case vocation, which bore the same relation to the action of the state as truth did to the understanding of nature, has lost its cultural power.

This loss of power was the more inevitable in that, at the moment the individual discovers the contingency of his paths, he discovers his own contingency. The most highly qualified engineer knows that in case of accident he will receive treatment unknown to ancient societies, but he also knows that a single want ad will suffice to replace him. Alexander and Napoleon won wars single-handedly, while our wars, waged by operational research and industry, are won by everyone and by no one; and what minister today truly dominates his ministry? The arrival of what Spengler calls "universal cities", the predominance of structures over the individual, convince small and great alike of their superfluity, reducing still further the vocation already compromised by the absence of a defined good. Nothing is more foreign to traditional cultures -occidental or other- than this lack; their categorical imperatives and stable dignities defended man against the feeling of contingency and its accompanying anguish.

The beauty of nature. - What more eloquent sermon praising nature have we had than post-Renaissance painting? Even the liberties taken by Baroque artists were but liberties of detail designed for a better grasp of the rhythms of things and of the world. The Chinese landscape or the Byzantine icon, far from being naturalistic, are oriented toward Being, toward true nature, just as surely as a Flemish primitive is preoccupied with the rendering of materials, and from this comes the feeling of unanimity among the old masters, between artist and artist, between artist and public. And whatever was abstract in their works also involved a surpassing of the individual and an investiture by nature, in varying proportions of rational geometry or of social ritual. Thus painting, literature, and the other arts played their roles of cultural regulators and animators.

We know that, on the contrary, the contemporary artist takes pride in originality, in differentiating himself from other artists, and in opposition to nature as a datum. His solitude is the more incurable in that it is based not on a moral choice but rather on the considered conviction that beauty -as earlier truth and good- is something to be conceived rather than something to be recorded. Expression gives way to creation. In this way art, hitherto a proof of humanist unanimity, moved over, from abstract painting to twelve-tone music to "a-literature", into a state of ferment in which everything is questioned.

Besides all this, if we wish to measure the transformations in progress we cannot limit the discussion to the major arts which after all concern only an elite. The aesthetic sphere is larger than this, and it is doubtless on its periphery that it truly engages the culture of a population: applied arts, the artisan's painstaking work, rhetoric, urbanism, calligraphy, orthography. All this is compromised. The verbal sonority, dialectical skill, and wit of which our ancestors were so proud today elicit defiance rather than esteem. For it is not any particular

form which is being weakened; it is all form, which, as soon as it appears to be sacred, is suspected of "formalism" by the critical and technical mentality of our time. If one considers the natural and stable character of forms in the old humanism, this instability represents a radical change.

The crumbling of myths. - Taken as a whole, the three evolutions we have just sketched form a resume of contemporary man's attitude concerning myth. This word is so much in fashion because it is at the core of our present situation. Myth may be defined as an idea-image-force animating the body of material which perpetuates it in rites; its speculative, moral, and aesthetic system of values is formed in a way that is partially irrational, yet real and age-old. The twelfth-century Crusade, the Poverty of St. Francis, the Latinism of Renaissance man, the Enlightenment on the eve of the Revolution, science and progress since then, act with the fascination of myth. In classical culture myth takes the form of system for understanding, of duty for ethics, of beauty for art. Its motive force is enthusiasm; its inspirational and regulatory force makes it the preferred means of traditional education. To educate is reduced to introducing the child into this pre-existing structure, inspiring love of that which conforms to it and an almost instinctive horror of all that conflicts with it.

The mainspring of this idea-image-force was broken by the development of the critical and technical spirit. Today's intellectual feels that it is his mission to destroy myth and mystification, these processes appearing to him approximately synonymous. The destructive process is operative in political life where both left and right denounce mythologies straight on, but this purification also reaches the calmest regions of research. Epistemology, in the Anglo-Saxon sense, takes myth out of science just as Bultmann took it out of biblical exegesis. Myth has even been directly enervated through the work of the mythologists. Dumézil, Eliade, and the school of Uppsala disclose the mechanisms of myth in ancient cultures and their echoes in our own culture, removing its secrecy and thereby its prestige.

Here, again, the masses live what the intellectual formulates. In great moments they know a reasoned heroism, with the problematical patriot of 1940 contrasted to the "real" patriot, all-of-a-piece, of 1914. In everyday life the average man replaces myth by slogan, hero by star, enthusiasm by impulse. Slogan, star, impulse do not belong to the world of myth and are but its substitute, being limited to small, transitory groups, and especially since they are never truly affirmed except in humor or, in any case, without the assumption of a being postulated by the ideal. In a recent inquiry youth was characterized by its "minimal aspirations". To this will be objected the recent examples of German National Socialism and Stalinist communism. But on closer observation National Socialism proves to have been a myth of those who no longer had myth, and its victories, as well as its defeat, are an example of activism in a vacuum. As for the charismatic power of Stalin, current Russian internal politics shows a society which has lived on the strength of myth at the moment when myth has become impossible precisely because of the progress engendered, and which would like to get rid of myth without sacrificing its energies. The churches show similar preoccupations, anxious to purify themselves without losing the flame.

These reflections lead back to our point of departure. The fall of myth, more than any other thing, supports the idea that we are living in a declining civilization, and the universal character of this fall, linked to the technical and critical nature of our culture, proves that, far from being a local phenomenon confined to the West, our decline involves all humanisms. Such a crumbling results in both apprehension and hope. Past civilizations so clearly drew life from

the infusion of myth that we are inclined to doubt that a civilization is possible without it. But, on the other hand, this causes us to be faced with a new and extreme situation which may in the very fact of its extremity hide resources yet unseen.

2. THE NUCLEUS OF A REFLECTIVE HUMANISM

One is strongly tempted to see the basis of a new humanism in certain ethical qualities of contemporary man. It cannot be denied that in contrast to the classical world's attitudes -the drape of a toga, as in antique portrait sculpture- the best of today's man has created a style of nudity, of sincerity, of modesty in the face of destiny and, at the same time, a feeling of brotherhood, of simple and frugal solidarity, of love, too, which is by no means lacking in grandeur. The very defects of our societies -brutality, cynicism- can be defined in relation to these virtues, which they cultivate, as it were, by corrupting them. One word sums up this code rather well: authenticity. This is what, in more or less pure form, animates the ethics of Heidegger, of Saint-Exupéry, or of James Dean, as yesterday it did that of Gide, already a bit "old hat" because there is too much "pose" in his disclosures.

It would be a mistake to underestimate these merits. Who would dare claim that a passion for naked truth, though a risk, is not man's finest risk? But this does not suffice to define a culture. The great moral virtues were often an attribute of dying civilizations: Marcus Aurelius and the beginnings of Christianity, like Buddhist and Chinese wisdom, are found as empires end. To go further, it is precisely our virtues that flourish in times of decline. Sincerity, solidarity, nudity, somewhat disillusioned resignation, love- these are echoes of Taine describing empires at dusk. For this to represent a new beginning we should have to show that we are not concerned with a resignation, be it ever so noble, but rather with an active center possessing the two properties of every developing cultural system: that of being creative and that of organising its creations gradually. Without scorn for our ethical virtues -indeed, to show that they are not mere sparks from an ebbing culture- we shall examine our discoveries in the light of the criteria of creativity and of self-regulation.[5]

The truth of Dialogue. - What charges are made against contemporary epistemology? That of being perspectivist and that of making undue allowance for construction -two serious charges against a truth of nature. But is not our complaint of a different order?

It would be difficult to stress too strongly the originality of today's technical milieu. Spengler, Bergson, and the pessimistic essayists speak of machines as of a simple, homogeneous reality; all machines, from the simplest to the most complex, are held to belong in the realm of execution, with no values except pragmatic ones. There is, actually, a difference of genre, of "kingdom", between the instrument and the tool, even between the abstract machine of the eighteenth century and the concrete machine of today.[6] The concrete machine -the one whose parts act synergically[7] instead of being merely juxtaposed- is a double confluent: a confluent of all the sciences which manifest their exchanges in it, even when explicatory theories are partitioned, and a confluent between human invention and the spontaneity of nature in the creation of an "associated milieu", in which object and atmosphere exist in causal

interrelations. Therefore, the complicated machine is not reduced, as Bergson would have had it, to the reification of a thought-out scheme; in this case it would obviously offer no solution to our epistemological problems. Its concreteness proposes between theory and theory, between man and nature, an effective union, even a theoretical union, since it is reflected in the process of concretization which makes it increasingly synergical. It is easy to see what becomes of nature and truth, fundamentals of humanism, in the machine world. The old changeless nature, left intact by the tool or the instrument which manipulated it only from the outside and imposed no new regime upon it, is definitely lost. In a Guimbal turbine, a Coolidge tube, or a supersonic plane the object conditions nature while being conditioned by it. However, nature is not suppressed; it constitutes, along with human intention, an original reality which makes it partially mechanical as the object becomes partially natural. Ancient truth understood as a linear deduction is destroyed in the same way. While the technical object may undergo minor continuous developments, it develops mainly in leaps, for, being concrete outside itself and in its self-regulating relationship with nature, the reciprocal causalities it establishes are totalities like living organisms and thus are transformed only through total and discontinuous reorganization of operative schemas. But this does not render all truth impossible, since these leaps take place in evolutive steps, half-experienced, half-rational, which form the "technical genres". Thus the world of machines has a meaning not only pragmatic but ontological and epistemological, whose range we are just beginning to understand. And the fact that science tends to be increasingly confused with this world, that only with difficulty can one distinguish pure science from applied science, far from being the ruination of truth, may foreshadow the possibility of a new truth in which there would no longer be a gap between natural and artificial but rather a reciprocal verification in common schemas. Cybernetics contributes to the systematization of this cpiste-mology when it is not reduced, as by Ducrocq, to an instrument of technocratic power or, following De Broglie, to a theory of information, but rather attempts to be that general theory of modes of functioning which Wiener had in mind when he launched the word in 1948.

The social sciences experience a similar fate in the notions of constitution and levels of consciousness introduced by phenomenology. Henry Duméry made remarkable use of this in his Philosophie de la religion[8]. According to these views, the "conscience" grasps the religious character of its object by revealing its own religiosity; this constitutive act occurs on at least two levels: that of "categories" (absolute, subject, grace, sin, charity, etc.) and that of "schemas" (transcendence, soul, supernatural, fall, ecstasy, etc.), the schema being in its mixture of interiority and exteriority, of individualization and universality, the diffraction at once enriching and debasing of category. We are thus far removed from the classical conception, in which the lower manifestations of religious faith were considered as accidents due to the expressive and executive necessities of the subject, or quite simply to its weaknesses, without affecting in its essence the act, which was distinct from the subject, while for Duméry category is engaged in the life of schema. In the classical conception, on the other hand, the act of faith recognized a fact, even though the discovery of this fact required the illumination of grace; for Duméry the religious event is constituted (we do not say "created") by the subject which takes from it both its passions and the troubled richness of its schemas and transcendental purity of its design of category. Nevertheless, do we not thus find again in die spiritual order, the double confluence which we observed a moment ago in the truth of the technical object? There is confluence between the levels of the subject, in which schemas and categories are bound together in their very discords; and there is confluence between subject and object, since the real event is neither suppressed nor made contingent (simple cause) but, with the revelatory constitution, realizes forms of integration in which their common objectivity is verified.[9] In

addition, these views are not limited to religion. Psychoanalysts like Schwarz have began to distinguish in human love intentional levels which admit the integration of apparently abnormal aspects, subjective as well as objective.[10] As for art, we have ourselves observed how often aesthetic theories become articulated into a living truth instead of destroying each other, as soon as we are willing to admit that in considering a work of the plastic arts, for example, there are four constitutive attitudes disclosing the various spheres of the object. They are a "spectator" attitude discovering the spectacle or "literary subject"; an aesthetic enjoyment savoring the beauty of harmony, a fruit of universalized living form; an aesthetic experience which penetrates the formal absolute of the work through the elements of unity or totality, of universal symbolism, of original primitivity, of eternity rediscovered, and of free necessity; and a human encounter embracing the pictorial, sculptural, architectural subject in which the formal absolute assumed by the (individual or collective) point of view of the artist realizes that unique yet universal thing called "a style", a vision of the world.[11] Religion, love, and art thus draw us away from a truth of nature, in the object as well as the subject. But the analysis of constitutive levels discloses a truth of human action in which object and subject are verified in the constituent act and in which the definite strata, by their conjunctions, at once diverge and symbolize each other.

Thus, in the case of phenomenology as in that of cybernetics, the truth which is beginning to dawn does not seem to be deprived of all regulatory character, despite the removal of a fixed nature. In this regard it even possesses an advantage over the old truth: it does not require premature bifurcations. Traditional systems, whether conceived as the cyclical high points of the Middle Ages or the linear systems inaugurated by Descartes, rested on principles which provided their coherence but almost immediately separated them from each other. On the other hand, our studies of technical functionings or of constitutive levels proceed in some way from below and bring out partial truths capable of functioning in widely varied speculative ensembles, postulating principles and final choices only at the end of their lines of flight, as at the horizon. There is in this a remarkable factor of horneostasia and cultural exchanges, which can be observed even in political theory. Whereas liberalism and socialism split some time ago because of their basic differences, the habit of postponing decisions of principle and of soberly analyzing modes of functionings and intentional levels caused economists and sociologists in both camps to exchange methods, to the point where capitalism and communism today often reverse roles. This is why our truth may be called truth of dialogue: of man and man, of man and things. Not that it is reduced to the exercise of dialogue, as the agnostic would have it, any more than it is separable from dialogue, as the dogmatism of truth of nature would have it. Nature is on the periphery of the dialogue, forming a sort of knot through more and more comprehensive figures which symbolize it in symbolizing one another. Placed in this technical and phenomenological perspective, dialogue and coexistence in which we had at first seen a sign of anarchy -which, for a truth of nature, they would be- become tests of self-regulation.

One may hardly say how this truth also shows itself to be creative. It is at odds with its system instead of finding support therein. In the technical field, on the other hand, the balances it constructs are metastable, in the sense that they insert themselves into a process of concretization in which each landing, after saturation, is supersaturated and calls forth that total reorganization of reciprocal causalities which is, in the proper sense of the word, invention. In technique, too, man is responsible for nature through that confluent of artificial and natural which is the concrete machine. More directly, he is responsible for the machine itself, for, notwithstanding the popular conception of automation (one of the latest versions of the myth), the ideal form of the technical object is not realized in the robot. The most perfect machine is

not a finished product; it contains, on the contrary, degrees of indetermination which open it up to multiple human intentions through a variety of coding systems. Man and machine complement each other: the machine registers prodigiously well but is incapable of sensation and invention; the human being registers poorly or little but has the ability to make his recordings meaningful and inventive in application to his aim. Man, then, far from being alienated by the machine, finds in it his proper functioning extended and turning back upon itself to be launched anew, through invention, toward new integrations.[12] And, as the phenomenological moves in the same direction, since analysis by levels employs our constitutive activity in all directions, the truth which is sought before our very eyes seems to promise the twin characteristics of a humanist epistemology: self-regulation and creativity.

Horizontal ethics. - Liberty, or choice in the ethics of duty, has become for us the creation of values. Does this reduce us to the anarchy or the empiricism which has been noted in existentialism and in Marxism?

Let us consider a simple example. Ancient and contemporary ethical systems agree that one must love one's neighbor, but the methods of establishing this love differ. The classics proceeded in what might be called a vertical direction, drawn from a supernatural or natural principle. My neighbor, having the same religious end or quite simply the same rational essence as I do, possesses the same rights; my duties are inferred from this. Our ethics, on the other hand, proceed horizontally, as it were, following approximately this Hegelian line. I am constantly tempted to declare myself; the being-with which I am cannot succeed in this except by causing itself to be recognized by others. If I impose myself on others by force, I make a thing of it and am no longer truly recognized; the only recognition of myself by others passes through recognition of others by me.

It is clear that this concrete morality is self-regulated. Contrary to the claims of dogmatic beliefs, lived experience possesses a coherence, even a logic, as soon as it is thematized. There are modes of conduct in which the meaning is accomplished, others in which it is denied. No doubt the principles are then no longer fixed and at the start but living and at the finish; their stability is nonetheless measured in Blondel's or Jaspers' metaphysics, as in the existential psychoanalysis of Sartre. And this ethics is also creative, given that it increases our responsibility in various ways. It always remains to be done, beginning again, testing itself in endlessly new situations which not only apply it but develop it -as ancient casuistry- and reorganize it in true inventions. In addition, not being deductive, it accepts the verdict of the fact; deprived of the old refuge of "good intentions", it grasps its good and its evil in the test of the event itself or in the opinion of others. Finally, since it no longer has a human archetype as a point of departure, but rather seeks to create one, it is responsible, in each act, for the entire picture of man. Without lending itself to the self-assured and comminatory preaching of classical ethics, it would appear that cultural fecundity cannot be denied it.

The aesthetics of abstraction. - Art is a privileged area for whoever would realize our historical situation. It is often prophetic, for, in the intuitive and sensitive mode proper to it, it presents a vision of the world which scientific or philosophic thought does not usually systematize until long after the fact. What complicates things in our situation is that abstraction, a characteristic of present-day art, is an ambiguous phenomenon. It is known to appear in the final days of cultures as their sclerosis, and primitive peoples are known to avoid it insofar as they are in contact with a more advanced civilization -two reasons for seeing in our abstract art an obvious sign of barbarism. But it is also clearly observable that abstraction was creative and

ordering wherever it did not represent a final stage in the life of forms but coincided with the spiritual beginning of a culture, as in the case of Islam. What part does it play for us?

In any case, contemporary abstraction in no way partakes of a sclerosis of previous forms. Francastel has clearly shown that it is neither the hardening nor the weakening of Renaissance space but a clear break with it, a new departure.[13]

This feeling is confirmed when it is observed how contemporary painting attempts a return to first elements in all orders, to pure space, pure matter, and pure action. Thus we have Paul Klee seeking the space which precedes form, the universal matrix in which all form is born; haunted at the same time by raw material, by the substance which preceded all designation; anxious, finally, to find in its original purity the human gesture without which there would be neither space nor defined substance. And in reality it is not a matter of simple clearingaway, of happy and savage ignorance -somewhat like Spengler's moments of pure race and pure life- in which man would take pleasure, between two cultures, in rediscovering the magical signs of the primitive. There is some of all this in Klee, who is in many ways admirable. No, works like the "Principal and Secondary Roads" or "Land of Choice", or the "Devil's Jungle" of this same Klee, quite like the sculptures of Naum Gabo, sketch out truly new forms as much in their content as in their mode of birth. They create structures of matter, parallel to that of relativity, in which substance is expressed by mass, mass by energy, and energy by torsions of space. And, on the other hand, they are no longer constituted by masterpieces comparable one by one to an archetypal nature- as in traditional science and ethics every act, every proposition, had its own evidence- but they are voluntarily inserted in series in which they recall each other as well as nature, in the breast of that artificial nature and of that natural artifice which is contemporary artistic expression, whether one thinks of the "series" of Picasso, of Delaunay, of Mondrian, or again of the Klee of "Das bildnerische Denken", for whom creation is always at the same time a methodology of art. We here encounter once more our descriptions of the technical world, except that in those descriptions technique effected, art manifested, transforming practical schemas into the inclusive symbols of the whole. As for knowing whether this self-regulation is capable of surpassing the artist and sustaining a whole society in becoming its imagery, let one measure the degree to which Klee, Picasso, Matisse, Mondrian, and Miro have penetrated the areas of the advertising poster and the household arts.

But the promises of painting and sculpture, esoteric disciplines, are nothing compared to the soaring creations of architecture, closer to the people, which today surpass painting in truly great creative inspiration --an encouraging development when it is recalled that architectural creation is commonly considered a characteristic of beginning civilizations. Brasilia, Chandigore, Caracas, as statements of Le Corbusier, Frank Lloyd Wright's Kaufmann house, Mies van der Rohe's Illinois Institute of Technology, Nervi's Rome station, despite the profound differences among these four men, are creating the same new world. The steel-ribboned glass wall, glittering by day and by night, dissymmetry, pillar construction raising whole large buildings off the ground, cantilevered overhang, man-made materials, the organic structure of self-supporting dividing walls, mushroom- or tent-shaped vaulting, modular construction, the open plan, the search for an architectural adaptation to both work and leisure, a link between building structures and machine structures, a free-flowing interior-exterior conception of space -all this shows the same reluctance to accept either physical nature or human nature as existing facts but rather to erect a median reality in which man and nature exist in mutual causality. After what we have said of the technical world, there is a profound meaning

in Le Corbusier's insistence that architecture is a "machine for living", as there is in Gropius' remark that it is a "methodology of society".[14]

To these dazzling developments in the spatial arts may be compared the current crisis in the temporal arts, especially in music and literature -unless this too may contain another indirect confirmation of our hopes. Time is in fact more interior than is space; also it is elaborated later than space in cultures, as is indicated in the Hegelian classification, repeated by Faure, which lists in order architecture, sculpture, painting, music, and poetry. Thus the difficulties of contemporary music would seem to indicate a point of departure. The same might be said of our literary poverty. Aside from its position among the arts of time, language, through its sociological and ideological functions, is deeply engaged in tradition and little fit for metamorphoses; besides, its cerebral nature makes it ill suited to serve as the stuff of the technical and methodological experiments which we have been discussing. For all these reasons our new time themes will perhaps first be constituted in those of the arts of time which are most strongly supported by space: dance and film, when the latter has come to realize that its chief material is textured at least as much by duration as by image. But prophecy is dangerous. Aside from the fact that the arts of time have occasionally known dawning outbursts in the past witness Homer and Dante- the rhythm of our reflective culture, doubtless greatly accelerated in comparison to the age-old cultures of Spengler, may hasten the blooming of literary and musical works. So it is even more important for us that, when they explore truly creative paths and are not content to plagiarize or to deny the past, our arts of time adopt the lines of force of other sectors of culture. In the contemporary novel and poetry, as in electronic music, there is an exploitation of schemas which, at the symbolic level proper to art, is contemporaneous with the cybernetic and phenomenological relationships which we noted in painting and architecture.[15] In all fields the same orientation is involved, even though the temporal arts, in their essence or in any other way, do not show immediately the same virtues of self-regulation and creativity.

From myth to network system. - We have asked: Is it possible to build a culture without myth? And, by the enervation of myth, does not technical and critical civilization cut off all hope for itself? We now see that it may not be possible to state the problem quite so bluntly. What we have just said of contemporary epistemology, ethics, and art forces on us a new image of reality, that of a universal network, and we may well ask whether this is not capable of taking the place of myth.

Elements are disposed in a network when they are joined together in such a manner that they form a fabric in which they refer to each other, each participating in the forces and the structures of the whole, which they support, share, and exchange. Here it must be made clear that a true network is not defined in its own terms; it incloses something and is organized within itself only for the reticulation of external reality, with which it forms a new reality. But then the web possesses several of the properties of myth. It, too, is of a universal and totalitarian tendency, is both visible and tangible. It blends the imaginary and the rational, understanding and action, and arouses the ideas-images-forces. It has a collective meaning and, in assuming the real, presents itself as real and sacred. [16] Of course, unlike myth, which is static and irrational, the web must be constantly constructed, remade, criticized, and reinvented -otherwise how could it be reconciled with the critical and artificialist mentality? But its artificiality is not a pure contingency; it holds man and beings enchained in its meshes, in its schemas of interaction joined with each other. We recall that contemporary architecture is a machine, in the noble sense of the word; the expression can be turned around, and we may say that the world

of concrete machines is an architectural one: its reticulary structure weaves an environment around man, a world of operationally significant forms. It creates, in short, that inclosing space which is the language of architecture.

Of course, for the network to play this cultural role, it must be open and not closed in a sterilizing automation. In other words, the machine's informatory capacity must encounter man's capacity for discerning meaning. The notion of network, this is to say, cannot be completely elucidated by cybernetic examination; it terminates in a phenomenology. When all is said and done, the machine does not require the supplement of a soul demanded by Bergson but rather a complement of spirit, in which it is coupled with the human element in a totality of finalized action and thought. Pessimistic essayists have made of the network a mass or a labyrinth, and this it is when judged by ancient norms, for it is far from having a certain given nature and individuality. On the other hand, as soon as it is seen as including nature designed for human intention and attaching the individual to the productive community, it connects more than it incloses. And the virtues of humility, nakedness, and participation, proper to dying civilizations, would then in our case be creative and self-regulated virtues of a new relationship between man and things and between man and man within a reticular world.

3. CONCLUSION

As recently as a few years ago it was still possible to distinguish between men of culture, literary men concerned with so-called eternal values of the past, and technicians, oriented toward the effective, the future. This distinction has disappeared. While it is true that we have been driven into a corner where we must reflect about culture, the man of culture no longer has the right to bury himself in the study of ancient civilizations, justified in hasty and incidental comparisons between these and our own, and pessimistic a priori. Nor can the technician afford to be hypnotized by pure efficacy, now that his objects are the signs of a culture aborning. Both must contribute to the definition of present values. This will not be a continuation of the old "general culture", in which it was sufficient for the historian to read occasionally *a*. work of scientific vulgarization and for the engineer to relax in the evening with Homer of the Upanishads. These are still useful pastimes, but they indicate an evasion of the real question. Today, general culture is no longer a survey of the element, included in extrinsic analogies, but rather the penetration of the very thread of the element, to the knot in which, in the most exacting form of specialization, it joins the network of all its implications and expands from the self-examining to the universal.

This labor of deep examination, of "presemifying" if you will, is made indispensable by the very nature of a technical culture. We have presented the ideas of network, of methodology, of participation; these are so many realities which are not dear in themselves and which have to be revealed. For that matter, what cultural values have not clamored for revelation? Classical man constructed the humanism which was his own, first literary, then scientific, by clarifying and putting into circulation the fundamental principles necessary for a general understanding of literature or of science. We must clarify and inculcate the concepts, images, and imperatives of our technological and phenom-enological values.

The intellectual has, therefore, a primary role to play at this moment in history. The difficulty is that, often reactionary or progressive, he prefers to take refuge in the past or in the future, from which point of view he pronounces judgment on what he calls the "present" with a self-flattering pride. His return to the present would represent a salutory step for himself as well as for those he is supposed to serve. He would discover that meditation of the actual in its full force sheds light on the past in *its* full force, just AS the meditation of previous creations is the source from which we in our turn draw creative ardor and clairvoyance. The present does not make history relative. As Hegel realized, it is the moment seized in its articulation of moment which makes its best showing in the eternal.

The young nations are just as involved in this as are the intelligentsia. We said at the outset that a new and radical departure should not be expected of them, for, since every cultural development must today pass through the technical mentality, they will encounter the same problems as we do and, in a way, will be old before having really begun. And yet they retain the advantages of youth, in the sense that they have a fresh outlook which confers on future values the magnetism indispensable to their existence as values. In any case- since it might be maintained that this enthusiasm has a musty smell of myth which will disappear as progress is made- their capacity for astonishment has the advantage of not slowing down new values by a priori pessimistic judgments which prevent blase peoples from recognizing and developing themselves.

The concerted establishment of a culture: the double requirement of method and impulse -or, if you prefer, of self-regulation and creativity- implied in this task undoubtedly explains the deep significance of the rapprochement we are witnessing between the enterprising strength of young peoples and the intellectual strength of older nations.

Henri Van Lier

in *Diogenes*, N°30, 1960

An International Council for Philosophical and Humanistic Studies

University of Chicago

Translated by James Laliadie

Notes:

- [1] "Civilisalion," "culture." and "huimnîun" do not h‰ve in French ihc clearly de-fined meanings they possess in German. We sliall [requently use (hetn syrionymimsly.
- [2] The shades of meaning in this bald statement will be developed in our conclusion.
- [3] Cf. Louis Leprince-Ringuet, "Psychologic nouvelle du chercheur scientifique," in L'Homme et l'atome (Geneva: Rencontres Internationales de Geneve, 1958).
- [4] J. L. Destouches and Paulette Février, L'Interprétation physique de la mécanique ondulatoire et des théories quantiques (Paris: Gauthier-Villars, 1956).
- [5]On the notion of self-regulation in the life of societies see Norbert Wiener, Cybernetics and Society (New York: John Wiley & Sons, 1948); but a society cannot remain homeostatic, and for this reason we add to the notion of self-regulation that of creativity, as intended by Maslow in Motivation and Personality (1955).
- [6] Our definitions, examples, and several of our ideas in this paragraph are taken from Gilbert Simondon's remarkable work Du Mode d'existence des objets techniques (Paris: Aubier, 1958).
- [7]Let us imagine an air-cooled engine. Cylinder and breech are reinforced by ribs; heat dissipation is accomplished by winglets. But in fact the two functions are the fact of ribs-and-wiaglets which allow no distinction between the volumetric unit and the unit of heat dissipation. There is not only compromise between functions but also concomitance and convergence (Simondon, of. cit., p. 22).
- [8] Paris: Presses Universitaires de France, 1958.
- [9] In this recollection of religious philosophy Henry Duméry retains only its phenomenology, symptoms of a universial methodological current, and purposely excludes the transcendental idealism, reminiscent of Husserl and Plotinus, which belongs to the personal philosophy of the author.
- [10] Cf., among olhers, Psychologie sexuelle, Paris: Presses Universitaires de France, 1951
- [11] Henri Van Lier, Les Arts de l'Espace (Paris; Casterman, 1959).
- [12] On all this see Simondon, op. cit.
- [13] Art et société (1955).
- [14] Cf. Pierre Francastel, Art et technique (1956), and Van Lier, op. cit.
- [15] E.g., the Robbe-Grillet of La Jalousie (1958) does not describe the jealous person, cither in (he third or in the first person but makes him relate his suspicions as he lived them, obliging the reader to perceive, to reason, in short lo "function" with him. It is for this reason that the book is entitled La Jalousie, not Le Jaloux. And this functioning, need we say, is not limited to a recording of facts, nor does it create them; it "constitutes" them, according to the apparent shifts of feeling and the profound relationships -in space and in rime- of its existential dialectic.
- [16] When unruly students, several years ago, put the clock of the Paris Observatory out of order, public reaction was quite violent. The feeling of sacrilege arose not from an evaluation of the damage done, whkh was, after all, relatively minor, but rather from the fact that an attack had been made against the key point of a network, since this clock sends out hourly signals over the radio (cf. Simondon, of. fit., p. 221).